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# A GRAMMAR OF YIDIN 

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This book is dedicated to
Dick Moses, Pompey Langdon, George Davis, Katie May, and the late Tilly Fuller,
who shared their language with me.
And to the remaining members of the Yidindi and Gungandi tribes, who have through no fault of their own - lost most of their own language and culture.
In the hope that they may be allowed to remould their lives, and their own society, in ways that they themselves choose.

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page 5

PLATES
between pages 24 and 25
I Dick Moses (dariyi), principal informant for the coastal dialect (Yarrabah, August 1973).
2 Tilly Fuller (buru:n), left, and her sister Katie May (dugulum), speakers of the tablelands dialect (Aloomba, January 1972).
3 From left: Dick Moses, Robert Patterson (nalmbi) of the Gungandi tribe, and Pompey Langdon (daluqu), a tablelands Yidindi (Yarrabah, August 1975).
4 Illustration from the Annual Report of the Chief Protector of Aboriginals [Queensland] for the year 1909 (Brisbane: Government Printer, 1910): 'Wedding of Albert, Prince of Yarrabah' (Albert was the son of minminiy - see 1.7).

## Preface

This is the grammar of a language originally spoken by perhaps 2000 members of the Yidindi, Gungandi and Madandi tribes, living in rain forest just to the south of the present city of Cairns, North Queensland. The writer collected some data on Yidin from 1963, and worked intensively on the language from 1971 to 1975. Although there are only a handful of speakers remaining, fluent text material was obtained from Tilly Fuller (who died in 1974), Dick Moses and George Davis. The eagerness of the main informants to have their language recorded, together with their intelligence and perceptiveness, has led to a full range of data being obtained for every level of linguistic description.

Yidin is quite close genetically to its northerly neighbour Dya:bugay, which is known from a short grammatical sketch by Hale (1976a); they are as similar as, say, French and Spanish. Comparison with Dya:bugay and reconstruction of aspects of proto-Yidin-Dya:bugay as well as more general reference to on-going work on comparison and reconstruction for the whole Australian language family helps to explain many morphological alternations and irregularities in Yidin.
Yidin is as different from its southerly neighbour, Dyirbal (see Dixon 1972) as it is from almost any other language in Australia (while still showing typological similarities characteristic of Australian languages as a whole). Important points of grammatical difference are commented on, in small print, as are a number of interesting surface similarities (some of which may be the result of areal diffusion).

An attempt has been made roughly to separate grammatical facts (in chapters 2, 3 and 4) from theoretical interpretation (in chapter 5 ). A notable feature of Yidin is that its grammatical categories do not fall into neat pigeon-holes. For instance, either dative or locative case may realise a certain syntactic category, and either straightforward apposition or else genitive marking can be used for inalienable possession. In each case the choice is governed by a semantic hierarchy, and operates on a 'more/less' (rather than an 'either/or') basis. Somewhat analogously, [ xv ]
some syntactic operations show a 'nominative-accusative' pattern (with the identification of transitive and intransitive subjects) while others work on an 'absolutive-ergative' principle (intransitive subject being identified with transitive object). Partly because of this grammatical fluidity, the 'tree structure/constituent' symbolism that is currently fashionable in grammatical description appears less than ideal for Yidin.

The description is loosely based on the transformational-generative model, with a 'configurational symbolism' being used in place of the normal trees; this recognises a strict division between core elements (subject, object, main verb) and peripheral elements, the latter being subdivided into local and non-local (e.g. indirect object). The syntactic derivations which operate on these configurations are identical in form and function to conventional transformations.

The grammar also owes a good deal to the Sapirean tradition: in particular, care is taken to distinguish between the structure of words (morphology), the association of words to form phrases (phrase syntax) and the structure of sentences (sentence syntax). The syntactic description is at every stage related to semantics, paying attention to the fact that the basic task of any language is to enable meanings to be conveyed from speaker to hearer.

Ample exemplification is given for each grammatical point. About a third of the sentences quoted are from running texts, the remainder coming from material dictated by informants (only a small part was directly elicited for purposes of the point under discussion). Examples taken from the texts included at the end of the book (numbers 2,9 and 14) are referred to by text and line number.

English glosses are kept as close as possible to those supplied by informants. For instance, ganar $A$ is glossed 'alligator' since that was the English word always employed (despite the fact that 'crocodile' might be a scientifically more appropriate translation). Yidin NPs do not obligatorily choose for definiteness or number; and one tense choice covers both 'present' and 'future'. These categories have been specified fairly arbitrarily in English translations, according to the context and/or the informant's gloss. Nothing concerning the structure of Yidin should be inferred from examination of the translations.

And so, I offer this book particularly to those graduate students in American and European Universities who are sufficiently interested in out-of-the-way languages to peruse a study such as this (although not
sufficiently dedicated to undertake fieldwork themselves, and document some previously undescribed language). As you squat in your theoretical cocoons, reinterpreting data to fit universal hypotheses and generate PhDs: many happy restatements!
March 1976

## Acknowledgements

Whatever value this study may have is largely due to the friendship of Dick Moses (dariyi) and the late Tilly Fuller (buru:n), their willingness to record reminiscences and traditional stories, and generally to teach their language to the writer and answer his questions. It is impossible to overestimate the insightful and thoughtful skill that they devoted to this task. Thanks are also due for the substantial help received from Pompey Langdon (daluru), George Davis (pangabana), Katie May (dugulum), Ranji Fuller (daruga), the late Richard Hyde (bumidi $)$, Ida Burnett ( (udun), the late Jack and Nellie Stewart (mirbi, wayygubi), Alec Morgan ( $\mathrm{gar} d u$ ) and Robert Patterson (nalmbi).

The main research was undertaken in six field trips between December 1971 and December 1975, largely financed by the Australian Research Grants Council (with some supplementation from the Australian National University). Preliminary fieldwork in 1963/4, 1967 and 1970 was financed by the Australian Institute of Aboriginal Studies. The support of these bodies is gratefully acknowledged.

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Norman Tindale, Ken Hale, Carolyn Strachan, La Mont West Jr and Peter Sutton graciously made available their field notes and tapes on Yidin. Tasaku Tsunoda searched for speakers of Gungay on Palm Island. Ken Hale and Helena Cassells allowed free use of their unpublished materials on Dya:bugay. John Haviland supplied material on Guugu-Yimidhirr, and fomented a number of ideas. Henry and Ruth Hershberger made available data on Gugu-Yalanji.

Sue Kesteven contributed theoretical ideas for chapter 2, and later read the whole manuscript; her insightful comments, criticisms and suggestions were most valuable. Thanks are also due, for discussion, ideas, data, references, and/or comments on sections of the manuscript, to Barry Alpher, Peter Austin, Jo Birdsell, Terry Crowley, Diana Eades,

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## Abbreviations

+ morpheme boundary
\# word boundary (in chapter 2 this refers to phonological words, and in chapter 5 to grammatical words)
\# \# sentence boundary
$\rightarrow$ in phonological rules and realisational rules
$\Rightarrow$ in syntactic derivations
( $=$ transformations)
$>$ diachronic 'becoming'
/ end of intonation group (possible
sentence final intonation)
C coastal dialect
T tablelands dialect
In chapter 2 we employ
S stressed syllable
U unstressed syllable
C consonant
V vowel

In chapters 3-6 we use
$S$ subject of an intransitive verb
A subject of a transitive verb
O object of a transitive verb
$\Sigma$ sentence
NP noun phrase (see 4.1.1-2)
VC verb complex (see 4.I.3)

| $\begin{array}{l}\text { sg singular } \\ \text { du dual } \\ \mathrm{n}-\mathrm{sg} \text { non-singular }\end{array}$ | referring to |
| :--- | :--- |
| pronouns |  |

In chapter 5 we use (see 5.1.7, 5.2.1-2)
[...] to enclose the 'core' of a sentence: subject, object and main verb
: to indicate the relation between the core and syntactic peripheral elements
; to indicate the relation between the core and local peripheral elements

+ --iolap indicate types of peripheral NP and subordinate clause (see 5.2.2, 5.3)
$\mathrm{a}, \mathrm{b}, \mathrm{c}, \ldots$ refer to specific NPs
$\mathrm{V}, \mathrm{W}, \ldots$ refer to specific VCs
$\mathrm{X}, \mathrm{Y}, \mathrm{Z}, \mathrm{T}, \ldots$ are variables, each referring to any non-null sequence of components
INV is a dummy verb 'involve' (see 5.4)
INCHO is a dummy verb 'become' (see 5.4.9)
$\mathrm{CR}(\mathrm{a}, \mathrm{b})$ indicates that a and b are coreferential
$\mathrm{M}(\mathrm{a})$ refers to the case marking on a

The abbreviations ' $\leftrightarrow$ ', '\{', '//', ' $\mathcal{F}^{\prime}$, ' $\Gamma$ ', ' $\leftarrow ', ' \rightarrow$ ', ' $'$ and ' $\rfloor$ ' used in 5.6 are fully explained in that section

Yidin sentences are often provided with an interlinear gloss (in addition to English translation of the complete sentence). In this, lexical items are given in lower case and grammatical elements in small capitals. For the latter the following abbreviations are used:

ABL ablative case INTR intransitive
ABS absolutive case LOC locative case
ACC
ALL
CAU
CAUS
COM

DAT
ERG
GEN genitive suffix
IMP imperative inflection
INCHO inchoative verbaliser
INST instrumental case
LOC locative case
PRES present-future tense
allative case inflection
causal case PURP
purposive case, and verbal inflection
REDUP reduplicated
SUBORD subordinate
TR transitive
VBLSR verbaliser
s, A, o refer to syntactic functions (and are sometimes used in glossing pronominal and deictic forms) - see above

## Rough guide to pronunciation

Most of the discussion this book is fairly technical, and is addressed to students of linguistics. There are, however, a number of topics that may be of more general interest, to non-specialists in linguistics. The following rough guide to pronunciation is provided to assist this wider audience.
$i$ is pronounced like the vowel in English bit
$u$ is pronounced like the vowel in English took, but without the rounding of the lips
$a$ is pronounced like the vowel in English rally
: indicates a lengthened vowel - thus $i$ : is pronounced as $i i, u$ : as $u u$, and $a$ : as $a a$
$b, d, l, m, n, y$ and $w$ can be pronounced almost exactly as in English $g$ is pronounced as in English gate
$r$ is a rolled $r$, as in Scottish pronunciation
$r$ is quite close to the English pronunciation of $r$, as in arrow
$n$ is like an $n$ and a $y$ pronounced simultaneously, similar to the nasal sound in English onion
$d$ is like a $d$ and a $y$ pronounced simultaneously, sharper than the English $j$ sound in judge; $d$ does not have the friction of English $j$, but is a stop consonant, like $b, d$ and $g$
$y$ occurs only at the end of a syllable in English; it is the single sound after the vowel in sing. $y$ begins most pronouns and many other words in Yidin (as in other Australian languages) and it is worth making the effort to pronounce it word-initially. One way of learning how to say yayu ' I ' is to begin with sing, add -ayu to form singayu, and on repetition gradually omit the si-, thus singayu, singayu, singayu, ngayu, ngayu.

## I The language and its speakers

## 1.I Linguistic type

Yidin is a fairly typical Australian language (see Dixon 1972: 1-2I for a brief account of some of the recurring features of languages of the continent). It is basically agglutinative and almost exclusively suffixing. The norm word order appears to be 'subject-object-verb', but considerable deviation from this is possible.

Its phonology accords with the normal Australian pattern: there are no sibilants or fricatives, and no distinction of voicing. The sixteen segmental phonemes comprise four stop-nasal series (bilabial, apicoalveolar, lamino-palatal and dorso-velar), one lateral, two rhotics, two semi-vowels and three vowels. Vowel length is phonologically significant but (apart from a set of exceptions involving only a dozen lexical items) no roots involve long vowels. Length is introduced through some morphological processes (of affixation) and through a number of rather sweeping phonological processes. The latter operate to satisfy certain stress targets: a word should, if possible, contain a whole number of disyllabic units (either all of the type 'stressed-unstressed' or else all of the type 'unstressed-stressed'). If it does have an odd number of syllables then the extra syllable must be unstressed.

There are clearly defined classes of noun, adjective, locational qualifier, time qualifier, (first and second person) pronoun, deictic, verb, adverb, particle and interjection. In addition to singular and non-singular forms of pronouns there is a dual in the first (but not the second) person. Definite deictics - which also have some of the functions of third person pronouns in other languages - do not vary for number but involve a three-term spatial system: the third term - complementing 'here' and 'there' - is 'invisible' in the tablelands dialect, but 'far and visible' in the coastal dialect.
There is a system of ten cases for nouns, adjectives, pronouns and deictics; locational and time qualifiers take a limited selection from these inflections. There are ten stem-forming affixes that can precede case inflections with nouns and adjectives; these include 'genitive' (which
can take any further case inflection), and 'comitative', which has a strikingly wide semantic range.

Verbs show a two-term tense system (past versus non-past). Derivational affixes optionally mark 'motion aspect' - that is, whether the action is done during or after 'coming' or 'going'. There are three conjugations, characterised by 'linking morphemes' (between stem and affix) $-n-,-l$ - and $-r$ - respectively; whereas the first two conjugations appear to be open, less than twenty members are known for the $-r$ class. Subclasses of 'transitive' and 'intransitive' verb correlate statistically with, but do not coincide with, the conjugations.

There are three types of subordinate clause (each marked by a special verbal inflection) that correspond to the three kinds of peripheral syntactic NP (marked by dative, purposive and causal cases), which in turn parallel the three kinds of local NP (locative, allative and ablative). The functions of these subordinate clauses correspond to those of 'relative clauses' and 'complements' in other languages.

Yidin has wide derivational possibilities - for deriving transitive and intransitive verbs from nouns and adjectives, deriving transitive from intransitive verbs, and so on. The verbal affix -:di-n has a wide range of syntactic and semantic effects-marking anti-passive and reflexive constructions (surface intransitives derived from deep transitives), or an event where the 'agent' does not have volitional control over the action, or an event that is incomplete and continuing.

Pronouns inflect in a nominative-accusative paradigm (one case marking both intransitive subject and transitive subject), deictics with human reference have separate cases for transitive subject, transitive object, and intransitive subject functions, whereas nouns show an absolutive-ergative pattern (here a single case combines intransitive subject and transitive object functions). There is in addition a semantic hierarchy - from human nouns, through animates to inanimates conditioning a number of quite disparate grammatical choices in Yidin.

Sentence modification is achieved partly through a set of a score or so of non-inflecting particles (marking negation, retribution, completion, reflexive, trying, and so on) and partly through half-a-dozen postinflectional affixes that can be added to a word belonging to any part of speech (with meanings 'now', 'still', and so on).

A noun phrase will typically involve both a 'specific' and a 'generic' noun. Investigation of generic-specific co-occurrences reveals a welldefined semantic system based on the 'nature' and the 'use' of an
animal or object. There are three levels of interrogative: ' what (genus) ?', or, with the genus being known, 'what (species) ?', or finally, with the species being known, 'what sort of ?' (demanding, say, an adjectival description).

### 1.2 Dialects

The Yidindji tribe - speaking the Yidin language - lived in the rain forest just south of Cairns, occupying a fair area of coastal flats (but with access to the sea only at Cairns inlet, and near the mouth of the Mulgrave River), the foothills of the range, and a tapering finger of tableland extending as far inland as Kairi (see map i). There were five or six 'local groups', named after the type of territory with which they were associated (in terms of conception sites, and so on) and which they occupied most of the year:
gulgibara (gulgi'sand'; -bara is a productive affix 'person belonging to-' - see 3.3.6) 'sand people' - the local group associated with the (sandy) seashore, and the lower reaches of the Mulgrave River and its tributaries, where it flows through sand.
malanbara (malan 'large flat rock') 'flat rock people' - the local group associated with the upper reaches of the Mulgrave River (and the Little Mulgrave) where the river predominantly flows through rocks.
walubara (walu 'side of hill') 'hillside people' - living close to the malanbara group, in the foothills of the range, but off the main rivers.
gambi:rbara or bundabara (gambi: 'tablelands', bunda 'mountain') 'tablelands people' - inhabiting the thick 'scrub' which characterises mountains on top of the tableland.
warginbara (wargin 'forest') 'forest people' - associated with the slighly less dense 'forest' between mountain peaks in the tableland.
badabara (bada 'grassy plain') 'grasslands people' - inhabiting the high grassy plains on the tableland (where kangaroos are most plentiful). There was a substantial area of grasslands between Yungaburra and Atherton, and Yidindi territory extended a short way into it.

Each local group had its own dialect. There are nowadays too few speakers remaining to attempt a detailed assessment of dialectal differences, but it does appear that the gulgibara (or 'coastal') speech was
the most divergent, and was opposed to malanbara, walubara, gambi:rbara, warginbara and badabara, which formed a second ('tablelands') dialect group. Basic lexical items were almost all identical for the coastal and tablelands varieties, but there were some minor variations of form and meaning and a few quite small grammatical divergences; these are fully documented at the appropriate place below.
The Gungandi tribe - speaking Gungay - lived on the Cape Grafton Peninsula, to the east of the Yidindi over the Murray Prior Range, and visited Green Island. There is now no one living who can speak Gungay, but present members of the Yidindi and Gungandi tribes say that it was mutually intelligible with Yidin-this is confirmed by the lexical evidence available in old vocabularies (see Appendix). To the south of Yidindi in the coastal region were the Madandi people, speaking Maḑay (reputedly so-called because they used the form maday for 'spear'); this tribe lived around Babinda and the mouth of the Mulgrave River. There are no speakers remaining for this tongue, and no vocabularies attributed to Maday (although the name is mentioned in Gribble 1933: 4, 143, but with a different location: 'mouth of the Barron River' instead of 'mouth of the Mulgrave River'). A further 'language' Wajur or Wanuru is known from vocabularies by Tindale and by Nekes and Wurms (see Appendix) - it was reportedly spoken to the south of Babinda and around the Russell River. A speaker of Mamu (from the south) told the writer that there were two distinct tribes, Wanur(u) and Madandi, but speakers of Yidin scarcely recognised the name Wanur(u). It is perhaps possible that Wanur(u) and Madandi were alternative names for a single tribe (as N. B. Tindale has suggested, private communication).

There are only lexical data available for Gungay (around 200 words) and Wanur (less than 100 words). The percentages of lexical items identical or almost identical between the dialects are:

| Yidin |  |  |
| :---: | :---: | :---: |
| $80 \%$ | Gungay |  |
| $78 \%$ | $69 \%$ | Wajur |

These, together with the reports of present-day members of the Yidindi and Gungandi tribes, suggest that Yidin, Gungay and Wajur could have been regarded - for linguistic purposes - as mutually intelligible dialects of a single language. (If Maday was not an alternative name for Wajur, it is likely that it would have been linguistically - as it is geo-


Map i. Yidin and surrounding dialects. (Based on Roth i910b; McConnel 1939-40; Tindale 1940; and the writer's field work. The broken line indicates approximate tribal boundaries for the peoples speaking dialects of Yidin; it is not known whether Maday(ndi) and Wanur(u) were distinct tribes, or two names for the same group. The locations for the groups speaking the Dya:bugay language: Dya:bugay, Guluy, Yirgay, Bulway and Nyagali - are each based on a single source and have not been checked; it is possible that some of these terms may be alternate names for a single dialect/local group/tribe.)
graphically - intermediate between Yidin and Wanur, and closely similar to both of them.)

It is likely that what we can call 'the Yidin language' had (at least) four main dialects; these can be schematised in approximate relative geographical positions:


It does seem that connections between the dialects followed the lines in the diagram. For instance, there appears to have been little common to Gungay and Wanur that was not also shared by coastal Yidin (in fact, the limited sources reveal just one word, dibi 'hair', occurring in Gungay and Wanur - and also in Dya:bugay - but not in Yidin). Thus coastal Yidin would have been the central dialect, maintaining communication with Gungay (on the promontory to the east), Wanur (along the coast to the south) and tablelands Yidin (in the mountains to the west).

It is likely that the grammar which follows would, in broad details, be applicable to the four-dialect language. But textual, grammatical and extensive lexical data have been obtainable only for coastal Yidin and tablelands Yidin. There is some phonotactic information on Gungay, but nothing is known of the eccentricities of grammatical detail which must surely have characterised the Guygay and Wanur dialects.

### 1.3 Surrounding languages

To the north of the Yidindi were a number of tribes (or local groups) speaking what appear to have been - like Yidin, Gungay and Wanur dialects of a single language: Yirgay, Guluy, Bulway, Nyagali and Dya:bugay (see map r). As in the case of groups speaking Yidin, tribal names were derived by the addition of the comitative suffix -( $n$ ) di - thus Yirgandi, Buluwandi, Dya:bugandi. Nowadays the name Dya:bugay (which is said to have been originally the name of the dialect spoken on the coast, towards Port Douglas) appears to be used by speakers to refer to the whole language, and Dya:bugandi to name the whole speechcommunity.

Dya:bugay, while clearly a separate language, is without doubt closely genetically related to Yidin (and no other language belongs to
this 'sub-family'). There are close similarities in pronoun roots, in noun and verb inflectional and derivational affixes, and in some enclitics, suggesting that it should be possible to reconstruct a fair portion of proto-Dya:bugay-Yidin. A 400 -word sample reveals that $53 \%$ of the lexicons are identical or very similar, suggesting that the languages have been separate for a long enough period for the fraction of common vocabulary to have dropped (through separate taboo and replacemen ${ }_{t}$ in the two languages) to the 'equilibrium level' (see Dixon 1972: 330-41).

To the south, Yidin and Wanur are contiguous with two of the dialects of the 'Dyirbal language' - Ngadan and Mamu. Yidin and Dyirbal are - considering that they are both languages of the general Australian type - totally dissimilar in every area of grammar. Lexically, Yidin has only $20 \%$ (identical or closely related) items in common with the central Dyirbal dialect, $22 \%$ with Mamu and $29 \%$ with Ngadan.

There appears in fact to have been considerable social contact between speakers of tablelands Yidin and of Ngadan, who had territories of the same ecological type - forested tablelands with rivers flowing through deep ravines. For instance, Ngadan-speakers had the Yidin-type twomoiety system, as against the four-section system of the other tribes speaking Dyirbal, and of their neighbours to the south and west (Dixon 1972: 31). Note also that the Yidin method of deriving a tribal from a language name - by the productive comitative affix $-(n) d i$ following a consonant, $-y i$ following a vowel $(3.3 .4,4.3 .1)$ - is used in the tribal names Ngadandi and Dyirbaldi (the latter being an alternative to the name Dyirbalyan), although the comitative affix in Dyirbal is -bila $\sim-b a$.

There appears to have been a fair amount of grammatical and phonological diffusion in the Yidin-Ngadan area, leading to a number of points of surface similarity. For instance, both Yidin and Ngadan have introduced contrastive vowel length rather recently, but in quite different ways (2.3.5). In Yidin the penultimate syllable of a word with an odd number of syllables was stressed, then the vowel was lengthened, the length becoming distinctive when the final syllable was dropped e.g. malánu > malá: $n u>$ malá $: n$ 'right hand' (cf. málan 'flat rock'). In Ngadan a sequence of vowel-plus-liquid was replaced by a long vowel at the end of a syllable e.g. bálgan > bá:gan 'hit' (cf. bágan 'speared'). Contrastive length thus appears to be a regional feature shared by the Ngadan dialect of Dyirbal, Yidin and Dya:bugay; it is missing from languages to the north of Dya:bugay (Gugu-Yalandi), to
the west of Ngadan (Ngaygupu) and to the south of Yidin and Ngadan (the remaining dialects of Dyirbal). As another instance of tablelands Yidij/Ngadan similarity we can note that whereas Guygay and coastal Yidin allow a final $-\eta$ in the phonetic form of words, tablelands Yidin is like Ngadan in not allowing words to end in $-\eta$ (an underlying final $-\eta$ is realised in terms of vowel nasalisation - 2.6.3). Finally, the system of demonstratives in tablelands Yidin coincides in form with those in the coastal dialect, but in meaning with the demonstratives in Ngadan and other Dyirbal dialects (3.7.1).

There is fuller discussion of these points, together with an account of the meanings that can be attached to the terms 'tribe' and 'language' for this region, in Dixon 1976b.

But the similarities between Yidin and Ngaḑan are all at the surface level. Anyone knowing just one language would find the other quite unintelligible (many members of the two tribes had a degree of bilingualism in Yidin and Ngadan - but this was, of course, quite another matter). The rather low lexical score between Yidin and Ngadan $29 \%$-suggests that they had been in contiguity for a relatively short time (certainly, a shorter time than that which has elapsed since Yidin and Dya:bugay emerged as separate languages).

To the south-west of Yidin was Ngaygunu, an extinct and poorly documented tongue. Although Ngayguyu had its greatest lexical similarity with Dyirbal ( $54 \%$ on a 150 -word comparison), it may well have been grammatically more similar to Warunu, its south-westerly neighbour (with which it has $47 \%$ common vocabulary). Yidin has 24 \% vocabulary in common with Ngayguyu, suggesting that there may have been a little recent borrowing; but the languages appear to have been basically quite dissimilar.

Ngaygunu is known only from mentions by Roth (1901b, i910b) and Sharp (1939); Tindale (1940: 157) mistakenly identifies it with Dyangun. Tilly Fuller, the writer's main informant for tablelands Yidin, volunteered that her mother had told her of the Ngaygunu language spoken around Herberton, but knew no more. Note that the tribal name is reported as Ngaygunu-yi or Ngaygunu-n-di, again involving the comitative affix from Yidin. The only linguistic materials on Ngaygunu are unpublished - Roth compiled a 187word list in 1898 (Mitchell Library, Sydney; uncatalogued manuscript number 216) and Tindale collected seven words in 1938 (privately making these available to the writer).

To the north-west of Yidin, but perhaps not quite contiguous with it, was Mbabatam, a language which is on the surface highly aberrant but which can be shown to have developed from a language of normal Australian type through a number of rather drastic historical changes (Dixon 1972: 347-50 and forthcoming - b). Mbabaram only has around $20 \%$ likely cognates with Yidin, but there are some possible grammatical similarities; more work is required to investigate the possibility of a close genetic connection between the two languages.

To the north-west of Mbabatam and Dya:bugay were a chain of closely related languages (or dialects?) - Wagaman, Dyangun, Muluridi and Gugu-Yalandi. Both lexically and grammatically these show little similarity to Yidin or Dya:bugay; for instance, Yidin and Muluridi whose territories must have approached each other very closely just south of Mareeba - have less than $30 \%$ vocabulary in common.

## 1. 4 Cultural background

Each Yidingi local group would spend most of the year in its own country (see 1.2); but at certain times, when a staple fruit was ready, the whole tribe would be likely to gather in one place. The advantage of a vegetationally-heterogeneous tribal territory was that in every season there was some food available in some part; coincidentally, it seems that fruit would ripen in a particular region at the time when it was climatically most pleasant to live there. Thus the coastal local groups would be likely to ascend to the tablelands - to eat yellow walnut (gaygi) and loya-cane (mudi and yabulam) - in the wet season, when the coastal flats were particularly hot, humid and insect-ridden. And the tablelands groups would come down to the coast - for Mulgrave walnut (digil) and quandong (murgan) - in the winter, avoiding some of the worst of the mountain frosts and mists.

The Yidindi had an extensive 'calendar', detailing observations of phenomena that indicated when food of a particular type was likely to be ready. Thus, when the golden flower comes out on the wattle tree (duwa:r), the carpet snake (wuyul) is fat and ready to be eaten; when (inedible) white fruit appear on the gazaygal vine, it is time to dig for scrub-turkey eggs in the high mounds in which they are buried; when the brown pigeon (dudulu) calls out [d̃ d̃̃] it is a sign that wood grubs (dambun) will be at their most luscious; and when the small bean tree (wuwuy) flowers on the tableland it is time to erect stone traps or yards
in the shallow parts of tableland rivers, and catch fish when they are at their fattest.
A fair proportion of the Yidindi diet came from flesh foods - wallabies, possums, bandicoots, fish, eels, turtles and so on. But the staples were a handful of vegetables, most of which required quite complex preparation. For instance, when the tail feathers of the willy wagtail (digirdigir) turn white it is time to gather rickety nuts (badil), on the small hills in coastal country. This is roasted in the fire, its shell is cracked and it is buried in the ground overnight. The next day it is ground fine on a large flat stationary stone, by circular movements of a round grinding stone (mugay), then sieved through a dilly-bag, and put into the river at some rapids or a small waterfall, with water directed in a stream onto the nut by a spouting of rolled ginger-leaves. It will be left in the water overnight and can then be eaten, after a minimum of forty-eight hours preparation. Then, when the black scrub locust (gana:l) first cries out, around Christmas time, it is a sign to ascend to the tablelands to gather black pine (gubu:m). This is first roasted in its shell, then the shell is broken and the kernel roasted, then the dried nuts are hung up in a dilly-bag for a short while. The nuts are chopped up, with a stone, and then ground fine, and sieved through a dilly-bag before being eaten (although this process can be shortened, and gubu:m eaten after only a few minutes preparation - 1.5). (And see Roth 190Ib for a list of three dozen edible plants and a similar number of edible molluscs for the Gungandi tribe, with some details of their preparation.)

There were also signs which indicated imminent natural happenings for instance, a cyclone. Inland tribes uniformly recognise that if they encounter sea-gulls too far from the sea, then a cyclone is approaching. When the coastal Yidindi saw the dalygan (a black bird, rather like a duck, with a red head) flying unusually close to the ground, to avoid the first breath of a high wind, they knew a cyclone was coming and would gather in large low huts for maximum protection from the winds. (Note that there is in Yidin an appropriate verb narmbi-l '[come down to] approach [but not reach] the ground' for describing this action by the bird - cf. 6.1.2.)

Green tree ants, dilibura, were held to have medicinal properties by the Yidindi (as by neighbouring tribes) and were not included under the generic term munimuni 'ant' (6.2.1). The ants would be squeezed between the hands and the resultant 'milk' flavoured with clean ashes - obtained by burning wood from a blue gum tree (gawu:l) or a quandong (murgan)
or a type of tea-tree (bagiram) - before being drunk. Alternatively, a hardy man could effect the cure by putting the green ants directly on to his chest, and allowing them to bite him (see also Gribble 1932: 15).

The Gungandi and Yidindi appear to have excelled at the manufacture of mother-of-pearl fish-hooks, dilly-bags woven from loya-cane, and bark water-carriers; these were, apparently, made only by men in this region (Roth 1904, Gribble 1932: 6). Indeed, these were their major objects of trade - Gribble (1932:31) 'remembers one trade route along the coast of north-eastern Queensland where canoes would come from the tribes in the Port Douglas district, bringing hardwood spears, and take back the cane baskets made by the Goonganjie people inhabiting Cape Grafton. The very last of these trading canoes came from the north in the year 1894'. And Roth (1910a: 18-19) gives a full account of Gungandi trading: ‘dealing now solely with the Cape Grafton Blacks, it would appear that, prior to the institution of the Yarrabah Missionary settlement, the following list comprised the trade-articles of home production: bicornual dilly-baskets (taken or sent to Port Douglas, the Mulgrave and Barron Rivers, Mareeba and Herberton), grass-bugle necklaces (for the Mulgrave and Russell Rivers), four-pronged fishspears (Mulgrave and Upper Russell Rivers, Johnstone River, Clump Point, etc.), straight spear-throwers without the shell-haft (for the Mulgrave, Johnstone and Russell Rivers), bent or moon-shaped spearthrowers, large fighting shields, and long single-handed swords (all for the Barron River and northwards). The imports constituting the Cape Grafton northern trade, coming mainly from the Barron River and Port Douglas, included the following: hour-glass woven-pattern dilly-bags, round-base basket dilly-bags, beeswax necklaces, straight shell-hafted spear-throwers, a variety of bamboo spear, square-cut nautilus-shell necklaces, and cockatoo top-knot head-dresses. The southern foreign trade, which used to come in either directly or indirectly from the Mulgrave River, comprised: long swords, boomerangs, shields, opossum string armlets, and the large oval-cut pearl-shell chest ornaments, the last mentioned being said to have reached the Mulgrave River via Atherton and Herberton, whither it was believed to have been brought from the Gulf country. The trading, amongst the Cape Grafton Blacks, was not carried out by any particular members of the community, the bartering being apparently personal, each one doing business on his own account.' An unusual moon-shaped woomera (baluy) was in use from Cape Grafton north to the Bloomfield River (Roth 1909: 199) and was
held to have magical properties (Gribble 1933: 7, 145; 1932: 56-7-and see 1.8 below).

There were fighting and singing corroborees, involving several neighbourhood tribes, at regular intervals (Roth 1908). In addition to providing a regulated outlet for aggressiveness, these served for social intercourse - the exchange of news, stories and songs - and were probably used for trading. It is significant that there appears to have been little or no trading or social meetings with the Dyirbal-speaking tribes, to the south. In fact Stan Connolly, a Gungandi who has tried to reconstruct his tribal history, maintains that the Yidin-speaking tribes lived in perpetual fear of the Mamu and Dyirbal - whom they regarded as much fiercer and more aggressive than themselves - and that the Gungandi (a relatively weak tribe) had a 'pact of defence' with the more dominant Yidijdi, that the latter would come to their aid if they were attacked by 'the Tully mob'. Although there appears to have been some contact between the Dyirbal-speaking Ngaḑandi and the inland Yidindi - on the tablelands - there seems to have been little interchange along the coast. The writer discussed this with middle-aged Dyirbalyan men, and they said it would explain why - in their youth - people came from a good way inland (from Ravenshoe and Herberton) to corroborees at Tully, but no one from north of Innisfail was seen there. It thus seems that Yidin-speakers had major contact along the coast with those whose language was genetically closest (Dya:bugay-speakers), and little or no helpful intercourse with those whose language was most different (Dyirbal-speakers).
Young men were initiated around puberty. Circumcision was unknown on the east coast, but horizontal cicatrices (wadir or muygga) would be cut across the chest and stomach, after the stomach had been distended by food. Newly initiated men had to sit with their heads down (to avoid looking around the camp) in the lap of an older man. They were only allowed to leave the camp - for toiletry purposes - under supervision, and then the track had to be brushed clear of all leaves and twigs before they went along it. They were forbidden to scratch their bodies with their hands, but were provided with a small sharpened stick (biwi) for the purpose. By-and-by, the initiates were taken to bathe in salt-water, to wash pus from the wounds, but they now had to keep their eyes upwards, to avoid looking down into the water and annoying the rainbow-serpent. In fact, one powerful myth from this area (originating with the Ngaçan tribe) tells how two young initiates strayed from the
camp by themselves and, trying to spear a wallaby, hit instead a flame tree, which is sacred to the rainbow-serpent. When the spear was extracted it had a grub on its point, breaking a further taboo. As a result, the rainbow-serpent punished the people by causing the sky to glow red and yellow, cracks to open in the earth, and water to pour up, engulfing the camp. This - which could pass as a plausible account of a volcanic eruption - is said to explain the volcanic crater lake, Eacham (see also Dixon 1972: 29).

The Yidindi had a considerable number of myths explaining the origin of animals and birds, of geographical formations, and so on. Unfortunately, most of these are now forgotten - and are known only by allusion - but the writer was able to collect parts of eight traditional tales. These all relate to a time in the distant past to which speakers of Yidin apply the English name 'storytime' (Yidin gubi - and note also the adjective bulu: $\gamma$ 'storytime person, thing or place'); the term 'dreamtime' is not used in this region and there seems to be no connection with 'dreams'.

For instance, one story tells how the rainbow (gudugudu) originally had the only fire in the world, while the birds (who were 'storytime people') were shivering and getting sick from eating raw food. Various birds and a grasshopper tried unsuccessfully to snatch the fire away (the ways in which each was prepared for its attempt accounts for its present colouring, and other physical characteristics). Then the black satin bird (badin) - who can glide down and alight so swiftly that his arrival is not noticed - succeeded in getting the fire. The rainbow was told by the birds that he would never again have fire, but that he must now take to the water (the opposite of fire, and incompatible with it); he went to dwell in deep water-holes in the river. It is believed that these are still the abode of the rainbow and children are discouraged from bathing in deep pools for this reason (thus providing an admirable safety reguation). A small rainbow can often be seen in the spray of a waterfall (which are common in this region), which will invariably have a deep water-hole below it. When the rainbow (who is also believed, throughout Australia, to be able to take the form of a snake) is seen in the sky, he is thought to be travelling from one water-hole to another, or just coming out of the cold water to warm himself in the sunshine, the nearest he can get to the fire he once possessed. (There is a rather different story explaining the origin of fire, attributed to the Gungangi tribe by Roth 1903: 11; see also Gribble 1933: 7, 145.)

There was a complex set of beliefs surrounding the rainbow --for instance, a full rainbow in the sky can be called by the name gamim 'father's father', while a middle-sized rainbow can be referred to as bimbi 'father', and a short one as yaba 'brother' (in the same vein, the moon is referred to as 'mother'). But these are now largely forgotten, and the writer was only able to glean isolated fragments.
A major part of most Yidin and Gungay myths involves the travels over the territory of storytime heroes, and the naming of places, according to something the hero saw there, or something that befell him. The most important story of this type concerns Gulndarubay, who travelled around Cape Grafton, up the coast from near Innisfail, and all the way up the Mulgrave River - fragments of this story (dealing with places in different parts of the tribal territory) were remembered by three different informants. For instance, at one point Gulndatubay comes to a rock on the coast (near what is now called Oombunghi Beach) opposite a small offshore island that has a freshwater spring on it (presumably the outlet for an underground freshwater stream from the mainland). The island reminds him of a child being fed by its mother through its umbilical cord and he calls it pumbubu ('new-born child'), naming the rock on the mainland dibin ('navel'). (Some place names are like these - identical to a common noun or a verbal form, but others involve some apparently gratuitous accretion to a lexical root. The mechanics of place-name formation is discussed in 6.1.2.)

Yidindi myths clearly state that their present (coastal) territory was at one time occupied exclusively by the Guggandi. A man - called, in some accounts, Yidin or Yidi - came by boat from the north with his people (in the story, all men) after their own country was inundated by water. It is said that at that time the Gungandi people spoke a different language, but the Yidindi party (which included Gulndarubay) told them they would one day forget their own language and be able to speak only Yidij.

It is currently unfashionable in anthropological circles to attribute any historical basis to traditional stories and myths. It is, however, worth noting that a theme running through all the coastal Yidin myths is that the coastline was once where the barrier reef now stands (as in fact it was, some 10,000 years ago), but the sea then rose and the shore retreated to its present position. The only common noun denoting 'island' is daruway, which also means 'small hill' - contrasting with bunda 'mountain, big hill'. The proper name of Fitzroy Island is gabay 'lower arm',
so called because most of this geographical feature was submerged and only one extension remains above water. Note also that there was a place half-way between Fitzroy Island and King Beach that was called mudaga ('pencil cedar') after the trees which grew there; it is now completely submerged. Again, Green Island is said to have been at one time four times as big as it is now - only the north-west portion remains above water (this is, in fact, consistent with water depths around it).
Tindale and Birdsell (1941: 1, 5) report that 'in the eastern coastal and mountain region near Cairns is an area where exist several small tribes of a people characterised by a high incidence of relatively and absolutely small stature, crisp curly hair, and a tendency towards yellowish-brown skin colour...The preliminary results of blood grouping tend to substantiate the distinctness of the bloc of tribes.' They gave twelve tribes belonging to this 'Barrinean type'-six speak Dyirbal, two Dya:bugay and three Yidin (Yidindi, Gungandi and Wanur). The final tribe is Mbabatam, speakers of a highly divergent language (see I.3) which Tindale took to be symptomatic of the Barrinean languages being 'unAustralian'. In fact, the languages show striking similarities with languages spoken in other parts of the continent (by Aborigines who do not show Barrinean physical characteristics); the point worthy of note is that there is such a large linguistic difference - and such overt hostility - between the Yidin-Dya:bugay speakers in the northern part of Tindale and Birdsell's bloc, and the Dyirbal speakers in the south. Note also that Dyirbal shows considerable similarities with languages on the South Queensland and New South Wales coasts, and that travellers in Dyirbal myths all come from the south (Dixon 1972, 1976b).
It is tempting to speculate that there may well have been, in the Cairns Rain Forest region, a people of a different physical type from the tribes around them, who may at one time have had their own distinctive language and culture. One would expect such an isolated block to be gradually infiltrated perhaps by Dyirbal-speakers from the south, and by Dya:bugay/Yidinspeakers from the north. This would explain the strong linguistic boundary half-way down the Barrinean bloc. It could also explain the Yidin story concerning the Guygandi tribe being the original inhabitants (the Barrinean people) and the Yidindi men coming by sea from the north (and presumably marrying Gungandi women). Certainly, the story insists that the Gungandi could not at that time understand Yidin, whereas by this century Gungay and Yidin were without doubt mutually intelligible.
The writer was intrigued by this hypothesis, and by a comment from the main coastal Yidin informant - admittedly highly prejudiced against Gungandi (see the comments on tribal hostility at Yarrabah in 1.7) - when he volunteered that the Gungandi were harmless and weak people 'like a midget'. As
a result of this he contacted Dr J. B. Birdsell, to see if the data from his 1938 measurements lent any support. Birdsell replied:
'Taking the two attributes of weight and stature 19 adult male Yidindi average 110.7 pounds whereas io adult male Guggandi weigh but 97.6 pounds. The range of weight in the two tribes respectively is $88-125$ pounds and $7^{8-1} 19$ pounds. Turning to stature for the same individuals, the Yidindi average 156.7 centimeters with a range of $149.4-166.8$ centimeters. The Gungandi, on the other hand, average but 152.8 centimeters, showing a range from 139.9 centimeters to 165.9 centimeters. Although the series are not as large as would be liked, they are all we will ever have, and I am confident that the differences are of sufficient magnitude to be statistically real, and further correspond to general field impressions of the two groups.
'There is a way of doubling our universe, and that is to take the females from the two tribal groups. These are a much smaller series but the differences are of roughly similar magnitude and in the same direction. For the Yidindi seven women weighed 96.6 pounds with a range from 74 to 121 pounds while the Gungandi for eight women showed a mean of only 88.1 pounds with a range from $64-104$ pounds. For stature the Yidindi average 147.0 centimeters, ranging from 139.0 to 152.5 centimeters. The little Guygandi averaged but 143.5 centimeters, with a range from $136.6-146.9$ centimeters. The differences in stature match those of the males, while the differences in weight are in the right direction but slightly less.
'Since we are dealing with small breeding universes here, who numerically may never have been very large, I think there is no reason to doubt the general validity of these figures and the differences they reveal. I think your informant may have faintly exaggerated the difference between the two peoples but I don't doubt that in the curious sword duels indulged in in this area a difference of 13 pounds between males of the two groups would mean a considerable difference in endurance. (The duelling swords are heavy, made of hardwood, and slung in single alternating strokes over the head against the opponent. Strength would make a very considerable difference in the effects.)'

## 1. 5 Moieties

The coastal Yidindi maintain that their most important story (which appears also to have been known to the Dya:bugay) concerned two 'storytime' brothers, Guyala and Damari (one version was recorded as Text 2 - pp. 513-30 below). They came into Yidindi territory, arranged all the foodstuffs that were to become the sustinence of the tribe, and ordered other aspects of daily life. Guyala was the sensible brother, who was always keen to make things easy and rational, whereas Damari was a 'silly fellow' who tried to make things as difficult as possible. They had
an argument over each type of food they were giving to the people. Guyala wanted the rickety nut, badil (see I.4), to require only a short soaking in water before it was ready to eat, but Damari maintained that it should be very bitter, so that it had to be soaked for a long time (here Damari, by his persistence, won). Then Damari wanted the black pine, $g u b u: m$, to require lengthy preparation but Guyala argued that it should be edible after just a few minutes roasting (in this case Guyala won). There was another argument about the mountain yam, dimir; Guyala wanted it to grow near the surface so that one would only have to pull on the vine to get it up, but Damari was intent on sinking it it deep into the earth so that it would need to be dug up with a long, pointed yamstick (here Damari won). Guyala then named all the animals, and all the places. Damari remonstrated that only a few places need be named, each some distance from the next; but Guyala argued that names must be given to places close together so that people could easily follow a wellknown sequence of names - if they were too far apart people would get lost looking for the next place on their route (here Guyala won).

Guyala and Damari had arranged to fight some people one day. But Damari got up before dawn and went in the opposite direction, running up against the prickles on a Bougainvillea tree to simulate spear wounds. Guyala, thinking Damari had already gone to the fighting ground, went there and carried on the battle by himself; then Damari appeared with his fake gashes, pretending he had been in the battle all the time (at the side, where Guyala couldn't see him). Finally, Guyala took a canoe and returned to the north, where he died; Damari - after having half of one leg bitten off by an alligator-settled down and later died near the present site of Yarrabah.

Nowadays the coastal Yidindi have two moieties - Guramina and Gurabana, which are said to descend from the two brothers, Guyala and Damari, respectively. Each Yidindi person belongs to one of the moieties, and must marry someone from the other moiety; children belong to the same moiety as their father.

Gurabana (bana $=$ 'water', gura is unknown outside these compounds) is associated with the summer, when torrential rains make living and food gathering as difficult and unpleasant as possible. Guramina (mina $=$ 'edible animal') is associated with the drier winter season, when it is possible to plan an orderly existence, and there is plenty of flesh food to be had. It is easy to see why Gurabana is connected with Damari, the silly and obtuse brother, and Guramina with Guyala, the
sensible and helpful one. The totems associated with Gurabana mostly have a connection with water or monsoonal conditions - storm, rainbow, and so on; gindada 'cassowary' is also a Gurabana totem (the writer was told that while the 'rainbow' has the status of father's father to Gurabana people, the cassowary fulfils the role of father). The Guramina totems include the 'fish hawk' guya:l (whose name is directly related to that of the storytime brother, guyala), the 'eaglehawk' bidu:, 'fire' buri, and so on. Each Aborigine is named after some totem of his moiety; thus Dick Moses (see i.8) belongs to the Gurabana class and is called dariyi after the verb dari-n 'disappear, sink down, become lost', here referring to the rainbow sinking down out of the sky.

There appear, overall, to be three pairs of names for moieties within the tribes and local groups speaking dialects of Yidin. Firstly, the set discussed above:
(1) guramina - gurabana
was given by Dick Moses, informant for coastal Yidin; by Sharp (1939: 268-9) for Nyagali and Dya:bugay; and by Tindale (MS notes) for Yidin and Dya:bugay.

But for Gunga:ndi, Gribble (1897b: 84) gives:
(2) guragulu - gurabana
and these are also the terms in Sharp (1939) for Gungay, Yidin and Yirgay and collected by Tindale (MS notes) for Gungay. (In a later publication Gribble, 1933: 144, mentions all three moiety names, and is plainly confused by them.)

Finally, Tilly Fuller, Katie May, Pompey Langdon and George Davis - representing various local groups of tablelands Yidindi - and Mollie Raymond - the main informant for Ngadgan - told the writer that in the tablelands region the moieties were:
(3) guramina - guragulu.

Some (and maybe all) of the totems for (3) Guramina correspond to those for (1) Guramina; it has not been possible to check (1) Gurabana against (3) Guragulu. Note that the legend of Damari and Guyala is not known (except at second-hand) to tablelands Yidindi, although they do call the fish-hawk guya:l. (damari is in fact the name for 'centipede' in the Dyalnuy 'avoidance' style of tablelands Yidin - see i.6.) It is said that when initiation was carried out at Bagurgu, near Lake Eacham, the Guramina men would be thrown to the right, and the Guragulu youths to the left.

There is little doubt that the Gungandi tribe - and probably also the Yidindi were occasional cannibals. It is worth mentioning that the main tablelands informant, 'Tilly Fuller, insisted that Guragulu were permitted to kill and eat men, whereas Guramina (her own moiety) were not. This could not be checked and the writer is rather doubtful of its truth.

At first, the writer wondered if one of the three moiety pairs might be an error. But each of the pairs is confirmed by sufficient sources for there to be no doubt that there were these three arrangements - involving every combination of two out of the three terms: Guramina, Gurabana, Guragulu. Geographically, (1) intercedes between (2) and (3) so that we have, drawing a line from Kairi to Cape Grafton:

| EAST | guragulu - gurabana | Gungay |
| :--- | :--- | :--- |
| CENTRE | guramina - gurabana | Coastal Yidin (and Dya:bugay ?) |
| WEST | guramina - guragulu | Tablelands Yidij, and Ngadan |

This is, at first sight, confusing. Thus a coastal Yidindi Guramina person would, if he chose a spouse from the west, have to select a Guragulu. But it would be a coastal Yidindi Gurabana who would marry a Guragulu from the east. And if a tablelands Yidindi Guragulu married a Gungandi, he would presumably have to marry a Guragulu !

Whereas mipa 'animal' and bana 'water' are amongst the commonest nouns in Yidin, there is no form gulu. But gulu does appear in Dyirbal, as the negative particle 'not'. This might conceivably supply the solution to our puzzle. We could suppose that gulu functions here as a negative - in the west it marks the opposite to the positively specified mina, and in the east the opposite to the positively specified bana; it is only in the centre that both poles receive a positive identification. However, this is a highly speculative solution (put forward in the spirit of looking for some clue to what seems an unexpected and counterintuitive arrangement of terms) which would require more concrete supporting evidence before it could be accepted with confidence.
Note that all the tribes to the south and west (including all other Dyirbalspeaking tribes) have a four-section system (Dixon 1972: 31). Sharp (1939: 442) implies that at least Dyirbal, Mamu and Ngadan have both moiety and section names. The writer's fieldwork indicates that this is not the case; Dyirbal and Mamu had four section names (and knew nothing of moieties) whereas Ngadan had simply the moieties Guramina and Guragulu, and did not use any section names. Unfortunately - despite several tries - it has not been possible to ascertain which section was allowed to marry which moiety in, say, a Mamu-Ngadan cross-tribal union.

## 1. 6 'Mother-in-law language'

It appears that, like the Dyirbal-speaking tribes to the south, each member of the Yidindi and related tribes had at his disposal two separate 'languages' or styles: a Dyalguy or 'mother-in-law' avoidance language, which was used in the presence of certain taboo relatives, and an everyday language, which was used in all other circumstances.

The Dyirbal-speaking tribes called the everyday language Guwal or Ngirma and the avoidance style Dyalnuy, so that one had to talk of Giramay Guwal and Giramay Dyalguy, and so on. But no term corresponding to guwal/girma was encountered for the Yidindi - one either spoke just Yidin (that is, the everyday style) or else Dyalnuy.

The Dyalnuy style dropped out of use among the Yidindi many years ago and is almost forgotten now. The writer was able to elicit almost 200 words from two speakers of the tablelands dialect, but this involved considerable effort of memory, over a period of three years, on the part of the informants (all items were carefully checked between them). It would seem that Yidindi Dyalyuy is organised along much the same lines as Dyirbal Dyalyuy (Dixon 1971, 1972). Thus it has the same phonology and grammar (affixes, particles, pronouns and grammatical items like ' what') as the everyday style, but a completely different lexicon. And there are many-to-one correspondences between everyday and avoidance vocabularies, with the result that Dyalyuy must have had many fewer dictionary items than everyday Yidij. For instance, where Yidin has two specific nouns binduba 'crayfish' and dungi 'freshwater shrimp', Dyalnuy has a single noun, wurun, covering both species. A detailed discussion is in 6.3 .
Although a Dyalnuy item is always different from the corresponding form in (everyday) Yidin, it sometimes coincides with a word in, for instance, Dyirbal everyday language (see Dixon 1972: 33). Informants are, of course, aware of this and there is a tendency to over-generalise. In any elicitation of avoidance vocabulary in this area care must be taken to check that each item given is in fact Dyalguy and not just the everyday language item from the next tribe (since these do not, by any means, always coincide).
It was impossible to ascertain the exact circumstances under which it was obligatory to use Dyalyuy. Comments were 'with mother-in-law, father-in-law, and certain cousins' and (for a female ego) 'with son-inlaw or uncle'. This certainly suggests a pattern of usage similar to that for Dyirbal Dyalyuy (Dixon 1972: 32).

Comparing the available data on Dyalyuy vocabulary for the Yidindi tribe with that for three dialects of the Dyirbal language we get the following lexical identity scores (leaving aside Dyalyuy-everyday language correspondences, and counting just Dyalguy-Dyalguy which coincide or are very similar in form):

| $\left.\begin{array}{lll}\text { Dyirbal dialect } \\ 56 \% & \text { Mamu dialect } \\ 45 \% & 64 \% & \text { Ngadan dialect }\end{array}\right\}$ of the Dyirbal language |  |
| :--- | :--- |
| $29 \%$ | $39 \%$ |
| 51 | 51 |

It is instructive to compare these with the lexical scores between the everyday styles:
$\left.\begin{array}{ll}\begin{array}{ll}\text { Dyirbal dialect } \\ 87 \% & \text { Mamu dialect } \\ 62 \% & 70 \% \\ \text { Ngadan dialect }\end{array} \\ 20 \% & 22 \% \\ 29 \% & \text { Yidin }\end{array}\right\}$ of the Dyirbal language

We see that the Yidindi Dyalpuy is relatively close to the Dyirbal Dyalnuys, whereas Yidin everyday style is quite different from the Dyirbal everyday variety.

These figures suggest that the Dyalyuy 'avoidance style' vocabularies increased to their present size relatively recently, after the protoDyirbal language had split into the various modern dialects, and after Ngadan had come into contact with Yidin (see also Dixon 1972: 345-7). Dick Moses, main informant for coastal Yidin, who had not himself had the opportunity to learn the Dyalnuy style (but was fully aware of its existence, and the conditions for its use) maintained that there was originally a separate tribe called Dyalpuy, which lived around Aloomba (between Yidij and Magay). This is a fascinating idea and opens up the possibility that these could have been the original Barrinean people (according to Tindale and Birdsell's hypothesis - I.4), words from whose language were taken over by the invaders for a special social speech-style. (It might be thought that some support for this is given by the vocabulary percentages above. But note that the Dyirbal dialect and Yidinḑi score $29 \%$ in Dyalguy vocabulary as against $20 \%$ in everyday vocabulary. The difference is probably not sufficient to provide adequate support for the idea that the Dyalnuys of Dyirbal and Yidindi were both based on a 'third language'. It is more likely that Dyalyuy lexicons increased to their present size - as a sort of areal linguistic feature - partly through borrowing of avoidance vocabulary between tribes.)

However, there is no mention of a Dyalguy tribe in the literature (every
other tribe listed above is reported by one or more of Gribble, Roth, McConnell, Sharp, Tindale) and every other present-day Yidindi the writer questioned denied knowledge of any such tribe. Regrettably, it seems unlikely that there is any truth to Dick Moses's claim.

### 1.7 Recent history

The Yidindi tribe came into contact with Europeans with the establishment of Cairns, in 1876 , and the settlement of the Atherton tablelands the following year. Within a decade almost all their tribal lands had been invaded - there were cattle, as well as two sugar plantations (each with its own mill) on the plains, matched by gold-diggers in the hills. The tribe did not take kindly to these incursions, and appear to have put up a strong resistance. Bolton (1963: 6r-2) reports that 'the Mulgrave goldfield, deep in the rain-forests behind Cairns, attracted during 1879 and 1880 a few bold spirits, who, for the sake of gold worth $£_{\mathrm{I}}$ a day, could tolerate conditions in which, while one man was digging, his mate would have to stand over him with a loaded revolver to prevent the natives from stealing their tools'.

The Gungandi, cut off by the high Murray Prior range from Cairns and the Mulgrave, were left alone for a while. Then, in 1892, the Rev. John B. Gribble arrived at what is now called Mission Bay, on the north side of Cape Grafton, to found a mission there. In 1880 Gribble had begun the Warangesda Mission on the Murrumbidgee River; in 1885 he moved to the Gascoyne River in northern West Australia but attempts to establish a mission there failed. Gribble then founded a station at Brewarrina on the Darling River for the Aborigines Protection Society of New South Wales, before turning to North Queensland (Gribble 1930, 1932, 1933). But his health was failing and within six months he left for the south (dying there the next year); John Gribble's place at Yarrabah - as the mission was called - was taken by his son Ernest R. Gribble, then a catechist in training for the priesthood.

Gribble soon had many of the Gungajdi living at Yarrabah, partly due to the cooperation of Minminiy (or 'King John' Barlow, as Gribble dubbed him - Gribble 1930: 68ff.). Minminiy did not himself live at Yarrabah but visited the mission about once a week, and appears to have assisted Gribble in keeping discipline. He was given a special uniform, with brown ribbon on it, which was apparently considered greatly superior to the brass plate normally issued to a European-appointed 'king'. As Gribble (1930: 77) reports it 'at the public meeting at which

John was formally appointed King of Yarrabah, he made a speech as follows: "Now, you people, I am your king; not a jump-up king like them blackfellows that got a brass plate on their neck, but a proper fellow king. I have got a lot of people to look after. And when you have any trouble with anybody, leave it to me, I am your king. When your wife growl, do not hit her, but leave it to me. When anything go wrong, leave it to me, and I will leave it to Mr Gribble". John was a regular communicant, two of his [original three] wives had married other men, and it was a treat to see the old man take his proper seat in Church at the daily services, resplendent in his uniform, or as with great dignity he took his place as President of the Yarrabah Court.'

Gribble appears to have been remarkably ill-suited to overseeing the integration of an Aboriginal tribe into European-dominated Australia. For instance, he appears to have had virtually no understanding of Aboriginal culture or social ethic. He certainly learned nothing of the language - filling in a vocabulary questionnaire for the Australasian Anthropological fournal in 1897, Gribble (1897a: 17) gave for 'to live' the form gobo, which is in fact 'leaf', and for 'to know' he quotes gnudju, which is actually the negative particle ( $\eta u d u$ ' $n o$, not' is one of the commonest words in Gungay and if Gribble had had even a smattering of the tongue must have recognised it). Gribble left Yarrabah, for health reasons, in 1909 ; there is no evidence that any of his successors were much better equipped for the task there.
It is said that the Board of Missions would not allow Gribble to return to Yarrabah, once he had recovered (although it has not been possible to check this). In 19I3 he went, like his father, to West Australia to establish the Forrest River Mission. Biskup (1973: 128-9) comments on this period 'Gribble was very much the son of his father: headstrong, self-righteous and authoritarian, with a permanent chip on his shoulder and a tendency to blame others for his or the mission's misfortunes... he thought nothing of knocking down an aborigine who did something to displease him, or of "arresting" aborigines caught killing the mission cattle'. Biskup also records how 'in 1927 the Australian Board of Missions asked A. P. Elkin, who was about to leave for the Kimberleys as the Australian National Research Council's first Research Fellow, to report confidentially on Gribble's administration of the mission. Elkin's report amounted to an unqualified condemnation of the superintendent. He found that Gribble's relationship with his staff was a most unhappy one and that there was little trust between the superintendent and other missionaries. Staff living quarters were appalling and the food, consisting mainly of porridge, salted meat, and half-rotten bread, " not quite what
one would like even missionaries to have". Gribble's relations with the aborigines were equally strained. Parents who refused to part with their children had their rations stopped. Compound children were kept under constant supervision. On reaching adolescence they were married in complete disregard of tribal custom. Young men who refused to marry were lined up for work with adolescent boys. Family life was discouraged. Couples were allowed to spend the nights together, but in daytime the wives were kept in the "ladies' compound" - little wonder the mission was known in nearby Wyndham as Gribble's stud farm.' There is no confidential record of how Yarrabah was run in its early years, but it is likely that it was not too different from this picture of Gribble's administration at Forrest River.

In the first decades of this century the mission appears to have made some progress in establishing a European-type culture among the Gungandi, and the many members of the Yidindi and other inland tribes who were progressively 'sent to Yarrabah'. There were at one time a dozen small 'villages' scattered over the considerable area of the Aboriginal Reserve - there was a good deal of agriculture (at various times: paspalum grass, cotton, peanuts and bananas as well as potatoes, turnips and other staples) in addition to dairying and later poultry farming.

There are reports (for instance, Rowland 1960: 99) that the mission diet was not adequate, but there does appear to have been a measure of self-sufficiency, with some of the people surely having a little pride and satisfaction from organising their own lives and growing their own crops. People from outlying villages would come into the main settlement on Sundays for the (compulsory) church service.

However, the situation has greatly deteriorated since the last war. There are now about one thousand people at Yarrabah, all living in the central town - but there is no trace of any agricultural endeavour. There is, in fact, very little work available at Yarrabah. Typically, a group of new houses may be built and painted by white workmen from Cairns (who tendered for a government contract), with Aborigines perhaps being used to help dig the foundations. The settlement staff is almost entirely European and although the Aboriginal Council is consulted on some matters, all major decisions and organisational details are arranged by the white manager. Some men go over during the week to work at cane farms on the Mulgrave, but a great number of people at Yarrabah subsist largely on social security benefits; there is little chance for selfrespect, or pride in any kind of achievement.

But if Yarrabah appears to have failed - by all social standards - as
a European community, it has done worse as an Aboriginal society. Children were taken away from their parents and placed in dormitories (between the ages of ten and about sixteen) where tribes were deliberately mixed, and they were laughed at for speaking their own language. Of the present population of Yarrabah only one Yidindi man - Dick Moses, dariyi, principal informant for this study - can speak his own language fluently; and this is simply because he was brought up at Woree, on the outskirts of Cairns, and did not come into the mission until his mid-teens. (During his early years on the mission, Moses is said to have been a 'hard case', who would not go to school or obey mission rules. It is probably because of this that he today retains his own language and culture.) Although there must be three hundred people at Yarrabah who reckon to belong to the Gungandi tribe, there is no one who knows as many as a hundred words of that language.

Despite being monolingual in English, the children speak only an attenuated version (but it is certainly a less rich variety of English, and not a separate 'pidgin' or 'creole'). The blame for this can fairly be placed on the early missionaries. As Gribble (1930: 99) himself put it 'in the early days of our work pidgin English was used by us all, and a beastly gibberish it was. As time passed, I determined that it should cease, and good English be used; and, strange to say, the people seemed to find it easier to avoid than the staff, who had got so accustomed to its use that they found it extremely difficult to avoid addressing in pidgin English every black they met.'
It is, in fact, instructive to compare Yarrabah with Hopevale Mission, just north of Cooktown, which was founded the same year. The Lutheran Pastor Schwarz - who founded Hopevale in 1886 and ran it until he was interned as an alien in 1939 - learned the language and wrote a grammar of it. The people at Hopeville still speak Guugu-Yimidhirr; and what is more, their English seems to be of a higher standard than that at Yarrabah. Hopevale provides a fair (but perhaps not a good) example of successful mingling of European and Aboriginal civilisations; the people have retained many of their tribal beliefs and values whilst living an essentially European-style life. The contrast with Yarrabah is striking.

Most young people at Yarrabah know as little of their environment as might a child brought up in the middle of Brisbane. The writer was told that many children do not know the (European, or Yidin/Gungay) names of most of the trees growing in the reserve, still less how to prepare their fruit (see 1.4). They know little or nothing of their traditional tribal law, beliefs and legends: moiety-determined marriage died
out long ago, and most people today would probably not know that there were such groupings as moieties. The writer was told that the dormitory system had effectively eliminated contact between generations, so that parents had no chance to instruct their children in legends, language and customs. (But nothing has really replaced the old tribal beliefs. Church attendance ceased to be compulsory when Yarrabah became a Queensland government settlement about 1960; by 1970 a good Sunday might see twenty people attending a service.)

At a guess, about a third of the people at Yarrabah are Gungandi; a third may be Yidindi with the remainder coming from the Cairns hinterland or more distant parts of the state. Most people do still identify themselves as either Gungandi or Yidindi and there is today quite fierce hostility between the two tribes. When land rights are discussed the Gungandi sometimes insist that the Yarrabah Reserve is their traditional land and the Yidindi are interlopers; the Yidindi reply that King Alfred (Minminiy's son) had clearly said before he died that anyone who was born at Yarrabah (whatever tribe his parents were) belonged equally to the territory. In fact, tribal rivalry is the main positive feature of the dispirited, purposeless nature of life at Yarrabah in the 1970s.

There has been some slight improvement in the last three or four years - a bakery was opened in 1974, and is managed entirely by Aborigines (in contrast, Aborigines have no place in the general running of the settlement, this being entirely the province of white administrators appointed by the Department of Aboriginal and Island Affairs in Brisbane). In 973 newspapers were brought over from Cairns each day for sale on the settlement. There is now a settlement bus, run by Aborigines, and an Aboriginal-owned taxi. But these are small advances towards what should be the eventual goal -a community run by Aborigines (with the sort of internal authority structure that characterised tribal life but which has totally disappeared over the past eighty years, another result of the dormitory system), providing useful and satisfying occupation for its members, and achieving a degree of self-sufficiency, and with it self-respect.

Those Yidindi who avoided being sent to Yarrabah fared both worse and better. There were the usual shootings by European settlers, and people outside Yarrabah probably had less overall chance of survival than those in the mission. But the tablelands Yidindi who did survive have today a much better life than their brothers in the settlement. They speak good English; and most of them have steady jobs and live in
cleaner conditions and better houses than is normal at Yarrabah. And, what is more, they know more about their environment and about their tribal customs and beliefs.

There was closer white settlement in Yidindi territory than in that of neighbouring tribes. The last Yidindi men to be initiated were in fact put through the ritual with other tribes. Thus Dick Moses, of the gulgibara local group, was initiated with the Dya:bugay-speaking Guluy, at Freshwater, and Pompey Langdon (of the malanbara) with the Dyirbal-speaking Ngadan, at Malanda. The last group of Yidindi who still lived something approaching a traditional life, and spoke their own language amongst themselves (while, at the same time, working as labourers for white settlers) lived at Goldsborough, in the foothills, until about 1934.

### 1.8 Sources for this study

There are many more members of the Yidindi and Gungandi tribes living at Yarrabah than outside it. But, of the dozen or so speakers or partial speakers of Yidin the writer worked with during the last twelve years, all but two were living freely in Edmonton, Gordonvale, Aloomba, Kairi, Atherton or other towns.

The first Yidin speakers to be encountered were also probably the most fluent: Jack Stewart (mirbi) and his wife Nellie (wayngubi) recorded three hours of Yidin vocabulary at Lake Barrine in November 1963 (they had originally been contacted by W.C. Wentworth, M.H.R. who reported their whereabouts to the Australian Institute of Aboriginal Studies). Several further attempts were made to work with the Stewarts during the next nine months (when the writer was almost exclusively concerned with a depth investigation of Dyirbal) but each time they were either unavailable or too ill to work. Then, in 1967, when Jack Stewart again could not be located, his brother-in-law Alec Morgan (gardu) gave some grammatical information on Yidin, and a few words in Dyalguy. By 1970, when the writer began intensive work on Yidin, Jack and Nellie Stewart had died and Alec Morgan was totally senile and of no further use as an informant.

The data on tablelands Yidij in this grammar were largely given, between 1971 and 1973, by Tilly Fuller (buru:p). She was born and brought up at Kairi and spoke fluent Yidij, recounting myths and legends and giving a detailed account of daily life in tribal times. Tilly Fuller remembered a good deal of Dyalnuy (and also understood a fair amount of the Ngadan dialect of Dyirbal). Her sister Katie May
(dugulum) and step-son Ranji Fuller (daruga) found it difficult not to mix English words and phrases into their Yidin but were most helpful in translating Tilly Fuller's texts, and explaining grammatical and semantic points. Although she had had a more 'tribal' upbringing than any other Yidindi encountered, Tilly Fuller's father was English (from York) and she had been married to an Englishman (from Cambridge) as she put it, with typical frankness 'I was having his baby so he did the right thing and married me'. In 1973 she was in hospital, and it was only possible to do a little work with her. Tilly Fuller died in October 1974, aged around 75 . Some grammatical points which emerged from texts that she gave cannot now be clarified or extended (for instance, 'reduplicated aspect' -3.8 .6 ) since there is no one living who can match Tilly Fuller's knowledge of the tablelands dialect.

The only other informant who could give any words in the Dyalnuy style was Pompey Langdon (daluru), a speaker of tablelands Yidin who lived at Blackfellow Creek, near Edmonton (and moved to Yarrabah in 1975). An initiated full-blood, Pompey Langdon is now aged over 80 and is not as mentally alert as Tilly Fuller or Dick Moses; he could not give texts but it was possible to check some lexical and simple grammatical points with him.

The youngest (and perhaps the only literate) speaker of Yidin is George Davis (paygabana). Born about 1919, he was brought up by his grandfather at Goldsborough - spoke Yidin and drank opium with him and learned a good deal of tribal lore and belief. On his grandfather's death he went to school (at the age of fifteen or sixteen) and is today a contract timbercutter. In terms of his home, his way of living and general background knowledge and articulateness, George Davis could not be distinguished from his white neighbours in Atherton (and is the only one of the thirty or forty informants the writer has worked with in North Queensland whose living conditions resemble those typical of Europeans). Yet he retains a firm knowledge of tablelands Yidin and of traditional stories and life-style (although, of course, much less rich than that of Tilly Fuller). George Davis's work in the bush makes him frequently inaccessible, but the writer was able to talk with him around Christmas 1974, and again in 1975, recording one legend and benefiting greatly from his clear and revealing explanation of lexical differences, and the complexities of mythic interpretation.

The main informant for this study was Dick Moses (dariyi) a fullblood born about 1898 into the gulgibara local group and now living at

Yarrabah. Moses assisted the writer on six field trips, between 1970 and 1975, working patiently for five or six hours each day recounting myths and autobiographical stories, correcting transcriptions, checking and counterchecking lexical forms and meanings, and patiently providing examples of grammatical points, leading the way to generalisations that revealed the underlying structure of the language. (Until her death, most difficult grammatical points were counterchecked with Tilly Fuller.) Moses also knows some Dya:bugay but was careful to keep this separate from Yidig. Indeed, he is so concerned to keep his Yidin pure and free from outside influence that Moses has eliminated what were certainly established English loan words. (Thus, in place of mudaga 'motor car' and biligan 'billy can', he uses dundalay and gunbu:l which he says were originally the Dyalnuy terms for these items; Moses only knew two or three other Dyalnuy words. Unfortunately neither Tilly Fuller nor Pompey Langdon - the major informants for Dyalguy recognised these as Dyalnuy words; but it is possible that there were substantial differences between coastal and tablelands Dyalyuys, as there were between the Dyalguy styles of, say, Dyirbal and Mamu - see r. 6 above.) The only other informants for coastal Yidin were Richard Hyde (bumidi) of Yarrabah (died in 1974) who mixed English words and grammar into every Yidin sentence, and Dick Moses's sister Ida Burnett ( $\quad$ udun) of White Rock, who tended to mix Yidin with Dya:bugay and did not respond directly to specific inquiries.

The writer never heard Yidin spoken spontaneously. This description is based on monologue texts and on Dick Moses and Tilly Fuller's systematic attempts to teach the writer to speak their language (in terms, for instance, of 'giving the right response' - see 3.1.3). The grammar is thus less complete than that for Dyirbal (Dixon 1972), a language which is still actively spoken and for which there would now be thirty or forty informants as fluent (although not necessarily so patient or thoughtful) as Dick Moses. And whereas it is possible to record twenty or more traditional Dyirbalyan myths (each from several different informants), Dick Moses knew only parts of six or seven (and no one else at Yarrabah knew any others).
Gungandi myths have virtually disappeared. The writer read to Dick Moses and Robert Patterson (nalmbi) - a Gungandi who remembers a little of the olden times and is extremely keen to reconstruct more-Gribble's (1932: 56-7) short account of the story of 'Goonyah'. Moses then embellished this outline (and changed it a little: Gribble says that the Great Spirit Balore
caused the sea to rise against Goonyah, whereas Moses has Guna stand up Balur - the sacred curved woomera - in the prow of his boat to calm the waves) and recorded it for the writer as a text in Yidin. The story - recorded by Gribble around 1900 , published by him in 1932 and re-told to the Guygandi in 1973 after they had quite forgotten it - is now spreading at Yarrabah, and in May 1974 Dick Moses recorded it in Yidin and in English for a visiting team of film-makers from Sydney. (Moses does, on the tape, say 'you see, old Gribble, he got that in a paper... he been put that down...that's the way I been to get them out of that book, you see' but the significance of this aside might well be lost on some future anthropo-historian.) Thus is a folk tradition, which had died, on the way to being partly reestablished.

## 2 Phonology

Yidin has a number of phonological rules of wide application, that operate on the forms of inflected words - inserting and deleting vowel length, and deleting a final syllable or final consonant - to ensure that the surface forms of words meet the stress targets of the language. These are discussed in detail in the present chapter; they are a necessary prerequisite to understanding the morphology, in chapter 3 .

But consideration of the phonological processes must refer to aspects of the morphology - the alternate forms of affixes (and the conditions under which each occurs) indicate the nature and application of the phonological rules. Critical decisions in the phonology depend upon the form of certain morphological combinations, and so on.

The ideal way to understand Yidin is to learn something of the phonology, then a little morphology, then some more phonology, and so on - gradually building up a picture of both levels of description (and ensuring both the phonological prerequisites for understanding each aspect of the morphology, and the morphological prerequisites for justifying and exemplifying each phonological rule and constraint). The writer follows this scheme in classroom presentation of Yidin; but it would plainly be an inappropriate arrangement for a reference grammar.

Where sections of this chapter involve heavy use of morphological results, cross-references are given to chapter 3. Ideally, the reader should first go through chapter 2 - to gain a general picture of the phonological rules presented there - and then study chapter 3 (and perhaps chapter 4 ) before returning to a more detailed consideration of the present chapter, concentrating this time on the morphological justification for our phonological generalisations.

## 2.I Segmental phonology

2.I.I Phonemes and their realisations. Yidin requires only sixteen segmental phonemes (the smallest inventory for any Australian language). These comprise:
four stop-nasal series, best described (as is usually the case for Australian languages - Dixon 1970c) in terms of active articulator:

|  | stop | nasal |
| :--- | :---: | :---: |
| labial | $b$ | $m$ |
| apical | $d$ | $n$ |
| laminal | $d$ | $n$ |
| dorsal | $g$ | $\eta$ |

an apical lateral - $l$
a trilled apical rhotic - $r$
an apical-postalveolar (retroflex) rhotic continuant $-\zeta$
two semi-vowels:
laminal - y
and labio-dorsal-w
and three vowels:

```
    open - a
    close front - i
```

and close back - $u$
Each vowel has both a long and a short variety (2.2).
The stops and nasals involve identical articulatory localisation. In $d$ and $n$ the tip of the tongue is placed against the alveolar ridge, whereas $d$ and $n$ require a fair section of the tongue blade to make contact with the hard palate and the alveolar ridge; $g$ and $\eta$ involve a portion of the back of the tongue touching the soft palate.

Stops are almost always voiced. Partly voiced allophones are sometimes encountered word-initially (most commonly, the word begins an intonation group); words cannot end in a stop. It is, in fact, normal for the glottis to be vibrating throughout the articulation of a Yidin word; thus, in one sense, 'voiced' is (for this language) the unmarked value of the phonetic opposition 'voiced/voiceless'.

The dorsal stop $\mid g /$ has secondary labialisation in, for instance, [ $\left.g^{w} u y \eta g a n\right]$ 'female spirit; grasshopper sp.', [ $\left.g^{w} u y g a l\right]$, 'bandicoot; eel', [ $\left.g^{w} u y \eta g^{\prime} l b i\right]$ 'Moreton Bay tree' and $\left[g^{w} u y u\right.$ ] 'tree vine sp.'; this appears to be conditioned by the following $\mid u-\eta g /$ or $\mid u-u /$. (In fact $/ g u y u /$ has been heard pronounced as [ $g^{w} i y \circ$ ].) The laminal stop /d/ can (particularly in the tablelands dialect) be weakened to semi-vowel [y], predominantly within the verbal derivational affix -:di-n (see 2.6.4). Apical $/ d /$ is sometimes realised as a tap [ $r$ ], particularly when it is the second occurrence of $/ d /$ within a short space in a word. Thus /bindada/
is normally pronounced [bindada] but has been heard as [bindaזa]; and in text 14, line $6 /$ wawa:Idanga:day/ is said as [wawa:ldayga:cã]. There is no noteworthy allophonic variation for the bilabial stop $/ b /$.

There is a tendency for final $|\boldsymbol{y}|,|n|$ or $|n|$ to be elided, the preceding vowel being nasalised and sometimes slightly lengthened. In the case of final $|\boldsymbol{\eta}|$ this has developed into a specific realisational rule, within the tablelands dialect (2.6.3). The sequence /aya/ may be pronounced as a very long [ $\tilde{a}::$ ] - again, particularly in the tablelands dialect, and predominantly when $/ \mathrm{ga} /$ is the verbal comitative affix (2.6.4).

The lateral $/ l /$ normally has a fairly dark (velarised) articulation, particularly after $u$. (In word-final position after $u$ it is sometimes difficult to distinguish between $/ l /$ and the retroflex continuant $/ r /$.)

The most difficult phonological distinction, for a non-native speaker of Yidin, is undoubtedly that between the two rhotics. $/ \boldsymbol{r} /$ is an apicoalveolar trill - sometimes reducing to a single tap - and exhibits little phonetic variation. The unmarked pronounciation of $|r|$ is as an apicopostalveolar grooved continuant; however it can be realised as a postalveolar trill, typically at the end of a stressed syllable (in the tablelands dialect there seems to be a fair chance of encountering a trilled $/ r /$ in any position). It appears, in fact, that the crucial distinction lies in $/ r /$ being articulated further back in the mouth than $|r|$. Whereas $\mid r /$ involves the tip of the tongue against the alveolar ridge, the tongue appears to be retracted for $|\gamma|$, producing either a continuant - that is almost retroflex in quality - or else a trill that vibrates against the back of the alveolar ridge.
We have already noted that $/ d /$ may be realised as $[r]$. With clusters such as $|r d|$ it is particularly hard to distinguish the segments - a clear trill-plus-stop may be recognisable at one occurrence of, say, |báurumbárdu| 'wattle tree grub-ERG' but on repetition it may be heard as [bárumbárdu] or [bárumbáru] or simply as [bárumbáru]; that is, since $\mid r /$ may reduce to a tap and $|d|$ may be realised as a tap, a single tap may simultaneously realise both underlying segments. Trilled $/ r /$ and a following $/ d /$ may merge in similar fashion.
And note that a $[d]$ has been heard inserted between $|r|$ and $|n|$. Dick Moses clearly said, and confirmed [burudurdni] for |burudurni| 'pademelon wallaby-Gen'.
The vowels show relatively little allophonic variation. The main point of note is that (as in many Australian languages) the close back vowel $/ u /$ involves - on visual evidence - no significant lip rounding. Yet Yidin $/ u /$ is aurally much closer to the rounded $[u]$ of, say, British

English, than it is to the corresponding unrounded close back vowel [u] in Australian English. One can only guess that some other articulatory effect may be employed to produce a $/ u /$ that is - on auditory grounds maximally different from $/ i /$, but does not involve lip rounding.

Articulation of the close vowels normally diverges little from cardinal [ $i$ ] and [ $u$ ]. Slightly more open varieties are encountered in word-final long vowels, but the lowering is no further than $[e]$ and $[o]$ - thus |yawu:/ 'grass sp.' is heard as [yawo:] (whereas /margu/ 'grey possum', with a short final vowel, would be no lower than [margo]), and /yiri:/ 'slatey stone' as [yirr:] or maybe [yire:].

This tendency of long high vowels to be slightly lowered 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...'
$|u|$ may be lowered when following a laminal, particularly the semivowel $|y|$ - thus $|g u y u|$, [guyo]. $|a|$ varies over IPA [a], [a] and [ $x]$; it is never raised as high as $[\varepsilon]$ or $[\rho]$, even before $\mid y /$. An underlying vowel-plus-(non-labial) nasal sequence may be realised as a nasalised vowel in word-final position - see 2.6.3.

There is a class of (about eighty) nominals whose absolutive (zero-inflection) forms are disyllabic but which appear to have a trisyllabic root with oblique cases - for instance, dambu:l 'two-abs', dambula + $\eta g u$ 'two-ERG'. We set up roots with a final vowel morphophoneme (written with a capital letterdambulA) that triggers the 'final syllable deletion rule' when no affix follows (2.3.4) and which is rewritten as a normal vowel phoneme in all other circumstances. Vowels emanating from these morphophonemes $(A, I$ and $U$ ) can have normal pronunciation $[a],[i]$ and $[u]$; but there is sometimes a tendency to centralise them, each approaching [a] so closely that in normal speech they can be difficult to distinguish (and the help of the informant has to be sought, in pronouncing the word with a more 'cardinal' vowel allophone). A vowel $|u|$, inserted in the oblique inflection of a certain class of genitives, can be reduced to [ 2 ] in the same way $-2.3 \cdot 3$. This behaviour of segments corresponding to root morphophonemes (and the genitive $\mid u /$ ) contrasts strongly with segments represented simply as $a, i$ or $u$ in underlying root and affix forms - the latter can never be centralised in this way. There is further discussion of this point in 2.3.4.

Yidin differs from many other Australian languages (e.g. Dixon 1972: 278) in not permitting the phonetic elision of $|y|$ before $|i|$ or $|w|$ before $|u|$ at the beginning of words. (The language and tribal names have been recorded
by earlier investigators as Idin, Idindji - Tindale 1974: 168. This is simply a mishearing - they can Not be pronounced [idin] or [idi:ndi].
2.1.2. Phonotactics. A root in Yidij has phonological structure:

$$
\mathrm{C}_{1} \mathrm{~V}_{1} \mathrm{C}_{2} \mathrm{~V}_{2}\left(\mathrm{C}_{2} \mathrm{~V}_{2}\right)^{\mathrm{n}}\left(\mathrm{C}_{3}\right) \quad \text { where } \quad n \geqslant 0
$$

Here $V_{1}$ and $V_{2}$ each represent a single vowel and $C_{1}$ and $C_{3}$ a single consonant; $\mathrm{C}_{2}$ can be a sequence of one, two or three consonants.

That is, a Yidin root has at least two syllables, each of which involves a single vowel segment. It begins in a single consonant and can end in a vowel or a single consonant.

There are phonetic monosyllables, involving very long vowels $[i:]$ and $[u:]$; these are taken to be phonological disyllables, involving sequences $/ i y i /$ and /uzwu/ respectively. The vowel in such a form is in fact considerably longer than a phonological long vowel (2.2), and it does alternate with vowel-semi-vowelvowel sequences - thus [mi:r] ~ [miyir] 'the wind connected with a thunderstorm'. Forms in this class - for instance /buwum/, $[b u: m]$ 'a vine' (coastal dialect only) and /wuwuy/, [wu:y] 'a small bean tree' (tablelands dialect only) - inflect in the pattern of even-syllabled (not odd-syllabled) roots. (See also the discussion of [da:] at the end of 2.4.)

The possibilities at the structural positions are:
$\mathrm{V}_{1}$ can be any short vowel $-a, i$ or $u$.
$\mathrm{V}_{2}$ can be any short vowel $a, i$ or $u$, or a long vowel $a: i$ : or $u$ : (the latter subject to certain constraints on the number of syllables in the word, and the position of the syllable in the word -2.2).
$\mathrm{C}_{1}$ can be any stop, nasal or semi-vowel $(b, d, d, g ; m, n, n, \eta$; $w$, or $y$ ).
One word in the writer's corpus begins with $l$ - the onomatopoeic lululumba-l 'rock a baby to sleep, singing " $l u$ - $l u$ - $l u-l u-\ldots$ ". It is worth noting that Dyirbal, which also prohibits initial $l$ 's, allows no exception here - it has verbal root yululumba-l with the same meaning.
$\mathrm{C}_{3}$ can be the lateral, either rhotic, the laminal semi-vowel or any nasal except dorsal $\eta(l ; r, l ; y ; m, n$ or $n)$.
$\mathrm{C}_{2}$ can be:
(i) any consonant
(ii) any homorganic nasal-stop cluster ( $m b, n d, n d$, or $\eta g$ )
(iii) a lateral or rhotic followed by any non-apical nasal, or stop, or homorganic nasal-stop sequence, or $w(l, r$ or $l$ followed by $b, d, g, m, n, \eta, m b, n d, \eta g$ or $w$ )
(iv) the laminal semi-vowel followed by a non-apical, non-laminal nasal, or stop, or homorganic nasal-stop sequence, or $w(y$ followed by $b, g, m, \eta, m b, \eta g$ or $w$ )
(v) the apical nasal followed by a non-apical stop ( $n$ followed by $b, d$ or $g$ ) or
(vi) the lateral followed by one of (v) (l followed by $n b, n d$ or $n g$ ).

Of the possible clusters covered by these general rules only $|\mathrm{lng}|$ and $/ \mathrm{rv} /$ have not been encountered; it is assumed that these are 'accidental gaps'. Only one example is known of each of $|\ln b|,|r n|,|\ln |$, $\mid t w /$ and $/[n d /$ - these are the Yidin forms dulnbilay 'white cedar tree' and burna 'heart', and the Dyalnuy roots mulnari 'blanket', durwu 'leaf' and birndali-n 'run'. (It should be noted that the writer's Yidin and Dyalnuy lexicon only contains about 1,800 items; and that $n$ is - with $n$ - the least frequent syllable-initial segment - 2.1.3.)

There are four clusters which are exceptions to our general rules for $\mathrm{C}_{2}$. One or two occurrences of each of $/|n|,|n \eta|, \mid n m /$ and $/ n b /$ are known: the adjective bulna 'impure, indistinct, poorly defined', the verb manya-n 'be frightened' and three Dyalnuy forms - noun yunyun 'breast', number adjective nunmul 'one' and noun bulanbay 'man'. There is also garna 'black cockatoo' in coastal Yidin, involving the cluster $/ \mathrm{rn} /$ - note that the corresponding form in the tablelands dialect is gayana (and see 2.6.2).
It is assumed that $|y n|,|y d|$ and $|y n d|$ are systematic gaps in Yidin - that is, the laminal semi-vowel cannot, within a morpheme, be followed by a laminal nasal or stop; these clusters do occur in Dyirbal, a language which otherwise has very similar phonotactic possibilities (Dixon 1972: 272-4).

Disyllabic affixes conform exactly to the phonotactic possibilities described for roots. Monosyllabic suffixes show a few eccentricities thus, one ergative allomorph is $-\eta g u$ (a form very common in Australian languages) and the dative inflection is $-n d a$ (although this may be a recent reduction from *-yunda-2.3.2, 3.3.2); in addition, there are four or so monosyllabic allomorphs beginning with $l$ and one with $l$. The consonant cluster possibilities at morpheme boundaries are very much wider than those described for an intramorphemic cluster $\left(\mathrm{C}_{2}\right)$ - we can, effectively, have any $\mathrm{C}_{3}$ followed by any $\mathrm{C}_{1}$; and trisyllabic sequences $|y n d|$ and so on are encountered with ergative and locative case inflections. (Roots that are inherently reduplicated allow $\mathrm{C}_{3} \mathrm{C}_{1}$ possibilities at the reduplication boundary, even though it is here intra-
morphemic. Thus buqimburim 'a red bird sp.' and duguldugul 'tree sp.' note that there are no roots buyim, dugul. See also 2.4.)

Inflected words differ in one important respect from roots - they can end in the dorsal nasal $\eta$. This is supplied as the non-past inflection with verbs of the $-n$ - conjugation. And it is a reduced form of ergative $-\eta g u$, and of the imperative form of transitive verbaliser $-\eta a$ and verbal comitative $-\eta a$, in each case when the affix is added to a stem which ends in a vowel and has an even number of syllables (2.3.2, 2.3.3). The status of final $\eta$ in various dialects of Yidin is discussed in 2.6.3.

There is one further constraint on word structure: $i(:) y$ can occur only when immediately followed by a vowel (that is, $i$ or $i$ : can be followed by a syllable-initial, but not a syllable-final, $y$ ). Thus we have giyi 'don't', biyal 'a ripple', diyuya 'catbird' but no word ending in $-i(:) y$, or with $-i(:) y$ - followed by a consonant.

Loan words appear to fit into the regular phonotactic pattern with one exception - they can begin with $l$ (for instance landima-l 'teach' from English 'learnt him').

It is in most cases easy to decide on syllable boundaries in Yidin. If a single consonant comes between two vowels the boundary precedes it (V.CV); if a diconsonantal cluster occurs intervocalically then the syllable boundary falls in the middle of it (VC.CV). There is, however, no clear way of dealing with the occasional cluster of three consonants (noting that words cannot begin or end in more than a single consonant). Thus in guypgan 'spirit of a woman', the $-y$-plainly belongs to the first syllable and the $-g$ - to the second one, but reasons can be advanced for assigning $-\eta$ - in either direction. (Compare with dulnbilay 'white cedar'; here the choice of $-n$ - depends both on the preceding segment - we cannot get $-y n C$ - and on the following one - -Cnd-is also impermissible.)

Much of the discussion of this chapter refers to the number of syllables in a word or morpheme. There is a one-to-one relation between syllables and vowels so that there is never any question about the number of syllables in any form. And the fact that we choose not to commit ourselves to the place of a syllable boundary within a triconsonantal cluster is here quite irrelevant.
2.1.3 Probabilities of occurrence. Relative probabilities of occurrence were calculated for initial $\left(C_{1}\right)$ and final $\left(C_{3}\right.$ or $\left.V_{2}\right)$ segments. The count was based on the writer's Yidin dictionary, leaving aside Dyalguy
and loan items (a total of about $\mathrm{r}, 600$ roots). Initial probabilities cover all parts of speech; figures for final segment do not cover verbs (for which roots, as set up, all end in a vowel) or roots with a final morphophoneme $A, I$ or $U$ (2.3.4).


Relative probabilities for vowels in $\mathrm{V}_{1}$ position were calculated separately for nouns, adjectives and verbs; there was no significant difference. Overall probabilities at $\mathrm{V}_{1}$ are:

$$
\begin{array}{llllll}
a & 0.4 \mathrm{I} & & i & 0.20 & u
\end{array}
$$

Probabilities differ somewhat for the vowel in the second syllable of a noun or adjective:

$$
\begin{array}{llllll}
a & 0.47 & & i & 0.23 & u
\end{array} 0.30
$$

It will be seen that the later a vowel is in the word, the less chance there is that it will be $u$. This is confirmed by examination of a sample of $\mathrm{I}_{3} \mathrm{I}$ trisyllabic nominal roots - the third vowel is $u$ in only 23 ( 0.175 ) of them. (And note that in 19 of these forms the second vowel is also $u$.)

The chance of a late vowel being $u$ falls off even more markedly with verbs. The probabilities at the vowel position in the second syllable of a verb root are:

$$
\begin{array}{llllll}
a & 0.64 & & i & 0.32 & \\
\hline
\end{array}
$$

Eleven of the thirteen trisyllabic verb roots in the writer's corpus have $a$ as their third vowel, with the remaining two showing $i$ (see 3.8.3).

### 2.2 Vowel length and stress

There is significant length contrast among vowels in non-initial syllables. Thus we have minimal pairs (quoting nouns in citation, $=$ absolutive or unmarked, form):

| malan | 'flat rock' | wuru |
| :--- | :--- | :--- |
| mala:n | 'right hand' | 'spear handle (generic)' |
| wuru: | (i) river; (ii) snake sp.' |  |

Length distinguishes present and past tense for disyllabic verbal stems in the $-l$ - and $-\gamma$ - conjugations:

|  | 'smell' | 'cook' | 'look, see' | 'leave' |
| :--- | :--- | :--- | :--- | :--- |
| PRESENT | gudil | wadul | wawal | badaך |
| PAST | gudi:l | wadu:l | wawa:l | bada: $\gamma$ |

Phonetically, at least three degrees of length can be distinguished. A nasal or liquid will tend to lengthen a preceding (phonologically short) vowel$\mid$ gurin|, [guri' $n]$ 'good', |bargu|, [ba‘tgu] 'cane-knife'. A phonologically long vowel will be longer than this - |bagi: $\mu \mid,[$ bali: $\mu]$ 'small-leaved tree sp.'. And a vowel-semi-vowel-vowel underlying sequence may be realised as what is the longest phonetic vowel-|miyirl, $[m i: r]$ ' wind connected with a thunderstorm' (2.1.2, 2.4).

A long vowel could be regarded either as a sequence of two identical short vowels, or as involving a prosody of length. The latter treatment is adopted here, since it makes for simplest morphological and phonological rule statement. For instance, one derivational affix to verb stems involves lengthening the stem-final vowel and adding $d i$. We have

| ROOT | gudi-l | wadu-l | wawa-l |
| :--- | :--- | :--- | :--- |
| DERIVED STEM | gudi:di-n | wadu:di-n | wawa:di-n |

(The final $-n,-l$ or $-\gamma$ quoted on a verbal root or stem marks the conjugation to which it belongs.) Now if a long vowel were written/VV/, this derivational affix would have to be assigned allomorphs $|i d i-n|,|u d i-n|$ and $\mid a d i-n /$; or else we could regard it as $/ V d i-n /$ and include an 'assimilation rule' rewriting $V$ with the value of the vowel preceding it. The simplest statement of the affix is just $/: d i-n /$, with the convention that a long vowel is written $/ V: /$. (Other examples of affixes beginning with ' $\because$ ' are verbal aspects ( $2.3 .5,3.8 .6$ ) and reduced forms of various case, tense, etc. inflections (2.3.2-3, 3.3.2, 3.8.4).)

The placement of stress in Yidin words depends on the presence and positioning of vowel length:
stress assignment rule. Stress is assigned to the first syllable involving a long vowel. If there is no long vowel, it is assigned to the first syllable of the word. Further stresses are then assigned (recursively) to the syllable next but one before, and the next but one after, a stressed syllable.
In 2.3 .5 we show that it is not possible to take stress as prior, and infer vowel length from stress placement.

Thus, in each Yidin word syllables are alternately stressed (S) and unstressed (U). For example:
(1) yadi:riyál
(2) wựabá:dipuinda
(3) dámbulánalnúnda
'walk about-GOING-COMIT-PRES'
'hunt-:di-dat subord'
'two-tr vblsR-dat subord'

In fact, long vowels in a Yidin word always occur in stressed syllables. To accommodate this, there is a restriction on the occurrence of long vowels:
constraint i. If two or more long vowels occur in a word, each pair must be separated by an odd number of syllables.
Each pair of long vowels in a word is in fact separated by just one syllable. We have stated the constraint in a more general form ('an odd number of syllables') since if a word were encountered in which two long vowels were separated by three (or five...) syllables it would exactly conform to the rather complex phonological patterning permitted by Yidin.

For example:
(4) magi:riyá:ldanú:n 'climb up-ASPECT-COMIT-COMING-DAT SUBORD'
(5) duøgá:rìá:l 'run-GOING-COMIT-PAST'
(6) burwá:liyá:lna 'jump-GOING-COMIT-PURP'

About $85 \%$ of the words in recorded Yidin texts contain an even number of syllables. These are made up of a whole number of disyllabic units, which must either be all of the type SU - as in (2), (3) - or all of the type US - as in (1), (4), (5).

If a word contains an odd number of syllables, then the number of unstressed syllables will always exceed the number of stressed syllables by one. This implies, in terms of the stress assignment rules of Yidin:

CONStRAint 2. If a word has an odd number of syllables, then there must be a long vowel in at least one even-numbered syllable. (And, by Constraints I and 2, all long vowels in such words must occur in evennumbered syllables.)

We see that, whereas in an even-syllabled word long vowels may occur in odd-numbered syllables or in even-numbered syllables (but not in a mixture of the two), in an odd-syllabled word long vowels can occur only in even-numbered syllables (as in (6)).

Thus, there are disyllabic words with stress pattern

$$
\begin{array}{lllll} 
& \text { SU } & \text { e.g. wáril } & \text { 'doorway-ABS' } \\
\text { or } & \text { US } & \text { e.g. wayi:l } & \text { 'red-bream-ABS' }
\end{array}
$$

and quadrisyllabic words with

$$
\begin{array}{lllll} 
& \text { SUSU } & \text { e.g. gúdagáni } & \text { 'dog-GEN' } \\
\text { or } & \text { USUS } & \text { e.g. } & \text { gulugulú:y } & \text { 'black bream-comir' }
\end{array}
$$

but all trisyllabic words must have the stress pattern

$$
\begin{array}{ccc}
\text { USU e.g. } & \text { galí:na } & \text { 'go-PURP' } \\
& \text { gudá:ga } & \text { 'dog-ABS' }
\end{array}
$$

and all quinquesyllabics must have the pattern USUSU, as in (6); and so on.

Yidin plainly prefers each word to contain a whole number of disyllabic units (all of type SU, or all of type US); in 2.3.2-4 we describe the 'final syllable deletion rule' which has wide application in all areas of the grammar and serves to derive even-syllabled surface words from underlying odd-syllabled forms. If, after all phonological rules have applied, a word is left with an odd number of syllables, then the extra syllable must be an unstressed singleton.

The nature of the dynamic processing within the brain for the programming of speech is far from being fully understood; but it seems likely that in the case of Yidin the programming is in terms of disyllabic stress-units (the writer is grateful to Kenneth L. Pike for discussion of this point, following a seminar presentation of the main points of Yidin phonology). In this connection it is noteworthy that when Dick Moses recorded a Yidij song, he missed exactly one disyllabic unit each time he took breath - this was either a complete word (the first buygu of buingu buingu yinal), or else the first two syllables of a trisyllabic word (bugu from bugù:ba dưnduluibi dánay).

Lehiste (1970: 163-4) mentions that disyllabic sequences function as a
major phonological unit in Finnish and Estonian; there seem to be considerable similarities with Yidin. She mentions that 'while monosyllabic units are possible, as are trisyllabic units, most longer words are made up of disyllabic units'. In Yidin texts, about $85 \%$ of the words are even-syllabled. Compare with Dyirbal where primary stress falls on the first syllable of every word and, although there does seem to be a definite preference for stressed and unstressed syllables to alternate, there is nothing comparable to Yidin's 'final syllable reduction rule'; in Dyirbal texts about $70 \%$ of the words are evensyllabled.

### 2.3 Phonological rules

2.3.I Penultimate lengthening [Rule 1]. In most Australian languages the absolutive case (marking intransitive subject and transitive object functions) has zero realisation. Consider typical paradigms for Yidin nouns:

|  | ABSOLUTIVE | PURPOSIVE |
| :--- | :--- | :--- |
| 'dog' | gudá:ga | gúdagágu |
| 'mother' | múdam | mudá:mgu |
| 'loya-cane sp.' | yabú:lam | yábulámgu |

If we take the absolutive forms as roots, a purposive suffix $-g u$ can be isolated, contrasting with absolutive $ø$. But there is an inconsistent length variation - in the case of 'dog' and 'loya-cane' we lose the length from the second syllable of the absolutive in forming the purposive, while for 'mother' purposive lengthens the second vowel.

Compare this with a representative verbal paradigm:

|  | PRESENT | PURPOSIVE |
| :--- | :--- | :--- |
| 'go' | gálí | galí:na |
| 'walk up' | madji:nday | mádindána |

Present tense inflection is plainly $-\eta$ and purposive $-n a$ for verbs of this conjugation. But if we take the verbal roots as gali- and madi:nda(simply subtracting $-\eta$ from the present tense forms) we find that the verbal purposive adds length in the first case, and deletes it in the second.

The alternative to stating ad hoc rules of length loss and insertion in each individual case is to take the roots as, in all cases, not involving any long vowels. Thus we have nominal roots gudaga, mudam and yabulam; with inflection $-g u$ for purposive and $\varnothing$ for absolutive. Similarly, the verb roots will be gali- and madinda-, with present $-\eta$ and purposive -na.

We now need a phonological rule which will apply to the final inflected form of each word (after all morphological processes of affixation, reduplication, and so on, have applied):

## RULE I - PENULTIMATE LENGTHENING

In every word with an odd number of syllables, the penultimate vowel is lengthened.

Stress assignment follows the application of Rule 1.
Sample derivations are (with a dash indicating that the rule does not apply):

|  | root-ABS | root-ABS | root-PURP | root-PURP |
| :--- | :--- | :---: | :---: | :---: |
|  | gudaga+o | mudam+o | gudaga+gu | mudam + gu |
| Rule I | guda:ga | - | - | muda:mgu |
| Stress assignment | gudá:ga | múdam | gúdagágu | mudá:mgu |

And similarly for the verbal forms.
The odd-syllabled forms just given have all had just three syllables. But with longer odd-syllabled forms we find that it is always the penultimate vowel that is lengthened. For instance:

```
gudágudá:ga 'dog-REDUP-ABS'
madindayá:lna 'walk up-COMIT-PURP'
```

An even-numbered syllable earlier than the penultimate in an oddsyllabled word may, of course, already involve vowel length. Thus, from verbal root burwa-'jump', aspectual affix -: $l i-$, comitative affix $-\eta a-l$ - and purposive inflection -na, we get

## burwa:liŋalna

and rule r then yields

## burwa:liya:lna

quoted as (6) above.
The penultimate syllable in an odd-syllabled word may, through the inclusion of an affix that specifies length (2.3.5), already contain a long vowel. Thus we can get

$$
\begin{array}{ll} 
& \text { burwa }+: l i+\eta
\end{array} \quad \text { 'jump-GOING-PRES' }
$$

In this case we can (as the simplest course) allow Rule i to apply vacuously, to derive the surface forms burwá:lin and madindayá:diy. (For another example of the vacuous application of Rule 1, see 2.3.8.)
2.3.2 Final syllable deletion [Rule 2] - (i) affix reduction. There are something like ten suffixes in Yidin which have alternate forms, one being used with stems that have an even number of syllables and another with those that have an odd number of syllables. (We will exemplify with disyllabic and trisyllabic stems; quadrisyllabics behave exactly like disyllabics, quinquesyllabics like trisyllabics, and so on.)

For instance, present, past and dative subordinate inflections are, with disyllabic and trisyllabic roots of the $-n$ - conjugation:

| root | gali- 'go' | madinda- 'walk up' |
| :--- | :--- | :--- |
| PRESENT | galiy | madi:nday |
| PAST | gali: $n$ | madindanu |
| DATIVE SUBORDINATE | galinunda | madindanu: $n$ |

Present tense is $-\eta$ in each case, with the length in madi:nday being inserted by Rule I (2.3.1). But the past tense has two allomorphs -: $n$ and $-\eta u$, and dative subordinate inflection is $-\eta u n d a$ or $-n u: n$. We can remark that $-: n$ looks like a reduced form of $-n u$, and $-\mu u: n$ of $-n u n d a$; but note that -nunda, the longer form of the subordinate inflection, occurs (on even-syllabled stems) where -: $n$, the shorter form of past tense, is encountered.

All roots (bar one) in the $-l$ - conjugation are even-syllabled. However, the verbal comitative affix $-\eta a-l$ can be added to any intransitive $-n$ - root, deriving a transitive stem which belongs to the $-l$-conjugation; we thus get galina-l'go with, take' and madindaya-l' walk up with, make walk up'. Corresponding inflections on these stems, and the $-l$ - conjugation root wawa-l'see' are:

| Stem | wawa- | galina- | madindaya- |
| :--- | :--- | :--- | :--- |
| PRESENT | wawal | gali:yal | madindayal |
| PAST | wawa:l | galiyalnu | madindaya:l |
| DATIVE SUBORDINATE | wawalnunda | galiyalnu:n | madindayalnunda |

We see that the non-past inflection is, for this conjugation, $-l$ (length in the middle syllable of gali:nal is the result of Rule I). Again, there are alternate forms for the other two inflections -:l or -lyu for past tense, and -lyunda or -lmu:n for dative subordinate.

Let us now turn to nouns, and examine some case forms for evensyllabled stems ending in a vowel (the example here is buna 'woman'), odd-syllabled stems ending in a vowel (gudaga 'dog') and stems of even
and odd syllabicity ending in a consonant (guygal 'bandicoot', badigal 'tortoise'):

| root | buna | gudaga | guygal | badigal |
| :--- | :--- | :--- | :--- | :--- |
| ABSOLUTIVE | buna | guda:ga | guygal | badi:gal |
| ERGATIVE | buna: $\eta$ | gudagangu | guyga:ldu | badigaldu |
| GENITIVE | buna:n | gudagani | guyga:lni | badigalni |

There is plainly allomorphic alternation in the genitive and ergative inflections. Genitive is $-n i$ after an odd-syllabled stem ending in a vowel, or with a stem of either syllabicity ending in a consonant, but $-: n$ with an even-syllabled stem ending in a vowel. Ergative is more complex - it is $-d u$ after a consonant (with, in fact, assimilation to a stem-final nasal or $y-2.3 \cdot 3,3.3 .2$ ), $-\eta g u$ after an odd-syllabled vowel-final stem and $-: \eta$ after an even-syllabled stem ending in a vowel. Rule i will account for the long vowels in the middle syllables of guda:ga, badi:gal, guyga:ldu and guyga:lni.

When we carefully study these alternations of verbal and nominal inflections we see that in each case the shorter allomorph is used to create an even-syllabled word (where the longer alternative would lead to an odd-syllabled result).

We could just state the allomorphs for each inflection, referring to the number of syllables in the stem as the conditioning factor. Thus:

> PAST TENSE (for - $n$ - conjugation stems)
> $\quad-n u$ after an odd-syllabled stem
> $-: n$ after an even-syllabled stem

And so on, for each of the ten suffixes which shows alternation of this type.

An alternative is to consider the shorter form as a reduced version of the longer, formed by a general phonological rule which is motivated by the 'even-syllabled' stress target of Yidin. We can take the canonical forms of the verbal suffixes as:

$$
\begin{array}{ll}
\text { PAST } \quad-n u \sim-l+n u \\
\text { DATIVE SUBORDINATE } & -n u+n d a \sim-l+n u+n d a
\end{array}
$$

(Here the $-l$ - conjugation demands a linking morpheme - what we can call a 'conjugation marker' - between stem and affix, see 3.8.3. Our analysis of the dative subordinate inflection as $-n u+n d a$ is discussed in
3.8.4, 4,4 . ' + ' indicates a morpheme boundary.) Underlying forms of the nominal affixes are taken as:

$$
\text { ERGATIVE } \quad-\eta g u \quad \text { GENITIVE } \quad-n i
$$

Then we have:
$\quad$ EXPECTED FORM
gali $+n u$
madind $a+n u+n d a$
wawa $+l+n u$
gali $+n a+l+n u+n d a$
madinda $+\eta a+l+n u$
buna $+\eta g u$
buna $+n i$

ACTUAL WORD
gali:n
madindanu:n
wawa:l
galinalnu:n
madindaŋa:l
buna:ク
buna:n
With gali- we get reduction of the past tense form (disyllabic root plus monosyllabic affix gives an odd-syllabled word, which is subject to reduction) but with the disyllabic dative subordinate affix $-n u+n d a$ we obtain an even-syllabled word which is not reduced. With madinda-, the past tense inflection produces an acceptable even-syllabled word, whereas $-n u+n d a$ forms a quinquesyllabic word, which does lose its final syllable. In the case of derived transitive stems galiya- and madindayathe situation is reversed - past tense yields an even-syllabled word with galiza-, but an odd-syllabled one (which is consequently reduced) with madindaya-; and so on.

We thus appear to have a rule that deletes the final syllable of some oddsyllabled words, producing an even-syllabled form which meets the stress target of Yidin (that each word should involve a whole number of disyllabic units, either all of the type SU, or all of the type US). And in each case where the final syllable is eliminated, the vowel of the preceding syllable is lengthened. We could, tentatively, formulate the rule:
(7) $\mathrm{XV}_{1} \mathrm{C}_{1}\left(\mathrm{C}_{2}\right) \mathrm{V}_{2} \# \rightarrow \mathrm{XV}_{1}: \mathrm{C}_{1} \#$
with the condition that $\mathrm{XV}_{1} \mathrm{C}_{1}\left(\mathrm{C}_{2}\right) \mathrm{V}_{1} \#$ should be odd-syllabled. In this formulation the lengthening of $\mathrm{V}_{1}$ could be viewed as 'compensatory' qua the loss of the final syllable; we could say that it serves to mark the fact that there was, in the underlying form of the word, an additional syllable.

But note that we have already provided justification for Rule I, which lengthens the penultimate vowel of an odd-syllabled word. In fact, the 'odd-syllabicity' structural condition on (7) is identical to that on Rule I .

This suggests that the simplest and most revealing way of explaining a form like gali: $n$ is to propose an underlying form gali $+n u$, allow Rule I to apply, lengthening the penultimate vowel, and then have a further rule which deletes the final syllable (and does not affect vowel length): (8) $\mathrm{XV}_{1}: \mathrm{C}_{1}\left(\mathrm{C}_{2}\right) \mathrm{V}_{2} \nRightarrow \rightarrow \mathrm{XV}_{1}: \mathrm{C}_{1} \#$
with the condition that $\mathrm{XV}_{1}: \mathrm{C}_{1}\left(\mathrm{C}_{2}\right) \mathrm{V}_{2} \#$ should be odd-syllabled. Sample derivations would now be:

$$
\begin{array}{lllll}
\text { root + affix } & \text { gali }+n u & \text { madinda }+n u+n d a & \text { buna }+n g u & \text { buna }+n i \\
\text { Rule I } & \text { gali }:+n u & \text { madinda }+n u:+n d a & \text { buna }:+\eta g u & \text { buna }:+n i \\
\text { Rule 2 } & \text { gali }:+n & \text { madinda }+n u:+n & \text { buna }:+\eta & \text { buna }:+n
\end{array}
$$

It remains to investigate the conditions under which the reduction represented in (8) takes place, and the optimal formulation of this reduction rule.

Firstly, only an open final syllable can be deleted. Thus, present tense inflection is always $-\eta$ with $-n$ - conjugation stems, and $-l$ on to $-l$ conjugation forms; this does give some odd-syllabled words - madi:nday and gali:yal, for instance - to which Rule 1 applies, but which do not meet the structural description for Rule 2. (We have already incorporated this condition into the statement of the rule in (7) and (8).) Similarly, the imperative suffix is (for $-\boldsymbol{n}$ - conjugation stems) $-\boldsymbol{n}$, whatever the syllabicity of the stem, and the causal subordinate inflection is always $-n u+m$. This produces some even-syllabled forms (galin, madindanum), and also some odd-syllabled words (madi:ndan, gali:num), but the latter do not reduce.

We also indicated in the statement of (7) and (8) that the second component (if any) of a final consonant cluster is lost. Thus, from past forms wawa $l+n u$ and madind $a+y a+l+n u$ we obtain simply wawa:l and madindaya:l; and from ergative buna $+\eta g u$ is derived buna: $\eta$. Yidin does not allow word-final consonant clusters.

And a further condition on (8) is that $\mathrm{C}_{1}$ should be one of the set of permitted word-final segments; these comprise (2.1.2) $l, r, r, y, m, n, n$ and $\eta$ ( $\eta$ can, as already mentioned, occur word-finally but not rootfinally -2.1.2, 2.6.3). Thus, ergative $-\eta g u$ reduces to $-: \eta$ and genitive $-n i$ to -:n, but purposive inflection is invariably -gu. We get gudagagu, and also buna:gu; Rule i operates normally but, because $g$ is not permitted word-finally, Rule 2 blocks in this case.

We now only have to explain why the final syllable reduction rule operates on buna: $+\eta g u$, buna: $+n i$, to produce disyllabic buna: $\eta$, buna:n, but does not eliminate the last syllable from guyga:l+du,
$g u y g a: l+n i$ (or from guyga:l+gu). There are a number of possibilities open at this point: we could - to explain these particular instances - say that Rule 2 will not operate if it would produce an oblique case-form in which a root-final consonant was now word-final; and so on. But the simplest condition - that will cover cases where Rule 2 does not apply, and there is no phonological explanation - is simply 'there must be a morpheme boundary between $\mathrm{V}_{1}$ and $\mathrm{C}_{1}$ '. This condition is satisfied for verb forms such as gali $+n u$, wawa $+l+n u$ where the root (as set up) ends in a vowel (the $\mathrm{V}_{1}$ of the rule) and $-l$ - is identified as a distinct 'conjugation marker' morpheme (3.8.3). It is satisfied in the case of disyllabic noun roots ending in a vowel. But the morpheme boundary condition is not met for roots ending in a consonant; thus Rule 2 is blocked in the case of guyga:l+du, guyga:l+ni (and muda:m+gu-2.3.1) and these remain as odd-syllabled words.
There are three exceptions to Rule 2-cases where the final-consonant and morpheme boundary conditions are satisfied but reduction does not take place (as against the twenty or so cases where the conditions correctly specify the application or non-application of the rule). At least one of these appears to have an historical explanation - dative ${ }^{*}-\eta$ unda may have reduced to - $n d a$ after the final syllable deletion rule was introduced into Yidij; nominal dative is not reduced (2.3.3, 3.3.2). But no other statement of conditions for Rule 2 yields less exceptions.

We can now state:
RULE 2 - FINAL SYLLABLE DELETION

$$
\mathrm{XV}_{1} \mathrm{C}_{1}\left(\mathrm{C}_{2}\right) \mathrm{V}_{2} \# \rightarrow \mathrm{XV}_{1} \mathrm{C}_{1} \#
$$

if $($ a $) \mathrm{XV}_{1} \mathrm{C}_{1}\left(\mathrm{C}_{2}\right) \mathrm{V}_{2} \#$ is an odd-syllabled word;
and (b) $\mathrm{C}_{1}$ is one of the set $(l, r, r, y, m, n, n, y)$ of allowable wordfinal consonants
and (c) there is a morpheme boundary between $\mathrm{V}_{1}$ and $\mathrm{C}_{1}$ Here $\mathrm{V}_{1}$ can be any (long or short) vowel.

Rule 2 cannot be ordered before Rule 1 since it destroys odd-syllabicity, which is the critical condition on Rule . To allow the possibility of two rules applying simultaneously would introduce unnecessary complications (at other points in the phonology). Working in terms of linear ordering, then, Rule 2 must follow Rule 1.

It will be noted that whereas in (8) we specified length on $V_{1}$ - the result of Rule I - we now simply write ' $\mathrm{V}_{1}$ ' but allow it to be a long
vowel. It is, in fact, valid to ask whether we could not insist that $\mathrm{V}_{1}$ be long, and as a result eliminate the need for condition (a). Rule I only lengthens the penultimate vowel of an odd-syllabled word, so might not ' $\mathrm{V}_{1}$ '' be equivalent to (and simpler than) condition ( $a$ )? This amounts to asking whether there is an even-syllabled word, with penultimate long vowel (also satisfying conditions (b) and (c)) from which we need to block the application of Rule 2. In fact there is not.

In 2.3 .5 we show that vowel length in Yidin words must either be the result of Rule I , or else is due to one of three verbal affixes that involve length specification - derivational -: di $i-n$, and aspectual 'going' -:li-n $\sim-: r i-n \sim-:$ :ri-n and 'coming' - :lda-n $\sim-: d a-n$ (there is in fact a small set of a dozen nominals whose roots must involve a long vowel - discussion of these is deferred until 2.3.8). The aspectual allomorphs which specify length cannot be added to an odd-syllabled stem (3.8.6-7), so that the length they specify cannot be in the penultimate syllable of an even-syllabled word. The suffix -: $\mathrm{d} i-n$ can be added to an odd-syllabled stem. Thus, with present tense $-\eta$ or imperative $-n$ we get even-syllabled words with penultimate length - for instance, galina:diy, galiza:din. But in these cases the final syllable is closed, and $\mathrm{C}_{1}$ is in any case not a segment that can occur word-finally; so the phonological conditions for Rule 2 are not met.
But note that this could be regarded as an 'accidental gap'. There is no theoretical reason why a Yidin even-syllabled word could not have penultimate length and meet the conditions for Rule 2. Everything else being equal, it would be most satisfactory to state Rule 2 so that it should not apply to such a form. Otherwise, if the language changed in such a way that forms of this type did come into being - and note that underlying |galina:diy| is pronounced [galina:yt] in the tablelands dialect (2.6.3-4) - but were (as we would expect) not reduced, we would have to 'reformulate' Rule 2. And in such a case we could surely not claim that speakers had modified the general phonological rules with which they operate (i.e. that the language had changed in any material way).

One reason for including criterion (a) - and not specifying vowel length - in the structural description of Rule 2 , is that the ablative case has what appears to be a reduced form which can revealingly be explained by saying that Rule I does not apply (the only exception to what is, otherwise, a fully productive rule) but Rule 2 does. We then have Rule 2 operating (in this case only) on an odd-syllabled form whose penultimate vowel is not long. The relevant data are given in the next section, and further justification is provided in 2.3.8.
2.3.3 Final syllable deletion [Rule 2] - instances of (i). Rule 2 can only apply if the final morpheme in a word is monosyllabic; with a disyllabic affix the morpheme boundary condition cannot be met (consider, for instance, digara + bara 'beach-belonging to', and see also 2.4).
It will be useful now quickly to survey all monosyllabic affixes that can occur word-finally and note the effects of Rule 2 . Rule I applies quite freely, to every odd-syllabled word, with the single exception noted below.
nominal cases. (Noun and adjective roots take identical case inflections - for full details see 3.3.2.)
[r] ergative. -du after a consonant (with assimilation in place of articulation to a preceding nasal or $y$ ). Does not reduce - (c) morpheme boundary condition is not met.

- $\eta g u$ after a vowel; reduces regularly by Rule 2.
[2] dative. - $d a$ after a nasal
-nda elsewhere. Does not reduce - an exception to Rule 2 (with a possible historical explanation - see 2.3.2. and 3.3.2).
[3] purposive $-g u$. Does not reduce - (b) final consonant condition is not met.
[4] locative-allative-instrumental.
$-d a$ after a consonant (assimilates like ergative). Does not reduce-condition (c) not met.
following a vowel: -la on an odd-syllabled stem and -: on an even-syllabled stem. We can take the canonical form as $-l a$ and suggest that this reduces by Rule 2 with, in addition, an affixspecific rule deleting final $-l$ in all but five irregular items. Thus we have:
trisyllabic stem - gudaga 'dog' locative - gudagala regular disyllabic stem - bulmba 'camp' locative-bulmba: irregular disyllabic stem - dugi 'tree' locative - dugi:l

We are here presenting an optimal explanation of the synchronic data on locative allomorphy. It is, in fact, possible that allomorph -: may not be diachronically related to -la (see 3.3.2).
[5] accusative (occurs very occasionally with nouns -3.3 .7 ) -na. Reduces by Rule 2 e.g. bimbi 'father', accusative bimbi:n.
[6] ablative-causal. -mu (e.g. guyga:lmu 'from a bandicoot', badigalmu 'from a tortoise', gudagamu 'from a dog').

With an even-syllabled vowel-final stem this inflection is simply -m (bulmbam 'from the camp', dugim 'from the tree', bunam 'from the woman')

It is possible that the allomorph $-m$ is not directly diachronically related to $-m u(3.8 .4,3.3 .2)$. Here, however, we are - as in the case of locative - simply attempting to explain the synchronic facts.

We could explain the - $m$ allomorph by the regular operation of Rules I and 2 , and then an ad hoc rule which deletes vowel length only when a vowel-final stem is followed by ablative case. That is:

| underlying form | buna $+m u$ |
| :--- | :--- |
| Rule 1 | buna $:+m u$ |
| Rule 2 | buna: $+m$ |
| ad hoc rule | bunam |

The alternative is to state an exception to Rule I - the rule will not apply when ablative immediately follows a vowel (note that it does apply when ablative is added to a consonant-final stem-guyga:lmu). We prefer this formulation on the principle that there is less 'cost' involved in providing an ad hoc exception to an established rule, than in setting up extra ad hoc rule. In fact we will, in 2.3 .8 , provide strong empirical justification for preferring the 'exception to Rule I' alternative.

It was in view of the behaviour of the ablative inflection that we adopted the formulation of Rule 2 given in 2.3.2. Odd-syllabicity is given as a condition, rather than penultimate vowel length, so that we can derive:

| underlying form | buna $+m u$ |
| :--- | :--- |
| Rule 1 | [exception-does not apply] |
| Rule 2 | buna $+m$ |

Note that there is no other exception known to the operation of Rule I. In fact the failure of Rule 1 to apply in this instance is only possible in view of the later obligatory application of Rule 2, to derive an even-syllabled word. Otherwise, the failure of Rule 1 would lead to the generation of an oddsyllabled word that did not meet Constraint 2 (2.2). (The only other circumstances in which Rule I could fail to apply and not produce a word that failed to meet the stress specification of Yidin would be if there were already a long
vowel in some even-numbered syllable earlier than the penultimate. But it appears that in these cases Rule I always does apply.)

One remaining nominal inflection is held back to [9] below.

## NOMINAL DERIVATIONS

Each nominal stem can occur in absolutive case, which has zero realisation. Thus, any monosyllabic affix deriving a nominal stem is 'at risk' to be reduced by Rule 2. [7, 8, 10, 11] can be added to a nominal stem, and derive a further nominal stem. [9] is a further inflection, but is most conveniently discussed after [8].
[7] set-inclusion -ba (e.g. buna:ba 'a set of people, one of whom is a woman' (see 3.3.6)). Does not reduce-(b) final consonant condition is not met.
[8] comitative ('with'). (See 3.3.4, 4.3.1)

- $d i$ following a consonant. Does not reduce - condition (c) not met.
$-y i$ following a vowel. Reduces regularly by Rule 2.
Thus:
root guygal 'bandicoot' comitative guyga:ldi
gudaga 'dog' gudagayi
bupa 'woman'
buna:y
It was noted in 2.I. 2 that in the surface form of a Yidin word a syllable cannot end in $-i y$ or $-i: y$. We have, in fact, a general 'syllablefinal yotic deletion rule' (Rule 3 ) that is discussed and formally stated in 2.3.7. In the present case it merely drops the yotic from the comitative of an even-syllabled stem ending in $i$. Thus the comitative of mayi 'vegetable food' is derived:

| root plus affix | mayi $+y i$ |
| :--- | :--- |
| Rule 1 | mayi: $+y i$ |
| Rule 2 | mayi: $+y$ |
| Rule 3 | mayi: |

(It will be noted that comitative falls together will locative-allativeinstrumental, only in the case of an even-syllabled stem ending in $i$.)

Now a comitative form (derived from a noun or adjective root) functions as an adjective, and takes the same case inflection as the head noun it modifies (3.3.4, 4.3.1). The forms discussed above were in fact
comitative-plus-absolutive. Non-zero cases go on to the unreduced form of a comitative, and the case can then itself be reduced by Rule 2. For instance:

| comitative-plus- | comitative-plus- |
| :--- | :---: |
| absolutive | ergative |
| gudagayi | gudagayi: $\eta$ |
| buna:y | bunayingu |
| muda:mdi | mudamdingu |

The appearance of $i$ after the comitative $y$ in bunayingu is support for our deriving buna:y as a reduced form of buna $+y i$, and generalising $-y i$ as the canonical form of the comitative affix with all vowel-final stems.
[9] 'fear' inflection (see 3.3.2, 4.6.1)
This involves the addition of $-d a$ to the underlying form of the comitative (providing further support for $-y i$ as the canonical form). For instance:
gudagayi:da 'for fear of the dog'
bupayida 'for fear of the woman'
mudamdida 'for fear of mother'
It is plausible to recognise a morpheme boundary between $-d i /-y i$ and -da, but apprehensional forms do not reduce, condition (b) on Rule 2 not being met.
[ 10 ] genitive $-n i$.
This effectively derives an adjectival stem, which takes the same case inflection as its head noun (exactly like comitative) - 3.3.3, 4.7.1. Genitive-plus-absolutive reduces regularly by Rule 2, as exemplified in 2.3.2. Just as we recognised underlying suffix forms $-\eta g u$ and $-y i$ for ergative buna:y and comitative buna:y, so we would expect to set up underlying buna $+n i$ for the surface form buna:n, following surface forms gudaga $+n i$, guygal $+n i$, and so on.

And we should expect the suffix-final $i$ to appear before non-zero case inflections, exactly as does the $i$ of the comitative. In fact the genitive of a vowel-final disyllabic root does show a trisyllabic stem before an oblique case, but its final vowel is $u$, not $i$ :

|  | genitive-plus- | genitive-plus- | genitive-plus- |
| :--- | :---: | :---: | :---: |
| root | absolutive | ergative | dative |
| gudaga | gudagani | gudagani: $\eta$ | gudagani:nda |
| buna | buna:n | bunanupgu | bunanunda |
| guygal | guyga:lni | guygalningu | guygalninda |

An attempt at a diachronic explanation of the appearance of $u$, where $i$ would be expected, in forms like bunanuygu and bunanunda, is in 3.3.3, 3.6.4.

It is worth noting that this $/ u /$ tends to be centralised, and is often pronounced as [ 1 ] or [ 2$]$ - although informants would, when the writer asked for clarification, say the word slowly with a $u$ vowel; they would not accept an $i$ (as in *bupaniygu). The vowel articulation in this case parallels the pronunciation of the vowels representing underlying morphophonemes $A, I$ and $U$ (2.I.I, 2.3.4).
[II] 'another' $-b i$ (3.3.6). Does not reduce $-(b)$ final consonant condition is not met.
verbal inflections (For full details see 3.8.4)
[12] past tense (see examples in 2.3.2).
$-n u$ with $-n$ - conjugation stems; reduces regularly by Rule 2 . $-l+n u$ with $-l$ - conjugation stems; reduces regularly by Rule 2 .

Note that with an $-n$ - conjugation form the first segment, $n$, of the tense affix is retained (being $\mathrm{C}_{1}$ in the structural description of Rule i) but with $-l$-conjugation forms the complete tense suffix is lost, $\mathrm{C}_{1}$ being the conjugation marker $-l$-. Only disyllabic stems are known for the $-r$ conjugation and here past tense is $-\tau \tau$; it is reasonable in this case to analogise an underlying form $-\tau+\mu u$, although there is no possibility of verifying this.
[13] purposive $-n a \sim-l+n a \sim-\eta+n a$. These do not reduce, and provide a second exception to Rule 2.
[14] dative subordinate $-n u+n d a \sim-l+n u+n d a \sim-r+n u+n d a$. Reduces regularly, by Rule 2.
[15] causal subordinate $-n u+m \sim-l+n u+m \sim-r+n u+m$. Does not reduce since the structural description for Rule 2 is not satisfied, the affix ending in a consonant.
[16] 'lest' inflection $-n+d i \sim-l+d i \sim-r+d j$. This is the third and final exception to Rule 2, since it does not reduce.
It could be pointed out that if verbal purposive and 'lest' forms did reduce then they would coincide, and would also fall together with past tense inflections in the case of the $-l$ - and $-r$ - conjugations. Similarly, if dative case forms reduced they would coincide with genitive. But the possibility of grammatical neutralisation cannot be quoted as sufficient reason for words
involving these three affixes being exceptions to a phonological rule; we have seen that locative-allative-instrumental can coincide with comitative in forms like mayi: (but are quite different in other instances - bupa: and buna:y, gudagala and gudagayi). However it is possible that the expectation of such neutralisation played some diachronic role in these three affixes becoming established as exceptions to Rule 2. (And note that although nominal dative $-n d a$ does not reduce, the verbal dative subordinate inflection $-n u+n d a$ does; it is presumed that the two -nda's have a common origin. Note also that while a reduced dative would coincide with genitive, the reduced dative subordinate ending does not fall together with any other form.)
verbal derivations. The only zero inflection on verbs (leaving a derivational affix in word-final position) is imperative with the $-l$ conjugation. The only verbal affix which derives an $-l$ - conjugation stem is:
[I7] comitative allomorph -ya-l (see 2.3.2, 3.8.5 and 4.3). This does reduce, by Rule 2, in the imperative inflection. Thus we get, with verbs of different syllabicity:

| root + COMITATIVE + IMPERATIVE | gali $+\eta a+o$ | madinda $+\eta a+o$ |
| :--- | :--- | :---: |
| Rule $\mathbf{I}$ | gali $:+\eta a$ | - |
| Rule 2 | gali: $+\eta$ | - |
| surface form | gali: $y$ | madindaya |

There is an affix of identical form which derives a transitive verbal stem from a noun or adjective:
[18] causative - $\eta a-l$. This again reduces, by Rule 2 , in the imperative inflection. With a disyllabic adjective root ending in a vowel we get

```
    root
    causative + imperative
cf. causative + present
causative + past
```

```
mada 'soft'
```

mada 'soft'
mada:\eta 'make soft!'
mada:\eta 'make soft!'
mada:yal 'make soft'
mada:yal 'make soft'
madayalnu 'made soft'

```
madayalnu 'made soft'
```

There is, of course, no reduction with trisyllabic nominal stems, or stems ending in a consonant:

| root | gumari | 'red' | gurin | 'good' |
| :--- | :--- | :--- | :--- | :--- |
| caus + imp | gumarina | 'make red!' | guri:nya | 'make good!' |
| caus + pres | gumarinal 'makes red' | guri:nyal | 'makes good' |  |
| caus + past | gumarina:l 'made red' | gurinyalyu 'made good' |  |  |

## TIME AFFIXES

[19] -may and $-m$ derive time adverbals from adjectives (3.7.8). They do not reduce since they each end in a consonant (and fail the structural description for Rule 2).
post-inflectional affixes. The majority of suffixes of this type (which can occur with words of any class, and always follow inflections) are disyllabic. There are, however, two monosyllabic affixes in this class --(a)la and -di (3.9.1-2) - and they do not reduce. These affixes receive separate discussion in 2.4 .

Rule 2 applies quite regularly to nouns, adjectives, verbs, deictics - in fact with every part of speech bar one: pronouns. In 3.6.3 we show that the optimal analysis of the pronoun paradigm involves regarding pronouns as falling outside the scope of Rule 2. (Note though that Rule I applies quite regularly with pronouns, as with all other parts of speech.)
2.3.4 Final syllable deletion [Rule 2]-(ii) root reduction. Of the 1,300 or so nominal roots (nouns, adjectives, locational and temporal forms) in the writer's dictionary of Yidin, around $\mathbf{1}, 200$ decline regularly, taking the forms of inflectional and derivational affixes briefly summarised in the last section. Sample paradigms are in table 2.r. The first column shows inflections on to a vowel-final stem, while the last three columns show inflections on to a stem ending in a consonant (the loss of $r$ from ergative and locative of madur is discussed in 3.3.2). For all 'regular' nominals the absolutive form has the same number of syllables as the root, and all oblique forms involve just one additional syllable.

There are, however, about eighty nominals in the dictionary which have disyllabic absolutive and quadrisyllabic oblique forms (that is, the non-zero case forms involve two syllables more than the absolutive form). These are exemplified in table 2.2.

Although the absolutive forms end in a consonant, these words do not decline like regular consonant-final roots (table 2.1). In fact, in all cases but the absolutive they appear to show a trisyllabic, vowel-final root gindanu, dambula, wayari. It remains to explain the absolutive.

In terms of a root inferred from the oblique forms, the underlying form of the absolutive should be gindanu $+\boldsymbol{\sigma}$, and so on; but the surface form is ginda:n. This immediately recalls underlying buna $+\eta g u$ from which Rules I and 2 derived surface form buna: $\boldsymbol{y}$, etc. Rule 1 is, of

Table 2.1 Regular nominal inflections

|  | 'initiated man' | 'hornet' | 'tortoise' | 'frog sp.' |
| :---: | :---: | :---: | :---: | :---: |
| Absolutive | mula:ri | bindin | badi:gal | madur |
| ergative | mularingu | bindi:ndu | badigaldu | madu:du |
| dative | mularinda | bindi:nda | badigalnda | madu:rnda |
| PURPOSIVE | mularigu | bindi:ngu | badigalgu | madu:rgu |
| locative | mularila | bindi:nda | badigalda | madu:da |
| ablative | mularimu | bindi:nmu | badigalmu | madu:rmu |
| comitative | mulariyi | bindi:ndi | badigaldi | madu:rdi |
| genitive | mularini | bindi:ni | badigalni | madu:rni |

Table 2.2 Morphophoneme-final nominal inflections

|  | 'moon' | 'two' | 'youth' |
| :--- | :--- | :--- | :--- |
| ABSOLUTIVE | ginda:n | dambu:l | waya:r |
| ERGATIVE | gindanuygu | dambulaygu | wayaringu |
| DATIVE | gindanunda | dambulanda | wayarinda |
| PURPOSIVE | gindanugu | dambulagu | wayarigu |
| LOCATIVE | gindanula | dambulala | wayarila |
| ABLATIVE | gindanumu | dambulamu | wayarimu |
| COMITATIVE | gindanuyi | dambulayi | wayariyi |
| GENITIVE | gindanuni | dambulani | wayarini |

course, totally productive (with a single exception noted in 2.3.3) and would automatically lengthen the middle vowel of gindanu. We could now suggest that it is Rule 2 which reduces ginda:nu to ginda:n. Note that the conditions for Rule 2 are all met, except the morpheme boundary condition. If we were to extend Rule 2 to cover the absolutive forms in table 2.2 there would have to be a disjunctive statement of its conditioning.

The most serious difficulty is that Rule 2 does Not reduce the absolutive forms of all vowel-final trisyllabic roots that meet its phonological conditions (that is, whose last intervocalic consonant can be a word-final segment). We would not, of course, expect gudaga 'dog', waguda 'man' or balawa 'black sugar ant' to reduce, since a word cannot end in a stop or $w$. But we should expect
both (a) gadara 'possum', bigunu 'shield', wayili 'red bream'
and (b) gudara 'broom', dudulu 'brown pigeon', galgali 'curlew' to reduce, giving disyllabic absolutives; set (a) do, and follow the paradigm in table 2.2, whereas set (b) do not reduce and have trisyllabic absolutives, following the paradigm in the first column of table 2.1. There are in fact about 80 trisyllabic roots in set (a) - in each case there is a single consonant ( $m, n, n, l, r$ or $q$ ) between the second and third vowels in the root. Set (b) - those whose absolutives could be reduced by Rule 2, but are not - contains about 35 roots with a single consonant in the final intervocalic position, and about 17 with a consonant cluster in that position (for instance, yabunga 'a wattle tree', gindalba 'small lizard sp.').
It appears that there is no phonological, semantic or grammatical factor conditioning this reduction. The only straightforward solution seems to be to assign roots ending in a final morphopheneme $-A, I$ or $U$ - to those items with trisyllabic oblique roots which do form a disyllabic absolutive. Thus we have gindan $U$, dambul. $A$, wayaf $I$, gadar $A$, bigun $U$, wayilI, and so on. A word-final morphophoneme will trigger Rule 2; if it is not word-final it will simply be rewritten as the appropriate vowel. Words in set (b) are assigned roots in the normal way mulari, gudara, dudulu, galgali, and so on.

We now have two alternatives for the third condition on Rule 2. There must either be a morpheme boundary immediately after the penultimate vowel, or the final vowel must be $A, I$ or $U$. The full statement is:

RULE 2 - FINAL SYLLABLE DELETION

$$
\mathrm{XV}_{1} \mathrm{C}_{1}\left(\mathrm{C}_{2}\right) \mathrm{V}_{2} \# \rightarrow \mathrm{XV}_{1} \mathrm{C}_{1} \#
$$

if (a) $\mathrm{XV}_{1} \mathrm{C}_{1}\left(\mathrm{C}_{2}\right) \mathrm{V}_{2} \#$ is an odd-syllabled word;
and (b) $\mathrm{C}_{1}$ is one of the set $(l, r, r, y, m, n, n, \eta)$ of allowable wordfinal consonants;
and (c) EITHER (i) there is a morpheme boundary between $\mathrm{V}_{1}$ and $\mathrm{C}_{1}$
OR (ii) $\mathrm{V}_{2}$ is $A, I$ or $U$.
Here $\mathrm{V}_{1}$ can be any (long or short) vowel.
Rule 2 must be ordered after Rule 1 .

All roots which are set up with final $A, I$ or $U$ are odd-syllabled and have a single consonant (which is an allowable word-final segment) between $\mathrm{V}_{1}$ and $\mathrm{V}_{2}$. Thus the inclusion of ' $\left(\mathrm{C}_{2}\right)$ ' in the structural description, and conditions ( $a$ ) and (b), are not strictly necessary to the statement of Rule 2 for the case of root reduction. But since these conditions must be satisfied for final syllable reduction to take place, it seems most straightforward to give one general statement of the rule, as above.

It is worthwhile comparing the possibilities at final intervocalic position in the set of morphophoneme-final roots, and in the set of roots which could reduce but don't, like mulari (we deal just with the non-reducing forms which have a single consonant between the final and penultimate vowels). The Yidin dictionary contains (excluding Dyalnuy forms):

|  | $l$ | $r$ | $r$ | $y$ | $m$ | $n$ | $n$ | $\eta$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| reducing roots | 25 | II | 2 I | - | 6 | 15 | 3 | - |
| non-reducing roots | 4 | II | 12 | 5 | - | I | I | - |

It will be seen that there is no significance in the fact that no reduced absolutive (of the type ginda:n) ends in $\eta$; there are in fact no trisyllabic roots with $\eta$ in the last intervocalic position.
Only five trisyllabic forms have $y$ in the last intervocalic position, and none of them reduces. In three words, $y$ follows $i$ (yuriya 'saltwater snake sp.', bibiya 'coconut tree', gurgiya 'freshwater khaki bream') and if these did reduce the then-final $y$ would have to be deleted by Rule 3-2.1.2, 2.3.3, 2.3.7. In the other two, $y$ follows $u$ (yazuyu 'turtle', diyuya 'catbird') and these could reduce, as do comitative forms (2.3.3). But there are so few trisyllabic forms with $y$ in the last intervocalic position, that no significance should be attached to the fact that none of them reduces.
It is worthy of note, though, that whereas $l, r$ and $\zeta$ occupy the last intervocalic position in both reducing and non-reducing roots, the nasals ( $m, n$ and $n$ ) are found almost exclusively in reducing roots. In fact the only two non-reducing roots with a nasal in this position exhibit alternation: gayana 'black cockatoo' has the form galna in the coastal dialect, and nirini 'a long peppery fruit' has been heard as nirni. (Such alternation is, in fact, rarely encountered in the dictionary as a whole. See 2.6.2.)

Each noun and adjective occurs more frequently in the absolutive form than in all other case forms put together. Thus, in most instances of use, the 'third vowel' of the root is not pronounced - but the long second vowel of, say, mala:n 'right-hand' (in contrast with malan 'flat rock') indicates that a trisyllabic root should appear in oblique cases. For
perhaps three-quarters of the reducing trisyllabic roots the writer found it an easy matter to discover the identity of the third root vowel (and the data obtained were quite consistent). But for a quarter or so of these items there was some difficulty, due to
either (I) fluctuation in the value of the third vowel in oblique forms,
or (II) appearance of a centralised allophone of the third vowel.
Taking these in turn:

## I. FLUCTUATION

First note that there appears to be a positive association between the second vowel and final vowel or morphophoneme in a trisyllabic root.

The figures for those reducing trisyllabic roots for which a final morphophoneme can unambiguously be assigned, are:

| second | final morphophoneme |  |  |
| :---: | :---: | :---: | ---: |
| vowel | $A$ | $I$ | $U$ |
| $a$ | 20 | 4 | 9 |
| $i$ | 4 | 8 | 5 |
| $u$ | 8 | - | 20 |

Thus, in $62 \%$ of these words the second vowel and final morphophoneme coincide (if there were no association, we should expect a figure of $33 \frac{1}{3} \%$ ).

A count of all other (non-reducing) vowel-final trisyllabic roots in Yidin reveals that $44 \%$ of them have identical second and third vowels.

It appears that sometimes a speaker cannot remember the identity of the third root vowel in a reducing-absolutive form. That is, he may be familiar with the absolutive form - say bayi: $\boldsymbol{n}$ 'spear stick' - and know from the long second vowel that there must be a root-final vowel before non-zero cases; but he is not sure whether the root should be bainA or bayinI or bayinU.

In such cases, the third vowel will be given as
either (i) identical to the second vowel of the root, or (ii) identical to the vowel of the suffix.
For instance, gambi: $y$ has always been given as the absolutive form 'tablelands'. Most informants gave purposive gambizagu, ablative gambiramu and locative gambifala; Dick Moses gave these forms on some occasions and on others gambirimu and gambirila - he was here supposing that the third vowel was identical with the second vowel (as it is for $62 \%$ of roots of this class).

Tendency (ii) can be exemplified with gambin U 'top-knot pigeon'. The absolutive is consistently gambi:n and one informant gave ergative gambinungu, purposive gambinugu, genitive gambinuni (consistently employing the root gambinu). Another informant gave, one year, ergative gambinungu, locative gambinala, comitative gambiniyi - where the third vowel anticipates the quality of the vowel in the suffix; the following year this informant used gambinu- in all oblique forms.

As will be seen from the examples, variation in the third vowel occurs only on some occasions for some informants (and then only for a handful of words). In almost every case, consistent results can be obtained by detailed checking with other informants.

Whenever there seemed, after preliminary investigation, to be an alternation between two root-final morphophonemes, the choice that differed from the second vowel of the root turned out to be correct. For instance, Dick Moses used the root gular $I$ 'big-leaf fig tree' during the writer's 1972 field trip, but gular $A$ in 1973. Checking independently with Tilly Fuller and Katie May revealed that they both used gularI.
The only morphophoneme alternations which it has not been possible to resolve are:
[ 1 ] gaduld $\sim$ gadulU 'dirty (e.g. of water)' - this item appears to be confined to the coastal dialect.
[2] wagal I ~ wagalA 'wide'. Both Dick Moses and Tilly Fuller alternated on different occasions between $i$ and $a$, before suffixes involving all types of vowels. Pompey Langdon used only $a$.
[3] gunbulA $\sim$ gunbulU 'billy can' (said to be in the Dyalnuy style). The third vowel was given as $a$ or $u$ by Dick Moses, and by Katie May; as $a$ by George Davis; as as $u$ by Pompey Langdon and Tilly Fuller (although Mrs Fuller gave $i$ before locative $l a$ on one occasion). From what we have said it might be thought that gunbulA is the most likely correct form (where the morphophoneme differs from the second vowel of the root). But the cognate form in the Ngadan dialect of Dyirbal is in fact gunbulu.

For some forms the third vowel was, on first elicitation, always the same as the vowel in the suffix; that is:
$u$ before ergative $-\eta g u$, ablative $-m u$ and purposive $-g u$
$a$ before locative -la, dative -nda, set-inclusion -ba and causative verbaliser -na-l
$i$ before genitive $-n i$ and comitative $-y i$
For instance, gayar $A$ 'European-type axe' has absolutive gaya. $\%$. One informant gave ergative gayaruygu, purposive gayaqugu, ablative gararumu,
locative gayarala, genitive gayarini and comitative gayariyi, suggesting that the root be taken simply as ganar $V$, with dummy V taking on the value of the suffix vowel. But another informant consistently used gayara- before all suffixes, whatever their vowel (and the following year the first informant consistently used gayara-).

The only putative root-final V's which it has not been possible to resolve are:
[4] absolutive wubu:l 'lucky (at hunting, etc.)'. Dick Moses gave ergative wubulungu, dative wubulanda and past tense verbalised form wubulaya:l, suggesting a root wubulV.
[5] absolutive wurgu:l 'pelican'. Dick Moses consistently used wurgulV, Pompey Langdon did not recognise the word and Tilly Fuller gave ergative wurguluygu (which would be consistent with underlying wurgulV or wurgulU).
[6] absolutive mugi: $r$ 'mussels'. A variety of vowels have been encountered before oblique suffixes and no clear pattern emerges (this word only occurs in the coastal dialect.)

## II. CENTRALISING

A morphophoneme, $A, I$, or $U$, normally emerges as a clearly articulated vowel, $[a],[i]$ or $[u]$, before a non-zero affix. And the normal stress rules will, of course, apply; thus we have gánaráni 'alligator-GEN' as against ganá:r 'alligator-ABS'.

But on some occasions a morphophoneme can be articulated as a central vowel [ $\partial]$; there will not then be stress on that syllable. Thus, the writer has recorded 'black pine-GEN' as [gúbumáni], but also as [gúbu$m \not n i]$. This centralising is quite uncharacteristic of Yidin vowels - which normally have rather extreme 'cardinal' values (2.1.I) - and is encountered only in the realisation of underlying morphophonemes, and with the $u$ in the declension of a genitive based on an even-syllabled vowel-final root (2.3.3, 3.3.3).

There are three likely explanations for this centralising tendency (it is possible that all have some relevance, and the central vowels observed are the result of a combination of factors). Firstly, when an informant is unsure of the quality of the third vowel in a root it is natural that he should - while still including the correct number of syllables in each word - not commit himself to the value of the vowel. This certainly explains some occurrences of [2]. Thus - as noted above - Dick Moses normally used the correct root gambir $A$ 'tablelands' but on one occasion pronounced the third vowel as $i$; at the same session he gave the genitive as simply [gámbirəni].

Before discussing the second reason for vowel centralisation we can
remark that many of the words which in the Yidin dialects have disyllabic absolutive ( $=$ citation) forms, with the second vowel long, correspond to words with trisyllabic citation forms in the Gungay dialect, or in nearby languages:

| Yidin | bigu: $n$ | Gungay <br> Dya:bugay, | bigunu | 'shield' |
| :--- | :--- | :--- | :--- | :--- |
|  | birga:l | 'night-hawk' |  |  |
|  | Dyirbal |  |  |  |
|  | bini:r | Dya:bugay | biniri | 'shell' |
|  | wayi:l | Wargamay | wayili | 'red bream' |

In just a few instances the cognate has a final consonant:

| Yidin | yagu:n | Gungay | yagunay | 'echidna (porcupine)' |
| :--- | :--- | :--- | :--- | :--- |
|  | dumbu:n | Dya:bugay | dumbunum | 'scorpion' |

In almost every case the third vowel of the cognate form corresponds to the morphophoneme that is set up for the Yidin root (on the basis of inspection of oblique forms in Yidin) - thus, bigunU, birgalA, binir , wayill, dumbun $U$, but yagunU .

It is reasonable to infer from these correspondences that what are presently morphophoneme-final roots in Yidin originally had simple trisyllabic roots, which were preserved as such in absolutive case/citation form. And that there was a specific historical change - probably in the quite recent past - reducing absolutive forms like bigu:nu and birga:la to the disyllabic bigu:n and birga:l.
The Yidin words must, of course, have first dropped the final consonant, where there was one - thus dumbu:num $>$ dumbu:nu $>$ dumbu:n. Qua yagunay, note that Yidin - unlike Guggay - does not allow roots to end in $y$ (2.6.3).

Now in almost every Australian language an absolutive form (marking intransitive subject and transitive object functions) is identical - at least as regards segmental phonology - with the root. This is the case for 1200 of the 1300 or so nominals known for Yidin. But for the 80 lexical items discussed in this section the absolutive has been reduced to two syllables, while a trisyllabic root is maintained elsewhere. As we have noted, this perfectly satisfies the strongest stress target of Yidin - every word involving one of these roots (for instance, every word in table 2.2) has an even number of syllables.

But there must be a tendency - in a way, in opposition to the stress target - to reconcile absolutive and root forms. The next historical step

Table 2.3 Absolutive-root reduction

|  | absolutive | root | oblique <br> (e.g. dative) |
| :--- | :---: | :---: | :---: |
| ORIGINAL | dambu:la | dambula | dambulanda |
| PRESENT | dambu:l | dambula | dambulanda |
| NEXT STAGE (?) | dambu:l | dambu:l | dambu:lnda |

could be to generalise the absolutive as the root on which all oblique forms are founded. We are suggesting that from the top line in table 2.3, the present system (in the middle line) developed, and that this may in time be replaced by the lower line.

The development from dambulanda to dambu:lnda would involve elimination of the third vowel (the stress pattern would then automatically follow the normal trisyllabic prescription-2.2). This would not be expected as a sudden step, but would be likely to involve occasional, and then progressively more frequent, unstressing and reduction/centralising of this vowel. This would fit in exactly with observed pronunciations like [gúbumani]; at present they are greatly outnumbered by 'regular' pronunciations [gúbumáni], but these may well be the first step in a change into disyllabic-root alignment, as in the bottom line of table 2.3. Note also that very occasionally what is properly a morphophoneme-final root may be inflected as if it were a consonant-final item - thus ginda:ndi 'by moon (light)' has been heard instead of gindanuyi (informants have sometimes corrected forms like ginda:ndi on listening to the tape, but at other times they may maintain that either gindanuyi or ginda:ndi is equally acceptable).

The final point that can be made in explanation of the central realisation of morphophonemes is the normal tendency to lower, say, $u$ before $y$ (2.1.1). For instance, /gindanuyi/ is often pronounced [gindanzyi] or [gindaniyi], making it impossible to hear whether $u$ or $i$ was intended ([gindanwi: :] has also been heard).

It is likely that these three tendencies assist and reinforce one another. In the case of a word which is relatively infrequent - and known mostly by its absolutive form - some speakers may be unsure of the third root vowel (point I); then this word is likely to be one of the first candidates to be assigned a disyllabic root (point 2). And if a third root vowel (say, an original $u$ ) is being occasionally unstressed and reduced (point 2 ), it
is likely to have a particularly central and neutral quality before $y$ (point 3), as in [gindanzyi]. There may also be interaction between (ii) centralisation and (i) fluctuation. Thus, a tendency to assimilate the third vowel of /gindanuyi/ to suffix vowel $i$, and a tendency to lower $u$ slightly before $y$, may both contribute to the observed [gindaniyi].
The lower line in table 2.3 introduces roots that involve a long vowel, followed by a consonant. This would be a definite phonological change since as we have seen (at least for the nominal roots so far considered) at present no root form involves a long vowel. (In 2.3.8 we discuss twelve items which do involve a long vowel, but it then comes at the end of the root.) It seems that the language is at present flirting with a phonetic alternation that might in time lead to a reinterpretation of this kind (it would be wrong, at this stage, to say that the language had irreversibly embarked on a series of changes that would lead to root reanalysis). It is a pity that-since Yidin is no longer actively spoken, and will become quite extinct within a very few years - no linguist will be able to observe the changes that would have been likely to occur.

The length of our comments on vowel fluctuation and centralisation should not obscure the fact that these are marginal effects, noticed occasionally in a minority of morphophoneme-final items. Nine-tenths or more of the time these words exactly follow the paradigm in table 2.2 (and this appears always to be the canonical pattern, to which phonetic and other divergences have to be related).

Since a relatively small number of morphophoneme-final roots are known, an exhaustive list is given below. On the right-hand side are cognates in the Guygay dialect, or in neighbouring languages (where known). The following abbreviations are used:

GU - Gungay (phonemic forms inferred in most cases from written sources - see Appendix).
DYA - Dya:bugay (material from Ken Hale, Helena Cassells, and the writer's own field work).
DYI - Dyirbal, MA - Mamu, GI - Giramay, NGA - Ngaḑan (dialects of the 'Dyirbal language' - material from the writer's field work).
WA - Wargamay (material from the writer's field work).

| babalA | 'bone' | [NGA babala] |
| :--- | :---: | :---: |
| balbay $A$ (tablelands dialect) $\sim$ banbarA |  |  |
|  | (coastal dialect) |  |


| bandar $A$ | 'madness in head' | [DYI bandal 'stupid'] |
| :---: | :---: | :---: |
| barinU | 'small-leaved tree, used for spear handle' |  |
| bigun $U$ | 'shield' | [GU bigunu] |
| bilgilI | 'spur wood' |  |
| binirI | 'shell, money' | [DYA biniri] |
| birgalA | 'night hawk' | [DYA, MA birgala] |
| budalA | 'fine[ly ground]' | [MA budala 'soft (cooked)'] |
| bulgur $U$ | 'swamp' |  |
| bulur $U$ | 'storytime person, thing or place' | [DYA, DYI buluru 'long time ago'] |
| dumbun $U$ | 'scorpion' | [DYA dumbunum] |
| dadirI | ```'seven sisters (stars); a trap'``` |  |
| dalamU | 'fresh, young (e.g. leaf)' |  |
| dambulA | 'two' | [GU dambula] |
| digur $U$ | 'thunderstorm' | [MA diguru] |
| dimur $U$ | 'large house' | [DYA, NGA dimuru] |
| dinar $A$ | 'root' | [DYA dinara] |
| dulyulU | 'waterfall' |  |
| duygum $U$ | 'worm' | [DYA duygum] |
| durin $U$ | 'leech' |  |
| duwar $A$ | 'wattle' |  |
| gabanU | 'rain' | [DYA gaba:n] |
| gabulU | 'stick for carrying fish' |  |
| gadar $A$ | 'brown possum' | [MA gadara, DYA gayara] |
| gadulA $\sim U$ | 'dirty (e.g. water)' |  |
| gambin U | 'top-knot pigeon' |  |
| gambir $A$ | 'tablelands' | [DYI, MA gambil] |
| gambunU | 'a type of spirit' |  |
| gangulA | 'grey wallaby' | [GU, DYA gangula] |
| gajalA | 'black scrub locust' |  |
| gajar $A$ | 'alligator' | [GU, DYA, DYI gajara] |
| gandilA | 'crab' | [cf. place-name gandira - 6.1.2] |
| gayay $A$ | 'European-type axe' |  |
| gayunU | 'bushes arranged as an animal trap' |  |
| garbar $A$ | 'mangrove tree' | [cf. place-name garbara - 6.1.2] |
| gawit I | 'crescent-shaped' |  |
| gawulA ( $\sim U$ ? | 'blue gum tree' | [DYA gawula 'gum tree sp.'] |


| gimalA | 'tree used for fire drills' | [DYA gimala 'fire drill'] |
| :---: | :---: | :---: |
| gindan $U$ | 'moon' | [DYA ginda:n] |
| giyal $A$ | 'stinging nettle tree' | [DYI giyara 'softwood stinging tree'] |
| gubum $A$ | 'black pine' |  |
| gudun $U$ | 'wind' |  |
| gugin $U$ | 'flying fox' | [DYI, MA gugi; <br> DYA gugi:n] |
| gulanU | 'walnut tree' |  |
| gular 1 | 'big-leaved fig tree' |  |
| gumbalA | 'a stage in the development of grubs' | [GI gumbala] |
| gungar I | 'north' | [GU, DYA, DYI gungari] |
| gurun $U$ | 'language, story, news' | [GU guruna or gurunu ?] |
| gurban $U$ | 'crow' |  |
| guyalA | 'fish hawk' | [GU guyala] |
| guyirI | 'calm (water)' |  |
| guyur U | 'storm' | [DYA guyuru] |
| madalA | 'tree fern' |  |
| $\operatorname{magul} A(\sim U ?)$ | 'a root food' | [DYA magula] |
| malan $U$ | 'right hand' | [DYA mala :n] |
| $\operatorname{malar} A$ | 'spider web' | [DYA malara] |
| mayar $A$ | 'young initiated man of the gurabana moiety' |  |
| milirI | 'cramp, pins and needles' |  |
| mindir $I$ | 'salt-water centipede' |  |
| mudalA | 'black mangrove tree; garfish' |  |
| mugirV | 'small mussels' | [cf. Gugu-Yalandyi mugir] |
| mupdur $U$ | 'plenty' |  |
| murin $U$ | 'ashes' | [DYA murini 'ashes, hot'] |
| nagill ( $\sim A$ ? $)$ | 'warm' | [GU nagila?, MA nigala 'dry'] |
| nuygulU | 'Torres Straits pigeon' | [DYA, GU juygulu] |
| pupur $U$ | 'initiated man' |  |
| nurulU | 'shade (of a bushy plant)' |  |
| nuygunU | 'whispered talk' |  |
| wagar $I \sim A$ | 'wide' | [DYA wagara] |
| wangam $U$ | 'kidney' | [NGA wangamu] |
| wandirI | 'how many' (number interrogative - see 3.7.7) |  |
| wayar 1 | 'pre-pubescent boy' | [DYA zvayari] |


| waygamU | 'overhanging cliff' |  |
| :--- | :--- | :--- |
| wayill | 'red bream', | [WA wayili] |
| wirulU | 'a shell fish' |  |
| wubulV | 'lucky (at hunting, etc.)' |  |
| wugamU | 'firefly' |  |
| wulmbur $U$ | 'leafy broom' | [DYA wulmburu 'leaves'] |
| wurgulV | 'pelican' |  |
| yabur U | 'post-pubescent girl' | [DYA yaburu] |
| yagunU | 'echidna' | [GU yagunay] |
| yangarA | 'straight' | [NGA yangara] |
| yurunU | 'long time ago' |  |

In addition, the data collected on Dyalguy contains a handful of morpho-phoneme-final roots:

| burur $U$ <br> dumalA | 'cloud' <br> 'straight woomera' | [MA Dyalyuy, DYI every- <br> day style - dumala] |
| :--- | :--- | :---: |
| mandalA | 'water' |  |
| muyarA | 'scrub turkey' | [MA everyday style - |
|  | muyara] |  |

2.3.5 Sources of vowel length. In 2.3.I we discussed the root and inflectional forms of 'regular' nominals - those for which all segments of the root occur in each case form. We found that for trisyllabics the absolutive form involves a long vowel (guda:ga, yabu:lam). This could be taken as the root, but then inflectional processes would become quite complex, involving various specifications of length deletion and insertion. Instead, we found it simplest to set up roots which involved no long vowels at all, and to introduce length by Rule i (which is - with a single exception noted in $2.3 \cdot 3$ - totally productive in Yidin).

Then in 2.3 .4 we discussed nominals which have a trisyllabic root in all oblique cases, but disyllabic absolutive form - always ending in a long vowel followed by a consonant (ginda:n, dambu:l, waya:r). The absolutive form could have been selected as the root, but then inflectional processes would have had to delete vowel length and add a (morphologically, but not phonologically, conditioned) vowel. The simplest
scheme for these items was to take the root as trisyllabic, ending in a morphophoneme $A, I$ or $U$, and without any vowel length. Length in absolutive forms is then again introduced by Rule 1 (and the final morphophoneme is deleted by Rule 2 ).

In summary, none of the roots set up for the 1280 nouns, adjectives, time words and locational words considered thus far involves any vowel length (the remaining 30 nominals will be dealt with in $2.3 .7,2.3 .8$ ).

This analysis is supported by the rule for nominal reduplication (3.3.9). Reduplication, which normally indicates plural reference, involves repetition of the first two syllables of the root. Thus (quoting absolutive forms) we have bupa 'woman', bunabupa 'lots of women' and wagu:da 'man', waguwagu:da 'lots of men'. If the root were wagu:da we would expect (unless the reduplication rule were explicitly framed to exclude the repetition of vowel length) wagu:wagu:da; but with root waguda, reduplication derives waguwaguda and Rule 1 then lengthens the penultimate vowel.

Now a syllable-final consonant will normally be reduplicated - yalal 'big', yalalyalal 'lots of big ones'; gundi:lbay 'tiger snake', gundilgundi:lbay 'lots of tiger snakes'. Thus, if the absolutive yabu:r 'young woman', dambu:l 'two' were the roots we would expect reduplicated *yabu:ryabu: $\tau$ and *dambu:ldambu:l(or perhaps *yaburyabu:r, *dambuldambu:l). In fact the forms are yabuyabu:r 'lots of young women', dambudambu:l 'two together', exactly what is predicted from roots yabur $U$ and dambulA.

We gave details, in 2.3.2-3, of a fair number of nominal and verbal inflections which have one surface allomorph involving a long vowelthus $-: \eta \sim-\eta g u \sim-d u$ ERGATIVE, $-: n \sim-n i$ GENITIVE, $-: n \sim n u$ PAST TENSE ( $-n$ - conjugation). -: $l \sim-l n u$ PAST TENSE (-l-conjugation), and so on. In each case the alternants are phonologically conditioned - by the number of syllables in the stem to which they are attached - and we could have provided a neat distributional statement of the allomorphy. But it was again found simplest to adopt a single canonical form (which does not involve a long vowel) for each affix, allowing vowel length again to be inserted by Rule 1 and a final syllable to be deleted by Rule 2.

Thus, no nominal root - of the set thus far considered - or verbal root, or nominal or verbal inflection involves vowel length, length being entirely the result of 'penultimate vowel lengthening' (Rule i). It is, in fact, quite predictable that the next-to-last syllable of any odd-syllabled word will involve a long vowel and will bear stress. Strictly speaking, it
is redundant to mark length in these circumstances - we could write absolutive mulari instead of mula:ri, allowing the reader silently to apply Rule i to all odd-syllabled words. In fact Rule i would be simply a specification of phonetic realisation - rather than a phonological rule if it were not sometimes followed by Rule 2, which excises a syllable and destroys the condition for the operation of Rule 1 . Thus, although we could write either mula:ri or mulari, the length must be specified in mala:n (absolutive of malan $U$ 'right-hand') to distinguish it from malan (absolutive of malan 'flat rock'). Since length must be specified in cases where Rule 2 follows Rule $\mathbf{1}$, it seems most consistent to mark length wherever Rule I applies.
It can be seen that vowel length only became phonologically significant in Yidin at the time at which Rule 2 (which does not itself affect length) was introduced. It is interesting in this connection to compare Yidin with Warganay, spoken 100 miles to the south. This language has contrastive vowel length (almost ceitainly going back to a distant ancestor language, perhaps even to proto-Australian), in the initial syllable only. Stress goes on to a long vowel if there is one in a word ( $m u$ í:ba 'stone fish', gi:baga ' fig tree sp.'), otherwise on the first syllable of a disyllabic word (mígan 'mountain') and the middle syllable of a trisyllabic form (gagára 'dilly-bag'). The vowel in the stressed second syllable of a trisyllabic word tends to be (phonetically) lengthened. But length in this case is entirely predictable, and is not marked in transcription of Wargamay words; it does appear to be phonetically less pronounced and less consistent than the contrastive length in initial syllables. (For further details of Wargamay phonology, see Dixon forthcoming - a .)

Vowel length in Yidin comes from two main sources:
(I) application of Rule I
(II) inherent length in three verbal affixes
(A number of further, quite minor, sources are listed in 2.3.8.)
The following verbal suffixes specify length on the final vowel of a preceding stem:

| p | conjugation | $-l-$ conjugation | $\stackrel{-\chi^{-}}{\text {conjugation }}$ |
| :---: | :---: | :---: | :---: |
| antipassive, etc. | -: $\mathrm{di}^{\text {- }}$ n | -:di-n | -:rdi-n |
| 'Going' aspect |  |  |  |
| normal form | [-yali-n] | -:li-n | -: $\boldsymbol{r}^{i-n}$ |
| form before comitative | -:ri-n | -:ri-n | -:ri-n |
| 'COMING' ASPECT | [-yada-n] | -:lda-n | -:da-n |

('Going' and 'coming' allomorphs for the $-n$ - conjugation are placed within square brackets, since they do not specify vowel length.)

The length specification in these affixes is not dependent on the number of syllables in the stem, and thus cannot be explained in terms of Rule I . For instance, with root wawa-l'see, look' we get stem wawa:di-n; this has past tense form wawa:dinu and present tense wawa:diy. With trisyllabic root wuyaba-n 'hunt', the -:di-n plus present tense form is wuyaba:diy. The aspectual affixes exactly parallel this. (Full details of the morphological occurrence of $-: d i-n$ are in 3.8 .5 ; its functions are described in 4.2. The aspectual affixes are described in 3.8.6.)

We can suppose that at some time in the not-too-distant past Yidin had no length contrast at the phonological level. (A distant ancestor certainly had contrastive length in initial syllables; this is preserved in some - geographically quite widely separated - modern languages, but appears to have been lost in Yidin. Thus, whereas Nyawaygi (at Ingham) has wa:yal 'boomerang' and ba:ri- 'to cry', Yidin has simply wayal and badi-.) We can also suppose that, like a number of modern Australian languages, Yidin placed major stress on the initial syllable of an even-syllabled word, but preferred to stress even-numbered syllables in odd-syllabled words so that there was a regular alternation of stressed and unstressed syllables, and no word would both begin and end with a stressed syllable. A non-initial stressed syllable would be likely to be (phonetically) slightly lengthened.

The main historical change would have been the elision of the final unstressed syllable of odd-syllabled words under certain conditions (presumably: the present-day conditions for the operation of Rule 2). With this change, stress (with concomitant length) would have become phonologically significant for even-syllabled words.

Turning now to length in aspectual affixes, it is likely that this is in some cases the remainder from an original extra syllable. The 'going' and 'coming' aspects may have evolved from compounding and reduction of lexical roots gali-n 'go' and gada-n 'come' (for an evaluation of possible evolutionary hypotheses, see 3.8 .6 ). We can generalise from present $-\boldsymbol{n}$ conjugation allomorphs and suggest that the aspectual affixes were originally (with normal conjugation markers $-\theta-,-l$ - and $-\tau-$ - see 3.8 .3 ):

|  | $-n-$ | $-l-$ | $-r-$ |
| :--- | :---: | :--- | :--- |
|  | conjugation | conjugation | conjugation |
| 'GOING', | $-\eta a l i-n$ | $-l+$ yali-n | $-\gamma+$ yali-n |
| 'COMING' | $-\eta a d a-n$ | $-l+$ yada-n | $-r+$ yada-n |

There must then have been the following truncations:

$$
\begin{array}{ll}
-l+\text { yali }-n>-: l i-n & -r+\text { yali }-n>-: \text { :i }-n \\
-l+\text { yada }-n>-: l d a n-n & -r+\text { yada }-n>-: d a-n
\end{array}
$$

In present-day Yidin $\mid u w u /$ and $\mid i y i /$ can be realised as [ $u::]$ and [ $i::]$ respectively (2.1.2). And the comitative suffix - $\eta a$ - has been heard as simply length on a preceding vowel (2.6.4). It is thus not implausible to suggest that - $y a$ - could have been replaced by length on the preceding vowel (whatever its quality). Since $\mid r l /$ is not a permitted consonant cluster, one of these segments would have had to drop, for the $-r$ conjugation going form. The retention of $l$ but not $\gamma$ before $d$ parallels the situation with ergative and locative case inflections-3.3.2.

The failure of -yali-n and -yada-n to reduce to -:li-n and $-: d a-n$ with $-n$ - conjugation stems may have been at least partly due to morphotactic considerations. If this reduction had taken place, $-: / i-n$ or $-: d a-n$ would be able immediately to follow -: div-n, giving long vowels in successive syllables, which is contrary to the stress constraints of Yidin. This - and the dissimilated going allomorph -:ri-n-are illustrated and discussed further in 3.8.7.

The most difficult vowel length to explain is that in -:di-n. We can note that this is the only (derivational or inflectional) affix which is not preceded by the conjugation marker $-l$ - when attached to an $-l$ - conjugation stem (3.8.2). This suggests a development $-l+d i-n>-: d i-n$ (compare with the changes in neighbouring Ngadan, described below). We would have to account for the occurrence of length in -:di-n when attached to $-n$ - and even to $-\gamma$ - conjugation stems (note that the $-\gamma$ - is retained) by analogic generalisation. Certainly, -:di-n occurs predominantly with transitive stems, and most transitive verbs do belong to the -l- conjugation, so this is a plausible focus from which a generalisation might spread.

It is possible that the reciprocal affix in Yidin's close relative Dya:bugay may be related to Yidin -: di $^{2}-n$. It has the form $-n d i r i-n$ (with $-n$ - conjugation stems) $\sim-l-n d i r i-n$ (with $-l$ - conjugation stems) - note that the conjugation marker $-l$ - is retained here, and there is no vowel length.

We suggested that it was stress which first became phonologically significant (on the introduction of Rule 2) and that it would have had concomitant (phonetic) length. But length is now - through diachronic reanalysis - the critical (phonological) property, which serves to deter-
mine stress. (This does, of course, tie in with our discussion of the evolution of verb affixes -nali-n $>-: l i-n$ and $-l d i-n>-: d i-n$.)

The reader may well enquire whether stress could not be taken as phonologically prior in present-day Yidin and length assigned by a later (phonetic) rule; Rule I would then be reformulated as 'penultimate syllable stressing'.

In fact, information concerning vowel length is not inferable from stress placement. Thus, if a quadrisyllabic word has the first (and all oddnumbered) syllables stressed, the third vowel could be short - as in gáliŋálnu 'go-comit-past' - or long - as in gáliŋá:djiך 'go-cOMIT-:diPRES'. If we know that even-numbered syllables are stressed in a quadrisyllabic word then we can infer that either the second vowel, or the fourth vowel, or both must be long (as in wawá:linu' 'see-GoING-Past', madindayá:l 'walk up-comit-PAST', duygá:riyá:l 'run-GOING-COMITPAST') but we have no way of knowing which of these three alternatives applies. In a quinquesyllabic word we know that the fourth vowel must be long - but the second vowel may be either short (madindayá:lna 'walk up-COMIT-PURP') or long (duךgá:riךá:lna 'run-GOING-COMITPURP'). It can be appreciated from these examples that in present-day Yidin we must first state the position of any long vowels in a word, and then stress will be automatically assignable by the rule given in 2.2.

Hale (1976a: 236) in his sketch grammar of Dya:bugay mentions that 'the distribution of long vowels is of some interest vis-à-vis other Australian languages - they are extremely rare in initial syllables but highly frequent in non-initial, especially final, syllables'. It seems that vowel length in Dya :bugay follows a similar pattern to that in Yidin, and may have (in part) a similar origin. (Length in the initial syllable of the language name /da:bugay/ is due to the prefix $d a$ :. This also occurs in Yidin -2.4, 3.4.3.)

Five of the six dialects of Dyirbal, Yidin's southerly neighbour, do not show contrastive vowel length. But the sixth dialect, Ngadan, has recently introduced length by a simple change (Dixon 1972:343):

$$
\left[\begin{array}{l}
\mathrm{V}\left\{\begin{array}{l}
l \\
r
\end{array}\right\} \\
a y \\
u y
\end{array}\right]>\left[\begin{array}{l}
\mathrm{V}: \\
a: \\
i:
\end{array}\right] /-\left\{\begin{array}{l}
\mathrm{C} \\
\neq
\end{array}\right\}
$$

Ngadan has minimal pairs such as baga-l 'spear', ba:ga-l 'hit' (baga-l and balga-l in other Dyirbal dialects).

The Ngaḑanḑi tribe lived on the tablelands in close proximity - and social contact - with speakers of tablelands Yidin. Ngadan resembles Yidin (particularly the tablelands dialect) in a number of surface features - see 1.3 .

It appears that contrastive vowel length is a recently introduced 'areal feature' for the northern part of the Cairns Rain Forest region. We have no data on which to base a guess as to whether significant length developed first in Yidin or in Ngadan. But it is worthwhile noting that stress appears to be independent of length in Ngadan. As in other Dyirbal dialects, the first syllable of each Ngadan word bears major stress - thus gábu: 'carpet snake', dá:ga 'snail', yá:ga: 'road' (there is in citation forms a tendency for both syllables to be stressed if the second one is long e.g. [yá:gá:] - compare with [midi] 'small' where the second syllable would never be stressed). The shift, in Yidij, from contrastive stress (with concomitant length) to contrastive length (which determines stress) may have been partly motivated by the occurrence in Ngadan of contrastive length.
2.3.6 Illicit length elimination [Rule 4]. According to Constraint I (2.2), if two or more long vowels occur in a word, each pair must be separated by an odd number of syllables. It is surely now reasonable to ask if we could not have a word which contained two (or more) long vowels - coming from different sources - which were not naturally separated by an odd number of syllables. That is, could we have length in both odd-numbered and even-numbered syllables of a word? Presumably, in the case of such a 'conflict', one length would drop and the other prevail. The interesting question here is: which, of two conflicting lengths (from different sources) would win out?

Conflict could only be possible in verbal forms, with
[A] length arising from affix $-: d i-n$, and from Rule 1 ; or
[B] length arising from a 'going' or 'coming' aspectual affix, and Rule I ; or
[C] length arising from $-: d i-n$, and from an aspectual affix.
We will take these one at a time and see whether, in each case, two long vowels could be in successive syllables, or could be separated by an even number of syllables.
[A] -:di-n and Rule I length.
If the derivational affix -: $d i-n$ and past tense are added to a trisyllabic stem we should, by the rules given so far, expect a word with third and fourth vowels long. For instance, from barganda-n ' pass by', the inflected form barganda:di: $\boldsymbol{n}$ would be expected. The form which results is bargandadi: $n$, with the 'inherent' length on $-:$ di $i-n$ being lost.

This is, in fact, the form that a moment's reflection should have enabled us to predict. It is true that the surface form barganda:di $i \boldsymbol{\mu}$ has an even number of syllables, and that even-syllabled words can have long vowels in odd-numbered or in even-numbered syllables (but not in both). However, the underlying form was barganda $+: d i+n u$, which has an odd number of syllables. Penultimate length is introduced into this form by Rule I (and the final syllable is then dropped). The point to notice is that barganda:dipu has the third vowel long - this is at odds with Constraint 2 (2.2) which insists that in an odd-syllabled word long vowels can only occur in even-numbered syllables.

The conflict here is not between -: $d i-n$ length and 'past tense' length, since the latter is introduced by a regular, productive rule of the language. It is rather between -:di-n length - when this suffix is attached to an odd-syllabled stem - and the Constraints of 2.2.

There are at least two alternative ways of dealing with this situation. We could say that the antipassive-type suffix has two allomorphs:

$$
\begin{array}{ll} 
& \text {-:di-n, following an even-syllabled stem } \\
\text { and } & \text {-di-n, following an odd-syllabled stem }
\end{array}
$$

Or, we can assign a single canonical form to the suffix, -:di-n, and adopt:
rule 4 - illicit length elimination
If a long vowel contravenes Constraints 1 and 2 (that is, if it occurs in an odd-numbered syllable of an odd-syllabled word) then it is shortened.

This rule is required in at least one other portion of the grammar (2.3.7) and - in keeping with our earlier policy of choosing one basic form for each root and affix and allowing length variation to be determined by general rules - we prefer the second alternative.
Rule 4 must be ordered before Rule 2 (which destroys the oddsyllabicity in terms of which Rule 4, like Rule I, operates). There is no necessary ordering between Rules I and 4.

We thus have the following sample derivation:

| underlying form | barganda $+: d i+n u$ |
| :--- | :--- |
| Rule 4 | barganda $+d i+n u$ |
| Rule $\mathbf{I}$ | barganda $+d i:+n u$ |
| Rule 2 | barganda $+d i:+n$ |

There are, in fact, words on which Rule 4 must operate that do not undergo reduction by Rule 2. Thus we get bargandadi:na 'pass by-:dipurp' and dundiyadi:num 'play-comit-: di-cau subord'.

Constraints I and 2, as originally stated in 2.2, applied to the surface forms of words. We now see that an underlying form (before Rule 2 has applied) must also conform to the surface prohibitions on long vowel placement; if it does not, Rule 4 effects normalisation.
[B] Aspectual length plus Rule i length.
The discussion under [A] should exactly apply to this case. However, it is very difficult to generate a word in which aspectual length conflicts with the constraints of 2.2 . We would need aspect directly on to an oddsyllabled stem of the $-l$ - or $-r^{-}$- conjugation. But there is only one trisyllabic root in the $-l$ - conjugation (and none in the $-r$ - class) and this could not be obtained with an aspectual affix (trisyllabic roots occur in the $-n$ - conjugation, but here aspectual affixes do not involve length specification). The only derivational affix belonging to the $-l$ - conjugation is comitative - $\eta a-l$; but if this is followed by an aspectual affix it will also be preceded by -:ri- (for instance duyg $a+: r i+\eta a+: l d a+n u$ 'run-aspect-comit-coming-past'). A full discussion, which involves detailed reference to verbal word structure and affixal allomorphy, is in 3.8.7.
[C] -:di-n length plus aspectual length.
We could, in theory, get a real conflict between long vowels deriving from different types of verbal affix (and not involving Rule i). It might be thought possible to generate, say, an even-syllabled word (that did not have any odd-syllabled underlying form) with length in the third and fourth syllables. But in fact it is not. The order in which affixes can occur in a verbal word, and their details of allomorphy, are such that it is impossible to generate any word in which aspectual length is separated by anything other than an odd number of syllables from -: $\mathrm{d} i-n$ length. A full account of this presupposes an intimate knowledge of verbal morphology, and is delayed until 3.8.7.

Table 2.4 Declension of roots ending in $-i,-y$ and $-i y$

|  | A <br> 'tree kangaroo' | B <br> 'initiated <br> man' | $\begin{gathered} \text { C } \\ \text { 'possum } \\ \text { sp.' } \end{gathered}$ | D <br> 'catfish' | $\overline{\mathrm{E}}$ <br> 'black nose wallaby' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Absolutive | mabi | mula.ri | dayguy | galbi: | guri:li |
| ERGATIVE | mabi: $\eta$ | mularingu | daygu:ypdu | galbi:ndu | gurilindu |
| Dative | mabi:nda | mularinda | daygu:ynda | galbi:nda | gurilinda |
| PURPOSIVE | mabi:gu | mularigu | davgu:ygu | galbi:gu | guriligu |
| Locative | mabi: | mularila | daygu:ynda | galbi:nda | gurilinda |
| ablative | mabim | mularimu | daךgu:ymu | galbi:mu | gurilimu |
| comitative | $m a b i$ : | mulariyi | dangu:ndi | galbi:ndi | gurilindi |
| genitive | mabi:n | mularini | daygu:yni | galbi:ni | gurilini |

2.3.7 Syllable-final yotic deletion [Rule 3]. We mentioned in 2.3.4 that of the $\mathrm{I}, 300$ or so nominal forms known to the writer, around $\mathrm{I}, 200$ can be assigned 'regular' disyllabic, trisyllabic or quadrisyllabic roots; each root segment occurs in every case form, as exemplified in columns $A$, B and C of table 2.4. A further 80 items can be assigned trisyllabic roots ending in a morphophoneme $A, I$ or $U$, this being deleted in absolutive case. In none of these cases did we have to assign vowel length to a root.

The remaining thirty or so nominal items fall into three paradigmatic classes. Firstly, there are eleven (disyllabic and quadrisyllabic) forms whose declension is exemplified in column D of table 2.4 .

In column D the absolutive form ends in $i$ : (the first long vowel we have encountered ending an absolutive form). But the oblique cases are quite different from those found with an even-syllabled root ending in $i$ compare column D with column A. Elsewhere ergative, locative and comitative allomorphs involving / $n d /$ are found only on regular roots ending in $y$, as in column $C$ (and they are independent of the number of syllables in the root).

We have already noted that a syllable in Yidin cannot end in $-i(:) y$. A sequence $i(:)$-plus- $y$ can be followed by a vowel, but not by a consonant or a word boundary. In 2.3.3 we saw that the comitative affix on to an even-syllabled root ending in $i$ should, by Rules I and 2, generate a form with final $-i: y$; but here the final $y$ is simply dropped (as in mabi:, column A of table 2.4).

This suggests setting up a root galbiy. The final $y$ would condition
ergative $-n d u$, and so on, but would be eliminated from surface forms whenever it remained in syllable-final position. In fact a root ending in $y$ would perfectly explain why genitive and ablative do not reduce in column D, as they do in column A. The morpheme boundary condition is met in the case of $m a b i+n i$, but is not satisfied for galbiy $+n i$ (just as it is not for dayguy $+n i$ ).

The critical point is that words like 'catfish' have underlying form ending in a consonant $y$ and not just a vowel $i\left(\right.$ (:). Root-final $y$ is identified as $\mathrm{C}_{1}$ in the structural description of Rule 2 and the morpheme boundary condition (c-i) is then not met.
Recently, one or two scholars working on Australian languages have suggested that only one phoneme, $/ i /$, need be recognised where most linguists would require both $|i|$ and $|y|$, and that $|u|$ can similarly be employed to cover normal $|u|$ and $|w|$-see Blake and Breen (1971), Blake (1969) and Crowley (forthcoming). They then give a phonetic realisation rule: 'the palatal or high front vowel $\mid i /$ and the velar or high back vowel $/ u /$ are realised as glides, $[j]$ and $[w]$ respectively, before $a$ and before one another ( $i$ before $u$ and $u$ before $i$ ) when a consonant precedes...[e.g.] ianka 'to tell' [janka] (Blake and Breen 1971: 31). This does decrease by two the number of phonemes needed for description of a language but only at the expense of considerable phonotactic complication (for instance, the generalisation 'each word must begin with a consonant' is lost, and the statement of consonant cluster possibilities is likely to become quite tortuous).
A solution involving the identification of $y$ with $i$ and $w$ with $u$ may be possible for some languages, where there is no contrast between $i$ : and $i y$ or iyi (cf. Trubetzkoy 1969: 172). But, in the case of Yidin, such a treatment would make it impossible to explain - in terms of the normal conditions on Rule 2 - why galbi:ni has not reduced, whereas mabi:n has. It may be that detailed investigation of other Australian languages will uncover further phonological rules which depend on the consonantal status of $y$, contrasted with vocalic $i$, in underlying representations (irrespective of how phonetically similar their realisations may be). It would also be interesting to discover whether the recognition of $|y|$ and $|i|$ as separate phonemes has 'psychological reality' (in the sense of Sapir, 1949: 46-60) for speakers of Australian languages; whether, for instance, they would feel comfortable with an orthography using just one symbol to cover $y$ and $i$.

We have suggested setting up root galbiy. Syllable final $-i y$, which we are permitting in the underlying representation, is not allowed in the surface form of Yidij words. To obtain the occurring absolutive galbi:, the quite natural rule:
(9) $i y \rightarrow i: 1-\#$
is required. It is natural to ask whether $i y$ also becomes $i$ : before a consonant (that is, whether (9) should be extended to cover all syllablefinal instances). In column D of table 2.4 we get, for instance, galbi:gu from underlying galbiy $+g u$. The length would be naturally given by Rule I ; thus, for these forms, either $i y \rightarrow i: /-\mathrm{C}$ (which would harmlessly reinforce the application of Rule 1 ) or $i y \rightarrow i /-\mathrm{C}$ would be equally appropriate.

A phonological sequence $/ i y i /$ is often heard as [ $i::]$ or [ $i:]$. It is thus valid to ask whether, say, genitive [galbi:ni] could not have underlying |galbiyini/, rather than the /galbi:ni/ we have suggested. This would imply a root/galbiy/ for ergative, locative and comitative cases, and /galbiyi/ elsewhere. Support for a genitive form ending in $/ i y+n i /-$ and thus for a root with final /iy/running through all the cases in column $\mathrm{D}-$ comes from the allomorphs of non-zero cases on to a genitive stem.

Thus, gadigadiy 'very small children' inflects like galbiy. It has genitive-plus-absolutive gadigadi:ni and genitive-plus-ergative gadigadiningu, as in
(ı) yanan bunda:n waya:ldu gadigadiningu

Isg-o hit-PAST boomerang-ERG children-GEN-ERG
I was hit by the children's boomerang.
It will be recalled that ergative is $-y g u$ with an odd-syllabled and $-: y$ after an even-syllabled vowel-final stem. The appearance of $-\eta g u$ here indicates an odd-syllabled genitive stem /gadigadini/, in preference to the even-syllabled /gadigadiyini/.

It will also be noted, from this example, that there is no length on the root-final vowel when it is no longer in a penultimate syllable. To generate / gadigadiningu/ we must have:
( II ) $\quad i y \rightarrow i /-\mathrm{C}$
This implies that the length in forms like galbi:gu and gadigadi:ni comes (only) from Rule I .

We can now state:
RULE 3 - SYlLable-FINAL YOTIC DELETION
(i) $i(:) y \rightarrow i: /-\#$
(ii) $\left[\begin{array}{l}i \\ i .\end{array}\right] y \rightarrow\left[\begin{array}{l}i \\ i:\end{array}\right] /-\mathrm{C}$
where C is any consonant.
$y$ does, of course, remain in surface form when followed by a vowel.

Rule 3 must be ordered after Rule 2. Part (i) will delete a $y$ that is placed in word-final position by Rule 2 (the derivation of a reduced comitative is set out in 2.3.3). And part (ii) must not apply until after Rule 2, since the $y$ is needed to block the reduction of forms like $g a l b i y+n i$, as described above.

Let us now turn to a further paradigmatic class of nominals, with roots having an odd number of syllables (of which only six members are known); their declension is exemplified in column E of table 2.4. We see that the case forms here differ from those on regular odd-syllabled roots ending in $i$ (column B ), very much as column D differed from column A . Ergative, locative and comitative forms again suggest a root ending in $-y$, guriliy. This will perfectly explain all the non-zero suffixal forms. We see that there is no vowel length in any of the quadrisyllabic words in column E-surface gurilini corresponds to underlying guriliy $+n i$. This gives further support to (10), $i y \rightarrow i /-\mathrm{C}$, which was initially suggested by gadigadiningu and then incorporated into Rule 3 .
Rule 3 specifies that a final $i y$ should become $i$;, yet the absolutive form of guriliy is guri:li, with a final short vowel. There is, however, no difficulty of explanation here. We have already recognised the need for Rule 4, which simply shortens any long vowel which happens to occur in an odd-numbered syllable of an odd-syllabled word. The derivation here would be:

| root + absolutive | guriliy+o |
| :--- | :--- |
| Rule $\mathbf{y}$ | guri:liy |
| Rule 3 | guri:li: |
| Rule 4 | guri:li |

In this case Rule 3, which lengthens the final vowel, must precede Rule 4, which eliminates this length. Rule 1 can apply at any place in the derivation.

But note that in 2.3 .6 we showed that Rule 4 must precede Rule 2. We also have the necessary ordering of Rule 1 before Rule 2 (2.3.2, 2.3.5) and of Rule 2 before Rule 3 (mentioned above). These orderings can be summarised:


We are here suggesting that Rule 4 applies both before and after the other phonological rules. This amounts to saying that once a word is generated by the morphological processes it is immediately checked against Constraints I and 2 (2.2) and any illicit length (for instance, from the affix -:di- $n$, appended to an odd-syllabled stem) deleted by Rule 4. Rules $\mathrm{I}-3$ then apply to the word, after which it is again measured up against the constraints and any illicit length introduced by the rules deleted by re-application of Rule 4. We are claiming that Yidin checks to see whether an underlying form adheres to surface stress/length conditions beFore it embarks on any further phonological tidying-up, and then has another check after everything else has been seen to.
The alternative to checking against the constraints-and having Rule 4 apply - at two places in the derivation would be to specify allomorphs -: $d i-n$ and $-d i-n$, conditioned by syllabicity (and similarly for aspectual affixes-2.3.6) and/or to bring a syllabicity condition into part (ii) of Rule 3 :

$$
\text { (i) } \begin{cases}i(:) y \rightarrow i: /-\# & \text { where the word is even-syllabled } \\ i(:) y \rightarrow i /-\# & \text { where the word is odd-syllabled }\end{cases}
$$

This would rewrite galbiy as galbi:, and guri:liy directly as guri:li.
It does, however, seem that a general specification like Rule 4 is preferable to ad hoc statements of this type. Given that Yidin words conform to Constraints I and 2 it is surely natural to state a general rule 'normalising' any form that does not meet the constraints.

We have, in this section, suggested that, paralleling (disyllabic and trisyllabic) roots ending in -ay and -uy, we do have disyllabic and trisyllabic roots ending in $-i y$. But whereas $-a y$ and $-u y$ roots preserve these segments in their absolute forms, $-i y$ yields absolutives ending in $-i$ : and $-i$.

Note that it is not necessary to set up roots with a final morphophoneme galbiY, guriliY, and so on. The root-final segment in galbiy, guriliy appears to be exactly parallel to that in words like dayguy 'possum sp.' and garaway 'brown snail'. And Rule 3 does in any case have to deal with phonemic $|y|$ in the case of reduced comitatives.

The realisation of underlying $\mid-V \eta \# /$ as $[-\tilde{V} \#]$ in the tablelands dialect (2.6.3) is in some ways similar to the derivation of $|-i: \#|$ from $|-i y \#|$. But note that the $\eta$-reduction rule appears to be at the phonetic level, whereas Rule 3 is plainly a phonological change (it must, for instance, precede Rule 4).

The writer's corpus contains eleven even-syllabled roots that inflect like column D of table 2.4. These comprise (absolutive form being quoted in each case):
[a] three disyllabic common nouns
galbi: 'catfish', diwi: 'tree sp.', yiri: 'type of slatey stone'
[b] two quadrisyllabic common nouns
giragundi: 'frog sp.', yingilibi: 'English bee' (coastal dialect only)
yingilibiy is plainly a loan word, with the final root $-i y$ being chosen to produce an $-i$ : in the citation form, corresponding to the vowel in the English word $\mid b i: /$.
[c] three common nouns that involve inherent reduplication
bili:bili: 'small hickory tree', gadigadi: 'very small children', gidigidi: 'small children'.

The only possible cognate for any of the above forms is Dya:bugay diwiri 'tea-tree species', which may correspond to Yidin diwiy. Note also that there seems to be a connection between
adjectives gadil 'very small' and nouns gadigadi: 'very small children' gidil 'small' gidigidi: 'small children'
The evolution of $-V$ : from *- $V l$ is reminiscent of the historical change which introduced long vowels into Ngadan (2.3.5); but note that in Ngadan there is no evidence that forms with underlying -Vy are derived from *-Vl.
[d] two place names (both disyllabic)
widi: 'a beach on the eastern side of Cape Grafton Peninsula'. This is named after widi 'frog sp.' which Gulndarubay (1.4) heard crying out on the beach. The common noun widi has ergative widi:y and locative widji:, whereas the place name widiy has locative widi:nda.
nirwi: 'a coastal location'. This name is based on the adjective niwir 'broken up' since in myth a boomerang (said to be a storytime 'boy') broke up on this spot. (There is discussion of the formation of place-names in 6.1.2.)
[e] a common noun in Dyalyuy - mugi:mugi: 'woman'.
Note that galbiy (absolutive galbi:) reduplicates as galbiygalbiy (absolutive galbi:galbi:). Reduplication establishes a new phonological word (2.4) with a \# boundary, and the rule $i y \rightarrow i: /-\#$ applies here. We can follow this by suggesting that an inherently reduplicated form also involves a phonological word boundary, and set up roots biliybiliy, mugiymugiy for absolutives bili:bili: and mugi:mugi: (but note that the roots for gadigadi: and gidigidi: are simply gadigadiy and gidigidiy).

There is a nominal /daliyi/ 'hunger, hungry'. The absolutive form is |dali:yi|, but this is often pronounced [dali::] or [dali:] and could easily be mistaken for a form with root-final /iy/. Case forms like purposive /daliyigu/ are again not easily distinguishable from /dali:gu/, although four syllables are sometimes clearly heard in /daliyigu/ whereas they could never be in /galbi:gu/. The critical case form is the ergative /daliyingu/, clearly demonstrating a trisyllabic root. By the rules we have given, comitative should be $\mid$ daliyi $+y i /$; it is /dali:ndi/ (and note comitative-plus-ergative dalindingu, with no vowel
length). It appears that, to avoid the tongue-twisting form /daliyiyi/, the root is taken as simply /daliy/ for comitative (only). It is in fact likely that the root is in the process of reducing from /daliyi/ to /daliy/ (one informant gave the ergative as dali:ndu on one occasion but later corrected himself to daliyingu, the form volunteered by all other informants.)

The corresponding form in Gungay was dalaya (supporting a Yidin root daliyi, which would then be liable to reduce); it is dali:r in Dya:bugay.

Trisyllabic roots ending in -iy - inflecting as in column E of table 2.4 - are particularly hard to recognise, since their absolutive forms are identical to those of regular trisyllabics ending in $i$ (column B). Once the ergative inflection of guriliy 'black nose wallaby' was noticed, a check was made of oblique case forms for all (of the two dozen or so) other $i$-final trisyllabic citation forms. This yielded one further example - dumbariy 'grandchild'. There are also two Dyalyuy nouns dariyiy 'bird' and dilariy 'black guana', in addition to a personal name minminiy (1.7) and the name of a creek wounadiy, declining in the same manner. woundiy is based on verb wupa-n 'to drink, swallow' and affix -:di $i-n$ (place names based on $-n$ - conjugation verbal stems frequently end in $-y-6.1 .2$ ) but no cognates are known for any of the other five items.
2.3.8 Roots with final long vowel. Finally, there are a dozen nominals whose absolutive form ends in $a$ : or $u:$. Their declension is exemplified in columns C and D of table 2.5 ; regular roots - ending in $a$ or $u$-are included at columns A and B for comparison.

Now we have previously encountered absolutive forms with a long vowel, but in each case we were able to justify setting up roots that involved no length - for absolutive guda:ga we had root gudaga (2.3.1), for dambu:l the root was dambulA (2.3.4), and for galbi: it was galbiy (2.3.7). However, there seems to be no way of avoiding a long vowel in the roots of durgu:, galambara: and similar items.

We could experiment with a root like durguw (note that no surface form can end with $w$ in Yidin, so we would be suggesting a significant disparity between underlying and surface possibilities). But a root-final $w$ would block Rule 2 (in the same way that $y$ of galbiy did) and we would expect genitive durgu:ni, ergative $d u r g u: d u$ and so on. (The only way of avoiding this would be to have a rule which rewrote $u w$ as $u$; and preceded any other phonological rule. But under these conditions a -uw solution would be equivalent to, but more complex than, taking the root to end in $-u:$.)

We thus take the absolutive forms as roots, and acknowledge that we have just a dozen words whose roots must involve a (final) $a$ : or $u:$.

Table 2.5 Declension of roots ending in $u$, $a, u$ :, $a$ :

|  |  | B 'whale' | C <br> 'mopoke owl' | D march D fly' |
| :---: | :---: | :---: | :---: | :---: |
| ABSOLUTIVE | margu | yunaygara | durgu: | galambaya: |
| ergative | margu: $\quad$ | yunaygara: $\eta$ | durgu: $\geqslant$ | galambara:y |
| Dative | margu:nda | yunaygara:nda | durgu:nda | galambara:nda |
| PURPOSIVE | margu:gu | junaygara:gu | durgu:gu | galambara:gu |
| locative | margu: | junaygara: | durgu: | galambara: |
| ablative | margum | yunaygaram | durgu:m | galambara:m |
| comitative | margu: y | yunaygara:y | durgu:y | galambara:y |
| genitive | margu:n | yunaygara:n | durgu:n | galambara:n |

(This does not in any way affect the argument in 2.3 .7 for considering absolutive $-i: \#$ forms to derive from roots ending in $-i y$. There is thus a basic asymmetry - roots ending in $-a y,-u y,-i y,-a:,-u$ : but not in $-i$, and surface forms ending in $-a y,-u y,-i$ :, $-a$ :, $-u$ : but not in $-i y$.)

Oblique case forms involve a long vowel in the penultimate syllable, and Rule I can be considered to apply vacuously (2.3.1). The ad hoc rule deleting locative $-l$ (2.3.3) still applies, so that for this class locative coincides with absolutive.
The most interesting forms in columns C and D are ablative durgu:m and galambara:m, compared to margum and junaygaram. We mentioned in 2.3.3 that the canonical form of the ablative/causal inflection is $-m u$, but we get simply $-m$ with an even-syllabled stem ending in a vowel; that is, Rule 2 has applied to excise the final syllable without the resulting form involving a long vowel. There are, as outlined in 2.3.3, two main alternative ways of dealing with this. We could say that Rule $\mathbf{I}$ applies to $m a r g u+m u$, producing $m a r g u:+m u$; this will then be reduced by Rule 2 to margu: $+m$, and an ad hoc rule would be required to delete the length (this rule will shorten the final vowel of an even-syllabled stem when followed by ablative case). Alternatively, we could postulate an exception to Rule 1 - it does not apply when ablative immediately follows a vowel. It seemed that there was marginally less 'cost' in accepting an ad hoc exception to an established rule, rather than in adding an extra ad hoc rule.

The second alternative is supported by forms like durgu:m and galambara: $m$ which retain the long root vowel before ablative case. If we
allowed Rule I to apply to $\operatorname{marg} u+m u$, the ad hoc rule which later shortened the vowel would surely be expected also to shorten the second vowel in durgu:m (unless the ad hoc rule were made even more special, shortening 'the final vowel of an even-syllabled stem when followed by the ablative case except where the stem is a root ending in a long vowel'!). Thus:

| root + ablative | margu $+m u$ | durgu: $+m u$ |
| :--- | :--- | :--- |
| Rule 1 | margu: $+m u$ | durgu: $+m u$ |
| Rule 2 | margu: $+m$ | durgu: $+m$ |
| ad hoc rule | margum | $*$ durgum |

However, if we say that $m a r g u+m u$ is an exception to Rule I then no length will be introduced and the root length in durgu: will as a matter of course go through into the ablative form:

| root-ablative | $\operatorname{marg} u+m u$ | $d u r g u:+m u$ |
| :--- | :---: | ---: |
| Rule 1 | $[\operatorname{exception}-$ does not apply] |  |
| Rule 2 | $m a r g u+m$ | $d u r g u:+m$ |

We do not, under this solution, have to distinguish at a late stage of the derivation between length introduced by Rule 1 and root length.

Rule 2 must thus be allowed to apply (in this case only) to an oddsyllabled form which does not involve a long vowel. It was in view of this that, in 2.3.2, we formulated Rule 2 with condition (a) - specifying oddsyllabicity - rather than including penultimate length in the formulaic structural description.
The full list of items encountered which demand a root ending in a long vowel is (with cognates where known):
bawu: 'backbone'
bidu: 'eaglehawk' [DYA, NGA bidu'fish-hawk']
durgu: 'mopoke owl' [DYA durgu:]
gadu: 'black tree ant' [DYI, WA gadu 'white ant', DYA gadu: 'tree ant']
galambara: 'march fly'
gawu: 'tree sp.' [DYA gawula 'gum tree sp.' may be cognate with Yidin gawu: or gawu:l]
[may be cognate with DYI ginay 'stinging bush']
wuru: (i) 'river'
[DYA wuru:]
(ii) 'snake sp.'
yawu: 'grass sp.' [MA Dyalpuy yarou]
yibu: 'miming in dance routine'
yulu: 'stingaree'
Note that these all involve an even number of syllables. There is no theoretical reason why we should not have an odd-syllabled root ending in $a$ : or $u$ :Rule 4 would delete the length from absolutive forms but it would occur before oblique cases (CVCVCV:gu, and so on). However, no root of this form has presented itself in the data collected.

In 2.3.5 we summarised the two main sources of vowel length (which between them account for at least $99 \%$ of long vowels in Yidin textual material):
[r] Rule 1
[2] verbal affixes involving inherent length
We can now add:
[3] the small set of nominal roots with inherent length.
Note that, since all roots with a final long vowel are even-syllabled, this length will always fall in an even-numbered syllable (and can never be liable to deletion by Rule 4). Root length is retained before all affixes e.g. durgu:nula 'owl-GEN-LOC' (3.3.3).

There are a handful of further sources of vowel length, all quite uncommon:
[4] nominal affixes -gara: and -dulu: (3.3.7) have final long vowels. They have not been encountered followed by any further affix, and do not cohere with a preceding stem (2.4).
[5] the rather infrequent verbal affix -:n-bidi- $n$ (3.8.8) also involves length specification; it too is non-cohering.
[6] Interrogative waninbara: 'what's the matter ?' (3.7.9) has a final long vowel. It does not take any further inflection.
[7] One nominal root appears to involve a medial long vowel wara:buga 'white apple tree'. This inflects exactly like a regular evensyllabled root (for instance, yunaygara in column B of table 2.5) locative is wara:buga:, ablative waqa:bugam, and so on.
2.3.9 Evidence from -la $\sim$-ala. There is a post-inflectional affix 'now' with allomorphs (3.9.1):

$$
\begin{array}{ll}
-l a & \text { following a vowel } \\
\text {-ala } & \text { following a consonant }
\end{array}
$$

The forms -(a)la takes with critical roots from the discussion of the last few sections provides convincing support for the underlying forms we have set up:

| absolutive | underlying | $+(a) l a$ |
| :--- | :--- | :--- |
| $\quad$ form | root | form |
| mabi | mabi | mabila |
| galbi: | galbiy | galbi:yala |
| mula:ri | mulari | mula:rila |
| guri:li | guriliy | guri:liyala |
| durgu: | durgu: | durgu:la |

-(a)la is non-cohering; the occurrence of length in these forms - and especially in galbi:yala - is discussed and explained in 2.4 .

Note the contrast between mabila and galbi:yala, the latter form clearly indicating a consonant-final root. The contrast between mula:rila and guri:liyala is even more striking, since these words can not be distinguished in their absolutive forms. And durgu:la justifies our positing a root-final vowel in this case.

We noted that with an even-syllabled stem ending in $i$, locative coincides with comitative-plus-absolutive. But -(a)la forms differ. From root mayi 'vegetable food':

|  |  | $+($ a $) l a$ |
| :--- | :--- | :--- |
| locative | mayi: | mayi:la |
| comitative + absolutive | mayi: | mayi:yala |

We suggested (2.3.3) derivations for these forms:

|  | locative | comitative + <br> absolutive |
| :--- | :--- | :--- |
| underlying root+affix | mayi $+l a$ <br> mayi $+y i$ |  |
| Rule I | mayi:la | mayi:yi |
| Rule 2 | mayi:l | mayi:y |
| ad hoc $-l$-deletion | mayi: | - |
| Rule 3 | - | mayi: |

The -(a) $l a$ forms provide support for the comitative-plus-absolutive derivation. It appears that the rule specifying the choice between -la and -ala must immediately precede Rule 3.
We noted in 2.1.2 that the only consonants which cannot occur as the second element of a cluster (at any position in a word) are $r, r, l$ and $y$. There might thus be phonotactic difficulties if we had an affix - which could follow a
consonant-final stem-beginning with one of these segments. No affix of this type begins with $r$ or $r$; and comitative $-y i$ can only follow vowels ( $\sim-d i / C-$ ) as can locative $-l a(\sim-d a / C-)$. There are thus phonotactic reasons for the alternation -la $\sim$-ala. (And see the comment on -luya-l in 4.8.3.)

### 2.4 Grammatical and phonological words

Every language appears to have a unit that can be called '(grammatical) word'. This has considerable 'psychological reality' for its speakers: they will discuss the meanings of words, but not of parts of words; an utterance may be interrupted at a word boundary; in slow dictation a sentence will be given word-by-word or syllable-by-syllable, never morpheme-by-morpheme (see Sapir 1921: 33-5). In fact, every (or almost every) language has a word for 'word'. In each case some grammatical criteria can be given to define 'word'; the exact nature of the criteria differs from language to language.

Each grammatical word in Yidin (excepting particles) has an obligatory root, and a final inflection; the latter is chosen from the set of nominal cases (if a noun, adjective, deictic, pronoun, time qualifier or locational qualifier) or from the set of verbal inflections (if a verbal stem). The main criteria for deciding whether a group of morphemes constitutes one grammatical word, or several words, are distributional in nature:
[1] fixed order of morphemes within a word.
Suppose we have a string of morphemes:
(12) yuyu wagu:da wagal gimbal duyga yali: na that man wife without run going purposive That wifeless man should run away
We find that gimbal must follow wagal, and that na must follow yali: which must follow duyga. But that yuyu, wagu:da, wagal + gimbal and $d u \eta g a+$ yali $:+n a$ can, potentially, be arranged in any order. This suggests that $\eta u \eta u$ and wagu:da each constitutes a single word, whereas the two morphemes wagal and gimbal form one word, as do the three elements duyga, pali(:) and $n a$.

## [2] distribution of inflections.

Each word will have just one inflectional morpheme. We can enquire whether, in (12), $n a$ could be added to dunga as well as to $\eta a l i$; it can not,
so we infer that duyga, yali and na constitute a single word. Note the contrast between the aspectual affix -yali- 'going' in (12) and the lexical root gali- 'go' in:

## (13) yupu wagu:da wagal + gimbal duyga: + na gali $:+$ na

That wifeless man should go, running
Similarly, each nominal word will have just one case inflection. Since the subject NP in (12) is in absolutive case (with zero realisation), it is impossible on this criterion to tell whether gimbal is an affix to wagal or an adjective modifying it. But this NP can be obtained in an oblique case, as in:

```
(14) buna yundu:+\eta waguda + \etagu wagal +gimba:l +du
    woman + ABS that + ERG man + ERG wife + without + ERG
        wawa:l
        see-PAST
    That wifeless man saw the woman
```

In (14) there is an ergative inflection following gimbal. We could not have the inflection following wagal in this instance (that is, *waga:l+du gimba: $l+d u$ is unacceptable), indicating that wagal + gimbal $+d u$ constitutes a single word. We would then infer that wagal + gimbal should also comprise one word in (12).

Once nominal and verbal roots are recognised, in terms of these two criteria, and possible word-structures are formulated, there remains a residue of twenty or so 'particles' that (as a rule - see 4.io) take no affixes of any sort. This class of words is effectively recognised and defined on negative grounds (as lacking the defining inflectional property of nominal and verbal words), and in terms of the freedom of placement of particles in a sentence.

It also appears that in any language we can recognise a phonological unit larger than the syllable, that can conveniently be termed 'phonological word'. The exact details of the phonological criteria which serve to define 'phonological word' vary from language to language; a phonological word often contains just one major stress, or a stress pattern of a certain type. Typically, certain phonological rules will operate within phonological words, while rules of a rather different type will apply across word boundaries.

It is quite common for 'grammatical word' (set up on grammatical criteria) and 'phonological word' (justified phonologically) to coincide. This is, however, not the case in Yidin. Here a grammatical word consists of a whole number of (one or more) phonological words. In fact, each of the examples quoted so far in this chapter (except for 2.3.9) has been a grammatical word that consisted of just one phonological word. It is now time to broaden our discussion to include grammatical words that involve two or more phonological units.

A root begins a phonological word. Certain suffixes cohere with the preceding root/stem and continue the same phonological word; other suffixes fail phonologically to cohere with what precedes them in the (grammatical) word, and begin a new phonological word. The crucial point here is the classification of affixes into two types:
cohering affixes - every monosyllabic inflectional or derivational affix coheres with a stem to which it is attached and continues an established phonological word.
non-cohering affixes - every disyllabic inflectional or derivational affix, and every post-inflectional affix (whether monosyllabic or disyllabic), fails to cohere, and commences a new phonological word within the same grammatical word.

There are no affixes involving more than two syllables.
Now all the rules and constraints we have presented in this chapter apply over phonological (and not over grammatical) words. We can illustrate this - and the distinction between cohering and non-cohering affixes - by examining transitive and intransitive verbalisations of adjectives.

The transitiviser (causative) affix -ya-l (see 4.8.1) is monosyllabic and thus cohering; tense inflections also cohere. We obtain:

| adjective | causative verb plus past tense |  |
| :---: | :---: | :---: |
| olutive form) | nderlying | surface |
| lba 'clever' | $b a+n a+l+n u$ | milbayalpu 'made clever |
| d' | $i+y a+l+$ | gumarina:l 'made red' |
| adu:l 'dirty' | $g a d u l A+y a+l+n u$ | dulaya:l 'made dirty |

Since gumaqi $+\eta a+l+n u$ and gadulA $+\eta a+l+n u$ are odd-syllabled Rule 1 applies, and then Rule 2 (all its conditions being satisfied).

But the intransitiviser (inchoative) -daga-n (see 4.8.r) is disyllabic and non-cohering. The corresponding paradigm is:
past inchoative

| absolutive | underlying | surface |
| :--- | :--- | :--- |
| milba | milba + daga $+n u$ | milbadaga: $n$ 'became clever' |
| guma: $\boldsymbol{r}^{i}$ | gumari + daga $+n u$ | guma:ridaga: $n$ 'became red' |
| gadu: $:$ | gadulA + daga $+n u$ | gadu:ldaga: $n$ 'became dirty' |

Each of these grammatical words consists of two phonological words firstly the root, and secondly -daga- plus past tense $-m u$. The phonological rules apply separately to each phonological word. Thus from oddsyllabled daga $+n u$ Rules 1 and 2 derive daga: $n$ (irrespective of the number of syllables in the root, since this belongs to a different phonological word). And the phonological rules apply to the root elements exactly as they do in the absolutive case.

Here we had underlying forms gumari $i+$ daga $a n u$, gadulA $+d a g a+n u$. If these had each constituted one phonological word, they would have been even-syllabled and no length insertion or syllable reduction would have been expected. But we have a phonological word boundary in the middle of each grammatical word - gumari\#daga $+\eta u$, gadulA \#daga + $\mu u$ - and Rules I and 2 thus operate separately on the two trisyllabic units in each grammatical word.

Let us now turn to affixes that derive adjectival from nominal stems. There are two interchangeable comitative ('with' or 'having') suffixes cohering $-y i$ (after a vowel) $\sim-d i$ (following a consonant) and noncohering -muday; and there is the complementary privative ('without') affix, non-cohering -gimbal. A comitative or privative form will take the same case inflection as the head noun it modifies (see 3.3.4, 3.3.6, 4.3.1). A typical paradigm is:

| root | wayal <br> 'boomerang' | gala <br> 'spear' |
| :--- | :--- | :--- |
| root $+d i \sim y i+\mathrm{ABS}$ | waya:ldi | gala:y |
| root $+d i \sim y i+\mathrm{ERG}$ | wayaldiggu | galayingu |
| root + muday +ABS | wayalmuday | galamuday |
| root + muday +ERG | wayalmuda:yndu | galamuda:yndu |
| root + gimbal +ABS | wayalgimbal | galagimbal |
| root + gimbal +ERG | wayalgimba:ldu | galagimba:ldu |


| root | mugaru <br> 'fish net' | bigunU <br> 'shield' |
| :---: | :---: | :---: |
| root $+d i \sim y i+\mathrm{ABS}$ | mugaruyi | bigunuyi |
| root $+d i \sim y i+$ ERG | mugaruyi:y | bigunuyi: $\eta$ |
| root + muday + ABS | muga:rumuday | bigu:nтuday |
| root + muday + ERG | muga:үumuda:yndu | bigu:nmuda:yndu |
| root + gimbal + ABS | muga:rugimbal | bigu:ngimbal |
| root + gimbal + ERG | muga:rugimba:ldu | bigu:ngimba:ldu |

It can be seen that ergative is $-\eta g u$ after a $-d i \sim-y i$ comitative with an even-syllabled root, but $-: \eta$ where the root has an odd number of syllables. Each of the forms in the $-d i \sim-y i$ rows is a single phonological word, and Rules 1 and 2 operate according to the syllabicity of the complete grammatical word. But with -muday and -gimbal forms the derivational affix begins a new phonological word; thus in mugaru\# gimbal $+d u$ Rule I operates twice, lengthening the penultimate vowel of each phonological word, and obtains a surface form muga:rugimba:ldu.

We take our final example of the contrast between cohering and noncohering affixes from verb morphology. We have already (2.3.2) noted paradigms involving cohering affixes with disyllabic and trisyllabic $-n$ conjugation roots:

| root | dunga- 'run' | dadama- 'jump' |
| :--- | :--- | :--- |
| root + past tense | duyga:n | dadamanu |
| root + comitative + past tense | duyganalnu | dadamana:l |

Here past tense is reduced with a disyllabic root when no derivational affix intervenes but with a trisyllabic root only following verbal comitative. Each grammatical word in this paradigm is a single phonological word, and reduction depends on the total number of syllables.

Compare this with the 'going' affix, which has the disyllabic (and non-cohering) allomorph -yali-n with $-n$ - conjugation stems:

| root | dunga- | dadama- |
| :--- | :--- | :--- |
| root+'going' aspect + past tense | duyganali: | dada:manali:n |

Past tense reduces in Each case, since -yali- begins a new phonological word (the reduction is independent of the syllabicity of the root).

The distinction between grammatical and phonological words is an important one in Yidin. The discussion of morphology and syntax (in chapters 3 and 4) refers almost exclusively to grammatical words. But
the stress assignment rule and constraints I and 2 (2.2), and Rules I-4 (2.3.1-8) work entirely in terms of phonological words; whenever 'word' is mentioned in one of these rules it refers to 'phonological word', and \# is used to indicate the boundary between phonological words.
Lehiste (1965:451) points out that formulae for 'quantity structures' in Finnish and Estonian (essentially based on disyllabic units) 'apply only to noncompound words. In the case of compounds and certain derivative suffixes that share many characteristics of words, the pattern starts again after a word or suffix boundary'. This seems reminiscent of the occurrence of a phonological word boundary within a grammatical word in Yidig.
There appears in Yidin to be a relation between 'phonological word' and the grammatical unit 'morpheme'. Each phonological word must contain just one disyllabic (or longer) morpheme - either a root or a disyllabic affix. It can also involve any number of monosyllabic (or single-consonantal) affixes (note that a single phonological word can involve at least four monomorphemic suffixes - see examples ( $\mathrm{I}-6$ ) in 2.2). We are here leaving aside the postinflectional monosyllabic exceptions -(a)la and - $d i$; these are discussed below.
The fact that a disyllabic affix must begin a new phonological word means that no phonological word is abnormally long. It does not seem, in fact, that a phonological word can involve more than seven syllables. Examples are magi $+: r i+y a+: l d a+n u+n d a$ 'climb up-aspect-comit-coming-dat subord' or madinda $+\eta a+: l i+n u+n d a$ 'walk up-COMIT-GOING-DAT SUBORD'both of these words have the penultimate vowel lengthened by Rule I , and are then reduced by Rule 2, giving magi:riya:Idanu:n and madindaja:linu:n respectively (3.8.7).

The stress and length constraints (2.2) are adhered to very strictly within a phonological word. But it appears that any type of stress sequence is possible over a phonological word boundary. We do sometimes get a regular pattern of stressed/unstressed alternation over a whole grammatical word, as in

$$
\begin{array}{cll}
\text { SU\#SU } & \text { wánal\#miday } & \text { 'boomerang-COMIT-ABS' } \\
\text { or US\#USU } & \text { bigú: } n \# m u d a ́: y n d u & \text { 'shield-COMIT-ERG' }
\end{array}
$$

but in other cases we can obtain two successive stressed, or two successive unstressed, syllables, as in

\[

\]

Pike (1964) describes how in Auca, a language of Ecuador, one stress pattern starts from the beginning of the word and another starts at the end. There are similarities and dissimilarities to the Yidin example - special rules are needed in Auca to cover the meeting-place of the two stress-trains in the middle of a word, whereas in Yidin there is normally no connection between the stress patterns of two phonological words that make up a single grammatical word.

We mentioned in 2.I.2 that whereas the consonant clusters that can occur within a morpheme are fairly restricted, spanning a morpheme boundary we can effectively get any word-final consonant followed by any word-initial segment. In fact, a rather wider set of possibilities is encountered across a phonological word boundary (within a grammatical word) than at a morpheme boundary within a phonological word. This is due to the fact that a number of phonological processes apply to simplify the junction of a stem with a monosyllabic affix, whereas no changes occur at the boundary preceding a disyllabic affix. For instance, ergative $-d u$ assimilates in point of articulation to a preceding nasal or $y$; and stem-final $n$ drops before genitive $-n i$ or dative $-(n) d a$ (3.3.5). Thus, we do not happen to get clusters $/ \mathrm{md}|,|\mathrm{nd}|$ at a morpheme boundary within a phonological word; these clusters are encountered at a morpheme boundary that is also a phonological word boundary (nominals ending in $m$ and $n$ can be followed by $-d a m b a-3.3 .6$ ). But note that a triconsonantal cluster can occur only across a morpheme boundary within a phonological word (e.g. gaba:y+nda 'road-LOC', yala:l+nda'big-DAT'), and never across a phonological word boundary.

Each Yidin affix was thoroughly checked to see whether or not it 'cohered'. The main criteria are:
[a] in the case of a nominal or post-inflectional affix, check whether or not a root-final morphophoneme is realised as a vowel, or is deleted, before the affix. If the morphophoneme is deleted (by Rule 2) the affix is shown to be non-cohering - for instance, gungafI+bara 'tablelandsbelonging to' is realised as gunga:rbara. If the morphophoneme is realised as a vowel, the following affix must be cohering - the 'fear' inflection on ganar $A$ 'alligator' is $-y i+d a$ giving a surface form ganarayi:da (this provides part of the reason for recognising the 'fear' inflection to involve a monosyllabic increment, $-d a$, to a comitative stem-2.3.3, 3.3.2).
[b] In the case of a nominal derivational affix ending in a vowel, check whether ergative alternates between $-\eta g u$ and $-: \eta$, depending on the syllabicity of the stem (and similarly for other cases).
[c] In the case of a verbal derivational affix, check whether past tense alternates between $-n u$ and $-: n$ (or $-l+n u$ and $-: l$ ), depending on the syllabicity of the stem.
[d] In the case of any affix, note the stress patterning. For instance, the stress on $\eta a ́ y u+n a ́$ in line 13 of text 14 indicates that $-n a$ is noncohering (3.3.7). And see the discussion of -mana-l in 3.8.5.

A complete list of Yidin affixes, classified as to whether or not each coheres, follows:

## COHERING

```
NOMINAL CASES (3.3.2)
    ergative \(-\eta g u \sim-d u \quad\) ablative \(-m u \sim-m\)
    locative -la \(\sim-d a \quad\) 'fear' \(-y i+d a \sim-d i+d a\)
    dative \(-(n) d a \quad\) accusative \(-n a\) (this is very rare -
    purposive -gu 3.3.7)
```

```
NOMINAL DERIVATIONS (3.3.3-6)
    genitive \(-n i \quad\) set-inclusion \(-b a\)
    comitative \(-y i \sim-d i \quad\) 'another' \(-b i\)
```

LOCATIONAL AND TEMPORAL SUFFIXES ( $3.4 .2,3.7 .8,3.5$ )
juxtapositional -ban durational time -(a)m
point time -(a)may
VERBAL inflections (3.8.2, 3.8.4)
present $-\eta \sim-l \sim-r \quad$ dative subordinate $-n u+n d a \sim$
past $-n u \sim-l+n u \sim-r+n u \quad-l+n u+n d a \sim-r+n u+n d a$
imperative $-n \sim-r \quad$ causal subordinate $-n u+m \sim$
purposive $-n a \sim-l+n a \sim \quad-l+n u+m \sim-r+n u+m$
$-r+n a \quad$ 'lest' $-n+d i \sim-l+d i \sim-r+d i$
VERBAL DERIVATIONS (3.8.2, 3.8.5-6, 4.8.1)
comitative allomorph -ya-l
anti-passive etc. -: $d i-n \sim-: r+d i-n$
'going' aspect allomorphs -:li-n $\sim$. $\boldsymbol{i} i-n \sim-: r i-n$
'coming' aspect allomorphs $-: l d a-n \sim-: d a-n$
causative verbaliser (added to nominals, particles, etc.) - $\eta a-l$

## NON-COHERING

NOMINAL DERIVATIONS (3.3.6-8)
comitative -muday durative -dulu:
privative -gimbal 'along' -mari

```
    'with a lot of' -damba 'up' -wangi
    'belonging to' -bara 'down' -dilygu
    'only, all' -damu 'west' -guwa
    'lots, all' -mu\etagal 'east' -naga
    'from'-gara:
vERBAL DERIVATIONS (3.8.2, 3.8.5-6,3.8.8, 4.8)
comitative allomorphs -l+maya-l ~ - l+ma\etaa-l
'going' aspect allomorph -\etaali-n
'coming' aspect allomorph -yada-n
'dispersed activity' -:n+bidi-n
inchoative verbaliser -daga-n
incremental verbaliser -madi-n
transitive verbaliser -luya-l
```

All types of reduplication - which prepose the first two syllables of the root before the stem - are non-cohering, and involve a phonological word boundary at the reduplication boundary - see 3.3.9, 3.4.1, 3.8.9, 2.3.7.

We mentioned that post-inflectional affixes do not cohere, whatever their syllabicity. These are clitic-like forms, which can generally be attached to any type of word and follow an inflection (if there is one). Four of the six well-attested post-inflectional affixes are disyllabic (full details are in 3.9):

$$
\begin{array}{ll}
\text {-yuri 'this-, like-' } & \text {-budun 'still' } \\
\text {-yuru'for another thing' } & \text {-wadan comparative }
\end{array}
$$

but there are two monosyllabics - -di 'self' and the form discussed in 2.3.9-la (after vowels) ~ -ala (after consonants) 'now'.

A root-final morphophoneme is deleted before these two affixes:
with root gangulA 'wallaby species' we get gangú:ldi'(not *gánguládi) with root bigunU 'shield' we get bigú:nála (not *bigunúla)
Compare with the nominal derivational affix -bi 'another' which does cohere:
with root yabur $U$ 'young girl' we get yáburúbi (not *yabú:rbi)
Similarly, when $-d i$ is added to the verb gada- $n$ 'come' in past tense the underlying form is gada $+n u+d i$. This is an even-syllabled form and if it were one phonological word Rules 1 and 2 would not need to apply. But it comprises two phonological words, $g a d a+n u \# d i$, and the surface form is gadá:ndi (as in line 14 of text 14). Also, if -la ~ -ala
were added to underlying gada $+n u$ we would expect gadanula; the form is in fact gadá:nála. Note that the consonant-final allomorph is used here, indicating that the choice of -la or -ala follows the application of Rule 2.

In 2.3 .9 we described how -ala occurred with galbiy (as against -la with mabi). There is, of course, a phonological word boundary here galbiy\#ala. Now Rule 3 (2.3.7) specifies $i y \rightarrow i: /-\neq$ and this would yield galbi:\#ala. Note that the actual form is galbi:yala, suggesting a late rule that inserts the glide $y$ between $i$ : and $a$ (sequences of two vowels are not permitted in Yidin, even across word boundaries). We thus get allomorph -ala chosen before Rule 3 operates; $y$ replaced by vowel length through the automatic operation of Rule 3 ; and then $y$ reinserted by a late 'glide insertion' rule. (Rule 3 must apply, to account for the long vowel; if we simply had -ala added to the root ${ }^{*}$ galbiyala would be expected.) Exactly the same argument holds for the comitative + absolutive + 'now' form mayi: yala (2.3.9).
-di and -(a)la provide the only examples of monosyllabic phonological words and are exceptions to the account in 2.2. Sometimes they do bear major stress (as gadá: $n \# d i$, gáligályu\#lá) but on other occasions these affixes have been heard assimilated into the stress pattern of the whole grammatical word (thus, gadá:ndi, galiyalyúla). It should be noted that stress assimilation between phonological words has only been consistently noted in the case of $-d i$ and -(a)la.

There is a form -na that may be a third monosyllabic postinflectional affix; it appears not to cohere. The data on this form are slight, and not totally clear-3.3.7.

The non-coherence of these two (or three) monosyllabic affixes may be a function of their grammatical status. They are only loosely attached to any word in a grammatical sense, and it may be because of this that they are considered a separate 'phonological word'.

There is, however, an alternative explanation possible in the case of -di. Yidin has a particle gadi with the same type of reflexive/intensive meaning as $-d i(4.10)$. It is not known why $\operatorname{yadi}$ (which does not involve a long vowel) has final stress. But it is undoubtedly this that has led to its degeneration into the post-inflectional affix -di. (At present gadi and $-d i$ are both used, in syntactic free variation, but it is likely that the affix is gradually replacing the particle.) -di's non-cohering nature may be due to its being a recent truncation of a disyllabic form (which would not
be expected to cohere) or just to the fact that it is a recently-created affix.

Finally, Yidin has just one prefix [da:-]; this has quite limited occurrence - 3.4.3. It does not cohere - from root gupgarI 'north' we get dá:gungá:y 'northwards', and from root wurga-n 'yawn' plus past tense $-n u$ we get wurgá: $n$ alternating with dáa:wurgá: $n$ 'yawned'.

One possibility open for us to consider is that [da:] has an underlying disyllabic form /dazua/. It was mentioned in 2.1. 2 that there are a handful of (rather uncommon) words that are normally pronounced as monosyllables involving $[i:]$ or $[u:]$. We regard them as underlying disyllabics largely because they inflect on the pattern of even-syllabled stems. But we also have the particle [ $g i$ :] 'don't' and exclamation [yi:] 'yes' which take no inflections; these are assigned forms $\mid g i y i /$ and $\mid$ yiyi simply by analogy with /miyiul, $[m i: r]$ and $|w u w u y|,[w u: y]$. The argument could be extended to [da:]; but a main difficulty is the quality of the vowel. All other Yidin monosyllabics involve either $|i y i|$ or $|u z v u|$, realised as $[i:]$ and $[u:]$ respectively. (In Dyirbal |awa/ can be pronounced [a:] - Dixon 1972: 278; but the phonetic differences between Yidin and Dyirbal are sufficiently great to rule out the validity of an analogical argument here.) Certainly, if [da:] could be assigned a disyllabic form this would fit into our generalisation about non-cohering affixes.

Yidin [da:] is probably cognate with a form /dazval that occurs in many Australian languages meaning 'mouth' and sometimes 'door' (hence its optional inclusion in the verb (da:)wurga-n 'to yawn' in Yidin). This prefix occurs in the language name Dya:bugay; and Hall (1972: 215) reports that $d a: z$ 'mouth, opening, orifice' is a prefix in Da:yore, spoken 300 miles to the north-west of Yidin (where it also features in the language name).

The main points of $2.2-4$ were published - omitting some of the complications, and with less exemplification - in Dixon (1977); that article does not contain any information or discussion that is not in the present chapter.

### 2.5 Other phonological processes

2.5.1 Dissimilation and double dissimilation. In common with almost all other Australian languages, Yidin shows assimilation of ergative and locative case suffixes to a stem-final nasal or yotic. It is unusual in that it also shows phonological dissimilation in a certain combination of verbal affixes.

With -l- conjugation roots the 'going' aspect has the form -: $l i-n$ $(-n$ is used to show that the derived stem takes $-n$ - conjugation suffixes).

Thus:

|  |  | root+ 'going' |
| :---: | :---: | :---: |
| root | root + past tense | aspect + past tense |
| magi-l 'climb up' | magi:l 'climbed up' | magi:linu 'went |
| climbing up' |  |  |
| burwa-l 'jump' | burwa:l 'jumped' | burwa:linu 'went <br> jumping' |

Now from any intransitive root (or stem) we can derive a transitive stem by adding the verbal comitative affix -ya-l. 'Going' aspect precedes comitative (for a full discussion see 3.8.6) and is in this environment realised as -:ri-n:

```
root + 'going' aspect + comitative + past tense magi:riza:l
\(" \quad " \quad " \quad+\) present tense magi:rinal
```

With an $-l$ - conjugation stem, the conjugation marker $-l$ - appears before all inflections save imperative (and all derivational affixes save -:di-n-see 3.8.2). We can thus suggest that the $l$ of -: $l i-n$ dissimilates to $r$ before the $l$ of $-\eta a-l$ (note that comitative is the only verbal affix deriving an $-l$ conjugation stem). The dissimilation is generalised so that it applies before $-\eta a-l$ in all instances (even when imperative or $-: d i-n$ follows 3.8.6).

The 'going' aspect is $-\eta a l i-n$ on to an $-n$ - conjugation stem and -.ri-n with a root from the $-\gamma$-conjugation, but in these cases too it becomes $-: r i-n$ before comitative - $\eta a-l$.

| ot | root + 'going' + past tense | root + 'going' + comit + past |
| :---: | :---: | :---: |
| duyga-n 'run' | duygayali:n'went running' | duyga:rina:l ' went running with' |
| bayga- $\boldsymbol{\prime}$ 'feel sore' | bayga:qinu 'feel sore while going' | bayga:rina:l'make feel sore while going |

It seems that the dissimilated $-l$ - conjugation allomorph of the 'going' aspect is generalised to apply to all three conjugations before comitative (otherwise we might expect the $-n$ - conjugation form to be *-pari-n).
It is likely that -:li-n is, historically, a reduced form of -yali-n (2.3.5). It may be that the unmarked $-n$ - conjugation allomorph has not reduced since this would lead to length conflict (for instance - wawa:di:li-n-2.3.6). But there is a reduced form before comitative since there is here no chance of a length conflict. Detailed discussion of this point will be found in 3.8.6-7.

However, although the 'going' suffix is -:ri-n before comitative for most verbs, it does not always have this form. With some verbal roots the normal allomorph -::li-n still occurs before -na-l:

| root | root+'going'+ | root+'going'+ |
| :---: | :---: | :---: |
| past tense | comit+past |  |
| burwa-l'jump' | burwa:linu 'went | burwa:liya:l 'went |
| jumping' | jumping with' |  |
| burgi-n 'walk about' | burgiyali:n 'went <br> balkabout' | burgi:liga:l 'went <br> walkabout with' |

The set of verbs which take -: li-n before -ya-l is limited - it includes warggi-n 'move around', dari-n 'sink down, vanish, be submerged, drown', gayba-n 'hide', dayba-n 'slip' and wiqa-n 'be bent, twisted'. It seems that if the (last) consonant cluster in the root involves a rhotic then allomorph -::li-n is preferred over -:ri-n.

We could say that a rhotic simply blocks the dissimilation of aspectual $l$ to $r$ before $-\eta a-l$. But in this case surely we would expect the normal $n$-conjugation allomorph, -yali-n, whereas in fact we get -:li-n. A case can be made out for saying that -:li-n dissimilates to $-: r i-n$ under pressure from - $y a-l$ (and the form -:ri-n is then generalised to all conjugations); and that, as a second stage, $-: x i-n$ dissimilates to $-: / l i-n$ in the presence of a rhotic (of either type) in the root.
2.5.2 Nasal insertion. There are two or three scattered examples of a nasal being inserted at a morpheme boundary, and in some cases assimilating to a following stop. However, this appears to be a rather marginal and little-used phonological process in Yidin (in contrast to Dyirbal, where it is quite productive-Dixon 1972: 283-6).

Thus, between a stem-final $-y$ and the ergative inflection $-d u$, an $n$ can optionally be inserted; between $-y$ and locative $-d a$ or comitative $-d i$ an $n$ is obligatory (see 3.3.5). There are also a few instances where $n$ is inserted at a reduplication boundary, and in some cases assimilated to a following stop (e.g. from bayga- $\tau$ 'feel sore-Pres' we get baygarmbaygar 'feeling very sore'). And pronouns and deictics have the basic root augmented by $-n$ for many oblique case forms - 3.6, 3.7.
Whilst correcting the writer an informant once enunciated [gilbay\#dá] very slowly and deliberately for underlying |gilbay + ndal 'guana sp-dax'; and similarly in a number of other cases. Analogously, the word |baumbar/ 'wattle tree grub' was pronounced slowly as [báru\#barr]. The explanation for
this is probably that phonological words cannot begin with a consonant cluster in Yidin, and if a syllable is made word-initial in slow dictation it must begin with a single consonant. (But, in the last example, [bárum\#bár] could have been said; this may imply that a homorganic cluster $/ \mathrm{mb} /$ is in some cases felt to be functioning as a single phonological unit.) It is unlikely that these examples are related to nasal insertion at morpheme boundaries.

### 2.6 Late phonetic rules

2.6.I Stress fronting. It is acknowledged that a description of stress patterning for any language is essentially a phonological idealisation, to which the phonetic facts need not always conform. As Lehiste (1970: 150) says 'it appears probable that word-level stress is in a very real sense an abstract quality: a potential for being stressed....In other words, our knowledge of the structure of the language informs us which syllables have the potential of being stressed; we "hear" the underlying phonological form.'

Just as it is a simple matter for a native speaker of a language to recognise the phonemes, but extremely difficult to distinguish allophones, so will a native speaker always work in terms of an underlying phonological stress pattern and may be unaware of articulatory deviations from this. In some cases a phonetician, who does not know a certain language, may recognise a quite different set of stresses from that which a native speaker will perceive (although of course their judgements would be expected to coincide in most cases).

Differences between observed and underlying patterns of stressing should be describable by late phonetic rules, which have a similar status to phonetic rules specifying allophonic alternation. There appears to be just one major statement of this type needed for Yidin:

## STRESS FRONTING

Irrespective of long vowels, and underlying stress assignment (2.2), there is a tendency (phonetically) to stress the initial syllable of each (grammatical) word.

Thus /dambu:l/ 'two-ABs' has been heard as [dambu':l], as [dámbu:l] and as [dámbui:l]; that is, with phonetic stress on the second syllable in one instance, on the first another time, and with the two syllables pretty equally stressed in a third occurrence. To take a further example, |gali:na| 'go-PURP' has been heard as [gali:na] and as [gáli:na] (but
never as [gali:na]], and |bara:dinal 'punch-:di-PURP' has been heard as [bayá:diná] and as [báca:diná].

The actual stress pattern of a word most frequently does coincide exactly with the underlying stress specification (according to 2.2), especially in learning situations (the writer was corrected if he did not conform to the underlying stress specification). Stress fronting is most apparent in texts (probably depending on sentence intonation, amongst other things). If the initial syllable is stressed, the second syllable in a word is likely to be unstressed, even though it may involve a long vowel; but in such cases the vowel length is still clearly distinguishable.

Stress fronting is presumably a recent tendency, introduced after the incorporation of Rules I and 2 into the phonological system of Yidin.
2.6.2 Stress retraction. There is one further stress deviation, that only concerns a handful of words. Thus burudur 'pademelon (wallaby sp.)' behaves unexceptionally in all oblique cases - ergative [búrudúdu], purposive [búrudúrgu], genitive [búrudúrni] and so on. But the absolutive is invariably [birrudu$: r]$ ], where [burú:dur] would be predicted by the rules we have given.

This can be dealt with by a further phonetic specification:

## STRESS RETRACTION

If the third syllable of a trisyllabic (phonological) word is closed and begins with a stop or $w$, and if the second syllable is open and begins with a lateral or rhotic, then vowel length and stress are likely to shift from second to third syllable.

We thus encounter absolutive forms [gùrabá:y] 'lizard sp.', [gàrawá:y] 'snail sp.', [dàruwá:y] 'small hill, island'. The main preference seems to be for the stressed syllable to begin with a stop or $w$ (segments that can only begin, and never end, a syllable) and for it Not to commence with a lateral or rhotic (segments which cannot occur word-initially). But stress (and length) will not normally shift to an open final syllable - thus [waáá:ba] 'creek', [dará:ga] 'step(-mother)'. And they will not normally shift from a closed second syllable - [gurá:lygan] 'curlew'. (In some cases equal stress can be heard on second and third syllables when their initial segments are as specified in the statement of the 'stress retraction rule' but the second syllable is closed - [baru':mbár $r$ ] 'wattle tree grub', [miri:mbda' $l$ ] 'yellow cockatoo feather'.)

Stress retraction appears to take precedence over stress fronting,
described in the last section. But it is still, like stress fronting, more of a tendency than a rule - strong in some words (thus [burú:dur] has never been heard), but weak in others (final stress alternating or co-existing with middle syllable stress), gradually tailing off as fewer of the conditions are met.

Stress retraction can apply to a phonological word, even if it makes up only a part of a grammatical word - thus [birudúu: $\psi$ \#gimbal] 'pademe-lon-privative'.

There are alternations of form for two lexical items, that seem to involve stress retraction. Tablelands Yidin maluzvay 'spirit, shadow' corresponds to malway in the coastal dialect. The tablelands form satisfies all the conditions for stress retraction, so we effectively have a development [màluwáy] > [malway]. It is likely that the middle syllable of a trisyllabic form could only be open to elision when it was unstressed, and it can only be consistently unstressed when the stress retraction rule applies. A similar explanation may be valid for tablelands gurugga, coastal gurgga 'kookaburra' (but here, although the second syllable begins with $r$ and the third one with $g$, the second syllable is closed and the final one open). (See also the discussion of garana $\sim$ garna and nirini $\sim$ nirni in 2.3.4.) Note that a vowel could be dropped only if a permissible consonant cluster would result: lateral or rhotic, followed by (non-apical) stop or $w$ is always an allowable cluster (2.1.2).
2.6.3 Final y and vowel nasalisation. It is unusual in an Australian language to have words ending in $\eta$. For instance, none of the dialects of Dyirbal, Yidig's southerly neighbour, permits roots or words to end in the dorso-velar nasal.

The Gungay dialect of Yidin allowed both roots and words to end in $\eta$ (see Appendix). The coastal Yidin dialect has no $\eta$-final roots but morphological and phonological processes can produce words ending in $\eta$. There are, in fact, four ways in which this can come about. Firstly, ergative $-\eta g u$ is reduced to $-: \eta$ after a disyllabic root ending in a vowel e.g. bupa:y 'woman-ERG' (2.3.2, 2.3.3, 3.3.2). Secondly, the imperative form of the denominal transitive verbaliser reduces to -: $y$ under identical conditions e.g. mada:y 'soft-CAUS-IMP', derived from mada + $\eta a+o$ (2.3.3, 4.8.1). Thirdly, the imperative form of a verbal comitative will reduce to $-: y$ under exactly the same conditions e.g. gali: $\eta$ 'go-сомIт-IMP', derived from gali $+\eta a+o(2.3 .3,3.8 .5)$. All of these have involved the deletion of the final syllable by Rule 2, which brings an original intervocalic $\eta$ into the word-final slot. However, the fourth
example does not involve any phonological truncation-the present tense inflection of an $-n$ - conjugation root is simply $-\eta$ e.g. galij 'gopres'.

In the coastal dialect, word-final $\eta$ is normally quite clearly articulated - [buná:y], [madá:y], [gali:y], [gáliy]. But the corresponding pronunciations in the tablelands dialect seldom if ever show a final $\eta$; instead the last vowel is nasalised - [buná:], [madá:], [galt:], [gálī]. A linguist attempting a synchronic description of tablelands Yidinwithout reference to the coastal variey - might at first toy with setting up twelve vowel phonemes (long and short, nasalised and non-nasalised varieties of $a, i, u$ ) and constraining his phonotactic rules so that words (like roots) could not end in $\eta$. He would, however, soon find that he needed to set up underlying forms with final $\eta$ for tablelands words (cf. Trubetzkoy 1969: 61, 122), and these would be identical to (underlying and surface) coastal forms. Thus, inflectional $\eta$ is articulated before a post-inflectional affix:

| underlying | phonetic <br> form | realisation |
| :---: | :--- | :--- |
| $\mid$ galiy $\mid$ | $[$ gali $]$ | 'go-PRES' |
| \|galinala | $[$ galinala $]$ | 'go-PRES-NOw' |

If we took phonological forms to involve $\mid-\tilde{V}(:) /$ rather than $/-V(:) \eta \mid$ various complications would arise. Thus, a verbal form like/wawa + $: l i+\eta \mid$ 'see-going-pres' is not reduced by Rule 2 since the final syllable is closed. But surely $/$ wwawa $+:|\bar{l}|$ would satisfy all the conditions for Rule 2-it would have to be listed as a further ad hoc exception to this rule. In view of all this, we take tablelands Yidin to have the same underlying phonology as the coastal dialect, and to involve an additional phonetic rule: $|-V(:) \eta| \rightarrow[-\tilde{V}(:)]$, at the end of a grammatical word.

We have already noted that speakers of tablelands Yidin were in close geographical and social contact with speakers of the Ngadan dialect of Dyirbal, and that there are a number of surface similarities between the two dialects ( $\mathrm{I} \cdot 3$ ). It may have been partly the influence of Ngadan that caused tablelands Yidin to drop final $\eta$ from the surface realisation of words, employing vowel nasalisation effectively to mark this underlying segment.

The status of final $\eta$ in the three dialects of Yidin can now be tabulated (following a $\mathrm{W}-\mathrm{E}$ axis):
phonological form of roots ending in $\eta$ ?
phonological form of words ending in $\eta$ ?
phonetic form of words ending in $\eta$ ? no Yes Yes

We see that Gungay treats $y$ exactly as it does any other nasal, but that as one goes inland the status of final $\eta$ becomes progressively restricted (until we reach Ngadan, which answers 'no' to all three questions).

In some languages, the replacement of vowel-plus-nasal by a nasalised vowel yields a phonologically long vowel (for instance Pope 1934: 206; and see the useful discussion in Lightner 1973). This is not the case in Yidin. The second vowel of [gali] is a little longer than that in [galiy] but it is still an allophone of a phonologically short vowel (this is an instance of the general rule that a vowel in an open syllable will tend to be longer than one in a closed syllable). The contrast between /galiy/ 'gopres' and |gali:y| 'go-comit-imp' is preserved in tablelands Yidin as [gali]-[gali:].

Final $g$ has literally never been heard in tablelands Yidin. Final $n$ is encountered, but there is a tendency to replace it, too, by vowel nasalisation. Thus $\mid y i \eta g u: r u n /$ 'this way' has been heard as [yingu:rû] and |nubi:rbin/ 'leech-ABS' as [pubi:rbī]. The same thing can happen with final $/ n /$ - $\mid$ galin/ 'go-mм' has been heard as [gali] - but not, apparently, with $m$.

There is, as would be expected, a tendency for any vowel preceding a nasal to have some degree of nasalisation, in any dialect of Yidin. In coastal Yidin a final $\eta$ may sometimes scarcely be articulated, with the clue to its presence being given by nasalisation of the vowel (and the same thing has been observed with any final nasal in Dyirbal). But what is a TENDENCY - applying to all (non-labial) nasals - in the language as a whole, appears to have developed into a phonetic realisation rule in the case of final dorso-velar nasals in the tablelands dialect.
2.6.4 Phonetic reduction. Phonetic realisation is closest to underlying phonological representation in citation forms and elicitation of sentences (where a speaker's attention is directly focused on what he is saying and How he is saying it). Slow monologue normally shows only slight
deviation, but the articulation of spontaneous conversation or quick, fluent monologue is likely to differ in many respects from the underlying forms (that is, from the written transcription that a native speaker would write down, or slowly dictate, when the recording of a fluent text is replayed). As anyone who has tried to provide an accurate phonetic transcription of his own language can attest, normal quick speech involves a considerably smaller number of (phonetic) syllables than a phonological representation would show, in addition to all manner of assimilations, lenitions and blendings.

Here we note two types of recurrent simplification that occurred in the most fluent Yidin texts. Firstly, the verbal derivational affix -: di-n can be heard as simply -:yi-n, occasionally in the coastal dialect and frequently in tablelands Yidin.

It is likely that further comparative work will be able to show that the Yidin verbal affix $-: d i-n$ and nominal comitative $-d i \sim-y i$ both derive from a form *-diri (or *-Diri-see the papers on 'The derivational affix "having"' in Dixon 1976a). Reflexes of this affix occur in many east-coast languages. Thus, Dyirbal has reflexive -yiriy (in the central Dyirbal dialect) $\sim-r i y$ (in the Mamu and Giramay dialect) - Dixon 1972: 89. And Dya:bugay (Hale 1976a) has a nominal comitative $-d i$ (after consonants) $\sim-. r$ (after vowels) - it is likely that this $r$ derives from the second syllable of *-diri (which has been lost without trace in Yidin).

Now in Yidig the nominal form of this affix preserves its original first syllable, $-d i$, after consonants but has lenited to $-y i$ after vowels. This is a phonological alternation - speakers would insist that, say, 'dog-comitative' was gudagayi, not gudagadi. (In fact we have to recognise that the phonological form is $-y i$ to account for its reduction by Rule 2-2.3.3.) But the verbal affix has phonological form -: $\mathrm{di} i-n$ in all cases, the occasional reduction to - :yi- $n$ being a phonetic matter. That is, informants insisted that 'see-antipassive-pres' was wawa:diy and would not allow the writer to take it down as wawa:yiy, although it was often heard in this reduced form in fast speech.

Secondly, sequences /aya(:)/ or $/ a w a(:) /$ are often reduced in fluent Yidin to a single long [a::], independently of morpheme and phonological word boundaries. For instance:
$\mid$ wudá + nadá $+: n \mid$ 'cross river-COMING-PAST' was heard as
[wudáa::dá: $\mu$ ] in line 119 of text 2
|wawá:linú| 'see-GOING-PAST' was heard as [wá::linú]
|wúnayá:lna| 'lie down-comit-PURP' was heard as [wúnắ::lna]

The first segment of verbal comitative $-\eta a-l$ is frequently lenited or lost, whatever the previous vowel. Thus, in text 2, line 3 I /galiya:lnal 'go-comit-PURP' was pronounced [galiã:lna], with a diphthong slurring from $[\tilde{\imath}]$ to $[\tilde{a}]$.

Finally, we can remark that in speaking Yidin rather more phonetic 'planning ahead' is needed than, say, in speaking Dyirbal. In Dyirbal every root and affix (bar one) is stressed on the first syllable; if a stressed syllable follows another stressed syllable, or comes at the end of a word, it loses its stress. Suppose a speaker of Dyirbal intended to say /dubula/ 'black pine-ABS' - this should be [dúbula]. But now suppose that after he had started transmitting motor commands to his articulatory organs for the first syllable, he decided to place the word in purposive case, and say /dubulagu|, [djubulagu]. There would be little difference in the articulation of the first two syllables, but the third syllable will now be stressed and a final unstressed $-g u$ added. It would be possible for him to change his intention - from /dubula/ to /dubulagu| - after he had started to say the word, and still provide an acceptable pronunciation.

This would not, however, be possible with the corresponding Yidin forms |gubu: $m$ / 'black pine-ABS' and |gúbumágu| 'black pine-PURP'. The stress pattern is quite different in the two cases and each articulation would have to be planned out in advance, with no real possibility of transferring (with any success) from one to the other in mid-utterance. (The 'stress fronting' tendency in Yidin would help a little - and this may be one of the reasons for the existence of the tendency - but the important point here is that the second syllable would normally be stressed in $\mid g u b u: m /$, but should on no account bear stress in |gubumagul.)

## 3 Morphology

The writer holds the opinion that syntax is the most central and most interesting section of the grammar of any language and is ideally presented before the welter of morphological detail (cf. Dixon 1972). However, different languages demand different strategies of description. Just as the phonological rules of Yidin are a necessary prerequisite to an understanding of the morphology (and must be described first) so the morphology involves complex alternations, dependencies and orderings between derivational affixes, which suggest that it be most appropriately dealt with ahead of syntax.
3.I.I briefly previews Yidin's syntactic type, to provide some contextualisation for the discussion of morphology (from 3.2 on). 3.1.2 then mentions the semantic hierarchy in terms of which a number of rather diverse grammatical choices are made (the choices all being of a 'more/ less' rather than an 'either/or' type). 3.1.3-5 describe some of the characteristic features of discourse organisation in Yidig, in terms of which a number of the grammatical alternations described in Chapters 3 and 4 can better be understood and appreciated.
Note that from here on the term 'word' will normally refer to 'grammatical word'; this contrasts with the usage in Chapter 2 where 'word' indicated 'phonological word'. (A grammatical word consists of a whole number of (one or more) phonological words - 2.4.)

### 3.1 Preliminary remarks

3.r.I Syntactic orientation. Nouns and adjectives in Yidin have one case inflection (ergative) marking transitive subject (A) function, and a further case (absolutive, having zero realisation) for both intransitive subject $(\mathrm{S})$ and transitive object (O). First and second person pronouns, on the other hand, have one form for both transitive and intransitive subject functions (A and $S$ ) and a further form for transitive object ( $O$ ). Yidin is thus like most other Australian languages (cf. Dixon 1972: 4f.) in having an 'absolutive-ergative' system of nominal inflection, but a 'nominative-accusative' pronoun paradigm. There are distinct forms [ 108 ]
for all three syntactic functions $-\mathrm{S}, \mathrm{A}$ and O - in the case of human deictics.

Certain syntactic processes (of subordination and coordination) demand a 'common NP' that is in S or O function in each of the sentences on which the process operates (note that these are the functions marked by the zero, absolutive, inflection in the case of nouns).

Each lexical root in Yidin is strictly marked for syntactic function it is either a noun or adjective, or a transitive verb, or an intransitive verb, etc. There are, however, a fair number of derivational processes that will change the syntactic function of a word - deriving a transitive verb from an intransitive stem, or a transitive or intransitive verb from an adjective or noun, etc. Each such syntactic derivation is clearly marked by an affix to the word.

Verbal transformations will, of course, change the case marking on NPs in a sentence. Thus, corresponding to transitive:
(15) buya:y wagu:da wawa:l
woman-ERG man-NOM see-PAST
we can have intransitive:
(16) bupa wagudanda wawa:dinu
woman-ABS man-dat see-:di-PAST
with essentially the same meaning: '(the) woman saw (the) man'. In (16) the verb involves the 'antipassive' derivational affix -:di-n.

Note that NPs in Yidin are not obligatorily marked for definiteness or number. The inclusion of articles, and singular or plural, in English translations is essentially arbitrary, being mainly motivated by contextual felicity. (It should not be taken to imply anything about the structure of the Yidin sentences.)

Similarly we can say:
(17) wagu:da buna:y galin
man-ABS woman-comit-ABS go-PRES
The man is going with the woman
or, with a very similar meaning:
(18) wagudaygu buya gali:yal
man-ERG woman-ABS go-COMIT-PRES
The man is taking the woman

Those affixes which have major syntactic function (syntactic cases, derivational affixes that change class membership, etc.) are in this chapter fully specified for form and morphotactic positioning, with details of their functions being deferred until chapter 4. Affixes which have more limited syntactic effect - aspectual and tense affixes on verbs, and so on - are fairly fully specified, as to both form and meaning, in the present chapter.
3.1. 2 Hierarchies and grammatical choice. At a number of points in the grammar of Yidin we are faced with two alternative expressions which seem to be in a relation of free variation. Thus, corresponding to the simple transitive sentence:

```
(19) yayu balmbin wawa:l
    I-sA grasshopper-ABS see-PAST
    I saw the grasshopper
```

there is a derived (intransitive) antipassive, with identical meaning:
(20) $\underset{\text { I-SA }}{\text { I- }} \underset{\text { ayu }}{ }\left\{\begin{array}{l}\text { balmbi:nda } \\ \text { grasshopper-LOC } \\ \text { balmbi:nda } \\ \text { grasshopper-DAT }\end{array}\right\} \begin{aligned} & \text { wawa:dipu } \\ & \text { see-:di-PAST }\end{aligned}$

Here either dative balmbi:nda or locative balmbi:nda is equally acceptable (and would be encountered equally frequently).

But if the object of a transitive sentence has human reference, it can only occur in dative (not locative) inflection in an antipassive, as in (16). If the transitive subject is inanimate it will most frequently be found in locative case in an antipassive construction:
(21) yayu walba: wawa:dinu I saw the stone

Dative marking is possible - and can be considered grammatical - with inanimate nouns in this function:
(22) yayu walba:nda wawa:diju 〈as (21)〉
but is rather uncommon.
It appears that the choice of dative or locative case can best be described in terms of the following diagram:


Dative can be used on any NP, whatever its reference. The use of locative increases as the hierarchy is descended. Locative is occasionally encountered with nouns referring to higher animals such as dogs (which are regarded as close to kin by the Yidindi), more frequently with lower animals, and very frequently indeed with inanimates. As one descends the hierarchy and the probability of locative increases, so that of dative case marking is proportionately reduced. It seems that dative is always POSSIBLE, but that it is progressively pushed aside by the expansion of locative, the lower one gets on the hierarchy.

Locative has occasionally been encountered on human nouns, but appears not to be grammatically acceptable with this semantic class. (The examples heard were - on playback - said by speakers to be errors, and corrected to dative.)

This explanation of the choice between locative and dative, in (23), applies to a wide range of occurrences of these cases, including some where there is no syntactic derivation involved. A full account is in 4.1.8.

There are several other grammatical choices motivated in exactly the same way as dative/locative. For instance, there are two forms of each deictic (these also fulfil the function of third person pronoun in Yidij):
yupdu- 'that' (predominantly human reference) yuygu- 'that' (predominantly inanimate reference)
(and similarly for yindu-/yingu- 'this' and yundu-/yuŋgu- 'that far or invisible' - 3.7.1). And there are two indefinite/interrogative forms:
wandu- 'someone/who (something/what)' (predominantly human reference)
wani- 'something/what' (predominantly inanimate reference)
The use of these forms can be summarised:


yundu- and wandu- can be used to refer to any person, animal or thing. As we descend the hierarchy (beginning with the higher non-human animates) $\eta u \eta g u$ - and wani- become increasingly more frequent.
A hierarchical explanation appears also to be appropriate for explaining different types of instrumental inflection (4.3.2).

A similar hierarchy operates in the case of possessive constructions. Alienable possession will always involve the possessor being marked with genitive case. Inalienable possession can either be shown by genitive inflection or by simple apposition of possessor and possessed nouns. Apposition is more likely to be used the lower the possessor is on a 'human...inanimate' hierarchy, like that in (23-4). But there is an important difference here-apposition can be used for inalienable possession involving a human possessor (it is just alienable possession which is restricted to the genitive construction). A full discussion of possessives is in 4.7.

The exact placement of nouns (according to their referents) on the hierarchy is not known in any detail - this would involve answers to questions such as 'is "possum" above, below, or at the same level as "kangaroo"?', and similarly for 'moon' and 'camp', 'stick' and 'stone', and so on. An investigation of the precise articulations of the hierarchy would undoubtedly require a native speaker trained as a linguist. (Normal elicitation techniques are unsuitable for investigating whether, say, 'there is a $60 \%$ chance of using $\eta u n g u$ - in the case of a snake, but $70 \%$ for referring to a fish'! ) What is known about hierarchically-motivated choice in Yidin has been inferred from examination of textual occurrences, and from the preferences of a fair range of informants (which were found to be quite consistent).
3.1.3 Discourse structure. Yidij shows considerable differences from its southerly neighbour Dyirbal (far more than the average differences between two contiguous languages in Australia) in grammar, phonology and lexicon. But perhaps the most striking divergence is in the struc-
turing of conversation. Dyirbal discourse is highly elliptical with maximum deletion of words that would either repeat information given in a previous sentence, or which can be inferred from the context; this applies both within a single utterance and in consecutive statementresponse or question-reply involving a number of speakers. Thus a question in Dyirbal will frequently be answered by a single word. For instance,
(25) minagu yinda yanuli baygaybila
what-PURP you-Sa go-PURP spear-comit-ABS
Why are you going out with a spear?
might receive the reply:
(26) bargangu
wallaby-PURP
For wallabies
A polar question will often be answered, or a statement commented on, just with an interjection (Dixon 1972: 124): 'yes', 'no', 'that's right', 'good job', 'I don't know', etc. For instance (Dixon 1972: 391):
(27) giyi yinda yuri dayga
dem-abs you-SA kangaroo-AbS eat-imp
'Would you [like to] eat [a piece of] this kangaroo?'
to which the reply was simply $\eta u$ 'alright'. The complete question or statement sentence could be repeated, of course (thus the reply to (25) might be gada baygaybila yanuli bargangu 'I'm going with a spear for wallabies') but more frequently just one or two words are preferred (bargangu, or maybe jada bargangu).

In Yidin, on the other hand, the normal conversational style is for a response to repeat the question that is being answered - or the statement that is being commented upon - as fully as possible:
(28) Q: nundu dugu:rmu gada: $n$ you-sa house-abl come-past Have you just come from the house?
(29) A: (yiyi) yayu bulmbam gada:n
yes I-SA camp-abl come-past (Yes), I've just come from the camp

It would not be normal to answer simply yiyi to a question such as (28). In fact, yayu bulmbam gada: $\boldsymbol{n}$ is the main response, yiyi being just an optional extra which can be supplied, for emphasis, at the beginning but is more frequently omitted. In contrast to Dyirbal, Yidin has very few interjections (the writer has only recorded four, whereas a comparable period of field work on Dyirbal yielded a dozen or more).

And note that Yidin has a single form $y u d u$ functioning both as the negative imperative particle 'don't' and as an interjection 'no, nothing, no more'. Dyirbal has two separate forms, galga and yimba respectively.

The informants regarded it as their main task, in teaching Yidin to the writer, to explain the construction of dialogue: 'if someone tells you so-and-so, how would you answer him back ?' And, in fact, there is a considerable art to felicitous discourse in Yidin. For the response must be a complete sentence, as full and informative as the original statement or question - so that a listener who heard only the response would perfectly understand it - but it must NOT simply repeat all of the lexical and grammatical elements of the original utterance. There must be some, but not too much, lexical or grammatical variation (in addition to automatic alternations such as you/I). This variation is achieved through a variety of devices. Taking these in turn :

## A - INTERCHANGE OF GENERIC/SPECIFIC NOUNS

Yidin has a well-articulated hierarchy of noun classification (6.2.1); an NP will often contain a specific noun and also the corresponding generic term (for instance 'animal, kangaroo' or 'vegetable, yam') 4.i.I. This system of semantic classification is often exploited for discourse variation. Thus (29) substituted the generic bulmba 'camp, camping-place' for the specific dugur 'house', which it semantically subsumes.

B - USE OF SYNONYMS AND SEMI-SYNONYMS
Yidin has a number of pairs of verbs which are exact synonyms. If one member of a synonym pair is employed in a statement or question, it will be normal to use the other in the response:
(30) S: yanda bama wamba:diy

I-DAT person-ABS wait-:di-PRES
The person is waiting for me
(31) R: nunin bama:l birmibirmin you-O person-ERG wait-REDUP-PRES [Oh,] the person's waiting for you
The only clue to a contrast between wamba- $n$ and birmi- $n$ that the writer was able to obtain (using field techniques that have always revealed meaning differences in languages like Dyirbal) was that if an interlocutor used wamba-n, it would be felicitous to employ birmi-n in the reply, or vice versa. (Note two further differences between statement and response here - ( 30 ) involves a $-: d i-n$ construction (see below); and in (3I) the verb is reduplicated.)

To take another example, the verbs burgi-n and yadi-l appear to be completely synonymous, both meaning 'walk about i.e. leave the camp for a while with the intention of returning'. These are, again, extremely useful in the construction of felicitous dialogue. Thus:


I walkabout along the road with the baby at [my] chest; I went with the baby; [he] was against my chest; [he] was lying asleep in my [arms]

## (33) R: nundu dada yadiyadi:rinal <br> you-SA baby-ABS walkabout-REDUP-GOING-COMIT-PRES <br> [Oh,] you're going on a long walkabout with the baby

The original statement here involved the coordination of three sentences. The response must comprise a full sentence - with subject, object and verb - but it need not parrot the statement item-by-item. Note that the response naturally substitutes $\eta u n d u$ ' you' for $\eta a y u$ ' $I$ ', retains dada ' baby', and uses yadi-l in place of the synonymous burgi-n. Both burgi-n and $y a d i-l o c c u r$ with the verbal comitative affix - $\eta a-l$, which derives a transitive from an intransitive stem. The response involves the aspectual affix -.ri-n 'going' which corresponds semantically to the lexical form gali-n 'go' in (32). Verbal reduplication in (33) indicates the respondent's understanding that the baby was taken walkabout for a considerable distance (inferred from the statement in (32) that the baby fell asleep on the journey).

There are only a handful of exact synonym pairs amongst Yidin verbs
(but note that No synonym pairs were encountered in the rather more extensive vocabulary collected for Dyirbal). It is likely that the main use of these pairs is simply to help in the synthesis of aesthetically-pleasing dialogue. Dyirbal, with its propensity for economical responses, would have little use for exact synonyms, but instead has a rich set of interjections.

When there are no true synonyms, Yidin will substitute semisynonymous items (as in the generic/specific example, (28-9)) to achieve a response that differs in some way from the original statement or question. It is not the case that one member of a synonym, or semisynonym, pair is most appropriately used in the statement and the other in the response; either could always be encountered in either position. (But of course, one member will always be more common - of the 'wait' pair, wamba- $n$ has a higher overall frequency of occurrence than birmi-n - and is thus more likely to occur in the first utterance of a dialogue; the less frequent alternant would then be likely to show up in the response, if one is provided.)

C - USE OF GRAMMATICAL ALTERNANTS
There are a number of grammatical alternations in Yidin that are, like lexical synonyms, exploited to promote felicitous discourse. Thus, there are two equivalent nominal comitative suffixes: - $d i$ (after consonants) $\sim-y i$ (after vowels), reducing to $-: y$ under specified phonological and morphological conditions (2.3.2-3), alternating with -muday, which has no allomorphic variants and undergoes no phonological reduction.
It seems that -muday is normally preferred with even-syllabled stems ending in $-i$, since here the reduction rules operating on $-y i$ (e.g. mayi $+y i \rightarrow$ mayi:y $\rightarrow$ mayi:) produce a form that is identical to locative/allative/instrumental, and this is liable to lead to confusion. But otherwise either $-d i \sim-y i$ or - muday can be used, with identical grammatical effects.

A response is likely to employ a different affix from that heard in the statement or question:
(34) $\mathrm{S}:$ yayu dada:y galiy

I-sA baby-COMIT-ABS go-PRES
I'm going with the baby
(35) R: nundu dadamuday galin
you-SA baby-COMIT-ABS go-IMP
[Go on,] you go with the baby!

Note the imperative inflection in (35), adding a hortative element to the response.

Speakers of Yidin also pay some attention to felicity within a single utterance and there is a tendency to alternate $-d i \sim-y i$ and -muday when a sentence involves iteration of the nominal comitative category. Thus we can have 'someone, wITH a container, which is wITH some food or liquid' as in:
(36) yuyu bama gaday / gunbuluyi
that-s person-abs come-Pres billy-can-comit-abs
banamuday
water-COMIT-ABS
That person is coming with a billy-can full of water or:
(37) yuyu bama duyga:n/ bundumuday badi:ldi
that-s person-ABS run-Past dilly-bag-comit-ABS nuts-comit-ABS
That person ran with a dilly-bag full of nuts

Note that in (36) $-d i \sim-y i$ is suffixed to the noun referring to the container and -muday to that indicating the contents, but these are reversed in (37). There does not seem to be any contrast in grammatical function here. The use of the comitative suffixes in (36-7) is motivated simply by considerations of felicity, a desire not to employ one type of comitative suffix twice in a single sentence.

The desire for felicity within a single utterance is particularly evident in the case of subordinate constructions. Where an NP is common to two clauses, a generic noun may occur in the main clause and a specific term in the subordinate clause, or vice versa. See ( $648-50$ ) in 4.4.2.

In some cases an abstract nominal root occurs either with or without a comitative affix e.g. daliyi 'hunger/hungry'. The two sentences:
(38) yayu dali:yi
(39) yayu dali:ndi
may have a slight cognitive difference (an informant explained that (38) means 'I'm hungry' as against (39) 'I'm really hungry') but it seems most likely that the contrast between (38) and (39) is largely stylistic, and is employed to facilitate more acceptable dialogue.
$-d i \sim-y i$ and $-m u d a y$ appear to have precisely the same function,
comparable to exact synonyms in the lexicon. There are a number of other pairs of affixes which have a degree of interchangeability, comparable to lexical semi-synonyms. For instance, in 3.1. 2 we mentioned dative and locative inflections, either of which can be used with a nonhuman noun in certain constructions. Here one alternant may be used in a statement or question and the other in a response, as in

(41) R: jundu dana:n paru walba:nda
you-SA stand-past on top of stone-dat
[Oh,] you stood on top of a stone
In an exactly analogous manner the causal/ablative possibilities -nim and $-m u$ may be employed in felicitous alternation (4.4.4), as may - with certain verbs - nominal comitative and dative (4.3.1), and intransitive verbalisers -madi-n and -daga-n (4.8.2). We mentioned (3.1.2) that inalienable possession may be expressed by genitive case or through simple apposition - these can also be used as stylistic alternants (especially if the possessor is also inanimate -4.7.3).
Note that not all hierarchically-motivated grammatical choices can be employed in this way, to ensure felicitous dialogue. We mentioned in 3.1.2 that a deictic can have the form yundu-~ $\quad \eta u \eta g u$-, and that an indefinite/interrogative can be wandu- $\sim$ wani-. But if a speaker refers to some object by one of these forms, the respondent should reply using the same form (unless he is intending to correct the speaker); in this case, the alternation does not imply (semi-)synonymy or substitutability.

Finally, instances have been noted where a transitive sentence, and its antipassive congener, appear to be employed for stylistic contrast - see (31) and (30) above. The derivational affix -:di-n can mark a wide range of syntactic and semantic effects and fulfils an important role in the grammar. But there appears sometimes to be a certain measure of substitutability (one is almost tempted to say: redundancy) between some of the alternative constructions, and this can be exploited to promote greater felicity of discourse.
3.x.4 First person orientation. The style of story narration in Yidin differs radically from that of Dyirbal, and of other Australian languages with which the writer is familiar. Dyirbal narrative style is, in fact, quite
close to that of English - a narrator sets the scene and refers to the characters in the third person, being sure to quote exactly any significant dialogue between them. (The writer has never encountered a Dyirbal story - as opposed to a reminiscence - in which the narrator assumes the role of the central character.)
Dyirbal, like Yidin, has no grammatical technique of indirect speech. (That is, they have no equivalents for English that clauses as in 'I told him that...'; both languages do have to complements with verbs of commanding/allowing e.g. 'I told him to...'.) In fact, the main factor distinguishing Dyirbal storytelling (and the English narrative style of speakers whose first language is Dyirbal) is the precise and lengthy reportage of direct speech, within a third person narrative. This style appears to be constant between different informants, speaking different dialects of Dyirbal.

In contrast, Yidin stories typically involve the principal character serving as narrator, with the whole tale being given a 'first person' slant. There may be a few sentences at the beginning told in the third person these set the scene and introduce the main character, who thereafter takes over the narration. If the central character changes, the narrator will shift (still remaining in the first person); the first narrator will introduce the arrival of the second character and then silently relinquish his meta-role to him.
However, if there are two simultaneous protagonists, each playing an equally important role, a third-person narrator will be continued throughout the story (and the grammatical first person will only be used with the - usually copiousdirect reporting of speech by the two heroes). Most of text 2, pp. 513-30, concerns the brothers Guyala and Damari and is told in the third person. But towards the end Guyala departs and, a sentence or two later, the narrator slips into the identity of Damari.

This style of first-person narrative is common to all the Yidin storytellers encountered by the writer (and note that the two major informants belonged to different branches of the tribe, and had never had any contact with each other).

As a result, (singular and non-singular) first person pronouns are extraordinarily frequent in Yidin texts (see 3.6.1). And it is sometimes difficult at first to distinguish between textual sentences that belong to the narrative, and those that are direct quotations of things said by the hero/narrator at some point in the set of events he is describing. (But see the comments in 3.1 .5 on exclamatory $n u n d u$, which normally introduces a direct quotation.)

It is likely that the 'first person style' of Yidin narratives has had some effect on the grammar (just as the pedantic repetition - with felicitous variation in responses has led to some lexical and grammatical synonymy - 3.1.3). In both Yidin and Dyirbal nouns follow an absolutive-ergative system of inflection while (first and second person) pronouns follow a nominativeaccusative paradigm. The major condition for sentence coordination in each language is that there be a common NP which is in surface S or O function (if a noun: absolutive case) in each sentence. But Yidin - unlike Dyirbal - also allows coordination of two sentences in which common NP is a pronoun in either S or A function (nominative case) - 5.I.3. Yidin's narrative style leads to a preponderance of pronouns, and it is natural for one rule of syntactic identification to mirror pronominal morphology. In Dyirbal narrative nouns are far commoner than pronouns, so it is reasonable in this case for syntactic identifications squarely to reflect nominal morphology.
3.1. 5 Extended use of pronouns. In addition to their normal referential functions, there are quite special uses for two pronominal forms. $n u n d u$ is the second person singular subject pronoun; but the form nundu is also used as an exclamation.

Whenever, in a narrative, the first person narrator/hero comes upon something unusual he commonly prefaces a comment with nundu, translatable in this instance as 'hey', or 'well', or 'oh!'. (There will commonly be no other person involved in the scene being described, as in Text I4, line 10.)

In such exclamatory uses nundu is characterised by stress on the second syllable, coupled with high-rising intonation with a short final fall: $\overline{\text { pundu}}$. The first syllable may be scarcely articulated, so that sometimes only $\widehat{n} \widehat{u}$ is heard. The occurrence of exclamatory $n u n d u$ is frequently a vital clue that a sentence in a story is a quotation of what was said at the time, rather than being part of the narrative (3.1.4).
Exclamatory $n u n d u$ and pronominal $n u n d u$ should perhaps be regarded as homonyms in present-day Yidin (although the exclamatory use is undoubtedly historically derived from the pronoun). They are normally phonetically and/or functionally distinguishable (although there are occasional cases where it is hard to tell which sense is intended - as in text 2, line 5). The two items nundu have been heard in sequence: $\widehat{n} d u$ nuindu... 'Hey ! you...'.

The other pronominal form with a non-referential use is gadin, first person singular genitive. When this is said with an exaggerated risingfalling intonation it conveys the speaker's sympathy for some illness or
injury of the addressee: 'I'm very sorry for you' (one informant glossed this sense of gadin as 'I'm sorry from the bottom of my heart').

### 3.2 Parts of speech

3.2.I Grammatical criteria. For Yidin the following word classes, with mutually exclusive membership, can be set up:

\(\left.\begin{array}{l}noun<br>adjective\end{array}\right\}\) nominal<br>locational qualifier time qualifier pronoun deictic \(\left.\begin{array}{l}verb<br>adverb\end{array}\right\}\) verbal particle interjection

Each root belongs to just one word class. There are a number of processes that derive a stem of a different class - forming adjectives from nouns, verbs from nominals, and so on (pronouns, deictics, particles and interjections cannot be derived).

The word classes can be distinguished in terms of semantic content, syntactic function, morphological possibilities (and, to a limited extent, phonological form). Potentiality of occurrence with derivational and inflectional affixes is the most easily observable difference and can be taken as the criterion for differentiating most pairs of word classes.

Pronoun and deictic constitute closed classes and can be simply listed; their affixes are similar to, but not in every case identical with, those on nouns and adjectives. Nominals have a well-defined system of case inflections; locational qualifiers take a limited subset of these, as do time qualifiers. Verbals have their own sets of derivational and inflectional suffixes which serve to differentiate that class. Particles can be specified on the negative grounds that they do not normally accept suffixes of any sort (save inchoative -daga-n, and the post-inflectional affix -(a)la 'now', which can occur on anything that is not an inter-ection-3.9.1). Interjections are set off syntactically-they occur utterance-initially, in an intonation group by themselves, and could be said to comprise a complete sentence.

Noun and adjective take identical inflections and have very similar (possibly identical) derivational possibilities; the same comments apply to verb and adverb. A major distinguishing criterion in each case is semantic content - a noun will normally refer to some object, whereas an adjective describes a quality of an object; similarly a verb refers to an action while an adverb describes, say, the way in which an action was performed. The extremes are clear enough but, especially in the case of noun and adjective, there is a threshold of uncertainty in the middle (see 3.2.2).

A noun phrase can involve just a noun or just an adjective (although we can note that an adjective is relatively seldom found without a noun, whereas a noun is only occasionally accompanied by an adjective). Perhaps the clearest-cutsyntactic test is co-occurrence with generic nouns. For each specific noun there is normally one appropriate generic term with which it can occur - thus dayguy 'black and white possum' could only be found with mina '(edible) animal'. In some cases there are two possible generics - badil 'rickety nut' can occur with mayi 'vegetable food' or dugi 'tree' (or with both) - but never more. Most adjectives, on the other hand, can occur with any generic noun - we can have mina jalal 'large animal', mayi yalal 'large vegetable', dugi yalal 'large tree', bama yalal 'big person', buri yalal 'big fire', and so on. (The only nominals left out on this criterion are generic nouns themselves; but these form a closed set, and could be simply listed - 6.2.1.)
This 'occurrence with many generics' criterion does separate out most adjectives. But there are some adjectives which describe specifically human attributes - for instance milba 'clever' - which would only be likely to be found with the generic bama 'person'.

There is no generic/specific categorisation of verbals, and verb and adverb can only be distinguished in terms of semantic content and syntactic preferences: an adverb is seldom found without an accompanying verb (although either a verb or an adverb can be the sole verbal element in a sentence).
3.2.2 Semantic content. The semantic contents of the parts of speech in Yidin are quite similar to those in Dyirbal (Dixon 1972: 39-41). Only points of difference from Dyirbal are noted in detail here.

The class of nouns covers all (touchable, drawable) concrete objects as well as mythical spirits, noises and language. Yidin also has some abstract nouns such as 'thought', 'dream', 'heat', 'smell', 'sickness', 'promise', 'present', 'walk' (concepts which are expressed by Dyirbal
by verbs or adjectives). Some abstract nouns commonly occur with the comitative affix (which serves to derive an adjective) - muran $+d i$ 'sickness + with' $=$ 'sick'. Others normally co-occur with one of just two or three verbs (the noun being in some cases obligatorily incorporated into the verbal word - see 6.1.I); thus dirbi 'promise' is most often found with budi-l 'put down', and bidal 'dream' only with either wanda-n 'fall down' or bada-l 'bite' (in combinations of this type the verb plainly has a metaphorical sense).

Adjectives cover physical properties, physiological states, mental attitudes, value judgements, and so on (exactly like Dyirbal); numbers are regarded as a subset of the adjective class. Unlike Dyirbal, Yidin also has a small subclass of quantifiers, involving 'some', 'another' (6.2.2).

There are a few nominals - referring to concepts that are dealt with by noun roots in some languages and by adjectives in others - on which the syntactic evidence in Yidin is ambiguous. Thus daliyi 'hungry/ hunger' can either be used by itself, to describe a state (implying that the root should be taken to be an adjective) or with the comitative affix (implying a noun root) - see ( $38-9$ ) above. Yidin's propensity for stylistic alternations makes it impossible to decide which subclass of nominals daliyi properly belongs to.

Yidin has a lexical set of locational qualifiers (these correspond to Dyirbal's grammatical systems of bound forms which make up 'noun markers' and 'verb markers' - Dixon 1972: 44-8, 56-7, 254-64). They indicate compass directions; up, down; behind, on top of, underneath, inside; near, far; across the river; and so on.

Time qualifiers describe temporal duration ('long' or 'short time') as well as referring to point-time in the past and future. The latter are orientated qua 'today' as point of origin. The general term 'morning' is related to 'tomorrow' and 'afternoon/evening' is derived from ' yesterday'. (This contrasts with Dyirbal which orientates time description to the point 'now' - 'earlier than now' and 'later than now'). See 6.2.3.

The pronoun class covers just first and second persons. There is a separate part of speech which includes demonstratives (these also fulfil the function of third person pronouns in other languages) and indefinite/ interrogative forms. For want of a more suitable term we refer to this class as deictics. Demonstratives (definite deictics) also specify proximity and visibility (3.7.1).

The semantic content of the verb class in Yidin is similar to that in Dyirbal - covering verbs of motion, affect, giving, attention, speaking and
bodily functions. As in most (or all) Australian languages, a single word will describe something that actually has or potentially could have a certain effect - for instance, wawa-l covers both 'see' and 'look' (see O'Grady 1960 and Dixon 1972: 40-1, 91-2). There are a few verbs describing mental attitudes - 'be happy', 'be jealous of' - but most concepts of this type are expressed by adjectives in Yidin. Adverbals specify whether an action was performed quickly or whether it was done to all of a set of objects, and so on.

Particles mark negation, prohibition, permission, possibility, completion, appropriacy, and retribution, amongst other things; they are listed in 4. Io .

### 3.3 Morphology of nouns and adjectives

A nominal word must involve a root and a case inflection (one choice being absolutive, which has zero realisation). Between root and inflection can come one or more derivational affixes-these include genitive (3.3.3), comitative (3.3.4), privative, 'only, all', 'lots', 'another' and so on (3.3.6). Finally, a word can be augmented by one of a set of post-inflectional affixes (3.9).
3.3.I Case inflections - system. Inflections on nominals in Yidin can be divided into local cases - those that simply indicate position 'at', or motion 'to' or 'from', a place - and syntactic cases. The latter can again be split, into 'core syntactic cases' - inflections on to the obligatory constituents of a sentence - and 'peripheral syntactic cases' - marking the optional non-local constituents.

The full set of cases is, with canonical forms:
CORE SYNTACTIC
absolutive ( S and O functions) ø
ergative (A function) $-\eta g u \sim-d u$
PERIPHERAL SYNTACTIC
LOCAL


The broken lines indicate that locative, allative and instrumental fall together, as do causal and ablative.

We can recognise a semantic correspondence between the local and the peripheral syntactic cases. Ablative indicates simply motion from a place or object whereas causal refers to the reason for some present state (or some previous action that made the present state possible). Thus mayi 'vegetable food' has causal inflection in
(42) yayu dubu:rdi mayim I'm full up from [eating] vegetable food
and ablative inflection in
(43) nayu galiy mayim I'm going (i.e. walking away) from the vegetable food

In fact (43) could have either an ablative or a causal interpretation - the latter would be 'I'm going out after [having eaten] vegetable food'.

Although nominal ablative and causal always fall together, there are separate forms for the two cases with the inanimate deictics - in this case there are different stems for peripheral and for local cases, to each of which can be added $-m u \sim-m$ (3.7.2). This provides morphological justification for our recognising two distinct cases here.

Allative indicates motion towards some place or object; in contrast, purposive indicates that an action is directed towards some person or object to involve it in the chain of events. Compare the allative in:
(44) yayu galiy wana:lda (bulmba:)

I'm going to (the place where) the boomerang [is]
with purposive in:
(45) Dayu galiy waya:lgu

I'm going to/for the boomerang [to do something to it, or with it]
Paralleling the ablative-causal and allative-purposive correspondences there is a clear relationship between the unmarked local case, locative, and what we will show to be the unmarked peripheral case, dative. We have already mentioned, in 3.1.2, that there is a degree of substitutability between locative and dative (conditioned by a semantic hierarchy). There is detailed discussion of these two cases in 4.r.8.

The 'fear' inflection, and its relationship to locative, is discussed in 3.3.2 and 4.6.3.

Locative and allative have the same form for nominals; there is in fact
seldom likely to be confusion since allative typically occurs with verbs of motion, and locative with verbs of rest. Note that locational qualifiers and deictics can have separate forms (3.4.1, 3.7.2), justifying our recognition of two distinct cases.

Almost all Australian languages have an instrumental case marking, and it invariably falls together either with ergative or (as here) with locative (Dixon 1972: 1i). In 5.4 .5 we give a deep syntactic explanation of why instrumental should coincide with locative in Yidig.

For brevity the locative-allative-instrumental inflection will often be referred to simply as 'locative' below, and ablative-causal as 'ablative'.

The suffix - $n a$ can function as an accusative case with nouns that have human reference, but it is encountered rather infrequently. A full discussion of -na is in 3.3.7.
3.3.2 Case inflections - form. We now take the case inflections in turn, describing the allomorphic variants and their conditioning. In $3 \cdot 3 \cdot 5$ we give a table summarising the forms of case inflections (and genitive and comitative derivational suffixes) with all types of stem, classified in terms of syllabicity and stem-final segment.

Ample exemplification of inflections on roots ending in $-i y,-a:,-u$ :, or a morphophoneme ( $A, I$ or $U$ ) was given in chapter 2 . The examples below are chosen from the set of around $\mathrm{I}, 200$ 'regular' nominals.
[r] absolutive - marks intransitive subject and transitive object functions.

This always has zero realisation so that absolutive form coincides with the root, subject to the operation of rules 1,2 and 3 (described in chapter 2).
[2] ergative - marks transitive subject function (with a human, animate or inanimate agent - see 4.1.5, 4.2.5). It has the forms:
(a) $-\eta g u$ after a stem ending in a vowel. If the stem is even-syllabled this reduces, through the operation of rules 1 and 2 , to $-: \eta$. Thus

$$
\begin{array}{cc}
\text { root } y \text { abi } & \text { ergative yabi:y 'grey possum' } \\
\text { bagabaqa } & \text { balabara:y 'fly sp.' } \\
\text { waguda } & \text { wagudaygu 'man' }
\end{array}
$$

(b) $-d u$ after a stem ending in a consonant. The $-d$ - will assimilate in place of articulation to a preceding nasal. Thus (noting that no stem ends in $\eta$ ):

| root $d u d u m$ | ergative dudu:mbu 'father's sister' |
| :---: | :---: |
| guban | guba:ndu 'big butterfly' |
| yubirbin | yubirbindu 'leech' |

When $-d u$ is added to an even-syllabled stem ending in a rhotic, the rhotic must drop. With an odd-syllabled stem, a stem-final rhotic may optionally be omitted (it seems that in these circumstances $r$ is frequently dropped while $l$ is normally retained). A stem-final $-l$ is never dropped before ergative $-d u$. Thus:

| root | ergative |  |
| :--- | :--- | :--- |
| wudar | wuda:du | 'dew, frost' |
| gugar | guga:du | 'large guana' |
| wagal | waga:ldu | 'wife' |
| mangumbar | mangumba(r)du | 'leaf grub' |
| buliyir | buliyi(r)du | 'chicken hawk' |
| warabal | warabaldu | 'flying squirrel' |

And note that $-r$ - always drops before the aspectual suffix -: $d a-n$ on verbs (3.8.6).

With a stem ending in $-y$, the suffixal $-d$ - assimilates to $-d$-; an $-n$ can optionally be inserted between stem and suffix (2.5.2) and the stemfinal $-y$ can optionally be deleted (with a stem ending in $-i y$ the $-y$ must be eliminated, by Rule 3-2.3.7). Thus the ergative of gunduy 'brown snake' has been heard as gundu:ydu and as gundu:yndu; that of dabuy 'brown bird sp.' as dabu:ydu and as dabu:du; that of daruy 'bird (generic)' as daru:ndu and as daru:yndu. It has not proved possible to uncover any definite phonological conditioning for the loss or retention of $n$ and $y$; it is likely that all four forms would be acceptable in each instance e.g. gundu: $(y)(n) d u$.
$n$ is most likely if the preceding intervocalic consonant (cluster) is weak. That is, it is more frequently found when the preceding intervocalic position is filled by $r, r$, $w$ or $y$ than if it is $b$ or $g$ (or a cluster). But this is at most a tendency, and certainly not a definite rule.
(c) There is a single irregularity: bama 'person' has ergative bama:l (bama inflects regularly in all other cases).
Australian languages typically have - $y g u$ and/or $-l u$ for the ergative inflection (Dixon 1972: 9-10). This suggests that bama:l might be reduced - by Rules I and $2-$ from an underlying bama $+l u$. Support for this is found in Dya:bugay where bama is again the only nominal with an irregular ergative, here bamalu.
[3] Locative-allative-instrumental. Locative indicates position of rest, or can be used to mark the underlying object in an antipassive construction (especially if inanimate)-see 4.2.3. Allative indicates motion towards some place or thing. A noun in instrumental case can refer to a weapon or tool with which an action is performed, or the material out of which something is made (4.1.6, 4.3.2).

The forms are:
(a) -la after an odd-syllabled stem ending in a vowel: root gabudu locative gabudula 'white clay'
(b) -: on to an even-syllabled stem ending in a vowel:
root buri locative buri: 'fire'
In terms of the general phonological rules of Yidin we would expect $-l a$ to reduce to $-: l$ with an even-syllabled stem. We could put forward an ad hoc rule $-: l \rightarrow-:$ ( for this case inflection only) - 2.3.3.
Note that almost all Australian languages show exact correspondence between locative and ergative allomorphs; normally the only difference is that locative ends in $-a$ and ergative in $-u$. A frequent pattern (Dixon 1972: $9-\mathrm{II}$ ) is:

|  | ergative | locative |
| :--- | :--- | :---: |
| onto vowel-final disyllabic stems | $-\eta g u$ | $-\eta g a$ |
| onto vowel-final trisyllabic stems | $-l u$ | $-l a$ |

Some languages have just $-\eta g u$ and $-\eta g a$ while others show just $-l u$ and $-l a$. Yidin is unusual in that it has ergative - $\eta g u$ and locative $-l a$; ergative $-l u$ is the underlying form for just one noun, bama, and there is no surface trace at all of locative - $\eta g a$. (The dialects of the Western Desert language described by Douglas 1964 and Glass and Hackett 1970 provide a complementary exception - common nouns ending in a vowel take ergative $-l u$ and locative - $\eta g a$.)

Suppose that originally Yidin had both locative -la (onto odd-syllabled stems) and also - $\eta g a$ (onto even-syllabled forms). We would of course expect $-\eta g a$ to reduce to $-: \eta$; and this is surely a likely candidate for further reduction to $-\therefore$ Note that $-\eta$ is hardly a 'favourite' final segment in Yidin (2.1.2, 2.6.3) and we do in any case have the reduced ergative $-: y$ (one can scarcely imagine a language welcoming the falling together of ergative and locative - yet of course this has occurred in Aranda (Strehlow 1944: 74, 202) and Wik-Munkan (data from Christine Kilham and Barbara Sayers)). In the context of Yidin phonetics (2.6.3) a reduction from $-: \eta$ to $-:$ is more plausible than one from $-: l$ to $-\therefore$ But, since there is nowadays no trace whatever of a locative inflection $-\eta g a$ in Yidin (nor in Dya:bugay, whose locative inflection exactly parallels Yidin's) we could scarcely put forward underlying - $\eta g a$ within the terms of a synchronic description.

Note also that all (or almost all) Australian languages have instrumental inflection identical either to locative, or to ergative (Dixon 1972: ir).
(c) -da after a stem ending in a consonant. The allomorphy here exactly parallels ergative: assimilation to a stem-final nasal; obligatory elision of a final rhotic off an even-syllabled stem and optional dropping when the stem is odd-syllabled:

| root | locative |  |
| :--- | :--- | :--- |
| mudam | muda:mba | 'mother' |
| wardan | warda:nda | 'boat' |
| yidin | yidi:nda | 'language name' |
| muygal | muyga:lda | 'hole, trap' |
| dubur | dubu:da | 'stomach' |
| baygur | baygu:da | 'fish spear' |
| maygumbar | maygumba $(r) d a$ | 'grub sp.' |
| guygambur | guygambu(r)da | 'butterfly sp.' |

It is sometimes difficult to distinguish the two segments in $\mid-r d-/$ or $|-r d|-$ for instance, they may simultaneously be realised by a flap [ $r$ ]; see 2.I.I. It is thus appropriate to represent [guduburu] 'stinking rat-ERG' by $\operatorname{lgudubu}(r) d u /$. But a distinct rhotic-plus- $d$ has been heard in the ergative of an odd-syllabled stem, whereas a rhotic is never audible in the even-syllabled case.

Locative $-d a$ assimilates to a stem-final $-y$, and the $-y$ may optionally drop. There is one difference from ergative - an $-n$ - mUST be inserted between a $-y$-final stem and locative inflection. Thus the locative of gabay 'path, track,' is gaba:(y) nda (but never *gaba:(y)da).
(d) There are four irregular items (all are disyllabic and end in a vowel). Here locative is $-: l$ (what in fact would be expected as the regular form, reduced by Rule 2 from underlying $-l a$ ). Thus:

| root $d u g i$ | locative-allative-instrumental dugi:l 'tree, wood, stick' |
| :---: | :---: |
| dadu | dadu:l 'shade' |
| biwi | biwi:l 'stick knife' |
| muyubara | muyubara:l 'new' |

These three roots are regular in all other inflections (including ergative $-: \eta)$.

The existence of these four locatives supports our hypothesis concerning the 'regular' locative with even-syllabled stems deriving from - $\eta g a$. We can now suggest that locative was -la on all odd-syllabled stems and on these four
disyllabics, and that it was - $\eta g a$ elsewhere. $-\eta g a$ must then have reduced to -:, with $-l a$ reducing to $-: l$ whenever the conditions for Rules 1 and 2 were satisfied. (The alternative hypothesis - that locative -: derives from -lawould have to incorporate some explanation of why $-l$ was lost on all evensyllabled stems Except these four.)

The writer has heard locative $-: l$ on two or three other words but these were all later corrected by informants to $-\therefore$ For instance, in one text Tilly Fuller gave:
(46) wayal gilbi:l ... / gaba:nda | duludulu:l
boomerang-ABS throw-PAST road-LOC Johnson hardwood-all
dugi:l /
tree-all
The boomerang was thrown...along the road, to the Johnson hardwood tree.

Here the specific noun duludulu appears to have been given locative $-: l$ by analogy with its generic superordinate dugi. In later questioning Tilly Fuller and other informants gave the allative-locative of $d u l u d u l u$ simply as $d u l u d u l u:$.
[4] DATIVE marks 'indirect object' (with ditransitive verbs like 'give', 'take to', 'show' and 'tell', and also with simple transitive and intransitive verbs - see 4.1.6); it can also be used to mark the underlying object in an antipassive construction - 4.2.3. The forms are:
(a) $-d a$ after a stem ending in $-m$ or $-n$; $-n d a$ after a stem ending in $-n$, with deletion of the stem-final $-n$ (see $3 \cdot 3 \cdot 5$ ):

| root | dative |  |
| :--- | :--- | :--- |
| dudum | dudu:mda | 'father's sister' |
| buyan | buya:nda | 'sun' |
| mugin | mugi:nda | 'mouse' |
| budibin | budibinda | 'black and red pigeon' |

(b) -nda elsewhere (i.e. on to stems ending in a vowel, lateral, rhotic or $y$ ). Stem-final $-y$ is lost before dative from an odd-syllabled stem (but retained on an even-syllabled stem):

| root | dative |  |
| :--- | :--- | :--- |
| bimbi | bimbi:nda | 'father' |
| yalal | yala:lnda | 'big' |
| wadir | wadi:rnda | 'cicatrices' |
| galygir | galygi:Ynda | 'sister' |
| daruy | daru:ynda | 'bird (generic)' |
| gawanday | gawandanda | 'spirit' |

Dative is the only nominal affix which is an exception to Rule 2 ; although all the conditions for this rule are met, dative does not reduce. Hale (1976a: 240) reports that Dya:bugay has a 'dative, benefactive' suffix which has the form -:nda after vowels and - $\eta u n d a$ after consonants. If Yidin -nda goes back to an original -yunda it might be that the reduction occurred after Rule 2 had been incorporated into the phonology; -yunda plainly would not be subject to reduction (it does not meet the morpheme boundary condition) and this might explain why $-n d a$ is not reduced in present-day Yidin. (But note that the probably cognate - verbal subordinate inflection $-n d a$ does reduce - 3.8.4.)
(c) There are two irregular datives, both on roots which show an irregular locative. Since this completes the list of case exceptions we can tabulate all the irregularities (forms within square brackets are regular):

| root | ative | locative | dative |
| :---: | :---: | :---: | :---: |
| bama | bama:l | [bama:] | [bama:nda] |
|  |  |  | 'person' |
| $d u g i$ | [dugi:y] | dugi:l | dugi:l(n)da |
| $d a d u$ | [dadu: $]$ ] | dadu:l | 'tree, stick, wood' dadu:l(n)da |
|  |  |  | 'shade' |
| biwi | [biwi:y] | biwi:l | [biwi:nda] |
|  |  |  | 'stick knife' |
| muyubara | [muyubara:y] | muyubara:l | [muyubara:nda] |
|  |  |  | 'new' |

Note that bizwi (which is known only in the coastal dialect) and muyubara have normal datives despite their irregular locatives. dugi and dadu appear to involve the addition of dative to the locative form (each has been heard with the $-n$ - present, and with it omitted).

This may be taken to suggest that dative $-n d a\left(<{ }^{*}-\eta u n d a\right)$ was originally a post-inflectional affix, typically added to locative (compare with -mari in modern Yidin-3.3.7), and that it later became a case inflection in its own right. Certainly, these forms may add morphological backing to our recognition of a syntactic correspondence between dative (as the unmarked peripheral case) and locative (as the unmarked local case) - see 3.2.1 and 4.r.8. Note also that locative and dative inflections coincide on a stem ending in $-\boldsymbol{n}$ (each is just -da).

The words with irregular case forms are all fairly common items; and they occur most frequently in the function with irregular marking. Thus bama is often encountered in ergative but seldom in locative case,
whereas dugi occurs predominantly with locative inflection, and very seldom in ergative case.
[5] PURPOsive could also be said to mark a type of indirect object. But whereas dative indicates something or someone who is passively involved in an action (as addressee or recipient, say), purposive implies that the referent will take a major, active role in the following event (as subject or direct object). This is further discussed and exemplified in 4.1.6, 4.5.1.

There is a single form $-g u$ with all types of stem. It does not reduce (since $-g$ is not a possible word-final segment). Thus:

| root | purposive |  |
| :--- | :--- | :--- |
| bama | bama:gu | 'person' |
| buluba | bulubagu | 'fighting ground' |
| mudam | muda:mgu | 'mother' |
| guman | guma:ngu | 'one' |
| birin | biri:ngu | 'salt water' |
| gugal | guga:lgu | 'fire drill' |
| dubur | dubu:rgu | 'stomach' |
| dirgar | dirga:rgu | 'blady grass' |
| gabay | gaba:ygu | 'road, track' |

[6] ablative-causal. Ablative indicates motion from a place or object; causal marks some person or thing which was the cause of a state or action referred to by the main verb. The forms are:
(a) -mu after trisyllabic stems ending in a vowel, and after stems ending in a consonant. After a stem ending in $-m$ the inflection is simply $-u$ (like most Australian languages, Yidin has a general rule that if a sequence of two identical consonants is generated at a morpheme boundary, one occurrence is omitted). The suffix is normally just -u after an odd-syllabled stem ending in $-\mu$, but $-m u$ after an even-syllabled $n$-final stem. Thus:

| root | ablative |  |
| :--- | :--- | :--- |
| dudulu | dudulumu | 'brown pigeon' |
| muygal | muyga:lmu | 'hole, trap' |
| yandar | yanda:rmu | 'creek' |
| wabar | waba:rmu | 'walk' |
| walmbay | walmba:ymu | 'waterfall' |
| gawam | gawa:mu | 'broken bank' |


| root | ablative |  |
| :--- | :--- | :--- |
| bindin | bindi:nmu | 'hornet' |
| birin | biri:nmu | 'salt water' |
| murudum | murudumu | 'stingaree' |
| yaraman | yaramanmu | 'horse' |
| yubirbin | yubirbinu | 'leech' |

It appears that an $-n m$ - cluster (which is not permitted within a root) is countenanced over a morpheme boundary that falls at the end of an even-syllabled stem, but is avoided after an odd-syllabled stem. There appear in fact to be two alternative ways of ensuring that an illicit $-n m$ cluster does not occur in surface structure. Either the $-m$ - can be dropped (as illustrated above), or else the $-m$ - is retained and stem-final $-n$ is reduced to $-y$; thus $\eta$ idubaymu has been heard as the ablative of yiduban 'small mussel'. But Rule 3 (2.3.7) must delete a $-y$ - that falls between $i$ and a consonant, removing all trace of stem-final $-n$ in these circumstances. Thus the ablative of yiyarin 'this sort of thing' (3.7.6) was recorded as yiyarimu; and jubirbimu was heard, as an alternative to $\eta u b i r b i n u$ (an informant insisted that either form was equally acceptable).
(b) $-m$, following an even-syllabled stem ending in a vowel. In order to relate this to an underlying -mu, we suggested in 2.3 .3 that these forms should be regarded as exceptions to Rule 1 (which would have introduced a long vowel) but that Rule 2 does apply, deleting the final $-u$. Thus:

| root | ablative | root | ablative |
| :---: | :---: | :---: | :---: |
| bana banam 'water' | wuru: | wuru:m 'river' |  |

A special causal form -nim, based on the genitive stem, is discussed in 3.3.3.

The ablative-causal allomorph -m occurs (a) after an even-syllabled stem ending in a vowel; (b) in the form -nim, whatever the phonological form of the stem to which it is attached; and (c) in the causal subordinate verbal inflection -num, again irrespective of syllabicity. In 3.8 .4 we discuss the possibility that allomorph $-m$ may NOT in fact be historically derived from $-m u$.
[7] FEAR marks a noun referring to 'something to be avoided' (the action referred to by the main verb being planned in order to effect this avoidance). Forms are:
(a) -yida following a vowel.
(b) -dida following a consonant.

Formally, the fear inflection simply involves the addition of $-d a$ to a comitative stem. Examples of fear forms can be obtained by simply adding - $d a$ to the comitatives listed in 3.3.4. The functions of this case are described in 4.I.6. and 4.6.I.
It is likely that, historically, 'fear' developed from the addition of the locative inflection to an earlier version of the comitative *-dir $\sim$-yir (3.3.4); this would have yielded -dida $\sim-y i d a$. (Compare this with the inflection of comitatives in Warunu - Tsunoda, 1976.) Comitative has reduced to -di $\sim-y i$, which now takes locative $-l a \sim-\therefore$. There is no feeling nowadays that fear involves the locative suffix. Thus, in modern Yidin, 'fear' has to be regarded as a distinct case, which is not semantically related to comitative (despite its exact formal dependence on this suffix).
3.3.3 Genitive stems. 'Genitive' is essentially a derivational affix in Yidin (as in many Australian languages) forming a stem that functions as an adjective and takes the full set of case inflections; a genitive noun or pronoun must agree in case with the 'head noun' which it qualifies. Thus, strictly speaking, we can talk of a genitive stem but only of a genitive-plus-absolutive word, a genitive-plus-ergative word, and so on.
(47) yiŋu guda:ga waga:lni THIS-ABS dog-ABS wife-GEN-ABS
This dog belongs to [my] wife
(48) yivu waga:lni guda:ga wunay

This dog belonging to my wife is lying down
(49) gudagajgu wagalningu yanan bada:l
dog-ERG wife-GEN-ERG I-O bite-PAST
[My] wife's dog bit me
Genitive has the canonical form $-n i$, onto stems of all phonological types. When followed by absolutive case, genitive is reduced to -: $n$ (by Rules 1 and 2) with an even-syllabled stem ending in a vowel. Examples with stems ending in a vowel, lateral or rhotic are:
genitive-plus-
root absolutive
gungandi
bimbi
dumbul
yalbur
gugar
giramay
guygandini 'tribal name'
bimbi:n 'father'
dumbu:Ini 'blue-tongue lizard'
yalbu:rni 'frog sp.'
guga:rni 'guana sp.'
giramayni 'tribal name'

With a stem ending in $-n$, genitive is simply $-i$ (one of the two successive tokens of the same consonant being dropped). With a stem ending in $-n$, the stem-final segment drops and genitive is $-n i$. The genitive form of a stem ending in $-m$ varies with its syllabicity: with an even-syllabled stem (only) the suffixal $-n$ - |may optionally be dropped. Thus:

|  | genitive-plus- |  |
| :--- | :--- | :--- |
| root | absolutive |  |
| mudam | muda:m(n)i | 'mother' |
| bindin | bindi:ni | 'hornet' |
| mugin | mugi:ni | 'mouse' |
| dindalam | dindalamni | 'grasshopper' |
| yaraman | yaramani | 'horse' |
| yiduban | jidubani | 'small mussel' |

Dick Moses stated that muda:mni was the 'correct' form, but that muda:mi was an acceptable shortening. It appears not to be possible to drop the $-\boldsymbol{n}$ after an odd-syllabled stem, in the coastal dialect. In the tablelands dialect, however, $-n$ - is normally dropped after any $-m$-final stem: thus muda:mi and dindalami.

Case inflections are added quite normally to genitive stems which retain the suffixal vowel $-i$ in the absolutive; they will be regularly reduced if the conditions for Rule 2 are met. Thus, from root gunduy 'brown snake' we get genitive stem gunduyni and then locative gunduynila:
(50) yayu naru dana:n / gunduynila mura:ynda

I-SA upon stand-PAST brown snake-GEN-LOC skin-LOC
I stood on the brown snake's skin
When genitive and ergative are added to waguda 'man' we obtain (after reduction by Rule 2) wagudani: $\eta$ :
(51) yanan wagudani:y gudagangu bada:l

The man's dog bit me
An example of genitive plus genitive (added to a pronoun) is given in 3.6.2.

In the case of a genitive stem which reduces in the absolutive (bama $+n i \rightarrow$ bama:n) we should expect oblique cases to be added to the underlying form. But, as mentioned in 2.3.3, the final vowel of the stem
is here $-u$, in place of an expected $-i$. Thus we obtain bamanula 'person-gen-loc', bunanunda 'woman-GEN-DAT', dadanuygu 'child-GEN-ERG', and so on:
(52) mundu mina yupu wiwin / gudaganda bimbinunda you-sa meat-abs that-abs give-imp dog-dat father-cen-dat You give that meat to father's dog!
The occurrence of $-u$ - in the inflection of just those genitives whose stem is reduced in the absolutive suggests an underlying form $-n u$ in this case. It may be that genitive was once *- $n u$ on all stems, and the final vowel was fronted ( ${ }^{*} u>i$ ) when it occurred word-finally. Original $-u$ is preserved in forms like bimbinunda since the vowel of the genitive affix in this word will never appear word-finally. But any stem which has surface $-n i$ in the absolutive has generalised this to all occurrences of the genitive stem (*gunduynu becomes gunduyni, and by analogy *gunduynula becomes gunduynila).

This hypothesis can be supported on two grounds. Firstly, we noted (2.1.3) that the later a vowel comes in a word, the less chance there is that it will be $-u$. There is thus some phonotactic pressure for a change of the type $u>i$ in a suffix. (There appears to be a general tendency for Australian languages to eliminate late or final - $u$ 's. For instance, the canonical forms of the singular pronouns have in many languages changed from first person * $y a d u$ to yada and from second person $\boldsymbol{p u n d u}$ or pindu to nunda or ginda $^{2}$. In addition, past tense $-\mu u$ has become $-n a$ over a wide area of Australia. And while $-u$ - occurs freely in the first syllable of verbs, most languages have few or no verb roots whose second or third vowel is $-u$-; see the data on Yidin verbs in 2.1. 3 and 3.8.3.) Yidin does have a number of other affixes ending in $-u$-ergative $-\eta g u \sim-d u$, purposive $-g u$, ablative $-m u$ and past tense $-n u-$ and there is no evidence that the final vowel here is in the process of change. But any change must have some beginning - if our hypothesis is true then it would appear that a general diffusional tendency to eliminate final $-u$ 's (which has affected pronouns in Dyirbal, and pronouns and past tense in languages further south) may in Yidin be beginning with the fronting of the genitive vowel.

Secondly, we can note that Yidin's close genetic relative Dya:bugay has identical or almost identical forms for almost all nominal affixes (ergative $-\eta g u \sim-d u$, locative $-l a \sim-: \sim-d a$, dative $-\eta u n d a \sim-: n d a$, comitative $-d i \sim-i r$, and so on). Genitive is in Dya:bugay -yun following a consonant and $-: n$ after a vowel. The changes ${ }^{*}-\eta u n>{ }^{*}-\eta u>{ }^{*}-n u$ form a natural chain of simplification.
Further discussion of this point is in 3.6.4.
A root ending in a long vowel (2.3.8) will retain this length before all inflectional and derivational affixes. Compare genitive-plus-locative
bamanula, from bama 'person', with durgu:nula, from durgu: 'mopoke owl"
(53) yayu mayga: dana:n durgu:nula I stood on the mopoke's nest

Genitive-plus-absolutive forms are of course phonologically parallel: bama:n and durgu:n.

There is one irregularity in the declension of genitive stems - genitive-plus-causal is always -nim, whatever the syllabicity of the stem to which it is added. Stems ending in a nasal trigger the normal intermorphemic boundary changes (as described above):

|  | genitive-plus- |  |
| :--- | :--- | :--- |
| root | causal |  |
| bama | bama:nim | 'person' |
| mudam | muda:m(n)im | 'mother' |
| mugij | mugi:nim | 'mouse' |
| guriliy | gurilinim | 'wallaby sp.' |
| gudaga | gudaganim | 'dog' |
| yaraman | yaramanim | 'horse' |
| wagal | waga:lnim | 'wife' |
| birgalA | birgalanim | 'night hawk' |

We would have predicted causal to alternate between $-m$ and $-m u$, depending on syllabicity (just as ergative is $-\eta g u \sim-: \eta$ with a genitive stem). But here we get simply $-m$, with no alternation. (The $-m$ allomorph of causal/ablative also occurs in the causal subordinate verb inflection, whatever the syllabicity - 3.8.4.)

In texts -nim is used for genitive-plus-causal and also genitive-plus-ablative. The writer was able to elicit a regular $-n u+m u$ for genitive-plus-ablative:
(54) yayu galiy bimbinumu I'm going from father's [place]

The informant gave, in contrast with (54):
(55) yayu galiy bimbi:nim I'm going from father

But -numu has never been heard in texts, and -nim appears normally to be preferred for genitive-plus-ablative function, in addition to genitive-pluscausal.

Note that -nim occurs even with even-syllabled vowel-final stems, which we suggested above should have underlying genitive *-nu. Genitive-plus-causal/ ablative may have developed from $-n u \sim-n i$ followed by $-m u \sim-m$, but it now has a single form with NO allomorphic variants. It is in fact arguable whether it
can validly be separated into $-n i+m$ by synchronic morphological analysis; certainly -nim appears to be developing towards the point where it would have to be considered a separate case inflection in its own right (just as 'fear' -dida $\sim-y i d a$ has developed from comitative-plus-locative).
-nim can be used to indicate past possessor (in contrast to simple -ni, which indicates present ownership). See (259) below and:
(56) yayu mayi wunday dugal / bama:nim

I-SA food-ABS stolen-ABS take-PRES person-GEN-ABL
I stole food from the people
Here bama:nim indicates that the food used to belong to the people (but now belongs to 'me', since I have stolen it). But there is also an ablative sense here, indicating that the food was taken from the people who used to own it.
-nim forms can have causal/ablative or perfective genitive function, or both - see $(669-72)$ in 4.4 .4 and (772-5) in 4.7 .2 . They can fulfil the same role as normal causal NPs qua subordinate clauses - 4.4.6.
3.3.4 Comitative -di $\sim$-yi. There is one other derivational affix which undergoes phonological reduction-comitative -di (following consonants) $\sim-y i$ (after vowels). This forms an adjectival stem which, like genitive, takes the full range of case inflections, agreeing with the head noun it qualifies. $-d i \sim-y i$ can mean 'with, accompanied by, by means of, having'; a full account of its semantic range is in 4.3.I.
-yi reduces, by Rule 2, when affixed to an even-syllabled root ending in a vowel. Examples of comitative on to stems of all phonological types:

|  | comitative-plus- |  |
| :--- | :--- | :--- |
| root | absolutive |  |
| bama | bama:y | 'person' |
| mugaqu | mugaruyi | 'fish net' |
| wayal | waya:ldi | 'boomerang' |
| bidir | bidi:rdi | 'loya cane sp.' |
| bagur | bagu:rdi | 'sword' |
| mudam | muda:mdi | 'mother' |
| wardan | warda:ndi | 'raft' |
| yidin | yidi:ndi | 'language name' |
| mugay | muga:ndi | 'grinding stone' |

In the case of a form ending in $-y$ the stem-final $-y$ must be deleted and $-n$-must be inserted before comitative. (The 'fear' inflection follows the same rule. Thus from root gunduy we get gundundida'for fear of the brown snake'.)

As already noted, Rule 3 ( $i: y \rightarrow i:$ ) leads to comitative-plus-absolutive falling together with locative for even-syllabled stems ending in $-i$. The only exceptions to this neutralisation are the roots with irregular locative. For instance, we get biwi:l locative and bizi: comitative-plus-absolutive.

A comitative stem inflects quite regularly. Forms which (by Rule 2) lose the final $-i$ in the absolutive case retain it before oblique inflections. For instance, from mina 'meat' we get comitative stem mina $+y i$ which in dative case becomes minayinda:
(57) ...dambu:l garba gadigadi: dananunda / minayinda
two-ABS behind children-ABS stand-subord meat-COMIT-DAT [Uncle cut the tree for grubs whilst] the two children stood behind [the tree waiting] for [uncle] with the meat (grubs)

The only affix which cannot follow comitative is 'fear' (this - formally, although not in terms of synchronic morphological analysis - includes the comitative affix).

Genitive can be followed by comitative. Even-syllabled stems ending in a vowel again have $-u$ - in the genitive affix:
(58) уиŋи dada gaday biba:y

THAT-S child-ABS come-PRES paper-COMIT-ABS
bunanuyi
woman-GEN-COMIT-ABS
That child is coming with the woman's paper (letter)
No example is known of genitive following comitative.
There is also a derivational affix -muday (3.3.6) which appears to have meaning and function identical to $-d i \sim-y i$; the two affixes seem always to be interchangeable, and are used as stylistic variants (3.1.3). The main difference is in fact phonological - muday is non-cohering and undergoes no reduction.

It seems likely that $-d i \sim-y i$ is a reflex of ${ }^{*}-\operatorname{dir}(i) \sim-\operatorname{dir}(i)$. The form -dir $\sim$-dir is encountered in some nearby languages (e.g. Guugu-Yimidhir). Note that Dya:bugay has $-d i$ following a consonant and $-: r$ after a vowel; it is likely that both allomorphs derive from *-dir (compare with genitive $-\eta u n / \mathrm{C}-\sim-: n / \mathrm{V}-$, dative $-\eta u n d a / \mathrm{C}-\sim-: n d a / \mathrm{V}-$ ).

Many Australian languages show a verbal derivational affix, also going back to *-diri ~ -diri (-:di-n in Yidin probably belongs to this set). There may possibly be some diachronic deep connection with the nominal comitative (see Dixon 1976a), or else the similarity could be entirely coincidental.

Note that Rule 2 could not have applied if allomorph -di occurred after a vowel (since a word cannot end in $-d$ ). The reduction of $-d i$ to $-y i$ may have been partly motivated by the 'even-syllabled word' target. And once -di had reduced to $-y i$ following an even-syllabled stem ending in a vowel, it was surely reasonable for $-y i$ to be generalised on to all vowel-final stems.
3.3.5 Review of monosyllabic nominal affixes. We have now discussed all nominal affixes which show allomorphic variants and involve special morpheme-boundary processes. (There are two further cohering affixes, $-b a$ and $-b i$; but these show no allomorphic or morphophonological complexities and are deferred until 3.3.6.)

Table 3.1 reviews the forms which the five oblique cases, and genitive and comitative derivational affixes, assume with every type of nominal stem. Stems are classified by their last segment - vindicates any final vowel ( $a, i$ or $u$ ) and $V$ any morphophoneme ( $A, I$ or $U$ ); vowel length is always shown by ' $\because$ '. A dash ' - ' indicates the part of the root preceding the final segment, which remains constant under all inflectional and derivational processes.

Absolutive is not shown in the table. It is identical to the stem (with vowel length being inserted by Rule I in appropriate cases) except for morphophoneme-final roots (2.3.4). Irregular ergative, locatives and datives were listed on page 131.

We can also summarise the odd morphophonological processes which apply at the boundary between a nominal stem and a monosyllabic affix:
(a) assimilation - ergative $-d u$ and locative - $d a$ are assimilated in place of articulation to a preceding nasal or $-y$.
(b) $-n$ - insertion. Between a stem-final $-y$ and ergative $-d u$, locative $-d a$ or comitative $-d i$, the nasal $-n$ - may be inserted and/or stem-final $-y$ may be dropped. The possibilities vary from affix to affix:

|  | ergative | locative | comitative |
| :--- | :---: | :--- | :---: |
|  | $-d u$ | $-d a$ | $-d i$ |
| $-\boldsymbol{n}$ - insertion | optional | obligatory | obligatory |
| $-y$ dropping | optional | optional | obligatory |

Table 3.1 Summary of case inflections, genitive and comitative stems

|  | ergative | locative | dative | purposive | ablative | genitive stem | comita sten |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $-v: \eta$ | -v: | -v:nda | -v:gu | -vm | -vnu- | $-v y i \dagger$ |
|  | $-v: \eta$ | -v: | -v:nda | -v:gu | -v:m | -v:nu- | -v:yi |
|  | -vpgu <br> -Vpgu | $\begin{aligned} & -v l a \\ & -V l a \end{aligned}$ | -vnda <br> -Vnda | $\begin{aligned} & -v g u \\ & -V g u \end{aligned}$ | -vmu <br> -Vmu | $\begin{aligned} & -v n i- \\ & -V n i- \end{aligned}$ | $\begin{aligned} & -v y i \\ & -V y i \end{aligned}$ |
|  | -:mbu <br> - :ndu <br> - :ndu | -: $m b a$ <br> -:nda <br> - $\quad$ nda | -: $m d a$ <br> -. $n d a$ <br> -:nda | $\begin{aligned} & \text { - :mgu } \\ & -: n g u \\ & -: n g u \end{aligned}$ | -:mu <br> -:nmu <br> -: $: n m u$ | $\begin{aligned} & -m(n) i- \\ & -n i- \\ & -n i- \end{aligned}$ | $-m d i$ <br> $-n d i$ <br> $-n d i$ |
|  | $-m b u$ <br> $-n d u$ <br> $-n d u$ | $-m b a$ -nda $-n d a$ | $-m d a$ <br> -nda <br> $-n d a$ | $\begin{aligned} & -m g u \\ & -n g u \\ & -n g u \end{aligned}$ | -mu <br> $-n m u$ <br> $-n u^{*}$ | $\begin{aligned} & -m n i- \\ & -n i- \\ & -n i- \end{aligned}$ | $-m d i$ <br> -ndi <br> $-n d i$ |
|  | -:ldu <br> -:du <br> -:du | $\begin{aligned} & \text {-:lda } \\ & -: d a \\ & -: d a \end{aligned}$ | -: $\ln d a$ <br> - :rnda <br> $-: \tau n d a$ | $\begin{aligned} & -: \lg u \\ & -: r g u \\ & -: r g u \end{aligned}$ | -: $l m u$ <br> -:rmu <br> $-: \tau m u$ | $\begin{aligned} & -l n i- \\ & -r n i- \\ & -r n i- \end{aligned}$ | -ldi $-r d i$ -rdi |
|  | $-l d u$ <br> $-(r) d u$ <br> $-(r) d u$ | $-l d a$ <br> -(r)da <br> $-(r) d a$ | $-\ln d a$ <br> -rnda <br> $-r n d a$ | $\begin{aligned} & -\lg u \\ & -r g u \\ & -r g u \end{aligned}$ | $-l m u$ <br> -rmu <br> $-r m u$ | $\begin{aligned} & -\ln i- \\ & -r n i- \\ & -r n i- \end{aligned}$ | -ldi <br> $-r d i-$ <br> $-r d i$ |
| labled abled | $\begin{aligned} & -(y)(n) d u \\ & -(y)(n) d u \end{aligned}$ | -(y) $n d a$ <br> $-(y) n d a$ | -ynda <br> -nda | $-y g u$ $-y g u$ | $-y m u$ $-у m u$ | $\begin{aligned} & -y n i- \\ & -y n i- \end{aligned}$ | -ndi |

Length has been added (by Rule 1) to case forms in the first five columns.

* $-\boldsymbol{j u} \sim \sim-y m u \dagger \quad \dagger$ Rule 3 applies when $y$ is preceded by $i(2.3 .7)$.
(c) nasal dropping
(i) stem-final $-\mu$ drops before dative $-n d a$ and genitive $-n i$ :

$$
-n+-n d a \rightarrow-n d a \quad-n+-n i \rightarrow-n i
$$

(ii) affix-initial $-n$ - drops after final $-m$
obligatorily from dative $-n d a \quad-m+-n d a \rightarrow-m d a$
optionally from genitive $-n i \quad-m+-n i \rightarrow-m(n) i$
( $-n$ - usually drops in the tablelands dialect; and it can drop from an even-syllabled stem in the coastal dialect).
(d) syllabicity-conditioned alternation
(i) final $-y$ drops from an odd-syllabled stem before dative $-n d a$.
(ii) when ablative - $m u$ is affixed to an odd-syllabled stem ending in $-n$ we get $-n+-m u \rightarrow$ either $-n u$ or $-y m u$.
(iii) a stem-final rhotic MUST drop from an even-syllabled stem, and may drop from an odd-syllabled stem, before ergative $-d u$ and locative -da.
See also (c-ii).
(e) identical consonant deletion
(i) ablative $-m+-m u \rightarrow-m u$
(ii) genitive $-n+-n i \rightarrow-n i$

In many Australian languages, allomorphs of the locative case exactly parallel those of ergative, except for the final vowel. Yidin shows two further differences (leaving aside irregular words, and phonological reductions):
(i) after a vowel, the canonical form of ergative is $-\eta g u$ but of locative is -la;
(ii) $-n$ is optionally inserted after a stem-final $-y$ when ergative follows, obligatorily when locative follows.
3.3.6 Other derivational affixes. There are eight other affixes which like genitive and comitative - derive a nominal stem from a nominal root. All stems derived by these affixes can take the full range of nominal inflections.
[r] -muday, comitative 'with, accompanied by, by means of, having'. This affix is interchangeable with the monosyllable cohering comitative $-d i \sim-y i$ (3.3.4); the two comitative suffixes can alternate, simply for stylistic felicity (3.1.3). A full discussion of the meaning and syntactic possibilities of comitatives is in 4.3.1.
[2] -gimbal, privative 'without'. This affix marks the lack of something:
(59) yayu wayalgimbal I've no boomerangs

A -gimbal form can restrict the reference of a noun:
(60) yanan bama:l wagalgimba:ldu bunda:n

I-sa person-erg wife-Priv-ERG hit-past
The person [man] who has no wives hit me
or simply act as a non-restrictive elaboration:
(6x) bama ninajina:n gudar / burigimbal person-abs sit-REDUP-PAST cold-ABS fire-PRIV-ABS The people just sat around cold, with no fire
(62) yayu guman galiy bamagimbal I-SA one-ABS go-PRES person-PRIV-ABS I'm going alone, without company

One example involves -gimbal suffixed to wugu 'work', modifying a pronoun:
(63) nundu dugu:da wunawunay muguy / wugugimbal you-SA house-LOC lie-REDUP-PRES all the time work-PRIV-ABS You just lie around the house all the time, never working

A -gimbal form can also qualify an inanimate noun:
(64) dunda:lay ganagayuy duŋga:n / bamagimbal
car-ABS SELF run-PAST person-PRIV-ABS
The car ran away by itself, with no one [inside it]
or describe some characteristics of a place:
(65) yandi yingu nina:n yuru:n / gadagimba:lda we-SA here-LOC sit-PAST long ago white man-PRIV-LOC
We all lived here a long time ago, when there were no white men
Here gadagimba:lda qualifies locative yingu' at this [place when it was] without white men, a long time ago'.

The semantic range of privative parallels that of comitative fairly well; there is further discussion in 4.3.1.
[3] -damba 'with a lot of -'. This suffix can not normally be used with an adjective. And it can only be used with a noun if its referent is, in the context, unpleasant and undesirable - a lot of noise, too much whistling, an uncomfortable number of bones in a fish, or
(66) yayu muygundamba I have a lot of sores [on my body]
(67) yinu bulmba dalgadamba

THIS-ABS place-ABS snail-LOT OF-ABS
There are lots of snails [crawling around] in this place
(68) murirdamba:y yandi:n bada:l
mosquito-LOT OF-ERG we-sA bite-Past
Lots of mosquitoes bit us
We have already noted that Yidin is radically different from Dyirbal in lexicon, grammar and phonology. Few affixes are cognate. But it is remarkable on how many points the two languages show semantic similarity. For instance, Yidin -damba is extraordinarily close to -ginay, in Dyirbal (Dixon 1972: 223-4).
[4]-bara 'something or someone pertaining to or belonging to-'. This affix is most frequently used to refer to the origin or habitat of some person or thing e.g. daruwaybara 'person from the island'; -bara is always a component of local group names (i.2). A -bara form is often used rather like a name, to refer to a person or group of people. It can simply be affixed to a deictic in locative case (3.7.2) - see (190) and
(69) yuŋgubara / dagul galiŋ
there-LOC-bara-ABS three-ABS go-PRES
The three people from that place are going
The term dalubara - based on dalu 'forehead' - was used to describe an ornament of little diamond-shaped shells (dilyar) 'sewn into a rope' and worn on the forehead.
-bara has been encountered suffixed to a genitive stem:
(70) bama gaya:lbi galiy / guwal wana /
person-abs different-ANOTHER go-PRES name-ABS who-s
gurbi gada:n muyubara gadigadi:nbara
PERHAPS come-PaST stranger-ABS long way-REDUP-GEN-
bara-ABS
Another person, of a different sort, is going. What is his name? He may be a stranger [who has come] from a long way away.
Here genitive and -bara reinforce each other '[someone] BELONGING to [a place/people] a long way away'.

We can, of course, also obtain genitive on to a -bara stem:
(71) yiŋu guwa gambi:rbara:n buүi gubay THIS-so west tablelands-bara-GEN-ABS fire-ABS burn-PRES This fire belonging to the people from the tablelands is burning at the western [corner of the corroboree ground]
-bara typically occurs with yinarin 'this kind of thing' and yuyarin 'that kind of thing' (3.7.6), again reinforcing the meaning. Thus
(72) yandi:n garu dara:ldan dugur / we-GEN-ABS by-and-by erect-COMING-IMP house-ABS juŋa:rinbara jundu yara gurin dara:l THAT KIND-bara-ABS you-SA south good-ABS erect-PAST
[You] come and build a house for us, the same sort of good [house] as you built [to the] south [for yourself]
(73) bulmba: yina:rinbara yidi:ndi gurbi yabi
camp-LOC THIS SORT-bara-ABS name-ABS PERHAPS lots-ABS
yingu ninay
here-LOC sit-PRES
There are probably quite a lot of these sort of Yidindi [people] living in the camp here.

There are names for kinds of storm which involve -bara. Thus guzvabara (guva 'west') will normally imply a light thunderstorm with little rain, whereas nalabara refers to a storm that rises in the east during the wet season, and may work up to very heavy rainfall (nala is properly 'butt of a tree' but its meaning can be extended to refer to the lower part of the continental land mass i.e. the coast). Each of these names is a hyponym of generic digu:r 'thunderstorm' (6.2.1).
-bara occurs with exactly the same meaning and function in Dyirbal (Dixon 1972: 224-5) and in fact in most of the languages of Queensland, to the south and west of Yidin.
[5] - $b a$ 'one of a group of people'. Coordination of nouns (with human reference) within an NP is achieved through the addition of $-b a$ to each one. For instance:
(74) wagudaba buna:ba madi:nday

The man and the woman are walking uphill
The use of $-b a$ always implies an open conjunction; the most faithful translation of (74) would be 'a group of people - which includes the man
and the woman - are walking uphill'. -ba can be added to a third coordinand (although this is not common). Further discussion of this affix is in 3.6 .5 when we suggest that the second person non-singular pronoun nunduba may historically be based on $-b a$.
Consideration of the full range of examples suggests that the most accurate translation is 'one of a group'; under this interpretation (74) is literally 'the man - being one of a group - and the woman - being another of the group are walking uphill'.

An NP can involve just one noun with the suffix $-b a$ :
(75) yiyu buna:ba galiy

This woman and one (or more) other people (who are NOT women) are going

Compare with a similar sentence involving dambu:l 'two':
(76) yinu buna dambu:l galin These two women are going
-ba corresponds to two suffixes in Dyirbal - gara 'one of a pair' and -maygan 'one of a group larger than two' (Dixon 1972: 230-1). And note-qua nunduba in Yidin - that in Dyirbal third person dual and plural pronouns based on these affixes (balagara and balamangan) appear to be in the process of evolution (Dixon 1972: 51-3).
[6] -damu 'only, all'. The restrictive meaning 'only' is exemplified by the following entreaty to a larrikin not to use the word 'cunt' in swearing:
(77) giyi nani:din muguy / bama:n

DON'T swear-:di-IMP all the time person-GEN-ABS
bunadamu:n $\quad$ jarubara
woman-only-GEN-ABS between legs-bara-ABS
Don't swear all the time! ['cunt'] belongs only to women, belongs to between their legs (i.e. the word should only be used to describe a part of female anatomy, not in cursing)

Other examples include:
(78) bama buriburidamu zuna:nbidi:n yabi person-abs old people-only-abs lie down-bidi-past lots-abs There were just lots of old people lying around [in the camp]
(79) dambulanda gilbi:l / dungudamu / mina yudu two-dat throw-Past head-only-abs meat-ABS NOT [Their uncle] only threw down the heads [of grubs] to the two [boys]; there was no meat on them

And see text 14.24 .
In some instances -damu appears to mean 'all and only' - see text 2.29 and:
(80) bunadamu:y mayi dula:linu mundi:may
woman-damu-ERG vegetable-ABS dig-GOING-PAST yam-ABS
All the women went to dig yams

Although their semantic extremes are far apart, it appears that -damu and -bi 'another' have some degree of overlap. The writer was told that they could, in some circumstances, be used as stylistic variants. Thus a reply to
(81) nundú/ yiŋu yabi bunadamu galiy

Hey! all (and only) these women are going!
might be
(82) fundú/ yiŋu buna:bi galiy

Yes, all the women are going
-damu also functions, with a slightly different meaning, as a postinflectional affix - 3.9.7.
[7] $-b i$ 'another'. Examples of the use of this affix are in text 14.20 , 30, 33. When used with a generic noun, such as bupa 'woman', $-b i$ can mean 'all' (literally 'one' and 'another' and 'another...'); it is in this sense that it can be used as a stylistic alternant of -damu, as in (81-2). Note also:
(83) yanan bunabingu yabi:y wawa:l

I-o woman-bi-ERG lots-ERG see-PAST
All the women saw me
Without yabi:y (83) could, in a suitable context, be taken to mean 'another woman saw me'.
-bi is typically used to refer to geographical features; thus, corresponding to jiya 'side of the hill' we get jiya:bi 'the other side of the hill'. Note also the roots dalabi 'on the other side (of a river)' (which may be historically related to the adjective dala 'shallow') and dilibugabi 'next day' (dili 'eye', buga 'night').
$-b i$ is often used with the quantifiers bagil, gayal 'another', as in (70); in this case root and affix semantically reinforce each other - see 6.2.2. $-b i$ is also attested on pronouns -3.6.2.

Dyirbal has $-b i$ as a post-inflectional affix, with the meaning 'too' (the nominal derivational affix -gabun in Dyirbal most nearly corresponds to Yidin -bi in meaning and function). Note also that there is a particle damu 'just' in Dyirbal which is semantically similar to the affix -damu in Yidin. (Dixon 1972: 268, 120.)
[8] mungal 'lots, all'. This affix appears to signify quantity. It has been encountered most frequently with wana 'who' in the idiom-like wanamuygal 'who are all those [people]?'. It can also occur with nouns, often in the response to a question that involved wanamuygal:
$\left\{\begin{array}{l}\mathrm{Q} \text { - bama wanamuygal } \\ \quad \text { Who are all [those] people ? }\end{array}\right.$
$\left\{\begin{array}{r}\mathrm{R}-\text { bama(mungal) yiyu yabi ninay } \\ \text { All these people are [just] sitting [here] }\end{array}\right.$

Informants would sometimes include and sometimes omit -mungal from the reply (but would never omit gabi). bama yinumungal ninay, in which -mungal is suffixed to the demonstrative, is also acceptable.

Another (non-elicited) example is:
(85) yiyu guman niban / bama:l budin / this-abs one-AbS stubborn-ABS person-ERG tell-pres
duga:lina burimuøgal / pudu gada:yal fetch-going-Purp fire-lots-abs not come-comit-pres
This [person sits] alone and stubborn. People ask [him] to fetch all the firewood, [but he] doesn't bring [it]
-mupgal can be followed by a case inflection:
(86) mina yuyu wiwin bamamuyga:lnda

Give that meat to all the people!
Its meaning appears to overlap with -damu and they can alternate, for discourse felicity. Thus a reply to ( 80 ) could be:
(87) yupudi wala bunamungal yabi ninay
that-abs-self finished woman-lots-abs lots-abs sit-pres
It's alright, the women've finished and [they're now] all sitting down [back at the camp]
(The idiom yupudi wala is discussed in 3.9.2 and 4.1o.)
Each nominal word must involve a root and a case ending (the most common case is absolutive, which has zero realisation). Between root and inflection we can have any of the derivational affixes described in this section, or comitative $-d i \sim-y i$ or genitive $-n i$.

Genitive, comitative and privative can mark a complete NP - every word in the NP will take the derivational affix. In such cases the complete NP functions very much like an adjective:
(88) milba:n wagudani yinu guda:ga

This dog belongs to the clever man
(89) nayu galin gala:y dagu:ldi

I'm going out with three spears
(90) yuyu buna mayimuday jabimuday

That woman has a lot of vegetable food
(91) nayu minagimbal muyygingimbal

I've no cooked meat
In contrast, -damu is suffixed to only one word in an NP (to aNY word, it appears)-bupadamu mudam badiy or buja mudamdamu badiy are equally acceptable for 'only mother is crying', but *bunadamu mudamdamu is not.
-damba, -bara, -ba, -damu, -bi and -muygal normally occur with nouns, and derive a stem that functions as a noun.
A word can involve more than one nominal derivational affix - we have given examples of genitive + comitative, $-b a r a+$ genitive and genitive $+b a r a$. In fact, the only sequences that have been observed involve genitive and some other affix. Elicitation on this topic in Australian languages tends to be difficult and highly artificial; but it is likely that most combinations of these affixes would be semantically implausible - we could scarcely have -damba-plus-bara, or -bara-plus-bi, for instance. Where two derivational affixes can co-occur their orderings are normally semantically motivated (rather than simply following some distributional formula) - compare -bara + genitive with genitive-plusbara, and see Dixon 1972: 232-3.
3.3.7 Further nominal affixes. Nominal derivational affixes (3.3.6) can be distinguished from post-inflectional affixes (3.9) on the following grounds:
(i) derivational affixes precede case inflections, post-inflectional affixes follow them;
(ii) nominal affixes only occur with nominal stems, whereas postinflectional affixes can be attached to a word belonging to any part of speech.

Note however that all nominal affixes occur most frequently in NPs that are in the (unmarked) S or O functions, with zero case inflection. And some post-inflectional affixes occur predominantly on nominal words. As a result it can be difficult to determine the type of certain uncommon affixes.

It is in most cases possible to resolve any uncertainty by elicitation (although this does not always give straightforward results - for instance -damu appears to function both as a nominal derivational affix and as a post-inflectional form).

There are four affixes whose grammatical status is still unclear to the writer. Since their major occurrences are with nominal roots it seemed most appropriate to discuss them here.
[1] -na.
Many Australian languages have an accusative suffix, $-n a$, marking transitive object ( $O$ ) function on pronouns and proper names. Sometimes the use of this affix can be extended to nouns with human reference, or even to any noun at all (Dixon 1970c surveys the occurrence of $-n a$ in a fair sample of languages). Yidin pronouns and deictics mark $O$ function by the affix $-\mu \sim-: n$ (note that with these word classes we never encounter the unreduced form $-n a$ ) - 3.6.2-3, 3.7.2-3.

There is in Yidin an affix -na that occurs with nominals. Of the nine occurrences in texts from the coastal dialect (told by Dick Moses) all but one were on a noun or nominal modifier in O function. Four were proper names - for instance:
(92) [gindadangu] bangilanna bada:r
[The cassowary, a storytime 'hero'] left Bangilan there three were kinship terms:
(93) garu dudu:mpa budi:n

Soon [he] told his aunt
(94) yali galya:n yaymi:lna

We should ask uncle
and one was a temporal word that could in this instance be taken as qualifying a noun in $O$ function (text 2.57).

It appears from these examples that $-n a$ is an accusative case inflection in Yidin; it coheres, and reduces by Rule 2. (And there is, in one case, morphophonological deletion of stem-final -y-bibiyuwu:na 'Bibi-yuwuy-O' in (248) below). There are many O NPs in coastal texts
involving proper names or kin terms that show no inflection, suggesting that the use of $-\mu a$ is optional. Overall, it seems that $-n a$ is Preferred with proper names, and that it is possible with kinship terms, in $\mathbf{O}$ function.

An affix - $n a$ occurs in tablelands texts with what appears to be simple emphatic effect. Thus, yáyuná 'it's me alright' (text 14.13) and bulmbabinala (place-ANOTHER-n $a$-NOw) '(at) another place now' (text 14.33 see also 14.30 ). This is not reduced by Rule 2 (and appears not to cohere). In elicitation of $-n a$ forms Dick Moses was perfectly happy with this usage:

## (95) yayuna magi:l I Did climb up

And there was one instance in a text told in the coastal dialect:

## (96) yupuna gurin That'll be good

We could distinguish two quite different affixes here - accusative case -na (in the coastal dialect) and a post-inflectional or derivational affix $-n a$ (in both dialects). But it is not easy to draw the line between the two; informants gave no hint that there were separate affixes involved (as has consistently happened in other cases where the writer has investigated homophonous suffixes). It could be that -na can function both as an indicator of grammatical function and as a semantic 'topic marker'.

The exact status of $-n a$ must for the time being be left open, in the absence of sufficient data on which to base a firm judgement.
[2] -gara:
There is an affix -gaya: that appears often to be interchangeable with the causal (but not the ablative) sense of the case inflection $-m u \sim-m$. Thus:
(97) mandam wunay muŋgungara:
[This] mark lies [on my skin] as the result of a sore
(98) yinu muøgun galagara:

This sore is from a spear [wound]
-gara: can fulfil the same role as causal $-m u \sim-m$ qua a subordinate clause (see 4.4.6):
(99) yayu dubu:rdi $\left\{\begin{array}{l}\text { minagara: } \\ \text { minam }\end{array}\right\}$ buga:dinum

I'm full up from eating meat.

There is one textual occurrence of -gara: following a verb:
(100) yiju bulmba banibani:digara:

This place [is called Bandi] because of [all the people] grumbing [there]

Note that it did not prove possible to elicit further examples of verb+ gara:- -gara: has also been given following the genitive-plus-ablative -nim-dimbaralnimgara: ' [I'm wet] from the cyclone'.

There are insufficient data to make a definite decision about the grammatical status of -gaqa:. In most occurrences it appears to be a nominal affix (maybe even a case inflection) but in others it has the characteristics of a post-inflectional affix.
-gala: appears not to occur - as a productive suffix - in the tablelands dialect. Stories told by tablelands informants mention two place names involving this form (wayalgaza: and dubugara:) but these are both in coastal territory.
[3] -dulu:.
This affix carries a durative meaning. It can occur on past time words, and extends the point of reference further out from the present (3.5). Only one occurrence of $-d u l u$ : with a nominal has been noted in texts:

## (101) yiyu gurindulu: wunanunda

This [woman was watched] lying here alright, for a long period
Here the addition of -dulu: to the adjective gurin indicates that the woman was alright for a period of time (while she was lying convalescing, after having been rescued from the claws of an alligator).

It appears that -dulu: can be added to an adjective if it is plausible that the state referred to could have extended for a fair time. For instance:
(102) yivu mayi nubadulu:/ guri gubay

This fruit is getting ripe, let it continue to be ripened [by the sun]
The informant conveyed the idea of duration by often including 'while' in the English translation he offered. Thus yipu buna gudaldulu: (gudal 'pregnant') was explained 'this woman, while she's in the family way'.
$-d u l u$ : has not been heard used spontaneously with a non-zero case inflection. Attempts to elicit it with a case suggested that -dulu: should perhaps be regarded as a post-inflectional affix ( $-d u l u$ : was obtained tacked on to yala:ldu 'big-Erg'). However, the data are at present insufficient to justify a firm decision.
[4] -mari 'alongside, along, through'.
This affix can either follow the locative case on a nominal, or it can go directly on to the root (and is not then followed by any further affix). Thus we can have:
(103) yuyu $\left\{\begin{array}{l}\text { gaba:ndamari } \\ \text { gabaymari }\end{array}\right\}$ galin

He is going along by the side of the road
In elicitation, informants preferred -mari directly on to a root (but the root + locative + mari alternative is fairly well attested in texts).

Compare (103) with:
(104) yüu gaba:nda galin $\quad \mathrm{He}$ is going along on the road
(104) indicates that the subject is walking on the road whereas (103) is likely to imply that he is walking along in the bush, parallel to and near to the road.
A sentence like

## (105) yuyu galiy bulgu:rmari

could mean either 'he's going through the swamp' or 'he's walking along by the side of the swamp'.

Further examples of -mari are in text 14 , line 20 - 'jump through the trees' - and line 9 - 'hit him across the back of the neck'.
Note also:

## (106) bana dugga:na munum dubu:rmul wapi:mari water-ABS run-PURP inside-ABL stomach-ABL mouth-LoCTHROUGH

[A woman who has been immersed in water is hung upside down and her stomach massaged] so that water will run out from the inside of [her] stomach, through [her] mouth

It is possible that-mari, currently a post-inflectional affix, is developing in the direction of becoming a distinct case inflection on nouns. But the data are really too slim to make this more than a guess.
3.3.8 Locational words as nominal affixes. Yidin has a fairly rich set of locational qualifiers (3.4). Just two of these -

$$
\begin{aligned}
& \text { waygi 'up' } \\
& \text { and dilggu 'down' }
\end{aligned}
$$

can occur, not only as free forms, but also as suffixes to nouns. See (677) and:
(107) nundu banbidjlygu ninan
you-SA eyebrow-Down sit-IMP
You sit with your eyes down! (Just after initiation, a young man is being warned not to look around the camp)
(108) nundu diliwaygi bana: duwin
you-sA eye-UP water-Loc swim-IMP
You bathe in the water with your eyes upwards! (Sometime later the initiate is taken to the river to wash the pus off his cicatrice wounds and warned not to look down in the water for fear of seeing and angering the rainbow-serpent)
(109) dina milma / garu dungudilygu dunda:na
foot-ABS tie-IMP by-and-by head-DOWN hang down-PURP
[To expel water from the stomach of a woman who has been immersed in water, her rescuer tells people to:] 'Tie [her] feet [and hang them over a branch] so that [her] head will hang down [and the water can be massaged out of her stomach]'
-dilygu and -waygi can only be suffixed to nouns referring to some part of an object, and then indicate the orientation of that object. They occur most frequently with body-part terms, but can describe the orientation of any material object. In fact, the meanings of body-part terms are frequently extended to apply to parts of tools and weapons. For instance, dira 'tooth' can refer to the cutting edge of an axe:
(110) gana yayu gaya:r dara:l diradilygu

TRY I-sa axe-abs stand-Past point-DOWN
[Having accidentally cut my foot on an axe, next time] I tried to put the axe point down (i.e. embed the cutting edge in the ground)
and diba 'liver' describes the front of a shield:
(111) nundu bigu:n nambi/ dibadilygu
you-SA shield-abs hold-IMP front-DOWN
You hold the shield with its front downwards!
-dilygu and -waygi cannot be affixed to nouns referring to a complete object. When position rather than orientation is referred to, dilygu and wangi must be used as free forms:
(112) yayu bigu:n nambil bidi:yal waygi

I'm holding the shield up properly
and not *bigu:nwaygi; similarly:
(113) yayu wawa:l ginda:n/ waygi

I saw the moon high up [in the sky]
and not ${ }^{*}$ ginda:nwaygi. Similarly, -dilygu and -waygi cannot be suffixed to adjectives.
There is an idiom ganawangi 'belly up'; outside this, gana only occurs as a particle 'try' - 4.10 (and these may well be two distinct but homophonous morphemes). ganawaygi can be used to describe a person:
(114) yayu bana: walyga:ligu ganawaygi

I went to float in the water, belly up
or, say, a canoe:
(115) ginu munda:l/ ganawangi gilbi:l/ wuna:na
[They] pulled up the canoe, and chucked it down belly up, to lie [there until needed again]

The complement of ganawaygi is magudilygu, which involves the normal body-part noun magu 'chest'.

The morphological process of employing locational words as nominal affixes is extended, in two ways, in the tablelands dialect. Firstly, guwa 'west' and naga 'east' can operate as affixes, in addition to dilygu and waygi:
(116) daban wawa:l / yawu: wunapunda / dunguguwa eel-Abs see-past grass-loc lie-subord head-west
An eel was seen lying on the grass with its head pointing to the west Secondly, the four locational forms can also be affixed to nouns describing parts of the environment - dangil 'bank', gambil 'spur' and even bana 'water'. See (263) in 3.9.1 and:
(117) yayu gali:n muguyala gambilnaga

I kept on going all the time now, along an easterly spur
(118) yuygum gayu gali:nala bananaga

From there I now went east along a river
No instances of (non-zero) case inflections have been encountered on any forms involving -waygi, -dilygu, -guwa or -naga, in either dialect.
3.3.9 Nominal reduplication. Reduplication of nouns and adjectives involves the first two syllables of the root being repeated before it (2.3.5):

| root | reduplicated form |  |  |
| :--- | :--- | :--- | :--- |
| buna | 'woman' | bunabuna | 'women' |
| yalal | 'big' | yalalyalal | 'lots of big [ones]' |
| mulari | 'initiated man' | mulamulari | 'initiated men' |
| dimur | 'house' | dimudimur $U$ | 'houses' |
| gindalba | 'lizard sp.' | gindalgindalba | 'lizards' |

It seems that a syllable-final nasal which is homorganic with the following stop is not reduplicated. Thus galambara: 'march fly', galagalambara: (There are no roots with a cluster of three consonants between second and third vowel.) A syllable-final consonant can be reduplicated even in an inflected form where it is lost before the inflection: thus the reduplicated locative of dabir 'flat rock' is dabir$d a b i: d a$ 'on lots of flat rocks'. Reduplication is non-cohering - that is, the reduplicated portion forms a separate phonological word (shown by the stress marking in the last example).

A nominal in Yidin is not normally specified for number (it can refer to any number of objects, according to the context). Reduplication is used, quite sparingly, specially to mark plurality:
(119) bama:l yabuyaburuygu dudum yaymi:l person-ERG young girl-REDUP-ERG auntie-ABS ask-PAST Lots of young girls asked Auntie

Plurality can be emphasised by reduplication and also the insertion of gabi 'many':

> (120) gana yandi:nda yabi gilbi yalalyalal TRY we-DAT lots-ABS throw-IMP big-REDUP-ABS Try and throw us lots of big [grubs, uncle]!

Number adjectives can be reduplicated. For instance dambudambu:l will indicate 'lots of two's' (cf. 4.8.2):
(121) nundu:ba ninan dambudambu:l you all-SA sit-IMP two-REDUP-ABS You all sit down in pairs!

Note also:
(122) dalygan gada: $n$ dabudabu:

The Dyalngan bird is coming [flying] low over the ground (indicating that a cyclone is approaching)

In (122) the reduplicated dabudabu: stresses that the bird is flying low for a considerable distance over the ground ('lots of ground'), rather than swooping down and rising up again.

And see 3.8 .9 for the semantic contrast between nominal reduplication and verbal reduplication of a verbalised nominal.

Note that some nominal roots exist only in reduplicated form - thus darngidarygi 'old woman', munimuni 'ant (generic)', dawadawa 'scrub magpie', gudugudu 'rainbow', biliybiliy 'a small hickory tree', dibudibu 'fancying oneself to know more than one does' (there are no forms darggi, muni, dawa, gudu, biliy or dibu). Roots that are inherently reduplicated allow consonant clusters typical of intermorphemic juncture at the reduplication boundary (2.1.2).

### 3.4 Locational qualifiers

3-4.1 Case inflections. Most words referring to position and direction belong to a distinct part of speech (that we term 'locational qualifiers'). There are, however, some words describing position and rest which belong to the adjective class, and take normal nominal inflections. These two sets are contrasted in the remainder of this section.

Locational qualifiers occur only in local cases and take the following inflections:

$$
\begin{aligned}
& \text { locative - root only } \\
& \text { allative - root only, or root plus }-g u \\
& \text { ablative - root plus }-m u \sim-m
\end{aligned}
$$

Ablative is identical in form and function to the corresponding nominal case. Allative -gu is formally identical with the syntactic case purposive on nominals.

A locational qualifier typically occurs with a nominal, with which it will agree in case. For instance, in
(123) yayu dabu:lda yara galiy I'm going south along the beach
the noun dabul 'beach' is in nominal locative inflection ( $-d a$ ) agreeing with the locational qualifier nara 'south' (whose root form indicates locative function).

The two most frequent locational qualifiers are:
wangi 'up' dilygu 'down'

These items seldom take affixes, just the root being used for both locative and allative (the exact sense is selected by the verb). Allative forms waygi:gu and dilygu:gu have been encountered, but it is very much more common to encounter just waygi or dilygu used for allative (as well as locative). For instance, in text 2 dilyg $u$ has an allative sense in lines 109 and 112 , and a locative sense in lines 50,54 and 57 ; whereas waygi is used with allative meaning in line 38 and has a locative sense in line 37 .

Some other words in this class tend to use root only and root $+g u$ equally frequently for the allative. This is the case with:

$$
\begin{array}{ll}
\text { guygarI 'north' } & \text { naya 'south' } \\
\text { guwa 'west' } & \text { naga 'east' }
\end{array}
$$

For instance, in text 2 guyga: $\gamma$ is used as the allative in line 123 and guygafigu in line 115 . Note that there is no choice in the case of locative just the root must be used (thus *gungarila and * ${ }^{\text {gara }}$ :, with the nominal locative inflection, are impossible).

It is instructive to compare guygarI and gara with two other words for which informants gave exactly the same glosses:
dangir 'north' gunin 'south'

These inflect exactly like nominals and are probably best considered members of the adjective class. Thus locative/allative forms are daygi:da and guni:nda (see text 2, line 114); informants were unhappy about using daygi:ggu and guni:ngu (properly purposives) for the allative, and greatly preferred dapgi:da, guni:nda.

It appears that gungaqI and dangit (and naqa and gunin) are interchangeable in most contexts. Thus ' $I$ live in the north' can be rendered equally well either by
(124) yayu wunay guyga:r
or by
(125) yayu wunay daygi:da
(In the Dyalyuy avoidance style, a single form corresponds to gungal I and daygir, and another to yara and gunin-6.3.) But gungayI/daygir and garalgunin are undoubtedly not exact synonyms. One informant
remarked that gupin would be used to describe the southern corner of the corroboree ground (where a tribe come from yara 'the south' would camp). It is likely that the difference in meaning can largely be attributed to the distinct part-of-speech membership of these words.

It is worthwhile noting that Dick Moses told the writer that gunga:r/yaral guwalnaga were the 'easy way' of giving compass directions, whereas dangir and gunin were 'the hard way'. See also 4.8.1 and 6.3.

Locational qualifiers form ablatives in exactly the same way as nouns and adjectives - thus waygim, guygarimu, and so on (cf. daygi:rmu etc.). Certain nouns with strong locational reference may sometimes employ $-g u$ in an allative (in addition to the normal purposive) sense, in alternation with the regular locative/allative inflection (see, for instance, bulmba:gu 'to the camp' in line 35 and bulubagu 'to the fighting ground' in line 78 of text 2). Typically, allative $-g u$ is used on a noun when it co-occurs with a locational qualifier that has allative -gu inflection; thus:
(126) yayu gali:jala bulmba:gu guwa:gu

I then went to the camp in the west.
This tendency appears to be due to analogic pressure for identical case markings to be used with locational qualifiers and with nominals having locational reference, when these co-occur in a sentence and 'agree'. (It undoubtedly involves generalisation from the identical ablatives.)

We can also compare munu 'inside' with magay 'outside'. munu is a straightforward locational qualifier. It normally occurs with a noun (describing the enclosure which something is inside of) that is in locative case:
(127) bana munu diwi:nda There is water in the Diwiy tree (128) garu yandi badi: munu bilan Soon, we must all get in the boat!

In contrast, magal 'outside' functions as an adjective and takes normal nominal inflections. Compare:
(129) yayu wunay munu dimurula I'm sleeping in the hut with
(130) yayu wounay maga:da I'm sleeping outside

Note that munu usually occurs with a noun in locative case whereas magar will normally occur alone; munu describes something as being nside some enclos ure (and it is natural to specify the enclosure) but
magar simply states 'outside ANY enclosure' (and it would not be appropriate to include a noun here). It may be this property which at least partly determines the class membership of these two words (and ensures that magay takes a non-zero locative inflection whereas munu doesn't).

There are a number of locational qualifiers which behave like munu in normally occurring with a noun in locative or dative case (while not, of course, showing any inflection themselves). For instance, naru 'on top of' in ( $40-1$ ), (50) and:


Don't you walk under [that coconut] tree, a nut might fall on your head (and hurt you)
or biri 'close up' in:
(133) jundu juŋgu ninan biri gudaganda you-SA there-LOC sit-IMP close-LOC dog-DAT
You sit down there close to the dog!
(The word order can be varied in all of these examples - thus naru could occur next to gaparanda in (131) or gana:yir and dugi:l could be separated in (132).)

It could be suggested, from these examples, that munu, naru, ganayir and biri are prepositions which govern the dative or locative case (see 3.I.2 and 4.I. 8 for the factors motivating the choice between dative and locative). However, these words are morphologically identical to guygar $I$, waygi and so on, for which a 'preposition' interpretation would not be suitable. In terms of our overall description of Yidin it is most appropriate to consider (128), for instance, as involving a locational qualifier ( $m u n u$ ) and a noun ( $b a d i$ ) both in locative function. Compare with (IO6) in which both munu and the noun dubur 'stomach' are in ablative case and here both are marked by the same inflection, $-m u \sim-m$.

The point here is that while both naru and gungarl can occur either alone or with a noun in locative or allative inflection, naru is seldom encountered by itself whereas gungarI normally is. And while both naru and guygaf I can take ablative inflection, gungar $I$ occurs in this form far more frequently than naru.

These quantitative differences could in time develop into a qualitative distinction. If, say, munu, naru, ganayir and biri were to be used exclusively in root form (that is, if they were to drop the $-g u$ and $-m u \sim-m$ inflections) it surely would then be appropriate to regard them as prepositions. This interpretation would be reinforced if gungar $I$ and so on began to inflect like adjectives (following daygir).

This indicates one way in which fairly concrete (lexical) words could develop into (grammatical) prepositions; the prepositions would then be likely to extend themselves, and take on more abstract functions within the grammar.

The class of locational qualifiers is fairly small and could (like pronouns and deictics) be considered a 'closed system'. (Place names, for instance, must inflect like nominals.)

The full list of locational qualifiers known is:

| waygi 'up' | naru 'on top' | ganba 'a very long way' |
| :---: | :---: | :---: |
| dilygu 'down' | ganayir 'underneath' | gadi 'a long way' |
| guygarl 'north' | garba 'behind' | bidi '[at] near' |
| nara 'south' | munu 'inside' | biri '[at] very near' |
| guwa 'west' | murba 'under the water' | $y a l u: g a ~ '[m o t i o n ~ t o] ~ c l o s e ~ u p ' ~$ |
| naga 'east' | guya $\sim$ guyabay 'across (the river)' | gani 'way outside the camp' nambin 'belly down' |
|  | dalabi ' on the other side (of the river)' |  |
|  | gangu 'on the other side (of the mountain)' |  |

'In front' is dealt with by the particle ganangar - see 4.10.
Locational qualifiers commonly occur with the affix -bara (3.3.6); they reduplicate like nouns e.g. gungagujga:r. Locational qualifiers can be verbalised quite freely-4.8.r.
3.4.2 -ban. The affix -ban indicates that two individuals are in juxtaposition; the root to which -ban is affixed marks the positional relation between them. For instance:
(134) yandi wuna:n naru:ban We sleep on top of one another
-ban occurs with some (but not all) locational qualifiers. Another example is:

## (135) bama dambu:l danay garbagarba:ban

The two men are standing behind each other (i.e. back-to-back)
It cannot occur productively with nominals. There are, however, three idiom-like words involving -ban. The most frequent involves walmbir 'by the side of' (in fact it could also be said that walmbir occurs most frequently with -ban):
(136) yandi dambu:l ninay walmbi:rban

We two sit down side-by-side
(137) guga dambu:l dunday walmbi:rban dina:gu skin-AbS two-abs hang down-Pres by the side-ban foot-purp The two stirrups hang down either side [of a saddle] for feet [to be put into]
(guga 'skin, hide' is used for 'leather' and by extension for 'leather stirrups').
gulgagulgaban - derived from gulga 'short' - is an adjective describing something as being 'shared out, a piece to every person'; for instance, yuyu mina gulgagulga:ban 'that meat is all shared out [now]'.

The idiom-like word diliban - from dili 'eye' - indicates two people a child, and a close relation (parent, aunt, etc.) who is looking after it:
(138) ŋuøu bupa dambu:l danay/dili:ban

Those two females are standing there, an adult and a closely related child
3.4.3 da:-. There is a prefix $d a$ :- which occurs with the six locational qualifiers that refer to 'up/down' and compass directions. It appears to mean 'in a - direction' Thus:

| da:waygi 'upwards' | da:yaza 'southwards' |
| :--- | :--- |
| da:dilygu 'downwards' | da:guwa 'westwards' |
| da:guyga: $\boldsymbol{\gamma}$ 'northwards' | da:naga 'eastwards' |

Leaving aside noun incorporation (6.1.1) da:- is the only prefix in Yidin. It is non-cohering (and could perhaps be regarded as having underlying disyllabic form /dawa-/-2.4). No case inflections have been encountered on da:- forms.
da:- also occurs, optionally, with wurga-n 'yawn'. Thus, for 'I yawned' one can say either jayu wurga:n or nayu da:wurga: $n$.
3.4.4 Hierarchy of locational words. Yidin territory rises from the easterly seaboard to the high tableland in the west. Thus, if one is talking in terms of a distance of ten or twenty miles 'up' must be 'west' and 'down' must be 'east'. In such a context wayg $i$ is synonymous with guva and dilygu with naga. (This need not of course hold for shorter distances - 'west' could well be 'downhill' over an extent of a mile or so.)

There are four main pairs of words with locational reference:
A. wangi 'up', dilygu 'down'
B. guzva 'west', naga 'east'
C. guygayI 'north', yara 'south'
D. daygit 'northern', gunin 'southern'

Sets A and B have parallel reference, as do sets C and D (but, of course, the difference between A and B is situational whereas that between C and D is grammatical).

We can recognise a hierarchy among these four pairs, on the following criteria:
(i) $\mathrm{A}, \mathrm{B}$ and C are locational qualifiers and have quite different caseforms from D , which are adjectives.
(ii) A can function as affixes to body-part nouns in the coastal dialect, whereas $\mathrm{B}, \mathrm{C}$ and D cannot - 3.3.8.
(iii) A and B can be affixes to body-part nouns in the tablelands dialect, but C and D can't be-3.3.8.
(iv) $\mathrm{A}, \mathrm{B}$ and C can take prefix da:-, whereas D cannot.
(v) The inchoative verbaliser -daga-n can be added to the root of $\mathrm{A}, \mathrm{B}$ and C , but only to the locative form of D (4.8.1).

It is clear that A are closest to being simply grammatical formatives (like, for instance, the systems of bound locational suffixes in Dyirbal Dixon 1972: 48, 262-4) and that, as one descends the hierarchy, the forms become increasingly 'lexical'.

### 3.5 Time qualifiers

We can distinguish two varieties of time qualifier: those referring to some point in time, normally measured from the origin 'today' (e.g. yurun $U$ ' many years ago', yada 'tomorrow'); and those referring to some
time-span, without reference to any specific origin (e.g. birgil 'for a short while', wayu 'for a long time').

The first kind, which we can call 'point time qualifiers', occur in the following forms:

$$
\begin{aligned}
& \text { simple root - 'at' a certain time } \\
& \text { root plus }-g u-\text { 'until' a certain time } \\
& \text { root plus }-m u \sim-m-\text { 'since' a certain time }
\end{aligned}
$$

The affixes $-g u$ and $-m u \sim-m$ are identical in form with nominal purposive and ablative (recurring also as allative and ablative markers with locational qualifiers).

Simple root forms can be exemplified by:
(139) yandi gada:n guygaguygam We came in the evening

See also the occurrences of the most common time qualifier garu 'later on, by-and-by' throughout texts 2,9 and 14 ; and yurun $U$ 'a long time ago' in (65) above.
'Until' and 'since' forms can be illustrated by:
(140) yandi mayi bada:r dilibugabigu

We left the fruit [growing on the tree] until the next day [when we'd go and pick it]
(141) nundu:ba yada:gu wamba:din

You wait until tomorrow!
(142) yayu wuna:n guyga:mu muguy

I've been asleep all the time since yesterday
$-g u$ can also have purposive sense when suffixed to a time word e.g. bama yanda budi:dinu yada:gu' the person told me to [do something] tomorrow'.

It appears that $-g u$ can only occur on time words with future reference, and $-m u \sim-m$ only on those that refer to the past (sentences involving ideas like 'until yesterday' have not been obtained).

The second type of time qualifier, referring to 'duration' (examples are in text 2 , lines 51 and 57 ) cannot occur with any case-type affix. Durational time qualifiers thus have no morphological similarity with point time words, and are included in the same word class on purely semantic grounds.

The suffixes -(a)m and -(a)may - which derive durational and point
time qualifiers, respectively, from number adjectives - are discussed in 3.7.8.

In 3.3 .7 we mentioned the durational affix -dulu:. Some time qualifiers in the tablelands dialect involve this form-bayudulu: 'a few months ago' and yuridulu: 'a few days ago'. There are no forms bayu or yuri; but note puril 'just now'. Although bapudulu: and puridulu: cannot be synchronically analysed, it is likely that they are fossilised forms which originally involved -dulu: as a productive affix.
-dulu: can be suffixed to some (point) time words in the tablelands dialect $y u r u: n$ 'a long time ago' and $y u r u: n d u l u$ : 'a very long time ago'.

Time qualifiers (at least those of the durative variety) reduplicate like nominals e.g. muguymuguyala 'for good now' from muguy 'all the time'.

### 3.6 Pronouns

3.6.I Reference. The class of (first and second person) pronouns has just five members. Initial elicitation suggested the following referential descriptions (citing nominative forms):
FIRST PERSON
singular - $\eta a y u$
dual - $y$ ali
plural - yajdi

SECOND PERSON singular - nundu
non-singular - nundu:ba
plural - yandi
(We use 'plural' for reference to three or more, and 'non-singular' for two or more.)

From this it would appear that the distinction between dual and plural is made in the first, but not in the second person.

The 'first person orientation' of Yidin (3.I.4) makes for the very frequent occurrence of pronouns in texts. But they are not all equally frequent - the first nine texts collected showed the following instances:

```
yayu forms-255 nundu forms-44
yali forms - \ mundu:ba forms - 18
```

nandi forms - $\mathbf{1 3} 1$

The main point to note is that gali forms are seldom used. In fact, japdi is frequently used to refer to two people (one of whom is the speaker). Examination of the occurrences of gali is revealing; in line 3 of text 2 we find:
(143) gana yali gali:nal gana bulmba numbin | yandi TRY we two-SA go-PURP TRY camp-abs look for-IMP we-SA gana galin TRY go-IMP
We two should try to go. Let's try to look for a camping-site ! We must try to go!

Here $\eta$ gali is used in the first clause, identifying a set of just two people; later in the sentence (and throughout the rest of the text) yandi is used to refer to the two people. A similar situation prevails in text 15 (another story concerning two brothers) - yali appears twice (in the first clause and again half-way through the text) and gandi is used a dozen times, to refer to the pair.

We can conclude that gandi is in fact the unmarked non-singular first person form, exactly corresponding to second person nundu:ba; nali is a marked 'dual' form, making a further, optional distinction within nonsingular. That is, we have (using + for the marked and - for the unmarked member of an opposition):


Note that Dya:bugay has just four pronouns - singular and non-singular first person ( (axvu and yaydi) paralleling singular and non-singular second person ( $n$ ura and $n u r a m b a$ ).
yali is used particularly when it is desired to emphasise two people (as opposed to three, etc.). This marked use of yali is exemplified in line 26 of text 14. A man says to his son bulmba pali:nala 'the camp now belongs to just us two' emphasising that the original third member of the group, his brother, is now dead.

The use of yali for the first reference to a pair, and later employment of jandi, has some similarities to the use of generic/specific nouns in Yidin.

Thus, a man (or group of men) may be described by waguda 'man' at first mention, but later referred to simply by bama 'person'.

If a second person dual requires to be specifically indicated, the number adjective dambulA is simply included with nunduba, as in (225) below and text 2.22. And note that yandi dambu:l has also been attested, as an alternative to yali-see (136).

Metaphorical-type uses of singular pronoun forms were mentioned in 3.1.5.
3.6.2 Paradigm. Whereas nominals have one form for $S$ and $O$ functions (absolutive case) and another form (ergative) for A function, pronouns have a single form (nominative) for both 'subject' functions, S and A, and a further 'marked' (accusative) form for transitive object, O. Further discussion of these differences in syntactic marking is in 4.1.4.

Pronouns also have dative, purposive and causal forms, with exactly the same functions as the corresponding nominals. The full paradigm for pronominal cases (excepting 'fear') is in table 3.2.

All pronouns form genitive and comitative stems; these again function like the corresponding nominals. They are set out in table 3.3 together with the 'fear' inflection, which has formal as well as functional parallels with nominal 'fear', again involving the addition of -da to the comitative stem.

The genitive-plus-absolutive forms for the first person dual and nonsingular pronouns exactly follow the nominal model. The addition of $-n i$ to roots $\eta$ ali and yandi gives underlying yali $+n i$, yandi $i+n i$; Rules I and 2 then yield yali:n and yandi:n. The occurrence of $u$ (and not $i$ ) as the third vowel before oblique case inflections also parallels nominal genitives. Thus:
(144) bama $\quad$ najdinuøgu gudagaךgu bada:l
person-abs we-GEN-ERG dog-erg bite-Past
Our dog bit [that] person
The singular pronouns form idiosyncratic genitive-plus-absolutives; but before oblique cases there is again a third syllable $-n u-$. A case could be made out for yadin being derived from $\eta a d i+n i$, with length being lost from the predicted yadi:n; on this basis we would predict the occurring stem yadinu before oblique cases. For the second person singular, however, the oblique stem involves the addition of a complete

Table 3.2 Pronoun case paradigm

|  | NOM (SA) | ACC (o) | DATIVE | PURPOSIVE | Causal |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I sg | gayu | yanan | yadu:nda ${ }^{2}$ | nadu.ngu | nadi:nim |
|  |  |  | $\sim$ yanda |  |  |
| 1 du | yali | yali:n | nali:nda | yali:ngu | nali:nim |
| I non-sg | nandi | nandi:n | nandi:nda | yandi:ngu | nandi:nim |
| 2 sg | nundu | nunin | C nuni:nda ${ }^{1,2}$ | C nuni:ngu ${ }^{1}$ | nuni:nim |
|  |  |  | $\sim$ nunda <br> T nunu:nda | T $n$ unu:ngu |  |
| 2 non-sg | nundu:ba | nundu:ban | nundubanda | nundubangu | nundubanim |

NOTE I - the second person singular dative and purposive forms are nuni:nda and nuni:ngu in the coastal dialect, but nunu:nda and nunu:ngu in the tablelands dialect.
NOTE 2 - the first person singular dative appears to have the underlying form yadu:nda but can be shortened to yanda (yanda is in fact a little more frequent than $\eta a d u: n d a$; the two were judged equally acceptable by informants).

The second person singular dative normally has - in the coastal dialect the 'long' form nuni:nda (for instance, text 9, lines 3 and 22); but a shortened form nunda has been heard (as text 2 , lines 34 and ro5). In this case, however, informants were - in elicitation sessions - a little unhappy about the acceptability of $n u n d a$, and expressed a preference for nuni:nda.
syllable to the absolutive form. Examples of declension of singular genitives are:
(145) yabi dayga gambi: yadinula lots-abs hole-ABS clothes-LOC I-GEN-LOC [There are] lots of holes in my clothes
(146) nundu yuŋu wiwin waga:lnda nuninunda you-sa that-so give-IMP wife-dat you-GEN-DAT You give that to your wife!

No oblique forms of the 2 n -sg genitive have been observed, and attempts at elicitation on this point did not yield consistent results (see also 3.7.5).

A genitive of a genitive has been obtained: yiŋu guda:ga yadinuni waga:lni 'this dog belongs to my wife'.

Comitative appears to involve the regular suffixation of -ndi to the nominative form except for second person singular where $-n d i$ is added

## Table 3.3 Genitive and comitative forms of pronouns

|  | genitive + absolutive | genitive <br> stem for <br> oblique <br> cases | comitative stem | fear case inflection |
| :---: | :---: | :---: | :---: | :---: |
| I sg | nadin | nadinu- | nadundi- | jadundida |
| I du | nali:n | nalinu- | nalindi- | yalindida |
| I non-sg | nandi:n | nandinu- | yandindi- | napdindida |
| 2 sg | nuni | yuninu- | nunindi- | nunindida |
|  | nundu:ban | ? | nundubandi- | nundubandi:da |

to the genitive-plus-absolutive form. Pronominal comitatives decline quite regularly; for instance
(147) buna bama:l yulbamaja:l yadundingu woman-abs person-erg sneak up-COMIT-PaST I-COMIT-ERG 'The person who had me with him sneaked up on the woman

There do not appear to be any local case forms of pronouns (but see 4.i.8). We do not even find the normal ablative/causal inflection $-m u \sim-m$; causal case on pronouns is handled by the -nim alternant (that appears to be historically derived from genitive-plus-ablative 3.3.3).

It could be argued, however, that the locative-allative form of pronouns would be likely to be based on the $-n$-final stem that underlies comitative, purposive (and perhaps dative) - see below. If this were so, it would simply fall together with dative, as happens with nominals ending in $-n$. Adding to this the substitutability of locative and dative in many contexts, we should take pause before categorically asserting that pronouns in Yidin have no locative-allative form; see also 4.8.3.

The nominal affix -bi (3.3.6) can occur with pronouns - for instance, nundu:bi daliyi 'you [must be] hungry too'.
3.6.3 Analysis. The most straightforward place to begin a morphological analysis of pronominal forms is 1 n -sg and 1 du. We can recognise:

$$
\begin{array}{ll}
\text { roots } & \text { I du - yali } \\
& \text { I n-sg - yandi }
\end{array}
$$

Most affixes have exactly the same form as with nominals (3.3.2, 3.3.3, 3.3.7):

$$
\begin{array}{ll}
\text { case inflections } & \text { nominative }(\mathrm{SA})-\emptyset \\
& \text { accusative }(\mathrm{O})-: n(<-n a ?) \\
& \text { dative }--n d a \\
\text { derived forms } & \text { causal }--n i m \\
& \text { genitive }+ \text { absolutive }--: n(<-n i) \\
& \text { oblique genitive }--n u-
\end{array}
$$

But there are two differences from nominal allomorphy. With roots gali and $\eta a n d i$ purposive is $-n g u$ (nominals have just $-g u$ ), and comitative (fear) is $-n d i(d a)$ (in these circumstances a nominal would show $-y i(d a)$ ).

This suggests recognising

$$
\begin{array}{ll}
\text { derived stems } & \text { I du-yalin } \\
& \text { I n-sg-yandin }
\end{array}
$$

to which the following regular nominal suffixes can be added

| case inflections | purposive $--g u$ <br> fear --dida |
| :--- | :--- |
| derived forms | comitative $-d i$ |

Note that dative could be related to either the root or the derived stem (implying an analysis into $\eta a l i+n d a$, or into galin $+d a$ ). Accusative, genitive and causal must be based on the roots yali and yandi, which also function as nominative (or 'subject') forms.
$-n$-final stems of this sort are required for deictics, where they are the basis for purposive $-\mathrm{g} u$, comitatives $-d i$ and $-m u d a y$, and privative -gimbal-3.7.3.

For I sg we could recognise stems:
gayu-nominative
yadun - for dative, purposive, comitative and fear (alternatively, dative could be based simply on jadu)
nadi - for genitive and causal
yaja - for accusative
In the case of 2 sg we need:
nundu-nominative
nuni - as genitive + absolutive (involving no further affix)
and as the stem on which are based accusative, causal, oblique genitives (and perhaps dative)
nunin - for dative (as an alternative to muni), purposive, comitative and fear
(nunun is the stem in the tablelands dialect on which dative and purposive are based)

2 sg shows one further irregularity - causal involves the addition of -nim to genitive + absolutive nuni (whereas in every other case it is formed by adding just $-m$ or $-i m$ to the genitive + absolutive - on this basis we would have predicted ${ }^{*}$ nunim in this case). In fact juni:nim looks as if it involves two successive tokens of genitive -ni! See 3.6.4.

With these stems, nominal forms of cases apply except for accusative and genitive. Nominal accusative is $-\mu a$, reducing (by Rule 2 ) to $-: / n$ after an even-syllabled stem ending in a vowel (3.3.7). We do get I du gali:n and In-sg yandi: $n$ but the singular pronouns are simply yana $+n$ and $n u n i+n$, without length. Similarly for genitive + absolutive - against the regular jali:n and yandi:n we encounter 1 sg gadin with no length ( 2 sg nuni will be discussed in the next section).

Finally, for 2 n -sg we can recognise
root $n u n d u b a$ - for nominative, accusative, genitive, causal stem nunduban - for purposive, comitative and fear

This is exactly parallel to 1 du and 1 n-sg; dative could be based on either form. But, as with the singulars, accusative and genitive are odd. If $-\mu a$ and $-n i$ underlie the I du and I n -sg forms then we would expect nundubana and nundubani. Instead the affixes are simply $-n$ and $-n$ (and see $3 \cdot 7 \cdot 5$ ).

We could suggest that accusative has two allomorphs with pronouns:

- $n a$ (regularly reducing by Rule 2) on I du, 1 n -sg
$-n$ on I sg, $2 \mathrm{sg}, 2 \mathrm{n}$-sg
And similarly for allomorphs of genitive. But this obscures the really significant point - that pronominal accusatives all end in $-n$ and genitive-plus-absolutives (except 2 sg ) all end in $-n$. These endings give a regularity to the pronoun paradigm, and this must be brought out in any morphological analysis. We should thus prefer to recognise the allomorphs as being $-: n \sim-n$ and $-: n \sim-n$; and THEN to note that the x du and In-sg forms are identical with reduced forms of the corresponding nominal affixes.

We are thus not invoking Rule 2 (with has wide application with nominals and verbals, and also with deictics) to explain any pronominal forms. Dative -nda is, as already mentioned, the only nominal affix which is an exception to reduction by Rule 2. We would have to admit purposive and comitative as further pronominal exceptions (the morpheme boundaries in yandi $+n+g u$ and $y a y d i+n+d i$ surely satisfy the condition on Rule 2 ) in addition to the allomorphic intricacies involved in accusative and genitive.

Considering pronouns to fall outside the scope of Rule 2 is not too unusual a step. Pronoun paradigms are notoriously irregular, standing some way apart from the regular morphological and phonological processes of a language. Note, though, that Rule I does apply quite regularly to all pronominal forms-compare, for example, yajdi and yajdi:ngu with nundu:ba and nundubangu.
3.6.4 Historical development. It remains to account for the irregularities in singular pronominal forms. These can only be explained in diachronic terms, through discussion of the development of the presentday Yidin singular pronoun paradigm from a set of reconstructed forms in an ancestor language.
The remarks that follow are based on the writer's comparative study of Australian pronoun systems, and a tentative partial reconstruction. This work is so far unpublished.
It seems that an ancestor language (maybe, proto-Australian) had monosyllabic singular pronominal roots:

$$
\text { isg-pay } \quad \text { 2sg-pun }
$$

The root form alone was employed in intransitive subject (S) function; transitive subject (A) function involved the addition of ergative affix $-d u$, following a consonant (with assimilation to a preceding nasal or $y$ ); transitive object function $(\mathrm{O})$ involved the accusative affix -na. There would also have been genitive and probably other (oblique syntactic) case forms. It appears that the $-y$ of $\eta a y$ dropped before a laminal stop or nasal. We are thus suggesting that the ancestor language had:

|  | S | A | O | genitive |
| :---: | :---: | :---: | :---: | :---: |
| r sg | yay | yadu | yapa | yay+GEN |
| 2 sg | nun | nundu | nun + na | nun+GEN |

The form of the genitive suffix will be discussed below.
At a certain stage in the historical development, monosyllables were proscribed. (It is a fact that many Australian languages are like Yidin in
not having any words with less than two syllables. It is also clear that these languages go back to an ancestor which showed monosyllabic pronouns, verbs and nouns - a fair sample of monosyllabic forms in each part of speech are clearly reconstructable.) Some languages added a dummy syllable $-b a$ to the S forms, maintaining a distinction between A and S marking (the Giramay dialect of Dyirbal demonstrates this, although here 2 sg is based on the rather different root gin - see Dixon $^{\text {n }}$ 1972: 243-6). Other languages, including Yidin, simply generalised the A form also to cover S function.
(Some modern languages still tolerate monosyllables, and show pronoun paradigms very like that given above - see Mathew 1910: 208 and Dixon 1972: 7.)

Hale (1973: 445-6) suggests that 'there may be a tendency in the process of language acquisition to reanalyse linguistic forms in cases where there is a particular kind of disparity between underlying and surface representations'. Now if in some language all words had to involve at least two syllables, the recognition of monosyllabic roots would entail a severe disparity between underlying and surface possibilities. This leads us to suggest that the 1 sg pronoun in Yidin underwent the following changes:
(1) Once the S form yay had been eliminated (along with all other monosyllabic words) pay-ceased to be recognised as the root common to I sg forms. Oblique forms were recreated, this time founded on the unmarked SA form gadu. Thus the original genitive was replaced by yadu + GEN. Dative, purposive and comitative involved suffixation to nadu $+n$.
(2) The laminal stop in nominative gadu (but not in any oblique form) reduced to the corresponding laminal semi-vowel, yielding yayu.
(3) By analogy with the accusative forms of the other pronouns, $-n$ was added to the original accusative yana ( < " ${ }^{*} a y+n a$ ), yielding yanan; speakers would not at this stage perceive that pana involved the accusative affix -na since to do so would involve intuitively recognising a monosyllabic root (and these are unknown in modern Yidin). panan thus involves two reflexes of the original accusative *-na.
Support for our suggestions concerning Yidin comes from the pronoun paradigm of Dya:bugay, Yidin's close genetic relative. This is (Hale 1976a: 237; adapting Hale's transcription to conform with that used for Yidin):

|  | SA | O | possessive | dative | ablative | purposive allative |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 sg | yawu(ygu) | yana | nayay | nayinda | yayayum | nayingu |
| 1 n -sg | naydi | yandin | nandin | nandinda | jandinum | nandingu |
| 2 sg | nura | nuran | nuran | nuranda | nuranum | jurangu |
| 2 n -sg | nuramba | nuramban | nuramban | nurambanda | nurambanum | jurambangu |

Note firstly that the I sg accusative pronoun is simply yaja in Dya:bugay. Although the accusative forms of other pronouns end in $-\mu$, Dya:bugay has not generalised the final $-\mu$ to I sg, as has Yidin.

Secondly, in the rightmost four columns the isg root begins with gay-; that is, the $-d$ - of $\eta a d u$ has been reduced to $-y$ - in oblique forms (this has happened only for the nominative form in Yidij). The SA form in Dya:bugay, $\eta a v u$, is a natural further development from yayu, with the semi-vowel assimilating to the following vowel (in total: yadu $>$ yayu $>$ yawu ). (Hale comments that yazuygu and yawu are in free variation and further notes that in Dya:bugay - $\eta g u$ is the ergative allomorph on a nominal which ends in a vowel.)

The development of the 2 sg pronoun in Yidin would have followed similar lines. Once the original S form, nun, had been dropped (and jundu generalised to cover its function) all oblique forms were recreated. But they were based on the 2 sg genitive form nuni or its extension $n u n i+n$ (rather than on the SA form, as was the case with I sg ). Thus, for instance, accusative simply added $-n$ to $n u n i$. (This contrasts with Dya:bugay, where oblique forms of 2 sg were again formed on the SA form, here pura).

In 3.3.3 we discussed the historical development of the genitive affix in Yidin. We noted that, for nominals, genitive is $-n i$ before all (including zero) case inflections for a root ending in a consonant and for an oddsyllabled root ending in a vowel; but that with an even-syllabled root ending in a vowel it is $-: n$ in the absolutive and $-n u$ in all oblique cases.

Thissuggests a historical development ${ }^{*}-n u>-n i \sim-n u$. We suggested that ${ }^{*}-n u$ has been replaced by $-n i$ wherever the affix vowel might be word-final; in cases where the suffixal vowel can not occur word-finally (but is instead deleted by Rule 2) the form $-n u$ is retained. Now the $-u$ of $-n u$ occurs only when followed by a further affix.

The 2 sg pronoun provides further support for an original genitive *-nu. Notice that dative and purposive are based on the stem nuni $+n-$ in the coastal dialect, but on $n u n u+n$ - in the tablelands variety (genitive + absolutive is $n u n i$ in both dialects). We can suggest that the tablelands forms preserve original genitive numu before non-zero case inflections,
whereas coastal speakers have generalised the absolutive form nuni into all oblique cases.

We have related present-day nuni to an original monosyllabic root *nun- and suffix *-nu. (It has already been mentioned, in $3 \cdot 3 \cdot 3$, that Dya:bugay has canonical form - yun for the genitive suffix. If Yidin and Dya:bugay genitives are related we could posit changes *-yun>*-nu> $-n i \sim-n u$. But note that this further step back - from *-nu to *- $\eta u n-$ is not critical for the argumentation here.) We have also suggested that all 2 sg forms excepting nominative were recreated on the base ${ }^{*} n u n u$ (replacing the earlier monosyllabic root *nun-).

It is instructive to compare I sg accusative ganan-where the final $-\boldsymbol{n}$ has been generalised to this form, in addition to the earlier acccusative $-n a$ - with nuni, which is the only pronominal genitive not to end in $-n$. But note that before oblique cases the genitive stem is nuninu- (not *nunu-) and that the causal case is nuni:nim (not ${ }^{*}$ nunum or ${ }^{*}$ nunim).

For the I sg pronoun in Yidin all forms bar accusative have been remodelled, taking nominative $\eta a d u$ as the founding 'root'. We would, on this basis, expect genitive stem yadunu- reducing to $\eta a d u: n$ in the absolutive. There are two discrepancies - second vowel is $i$ not $u$, and the absolutive lacks length. $u>i$ could be explained as assimilation to $d$-, although we must note that this has occurred only in the genitive, $-d u$ remaining in all other cases. But notice Dya:bugay, where there is wide variation in the second vowel of 1 sg forms $-u$ is retained in nominative but changed to $i$ in dative and purposive and to $a$ in possessive and ablative. The occurrence of gadin rather than gadi:n is consistent with our comments that pronouns constitute the only area of the grammar where Rule 2 does not apply regularly; the main point is that genitive-plus-absolutives end in $-\boldsymbol{n}$ (as accusatives end in $-\boldsymbol{n}$ ) with the appearance of vowel length being confined to 1 du and 1 n -sg forms.

Note that in Dya:bugay genitive is $-\eta$ on I sg but $-n$ with other pronouns. Compare with nominal genitive and note a pattern of similarity with other nominal suffixes in Dya:bugay

|  | following <br> consonant | following <br> vowel |
| :--- | :--- | :--- |
| genitive | - -nun | $-: n$ |
| ablative | - -nunum | $-: n u m$ |
| dative | - -nunda | $-: n d a$ |

It is possible (although not likely) that pronominal genitive -(:)n in Yidin is, as in Dya:bugay, based on the final segment of *-pun, rather than on the initial ${ }^{*} \eta(>n)$; but note that this would not explain the form $-n u$ of the genitive before oblique cases.

We can now summarise our internal reconstruction of the history of singular pronouns in Yidin:

FIRST PERSON

| stage I | $\begin{array}{cc} \mathrm{S} & \mathrm{~A} \\ \text { nay } & \text { yadu } \end{array}$ | O yana | $\begin{aligned} & \text { genitive } \\ & n a y+n u \end{aligned}$ | oblique yay + |
| :---: | :---: | :---: | :---: | :---: |
| stage 2 | jadu | yana | nadu + nu | ทadu(n)+ |
| stage 3 | yayu | yanan | yadin $\sim$ yadinu | yadu(n)+ |
| SECOND PERSON |  |  |  |  |


|  | S | A | O | genitive | oblique |
| :---: | :---: | :---: | :---: | :---: | :---: |
| stage I | nun | nundu | $n u n+n a$ | липи | nun + |
| stage 2 |  | $d u$ | ? | мипи | nunu(n)+ |
| stage 3 |  | $d u$ | nunin | nипi $\sim$ nuпiпи | $n u п u(n)+\sim n u n i(n)+$ |

If comparison with Dya:bugay is permitted, we can suggest (but not be certain of) *- $\boldsymbol{\eta} u n$ as an earlier form of genitive *-nu.

Finally, there is the undoubtedly recent reduction of singular dative pronouns. The second syllable of the root (-du- from yadu:nda, -nifrom nuni:nda) can be omitted from these frequently used forms, yielding disyllabic words. It is likely that the reduction began in the first person and is spreading to the second - we have remarked that although both yanda and nunda occur, only the former is recognised as fully grammatical.
3.6.5 junduba. Almost all Australian languages have singular pronouns based on gay (first person) and nun or $\operatorname{\eta in}$ (second person). Almost as common is $y a l i$ for first person dual (further marked as 'inclusive' for languages which show an inclusive/exclusive distinction). Next in number of occurrences comes second person plural nura. (Examples of these forms are in Dixon 1970c: 86-9 and Schmidt 1912; see also Dixon 1972: 5-9).
nura, which is not attested for Yidin, is the 2 sg pronoun in Dya:bugay. This suggests that proto-Yidin-Dya:bugay may have had the normal arrangement of second person pronouns:

|  | 2 sg | 2 n -sg |
| :--- | :--- | :--- |
| proto-Yidin-Dya:bugay | $n u n(d u)$ | nura |
| modern Yidij | $n u n d u$ | nunduba |
| modern Dya:bugay | $n u r a$ | nuramba |

The original plural form nura, has been lost in Yidin and replaced by munduba, based on the singular pronoun. In Dya:bugay pura has shifted from plural to singular reference, replacing $n u n d u$, and a new plural (based on nura) has been derived.

There are many examples, from all parts of the world, of a plural pronoun becoming the polite or formal way of referring to a single addressee, and gradually taking on singular meaning ('you' in English and 'vous' in French, for instance). Wilf Douglas (personal communication) reports that although in the Ernabella dialect of the Western Desert language 2 sg is $n u n d u$ and 2 pl nura, in the Ooldean dialect $n u r a$ is 2 sg with the 2 pl form, nuramuga, involving an increment to this. (He also reports that in the Warburton Ranges dialect 2 sg is nundulu and 2 pl nunduluya.) There may well have been sociolinguistic reasons for the shift of 2 pl pronoun to 2 sg reference in Ooldean and Dya:bugay, as there were in French and English.

It is clear that in Yidin and Dya:bugay the 2 n -sg root is (historically) derived from 2 sg by the addition of $-b a$ (with an intrusive homorganic nasal in the case of Dya:bugay). It is also clear that this $-b a$ is cognate with the productive nominal affix $-b a$ 'one of a group' in present-day Yidin.

We mentioned in 3.3.6 that if two (human) nouns are coordinated, $-b a$ must be added to each:
(148) darygidarygi:ba yaburuba galin
old woman-ba-ABS young girl-ba-ABS go-PRES
An old woman (being one of a group of people) and a girl (being another member of the group) are going. (That is 'a woman and a girl are going', leaving open the question of whether they are going alone, or as part of a larger assemblage.)

If one of the several people involved in an action is the addressee, we would predict:
(149) mundu:ba darngidarngi:ba galiy

You and an old woman are going (again leaving open the question of whether anyone else is also going)
and (149) - involving the 2 n -sg pronoun nunduba-is exactly what would be said here.

It will thus be seen that nunduba is literally 'a group [of people] one of which is you'. We have a choice between saying simply:

## (150) nundu:ba galin

You are going with one or more other people
or specifying rather more precisely by using (149) 'you are going with one or more other people, one of whom is an old woman'. Or, if there are three (or more) people involved, we could specify more fully and say:
(151) nundu:ba darygidarngi:ba yaburuba galin

You are going with two or more people, one of whom is an old woman and one of whom is a girl
But note that, although nunduba is plainly historically derived from $m_{u n d u}$ and -ba, it cannot be analysed into $n u n d u+b a$ in terms of a synchronic analysis of modern Yidig. If nunduba did involve the productive affix -ba we would expect regular declension - ergative nundubaygu, genitive-plus-absolutive mundubani, and so on (paralleling nominal-plus-ba forms - 3.3.6). Instead, nunduba has its own set of rather idiosyncratic case forms-3.6.2.
yaydi and yali function exactly like the $-b a$ equivalents of gayu (note that ${ }^{*}$ gayu:ba is not an acceptable Yidin word). The unmarked nonsingular, yandi, can refer to a set of two or more than two, just like munduba or nominal $+b a$ forms. Thus:
(152) yandi buna:ba galiy

A woman and I (and some others) are going
(153) yandi bunabaygu wagu:da gali:yal

A woman and I (and some others) are taking a man
Note that bunaba is in absolutive case (S function) in (152) but in ergative (A function) in ( 153 ): yandi is in nominative form in both instances.
( 152 ) can be paraphrased by a construction with the nominal comitative suffix on either noun or pronoun:
(154) yayu bupa:y galiy I am going with a woman
or
(155) buna yadu:ndi galin A woman is going with me

In all of ( $152-5$ ) it is left open whether or not anyone else went with ' the woman and me'; and in fact bupa could refer to one or to more than one woman. (One can, of course, include a number adjective - yandi buna:ba dambulaba galiy ' a group which includes me and two women is going'.)

If one wished to stress that only two people were involved, yali '[a group of] two people, one of whom is me' would be used:
(156) yali waga:lba yingu ninay

I'm sitting here with [my] wife
yali is thus a particular further specification of yandi, for referring to a group which has just two members.
yali is only infrequently used in texts (3.6.1) and it has not been possible to survey a very wide range of occurrences. It is most frequently used in an 'inclusive' sense, for referring to speaker and addressee (see text 2 , line 3 ) but it is clear that it can have 'exclusive' reference, to speaker and third party - as in (156). The simplest way of explicitly marking yali as exclusive is to append the $-b a$ form of a deictic (3.7.5), say:
(157) yali yindu:mba galiy 'Me and him are going'

In contrast, an inclusive sense is indicated by apposing in-sg or I du and 2 n -sg forms e.g. yali nundu:ba galiy 'you and I are going'. This can be translated literally as 'I, being one of a group of two, and you, being another of the group, are going'. (Here Yidin differs significantly from most other Australian languages which do not have separate forms for inclusive and exclusive pronouns. The normal practice is to render the inclusive sense through appending 2 sg (NOT $2 \mathrm{n}-\mathrm{sg}$ ) pronoun to I du or I pl ; Dyirbal is one language behaving in this way - Dixon $1972: 63$.) We have mentioned that $y a d u, n u n d u$ and $y a l i$ are found in many other Australian languages; and we have suggested an etymology for nunduba. The remaining pronoun, a n-sg yandi, is not in fact found outside Yidin, Dya:bugay and one or two nearby languages (including Gugu-Yalandyi-see Hershberger 1964).

The origin of yandi is unknown. But we can, rather speculatively, mention that the addition of comitative $-d i$ to monosyllabic root gay would, by the regular rules (3.3.4), yield gandi (exactly the same rules apply in Dya:bugay, yielding the same result). It could be that a sentence like:
(158) *bama yandi $(=y a y+d i)$ galiy A person is going with me tended to be abbreviated to:
(159) yandigaliy We are going

If this were the case it would mean that the 1 n -sg pronoun developed in quite a different way from 2 n -sg: the former would be, etymologically, 'someone, WITH ME' and the latter 'a group, one of WHOM IS YOU'. (We have already noted that yandi functions like a -ba form, not like a comitative.) But these comments on the development of gajdi are very much a guess, with no supporting evidence available. It is more likely that the similarity between najdi and $\eta a y+d i$ is simply coincidence.

### 3.7 Deictics - definite and indefinite/interrogative

3.7.I Reference. Yidin has a complex system of deictics. We deal in this section with the underlying semantic contrasts.
[A] DEGREE OF DISTANCE
There are three possibilities for the first syllable of a 'definite' deictic. They can be illustrated for the 'absolutive' and 'locative' forms:

| yiyu 'this' | yingu 'here' | near speaker |
| :---: | :---: | :---: |
| yumu 'that' | yuฑgu 'there' | at a distance from speaker |
| yuұu 'yon' | yuฑgu 'yonder' | at a considerable distance from speaker, but visible |

The meanings quoted here apply for the coastal dialect (extending to the malanbara local group part-way up the range, whose speech seems in this instance to pattern with gulgibara rather than with the local groups on top of the tableland - $\mathbf{x} .2$ ). There are simply three degrees of distance. $y i$ - forms are the most common with syntactic cases while $y u$-forms are more frequent for local cases. $y u$ - forms are relatively rare; a typical instance is given in ( 160 ) where a traveller stands on a cliff and looks across the sea to a distant island:
(160) yuŋи yara gandagara: wunay yon-abs south-Loc Franklin Island lie-Pres 'Franklin Island lies a long way off to the south'

Instances of yuygu are in coastal dialect texts 2.109 and 9.26.
The tablelands dialect has the same three definite deictic roots but here $y u$ - refers to something which is not visible (but is, perhaps, audible).

It is interesting to compare the deictic systems in these two dialects of Yidin with that in Dyirbal (Dixon 1972: 45):

| coastal Yidin |  | Dyirbal |  |
| :---: | :---: | :---: | :---: |
| 'here' | $y i-$ | 'here (visible)' | yala- |
| 'there' | nu- | 'there (visible)' | bala- |
| 'yonder (visible)' | $y u$ - | 'invisible' | yala- |
|  |  | lands Yidin |  |

Thus, tablelands Yidin has the Dyirbal semantic system associated with the coastal dialect forms.

The use of $y i$ - and $y u$ - forms in the tablelands dialect shows no appreciable differences from the coastal dialect. A good example of their contrast within a single sentence is in line 17 of text 14 . Note that $y i$ and $\eta u$ - (and probably also $y u$-) forms can function cataphorically and anaphorically just like English 'this' and 'that' (this can be seen from an examination of their occurrences in text 9 , for instance).
There is also an idiom-like phrase yupudi wala 'that's alright'-see the discussion of -di in 3.9.1.

## [B] hUMAN-INANIMATE HIERARCHY

There are in fact two forms of each definite demonstrative, whose use depends on the human-ness/animacy of the referent. They fall together in the absolutive case (quoted above) but there are distinct stems for oblique cases:
'this'
'that'
'far/invisible'

| HUMAN | INANIMATE |
| :--- | :---: |
| yindu- | yingu- |
| yundu- | yuqgu- |
| yundu- | yungu- |

Note that all definite deictics exist in three forms, with initial $y i$-, $y u$ - or $y u$-. In the discussion below we shall simply cite $y i$ - forms, but it should always be borne in mind that there are corresponding $y u$ - and $y u$-forms.

We glossed the columns above 'human' and 'inanimate', referring to the extremes of a continuum. In fact, the use of the two forms of the definite deictic can best be explained in terms of a hierarchy (see 3.1.2):


A deictic referring to a human must involve the root yindu-; but yinducan be used to refer to anything, whether human or non-human, animate or non-animate. yingu-forms are most frequently used to refer to inanimates, but can be used with animates, the likelihood of their being encountered dropping off as one ascends the hierarchy towards 'human'. yingu-forms are not normally used to refer to (live) humans.

Thus the dative referring to a place would be most likely to be yingu:nda; for referring to an animal it might be either yingu:nda or yindu:nda; but for a person, only yindu:nda is allowable (see yindu:nda bimbi:nda 'for this father', where 'father' here refers to the Christian God - text 9.35).
Note that the inanimate form is likely to be used for referring to a human corpse - as puygu:gu in text 14, line 27. A similar assignment is found in Dyirbal noun classes: all human or animate nouns belong to class I or class 2, but nouns referring to 'meat' (and to 'body parts') are in the 'inanimate' residue class, 4 (Dixon 1972: 306-11).
George Davis was the youngest speaker of Yidin interviewed, and his command of the language was not always as good as that of people from an older generation. He had reanalysed the more/less continuum for the use of yindu-lyingu- into a definite yes/no choice - that is, he said he would use $y i j d u$ - only for humans and $y$ iggu- only for inanimates, stating that neither of these forms was appropriate to refer to animals. This reanalysis has involved polarisation of the two forms, each to that end of the hierarchy at which it was most typically used, with netther being allowed in the no-man's land between (in which вотн could normally be used, with approximately equal frequency).
[C] Definite versus indefinite/interrogative
In common with most or all other Australian languages, Yidin has a set of forms that can have either 'indefinite' or 'interrogative' force. In fact, the most appropriate translation would normally involve вотн notions; thus, for

```
(16r) woandu zvalba yaygi:n
    INDEF/INTERROG-ERG rock-ABS split-PAST
```

the storyteller provided a translation 'someone must have cut that rock -who did it ?'. Speakers of Australian languages usually consider vagueness to be a social fault (Dixon 1972: 30), so that it is not unnatural for any indefinite specification to, at the same time, enquire for definite information about what is being referred to.

An interrogative gloss will be appropriate for most instances of a
form like wandu, and this can tend to obscure the 'indefinite' aspect of these words. But in some cases only the indefinite sense applies (with no overtones of interrogation); for instance - text 2.37:

## (162) bulmba yanda budiy yingu:n yara wanda camp-ABS I-DAT tell-PRES THIS-ACC south-LOC INDEF-LOC I was told this camp was somewhere to the south

The use of an indefinite/interrogative presupposes that there is something (of the type that is being sought), and enquires who or what or where it is. If one has no reason to assume there is anything, it would not be appropriate to use an indefinite/interrogative. Thus, an informant said that on coming into camp one would not say bana wanda 'where's the water' (literally 'there is some water, where is it ?') but would instead use bana yudu'there's no water ?' If there did happen to be some water available, someone else might reply dugubilda dunday 'hanging up in a water-bag'.

Authors of grammars of Australian languages have typically labelled indefinite/interrogatives as simply 'interrogatives', immediately recognising perhaps eliciting - the 'interrogative' sense but failing to look beyond the normal confines of this Indo-European label. (The writer's grammar of Dyirbal is particularly open to the criticism, the 'indefinite' interpretation being alluded to only in a late note - Dixon 1972: 265.)

There are two indefinite/interrogatives corresponding exactly to the 'human' and 'inanimate' definite deictics (the distinction of 'degree of distance/visibility' is of course not applicable to indefinites). The oblique roots are:
human inanimate
indefinite/
interrogative wandu 'someone/who' wani 'something/what' etc.
definite
yindu 'this person' etc. etc.

The definite deictics ( $y i$-, $\eta u$ - and $y u$ - forms) and the indefinite/interrogatives are morphologically similar and plainly make up one word class. There appears to be no really suitable label for the class. For want of anything better, we employ 'deictic', and then talk of definite and of indefinite/interrogative deictics (the latter report the lack of deictic specification, and request it).

Exactly the same hierarchical principle of use applies to wani-/wanduas to $y$ ingu-/yindu. wandu- must be used for reference to humans. Either form is possible where the referent is, say, a bird:
(163) yiŋu manga $\left\{\begin{array}{l}\text { wandu:n } \\ \text { wapi:n(i) }\end{array}\right\}$

Which [bird] does this nest belong to ? (literally, 'this nest belongs to some [bird], which one is it ?)

But where it is expected that the person answering will specify an inanimate noun, wani is preferred.

It seems that wani- may be the 'unmarked' indefinite/interrogative in the sense that it is likely to be employed when the speaker has no idea whether the thing he is asking after is human or animate or what. In these circumstances waji could be referring to a person. But it must be noted that information on this point is not totally clear.
[D] generic versus specific interrogatives
We have already noted that an NP in Yidin will typically involve both a generic and a specific noun (3.1.3 - see also 4.1.1, 6.2.1). For instance:

GENERIC
mina 'edible animal' gangu:l 'wallaby' mayi 'edible vegetable' badil 'rickety nut' gugu 'noise'

SPECIFIC wulygu 'woman's song'

There are in fact two varieties of 'inanimate' indefinite/interrogatives:
wani 'what (genus)'
and wanira 'what (species), what kind of'

That is, if one has no real idea what generic term an indefinite or unknown entity should be grouped under, wani should be used. But if one does know the genus, then wanira will be appropriate (and will normally be used together with the generic term). For instance, a conversation between A and B could go (with all four utterances referring to the same animal):

| (164) A - wani galin | What is that going [along there] ? |
| :--- | :--- |
| B - mina galin | It's an animal going [along]. |
| A - wani :ra mina dungay | What sort of animal is it running |
|  | along [there]? |
| B - gangu:l wariy | It's a wallaby jumping [along]. |

and so on. wani:ra mayi ' what kind of food' occurs in lines 40 and 44 of text 2.
wani- forms are four or five times more frequent than wanira; wani has an irregular paradigm whereas wanira appears to inflect exactly like a nominal (wanira is in fact seldom encountered in oblique cases).
wanira is not normally used to refer to humans; but an informant mentioned that wanira bama is possible, and is equivalent to the more usual wapdabara 'what local group [does a person] belong to ?' - see 6.2.1.

A full discussion of the semantics of generics, with further examples of wanira, is in 6.2.1. A third type of interrogative, wandarin ' what kind of', asking about the token of a given species type, is discussed - and contrasted with wani and wanira - in 3.7.6.

## [E] INDEFINITE/INTERROGATIVES versus GENERIC NOUNS

An NP in Yidin can perfectly well involve just a specific, or else just a generic, noun. We could describe an event fairly precisely by:
(165) yanan yadinuøgu bimbi:y wawa:l My father saw me or, at a more general level, by:
(166) yanan bama:l wawa:l A person saw me

The point to note here is that there is a difference in meaning between (166) and
(167) wandu yanan wawa:l Someone (or something) saw me - who saw me?

In saying (167) the speaker admits that he does not know who saw him (and elicits clarification). But if he utters (166) it is possible that he knows who it was, but is just not naming the person at the moment. (167) is indefinite whereas (166) can be definite but underspecified. (The point to emphasise is that (r66) should Not in all cases be glossed 'SOMEONE saw me'.)
Although there is a clear distinction between generic nouns and indefinite/ interrogatives in each individual Australian language, there is evidence of diachronic shift between the classes. Thus mina is a generic noun '(edible) animal' in Yidin and in many other northern languages; this is surely related to the non-human indefinite/interrogative mina 'something/what' in Dyirbal and many languages to the south. In this case, a failure to recognise the 'indefinite' interpretation of 'interrogatives' would be likely to obscure the naturalness of the semantic relationship (it is by no means obvious that 'animal' and 'what' should be related).
3.7.2 Paradigm. The full paradigm for all deictic forms is given below. As already mentioned, the definite deictics have forms with initial $y u$ - and $y u$-parallelling every $y i$ - word cited here.

The syntactic case forms are in table 3.4 . We can recall that nominals have one form for $S$ and $O$ functions and a separate, marked, form for $A$ function; and that pronouns have one form for S and A functions and a further form for O . Notice that human deictics (both definite and indefinite/interrogative) have distinct forms for all three major syntactic functions $-\mathrm{S}, \mathrm{A}$ and O . The inanimate indefinite/interrogative has a single form for S and O functions, exactly like a nominal. And the inanimate definite generally uses the unmarked form for O as well as S functions; but an accusative form yingu:n can be used - as in (162) - as alternative to $y i j u$ in O function only.

The point most worthy of note is that in S function (which occurs in texts more frequently than any other) the human and inanimate definites fall together; however, the indefinite/interrogatives always maintain separate forms. Thus, a sentence whose S NP consists just of a deictic:
(168) yulu wanda: $n$ That fell
is ambiguous - it could mean 'that (person) fell (over)', or 'that (fruit) fell (off a tree)', and so on. In contrast, a dative NP would be likely to involve different forms for referring to a human, as in (i69), or an inanimate, as in ( 170 ):
(169) yiyu guda:ga nina:n $\eta u n d u: n d a(d a d a: n d a) ~ n a r u$

This dog sat on that (child)
(170) yipu guda:ga nina:n puygu:nda (galba :nda) naru

This dog sat on that (tomahawk)
In the inanimate definite row, it will be seen that there is no ergative form based on the root yingu-. Instead, yindu:y is used with all types of ergatives (human, animate and inanimate):
(171) yundu:y malga:ydu mina dimbay

That Malgay fish [jumps up from the water and] grabs animals [flies]
(172) ganan dugi:y bunda:dinu/yundu:y

That stick hit me [= I hit myself accidentally, on the stick]
It is probably most satisfactory to say that there is no ergative (A) form of the inanimate definite deictic, and that the human definite has to be

## Table 3.4 Deictics-syntactic cases

|  | S | O | A | DAt/INSTR | PURP | causal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DEFINITE human inanimate | $y i p u\{$ | yindu:n <br> уiju ~ yingu:n | yindu:n <br> (yindu:p) | yindu:nda <br> yingu:nda | yindu:ngu <br> yiggu:gu | yindu:nim yiggu:nim and yiggu:nmu |
| INDEFINITE/ human inanimate generic specific | INTERRO <br> wana <br> wani <br> wani:ra | OGATIVE <br> wandu:n <br> wani <br> wani:ra | wandu <br> wani:ndu <br> waniraygu | wandu:nda <br> wani:nda <br> waniranda | wandu:ngu <br> wani:ngu <br> waniragu | wandu:nim <br> wani:nim and wayi:nmu wayiramu |

used in cases like (171-2). (What we are calling 'human' forms can of course be used whatever the reference-3.7.1.)

There are instrumental forms for just the inanimate deictics wani:nda, as in (173), and yingu:nda. These coincide with dative. However, this should not be taken to imply any syntactic identification of dative and instrumental; it is simply that dative and locative coincide on stems ending in $-n$ (in the next section we posit stems wanin- and yingun- here).
(173) wani:nda nundu dugi gunda:l What did you cut the tree with ?

We can note that the two human deictics lack -mu $\sim-m$ causal forms exactly as do pronouns - and have to make do with -nim forms (3.3.3). There are examples of a human deictic plus -nim co-occurring with a noun plus - $m$, as in
(174) nundu yundu:nim mandim burga:l
you-sa that-human-cau hand-abl pull out-past
You pulled [it] out of that [person]'s hand
mundu:nim appears to have a normal genitive-plus-causal sense here ('that which used to belong to that [person]') whereas mandim can be given a purely ablative ('motion from') interpretation. But gundu:nim and mandim undoubtedly 'agree' in (174).

It appears in fact that yigdu:nim and waydu:nim from table 3.4 may have the full range of causal and ablative function normally associated with nominal $-m \sim-m u$ forms. $n u n d u$ wandu:nim gaday can mean 'who are you coming from?', with a purely local sense.

The inanimate deictics have regular causal $(-m u \sim-m)$ as well as $-n i m$ forms. We can contrast a straight causal:
(175) bama:l yajan dayga:l/ wani:nmu

From (= for) what did he grumble at me? (dayga:l can be glossed 'jealously growl at'; here wani:nmu asks what the speaker has done, to be bawled out in this way)
with a 'perfective possessive' -nim form:
(176) jundu yuŋu wani:nim dayga:n

What did you take that from? (this might, say, refer to a piece of metal, with the speaker asking what inanimate thing - car or whatever - it came from)

These causal forms can be contrasted with the ablative form of the inanimate indefinite/interrogative (see table 3.7 below):
(177) nundu wandam yuyu wayal duga:l

Where did you get that boomerang from?
This is the only place in the grammar of Yidin where causal and ablative have quite different forms (being in fact based on 'syntactic stem' wanin- and 'local stem' wanda- respectively - see 3.7.3).

We can complete the paradigm by exemplifying the causal -nim form of the human indefinite/interrogative:
(178) nundu wandu:nim puyu wayal duga:l

Who did you get that boomerang from?
The purposive form of the inanimate interrogative is widely used and can often be translated as 'why' (see, for instance, lines 14, 25 of text 14 and line 57 of text 2 ). Compare with the purposive of the human interrogative:
(179) yiju birmbi:rdi ninay /
THIS-ABS jealousy-COMIT-ABS sit-PRES
wajdu:ngu
INDEF/INTERROG-HUMAN-PURP
This [person] is sitting [there] feeling jealous - concerning whom?

Here the purposive case marks the object of the jealous person's feelings perhaps, his wife - and not, say, the rival who is making up to her.

Table 3.5 gives the genitive and comitative forms of the five deictics, together with fear inflection. Since the genitive suffix can be used to indicate the habitual camping place of an animal, or part-whole relationships for animate or inanimate things, genitives based on the inanimate deictics are quite common; for instance:

Table 3.5 Deictics - genitive and comitative forms

|  | genitive-plusabsolutive | genitive stem for oblique cases | comitative stem | fear inflection |
| :---: | :---: | :---: | :---: | :---: |
| DEFINITE |  |  |  |  |
| human | yindu:n | yindunu- | yindundi- | yindundida |
| inanimate | yingu:n | yiŋgunu- | yinguyi- | yigguyida |
| IndeFinite/INTERROGATIVE |  |  |  |  |
| human | wandu:n | zandunu- | wapdundi- | wandundida |
| inanimate |  |  |  |  |
| generic | waji:n(i) | waninu- | wapindi- | wanindida |
| specific | wajirani | ? | wajirayi- | wapirayida |


| (180)yigu wuru <br> THIS-ABS handle-ABS <br> dHIS-INAN-GEN-ABS | gingu:n | spear-GEN-ABS |
| :--- | :--- | :--- |
| dargi:na |  |  |
| embed-PURP |  |  |

This handle belongs to this spear, and is to be attached to it
Genitives decline in the normal way; again the third vowel of the oblique stem is $-u-(3.3 .3,3.6 .2)$. In (181) yundu-is used to refer to an alligator:
(181) garu gana:r yandi bandi:liy / bulmba:
by-and-by alligator-abs we-SA find-GOING-PRES camp-LOC mundunula wunanunda
THAT-HUMAN-GEN-LOC lie-SUBORD
By-and-by we'll go to find the alligator, who will be lying in his lair

Both wani:n and wani:ni have been recorded for the genitive + absolutive of the inanimate indefinite/interrogative; these could be related to stems wani- (with regular reduction by Rule 2 ) and wanin- respectively see $3 \cdot 7 \cdot 3$. (But note that the oblique stem is waninu-.)

Comitative forms are quite regular, with $-d i \sim-y i$ being added to stems yindun-, yingu-, wandun- and wanin- (3.7.3). The morpheme boundary condition of Rule 2 is satisfied for the inanimate indefinite (in absolutive case) and this reduces: $y i \eta g u+y i \rightarrow y i \eta g u: y$. Comitatives decline quite regularly, as
(182) yanan yundu:y wanindingu bunda: $\boldsymbol{\eta}$

I-o that-human-erg indef-inan-comit-erg hit-past What did that [person] who hit me have?

Note that one sense of (182) can be paraphrased by:
(183) yanan yundu:y wani:nda bunda:n

What did that [person] hit me with ?
where the indefinite/interrogative is in instrumental inflection.
Fear forms involve the regular addition of $-d a$ to a comitative stem; for instance:
(184) yayu yaryga:n yuyguyida walbayida

I was frightened of those stones (lest they roll down the mountain)
Deictic forms occur with derivational affixes -muday 'with' and -gimbal' without' (3.3.6); these are shown in table 3.t muday forms are, as usual, interchangeable with words involving the alternate comitative suffix $-d i \sim-y i$. The occurrence of -gimbal with wajdun- and wanin- is particularly interesting in that here only the indefinite sense is relevant wapdungimbal 'with no one' (literally 'without some one') and waningimbal 'with nothing' (literally 'without something'). Thus:
(185) yiŋu guman bama gaday/ waningimbal/ gurbi muray bada:r

This person is coming alone, with nothing; perhaps [he] left the clothes behind

Table 3.6 Deictics with derivational affixes

|  | -muday 'with' | -gimbal 'without' |
| :---: | :---: | :---: |
| DEFInIte |  |  |
| human | yindunmuday | yindungimbal |
| inanimate | yingumuday | ? |
| INDEFINITE/INTERROGATIVE |  |  |
| human | ? | wandungimbal |
| inanimate |  |  |
| generic | waninmuday | waningimbal |

The use of waningimbal implies that someone has nothing, when he would be expected to have something (of a certain sort); hence the inclusion of the qualifying second clause in (185).
-bara can be suffixed to the locative root wanda or yingu (see below). There is also an idiom yuyumbudun, occurring in text 9 , line 35 ; this is the only instance known of the form yuyum (for -budun see 3.9.5).

The form wajiyula ' what's this' appears to be an emphatic version of waji; it has been obtained in, for instance, ergative case - waninula:y. -yula is not known outside this word.
wanamuygal was mentioned in discussion of the derivational affix -muygal, 3.3.6.

The inanimate indefinite/interrogative can be verbalised, giving intransitive wanin + daga- $n$ 'do what' and transitive wajin- $y a-l$ 'do what to'; details are in 4.8.r.

Finally, local cases of deictics are in table 3.7. It appears that only the inanimates take local cases (providing further evidence for the similarity between inanimate deictics and nominals - against animate deictics, which are most similar to pronouns).

Note that there is a special 'allative of direction' ('this way', 'which way'). This has the forms yingu:run/wapda:run in the coastal dialect but yiga:luy/wanda:luy in tablelands Yidin. It can be used with a verb of motion:
(186) yandi yingu:run waygigalin We're going up this way
or with a verb of rest, indicating the direction in which someone is facing:
(187) nundu yuŋgu:run ninan You sit down [facing] that way!

Table 3.7 Deictics - local case forms

|  | definite | indefinite/interrogative |
| :--- | :--- | :--- |
| locative | yingu | wanda |
| allative of place | yiggu $(\sim$ yingu:gu $)$ | wanda:l $(\sim$ wanda:gu $)$ |
| allative of direction | C yingu:run, T yiga:luy | C wanda:run, T wanda:luy |
| ablative | yingum | wandam |

A directional form can be used with a noun or locational qualifier in allative case, the former specifying the direction and the latter the goal of motion:
(188) gana pandi yingu:run galiy bulmba:gu try we-sa this-all(dirn) go-purp home-all Let's try to go this way home!

In (188) the -gu inflection on bulmba marks allative not purposive case - this usage (which is less common than the regular nominal allative bulmba:) is modelled on the allative inflection for locational qualifiers -3.4.r.
wanda:run 'which way' is used in text 2 , line 85 ; and in (220) below.
As with nominals, a single form marks locative ('where at') and allative of place (' where to ') for the definite deictic. With the indefinite/ interrogative, however, there are two forms - wanda and wanda:l. Although wanda:l is preferred for the allative sense (as in line 19 of text 2) and wanda for locative function (text 2 , line 33 and subsequent lines) there appears to be a degree of interchangeability between these forms - wanda:l has occasionally been encountered with what seems to be a locative sense and wanda with allative.

There are also forms yiggu:gu and wanda:gu, with exclusively allative meaning; these are used quite seldom, and normally accompany a locational qualifier (or a noun with locational reference) which also bears a -gu suffix - see 3.4.r.

Locational specification can involve both a deictic and a nominal, which must ther agree in case, as in

$$
\begin{aligned}
& \text { (189) yingum dugim najdi guga nada:l } \\
& \text { THIS-INAN-ABL tree-ABL we-SA bark-ABS peel-PAST } \\
& \text { We peeled the bark off this tree }
\end{aligned}
$$

There are also forms involving the derivational affix -bara 'belonging to' (3.3.6) added to a locative deictic. nuygubara was exemplified in (69); there is also wandabara (see also 6.2.1):
(190) yanan bama:l wandabara:n bunda:n

Where does the person come from who hit me?
3.7.3 Analysis. The specific inanimate interrogative wanira 'what kind of' inflects exactly like a trisyllabic nominal (and is in fact seldom found in oblique form); but the other four deictics have more-or-less irregular paradigms. We can suggest the following stems, underlying the forms quoted in the last section:
(a) absolutive (S)
form
(b) stem for
genitive
(c) stem for ergative/accusative
$\begin{array}{l}\text { (c) stem for erga- } \\ \text { tive/accusative }\end{array}$ yindun- yingu(n)- wandun- $\} \begin{aligned} & \text { wain- } \\ & \begin{array}{l}\text { (d) stem for other } \\ \text { non-local suffixes }\end{array} \\ & \begin{array}{ll}\text { (e) }\end{array} \text { wanda }-2\end{aligned}$
(e) stem for local - yingu- - wandacases

indefinite/interrogative

wan
want- ~ wanin-yindu- yingu- wand-

Inanimate definite has the stem yingun- for causal and instrumental, but yingu- for purposive (either yingun- or yingu- yields the correct dative form).

To these stems we add:
(b) genitive -ni, causal -nim
(c) ergative $-\eta g u-\sim-d u$, accusative $-n a$
(d) dative $-n d a$, purposive $-g u$, causal $-m u \sim-m$, comitative $-d i \sim-y i$, fear -dida $\sim$-yid, comitative -muddy, privative -gimbal, verbalisers -daga-n, -ya-l
(e) locative-allative $ø(\sim-: l)$, allative of place $-g u$, allative of direction $-r u n$, ablative $-m$

Note that Rule 2 applies quite regularly to deictics, reducing genitive, ergative and accusative on even-syllabled stems ending in a vowel.

This constitutes a major difference between deictics and pronouns; in 3.6.3 we found it simplest to exclude the class of pronouns from the domain of operation of Rule 2.

One important similarity with pronouns is the appearance of a stem augmented by final $-n$, which is the basis for causal and instrumental, and also for purposive with all deictics bar the inanimate definite. The inanimate indefinite also uses the $-n$-augmented stem for ergative; genitive alternant wani:ni would seem to involve wanin- as stem, whereas wani:n is plainly based on want-.
Dative could be based on stem (c) or stem (d) for all columns. In fact the argument for basing dative on an $-n$-final stem emanates from the $1 \mathbf{s g}$ pronoun (3.6.3); here a stem without final -n (yadu) would not be needed for
any other case, and we thus prefer to relate dative gadu:nda to the stem yadun. Since everything else appears to be equal, we choose to relate dative on other pronouns, and on deictics, to an - $n$-final stem.

Our associating the stem for local cases with the inanimate column might be questioned in the case of indefinite/interrogative - here the local stem, (e), differs from the inanimate stems in rows (a-d) (it is perhaps closer to the human stems in these rows). But the inanimate syntactic-local correspondence is particularly clear in the case of definite deictics where the stem ying $u$ (with or without - $n$-augmentation) underlies all forms bar the absolutive. We then take the same semantic equation to apply for indefinites.
Note that the deictic locative has an entirely local sense - unlike the nominal locative it does not alternate with dative, for instance-4.1.8, 4.2.3.

There are a number of 'gaps' qua the stem/affix combinations we have given:
(i) there are no causal forms $-m u \sim-m$ for the human deictics (note that all four deictics have causals involving -nim);
(ii) there is, strictly speaking, no ergative form for the inanimate definite;
(iii) there is no accusative form for the inanimate indefinite, the absolutive form being used in O function. The inanimate definite accusative is seldom used, the unmarked absolutive being normally preferred;
(iv) the special allative $-: l$ applies only to indefinites.

We must also note one exception:
there is no ergative inflection, $-\eta g u \sim-: \eta$, with the human indefinite, the root wandu constituting the complete A form.
The definite form of the 'allative of direction' in the tablelands dialect appears to be quite irregular. We could recognise a suffix -luy (or perhaps -aluy) from indefinite vandaluy, but this would yield as definite stem the nonce-form yiya- or yiy-.
3.7.4 Historical development. Yidin pronouns conform to the widespread Australian pattern; it was possible (in 3.6.4) to make quite detailed and confident comments on their historical development. The indefinite/interrogatives show some similarity with forms in other languages and we are able to reconstruct something of their history by analysis of the alternations within Yidin. But the definite deictic roots
show little similarity with forms in any other language (even Dya:bugay has different definite forms, although the Dya:bugay interrogatives du: 'who' and ni: 'what' are plainly related to the second syllables of the corresponding Yidij forms) and we can say nothing with confidence about their development.

It is significant that the human indefinite/interrogative ergative is simply wandu. This could be analysed as root wan- plus the regular ergative ending - $d u$. Present-day Yidin does not, of course, tolerate monosyllabic roots. But we have already suggested an earlier stage of the language in which monosyllabic pronouns - 1 sg gay and 2 sg nunwere found; and it is plausible to couple these with monosyllabic indefinite/interrogative root wap.

The locative for wap would be predicted as wanda; this is in fact the locative in modern Yidin. These facts then suggest:
(a) Pre-Yidin had a single indefinite interrogative form with the root wan used in S function, wandu for A function and wanda as locative.
(b) At a certain historical stage monosyllables were eliminated. Two $S$ forms then evolved - human wana and inanimate wani.
The way in which the wana/wani contrast was established is not known. But note that we would have expected the O form based on monosyllabic wan to be wan $+n a=$ wana (and the accusative suffix $-n a$ is normally only used on a form that has human reference); if this were the origin of wapa we would have to explain the shift from O to S function. Note also that the final vowel in wapi is, in articulatory terms, close to the preceding consonant, $n$.
(c) oblique case forms were then recreated:
(i) ergative wand $u$ became the basis for human syntactic cases and derived stems. Note the similarity with our postulated scheme for I sg pronoun - there I sg $\eta a d u$ re-founded all oblique cases (except, in this instance, accusative).
(ii) absolutive wani became the basis for inanimate syntactic cases and derived stems (wani being retained in O as well as S function, paralleling the ergative-absolutive paradigm for nominals);
wand $u$ and wani were augmented by $-n$ before suffixes other than genitive, and accusative; this pattern of $-n$-augmentation is common to deictics and pronouns.
(iii) locative wanda became the basis for the local cases.

There is insufficient formal parallelism between indefinites and definites to enable us to say much about the genesis of the latter. Root yijdu could suggest
$y i n+d u$ but here modern ergative does involve the addition of $-: y$; if $y i n d u$ were the original ergative, remodelling of forms had advanced much further than for the indefinite/interrogative. There is no further evidence for an original root yin- (as there was for wan-).
$y i \eta g u$ could be analysed into yiy-plus purposive or ergative -gu. The absolutive form yigu might be thought to provide support for an original root yiy- (we could suggest that yiju is the disyllabic development of *yig, as wana and woani appear to be augmentations of *wan; the quality of the final vowel of $y i j u$ could be explained by assimilation to the preceding $-\eta$ ). But there is little semantic support - we would expect yingu to function as ergative or purposive, whereas it is locative in modern Yidin (and there is not even an ergative form based on yingu!).

Reconstruction of the history of the definite deictics will have to await the discovery of cognate forms in some related language(s).
3.7.5 yindumba. In 3.6.5 we related the 2 n -sg pronoun nunduba to $2 \mathrm{sg} m u n d u$ through the derivational affix -ba 'one of a group'. There is also a 'non-singular' form of the human definite deictic that appears (historically at least) to involve the nominal affix $-b a$. The following forms are attested:

$$
\begin{aligned}
& \text { S function - yindu:mba } \\
& \text { A function - yindumbaygu } \\
& \text { O function - yindu:mban } \\
& \text { dative - yindumbanda } \\
& \text { purposive - yindumbangu } \\
& \text { genitive-plus-absolutive - yindu:mban } \\
& \text { comitative-plus-absolutive - yindumbandi }
\end{aligned}
$$

$y i n d u m b a$ thus inflects just like a pronoun or deictic. Stem yindumba underlies $\mathrm{S}, \mathrm{A}, \mathrm{O}$ and genitive forms; ergative is the regular - $\eta \mathrm{g} u$ but accusative $-n$ and genitive $-n$ (rather than $-n a$ and $-n i$ ) are reminiscent of case endings on the 2 n -sg pronoun nunduba (3.6.3). Other forms involve the $-n$-augmented stem yindumban-.
Attempts at elicitation of oblique cases with the genitive of yindumba did not yield sure or consistent results (a similar failure occurred with nunduba3.6.2).
yindumba indicates a set of two or more people which includes 'this [person]'. It is often glossed by informants 'this fellow and someone else' or 'these two':
(191) nundu mayi wiwin yindumbanda

You give some food to these two (or more) people!
yindumba differs formally from nunduba in the inclusion of a homorganic nasal $-m$ - between root and affix; compare with the 2 n -sg pronoun in Dya:bugay, nuramba.
3.7.6 yinarin/wandarin. There is a further set of deictic-type forms 'this/what kind of'. The full paradigm is in table 3.8. Note that these forms inflect exactly like nominal roots with one oddity $--l$ can be added to the locative (as in line 25 of text 9 ). An $-l$ form occurs most frequently with allative sense (and is thus parallel to the occurrence of wanda:l qua wanda-3.7.2). Derivational affixes can be added to yinarin/wandarin much as they can to any nominal - for instance, yigarinba' 'a group of people, one of whom is this sort of person'.

There is no distinction between 'human' and 'inanimate' forms; both yiyarin and wandarin can be used to refer to any sort of object. Thus, we find human reference in:

```
(192) wajda:gu yi\etaa:rin bama galiy / yabi
    WHERE-ALL THIS SORT-ABS person-ABS go-Pres lots-ABS
        gada
        white man-ABS
```

    Where are these sort of people going ? - all these white men
    and inanimate reference in:
(193) yayu dubu:rdi mayim yiŋarimu

I-sa stomach-COMIT-abs food-CAU this sort-CaU
buga:dinum
eat-:di-CAU SUBORD
I'm full from eating this sort of food
As with all $y i$-initial deictics, there are corresponding forms beginning with $y u$ - and $y u$-. Semantically, yiyarin 'this sort of thing' contrasts with yuyarin 'that sort of thing' - the 'this/that' distinction is shown either deictically (by pointing) or perhaps in terms of textual anaphora. yuyarip then implies 'yet another sort of thing'. For instance:
(194) yayu wunay yiyarindal

I'll sleep on this sort [of ground]
(195) nundu wunay yuyarindal dabu:
[Whereas] you [prefer to] sleep on that sort of ground
table 3.8 Inflectional paradigm for yinarin/wandarin

|  | 'this kind of' | 'what kind of' |
| :---: | :---: | :---: |
| absolutive (SO) | yipa:rin | wanda:rin |
| ergative (A) | yijarindu | wandarindu |
| dative | yizarinda | wandarinda |
| purposive | yijaringu | wandaringu |
| causal-ablative | уiұarimu | wapdarimu |
| locative-allative-instrumental | yinarinda(l) | wandarinda(l) |
| fear | yijarindida | wandarindida |
| genitive stem | yiyarini- | waydarini- |
| comitative stem | yizarindi- | wandarindi- |

(196) yadin bimbi wunay yuyarindal dabu:
[And] my father [prefers to] sleep on another sort of ground (i.e. on a different type of soil)
yigarin and yuyarin are employed quite frequently in texts 2 and 9. Note particularly their use in referring to different types of food-in line 10 of text 9 yuyarin mina 'that sort of meat' refers to the stew served up in the early days of the mission; in line 3I yiyarin describes ripe bananas and suchlike (the only sort of food the white superintendent gave the boys to eat) and in line 34 yunarin mayi refers to traditional food, which the boys would go off into the bush to procure as soon as they were old enough.

The occurrence of yigarin and wandarin with the nominal affix -bara is exemplified in ( $72-3$ ) above.

It is instructive to compare wandarin with wanira and wani (3.7.1). wani assumes no knowledge of the object that attention is being focused on, and enquires about (at least) its genus. wanira assumes that the genus is known, and enquires about the species. wandarin presupposes the species but asks about the characteristics of a particular token of this type. Thus, we might get (cf. (164)) :

| (197) Question | Answer |
| :--- | :--- |
| wani 'what is it ?' | mina 'an [edible] animal' |
| wani:ra mina 'what type | gangu:l 'a grey wallaby' |
| of animal is it ?' |  |

```
wanda:rin gangu:l ' what
    kind of grey wallaby
    is it?'
```

It might be appropriate to refer to wandarin as indefinite/interrogative (not just 'interrogative'), following our treatment of wapi and waya. However, no instance of wandarin has been encountered in which the sense is simply indefinite (without any concomitant question). (But wandarin has not, in fact, been encountered very frequently.)
3.7.7 wandirI 'how many'. There is an interrogative number adjective wandirI 'how many'. This is the only grammatical form demanding a root-final morphophoneme (2.3.4). It reduces, by Rule 2, in the absolutive:
(198) wajdi:r nuni:nda mayi

HOW MANY-ABS you-DAT fruit-ABS
How many fruit have you got?
The third vowel of the root appears before a non-zero inflection:
(199) nunin bama:l wandiringu wawa:l
you-o person-ERG HOW MANY-ERG see-PAST
How many people saw you?
The reply to (198) or (199) could involve yarga 'none, nothing', yabi 'many, a lot', mundur $U$ 'a great many' or a specific number adjective guman 'one', dambulA 'two' or dagul 'three'.

In one text wandirI co-occurs with yabi:

## (200) bama wandi:r ninay yabi

How many comprise the crowd sitting [here]?
It is likely that in (200) wandi:r is enquiring as to how many tribes the crowd of people represent.
3.7.8 Time interrogatives. The locative form of the inanimate interrogative, wanda, normally enquires about spatial position - 'where'. But it has been encountered with a temporal sense, 'when':
(201) nundu:ba yingu giyi wayu / mina wanda you all-SA here-all DON'т long time animal-ABS 'WHEN' garu $\quad$ uundu yumu dugal by-and-by you-sa that-abs catch-PRES
Don't you [sit] here too long! When are you going to catch that fish ?

There are also cases where wanda corresponds to the 'relative pronoun' sense of 'when' in English:

```
(202) garu bama wanda yalal\etaalaldaga:n /
    by-and-by person-ABS 'WHEN' big-REDUP-INCHO-PAST
    durudurudaga:n / bama yu\etagum gunugunu
    adult man-INCHO-PAST PERSON-ABS THERE-ABL fight-ABS
    dara:dinu
    stand-:di-PAST
```

Later on, when the people had [grown] really big, had become adult men, they fought [in retribution for the crime they had committed as children]
Following the normal Yidij pattern, wajpda can have an indefinite as well as (or instead of) an interrogative meaning; this extends to the time sense. Thus, in line 48 of text 2 , wanda guygaguygam means 'sometime in the evening'.
Informants did not use wanda in translation of English sentences involving 'when', preferring to employ wandirimay (see below) or to use a subordinate clause construction (4.4). wayda is primarily a locational form (and was used exclusively as such in elicitation); but there are in texts a fair sprinkling of undoubtedly temporal uses, such as (201-2).
There are other examples of temporal use of words whose primary reference is locational. Thus bidi 'close by' (3.4.1) has the sense 'just now' in
(203) yinu gumba mura:ndidaga:n / bidi
this-abs girl-ABS sickness-comit-Incho-PAST 'just now' nina:jum
sit-cau subord
This girl has [suddenly] become sick, after having just now been sitting [here feeling alright]
Similarly yungum - 'from there', ablative of the inanimate deictic - can have a time meaning 'and then' or 'from that time'; see (202) above and text 2 , line 63 .
yungum exactly parallels bayum 'from there, then' in Dyirbal (Dixon 1972: 115). The English narrative style of Yidindi (and some Dyirbalyan) informants makes heavy use of 'from there' in places where 'when' would be expected.
Dick Moses used the form waydayunda 'when' in text 2 , line 80 , but later suggested that this was really a Dya:bugay form (Hale reports da:yunda' when'
in Dya:bugay) giving wandirimay as the correct Yidin equivalent. Compare vandayunda with yaluyunda 'today', a form that is attested in both coastal and tablelands dialects of Yidin. (-yunda occurs as a locational affix 'somewhere' in the central dialect of Dyirbal. Note that yalu is a Dyirbal form 'to this place', but that -yunda has not been encountered as an affix to yalu in Dyirbal - Dixon 1972: 57, 261.)

The most usual time interrogatives are derived from number interrogative wapdirI 'how many'. There are two affixes, -may and -m, which can only have time reference:

$$
\begin{aligned}
& \text { suffix -may 'at - days' } \text { giving } \begin{array}{l}
\text { wandirimay 'when ?' } \\
-m \text { 'during - days' }
\end{array} \\
& \text { wandirim 'how long ?' }
\end{aligned}
$$

We can literally interpret wandirimay as 'at how many [days]' and wandirim as 'during how many [days]'.

It was mentioned in 3.5 that time qualifiers fall into two sets - pointtime and durational. wandirimay belongs to the first set and would be appropriately answered by a point time qualifier:
(204) Q - nundu wandirimay gaday When will you come?

A - jayu gaday yada I'll come tomorrow
(205) Q - wandirimay nundu garu dugur balgal

When are you going to build the house?
A - yayu wambay/ginda:n garu muyubara budi:din
I'll wait [until] by-and-by the new moon lies [in the sky] (i.e. until next month)
wandirim belongs to the durational set, and should be answered by specification of a time-span:
(206) Q - nundu wandi:rim wunay How long are you going to sleep for?
A - yayu wayu wunay
I'll sleep [for] a long time
These two time interrogatives can refer either to the future, as in (204-6), or to the past:
(207) nundu:ba wandirimay yingu:run yingu gada:n

When did you [all] come this way here?
(208) yivu buna wandi:rim wouna:n

How long has this woman been sleeping for?

The directionality of time reference in sentences like (204-8) must be deduced from the tense, any time qualifier in the sentence, and from the context. (Thus garu 'later on, by-and-by' in (205) underlines the future reference suggested by the non-past tense in this sentence.)
wandirimay behaves like other point time qualifiers in taking the suffixes (3.5):

$$
\begin{aligned}
& -g u \text { 'until' } \\
& -m u \text { 'since' }
\end{aligned}
$$

For instance:
(209) nundu wandirima:ygu galiy

Until when are you going to continue going? (This sentence was glossed by an informant as 'what time are you going to come back?')
(210) $n u n d u$ wajdirima:ymu gaday

When did you start coming ? (The informant's gloss was 'From what time you come?')
wandirimaygu and wandirimaymu thus have durational reference like wapdirim. There is a major difference: wapdirim could just be enquiring as to whether something was done for a long time or a short time (irrespective of the locus of the period), whereas wandirimaygu and wapdirimaymu normally assume that one end-point of the time-span is the present and ask how far away (in the future or past) the other point is. wandirim also has a sense which is identical to wandirimaygu/wandirimaymu, but it cannot explicitly distinguish between future and past as the durationals derived from wandirimay do.
wandarim, like other durational time qualifiers, cannot take $-g u$ or $-m u$.
Both wandirimay and wandirim commonly take the comitative affix $-d i-3.3 .4$ (but note that $-d i$ will not normally co-occur with suffixes $-g u /-m u)$ :
(211) wandirimdi mundu ninajaday

How many days are you going to come and sit here for ? (This was the exact gloss volunteered by the informant - note the inclusion of 'how many [days]', which directly relates to the root wandirl 'how many'.)

Affixes -may and -m can also be suffixed to number adjectives. Thus with dambulA 'two' we get
dambulamay 'in two [days'] or 'two [days] ago'
dambulam 'for two [days]'
dambulamay occurs in text 14, line 22; and in:
(212) yadin bimbi dambulamay wula:n

My father died two days ago
These forms are also commonly found with comitative -di. Thus, an answer to (206) or (211) could be:
(213) yayu wunay(/ninay) dambulamdi

I'll stay [here] for two nights (days)
Almost all the examples of $-m a y$ and $-m$ involve wandirI or dambulA. These affixes were elicited with dagul 'three' as dagulamay, dagulam. This suggests allomorphic alternation: -amay, -am after consonants; -may, $-m$ after vowels. However, more examples would be needed before this could be put forward as a generalisation. It was not possible to elicit -(a)may, -(a)m with $\eta a b i$ 'many' or guman 'one'.
3.7.9 Other interrogatives. A further interrogative waninbara: ' what's the matter, what for ?' is attested only in the coastal dialect (and occurs there fairly commonly):
(214) buriburi yiŋu mura:ndi wunaj/ waninbara:

This old man is lying sick, [I wonder] what's the matter [with him]
(215) nunin wandu bunda:n/ waninbara:

Someone hit you - what for?
(2,6) yanan waninbara: yundu:y wawa:l
What's the matter with him looking at me all the time $(=$ What is he looking at me all the time for ?)
waninbara: does not inflect. (Note that it can not-synchronically at least - be analysed in terms of the nominal affix -bara 'belonging to' and locative inflection. -bara can in fact be added to wanda - but not waninand the resulting form does take case inflections - see (190).)

Finally, there is a rather infrequent form wanduluy 'how, which way'. This is also restricted to the coastal dialect, and seems to be a separate item from tablelands wandaluy 'in which direction' (3.7.2). A possible response to
(217) nundu wandu:luy dugi gunda:l How did you cut the tree? might then be
(218) yayu gurin gunda:l I cut it well (= properly)

### 3.8 Morphology of verbs and adverbs

3.8.1 Verbal word structure. Verbs and adverbs are morphologically identical. They are, like other parts of speech, entirely suffixing.
The prefix da:- is attested only with wurga-n 'yawn' - 3.4.3. Noun incorporation could perhaps be regarded as a type of prefixation; it is dealt with in 6.I.I.

We can distinguish two kinds of verbal affix:
[1] INFLECTIONAL SUFFIXES
(a) past tense $-n u \sim-l+n u \sim-r+n u$
(b) present-future ( $=$ non-past) tense $-\eta \sim-l \sim-\gamma$
(c) imperative $-n \sim n \sim-r$
(d) purposive $-n a \sim-l+n a \sim-r+n a$
(e) dative subordinate $-n u+n d a \sim-l+n u+n d a \sim-r+n u+n d a$
(f) causal subordinate $-n u+m \sim-l+n u+m \sim-r+n u+m$
(g) 'lest' $-n+d i \sim-l+d i \sim-r+d i$
(a-d) occur on the verbs in a main clause; ( $\mathrm{d}-\mathrm{g}$ ) mark the verbs of a subordinate clause. Note here that (d) has dual function - 4.5.
(a-f) cannot be followed by any further affix (except post-inflectional affixes, which can be added to a word from any part of speech, following any type of inflection). (g) takes a nominal case, agreeing with the case of the 'common NP' in the main clause-4.6.2.
[2] DERIVATIONAL SUFFIXES
(a) comitative $-\eta a-l \sim-l+$ maya-l $\sim-l+$ maya-l
(Care should be taken to distinguish verbal comitative from nominal comitatives $-d i \sim-y i$ and -muday. The syntactic correspondence between these suffixes - which is our justification for employing the same name - is described in 4.3.3.)
(b) $-: d i-n \sim-: r+d i-n$. This suffix has a variety of syntactic and semantic effects; most prominently, it marks a construction as 'antipassive' or 'reflexive' (4.2). There is no suitable single name and so we shall refer to this-perhaps the most important syntactic affix in Yidin - simply as -:di $i-n$.
(c) aspectual

$$
\begin{aligned}
& \text { (c-i) 'going' -yali-n } \sim-: l i-n \sim-: r i-n \sim-: r i-n \\
& \text { (c-ii) 'coming' -yada-n } \sim-: l+d a-n \sim-: d a-n
\end{aligned}
$$

A further type of 'reduplicated aspect', in the tablelands dialect only, is dealt with in 3.8.6.
There is one further derivational affix, $-: n+b i d i-n$. This is poorly attested, and appears only to occur with a limited set of verbs. It is dealt with in 3.8.8.
(a) and (b), unlike (c), can affect the syntactic function of stems to which they are affixed. Comitative occurs ONLY with an intransitive stem, and always derives a transitive form. - : di-n occurs PREDOMInantly with transitives, and most frequently derives an intransitive stem (if it occurs with an intransitive, the resulting stem must be intransitive). Aspectual suffixes, on the other hand, occur freely with stems of вотн transitivity types, and do not change this transitivity. An aspectual affix will simply specify that an action was performed during or after 'going' or 'coming' - 3.8.6.

A verb in Yidin must involve a root, and a final inflectional suffix one of ( $1 \mathrm{a}-\mathrm{g}$ ) above. Between root and inflection we can, optionally, have any one, two or all three of the derivational suffixes. Aspect may occur at two positions, but no examples of a repeated comitative or $-: d i-n$ have been encountered.

Derivational affixes show the following ordering possibilities:
(i) -:di-n can occur before or after comitative.
(ii) aspect must precede comitative (aspect can follow comitative only when there is also an aspectual affix preceding it).
(iii) aspect must follow -:di-n. (Aspect can only precede $-: d i-n$ when comitative intervenes. We then have, by (ii), aspect preceding comitative; and, by (i), comitative preceding -:di-n.)

If a simple table of 'affix orders' were constructed we would have to allow the 'threading' of the table to loop back to account for these orderings.

It is suggested in 5.4 that the comitative suffix is the realisation of a separate 'verb' in deep structure. Partly to reflect this, we can describe the ordering of verbal suffixes through rules:
(219) (a) $\mathrm{V} \rightarrow$ ROOT $(+-$ di $-n$ ) ( + ASPECT $)\left(+\mathrm{V}^{\prime}\right.$ ) + INFLECTION
(b) $\mathrm{V}^{\prime} \rightarrow$ COMITATIVE $(+: d i-n)$ ( + ASPECT)
with the proviso that comitative can only be added to an intransitive stem (effectively, to an intransitive root, or to a transitive root with -: di-n in antipassive or reflexive sense-4.2.3-4).

One constraint is necessary on (219) - ASPECT can only be specified in (b) IF there is also an ASPECT choice in (a); this is discussed in 3.8.6.

We are thus regarding comitative as a type of verb root, that can be followed by the same affixes, in the same order, as a lexical root; comitative and its affixes are then 'embedded' immediately before the inflection in the 'main' verb.
(219) would generate a verb with -:di-n twice, so long as comitative intervened. As already mentioned, no verb with two occurrences of -:dji-n has been encountered. But it is possible that this is a shortcoming of the data collected rather than a constraint on the grammar.

The full paradigm for the main verbal suffixes is given in 3.8.2. Conjugations - their membership, transitivity and phonological features - are described in 3.8.3. We then describe, in turn, the forms and functions of the inflectional, syntactic derivational and aspectual affixes. 3.8.7 provides further discussion of affix combinations and deals with the possibility of a 'length conflict' between -:di and an aspectual suffix.

Affixes -daga- $n$ and - $y a-l$, which derive verbal stems from nominal and locational forms, are dealt with at 4.8.1.
3.8.2 Paradigm. Yidin has three verbal conjugations; we refer to them in terms of the 'conjugation markers' $-n,-l$ and $-r$.

Verb roots are set up to end in a vowel; conjugation membership is then shown by a suffixed $-n,-l$ or $-l$ in the citation form. Each derivational affix is specified for conjugation in the same way (the conjugation membership of a derived stem is independent of that of the underlying root).

The canonical forms of verbal suffixes are in table 3.9 ; these are in each case to be added to a verb-final root or stem. The ways in which the inflections are reduced by Rule $2(2.3 .2)$ are detailed in 3.8.4.
3.8.3 Conjugations and transitivity. Each verbal root and derived stem in Yidin is strictly classified as either transitive or intransitive. There are a number of syntactic tests for transitivity - only a transitive verb can occur with an ergative NP; only an intransitive stem can take the verbal comitative suffix; and so on.

There is some statistical correlation between transitivity and conjugation membership, as can be seen from the distribution of the 293 verbal roots in the writer's corpus of everyday Yidin:
table 3.9 Verbal suffixes

| conjugation: | -n | -l | - $r$ |
| :---: | :---: | :---: | :---: |
| INFLECTIONS |  |  |  |
| present-future | - $\quad$ - | -l | - $r$ |
| past | - $\quad n u$ | $-l+n u$ | * $-r+n u$ |
| imperative | -n | $\emptyset$ | -r |
| purposive | $n a$ | $-l+n a$ | $-r+n a$ |
| dative subordinate | - $\quad n u+n d a$ | $-l+n u+n d a$ | $-r+n u+n d a$ |
| causal subordinate | - $\quad n u+m$ | $-l+n u+m$ | $-r+n u+m$ |
| 'lest' | $-n+d i$ | $-l+d i$ | $-r+d i$ |
| DERIVATIONS |  |  |  |
| comitative | - $\quad$ ya-l | $-l+$ maya-l | $-\tau+$ maya-l |
| -:di-n | -: di-n | $-: d i-n$ | $-: r+d i-n$ |
| 'going' aspect |  |  |  |
| unmarked | - yali-n | -:li-n | -. $\boldsymbol{r}^{i-n}$ |
| before - $\eta a-l$ | -: ri-n | - :ri-n | -:ri-n |
| 'coming' aspect | - yada-n | -: $l+d a-n$ | $-: d a-n$ |

* Postulated canonical form - this is in fact always reduced by Rule 2. See 3.8.4.

| conjugation | $-n$ | $-l$ | $-r$ | total |
| :--- | ---: | ---: | ---: | ---: |
| intransitive | 87 | 23 | 2 | 112 |
| transitive | $\frac{68}{155}$ | $\frac{100}{123}$ | $\frac{13}{15}$ | $\frac{181}{293}$ |

Thus, $8 \mathrm{r} \%$ of $-l$ conjugation and $87 \%$ of $-r$ conjugation roots are transitive; but $56 \%$ of $-n$ conjugation forms are intransitive. Note also that comitative $-y a-l$, which derives transitive stems, belongs to the $-l$ conjugation. The major function of $-: d i-n$ is to derive intransitive from transitive stems (in its minor functions it leaves transitivity unchanged); a -: di- $n$ form always belongs to the $-n$ conjugation.

The corresponding figures for the corpus of verbal roots in Dyalyuy are:

| conjugation | $-n$ | $-l$ | $-\boldsymbol{r}$ | total |
| :--- | ---: | ---: | ---: | ---: |
| intransitive | 20 | 1 | - | 21 |
| transitive | $\frac{8}{28}$ | $\frac{19}{20}$ | $\frac{3}{3}$ | $\frac{30}{51}$ |

yielding similar percentage figures.

But note that many Dyalnuy verbs appear to involve a derivational affix for instance 'bathe' is yiraba:di-n and 'dig' burganbaya-l (yiraba- and burganba- do not occur outside these words). In fact, of the intransitive roots in Dyalyuy ten end in -:di-n, and amongst the transitives seven show final - $y a-l$.

Information on Dyalguy was difficult to obtain and it has not been possible rigorously to check transitivity in each case (as it was for verbs in everyday Yidij); the figures above include some 'unconfirmed' assignments.

Since the $-r$ conjugation is so small, by comparison with the $-n$ and $-l$ classes, we can usefully list all its members:

Everyday Yidin - Intransitive
bayga- $\boldsymbol{\tau}$ 'feel sore, have pain'
Everyday Yidin - Transitive
bada-r 'leave'
balyga- $\boldsymbol{r}$ 'hit with a stick'
banda-r 'follow'
bundu- $r$ '(doctor) wipe(s) off pain'
buybu-l 'blow, spit at'
dadu- $r$ 'put blanket down' (T)
danda-r 'rub'
Dyalyuy style - Transitive
naypu- $r$ 'throw' $\quad n u \eta d u-r$ and nuqga- $r$ 'smell'
Note that Dya:bugay has conjugations corresponding to Yidin's $-n$ and $-l$ classes, but lacks a third $-r$ conjugation.

Just $95 \%$ of verb roots in Yidin are disyllabic. There are no monosyllabic roots at all. Of the thirteen trisyllabics all but one belong to the - $n$ conjugation. Two quadrisyllabics are known, one from each of the major conjugations.

The full list of trisyllabics is:
Intransitive - $\boldsymbol{n}$ conjugation
bambara-n 'be frightened, nervous'
dandaba-n'dance around, feeling lively and pugnacious'
dandiri-n 'feel frisky'
daraba-n 'shake, rinse mouth, etc.'
Transitive - $n$ conjugation
barganda-n 'pass by' wuyaba-n 'look for [meat], hunt'
dandada-n '(doctor) rub(s)'
Transitive $-l$ conjugation
binarya-l 'tell, warn'
dadama-n 'jump over'
dugarba-n 'have unsettled mind' madinda-n 'walk up'
waymbala-n 'roll'
yilari- $n$ 'be scattered, spread about'

Although binarya-l looks as if it involves comitative or causative - $\eta a-l$ there is no form binar known in Yidij. Compare binarya-l 'warn' with the derived binaya-l 'listen' (based on bina 'ear', through the 'causative' verbaliser - $\eta a-l-4.8 . \mathrm{I})$.

The two quadrisyllabic roots are both transitive:
binagali-n 'forget' lululumba-l 'rock baby to sleep'
lululumba-l has an onomatopoeic origin being based on the lilting 'lu-lu$l u . .$. ' which is sung whilst rocking a child to sleep. It is the only $l$-initial word known (outside loans from English) - 2.1.2.

Only about one half of Dyalyuy verb roots are disyllabic. There are seventeen trisyllabics and quadrisyllabics whose final syllable is -:di-n or $-\eta a-l$ and in addition seven trisyllabic roots which show no evidence of (historically) involving a derivational affix.

The probabilities for vowels in the first syllable of a verb are the same as those for the first syllable of a noun or adjective (2.1.3):

$$
\begin{array}{llllll}
a & 0.41 & i & 0.20 & u & 0.39
\end{array}
$$

But the second vowel position of a disyllabic verb root shows markedly different preferences:

$$
\begin{array}{llllll}
a & 0.67 & i & 0.30 & & u
\end{array}
$$

There is little difference between the two main conjugations and between transitivity classes qua $-a /-i$ distribution (for instance, $33 \%$ of $-n$ conjugation verbs as against $28 \%$ of $-l$ conjugation roots have $-i$ as second vowel).
Only seven $-u$-final roots are known in everyday Yidin. Four of these are in the small $-r$ conjugation (listed above). The others are:
intransitive:
duyu-n '(long thing) wriggle(s)'
transitive:
dadu-l 'put blanket down' (C) wadu-l 'cook, burn'

There are three $-u$-final roots attested in the Dyalyuy style - two in the $-r$ conjugation and:
gild $u-l$ 'bite'
Examination of the allomorphs in table 3.9 reveals that almost all the forms in the middle column begin with $-l$-, those in the right-hand column have an initial $-\boldsymbol{r}$-, while the left-hand column lacks any corresponding segment (initial $-\boldsymbol{n}$ - crops up just in the 'lest' row).

There are three ways of dealing with this (cf. Householder 1971: 218 ff .). Firstly, we could simply list allomorphs - purposive -na $\sim-\ln a$
$\sim-r n a$, and so on - without any attempt at further segmentation; this would, however, fail to bring out the recurrent pattern of initial $\theta /-l-/-\gamma$ - in the paradigm.

The second alternative would be to assign a final $-l$ or $-\gamma$ to the verb roots. This would certainly relate together the recurrent segments in table 3.9. But we would need to have a rule deleting - or substituting for - the final root segment for imperative, and in a few other cases. And we would either have to have an $-n$ conjugation root ending in $-n$, but delete this before most inflections, or have it ending in a vowel, and then include a rule inserting $-n$ - before the 'lest' suffix.

These suggestions involve segmenting say wawa:lna 'go-PURPOsIve'

$$
\begin{aligned}
& \text { into (1) wawa }+\ln a \\
& \text { or into (2) wawal }+n a
\end{aligned}
$$

(Vowel length is, of course, inserted by Rule i.)
The third alternative is to recognise the $-l$ - as a separate morpheme, a 'conjugation marker':

$$
\text { (3) } w a w a+l+n a
$$

We would now state verb structure as

$$
\begin{gathered}
\text { ROOT }(+ \text { CONJ. MARKER + DERIVATIONAL AFFIX }) \ldots \\
+ \text { CONJ. MARKER + INFLECTION }
\end{gathered}
$$

This leads to the recognition of a single form for each inflection (except present and imperative) and for derivational $-: d i-n$ :
past $-n u$
purposive -na
dative subordinate $-n u+n d a$
causal subordinate $-n u+m$
'lest' -di
antipassive etc. -:di-n

We now simply have to state that conjugational marker $-\gamma$ - appears before each of these suffixes, $-l$ - occurs before all except antipassive $-: d i-n$, and $-n$ - appears only before 'lest' $-d i$.

Comitative and aspectual suffixes involve more complex allomorphic alternation - but conjugation marker $-l$ - can again be recognised, before comitative -maya- $l$ and 'coming' -:da-n, and $-r$ - before comitative -maya-l. Further, the first syllable of the unmarked form of 'going' aspect clearly relates to the conjugation marker for the $-l$ and $-r$ conjugations.
Present tense simply involves the conjugation markers $-l$ and $-r$ with no further affix. For the $-n$ conjugation we add $-\eta$. Imperatives differ
from conjugation to conjugation: add $-n$ in the left-hand column, use the bare root in the centre column, and add $-r$ (which is phonetically close to the conjugation marker) on the right-hand side.

We choose $-n$ (rather than, say, zero or $-\eta$ ) as conjugation marker for the predominantly intransitive class ( 1 ) because this segment does appear in the 'conjugation marker slot' af the 'lest' row, and also functions as imperative suffix; and (2) because of the evidence from reduplication (3.8.9). Verbal reduplication repeats a disyllabic root and can also include the conjugation marker. Examples of past tense forms are:

\[

\]

The statement of reduplication is plainly simplified if we set up $\boldsymbol{n}$ - as conjugation marker, on a par with $-l$ - and $-\gamma$-.

Note that our recognising the conjugation marker as a separate morpheme gains support from details of the application of Rule 2. Since wawa $+l+n u$ 'see-PAST' reduces to wawa:l, a morpheme boundary must appear immediately before the $-l-$, to satisfy the condition on Rule 2.
Alternatively, we could say that $-l$ - must be recognised as a separate morpheme - and not part of the root-IN ORDER TO JUSTIFY the morpheme boundary condition on Rule 2.
3.8.4 Inflections. Table 3.10 illustrates verbal inflections for the three conjugations and for verbs of differing syllabicity. All the inflections are phonologically cohering (2.4).

Only one trisyllabic root is known for the $-l$ conjugation, and this is used in table 3.10. The comitative affix -ya-l freely derives trisyllabic - $l$ stems, which inflect in exactly the same pattern (3.8.5). No trisyllabic roots are known for the $-\tau$ conjugation, nor is there any affix that derives an $-\tau$ conjugation stem.

Quadrisyllabic stems inflect exactly like disyllabics, and quinquesyllabics like trisyllabics; and so on.

Taking the inflections in turn:
[a] PRESENT/FUTURE TENSE $-\eta \sim-l \sim-\gamma$
This is used for any non-past reference. It is most frequently employed for referring to the present (which can be taken to include immediate
table 3.10 Verbal inflectional paradigm

| root | $\begin{aligned} & \text { gali-n } \\ & \text { 'go' } \end{aligned}$ | madinda-n <br> 'walk up' | $\begin{gathered} \text { wawa-l } \\ \text { 'see' } \end{gathered}$ | binarya-l 'warn' | bada-r <br> 'leave' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| presentfuture | galin | madi:nday | wawal | bina:ryal | badar |
| past | gali:n | madindanu | wawa:l | binaryalnu | bada:r |
| imperative | galin | madi:ndan | wawa | bina:rya | badar |
| purposive | gali:na | madindana | wawa:lna | binaryalna | bada:rna |
| dative subord. | galinunda | madindaju:n | wawalpunda | binaryalyu:n | badarnunda |
| causal subord. | gali:num | madindanum | wawa:lnum | binaryalyum | bada:rnum |
| 'lest'+ abs. | gali:ndi | madindandi | wawa:ldi | binaryaldi | bada :rdi |

past and immediate future) and we normally term it just 'present' in textual glossing. But it can also be used for prediction about the future, contrasting here with purposive which details future obligation or necessity (4.5.2). Non-past and past are nicely contrasted in:

## (220) wajda:run garu yayu magil / <br> WHERE-ALL DIRN by-and-by I-sa climb up-Pres/fut <br> yayu wurba:dinu <br> I-SA look for-PAST <br> I looked to see which way I [could] climb up, by-and-by

[b] PAST TENSE $-n u \sim-l+n u \sim{ }^{*}-r+n u$
$-n u$ and $-l+n u$ are set up as the canonical forms of this suffix in the two main conjugations - they are reduced, by Rule 2 , to $-: n$ and $-: l$ after even-syllabled stems. All $-r$ conjugation stems are disyllabic and past tense is always $-i r$. We can set up underlying ${ }^{*}-r+n u$, which is then obligatorily reduced to $-: r$ (that is, the conditions on Rule 2 are always met). There is no justification for this step, other than overall symmetry and economy (we prefer to allow length to be specified by Rule 1 , rather than adding to the list of affixes that have inherent length - 2.3.5, 2.3.8).
Note that subordinate inflections appear to involve the addition of $-n d a$ and $-m$ to a form identical to past tense; and $-n u$ - does show up in these circumstances for the $-r$ conjugation.

Past tense is the normal choice in narrative (although present is sometimes employed). The majority of verbs in Yidin texts are in either past or present inflection; study of the occurrence of these tenses in the texts given at pages 513-39, and in examples, will indicate further details of use.
[c] imperative $-\boldsymbol{n} \sim \boldsymbol{o} \sim-r$
This is used in both positive and negative imperative constructions; a full account of the syntax of imperatives is in 4.9 .
Most Australian languages have a syllabic affix for the imperative - often $-g a \sim-y a \sim-l a$ etc. (Dixon 1972: 15-16). Dyirbal is unusual qua Australian languages (although conforming to a general trend in languages outside the continent) in having just the root as imperative, without even a conjugation marker (Dixon 1972: 110-11). Yidin is part-way between Dyirbal and the Australian norm - it uses just the root for one conjugation but adds a minimal (consonantal) suffix in the other two cases.
[d] PURPOSIVE $-n a \sim-l+n a \sim-r+n a$
Purposive is one of the two verbal exceptions to the operation of Rule 2; although it meets all the conditions it is not reduced (there is discussion of this in 2.3.3). This inflection can occur on the verb in a main clause, in place of tense or imperative; and it can also mark a subordinate clause, paralleling $-n u+n d a$ and $-n u+m$. A detailed account of its meaning and function will be found in 4.5 .
Most Australian languages have a purposive inflection on verbs with similar meaning to that in Yidin, but the form is normally -gu (being identical to nominal purposive). It is valid to ask how Yidin came to have the unusual form -na for purposive.
Compare the main verbal inflections in Dya:bugay (Hale 1976a: 238) with those in the two corresponding conjugations of Yidin:

| $\overbrace{-n}$ | $-l$ |
| :--- | :--- |
| $-n$ | $\emptyset$ |
| $-n$ | $-n$ |
| $-\eta$ | $-l$ |
| $-n a$ | $-l n a$ |
| $-y \eta g u$ | $-l u \eta$ |

CONJUGATION
imperative
$\left.\begin{array}{l}\text { past } \\ \text { present } \\ \text { future }\end{array}\right\}$
purposive

| Yidin |  |
| :--- | :--- |
| $-n$ | $-l$ |
| $-n$ | $\varnothing$ |
| $-n u$ | $-l+n u$ |
| $-\eta$ | $-l$ |
| $-n a$ | $-l+n a$ |

It is most plausible to suggest that the proto-system was similar to that in modern Dya:bugay, and that Yidin has (i) dropped the original purposive,
(ii) shifted future -na to a purposive sense, and (iii) generalised present also to cover future. Common Australian purposive $-g u$ is plainly part of the $-y \eta g u$ allomorph in Dya:bugay (and we can wonder whether -luy might be a reduction from something like -luygu).
[e] DATIVE SUBORDINATE $-n u+n d a \sim-l+n u+n d a \sim-r+n u+n d a$
When suffixed to an odd-syllabled stem this reduces regularly, by Rule 2, giving -nu:n and -lnu:n (there are no odd-syllabled stems in the $-r$ conjugation).

A $-n u+n d a$ inflection marks the verb in an 'unmarked' subordinate (relative-type) clause. Full details are in 4.4.1-3.
[f] CAUSAL SUBORDINATE $-n u+m \sim-l+n u+m \sim-r+n u+m$
Since it ends in a consonant, causal subordinate does not reduce. Verbs in 'perfective' subordinate clauses show this inflection - 4.4.5-7.

We demonstrate, in 4.4.6, a syntactic connection between nominal dative $-n d a$ and verbal inflection $-n u+n d a$
and a parallel connection between
nominal causal $-m u \sim-m$ (and $-n i m$ ) and verbal inflection $-n u+m$.
It is in view of this, and the formal similarity, that we choose the names 'dative subordinate' and 'causal subordinate'.

Any analysis must surely focus on the common first syllable, $-n u-$, in the two subordinate inflections. One way of doing this is simply to recognise a morpheme boundary in the middle of each ending -$-n u+n d a$ and $-n u+m$. We can then say that $-n u$ - is the 'foundation' for subordinate verb marking, to which is added the relevant nominal inflection.
Although this $-n u$ may well be historically related to past tense $-n u$ (we have no evidence one way or the other) they could scarcely be equated, in a synchronic analysis.

It is in fact necessary to recognise a morpheme boundary in the middle of $-n u+n d a$ in order to explain its reduction by Rule 2. Note that although reduction proceeds regularly here, nominal dative $-n d a$ is an exception to Rule 2. We suggested (3.3.3, 2.3.2) that the non-reduction of nominal -nda may be explained in terms of its being a recent shortening of *-yunda. But surely the same considerations should apply to $-n d a$ in $-n u+n d a$ ? It may be significant that if nominal -nda did reduce it would fall together with genitive $-: n$, whereas the reduced form of $-n u+n d a$ is quite distinct from every other verbal ending (2.3.3).

It is of course possible that we had the following time ordering of changes: (1) *- $-\eta u n d a$ reduces to $-n d a$ in verbal inflection; (2) Rule 2 introduced; (3) *- $\eta u n d a$ reduces to $-n d a$ in nominal inflection. But since we have no way at all of verifying such an ordering it is surely invalid to put forward an explanation in these terms.

The last part of causal subordinate is $-m$, whatever the syllabicity, whereas nominal causal/ablative shows $-m$ after an even-syllabled and $-m u$ with an odd-syllabled stem ending in a vowel. Note that $-m$ is also found (again, irrespective of syllabicity) in the special genitive + causal/ablative inflection -nim (3.3.3).

We suggested (2.3.3, 3.3.2) that ablative-causal allomorph $-m$ should perhaps be synchronically derived from canonical $-m u$. But this may not be its historical origin. Note that Dya:bugay has ablative $-m u$ following a consonant but -malim after a vowel. It could be that Yidin $-m$ is a reduction from something like -malim. $-m$ is the invariant form in $-\eta u+m$ and $-n i m$ (following a vowel is each case) but is restricted to even-syllabled stems in regular ablative-causal inflection. This suggests that Yidin may have replaced $-m$ by $-m u$ on an odd-syllabled stem ending in a vowel (by analogy with the post-consonantal allomorph), the better to meet its syllabicity target.
[g] 'LEST' $-n+d i \sim-l+d i \sim-r+d i$
This does not reduce, providing the final exception to Rule 2. -di marks the verb in a special type of subordinate clause, that normally has an NP in common with the main clause. A case ending, agreeing with that on the common NP in the matrix clause, is added to the 'lest' affix on the subordinate clause verb. Full discussion and exemplification is in 4.6.2.
3.8.5 Syntactic derivational affixes. There are two derivational affixes with syntactic effect:
[a] comitative -ya-l $\sim-l+$ maya $l \sim-r+$ maya- $l$
This occurs only with an intransitive root or stem and derives a transitive stem. It can have an 'accompanitive' meaning:
(221) yayu wagal nina:yal I'm sitting with [my] wife
or a more 'causative' sense:
(222) yanan mayi:y gamanalnu The fruit made me vomit
(223) bama:l yuŋu wanda:riya:l

A person made that [man] go and fall down (i.e. knocked him down)

A full account of the syntax and semantics of verbal comitatives is in 4.3 .

Comitatives inflect exactly like $-l$ conjugation roots, with the same syllabicity-determined alternations of past and dative subordinate. We can illustrate sample inflections on to comitatives derived from disyllabic roots of each conjugation, and from a trisyllabic - $n$ conjugation root. (All $-\zeta$ conjugation roots are disyllabic, and the only $-l$ conjugation trisyllabic root is transitive.)

| root | $\begin{aligned} & \text { gali-n } \\ & \text { 'go' } \end{aligned}$ | madinda-n 'walk up' |
| :---: | :---: | :---: |
| comitative stem | galiza-l | madindaya-l |
| present | gali:yal | madindayal |
| past | galiyalyu | madindaya:l |
| imperative | gali: $\quad$ | madindaya |
| purposive | galiyalna | madindaya:lna |
| dative subord. | galizalyu: $n$ | madindayalnunda |
| root | magi-l 'climb up' | bayga- $r$ 'feel sore' |
| comitative stem | magilmaja-l | baygalmana-l |
| present | magilmayal | baygarmayal |
| past | magilmaja:l | baygarmana:l |
| imperative | magilmaya | baygarmaya |
| purposive | magilmaya:lna | baygarmaya:lna |
| dative subord. | magilmayalnunda | baygarmavalnunda |

Past tense reduces with even-syllabled stems (madindaya:l, magilmaja:l) and dative subordinate with odd-syllabled forms (galinalpu:n) exactly as the conditions for Rule 2 are satisfied. The $-\eta a-l$ allomorph (on $-l$ and $-\zeta$ conjugations) coheres, as do all monosyllabic and inflectional affixes (2.4); the mana-l allomorph is, like all other polysyllabic suffixes, non-cohering, and commences a fresh phonological word. ('Going' and 'coming' aspects provide further examples of morphemes with one monosyllabic, cohering allomorph and another disyllabic, non-cohering alternant-3.8.6.)

It is in fact not easy to tell whether -mana-l coheres. It only occurs with disyllabic roots and we could attribute the reduction from magi $+l+$ maya +
$l+n u$ to magilmaya:l either to the quinquesyllabicity of the whole word (if -maya-l did cohere) or to the trisyllabicity of the second phonological word $\# m a y a+l+n u$ (if -maya-l did not cohere). The only possible criterion is stress-weget mágilmāá:l, mágilmayá:lna (not ${ }^{*}$ magilmayá:l, ${ }^{*}$ magilmayá:lna) indicating that there are two phonological words in each case.
(Note that it is difficult to be sure of stress in marginal cases like this. For one thing, there is always a tendency (2.6.1) to stress an initial syllable - so that a predicted form like magilmayá:l could on occasion be heard as magilmayá:l. For another, the stress patterns on adjacent phonological words can sometimes (2.4) be rationalised into overall stress/unstress alternation - so that a predicted mágilmayd́:l could conceivably be heard as magilmayá:l). The stress patterns heard do indicate that -maya-l is non-cohering, but the evidence is - by its nature - elusive. But note that all other disyllabic affixes are non-cohering and in each other case the evidence is quite conclusive - for instance bigun $U \# m u d a y$ 'shield-comitative-ABSOLUtive' is realised as bigu:nmuday (2.4), and madinda\#nali $+\boldsymbol{n u}$ 'walk up-GoING-PAST' is realised as madi:ndayali: $n(3.8 .6)$.

When an even-syllabled $-\boldsymbol{n}$ conjugation root, such as gali- $n$ 'go', occurs with comitative and imperative (which is zero in the $-l$ conjugation) we get underlying gali$+\eta a+\sigma$. This reduces, by Rule 2, to gali:y. Imperatives like madinda $+y a$, magi $+l+$ maya and bayga $+\gamma+$ maya are not reduced, since the syllabicity condition on Rule 2 is not met. (If comitative were $-\eta a-l$ with $-l$ - and $-r$ - conjugations it should be reduced by Rule 2, the resulting form being identical to noncomitative past tense. The arrangement of allomorphs here - as elsewhere in the grammar (3.8.7) - is most convenient qua the stress and vowel length targets of Yidin.)
Yidin is like many other Australian languages (including Dyirbal - Dixon 1972: 85-7, 96-9, 198-9) in having (one allomorph of) comitative formally identical with an affix (here, $-\eta a-l$ ) which derives a transitive verbal stem from a noun or adjective. See 4.8.r.

## [b] ANTIPASSIVE etc. $-: d i-n \sim-: r+d i-n$

This affix has a variety of functions. In its 'antipassive' and 'reflexive' senses it occurs only with transitive forms and derives an intransitive stem. It can also occur with a transitive stem indicating that the 'agent' does not have volitional control over the action; here the resulting stem is still transitive. Finally, it can occur with transitive or intransitive stems - again leaving transitivity unchanged - marking the action as
'continuous, uncompleted'. There is lengthy discussion of these functions in 4.2.
$-: d i-n$ stems inflect exactly like $-n$ conjugation roots. Sample inflections are:

| root | $\begin{gathered} \text { buga-n } \\ \text { 'eat' } \end{gathered}$ | wuŋaba-n <br> 'hunt for' |
| :---: | :---: | :---: |
| -:di- $n$ stem | buga:di-n | wuyaba:di-n |
| present | buga:dij | wuyaba:din |
| past | buga:dinu | wuyabadi:n |
| imperative | buga:din | wuךaba:din |
| purposive | buga:dina | wuyabadi:na |
| dative subord. | buga:dinu:n | wupaba:dinunda |
| root | baga-l 'spear' | bada- $\boldsymbol{r}$ 'follow' |
| -: $\mathrm{dj} i-n$ stem | baga:di-n | bada:rdi-n |
| present | baga:din | bada:rdin |
| past | baga:dinu | bada:rdinu |
| imperative | baga:din | bada:rdin |
| purposive | baga:dina | bada:rdina |
| dative subord. | baga:dinu:n | bada:rdinu:n |

Vowel length in the second syllable of words like buga:diy and baga:din is, of course, what would be predicted by Rule I. We see that -:di-n has inherent length specification from examination of even-syllabled words for instance, present wuyaba:diy and past buga:diju, baga:dipu etc. Note that -:di- $n$ length is lost in wuyabadi: $n$ and wunabadi:na; this is due to the operation of Rule 4 (2.3.6) which deletes a long vowel occurring in an odd-numbered syllable of an odd-syllabled word.
All verbal affixes discussed above have had parallel occurrences of conjugation markers $-l$ - and $-\tau$-; here, for the first time, $-r$ - occurs but not $-l$ - (with the $-l$ conjugation and $-n$ conjugation forms then falling together). In 2.3.5 we discussed the possible genesis of length in : : $d i-n$, in terms of a development like $-l+d i-n>-: d i-n$.
Note the similarity of form between the 'lest' inflection - $d i$ and the derivational affix -: $d i-n$. Whether or not these affixes may have some common historical origin (and there is no evidence that they do have), they are felt to be quite distinct in present-day Yidin. They can, for instance, co-occur quite freely - thus 'spear-:di-LEST' occurs in absolutive case as baga:dindi and in ergative as baga:dindi:y-examples are in 4.6.2.
$-y a-l$ and $-: d i-n$ can occur together, in either order. An intransitive root can take comitative $-\eta a-l$, deriving a transitive stem; if $-: d i-n$ is added to this we would usually obtain an intransitive form. A stem like galiya:di-n will inflect exactly like wuyaba:di-n, from the paradigm above; thus, while length appears in present galina:din it is deleted by Rule 4 from past tense galigadi: $n$; and so on. The syntax of comitative-plus-:di-n is discussed in 4.3.8.
-:di-n followed by - $\eta a-l$ serves to derive a transitive stem (from an underlying transitive root, via an intermediate intransitive stem), and can put an instrumental NP into absolutive case, making it the pivot for various syntactic operations-4.3.6. Thus baga:diya-l inflects like a normal even-syllabled $-l$ root. Since the length is in an even-numbered syllable it is not liable to deletion - we get present baga:diyal, past baga:dina:l, purposive baga:dina:lna, and so on.
3.8.6 Aspects - 'going' and 'coming'. There are two aspectual affixes; any verb - except gali-n 'go' and gada-n 'come' - may, optionally, make one choice from this system. Aspectual affixes have no syntactic effect, and do not alter the transitivity of the verb; they always derive a stem that takes $-n$ conjugation inflections. Basic forms are:
[a] 'GOING' ASPECT -yali-n $\sim-: l i-n \sim-: r i-n$
[b] 'COMING' ASPECT $-\eta a d a-n \sim-: l+d a-n \sim-: d a-n$
An aspectual affix will indicate whether an action was performed during or after 'going' or 'coming'. With a verb referring to a nondurational action, or to a position of rest ('sit', 'stand', 'lie' etc.) an aspectual specification normally implies that the actor goes/comes and THEN performs the action referred to by the verb. Thus (text 2, lines 122 and 42):
(224) yagaldida: yayu wulayaliy yuŋgu

I'll go and die there in Yagaldyida
(225) nundu:ba dambu:l wunayadan yingu

You two come and sleep here!
Other examples are in (80), (72) and (21I) above.
With a verb that refers to motion, or to a durative action, an aspectual specification can imply that the action was performed whilst going or coming. For instance, with duyga-n 'run':
(226) yadin bimbi duygayaliy

My father's running away ('going running')

## (227) badin mudam duyganaday My mother's running here ('coming running')

But a motion/durative verb can also have the first meaning - go/come and then perform the action. Thus bugayadan 'eat-come-Imp' could mean 'eat while coming!' or (as in text 9 , line 8 ) 'come and eat!'. In line 4 of text 2 wawa:lipu 'look-going-PAST' is used to mean 'look whilst going' but in lines 7 and 10 of the same text it means 'go and look'. And compare (text 2 , line 35 ):
(228) yandi bulmba:gu galina:lna | bayi:lina
we-SA camp-ALL go-COMIT-PURP emerge-GOING-PURP bama:nda person-dat
We must take [the women] to the camp, [we must] go so that we emerge [from the bush] at the people['s camp]
with another textual example:
(229) bana bayi:ldanu
water-ABS emerge-COMING-PAST
[During a volcanic eruption the ground split and] water came [rushing] out

The 'origin' with respect to which 'going' and 'coming' are orientated is normally either the present position of the speaker, or the actor's home or temporary camp, or - in a narrative - the last place mentioned. There are a fair number of examples of aspectual affixes throughout the texts (pages 513-39). (Note that in line 6 of text 14 the speaker uses 'going' aspect at the beginning of the sentence and 'coming' at the end - he began by taking his present position as 'origin' but then switched to his home.)

The two aspects are contrasted within a single sentence, taken from a text which describes the origin of Lake Eacham. As the water rose:

```
(230)bana yalal du\etaga\etaali:na / bundu
    water-ABS big-ABS run-GOING-PURP dilly-bag-ABS
        du\etagavada:n | gangu:l | ginda:da |
        run-coming-PAST grey wallaby-ABS cassowary-ABS
        burudu:r /
        pademelon-abs
```

[The water rose and] as a result lots of water went rushing [into the camp]; [then] the dilly-bag, the grey wallaby, the cassowary and the pademelon came running [out of the camp, fleeing from the water]
Here the narrator took as 'origin' his location whilst he was telling the story - water WENT INTO the camp (which is nowadays fully submerged) and the people CaME out. (duyga-n 'run, move quickly' can refer to rapid movement of people or of water. Note that bundu'dilly-bag' was believed - like animals and birds - to have had human form at the time of this 'storytime' myth.)
'Going' and 'coming' can be described by the lexical verbs gali- $n$ and gada- $n$, or by verbal aspects, or by both simultaneously. Thus we can have, as alternatives to (226-7) with exactly the same meanings:
(231) yadin bimbi galiy duygayaliy
(232) yadin mudam gaday duทgayaday

See 4.1.3 and example (327) below. The writer has heard sentences like yadin bimbi galiy duygay, but these are less used - if one of the verbs in a verb complex is gali-n or gada-n then the other verbs in the complex will normally take the appropriate aspectual affix. In fact, the preferences for 'aspect agreement' go further. If gali-n or gada- $\boldsymbol{n}$ occurs in the main clause, then the appropriate aspect should be included in a subordinate clause, if this is semantically plausible. That is, informants preferred:
(233) yayu galiy mina:gu/ mina duga:lina

I'm going for fish, going to catch fish
to
(234) yayu galiy mina:gu/ mina duga:lna
although both appear to be fully grammatical.
There is a strong formal similarity between lexical verbs 'go/come' and the aspectual affixes:
lexical verb
aspect $\left\{\begin{array}{l}-n \text { conjugation } \\ -l \text { conjugation } \\ -r \text { conjugation }\end{array}\right.$

| 'go' | 'come' |
| :---: | :---: |
| gali-n | gada-n |
| -nali-n | -nada-n |
| -:li-n | -:lda-n |
| -:ri-n | -: $d a-n$ |

There are plainly two possible ways in which these forms could have evolved. The lexical verbs could have been incorporated as verbal affixes (a syntactic syntagm - verb + tense, go/come + tense - reducing to a morphological structure), with the initial $g$ - softening to $y$ - after an $-n$ conjugation stem, and the initial syllable being lost in other conjugations. Alternatively, we could
suggest that at some earlier stage of the language there was a monosyllabic verb ga- 'motion', without lexical differentiation between 'going' and 'coming' (exactly as we posited ancestral monosyllabic pronouns and a deictic in $3.6 .4,3.7 .4$ ) ; and that there were aspectual affixes with forms similar to -li-n and -da-n. It would be natural, as monosyllabic forms came no longer to be tolerated, for $g a+l i-n$ and $g a+d a-n$ to be reanalysed as disyllabic roots gali-n and gada-n. Note that there is a monosyllabic verb ga:-, meaning 'go' or something similar, in a number of languages from the southeast of Australia - for instance, Geytenbeek and Geytenbeek 1971: 59 (and a form gaga- 'go' in Wargamay, a hundred miles to the south of Yidin). (We would, under this hypothesis, still need to explain the first syllable of - yali-n and -yada- $n$, and the presence of vowel length in -:li- $n$ and -:lda-n etc.)

Support for the first, affix-derived-from-lexical-root, alternative is provided by Dya:bugay. Hale (1976a: 239) mentions that 'there is productive compounding of verb stems with the motion verbs gali- "to go" and gara- "to come"'. (Note that there is a regular correspondence between Dya:bugay $-r$ and Yidin - $d$-; for instance bari-/badi- 'to cry'.) An 'incremental affix' is in Dya:bugay inserted between verb root and gali-lgara-; this is $-\boldsymbol{y}$ - for $-n$ conjugation roots and -la-for the $-l$ conjugation.

Compare also with the reduplicated aspectual suffixes in tablelands Yidij, described below.

In just one text that the writer recorded (told by Dick Moses in coastal Yidij) there appears to be incorporation of nina-n 'sit' between verb root and inflection - for instance daygadayga:dininanunda 'grumble-REDUP-:di-ninadat subord'. However, it did not prove possible to elicit any further forms of this nature (or to have them judged acceptable outside the context of the text). This may have been influence from Dya:bugay, which is Dick Moses's second language; although nina- incorporation is not mentioned in Hale's short sketch grammar of that language,

We can now illustrate sample inflections of aspectual stems that are based on different types of root ('going' suffixes are used here; 'coming' is exactly parallel):

| root | wiwi-n | madinda- $n$ |
| :--- | :--- | :--- |
|  | 'give' | 'walk up' |
| aspect stem | wiwinali- $n$ | madindayali-n |
| present | wiwiyalin | madi:ndayalin |
| past | wiwinali:n | madi:ndayali:n |
| imperative | wiwinalin | madi:ndayalin |
| purposive | wiwinali:na | madi:ndayali:na |
| dative subord. | wiwinalinunda | madi:ndayalijunda |


| root | wawa-l | $b a d a-\tau$ |
| :---: | :---: | :---: |
|  | 'see' | 'leave' |
| aspect stem | wawa:li-n | bada:ri-n |
| present | wawa:liy | bada:rin |
| past | wawa:linu | bada:rinu |
| imperative | wawa:lin | bada:rin |
| purposive | wawa:lina | bada:rina |
| dative subord. | wawa:linu:n | bada:үinu:n |

Aspectual affixes have occasionally been heard as $-\eta g a l i-n$ and $-\eta g a d a-n$ after a trisyllabic root e.g. dada:mangaday 'jump over-COMING-PRESENT'. (An allomorph with initial $-\eta g$ - has never been encountered on a disyllabic root.) This might be taken as further evidence that -yali-n and -yada-n did evolve from gali-n and gada-n.

It will be seen that the monosyllabic allomorphs -:li-n and -:ri-n cohere, and continue an established phonological word. In contrast, noncohering -yali-n begins a new phonological word-note that past tense is \#yali:n whatever the syllabicity of the root to which it is attached.

In 2.3.5 we speculated that the 'going' aspect might at one time have been -yali-n (<**gali-n) with all conjugations, but that -l-yali-n reduced to -:li-n and $-r-\eta a l i-n$ to $-: l_{i-n}$. Essentially, $-\eta a$ - was replaced by vowel length (2.6.4). Since $-\gamma l$ - is not a possible cluster, -l- was dropped (retaining the distinctive conjugation marker). Similar considerations apply to 'coming' forms. Here we would suppose that $-l-\eta a d a-n>-: l d a-n$ and $-r-y a d a-n>-: d a-n$. The dropping of $\ell$ before $d$ follows the general phonotactic preferences of Yidin (2.1.2) and parallels rhotic dropping before ergative and locative cases (3.3.2).

When the 'going' aspect occurs before comitative - $\eta a-l$, its form is simply -:ri-n, with roots of all conjugations. Thus:

| root | dunga-n 'run' | magi-l <br> 'climb up' | bayga- $\tau$ <br> 'feel sore' |
| :---: | :---: | :---: | :---: |
| 'going' + present | dungayalin | magi:liy | bayga:rin |
| 'going'+ past | dungayali:n | magi:linu | bayga:rinu |
| $\begin{aligned} & \text { 'going' }+ \text { comitative } \\ & + \text { present } \end{aligned}$ | dunga:rinal | magi:rinal | bayga:ripal |
| 'going'+ comitative | duyga:rina:l | magi:rina:l | bayga:riza:l |

We can explain the substitution of $-: r i-n$ for the normal 'going' allomorph in terms of dissimilation qua the $-l$ - of comitative $-\eta a-l$ (2.5.1). Note that the conjugation marker $-l$ - occurs in every inflection save imperative (table 3.9), but that -:ri-n is generalised to occur before $-\eta a-l$ in all inflections, including imperative. (Conjugation marker $-l-$ is also dropped from - $\eta a-l$ when the derivational affix $-: d i-n$ follows, and here too -:ri-n is retained - see yadi:riya:dipu in 3.8.7.)

It seems as if the $-l$ - of the $-:: l i-n$ allomorph is dissimilated to $-r$ - and this form is then generalised to apply in all conjugations before - $\eta a-l$.

However, there are certain cases in which 'going' is -:lli-n, not -:ri-n, before $-\eta a-l$. This happens when $r$ or $r$ occurs in the last consonant cluster of the root - examples were given in 2.5.1. We could say in this case EITHER that there is a second dissimilation, $-: r i-n$ giving way to -: li-n under pressure from a root rhotic, or that a root rhotic blocks the dissimilation of $-: l i-n$ to $-: r i-n$ in the presence of $-n a-l$. (But note that in the latter case we still have to admit the $-l$ conjugation allomorph being generalised to other conjugations before $-\eta a-l$; for instance, with $-n$ conjugation burgi- $n$ we get burgi-yali- $\boldsymbol{\eta}$ 'walkabout-GOING-PREs' but burgi-:li-ya-l 'walkabout-GOING-COMIT-PRES'.)

Generally, 'coming' aspect behaves exactly like the 'going' variety. There is, however, an important difference in their co-occurrence with comitative $-\eta a-l$. We can first consider a sentential paradigm involving duyga-n 'run' with or without 'going' aspect and with or without comitative derivational affix:
buna duyga:n
Woman ran
b соміт dada buna:y duygayalfu
Woman ran with baby
c 'Going' buna duygayali:n
Woman ran away
d comit +'going' dada buna:y duyga:rina:l
Woman ran away with baby
This is quite straightforward, conforming exactly to the rules we have indicated. But consider the corresponding paradigm with the 'coming' affix:

$$
\begin{array}{ll}
\text { (236) c 'coming' } & \text { buna duygayada:n } \\
& \text { Woman ran here } \\
\text { d comit + 'coming' } & \text { dada buna:y dupga:rina:ldanu } \\
& \text { Woman ran here with baby }
\end{array}
$$

(236d) has both -:ri-n before $-\eta a-l$ and $-: l d a-n$ after it. If we describe $-: r i-n$ as an allomorph of the 'going' aspect -as (235d) suggests we should - then ( 236 d ) would appear to involve both 'going' and 'coming' specifications. But 'going' and 'coming' are complementary terms in a binary semantic system, and both cannot simultaneously be specified. (A comitative verb cannot be interpreted in such a way that the subject is going in one direction and the object in another - see 4.3.7.) Furthermore, ( 236 d ) does carry just a 'coming' meaning (there is no implication at all of 'going' or 'coming and going' or anything of that sort).

It seems that -:ri-n, before $-y a-l$, is a general marker of aspect (not just of a particular aspect choice). If we also get -:lda-n, following - $\eta a-l$, then the aspectual choice is marked as 'coming'. If there is no further aspect specification in the word then the unmarked 'going' aspect is to be inferred. Note that we can, in fact, have -: $l i-n$ after $-\eta a-l$ in addition to the $-: r i-n$ preceding it. That is:

## (237) COMIT+ 'GOING’ dada buna: duyga:riya:linu Woman ran away with baby

is a paraphrase of $(235 \mathrm{~d})$, in free variation with it.
Forms with just -:ri-n plus -ya-l, like (235d), seem to be commoner in texts and conversation than the longer -:ri-n plus - $n a-l$ plus -:li-n type (237). See (223) above, and lines 27,28 of text 2. But verbs like that in (237) are likely to be preferred when attention is focused on the niceties of semantic expression, as in an informant session that has taken a pedantic turn.
The dissimilation of $-: r i-n$ to $-: I l i-n$ after a root showing a rhotic (2.5.1) takes place whether or not -:Ida-n follows the comitative suffix. For instance burva:Lija:ldaju 'jump-Aspect-comit-coming-Past' exactly parallels duyga:riya:ldaju. Another example is garba:lina:liju 'hide-Aspect-comit-goingPAST' which involves -: $l i-n$ twice.

If a verb involves the comitative affix then it must - in terms of the formula given at (219) - go into a second set of affixal possibilities. We naturally have two aspect specifications - one in terms of line (a) and one from line (b), of (219). Either -::li-n or -:Ida-n can follow - $\eta a-l$, in (219b), but preceding comitative in (219a) we only find -:ri-n (contrasting with its absence). The structure of a verb which involves both comitative and aspect can be summarised:

Note that it is not normal to obtain -:lda-n (or -:li-n) following -ya-l without a -.ri-n preceding it, in the case of a disyllabic root.

If Yidin did allow an aspect suffix after $-\eta a-l$, where $-\eta a-l$ was added directly to a disyllabic root, there would be a 'length conflict' (2.3.6) and aspectual length would have to be deleted by Rule 4 . For instance, duyga $a+\eta a+: l i+n u$ 'run-COMIT-GOING-PAST' would then yield duygajali: $n$, which is in fact identical with the realisation of duyga+ $a \operatorname{li}+n u$ 'run-going-past'. (With the 'coming' aspect we should theoretically get a contrast between *dungayalda: $n$ and duygayada: $n$-but the inclusion or omission of $-l$ - here is something that could easily be missed in rapid speech.) It is likely that these two considerations - avoidance of ambiguity, and avoidance of underlying suffixal length failing to gain surface realisation - are at least partly responsible for the evolution of the rather complex method of 'double aspect marking' for comitatives.

The discussion of -:ri-n above applies only to disyllabic roots taking comitative. With trisyllabic roots (or with a disyllabic root plus -: di-n) comitative goes directly on to the root and is then followed by aspectual -:li-n or -:lda-n. It is not acceptable to insert -.ri-n (or any other aspectual suffix) between a trisyllabic stem and - $\eta a-l$. Thus we encounter:

## (238) buna: $\eta$ dada madindaya:linu

Woman is going, walking up, with the baby
whereas *madinda:riyalnu or *madindariyali:n (from underlying madinda $+: r i+\eta a+: l i+n u)$ were judged ungrammatical.
There is no possibility of ambiguity with (i) madinda $+\eta a+: l i+n u$ ' walk up-COMIT-GOING-PAST', yielding madindaya:linu. Compare with (ii) madinda + yali $+n u$ 'walk up-GOING-PAST', which yields madi:ndayali:n. Affixal length is naturally retained in (i) without the inclusion of anything like -:ri-n. And, of course, both -ya-l and -:li-n cohere whereas -yali-n does not (2.4); although (i) and (ii) have the same number of syllables, past tense is reduced in (ii) but not in (i).

The contrast between disyllabic and trisyllabic roots with comitative and aspect reinforces our suggestion above that -:ri-n is introduced before - $\eta$ a-l
in order to produce words that conform as closely as possible to the stress/ length targets of Yidij.

There is a further type of aspect - which we refer to as 'reduplicated aspect' - that occurs only in the tablelands dialect. The regular aspectual affixes, as described above, also occur quite freely in tablelands Yidin. Contrasting the two varieties:

|  | $-n$ | $-l$ | $-\boldsymbol{r}$ |
| :--- | :--- | :--- | :--- | :--- |
| normal |  |  |  |
| conjugation |  |  |  |
| conjugation |  |  |  |
| conjugation |  |  |  |

The reduplicated aspects occur in texts given by Tilly Fuller (see line 6 of text 14) and George Davis; it has not, however, been possible to elicit much on this topic (partly owing to the death of Tilly Fuller in 1974).

Reduplicated aspects appear to mean 'going right away' or 'coming close up', as against normal unmarked 'going' and 'coming' (but it must be emphasised that it has not been possible to pursue corroborative questioning on this semantic contrast, to the extent that the writer usually deems advisable). Thus wawa:lday could be 'come and look' and wawa:ldayga:day would then be 'come right up and have a look'. And, in explaining the verbs used for different modes of crossing a river George Davis said:
(239) yayu daypga:da dupda:ringa:liŋ

I-SA rapids-LOC walk across-REDUP GOING-PRES
I walked across [the stream] at the rapids.
Here the aspectual -ringali- $n$ emphasises that at a shallow spot, referred to by daypgaq, one can actually walk right across a river.

Verbal affixes marking 'going' and 'coming' are found in some other Australian languages. See, for instance, Chadwick (1975: 33ff.) on Djingili.
3.8.7 Affix combinations. The various possible combinations of derivational affixes have all been mentioned in the last few sections. They can now conveniently be summarised, paying particular attention to the occurrence of vowel length (bearing in mind the stress and length constraints-2.2).
[a] comitative plus aspect
With a disyllabic root, -:ri-n precedes comitative and -: $l i-n \sim 0$ ('going') or -:lda-n ('coming') follows it. The length inherent in -:ri-n is thus always in the second syllable of the word; this satisfies the constraints whether the complete word is even-syllabled - as magi:riyal 'climb up-ASPECT-COMIT-PRES' - or odd-syllabled - as magi:rina:lna 'climb up-aspect-comit-purp'. In past tense we find length in two distinct syllables, both even-numbered - magi:riya:l. If -:lda-n or -: $l i-n$ is included after $-\eta a-l$ there will be two long vowels, again separated by just one syllable-present magi:riya:lday, purposive magi:rina:ldana, past magi:rina:ldapu. A word in dative subordinate inflection will involve three long vowels, falling in the second, fourth and sixth syllables - magi:rina:ldapu:n.

Note that we cannot get Disyllabic Root + - $\eta a-l+$ Aspect; nor can 'coming' aspect be expressed through just Disyllabic Root + Aspect + -ya-l.

With a trisyllabic root, comitative must be directly suffixed to the root and is followed by regular aspect -::li-n $\sim$-:lda-n. Aspectual length is then in the fourth syllable of the word and always satisfies the constraints - for instance in both odd-syllabled present tense madindaya:lin, and even-syllabled past form madindaya:linu. A word in dative subordinate inflection will involve two long vowels, separated by a single syllable - madindaya:linu: $n$.

## [b] -:di-n plus ASPECT

Aspect must always follow -: $d i-n$-see (219). The $-n$ conjugational aspectual allomorphs, which must be used in this case, do not involve inherent length so that there is no chance here of a conflict between long vowels in successive syllables (2.3.6). Examples of this affix combination are:
(240) yandi bimbi:nda buygu dara:diyaday we-sA father-dat knee-ABS stand-: $d i$-coming-pres We came and knelt [praying] to [the heavenly] father
(241) yipu bama baga:diyali:n gangulanda this-s person-abs spear-:di-going-past wallaby-dat This person went and speared a wallaby
(242) yayu gali:n bana: gula daraba:dipali: $n$ I-sa go-past water-loc body-abs shake-:di-GOING-PAST I went to the water, went and washed [my] body [in the water]

Note that aspectual -yali-n/-yada-n commences a new phonological word, so that the -:di-n length could not conflict with anything later in the (grammatical) word.

We suggested in the last section that the evidence points to all 'going' allomorphs being reflexes of *-yali-n, and to 'coming' forms descending from ${ }^{*}-y a d a-n$. Initial $-\eta a$ - has been replaced by vowel length for the $-l$ and $-r$ conjugations, giving monosyllabic affixes that phonologically cohere with the preceding stem. In contrast, $-n$ conjugation allomorphs are disyllabic and non-cohering.

Note that if we did have, say, $-:: l i-n$ and $-: d a-n$ in the $-n$ conjugation we would be bound to get length in two successive syllables. With a disyllabic root plus $-: d i-n$ plus aspect, $-: d i-n$ length would be in an evennumbered syllable and aspect length in an odd-numbered syllable; these would be reversed in the case of an odd-syllabled root. Examples would be: present tense ${ }^{*} b a g a+: d i+: l i+\eta,^{*}$ wuyaba $a: d i+: l i+\eta$ and past *baga $+: d i+: l i+n u$, *wupaba $+: d i+: l i+n u$. Here -: $d i-n$ and aspectual length would conflict with one another, and one would plainly have to be eliminated. How could this be done? Would it be morphologically conditioned (-:di-n length being retained and aspect length lost, or vice versa) or phonologically determined (say, length in an odd-numbered syllable always being eliminated)? In fact, a conflict between inherent long vowels is never encountered in Yidin. We can surely suggest (as we did in 2.3.5) that a desire to avoid such a conflict is likely to be one of the reasons why -yali-n and yada-n have not reduced in the -n conjugation.

## [c] -:di-n followed by comitative

This is a common combination - see 4.3.6. With a disyllabic root the length goes onto the second syllable and the constraints will always be satisfied. The three transitive trisyllabic roots known (3.8.3) can not, it seems, plausibly take these affixes - if an example did occur, length would be in the third syllable and would be deleted by Rule 4 if the resulting word were odd-syllabled. Thus, supposing dandada-n 'rub' to take these affixes, we would get -:di-n length remaining in past dandada:dipalpu but being lost from present dandadadi:yal.
[d] -:di- $n$ followed by comitative, plus aspect
A disyllabic root plus -:di-n functions exactly like a trisyllabic root; aspect follows (and can under no circumstances precede) comitative. Verbs can thus have the structure Root plus -: di-n+COMIT + aspect but never *Root + -:di- $n+$ asPECT + COMIT (nor, of course, *Root + ASPECT $+-: d i-n+$ COMIT). There can be two long vowels in the word, but they will always be separated by one syllable - the intervening -ya-l. Thus bunda $+: d i+y a+: l i+n u(c f .4 \cdot 3.6)$ in
(243) yayu dugi bama:nda bunda:dina:linu

I used a stick to go and hit a person
A word involving these affixes can show three long vowels - in the dative subordinate inflection: bunda:diya:linu:n; but these are all in evennumbered syllables, and satisfy the constraints of $\mathbf{2 . 2}$.

If a trisyllabic root could occur with $-: d i$ - plus $-\eta a-l$ plus aspect plus monosyllabic inflection, both -: di-n and aspect length would conflict with the constraints, and both would be eliminated by Rule 4. But, as explained above, such a form has never been obtained and does not seem semantically plausible.
[e] comitative followed by -:di-n
With a disyllabic root the length supplied by -:di-n falls in the third syllable and will be deleted, by Rule 4, whenever a monosyllabic inflection follows - examples are at ( $62 \mathrm{I}-2$ ) in 4.3 .8 (and see 2.3.6, 3.8.5). This affix combination is quite frequent, and this is perhaps the most common instance of the application of Rule 4.
[f] COMItative followed by -:di-n, plus aspect
There are three possible positions for aspect - (i) before comitative, (ii) between comitative and -:di-n, or (iii) following -:di-n. Formula (219), for verbal word structure, does not generate (ii) and this sequence is in fact quite unacceptable. (Note that if it were permitted we would get aspectual length and $-: d i-n$ length in successive syllables, providing an infraction of the constraints.) (i) and (iii) are both theoretically possible, with aspect being generated on cycle $a$ or on cycle $b$ of (219); both have been obtained, by elicitation:
(244) yayu bama maga yadi:riya:dinu

I went walkabout in the company of [other] people
and a sentence similar to (244), with the same meaning, but having as verb burgina:diyali: $n$ ( $y$ adi-l and burgi- $n$ are seemingly exact synonyms 3.1.3). With dative subordinate inflection we could get a further example of a word involving three long vowels; again, they would all be in evennumbered syllables - yadi:riga:dinu:n.

In all the examples obtained 'going' aspect (-:ri-n) precedes -ya+:di-n whereas 'coming' aspect ( $-\eta$ ada- $n$ ) follows. But it must be emphasised that combinations of comitative, -:di-n and aspect have not been encountered outside direct elicitation, and the data are certainly too slender for any generalisation - of the type 'going' precedes -ya-l, 'coming' follows -:di-nto be at present supportable. It is possible that aspect could occur вотн BEFORE - $\eta a-l$ AND also AFTER - $: d i-n$ (as it can both precede and follow - $\eta a-l$ ); information is lacking on this point.

The main point to notice about these affix combinations is that, by careful choice of allomorphy and subtle morphotactic deployment, $-: d i-n$ and an aspectual form involving a long vowel are always separated by exactly one syllable; similarly, two aspect tokens - both involving long vowels - must be separated by a single syllable. In this way Constraint I - 'if two or more long vowels occur in a word, each pair must be separated by an odd number of syllables' (2.2) - is always satisfied in these cases. The devices that achieve this end are:
(i) the aspectual allomorphs that immediately follow -: $\mathrm{di}-\boldsymbol{n}$ do not involve long vowels (and are in fact non-cohering);
(ii) -:di- $n$ cannot immediately be preceded by aspect (or else it would, of course, occur next to -:li-n or $-: l d a-n$ etc.);
(iii) if $-: d i-n$ does occur in a word with a monosyllabic aspectual allomorph, -:d $i-n$ and aspect are separated by the comitative $-\eta a-l-$ we get $-: d i-n$ plus $-\eta a-l$ plus aspect, in ( d ), or aspect plus $-\eta a-l$ plus $-: d i-n$, as in (f);
(iv) if two monosyllabic aspectual affixes occur, they must be either side of $-\eta a-l$.

Thus, to complete the discussion that was opened in 2.3.6, there is no 'conflict' (qua the general constraints of Yidij phonology) between vowel lengths coming from different sources.

We can, as described in 2.3.6, have -:di-n length appearing in an illicit syllable (an odd-numbered syllable in an odd-syllabled form) and this will then be eliminated by Rule 4 . Note, though, that there is
hardly any chance of aspectual length appearing in an illicit syllable. All trisyllabic roots bar one are in the $-n$ conjugation, whose aspectual forms do not show length. Trisyllabic stems can be derived through -:di-n (again, taking length-less aspectual allomorphs) or with - $\eta a-l$. But $-\eta a-l$, on to a disyllabic root, can only be followed by aspect if it is also preceded by -:ri-n, ensuring that all long vowels fall in even-numbered syllables. Aspect length could only conceivably occur on an illicit syllable in the following circumstances:
(i) if a trisyllabic root occurred with -:di-n plus -ya-l plus aspect plus monosyllabic inflection, then both -:di-n and aspect length would be deleted by Rule 4. But, as noted at (d) above, such a form has never been encountered and (in terms of the trisyllabic transitive roots known) would scarcely be semantically possible.
(ii) one trisyllabic root belonging to the $-l$ conjugations is known-binarya-l 'tell, warn'. Here aspectual length would presumably be lost before a monosyllabic inflection-underlying binarya+:li+ $n u$ 'warn-GoING-PAST' yielding binaryali:n. But it has not proved possible to elicit binarya-l plus aspect.

Our detailed examination of affix combinations and the occurrence of long vowels must surely indicate that the development of Yidip morphology has been orientated to the language's overriding phonological targets - that every long vowel should occur in a stressed syllable, and stressed and unstressed syllables should alternate in a phonological word.
3.8.8 -:n-bidi-n. A further derivational affix, -: $n$-bidi-n, has been encountered - in texts from both coastal and tablelands dialects - with the verb wuna-n 'lie down'. It appears to imply that an activity was done at a number of places that are fairly dispersed. Thus, in the coastal dialect example - quoted at ( 78 ) in 3.3 .6 - wuna :nbidi:n implies that the old people were lying around lazily, anywhere in the camp. Compare with the tablelands instance:

[^0]We go walkabout by moonlight, looking for animals. We come home after [hunting] animals, come to stay at home, lie down anywhere, lie sleeping
Here wuna:nbidiy indicates that the group of hunters are so tired by the time they regain their camp that they flop down anywhere to sleep, not bothering to make up proper beds or position themselves according to kin ties, and so forth.

It has been possible to elicit -:n-bidi-n on other verbs of position -nina:nbidi-n can refer to a number of people 'sitting about', all at different places, or to one man who keeps on moving about, sitting at various spots; similarly for dana:nbidi-n ‘stand about'. gada:nbidi-n was glossed 'come about, dilly-dallying about'.

It seems that -: $n$-bidi- $n$ can only occur on verbs indicating position of rest or (with less certitude) on some verbs of motion. The most interesting occurrence was with wanda-n 'fall down':
(246) yinu bama guman wanda :nbidiy gaday/gaba:nda

This person is coming [staggering and swaying] along the road, falling down all over the place.
This affix has only been obtained on disyllabic verbs belonging to the $-n$ conjugation, and then only in present and past tenses. It appears to be non-cohering - thus wouná:nbidi:n, wuná:nbidig. Note that this affix seems to involve inherent specification of vowel length (and this is added to the end of the preceding phonological word!). But the data are really so slim that it is impossible to be totally confident about this point.
A further verbal affix, -ba-n, occurred in conversation with Dick Moses and appeared to have a 'continuous' meaning - galinbayu 'kept on going', gibibibayu 'threw backwards and forwards'. But later elicitation attempts threw doubts on the authenticity of the affix (which did not appear in any texts); it could conceivably be an intrusion from Dya:bugay (although it is not noted in Hale's sketch grammar of Dya:bugay).
3.8.9 Verbal reduplication. Verbs reduplicate on the same formal pattern as nominals (3.3.9) - that is, the first two syllables of the root are repeated before it. For instance, dadama-n 'jump', dadadadama-n 'jump a lot'.

As in the case of nominals, a syllable-final nasal that is homorganic with the following stop is not reduplicated-madinda-n 'walk up', madimadinda-n 'keep walking up'. There are in fact (3.8.3) only two trisyllabic verb roots
with a non-homorganic cluster between second and third vowels, so that a consonant at the end of the second syllable is reduplicated - thus dugarba-n 'have unsettled mind', dugardugarba-n 'have unsettled mind for a long period'.

A conjugation marker may optionally be reduplicated (irrespective of whether or not it is retained as part of the word-final inflection):
unreduplicated

| present tense | wawal 'look' |
| :--- | :--- |
| imperative | bugan 'eat!' |
| past | buga: $n$ 'ate' |
| present | baygar 'feel sore' |

reduplicated
present tense wawawawal or wawalwawal 'look thoroughly'
imperative bugabugan or buganbugan 'eat fast!'
past bugabuga:n or buganbuga:n 'ate fast'
present baygar (m)baygay 'feel very sore'
Only a few $-r$ conjugation reduplicated verbs have been encountered the conjugation marker $-r$ - was always included. And in two of the three instances of bayga-r reduplication a homorganic nasal $-m$ - was also inserted.

The only syllable-final inflections that do not coincide with conjugation markers are present tense $-\eta$ (in the $-n$ conjugation) and imperative $-r$ (in the $-r$ conjugation). These can be reduplicated:
unreduplicated
present tense bugay 'eats'
imperative bandar 'follow!'
reduplicated
present tense bugabugay or bugaybugay 'eats fast'
imperative bandarbandar 'follow quickly!'
No (part of) any other inflection could be considered part of the first two syllables of a word; thus, verbal reduplication cannot repeat (part of) any other inflection; nor is vowel length reduplicated.

Semantically, reduplication indicates that an action was performed many times, or over a long period, or to a considerable degree, or was done quickly. It occurs typically with verbs such as dayga-n'grumble at', bayga- $\boldsymbol{r}$ 'feel sore' or muri- $n$ 'scream' (for this see line 29 of text 2 ). The 'extension in time' sense is seen in:
(247) bibiyuwuy mura:ndidaga:n/ mura:ndi wunawuna:n

Bibiyuwuy became sick, he was lying [there] sick for a long time
(248) dudu:mbu bibiyuwu:na garbagarbayalyu

Auntie always kept Bibiyuwuy hidden
(249) yiyu dada muguy binda:

THIS-S baby-abs all the time shoulder-LOC
yadi:ripa:l | buya:ndu gula guba:n | walkabout-ASPECT-COMIT-PAST sun-ERG body-ABS burn-PAST dada gula bindula galigaligalnum
baby-abs body-ABS weak-NOw go-REDUP-COMIT-CAU SUBORD
This child was taken out walkabout on someone's shoulder for a long time; its body has been burnt by the sun; the child's body is now [feeling] weak from being taken about so much

Reduplication emphasises the 'degree' of an action or state in the following dialogue:
(250) A - yayu dugi:l dadamanu

I [just] jumped over [that] log
B - wani:ngu nundu dadamanu
Why did you jump [over it] ?
A - yayu dundidundi:n banda:dinu
[Oh !] I was [just] feeling very lively, and [wanted to] test myself.
B - nundu gurbi milbadagay
[You'd better watch out,] you might be getting too smart [for your own good, and might injure yourself]

Here the reduplication of dundi-n 'feel happy, gay' emphasises the carefree, high spirits of speaker A.

Unlike most Australian languages, Yidin has no morphological marking for reciprocal verbs. When the writer asked how to say 'the two men hit each other'
(251) bama dambu:l bundabunday
was given - see 4.2.4. (Note that in Dyirbal a reciprocal verb must be reduplicated, in addition to receiving a special derivational affix - Dixon 1972:92-3).

Although verbal and nominal reduplication in Yidin involve exactly the same phonological process, their semantic effects are quite different. This can be seen by comparing the reduplication of a nominal, and of a
verbal form derived from it. Thus, from yalal 'big' we obtain yalalyalal 'lots of big ones', reduplication simply marking plurality - see (120) in 3.3.9. But later in the text from which (120) was taken we encounter:
(252) garu/ bama wanda yalalyalaldaga:nala

Later on, when the [two] people had become really big
Here reduplication of verbal yalal+daga-n 'become big' emphasises that the children referred to earlier in the story had, by this time, really grown up into adult men. (The unreduplicated form yalaldaga: $n$ could have been taken to imply that they were, say, adolescents.)

This example also emphasises the verbal nature of galal + daga- $n$, as opposed to nominal galal. Note that either could make up the main 'comment' of a sentence - bama yalal 'the person is big', bama yalaldagay 'the person has become big'. This point is taken up again in 5.4.8-9, 5.6.1.

### 3.9 Post-inflectional affixes

There is a set of about eight clitic-like suffixes; these can as a rule occur on any word (whatever its part-of-speech membership) and always follow case or tense inflections. These affixes are, irrespective of syllabicity, phonologically non-cohering (2.4).
3.9.I -(a)la. -la (after a vowel) ~ -ala (after a consonant) 'now'. 'This affix is found most frequently attached to verbs, but does occur quite freely with all parts of speech.
[a] VERBS - -(a)la can follow any final inflection.
With present-future tense -(a)la often gives an 'immediate future' sense. Thus (line 107 of text 2 ):
(253) nundu yuygu danan/ yayu galiyala bulmba:gu

You stand there, I'll go at once to the camp
Further examples of present plus -(a)la will be found throughout text 14. Note that with a verb stem belonging to the $-l$ conjugation, whose last root vowel is $a$, we get the phonologically repetitive string -alala:
(254) yayu dada yuทgu:gu gali:yalala

I'll take the child there now

In narration -(a)la is often used on past tense to mean 'this is what happened next'. See ( 118 ), (126), line 24 of text 14 and:

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(255) yayu war\etagi:nala gada:n
    I-sa do all around-paST-NOw come-PaST
    I came, now moving by a circuitous route
```

And compare with (252).
Note that - (a)la is, like all post-inflectional affixes, added to a word after all phonological processes have applied (2.4). Thus we get -ala onto a reduced past but $-l a$ with an unreduced form (e.g. madindanula 'walk up-PAST-NOw').

With an imperative verb -(a)la serves to reinforce the urgency of the command - for instance line 29 of text 14 .
-(a) $l a$ can also occur after a verbal inflection which marks a subordinate clause:
(256) dada $\quad$ риŋu bibiyuwuy ทamu:ray bayi:l |
child-abs that-s name-abs smell-abs emerge-PAST
madala / wunanunda
soft-ABS-NOW lie-DAT SUBORD buludaganundala rotten-INTR VBLSR-DAT SUBORD-NOW
A smell came out of [the corpse of] the baby Bibiyuwuy; it was soft now; it had been lying [for a while] and was now turning rotten
[b] PRONOUNS AND DEICTICS - -(a) la often implies 'it's my (or your, or his/her) turn':
(257) nundu buga:n/ nayula buga:na

You've eaten, now I must eat
[c] ADJECTIVES - here the affix normally indicates that a certain object has just entered into a particular state. See bindula in (249), madala in (256) and:
(258) yayu dugi wawa:l wuwuy gamu / yandi

I-sA tree-ABS see-PAST bean tree-ABS flower-ABS we-SA
mina:gu gali:na/mina dirgulala fish-PURP go-PURP fish-ABS fat-ABS-NOW
I saw the flowers [out] on the bean tree, and so went for fish. Fish will be fat [and ready to eat] now (cf. I.4)

Further examples are in line 34 of text 9 , and lines 25,27 of text 14 . [d] NOUNS - if -(a)la is used with a noun in absolutive case it may indicate that someone or something has attained a certain form, referred to by that noun. See (847) below.
-(a)la can occur after any oblique case form of a noun, adjective or pronoun. It is particularly common after genitives:
(259) puyu wayal bimbi:nim / nayu wawa:l
that-abs boomerang-abs father-Gen-abl I-sa see-past
galigalijalpum | yuךu wayal
go-REDUP-COMIT-CAU SUBORD THAT-ABS boomerang-ABS
galya:nala
uncle-GEN-ABS-NOW
That boomerang used to belong to father - I used to see him taking it around [with him]; now that boomerang belongs to uncle
An example of -(a)la following purposive is:
(260) yandi madi:nday bunda: galiy/ gubumagula
[When the black locust sings out] we go walking up the mountain [to the tablelands] for black pine now
Note the formal similarity between post-inflectional -(a)la and the locative allomorph -la. The latter only occurs with odd-syllabled stems ending in a vowel and, unlike -(a)la, is phonologically cohering. There is thus a potential contrast: gúdagála 'dog-Loc' as against gudá:galá 'dog-ABS-Now'; but it is in practice sometimes difficult to distinguish the two affixes in these circumstances. ('dog-ABS-Now' can be pronounced gúdagála-see 2.4 and 2.6.1).
[e] time words - an example was given at ( 117 ) above.
[f] locational words - -(a)la occurs frequently on all types of locationals and locational deictics e.g.
(261) wira ginda:n waygila dalbalala wunay

The moon is lying high up [in the sky] now
(262) yayu yingula wulayada:n

I've come to die right here
(263) yuygum yayu gali:n/ banaguwala

From there I went, now [going] west along the river
Compare (263) with ( 118 ) above.
Note that -(a)la is not normally encountered on more than one word in an NP. Thus in
(264) gana yayu yingu bura:yndala wuna:na

I'd better try to sleep here in [this] cave
both yingu 'here-Loc' and bura:ynda 'cave-Loc' are in locative case, but only the latter bears -(a)la. (Note however (261), in which both waygi 'up' and dalbal 'reaching up' take the post-inflectional suffix.)
[g] PARTICLES - -(a)la can also occur quite freely with particles:
(265) yayu yudula gana biba:dina

I tried not to look back now [at my old home, since I now had a new camp]
-(a) $l a$ is quite common in coastal Yidin, but is consistently more frequent in the texts collected in tablelands Yidin. It is said that $-(a) l a$ was used much more in Gungay than in coastal Yidin (and was in fact a characteristic feature of Guygay).
3.9.2 -di. This affix has an intensive or reflexive meaning, corresponding quite closely to English 'self' forms. It is found most frequently with pronouns or deictics:
(266) yayudi mura:ndi I myself am sick
(267) yayudi bina:yal mayi I'm thinking about vegetable food

Without the $-d i(267)$ would mean 'I'm listening to vegetable food (e.g. to the noise of fruit falling)'. With $-d i$ marking its subject binaya-l 'listen' takes on the meaning 'listen to oneself' $=$ 'think'. (Compare with Dyirbal where the reflexive form of yamba-n 'listen' is used for 'think', but in this case reflexive is derived by a verbal affix similar to -:di-n in Yidin - Dixon 1972 : 41, 89.)
(268) yuyudi bini:r nuni:nda wiwi:n
[On first coming into the mission Dick Moses was paid with a paper docket and asked where the (coin) money was. He was told:] 'That is money you've been given'
-di can also occur with nouns; it is added to a proper name in:
(269) minmi:nidi yuŋu danay Its Minminiy standing there

Dick Moses told a story of how (when a boy) he and a friend illicitly dug up some mission potatoes one night. A white supervisor found them and asked what they were doing. The boys stood silent because, as Moses said:
(270) yandi mayidi dula:l bayga:mu

We'd certainly been digging the potatoes
Here, the inclusion of $-d i$ on the first word of the NP mayi baygamu emphasises that it was potatoes they were digging (and they had no chance of hiding anything).

Note that - $d i$ - like -(a) $l a$ and other post-inflectional affixes - will only normally be affixed to one word in an NP, as in (268-70). This contrasts with case inflections, which must be added to each word in an NP, and with genitive, comitative and privative derivational affixes, which can also be affixed to each word in an NP (3.3.6).
$-d i$ can also be affixed to adjectives and then indicates 'certainly, really, very' (compare -wadan-3.9.6). Thus a reply to

## (27) buna yuqu gudu:ndi yala:ldi

That woman has a big bottom
might be
(272) yiyijgudun ŋalaldi

Yes, [her] bottom is certainly big.
The particle wala 'ceased' (4.10) frequently occurs with adjective-plus-di, and serves to emphasise the judgement:
(273) gapa:r Yalaldi wala
[This] alligator is certainly a big one
When $-d i$ is affixed to gurin 'good' it is normally accompanied by wala: gurindi wala ' [it]'s certainly alright' is a common idiom-like expression. Even more frequent is yuyudi wala ' $[\mathrm{it}]$ 's alright', which may optionally be augmented by gurin - see (87) in 3.3.6, text 9 , line 29 and text 2 , line 77.
$-d i$ also occurs, though less frequently, with verbs. Thus in (274) bulmba duyur danaydi yabi yivu

There is a lot of noise present at this place
the verb danay 'stand' plus $-d i$ indicates that the noise is certainly present ('standing') at the place.
The noise is inalienably possessed by the place - hence the apposition of bulmba 'place' and duyul 'noise', both in absolutive case. See 4.7.3.
In text 14, line 14, Tilly Fuller said yayu gada.ndi, but on playback preferred payudi gada:n (yayu gada:pdi is perfectly grammatical but in this context gayudi gada: $n$ appears to be more appropriate.)

- di has been encountered several times with $\eta u d u$, but in each case it seems that the form is functioning as an interjection 'no' (4.12) rather than as the particle 'not' (4.10).

There is a particle yadi (with stress on a short non-initial syllable a unique exception to the stress assignment rule of 2.2 ), that has exactly the same meaning and form as -di. It is likely that the affix which is much commoner than yadi in the texts collected - is a recent shortening of the particle. See 4.ro.
3.9.3 -yuti. This affix has different effects according as it is added to a pronoun or deictic, or to a noun.
[a] with a pronoun or deictic, -yuri is a (semantic) topicaliser 'this is the one'. See (693) and:
(275) yananךuri nundu:ba bundayadan/.../yayuyuri bunda:n/

I'm the one you must come and hit...I'm the one who killed [the old man]
(276) nundu:bayuri mayi yabi bugay
[I thought] you were the fellows who were eating all the vegetable food
(277) yiŋuøuri (dugi) yayu gunda:l

This is the (tree) I cut down
yinupuri in (277) has a directly deictic sense; this sentence might be said when pointing out the tree to someone.
[b] when affixed to a noun, -yuri means 'like'. Thus, in explaining to the writer what type of insect guruyga refers to, the informant said:
(278) guru:yga wawa:l/ mindilyuri gambanunda
'Guruyga' is seen crawling about like a tick
Note also:
(279) bama gada:n/gulbul wayga:dinu:n/ bundayuri

The people came [to high land] as the waves rose like a mountain (280) yiŋu wagu:da ninay/bunayuri

This man sitting [here] is like a woman
Compare (280) with (281), in which -nuri is affixed to the demonstrative $y i y u$ and thus bears sense (a):
(281) yiyunuri bupa ninay

This is the woman, sitting [here]
(Note that the word order is rearrangeable in both (280) and (281).)
-yuri can occur freely with genitive forms. Thus we can have either:
(282) bama yupu ninay/ yumbay gangu:lyuci

That person sitting [here] has a face like a wallaby
or
(283) yuyu bama:n yumbar wunay/gangulaniyuri

That face of the person lying [there] is like [the face] of a wallaby
See 4.7.3 for discussion of the use of 'genitive construction' or 'appositional construction' for inalienable possession.

The genitive form of a pronoun can select sense (a) of -yuri- yadinnuri ' [I thought] it was yours' - or else, like a nominal, sense (b):
(284) yadin dadal yayu wawa:l/ nadinyuri yumbay gula guman

I see my son - his face is like mine and his body is one [with mine] (i.e. he resembles me in face and build)

Only one example has been gathered of - $\eta u u^{i}$ following an oblique nominal case. Describing the first plane seen in Cairns, Dick Moses said
(285) garu wawa:lna dabu:yuri galinunda
[When the plane flew low overhead, it] looked as if it would soon be going along the ground

It is likely that speakers of Yidin perceive -yuri as a semantically nondisjunctive suffix (rather than two homophonous forms). A pronoun or deictic refers to some specific individual whereas a noun describes a class of objects; thus sense (b) 'it is like one of this class' collapses to sense (a) 'it is this' with pronouns and deictics. (Note that the genitive pronoun has to be used for 'he is like me', as in (284).)
(285) could in fact be interpreted qua sense (a) - 'THis is the ground it seemed likely to go along' - or (b) - 'it was like going along the ground'. When - $y u r i$ is suffixed to an adjective an interpretation qua sense (a) or sense (b) is again possible - see line 33 of text 9:
(286) mayi binay guringuri We thought the food was good
$-\eta u r i$ has been encountered suffixed to a verb - yayu vaamba:dijuquuti 'I waited [for him, while he had his turn]' but does not appear to be productive with this part of speech.
3.9.4 -ŋuru-. - иu u'for another thing' has a contrastive role, marking a referent (of whichever part of speech it is attached to) of a different type. - $\eta u r u$ often carries the implication of things being encountered or happening 'in turn', one after another.

In a myth, a storytime hero comes upon a gathering of tribes. He passes the Yidindi camp, then the Ngadandi group, and then the Dya:bugay camp:
(287) bulmba da:bugay yivuŋuru ninay

This next camp is the Dya:bugay [people] sitting [here]
Compare with:
(288) dada yadin yiŋu bana: wuŋawuya:dinuฑuru biri:nda

This son of mine drowned in salt water, it being his turn
[to die] (the informant offered the translation 'his time having come')

- $y$ uru has not been encountered with first or second person pronouns, but it does occur with deictics, (287), verbs, (288), and nominals. With an adjective $-\eta u \nsim u$ indicates a state recently achieved (and contrasting with a previous state):
(289) bana duda:n dilygu/ wuna:n gurinyuru

The water went down and now [for a change] lay there peacefully [after a period of high seas and rising water]

Onto a noun, -yuru is close in meaning to the nominal derivational affix $-b i(3 \cdot 3 \cdot 6)$. The two suffixes can in fact be used as stylistic variants in discourse. Thus, a command:
(290) nundu wayalyuru gali:y You take another boomerang! might elicit the response:
(291) yayu waya:lbi gali:yal I'll take another boomerang

The contrastive, listing use of - yuru shows up well in (292) where the informant was explaining the meaning of wigi-l 'be made satiated and sick by [eating] too much food of different kinds':
(292) yayu mayi jabi buga:n/ mina mugu/ mina yayu buga:nŋuүu/ jayu dubu:rdi ninay/ nanan mina: $\eta$ wigil
I ate a lot of vegetable food; then [I] couldn't help [going on to] meat. I then ate meat as well. [Now] I'm sitting feeling full; and the meat (on top of the vegetable food) is making me feel ill

Here - $\eta u \boldsymbol{r} u$ is effectively suffixed to the clause gayu mina buga: $n$, indicating that the speaker went on to meat after having filled himself up with vegetables. (The Yidindi believe that one should not normally combine mayi and miga in one meal.)
3.9.5 -budun. -budun 'still' can be affixed to a verb:
(293) gapa:r galiybudun

The alligator is still going [down the river]
or to an adjective (note that in (295) -budun co-occurs with -yuru; compare with (289) above):
(294) gana nandi daliyibudun ninay

We're trying to sit [here], but we're still very hungry
(295) guyiriyal bana/ gurinbudunyuru
[The magic woomera] made the water calm, so that it was still alright (in contrast to its former turbulent state)
or to a deictic:
(296) yuqubudun yayu gilbil/ dungu bugan
[Two boys have complained to their uncle that he is keeping the meaty parts of grubs for himself and throwing down just the grub-heads to them. Uncle replies:] 'That's all I can throw [to you] - eat the heads!'
or to a noun, in any case inflection - for instance, ergative:
(297) buriburi:ybudun mula:ri gali:yal

The old people still take the newly-initiated man [clearing a path for him in the bush when he goes to defecate] (i.e. his cicatrices are not yet healed sufficiently for him to be allowed to go out by himself.)
or a locational word - see line 57 of text 2. -budun is not attested with particles.
There is also what appears to be an idiom yuyumbudun 'and then the same thing' (e.g. line 35 of text 9 ); it appears that yuyum does not appear outside this compound-3.7.2.
3.9.6 -wadan. The main function of this affix is to effect the comparison of adjectives:
(298) yayu yalal yipu bagil nalalwadan

I'm big but this other [man] is bigger [than me]

When the writer enquired how to say 'molasses is sweeter than honey' he was given:
(299) mala:di wigilwigilwadan / banga yudu gana
molasses-ABS sweet-REDUP-wadan honey-abs NOT try bindu innocuous-ABS
Molasses is very sweet, honey isn't - it is only mild[ly sweet]
And when ' $m y$ son is cleverer than your son' was asked:
(300) yadin dada milbawadan/nuni gudu

I-gen-abs child-AbS clever-wadan you-GEN-ABS NOT milbadaga:n clever-Incho-past
My son is cleverer (at hunting, etc.), yours never became clever (at it)
The inchoative verbaliser -daga- $n$ is discussed in 4.8.1.
As Sapir has emphasised (1949: 122) judgements of grading must precede absolute descriptions. Thus, 'this man is big' can only follow from 'this man is bigger than the norm' or 'this man is bigger than most other men in the community' etc. It appears that the comparative sense of -wadan is primary. But, if there is no explicit second object against which the object under focus is being compared, then -wadan can be translated by something like 'very'. For instance, the first three words of ( 300 ) said in isolation could be rendered as 'my son is very clever (i.e. high on the scale of skilfulness qua the other young men in the camp)'. And:
(301) yanan bama:l yala:lduwadan wawa:l

The (very) big person saw me
(302) yayu pundu:n baryga:n / bama yiju milbawadan

I-sa that-acc praise-past person-abs this-abs clever-wadan I praised that [fellow]: 'This person is certainly clever'
-wadan does not normally occur on a noun, if this is accompanied by an adjective - *bamawadan yalal(wadan). However, a noun making up an NP by itself can take -wadan, which then implies a comparative judgement on some quality of the noun e.g. wagu:dawadan 'really a man' (or, as the informant put it, 'it's a man alright!').

- zwadan is more limited in occurrence than -(a)la, -di,-yuri,-yuru and
-budun, being attested only with nominals. But it is certainly postinflectional, following all derivational affixes and case endings, as in (301) and:
(303) yayu madi:nday bunda: yala:ldazwadan

I-SA walk up-PRes mountain-Loc big-Loc-wadan
I'll climb a bigger mountain
3.9.7 Summary. The five main post-inflectional affixes, listed in 3.9.1-5, can occur with nouns, adjectives, locational and time qualifiers, and deictics. All occur after verbs except $-\eta u r i$ and all after pronouns except $-\eta u u^{u}$ and -budun. Only -(a)la occurs with particles and only $-d i$ with the interjection $\eta u d u$.
A post-inflectional affix will occur on just one word in an NP, even though it may be modifying the meaning of the complete NP. In some instances - for example, (292) - a post-inflectional affix seems to be qualifying a complete sentence, but is again attached to a single word (probably, in this case, the last word in the sentence).

There are three other affixes that also show some post-inflectional characteristics. In 3.3 .7 we mentioned the suffix - $n a$ (possibly one of two homophonous affixes -na) that has simple emphatic effect; it is noncohering and non-reducing. -mari 'alongside, along, through' (3.3.7) either goes directly on to a root, or else follows locative case. Finally, -damu 'only, all' (3.3.6) is a nominal derivational affix, but it does occur in line 77 of text 2 following a verb (with the meaning '[happens] just a bit'). In addition, the writer elicited

## (304) mayi gurdidamu bana:

Let the vegetable get soaked in water just a bit -damu cannot occur productively with verbs.

## 4 Syntax

### 4.1 Simple sentences

4.I.I Non-pronominal noun phrases. The words in a noun phrase in Yidin agree, in all showing the same case inflection. It is this case ending that enables us to group the words together as members of one NP, and it is the choice of case inflection which indicates the function of the NP in the sentence.
Yet Yidin does have a fairly definite preferred word order. Deviations from the norm occur, but they are not frequent. (Here Yidin contrasts with its southern neighbour Dyirbal, which shows exceptionally wide word order possibilities - Dixon 1972: 59, 107-8, 291.) But since grammatical function is entirely determined by case inflections - the Yidin preference for a fixed word order is best regarded as an aesthetic (or pedantic) fad, rather than a syntactic necessity - sentences showing unusual orders are generally quite grammatical, any oddity being at the level of 'style'.

A noun phrase can involve the following constituents:
[i] a specific (i.e. non-generic) noun e.g. badil 'rickety nut', wayal 'boomerang', dada 'child'. This normally functions as the 'head' of the NP.
[ii] one or more generic nouns (the twenty or so generic terms, and the semantic hierarchy they define, are given in 6.2.1). A generic will normally precede a specific noun (deviations from this ordering are encountered extremely rarely). Thus:

## (305) gana mayi dimir dula:lin

TRY vegetable-ABS yam-abs dig-going-IMP
Go and try to dig some yams up! (text 2.53)
(306) bama mula:ri wulyga:n bana:
person-abs initiated man-abs cover-PAST water-loc
The initiated men were drowned by the [rising] water
It is possible to find two generic nouns co-occurring with a specific noun in an NP. They can either be at different levels of generality (both referring to the
nature of the object) as bama buna yabu: $\gamma$ 'person, woman, pubescent girl'; or one can refer to the function and one to the nature of the object, as wira gala biwur 'moveable object, spear (generic), fish-spear'.
[iii] a genitive noun or pronoun, together with appropriate modifiers/ qualifiers. We can effectively have an NP embedded within an NP; the case inflection appropriate to the matrix NP is added after the genitive affix on each word of the embedded phrase. A genitive NP normally precedes the specific head noun (and any generic qualifier) although it can - in perhaps $10-12 \%$ of the occurrences noted from texts - follow the head. Detailed discussion and examples are in 4.7.1-3.
[iv] Genitive marking must be used for alienable possession and can also be employed in case of an inalienable (part-whole) relationship. There is an alternative method of indicating inalienable possession - just appose possessor and possessed nouns, with no special marking (both will, of course, take the case inflection appropriate to the whole NP). In this construction it seems that the possessed ('part') noun will normally follow the 'head' possessor noun:
(307) nundu/ bama dungu numay
hey! person-ABS head-ABS move about-PRES
Hey! that's a person's head moving about
(308) dugi gubu gana yayu waygi wawa:lna
tree-abs leaf-abs Try I-SA up look-PURP
I must try to look up at the leaves on the trees [to see what colour they are, when the clouds have turned yellow just before a volcanic eruption]
[v] An NP can, of course, involve a member of the class of adjectives (which includes, in Yidin, numeral qualifiers). Adjectives normally follow nouns, as in lines $21,49,68$ etc. of text 2 and in:

```
(309) bama:l yabi:\eta guru:n gadayalnu
    person-ERG many-ERg language-ABS come-comit-PaST
    A lot of people brought news
```

Most examples of NPs with two adjectives involve one descriptive adjective and a numeral; both will follow the noun (insufficient examples are known to determine whether there is any relative ordering between types of adjective). In (310) the descriptive adjective galal 'big' occurs, unusually, between generic and specific nouns:
(310) bama jalalyalal duruduru yabi gada: $\boldsymbol{n}$ person-ABS big-REDUP-ABS adult man-ABS many-abs come-PAST Many big adult people came

Only two NPs have been encountered (outside direct elicitation) which show two descriptive adjectives: nuni digir guran duri 'your nose is long and pointed'; ganda [galiyalnu] gadil gulga '[took along] a short little yamstick'.

Only two or three examples are known of an adjective preceding the head noun; it may be significant that all of these involve numerals; for instance, an informant said bama dambu:l milba 'person two clever' but then repeated it as dambu:l bama milba.
[vi] an NP can involve one of a set of logical-type modifiers:

> bagil 'another token of the same type'
> gayal 'a token of a different type'
> wawur 'some of'
(a full account of their syntax and semantics is in 6.2.2).
These generally follow the noun. Note that these modifiers can more frequently than other non-noun constituents-make up a whole NP:
(311) yandi gayal mugu yayga:n
we-SA other-AbS Particle forget-past
[After the mission had given us European food] we couldn't help but forget about the other sort (of food) [i.e. traditional Yidin food] (text 9.34)
[vii] Finally, an NP may include a deictic, from the set discussed in 3.7.
Definite deictics seem not to have any preferred place in ordering they precede the head noun in about half the instances collected and follow them in the other half. In fact, although a definite deictic can occur at the beginning or end of an NP, it is frequently found somewhere in the middle. For example, between possessive and head noun:

```
(312) yandi bama:n yivu bupa dambu:l
we-SA person-GEN-ABS this-ABS woman-ABS two-ABS
    du\etaga:rina:lna
    run-GOING-COMIT-PURP
    We must run away with these two women who belong to the
    people (text 2.27)
```

or between a generic noun and a specific proper name:
(313) bama yipu yidi:pdi gaday
person-abs this-ABS 'tribe'-ABS come-Pres
This Yidindi person is coming
or between a noun and adjective:
(314) bama yiju yabi ninay
person-ABS this-ABS lots-abS sit-PRes
A lot of these people are sitting [there] (text 2.8)
Indefinite/interrogative deictics have also been observed at all positions in an NP; but they do - unlike the definite variety - show a distinct preference for NP-initial (and sentence-initial) position.

It will be noted that most of the NPs exemplified in (305-14) have been in absolutive case (marking S or O function). In fact, absolutive NPs tend to convey more information than oblique constituents (syntactic rules are often used to bring a complex NP into surface S or O function). But the evidence available suggests that the possibilities we have outlined apply to all NPs; it is just that absolutive NPs - because of their pivotal role as syntactic 'topic' tend to take up more of the available choices.

In summary, an NP can involve (with norm ordering shown on the left:


Note that none of these can be regarded as an obligatory constituent of an NP. There is normally a specific or generic noun, but an NP can quite happily consist of just a deictic, or adjective, or deictic and adjective - in fact, of any combination of choices from ito vii.
Australian languages can be ranged along a continuum qua freedom of word order: at one extreme is Dyirbal, where words can occur in any order within a sentence and case marking is quite obligatory on each nominal item; at the
other end is Diyari (Peter Austin, personal communication) where the order of words within NPs and within VPs (and of phrases within sentences) is quite fixed, and case inflection is normally added to just the last word in an NP. Yidin shows characteristics of both types - most NPs conform to norm restrictions on word order, but each word in an NP must be marked for case.
4.1.2 Pronominal noun phrases. An NP can, of course, consist of just a (first or second person) pronoun. A pronominal NP can also involve any of the items listed in i -vii of the last section. It can include a specific noun or a generic noun, or both:
(315) yandi yabi bama gadigadi: gada:n
we-SA lots-ABS person-ABS small children-ABS come-PAST
All of us little children came
Possession can be shown by an embedded NP with genitive marking:
(316) nundu yadin dada wala wula:n
you-Sa I-gen-abs baby-abs Particle die-Past
You, my baby, have passed away
(317) nuni yuøu dungu yayu gunda:l
you-GEN-ABS that-ABS head-abs I-SA cut-PAST
I cut off that head of yours [said to a spirit] (text 14.19)
Inalienable possession of a 'part' can be shown by apposition, as in text 2 , line 97 , and
(318) yajan gurga gunda:l

I-o neck-ABS cut-PAST
My neck was cut
A pronominal NP can include an adjective, as in (62), (315) and line 42 of text 2 ; or a quantifier:
(319) yandi wawur yaqyga:n Some of us were frightened

An interrogative deictic can feature in a pronominal NP-as nundu wana 'who are you?' in line 15 of text 2 . A definite deictic can also co-occur with a pronoun - nundu yuyu wagu:da ninan 'you, that man, sit down!'.

The inclusive sense of a non-singular pronoun is brought out by the inclusion of nunduba 'a set of people, one of whom is you' with I n-sg yandi or I du yali. Similarly, the addition of a definite deictic suffixed by -ba, to a non-singular first person pronoun, yields an exclusive form (3.6.5).

A pronoun will normally come first in any NP; exceptions to this rule occur, but are very rare.

A personal name can occur in an NP together with any or all of the possibilities listed in 4.I.I. The proper noun normally comes last in the NP; failing that, it occurs initially (that is, it will not intervene between other constituents). Thus, with deictic, and two common nouns:
(320) yipu bama buna bindam gali:n this-abS person-abS woman-ABS 'name'-abs go-Past This woman Bindam went
or with a genitive pronoun and a head noun that has kinship reference:

```
(321) guya:la yadin guyga:r yaba gali:n
    'name'-ABS I-GEN-ABS north brother-abS go-Past
    My brother Guyala has gone north (text 2.123)
```

It could be argued that when a personal name or a pronoun occurs with other nominal constituents we effectively have two distinct NPs in apposition, filling a single structural slot (one follows the specifications of 4.I.I, and the other consists of just a pronoun or name). Certainly the positioning of pronoun/name before or after the other constituents lends support to this suggestion.

We also find instances of an NP (or, in terms of the suggestion above, two apposed NPs) involving pronoun and personal name:
(322) yayu gulndarubay galiy I, Gulndarubay, am going
4.1.3 Verb complexes. The verbal slot in a Yidin sentence can involve two or more verbal forms, provided that these agree in surface transitivity and in final inflection. We will refer to such a syntagm as a 'verb complex'. ('Verb phrase' is normally taken to refer to a constituent involving a verb complex and a noun phrase.)

There appear to be three basic types of verbal complex: [i] an adverb can occur with a verb. Adverbs and verbs have identical morphological possibilities, as do adjectives and nouns. An adverb provides semantic qualification to a verb, exactly as an adjective does for a noun.

Only five adverbs are known for Yidin. Four are transitive:
gida-n 'do quickly'
burndi-n 'finish off, make die out'
and one is intransitive:

VCs involving a verb and adverb occur in (255) above and in:
(323) bama yabuyabu: yagar
person-ABS pubescent girl-REDUP-ABS hunt away-IMP gaymbin
do to all-IMP
Hunt all the teenage girls away !
(324) [mayi ] gida:na dayga:na banam
vegetable-ABS do quickly-PURP take out-PURP water-ABL
[We must] quickly take [the vegetables] out of the water (text 2.52)
In (323-4) both verb and adverb are inherently transitive; in (255) both are inherently intransitive. If there is a difference in underlying transitivity we must either employ a comitative (transitivised) form of the intransitive member, as in

## (325) bayu dugi warngijalnu gunda:l <br> I-sa tree-abs do all round-comit-past cut-past <br> I cut all round the [trunk of the] tree

or else we can derive a surface intransitive by affixing -:di-n to the transitive root, as in
(326) yayu gana waygi bunda: banda:dina

I-SA TRY up mountain-LOC try to do-:di-PURP
magi:lina
climb up-GOING-PURP
I must try and go climb up that mountain
See also the third line of (250) above.
Note that in both ( 325 ) and ( 326 ) it is the adverb whose transitivity is changed, to agree with that of the verb. An adverb will normally come first in a VC, although it does sometimes follow the verb, as in (323), (250).
[ii] gali-n 'go' or gada-n 'come' can co-occur with another verb which is then normally (though not invariably) marked with the appropriate 'going' or 'coming' aspectual suffix.
(327) yayu garu gali:yal wiwiyaliy
I-sA by-and-by go-comit-PRES give-GOING-PRES
I'm taking [the shells] to give [to them] by-and-by

In (327) gali:yal and wiwiyaliy effectively refer to a single event; that is, the 'going' is thought of as part of the activity of 'giving' (and this can
not easily be brought out through English translation). Note that in (327) gali-n takes comitative - $\eta$ a-l to agree in transitivity with wiwi-n; and wiwi- $n$ takes aspectual - $\eta$ ali- $n$, in semantic concord with gali-n.

Other examples of 'transitive verb plus galiga-l' - without, in these cases, the verbs having an aspectual suffix - are in lines $63,64,115,120$ of text 2 .
[iii] Finally, any two verbs can be placed in a single verb complex, subject to transitivity and inflectional agreement (and to semantic plausibility). Note that VCs of type [iii] are less frequently encountered in texts than those of types [i] and [ii].
(328) yayu dana: $n$ wawa:dinu or yayu danayalyu wawa:l I stood watching
(329) bama:l wagal guman duga:l duyga:rina:l person-erg wife-abs one-abs grab-past run-going-comit-past A person grabbed one woman and ran away with her
(330) bada:r gunila wuna:nal bagi:ldu garu leave-past particle-now lie-Purp another-erg by-and-by bada:lday bugajaday / bite-coming-pres eat-coming-PRes
[They] left [the wounded alligator] to lie [there, saying:] 'Another [alligator] will come along by-and-by and bite and eat [him]'
4.1.4 Syntactic marking. Much of our discussion in this chapter and the next will be in terms of the three basic syntactic functions, which we abbreviate:

S - intransitive subject
A - transitive subject
O -transitive object
Different word classes in Yidin show different patterns of morphological marking for these functions. They are exemplified in table 4.r.

It will be seen, in column $i$, that pronouns (which must have human reference) employ an unmarked form for $S$ and $A$ functions, but add the suffix $-: n \sim-n$ to mark a pronoun being used as transitive object. In fact, a 'transitive event' is most likely to have a human agent, who initiates and controls the action; this is unremarkable, and it is thus natural that an unmarked form should be used for A function. The marked circumstance is for speaker or addressee to be object (rather than the object being a non-human animate, or else something in-

TABLE 4.I Morphological marking for syntactic function

|  | i | ii | iii | iv |
| :---: | :---: | :---: | :---: | :---: |
| A | nandi | yindu: $\eta$ | (yindu: ${ }^{\text {? }}$ ) | bana: $\eta$ |
| S | najdi | yìu | yipu | bana |
| O | papdi:n | yindu:n | yiju $\sim$ yiggu:n | bana |
|  | all (first and second person) pronouns | human deictics | definite inanimate deictic | all nominals and indefinite inanimate deictic |

animate) and this semantically unusual case is morphologically marked by the suffix $-: n \sim-n$.

The reverse applies in column iv. The majority of nouns refer to non-human entities which are typically found as object of a transitive action; there is no morphological marking for this function. It is less usual to find a non-human as transitive subject and it is thus perfectly natural that this function should be marked by a special (ergative) affix.
A detailed discussion of syntactic hierarchies, exemplified from a wide variety of languages, is in Silverstein (1976). The partial explanation given above was suggested by Silverstein's paper.

We can summarise the case suffixes employed in table 4.1:

|  | i | ii | iii | iv |
| :--- | :--- | :--- | :--- | :--- |
| A | $ø$ | $-\eta g u$ | $(-\eta g u)$ | $-\eta g u$ |
| S | $ø$ | $ø$ | $\varnothing$ | $\varnothing$ |
| O | $-(:) n$ | $-(:) n$ | $\varnothing \sim-(:) n$ | $\varnothing$ |

Where just O , of the three syntactic functions, is marked it is said to involve an 'accusative inflection'; 'nominative' is used as the name for the zero marking of $S$ and $A$ functions in such a system (column i). When just $A$ is marked, its case inflection is termed 'ergative', and the zero marking for $S$ and $O$ functions in this type of system is called 'absolutive' (column iv).

Column ii plainly involves both ergative and accusative suffixes. Column iii probably has no true ergative form (yindu:y belonging properly in column $\mathrm{ii}-3.7 .2$ ). Since O , as well as S , can be realised as yiyu in column iii this form is appropriately referred to as absolutive (paralleling the zero marking for S and O functions in column iv). But yiyu also
functions as the S form in column ii, suggesting that the name absolutive be extended to cover it, too. This gives a full set of case labels:

|  | i | ii | iii | iv |
| :--- | :---: | :---: | :---: | :---: |
| A | NOM | ERG | (ERG) | ERG |
| S | NOM | ABS | ABS | ABS |
| O | ACC | ACC | ABS $\sim$ ACC | ABS |

Note that an accusative-type affix $-n a$ (which is certainly historically related to pronominal/deictic -: $n \sim-n$ ) can be added to proper names and kin terms, in the coastal dialect only (3.3.7).

The extreme morphological systems (i and iv) can now be illustrated in sentences. Zero inflection on a noun marks intransitive subject function:
(331) guda:ga gaday The dog is coming or transitive object function:
(332) wagudaygu guda:ga bunda:n The man hit the dog Transitive subject function demands the ergative affix - $\eta g u$ :
(333) wagu:da gudagangu bada:l The dog bit the man

Pronouns use the unmarked case for intransitive subject function:
(334) yandi gaday We are coming
and transitive subject function:
(335) nandi nunin bunday We'll hit you

When a pronoun occurs as transitive object it is marked by the affix -(:) $n$ :
(336) nundu yandi:n bunda:n You hit us

Sentences can, of course, mix nouns, pronouns and deictics without any possibility of confusion. Reference to table 4.I shows that in (337) bana: $\eta$ is A and pandi O :
(337) bana:y yandi:n dada:l The (sacred) water doesn't like us

In contrast, $\left(33^{8}\right)$ involves $y a n d i$, which can be used for $A$ or $S$ function, and bana, which can be $S$ or $O$. But $S$ cannot co-occur with $A$ or $O$ and so yandi must be A and bana O. (Alternatively, we could note that wuya- $n$ is a transitive verb, which demands $A$ and $O$ NPs.)
(338) yandi bana wuyay We'll drink the water

Indeed, as outlined in 4.I. 2 an NP will often involve pronoun/deictic and nominals. Compare (3I5) with:
(339) yandi yabi:y wurba:n/wani:ra wira we-SA lots-ERG look-PaSt what kind-abs thing-abS We all looked for [the thing:] 'What kind of thing is this ?'
4.1.5 Syntactic types of verbs. Transitive verbs in Yidin fall into two syntactico-semantic types. Firstly, the great majority of verbs in the language expect an animate (normally human) agent, who controls and regulates the action:
(340) mayi badil buna:y bugay The woman is eating Badil nuts
(341) yayu bana wuךa:n I drank some water
(342) yayu gidi gilbi:l gaba:ygu

I threw the Gidi (tea-tree) torch away, on to the road
However, there are occasional metaphorical uses of verbs from this class, with an inanimate subject:
(343) yajan giya:y bugay gula

I-o fever-ERG eat-PRES body-abs
The fever is eating my body away
(344) bana:ク bulmba wuyay
water-ERG camp-ABS drink-PRES
The water [rose up and] drowned the camp
(345) badi gilbi:l bana:y
boat-ABS throw-PAST water-ERG
[Waves rose high in the sea and] the water threw the boat up
In the case of a verb that engenders physical change in the object ('hit', 'cut', 'spear' etc. - we use the term 'affect' for this semantic class), the derivational affix -:di-n must be added to the verb whenever the A NP is inanimate. This is discussed in 4.2.5.

The second type of transitive verb can only take inanimate subjects. Its most common member is guba-n 'burn', whose A NP must be 'something burning' ('fire', 'flame', 'sun', etc.). Examples are at (249) and
(346) buri:y ganan guba:n
fire-ERG I-o burn-PAST
The fire burnt me
(347) yuŋdu:ท buŋa:ndu mayi gubay THAT-ERG sun-ERG fruit-ABS burn-PRES That sun is ripening the fruit
buri can refer to a burning or to an unlit fire (a pile of wood waiting to be set alight). In the latter sense buri can be O of guba-n, as in:
(348) buri gidi:y guba:n

The Gidi torch set the fire alight (literally: 'the torch burnt the fire')
Sentences of the type:
(349) yuøu buri gubay

That fire is burning
are not uncommon. These do not, however, demonstrate an intransitive sense of guba-n; (349) is simply an elliptical version of something like (348), with the ergative NP unstated (but potentially statable).

It is instructive to compare guba-n with wadu-l 'burn, cook' - this belongs to the first syntactic type and must have a human subject. With wadu-l the 'something burning' can either be in O function:
(350) nundu buri wadu You make a fire!
or in instrumental function:
(351) nundu mina buri: wadu You cook the meat on the fire!

Instrumental and locative cases are marked by the same inflection. There is, however, a syntactic test to distinguish them - only an instrumental NP can be placed in absolutive case in a $-: d i+y a-l$ construction (4.3.6); on this criterion buri is instrument, and not locative, in (351).
$g u b a-n$ and wadu-l appear to have identical semantic content, and to differ only in syntactic type; they are discussed and contrasted further in 4.2.5, 4.3.7.

The second type of verb, taking only inanimate subject, constitutes a very small class. guba-n is, in fact, the only commonly occurring member. Others are dada-l whose A must be 'water' - 'water turns against some person who has broken a taboo' - and wigi-l whose A must be some kind of foodstuff -'rich food makes some person feel sick' - see (337) and (292) above.
4.1.6 Syntactic extensions. To the core of any sentence - consisting of subject/object NPs and the main VC - can be added peripheral NPs, marked either by syntactic or local cases. In this section we exemplify syntactic extensions, and in the next local extensions are discussed.

Local extensions merely mark the orientation of an action - 'to', 'at' or 'from' some place or object. Syntactic extensions, on the other hand, specify additional participants or objects involved in an event, or explain cause or purpose. There is (as explained and exemplified in 3.3.1) a semantic correspondence between local and syntactic cases: ablative-tocausal (which do, in fact, have the same realisation), allative-to-purposive, and locative-to-dative. The relationship between locative and dative is particularly important to an understanding of Yidin syntax, and is gone into in detail in 4.r.8.

There are five types of syntactic extension to a core sentence, each marked by a separate case inflection. Intransitive cores (consisting of S NP and intransitive VC) and transitive cores (involving A NP, O NP and transitive VC ) show the same possibilities of extension.
[I] dative, -nda, most nearly corresponds to what is called 'indirect object function' in other languages. That is, it marks the third NP with inherently ditransitive verbs such as niba-l 'show [something] to', budi-n 'tell [something] to', wiwi-n 'give [something] to' and yumba-r 'send [a message] to'; for example (268) and
(352) yandi mayi galya:nda wiwi:na
we-Sa food-AbS uncle-dat give-PURP
We must give some food to uncle
(353) guru:n galinalpu bama:nda yumba:r
language-abs go-COMit-past person-dat take message-past
The message was taken to the people
In addition, any transitive or intransitive VC can take a dative NP, indicating something like the orientation of the action:
(354) yandi yuygu bimbi:nda buygu dara:linu
we-sa there-loc father-dat knee-abs put standing-going-past (text 9.28)
We all went and knelt there [in Church] for (the heavenly) Father
(355) bulmba: yanda widi badiy
place-Loc I-dat frog-AbS cry-Pres
The frog is crying out to me in [that] place
(356) yupu bupa badiy yanda

That woman is crying for me [e.g. wishing for my return, during my absence]

In (354) bungu 'knee' is the object and yandi ' we' the subject of the transitive verb dara-l'put standing up'. Note the contrast between (355) which describes the frog crying out to me, as I pass a camping-site, and (356), telling how the woman cries out because she misses and wants me.

An adjective may take a dative NP as complement:
(357) nuni:nda уиŋи buпa mundu:y
you-DAT that-S woman-ABS desire-COMIT-ABS
That woman wants you (in a sexual sense)
(358) wandi:r nuni:nda mayi How many fruit have you got?
(359) bulmba nalan nuni:nda The place is unfamiliar to you
[2] PURPOSIVE, $-g u$, has superficial similarities of function with dative; for instance, English translations of both types of NP will frequently involve a preposition 'to' or 'for'.

But there is a crucial semantic difference between purposive and dative. Purposive marks an NP which is peripheral in the current sentence but which is expected to function as a core NP (subject or object) in a subsequent sentence. That is, the referent of a purposive NP in a given sentence is not a central participant in the action described by that sentence, but is likely to be a central participant in a further, logically connected, action.

Typical examples of purposive NPs are (179), (260) and:
(360) yandi daral dungul gulugulu:gu
we-SA set up-pres fish-yard-abs black bream-PURP
We set up a fish-trap for black bream
(361) yandi:n bama:l guga:l mayi:gu
we-o person-ERG call-past food-PURP
The people called us for food
(362) bugul duga:lin bundu:gu
loya vine-ABS pull-GOING-IMP dilly-bag-PURP
Go and pull loya vines for dilly-bags
Sentences like (360-2) are likely to be extended by a verb - which bears verbal purposive inflection -na-describing an action for which the referent of the purposive NP is a core participant. To (361) we can add a clause with buga-n 'eat' and to (362) one which features balga-l 'make':
(363) yandi:n bama:l guga:l mayi:gu buga:dina The people called us to eat food (text 9.7)

## (364) bugul duga:lin/bundu:gu balga:lna <br> Go and pull loya vines, to make dilly-bags [with them]

We have seen that a purposive NP introduces a new participant who will be playing an increasingly central role as the chain of events unfolds. In contrast, a dative NP refers to a peripheral participant who has an entirely 'passive' role, and will not be the agent or patient of any related action. Someone referred to by a dative NP is merely the recipient or locus of one event, and is unlikely to play any further role in the chain of events.

There are examples where dative and purposive appear to be interchangeable. Compare (357) where the object of mundu:y 'with desire for' is in dative case, with $\left(3^{6} 5\right)$ where the object of this adjective is marked by purposive inflection:
(365) yayu mundu:y yundu:ngu buna:gu I want that woman

There is, however, an important semantic difference between these two sentences. (357) indicates passive desire, with no expectation that anything will be done about it. In contrast, we would expect ( 365 ) to be continued by a verb indicating what the subject intended to do to the object of his desire:
(366) yayu mundu:y gundu:ngu buna:gu garu
I-sA desire-COMIT-ABS that-PURP woman-PURP by-and-by
duŋga:riya:lna
run-GOING-COMIT-PURP
I want to go and run away with that woman by-and-by

Note that, as these sentences occurred at different places in the corpus, (357) has a female subject, desiring a man, whereas $\left(3^{6} 5-6\right)$ deal with a man's desire for a woman. It is significant that in Yidij society a woman would not normally do anything in these circumstances, whereas a man might well take positive steps, as in (366). Further examples of dative/purposive contrast are at (708-10) in 4.5.1.

Dative and purposive also have quite different syntactic roles, outside simple sentences. Dative, but not purposive, can be used to mark a deep O NP in a -:di-n construction (4.2.3); purposive, but not dative, can co-occur with a subordinate clause marked by purposive verbal inflection $-n a$, as in (363-4, 366) (and see 4.5.4); dative co-occurs, in an analogous manner, with subordinate clauses bearing -nunda marking (4.4.6).
[3] causal NPs, marked by $-m u \sim-m$, indicate the reason for or cause of something referred to by the core constituents. See (42) in 3.3.1 and:
(367) muทgun yina:rin wawal galam
wound-abs this sort-AbS see-pres spear-cau
These sort of wounds can be seen [on a certain man] caused by spears (text 2.100)
(368) yayu banda:r gabay galinunda / waya:lmu

I-sa follow-past road-abs go-dat subord boomerang-cau
I followed the road, resulting from the boomerang, as it went (i.e. the boomerang was thrown through the bush, and as it travelled it cut a swathe that was later used as a road)

Just as the referent of a purposive NP is likely to be a central participant in some later event, so the referent of a causal NP will have had a central role in a previous event (of which the current event is a logical consequence). Thus 'food' would have been the object of 'eat' qua (42), 'spear' would have been the subject or instrument of 'pierce' in an event previous to ( 367 ), and 'boomerang' would have been the subject of something like 'cut (a path)' for (368).

The relation between syntactic cases purposive ('in order to') and causal ('as a result of') parallels that between local cases allative ('to a place') and ablative ('from a place') - 3.3.r.
A causal NP can co-occur with a - $n u m$ subordinate clause (4.4.6), just as purposive can occur with -na and dative with -munda subordinates. [4] FEAR, -dida $\sim-y i d a$, markes a type of peripheral NP that can occur in any type of sentence. The referent of a fear NP is something which is to be avoided, and the verb will normally be describing or suggesting action that can be taken to bring this about. See (740-2) and:
(369) dada munubudun nina: $\boldsymbol{n} /$ bamayida
child-abs inside-still sit-past person-fear
The child still sat inside [the hut] for fear of [being seen by] the people.
(370) yawu:yu dungu bayi:ldanu / dari:n pundundida turtle-abs head-abs emerge-coming-past sink-past that-fear The turtle's head came out [of the water], and then ducked down [again] frightened of something

Note also that the complement of a verb of fearing takes 'fear' inflection:
(371) yivu dada yarygay/ gurilindi:da

This child is frightened of the wallaby
Fear NPs co-occur with subordinate clauses marked by the inflection -di-4.6.3.
[5] instrumental NPs, marked by $-d a \sim-l a \sim-:$, refer to a weapon or tool used in some action. See (536-43) and:
(372) yayu biwu:da mina daban baga:l

I-sa fish-spear-Inst animal-abs eel-Abs spear-Past
I speared an eel with a [multi-pronged] fish-spear
Or to the material out of which something is made:
(373) yandi dugur balga:l dirga:da we-SA house-NOM make-PAST blady grass-INST We made [thatched] a house with blady grass (text 9.18)

Instrumental differs from dative, purposive, causal and fear in that an instrumental NP can, through two syntactic transformations (marked by verbal derivational affixes -:d $i-n$ and - $\eta a-l)$ be placed in absolutive case 4.3.6.

Instrumental NPs have only been encountered in transitive simple sentences. This may just reflect on the corpus available rather than indicating a constraint on the grammar. (Dixon 1972:93-5 mentions that instrumental NPs are very occasionally found with intransitive simple sentences in Dyirbal.)
4.I. 7 Local extensions. We can recognise two distinct uses of local NPs, as they occur with verbs that explicitly refer to position, and with verbs of other types.
Verbs of position can be divided into two subsets - those that specify a 'position of rest' ('sit', 'stand', 'lie', 'put', 'leave' etc.) and those that describe 'motion' ('go', 'come', 'run', 'take', 'carry' etc.). Members of the first subset can take NPs in locative case, and those of the second set may select allative and/or ablative NPs.

With nouns and adjectives, locative and allative inflections coincide. The sense intended can be simply inferred from the semantic nature of the verb - whether it is a 'verb of rest' or a 'verb of motion'. Thus:
(374) nunin bulmba: bada:day | buriburi:y you-o camp-LOC leave-coming-Pres old man-ERG The old man brings you and leaves you in the camp
and
(375) buya yuŋu gaday banam bulmba:
woman-ABS that-ABS come-PReS water-abl camp-all
That woman is coming from the river to the camp
Note that there is a distinctive allative inflection on locational qualifiers (3.4.1) and deictics (3.7.2). This provides some justification for our recognising locative and allative as distinct cases (and generalising the distinction throughout the grammar). Instrumental also falls together with locative and allative; syntactic reasons for recognising instrumental as a separate case are in 4.3.2.

Any action that is not centrally concerned with 'motion' or 'rest' can be qualified by an NP in the unmarked local case, locative. This simply indicates the place at which the action took place:
(376) yanan dina galba:ndu gunda:dinu bulmba:

I-o foot-ABS axe-ERG cut-:di-PAST camp-LOC
I accidentally cut my foot on the stone tomahawk, in the camp
An NP in local case appears to have a close syntactic connection with a VC of 'rest' or 'motion' (as shown by the selection of case by the verb). With verbs of other types, however, there is no particular link with locative NPs - here VC and local NP are simply constituents of the same sentence.

A local NP can consist of nominals, or of a locational qualifier (3.4), or of a deictic (3.7.2); or it can involve any mixture of these, provided they agree in case.
4.r. 8 Dative and locative. We described, in 4.r.6, the use of dative to mark a 'passive' beneficiary or indirect object. In the examples given thus far - (120), (162), (352-9)-dative has occurred on nouns with human reference.

Locative appears on the surface to be quite different; it indicates that an action takes place at or in or on a place:
(377) yayu bana: walyga:lipu

I went and floated on the water
(378) naga yayu janda:da yuyavali: $n$

I went and crossed the creek in the east

In (378) the locative form of yandar 'creek' indicates where the action referred to by the intransitive verb yuna-n 'cross the river' took place.

Locative can be suffixed to a noun referring to noise, meaning 'while the noise was going on':
(379) gawa:lda yanan wanda:riya:l shout-LOC I-O fall down-GOING-COMIT-PAST
I was taken and put down [on the ground, to have cicatrices cut] amidst [much] shouting

Note that in examples such as $(127-9),(374),(377-9)$ locative is in each case added to a noun that has inanimate reference.

There are circumstances in which either dative or locative case can be used, with no difference whatsoever in meaning. 'I sat on the grasshopper' can be rendered either by:
(380) yayu nina:n balmbi:nda
in which balmbin 'grasshopper' shows locative inflection, or by:
(381) yayu nina:n balmbi:nda
in which it is marked by dative case. Similarly, the locational qualifier naru 'on top of' can be accompanied by either locative or dative case, as in:

> (382) buriburi burwal naru $\left\{\begin{array}{l}\text { ganarala } \\ \text { ganaranda }\end{array}\right\}$
> The old man jumped on top of the alligator

In constructions like ( $380-2$ ) the occurrence of dative or locative appears to be conditioned by a semantic hierarchy, described and diagrammed in 3.r.2. Dative can be used on any NP, whatever its reference. Locative occurs predominantly with inanimates, less with non-human animates, and not at all with humans. As the continuum inanimate-human is gradually ascended, so the chances of locative being used decrease, and the probability of dative increases proportionately. With nouns like balmbin 'grasshopper' and ganar $A$ 'alligator' either case would be about equally likely. With, say, gulgi 'sand' both $(383)$ and (384) are perfectly grammatical, but the locative ( 383 ) would be much COMMONER than dative (384):
(383) yuŋu dada burwal naru gulgi: TThat child jumped on to the (384) yuฑu dada burwal naru gulgi:nda $\}$ sand

However, at the other end of the scale only dative is considered fully acceptable on a human noun:
(385) yuyu dada burwal naru buna:nda

That child jumped on top of the woman
*(386) yupu dada burwal naru bupa:
Sentences like (386) have very occasionally been heard, but were later corrected by informants. Thus, locative could be substituted for dative in (170) of 3.7.2, but not in (169). See also (50) in 3.3.3.

The alternation between dative and locative is frequently exploited for stylistic effect - if a question or statement uses one of these cases, the response may effect stylistic variation by employing the other. This was exemplified by ( $40-1$ ) in 3.r.3.

The correspondence between locative and dative is nicely exemplified by an informant's explanation of particular uses of the generic noun danga 'hole, orifice'. He mentioned that it can refer to a hole in the ground:
(387) dabu: wunay dayga 'dayga' holes exist in the ground
or to a woman's vaginal opening:
(388) buna:nda wunay dayga 'danga' holes exist on a woman

Here dabu 'ground' bears locative case, but buna 'woman' shows dative (cf. 6.2.1).

Locative or dative can be used to mark an underlying O NP in a -: di-n construction; case employment here is determined by the same semantic hierarchy - 3.1.2, 4.2.3.

Perhaps the most interesting aspect of the dative/locative association concerns inalienable (part-whole) possession. This is shown either by simple apposition, or by genitive marking (a hierarchy conditions the choice between these types of construction-4.7.3). In the former case the nouns referring to 'whole' and to 'part' normally show different cases when in peripheral function within a simple sentence.

A body-part noun (body parts are grouped with 'inanimates' in the Yidin semantic classification) is likely to take locative inflection:
( 389 ) guli gambay dungu: A louse is crawling on [someone's] head whereas in the same functional slot a human noun must take dative marking:
(390) guli gambay buya:nda A louse is crawling on a woman (389) and (390) could be alternative descriptions of the same event. More fully, we could put dungu and bupa together, in a relation of inalienable possession:
(391) guli gambay bupa :nda dungu: A louse is crawling on a woman's head

This is in fact the normal construction for a syntagm of inalienable possession in indirect object function. See (32), (132) above and
(392) nundu ninan magu: buriburi:nda

You sit in the old man's lap
(393) diran manda:diy bala: yanda

Tiredness fills my calves
It is possible, in a construction like (391), for part as well as whole to be in dative case:
(394) guli gambay buna:nda dungu:nda 〈= (391) >

But, if the possessor is human, the two nouns could not both show locative marking:
*(395) guli gambay bupa: dungu:
(And similarly, locative could not be substituted for dative in (390).)
In S, O or A function both words in a part-whole syntagm will be marked by the same case $-4 \cdot 7 \cdot 3$. It is only in peripheral function that a case alternation, dative $\sim$ locative, occurs.

Note that the dative $\sim$ locative alternation only holds for nominals. Deictic locatives have an entirely local function and cannot be substituted for datives in the way that nominal locatives can (that is, puygu only means 'there', never 'on that thing'). Pronouns do not show any locative form at all.

In 3.7.1 we explained how the choice between 'human' and 'inanimate' deictics was conditioned by a semantic hierarchy; we have here suggested that the choice between dative and locative is made in terms of the same hierarchy. There is no interpenetration between these two choices - if a deictic is employed, only dative case is admissible in sentences like ( $380-94$ ).

The genitive suffix derives a noun that functions like an adjective and mUST take the same case inflection as the 'possessed' noun it modifies. Thus we get:
(396) yayu nina:n bamanula gala: I sat on the man's spear
and not *bamanunda gala:. Other examples are at (50), (145-6) above.
It is not the case that dative and locative are substitutable - within the constraints of the semantic hierarchy - in every construction. In (377-9) no animate or human noun could be substituted (without gross change in meaning) for bana 'water', yandar 'creek' or gawal'shouting'; and here dative could NOT be used in place of locative. In (353), involving yumba- $\boldsymbol{y}$ 'take message to', the indirect object must be human, and dative is the only possible case marking. The beneficiary of wiwi-n' give' can be any type of noun and this must be marked by dative case (NEVER locative) whether it is human, as in (352), or animate as in (52) from 3.3.3, or inanimate as in:

## (397) yayu bana wiwin dundalaynda

I'll give the car some water (i.e. I'll put water in the car's radiator)
The morphological connection between irregular datives and locatives (3-3.2) may be related to the syntactic correspondence between these cases.
4.1.9 Order of sentential constituents. The order in which NPs (and their constituent words) occur in a sentence can be quite free. That is, if a large enough body of texts is examined, any particular word order will doubtless be found. But there are strong ordering preferences, which are adhered to in the great majority of cases; although deviations from the norm are potentially unlimited they are only taken advantage of in a minority of instances.

The order of NPs within a sentence (as of words within an NP, and overall of words within a sentence) is much more constant in Yidin than in Dyirbal, for instance (Dixon 1972: 59, 107-8, 291).

The order of sentential constituents in Yidin appears to be controlled by the following preferences:
(a) $\mathrm{S}, \mathrm{A}, \mathrm{O}$ and instrumental NPs should precede the verb; also (i) $\mathrm{S}, \mathrm{A}$ and O should come before instrumental; and (ii) A should precede $O$;
(b) dative, purposive, causal, fear and local NPs should follow the verb;
(c) pronouns should come as near as possible to the beginning of the sentence.

These demands can strengthen or counter each other. Thus, a pronominal O NP is much less likely - through (c) reinforcing (a) - to be found following the verb than is a noun in $O$ function. And whereas a non-pronominal dative NP most frequently follows the verb, a pronominal dative is found before the verb more often than after it (this could be taken as implying that preference (c) is stronger than (b)). In fact a pronominal dative will often precede a non-pronominal O NP:
(398) yundu gana yanda guman wiwin
you-sa particle I-dat one-abs give-imp
You give me [just] one [shell]!
If both A and O NPs are nominals, ergative (A) will precede absolutive (O):
(399) buna:n bama wagu:da bunda:n The woman hit the man

If both are pronouns, nominative (A) will precede absolutive (O):
(400) yayu nunin wawa:l I saw you

When the A NP is a pronoun and the O NP a nominal, preference (a-ii) reinforces (c), with the A NP preceding the O constituent. If, however, A is a noun and O a pronoun, ( $\mathrm{a}-\mathrm{ii}$ ) is in conflict with (c); both possibilities occur, but 'pronoun first' is a little commoner:
(401) yapan bama:l wawa:l A person saw me
suggesting that preference (c) takes precedence over (a-ii).
Deictics appear to function more like nominals than like pronouns qua these ordering preferences. Interrogatives do occur initially, but they also frequently occur medially, in the slot predicted by (a-c) - see lines 15 and 17 of text 2 .

Preferences ( $\mathrm{a}-\mathrm{c}$ ) help to explain the relative frequencies of orders observed in texts; as already noted, all ordering possibilities are encountered, but some rather seldom. (For instance, instrumental comes between A and O NPs and the verb in (183) and (351); but it occurs sentence-initially in (173), between A and O NPs in (372) and after the verb in (373). In elicitation informants always preferred instrumental to come before the verb, following core $\mathrm{S} / \mathrm{A} / \mathrm{O} \mathrm{NPs}$.)

There is a tendency for all the constituents of an NP to occur together (in the order discussed in 4.r.1, 4.I.2). However, there is one frequent way in which an NP can be split - one word will occur before the verb (in the position expected by preferences ( $\mathrm{a}-\mathrm{c}$ ) ) and the remainder after the verb. Thus (258), (270), (343) above and:
(402) yayu bama wawa:dinu dambu:l

I-sA person-ABS see-:di-PAST two-ABS I (unexpectedly) saw two people
(403) yayu miza bugay gangu:l

I-SA animal-ABS eat-PRES wallaby-ABS
I am eating wallaby
(404) yayu yuŋu wawa:l munil

I-SA that-ABS see-Past vine-ABS
I saw that Munil vine
(405) bama galiy yabi gada
person-ABS go-PRES many-ABS white man-ABS
Lots of white men are going
Occasional examples of 'splitting' of peripheral NPs have been encountered. For instance:

## (406) mina:gu yiju gaday daba:ngu animal-PURP this-S come-PRES eel-PURP This [person] is coming for eels.

Since a purposive NP normally occurs after the verb it appears here as if the first word is moved to the front of the sentence. This contrasts with (402-5) which - working in terms of the underlying ordering preferences - involve all but the first word of an S or O NP being moved to the right of the verb.
Split ergative NPs do not occur in the author's corpus (but it must be remarked that ergative NPs are typically less complex - involving fewer words - than absolutive NPs). They may be possible, but informants were not too happy with them.

The part of an NP which precedes the verb is normally a generic noun or a deictic, with specific noun, adjective etc. coming later in the sentence. It seems as if an event is first outlined through a general description of the participants, and then of the action; once this is completed, referential details can be filled in.

The Yidin pattern of splitting NPs could be the first step in a series of historical changes that would lead to the development of pronominal prefixes to the verb. If (a) each NP had to include a pronoun or deictic, and (b) this had to be the initial element in the NP, and (c) S, O and A NPs always had one word before the verb and the rest after, then these free form pronouns and deictics would be very likely to reduce to bound prefixes. The main innovations necessary would be (i) for deictics to be included in each non-
pronominal NP, and to occur initially; (ii) for A NPs to 'split' like S and O NPs; and (iii) for splitting to be obligatory, rather than optional as at present.
(Alternatively, a single prefix could develop marking just S or O NP, with A NPs being dealt with entirely by free forms. Note, though, that Australian languages which have bound form pronominal prefixes or suffixes have one form cross-referencing S or A NP, and a second form for O NP. Certainly, the morphology of pronouns in Yidin would make such a nominativeaccusative cross-referencing scheme more likely than S-and-O-but-not-A incorporation.)

Locational qualifiers occur as part of a local NP and - by preference (b) - normally follow the verb. Within a local NP a locational qualifier will normally precede a noun in local inflection.
naru consistently FOLlows a noun if a deictic is also included, but Precedes the noun when there is no deictic. Thus in (170) of 3.7.2 the informant gave naru galba:nda 'on top of the axe' but juqgu:nda galba:nda naru' on top of that axe'. (However it is not certain that other locational qualifiers behave in similar fashion.)

There are two further types of sentential constituent - time qualifiers (3.5) and particles (4.10). Both normally occur immediately before the verb, although they are occasionally encountered earlier in the sentence or even following the verb.

Time qualifier garu is an exception - the preferred position for this word is at the very beginning of the sentence.

Finally, we can note that any nominal constituent can be deleted from a sentence in Yidin; this applies even to subject and object NPs. (In this Yidin differs from Dyirbal, whose sentences must include an absolutive 'topic' NP - Dixon 1972: 70.)
4.r.10 Minor sentences. Like most Australian languages, Yidin has no copula (although wuna-n 'lie' covers some of the 'exist' functions of 'to be' in English - 6.2.4). There are thus a number of types of sentence that include no verb at all. These involve a noun in absolutive case (or a pronoun in nominative form) and a 'comment' consisting of either [i] a noun, as in
(407) dugi yiyu dundu This tree is [just] a stump
or [ii] a simple adjective, as in
(408) mayi mamba The fruit is sour (text 2.68)
(409) gurbi wira dangan This thing might be dangerous
(410) bulmba yiju dabu madamada

The ground at this camping-site is soft
or [iii] an adjective formed from a noun by the addition of one of the derivational suffixes listed in 3.3.6; examples are at (42), (67), (84), (90-1) and:
(411) yiju bulmba banamuday

There's water at this camping-site (i.e. a stream of drinking water there)
(412) yiju bulmba banagimbal

There's no water at this camping-site
Adjectives in 'comment' function frequently bear the post-inflectional affix -(a)la, as in (258).

Some (simple and derived) adjectives may take a dative complement, very much like a verb - see ( $357^{-9}$ ) above;
or [iv] a noun bearing the post-inflectional affix - $y$ uri 'like a', or an adjective bearing the post-inflectional affix -wadan, which carries a comparative meaning. See examples (298-300, 302) in 3.9.6;
or [v] a possessive NP, marked by the genitive suffix, as (47), (88) and (762), (767) from 4.7.1. Note also
(413) mayi mirwur yadin The fruit has been gathered up for me which involves both the adjective miwur 'gathered up' and the possessive pronoun yadin 'belonging to me' as comment on mayi 'fruit'.

A possessive phrase in comment slot is also likely to bear the postinflectional affix -(a)la, as in (259).

The majority of Yidin texts concern the travels of 'storytime heroes' who named each place they came to, basing the name on some geographical feature or on something that befell them there. There are many verb-less sentences 'naming a place'; these are often followed, as in (414), by an explanation of why that name was chosen:
(414) bulmba yinu balbu: $\because u /$ balbun dana:n

This place [was called] Balburu: the Balbun tree grew [there]
The first clause in (414) could be regarded as consisting of a single NP which involves a generic common noun bulmba 'place', the deictic yiju, and a proper name balbutu. But note that here the generic noun functions as 'topic' and the name is the 'comment'. (The phonological formation of place-names is discussed in 6.1.2.)

## 4.2 -:di-n constructions

4.2.1 Transitivity distinction. We have already noted (3.1.4) that Yidin stories are highly first-person orientated. Taking into account the identity of S and A forms for pronouns and the fact that an O NP (like any other nominal constituent of a sentence) can be deleted, it can be seen that it is frequently not immediately clear whether a sentence like:
(415) yayu bargandayu I passed by
is transitive or intransitive. The transitivity of barganda- $n$ can, of course, be ascertained from its occurrence in other sentences. Thus
(416) yayu bama buna bargandanu I passed the woman by (417) yanan bama:l buna:y bargandanu The woman passed me by show barganda- $n$ to be inherently transitive; the object NP has simply been deleted from (415).

It might be inferred, from this discussion, that transitivity is not a cut-and-dried matter, of much syntactic importance, in Yidin (just as in English it is sometimes difficult to decide whether some occurrence of a verb like 'eat' is transitive or intransitive). But this would be a mistaken impression. Every Yidin verb is inherently transitive or intransitive, and its transitivity is of the utmost importance for the syntactic operations that can be applied to it. For instance, coordinated verbs within a VC must agree in surface transitivity (4.1.3); and subordinate clauses must have an S or O (but not A) NP coreferential to an NP in the main clause (4.4-6).

Knowledge of the transitivity of a verb is often vital for the semantic interpretation of a sentence with only one core NP stated. Consider (418), which has nouns in absolutive case in place of the pronoun in (415):
(418) bama buna bargandanu

If barganda- $n$ 'pass by' were intransitive this sentence would mean 'the woman passed by'; since it is, in fact, transitive (418) means '[someone] passed the woman by'.

These examples have depended on choosing a Yidin verb whose English translation equivalent is ambi-transitive, with A corresponding to S . If we had chosen an ambi-transitive verb in English for which O corresponded to S, the noun example - corresponding to (418) - would have been semantically
constant，while the pronoun example－corresponding to（415）－would have involved inversion．（＇Get up＇is a verb of this type－＇ X got Y up＇can describe the same action as＇$Y$ got up＇，quite different from that referred to in＇$X$ got up＇．）Discussion of the semantic types $S \equiv A$ and $S \equiv O$ is in 4.3 below（see also Dixon 1972：296－301）．

Although each verb has an inherent transitivity value，this can be changed by a syntactic process；such change is，in Yidin，always morpho－ logically marked．Thus，a transitive stem can be derived from an intran－ sitive root by the addition of comitative－$\eta$ a－$l$（galina－l＇＇take＇from gali－$n$ ＇ go ＇，for instance）－4．3．And an intransitive stem can be derived from a transitive root by the addition of $-:$ di $i-n$ ．
In fact，$-: d i-n$ is at once the most important and the most complex derivational affix in Yidin．We first survey its uses and present the conditions for its employment（4．2．2）before discussing and exemplifying the individual senses（4．2．3－7）．

4．2．2－：di－n－survey of functions．First note that it is always possible to determine the function of an NP by comparing nominal and pro－ nominal possibilities（4．I．4）．For instance：

|  | pronoun（＇I＇） | noun（＇man＇） |
| :--- | :---: | :--- |
| A | nayu | wagudaygu |
| S | nayu | wagu：da |
| O | mayan | wagu：da |

The functions of NPs in
（419）yayu buna giba：l I scratched the woman are ascertained to be A and O ，by comparison with：
（420）wagudaygu buna giba：l The man scratched the woman
（421）yayu punin giba：l I scratched you
With this criterion to guide us，we can survey the uses of $-: d i-n$ ：
［ 1 ］the most frequent and important function of this verbal suffix is to mark a derived intransitive sentence．For instance，corresponding to （420）there is：
（422）wagu：da giba：dinu buna：nda 〈＝（420）〉
There are a number of reasons for regarding（422）as intransitive． Firstly，wagu：da is plainly an S NP，as can be seen by comparing with the－：di－n correspondent of（419）：
（423）yayu giba：dinu bupa：nda 〈＝（419）〉

In addition, giba:di-n can be combined with an intransitive verb within a VC.
[2] -:di- $n$ also marks a reflexive construction, as:
(424) wagu:da giba:diju The man scratched himself (on purpose)

Again the NP is in S function, the corresponding pronominal sentence being:
(425) yayu giba:dinu I scratched myself (on purpose)
showing that (424-5) are intransitive.
[3] there are a few sentences in which -:di-n is suffixed to an underlying transitive root and the resulting sentence is still transitive, with A NP marked by ergative case (on a nominal) and O NP by accusative (on a pronoun). For instance:
(426) yajan ginga: $\boldsymbol{y}$ giba:dinu ( $a$ ayu banganunda)

I-o prickle-erg scratch-:di-past I-sA pass by-dat subord A prickle scratched me (as I went past [a bush])
(427) уиүи buya gaba:nda dana:n / pundu:y wagudaygu that-s woman-abs road-loc stand-past that-a man-erg gunda:dinu bayga:ldal cut-: $d i$-past axe-Inst
That woman was standing in the road (in the way) and the man cut her accidentally with his axe (as he was making to cut a tree)
(428) yanan bama:l dayga:din muguy

I-o person-ERG grumble at-: di $i$-Pres all the time
[That] person keeps grumbling at me at all the time [telling me to work]
These three examples do not immediately appear to have any semantic common denominator; and $-d i-n$ does not in (426-8) seem to have any syntactic effect.
[4] -:di-n does very occasionally occur with an intransitive root, the resulting stem being again intransitive:
(429) yuøu bama gama:dinu

That person is vomiting (the informant glossed this as 'that person been still retch up')
An exhaustive investigation of the occurrences of the verbal derivational affix -:di-n suggests the following explanation for its use.

First note that $S$ and $O$ functions play a central role in the grammar of Yidin. For instance, if a subordinate clause has an NP coreferential with some NP in the matrix clause, then this NP must be in surface S or O function in the subordinate clause; and, morphologically, absolutive case marks a nominal in either S or O function.

Now the norm case in Yidin is for a transitive verb to occur in a sentence which has a (deep) A NP that is
(i) distinct from the surface $\mathrm{S} / \mathrm{O} \mathrm{NP}$, and
(ii) has volitional control over
(iii) a single completed or anticipated action

Any sentence that deviates from this norm will have its verb(s) marked by the derivational affix - :di- $n$.

Thus -:di-n is used
(a) in an 'antipassive' construction, like (422-3), where the deep A NP becomes surface topic (S function) and the deep O NP takes on a peripheral role, marked by dative or locative case. Condition (i) is broken, since the deep A NP becomes surface S.
(b) in a 'reflexive' construction, like (424-5). Here deep A is identical with deep O and Yidin adopts the convention of including a single NP in the surface structure - this is in fact in $S$ function. Condition (i) is again broken.
(c) if the A NP refers to something inanimate, as in (426), the agent could not be said to have volitional control over the action. Here condition (ii) is broken. (There is a semantic restriction on the class of verbs with which -: $d i-n$ is used in this sense - see 4.2.5.)
(d) if an A NP has human reference but, as in (427), achieves some result quite accidentally, without planning or control. Here condition (ii) is again broken.
(e) if the action referred to by the verb is 'continuous', extending into the present and future, so that it cannot be viewed as a (prospective or retrospective) whole, from the vantage point of the present, as in (428-9). Here condition (iii) is broken.
(i-ii) refer to an NP in A function, and so -:di-n in senses (a-d) is restricted to transitive verbs. (iii), however, simply refers to the duration of the action, and can apply equally well to transitive verbs, (428), or to intransitives, (429).
4.2.3-7 take (a-e) one at a time - discussing, explaining and exemplifying these uses of $-: d i-n$. Note that $-: d i-n$ must always be used in cases (a-b), when an intransitive clause is derived from an underlying
transitive configuration. $-: d i-n$ will always be used in case (c), if the verb is from a semantic set that we term 'affect'. The line between 'accident' and 'purpose' (with a human agent in each case) and that between 'discrete' and 'continuous' are hard to draw and -:di- $n$ will only sometimes be employed in cases (d) and (e) - it is used specially to mark an action as embarrassingly 'accidental' or as inconveniently 'continuous'.
4.2.3 Antipassives. There is a syntactic process in Yidin that derives an intransitive from an underlying transitive sentence. Thus from:
(430) wagudaygu guda:ga wawa:l The man saw the dog we obtain either:
(431) wagu:da wawa:dinu gudaganda $\langle=(430)\rangle$
or
(432) wagu:da wawa:dinu gudagala 〈= (430) $\rangle$

Absolutive replaces the ergative inflection on the deep A NP, and either dative - as in (43I) - or locative - as in (432) - replaces the absolutive inflection on the deep O NP ; the verb receives the derivational affix -: di-n.

The occurrence of dative or locative on the deep O in a -:di-n construction of this type is conditioned by the semantic hierarchy described in 3.I.2 and 4.I.8. With an inanimate noun locative is preferred, although dative is perfectly possible, as (2I-2); with a (non-human) animate noun dative and locative are both acceptable and both fairly common, as (20) and (431-2); with a human noun only dative case is allowed, as (16).

Note that two nouns which are in apposition, showing a 'part-whole' (or inalienable possession) relationship, in the O NP of a simple sentence:
(433) wagu:da dungu buna:n dina: bara:l man-abs head-abs woman-ERG foot-INST strike-PAST The woman kicked the man's head
will be likely to take different cases in the corresponding -:di-n construction. Here the human 'owner' will be in dative case while the body-part is normally placed in locative inflection (although it, too, can take dative):
(434) buna wagudanda dungu: dina: bara:dinu $\langle=$ (433) $\rangle$ woman-ABS man-dat head-LOC foot-INST strike-:di-PAST

Pronouns do not occur in locative case, so there is not even a morphological alternative to dative for this part of speech. Corresponding to
(435) yayu nunin wawa:l I saw you
we get just
(436) yayu nanda wawa:dipu 〈=(435))

As mentioned in 4.1.8, locative deictics have an entirely local sense, and could not function as the surface marker of a deep O NP in an antipassive construction.

In the last section we gave reasons for regarding (431-2), (434) and (436) as intransitive sentences; the absolutive noun or nominative pronoun constitutes an S NP. This process - of deriving (43I-2) from (430), and so on - has in fact two syntactic effects: (1) to make the verb intransitive, and (2) to place the A NP in the unmarked case. In view of this it seems appropriate to (follow Silverstein and) refer to this type of construction as 'antipassive' (qua 'passive', which places a deep O NP in the unmarked case).

Any type of A NP can take on surface $S$ function in a -:di-n construction an inanimate example is at (393) above.

An antipassive is syntactically 'marked' - qua simple sentences like (430), (433), (435). It is used in the following typical circumstances:
[i] To derive an intransitive verb for inclusion in an intransitive VC 4.1.3. See (326) and:
(437) yayu gana:ygar galiy / gaybam midi:dinala

I-SA IN FRONT go-Pres behind-ABL block-:d $i$-Pres-Now galiy
go-PRES
I go in front, now [I'm] going blocking [the road against anyone coming] from behind
Note that midi-l is a transitive root, as in:
(438) yayu gabay midil

I-SA road-ABS block-pres
I'm blocking the road [so that no one can get by]
[ii] To put the A NP in surface $S$ function in order to meet the syntactic requirements on coordination (5.1.3) or subordination. Suppose, for instance, that we wished to embed:
(439) yindu:y bama:l mayi dula:l

These people dug up vegetables (i.e. potatoes)
as a subordinate clause within
(440) yayu yigu bama bandi:lipu I went and found these people

A condition on this type of embedding is that the 'common NP' (here yipu bama) should be in S or O function in each clause. This is met in the case of (440), but (439) must be antipassivised to satisfy the condition. We then get:
(441) yinu bama mayi: dula:dinu 〈= (439)〉
which can be embedded in (440), yielding:
(442) yayu yinu bama bandi:linu mayi: dula:dinu:n

I went and found these people digging up vegetables
(The second occurrence of yipu bama is deleted, and subordinate inflection -nunda replaces tense on the verb of the bound clause. dula + $: d i+n u+n d a$ is then reduced to dula:dinu:n through the operation of Rules I and 2-3.8.4, 2.3.1, 2.3.2.)
Where a -:di-n construction occurs as a subordinate clause it is possible for the deep O NP to be marked by a peripheral case other than dative or locative (causal and purposive are attested). A detailed discussion of this and other aspects of subordination are in 4.4.6, 4.5.4.
[iii] Sentences in Yidin should, if possible, include an absolutive or nominative NP (these constituents are only very rarely deleted). In contrast, dative/locative NPs - including those acting as surface realisation of O in a -: di-n construction - are particularly liable to deletion. Thus, if a speaker wishes to indicate the A for some action, but prefers not to commit himself concerning the O , he can simply use a -: $d i-n$ construction:
(443) yinu buna buga:diy This woman is eating

The corresponding simple sentence:
(444) yindu:y buna:n bugay
is decidedly awkward, having an empty (absolutive) O slot.
[iv] A -:di-n construction may be used simply for stylistic felicity. A response may employ $-: d i-n$ in reply to a question or statement whose verb bore no derivational affix; or, if a statement uses -:di-n the response may avoid it - see (30-1) in 3.1.3. In discussing (430-2) informants
volunteered that these were alternatives, with identical meaning, and that they could be substituted one for another to satisfy the aesthetic demands of discourse structure.
Just as we can have an imperative version of a simple sentence, from which the subject NP can optionally be deleted (4.9):
(445) ( $n u n d u$ ) gangu:l baga (You) spear the wallaby!
so we can have an imperative of the corresponding antipassive:
(446) ( $n u n d u$ ) gangulala baga:din 〈= (445) )

However, informants greatly preferred the more straightforward (445), mentioning that (446) would only be likely as a response, for the sake of stylistic variation.
'Antipassive' is the commonest sense of the affix $-: d i-n$, accounting for more than three-quarters of its occurrences in texts. Examples will be found throughout the texts given on pages $513-39$.
Some verbs in Yidin exist only in :di-n form; they are all intransitive. Examples include nayga:di-n 'talk', wanga:di-n 'get up', bani:di-n 'grumble' in (100), and muri:di-n 'scream' in line 29 of text 2. Haviland (1972) reports that Guugu-Yimidhirr has a rather larger number of verbs that only occur in -dhi form (Guugu-Yimidhirr -dhi appears to be cognate to Yidin -:di-n, and seems to have a similar range of functions).
4.2.4 Reflexives. A transitive simple sentence must have referentially distinct A and O NPs:
(447) yayu wagu:da bambi:l I covered the man
(448) wagudaygu yanan bambi:l The man covered me

If the agent and patient of an action described by a transitive verb are identical, then a reflexive construction must be used. There is a single S NP, describing agent/patient, and the verb bears the suffix -:di-n:
(449) yayu bambi:dipu I covered myself
(450) wagu:da bambi:dipu The man covered himself

Other examples of reflexives are at (240), (242) in 3.8.7.
Note that reflexives - like transitive simple sentences and their antipassive counterparts - assume that the agent has volitional control over the action, and that he performs it quite deliberately and purposefully ('accidental reflexives' are discussed in 4.2.5). In terms of our explanation of 4.2.2,-: dit-n in (449-50) simply marks the fact that the deep agent is realised in surface structure through an S NP.

It is interesting to compare reflexives（449－50）with the antipassive counterparts of（ $447-8$ ）：
（451）yayu bambi：diju wagudanda 〈＝（447）〉
（452）wagu：da yanda bambi：divu 〈＝（448）〉
The dative NP could be deleted from（451），giving a sentence identical to（449）．Thus，yayu bambi：dinu is ambiguous between reflexive and antipassive readings（＇I covered myself＇vs＇I covered someone／some－ thing＇with the patient unstated）．Similarly for（452）and（450）．

The ambiguity can be resolved by including particle ganagayuy＇self＇ or ganamalbu＇self＇（4．10）or post－inflectional clitic－di＇self＇（3．9．2）in the reflexive：
（453）yayu ganagayuy bambi：dipu I covered myself
Note that both ganagayuy and－di appear（like＇self＇words in English）to have intensive as well as reflexive uses；either could conceivably be included in （ $45 \mathrm{I}-2$ ）．But it does seem that reflexive is the predominant sense－of gana－ gayuy at least－and if it were included in（453）this particle would be likely to be taken as providing disambiguation in the direction of reflexive．

We can，of course，have an imperative version of any reflexive sentence；thus：
（454）（ $\quad$ undu）ganagayuy bambi：din（You）cover yourself！
A－：di－n reflexive occurs in line 53 of text 2.
Note also that ditransitive verbs such as wizi－n form reflexives．Thus：

## （455）yupu dambu：l wiwi：dipula｜bigunuyi dara：dipu

 that－s two－abs give－：$d i$－Past－now shield－comit－abs stand－：$d i$－Past Those two gave themselves up，standing with shields［in their hands］．It was the custom in Yidin society that when a man admitted some crime he would offer himself as a target for people to throw spears at，attempting to protect himself with his shield（but not running away，or retaliating by throwing spears himself）．（455）describes such an invitation．
The reflexive of wiwi－n can also be used to describe a woman submitting to the sexual advances of a man：
（456）yayu wivi：dinu yindu：nda wagudandal jajan dumba：Ina
I－sa give－：di－past this－dat man－dat I－o swive－purp
I gave myself to this man，for him to swive［＝make love to］me
Unlike its neighbours Dya：bugay（Hale 1976a：238）and Dyirbal （Dixon 1972：92－3），Yidin has no verbal affix marking＇reciprocal＇ constructions．

The reduplicated form of bunda－n＇hit＇consistently behaves as a reciprocal （and is intransitive）：
（457）bama dambu：l bundabunday
The two people are fighting（literally＇hitting each other＇）
This，however，appears to be unique；the reduplicated forms of all other transitive verbs are still transitive and mean simply＇keep on doing＇．
However，most of the writer＇s attempts to elicit reciprocal brought forth sentences of the form＇One person painted another，and then the other painted the first person，in turn＇involving one of the particles daymbi，daybay＇in turn＇－see 4．ro．

4．2．5 Non－animate agent．Suppose that someone accidentally steps on an axe lying on the ground and hurts himself on it．He might say，in English，＇The axe cut my foot＇，putting the instrument＇axe＇as subject of a transitive verb．Yidin uses an exactly analogous construction，but here the verb must be marked by－：di－n to indicate an inanimate agent：
（458）yanan dina banga：ldu gunda：dinu
I－o foot－ABS axe－ERG cut－：di－PAST
The axe cut my foot（ $=\mathrm{I}$ cut myself，accidentally，on the axe）

The ergative and accusative inflections indicate that（458）is a normal transitive sentence－compare（458）with examples of antipassive and reflexive in the last two sections，for which－：di－n marked a derived intransitive construction．But in（458）the referent of the A NP does not have volitional control over the action；there can be no imperative counterpart of this sentence．It is because condition（ii）of 4．2．2 is broken that the suffix－： $\mathrm{di} \mathrm{i}-n$ must be included in（458）．

Summarising and contrasting the three uses of $-:$ di $i-n$ dealt with，we can begin with＇normal＇transitive sentences－which meet conditions （i－iii）of 4．2．2－that can appropriately include an instrumental NP：
（459）yayu wagu：da banga：lda gunda：l
I cut the man with an axe
（460）yajan wagudaygu bayga：lda gunda：l
The man cut me with an axe
From these sentences we can derive antipassives，with essentially the same meaning（note that bayga：lda＇axe－INST＇is retained without change in an antipassive）：
（461）yayu wagudanda bayga：lda gunda：dipu 〈＝（459）〉
（462）wagu：da janda bayga：lda gunda：dipu 〈＝（460）〉

If underlying agent and patient coincide we must have a reflexive:
(463) yayu bayga:lda gunda:dinu

I cut myself (on purpose) with an axe
(464) wagu:da bavga:lda gunda:dinu

The man cut himself (on purpose) with an axe
Finally, we can have transitive sentences, similar to (459-60) but with an inanimate A NP which is not the 'controller' of the action:
(465) yanan bayga:ldu gunda:dipu

I cut myself (accidentally) on an axe ( $=\mathrm{An}$ axe cut me)
(466) wagu:da bayga:ldu gunda:dipu

The man cut himself (accidentally) on an axe ( $=$ An axe cut him)
(463-4) imply that the actor did something to himself deliberately and on purpose. In contrast, (465-6) indicate that he did something to himself accidentally - in these examples the agent could have injured himself by standing on an axe, or letting it drop on his foot, or nicking himself in the neck when swinging the axe back.

English translations which involve a reflexive can be appropriate for (465-6), as for ( $463-4$ ). But it must be emphasised that only (463-4) are reflexives in Yidin - derived intransitive sentences with a single S NP. (465-6) are transitive sentences, with A and O NPs but involving a non-controlling $A$.
Informants would sometimes translate sentences like ( $465-6$ ) by reflexives in English, but often used a transitive gloss with inanimate A. Thus the reflexive
(467) yayu dungu babalala bunda:dipu

I-sa head-abs bone-Inst hit-:di-Past
was glossed 'I hit my head on that bone', whereas the 'inanimate A' transitive sentence:
(468) yapan dungu babalaygu bunda:dinu

I-o head-ABS bone-ERG hit-:di-past
was translated by the informant 'That bone hit my head'. (He explained that if one walked into a butcher's shop where bones were hanging from the ceiling, and accidentally knocked one's head on a bone, (468) would be an appropriate description.)

As already mentioned, any NP can be omitted from a Yidin sentence. Thus we can have shortened versions of ( 463 ) and ( 465 ):
(469) yayu gunda:dinu I cut myself (on purpose)
(470) yajan gunda:dipu I cut myself (accidentally) (= Something inanimate cut me)

Here the different form of the pronoun, for S and O functions respectively, clearly distinguishes the two meanings. Consider, however, shortened versions of (464) and (466):
(47) wagu:da gunda:diju The man cut himself (on purpose)
(472) wagu:da gunda:dipu The man cut himself (accidentally) (= Something inanimate cut the man)
Since a noun has the same form for both S and O functions, (471) and (472) are identical (wagu:da gunda:diju is in fact three-ways ambiguous, the third possibility being a shortened form of the antipassive (462), just as ( 469 ) could be a reduced version of either (463) or (461)). (471/2) can only be disambiguated by including an NP indicating the weapon or tool involved - if this is in instrumental case it indicates a true reflexive, and if in ergative case a non-controlled transitive sentence.

We can, as mentioned above, have imperative versions of (459-64), (469), (471) but not of (465-6), (470), (472).

The distinction between sentences like (463-4) and those like (465-6) is an important one in Yidin. For instance, text 2 describes how Guyala and Damari are to fight against some other people on a certain day. Damari gets up early and slinks off by himself, to avoid the fight; he runs up against a Bougainvillea tree so that its prickles pierce his skin and it will look as if he has been speared in battle. He rehearses what he will say to Guyala (line 97):
(473) yayu dunga:nal yanan gula baga:dina

I-sa run-purp I-o body-abs spear-:di-PURP I had to run, and as a result my body got speared
The inclusion of the O form yanan shows that Damari is using the transitive 'inanimate A' construction, of the pattern shown in (465-6); he is saying that he was speared accidentally, whilst trying to dodge away. But in fact he had purposefully speared himself, on the Bougainvillea prickles, and should have described this by using yayu in place of ganan (employing a reflexive sentence, of the type exemplified at (463-4)). By choosing yanan rather than yayu, Damari is telling a lie although it is difficult to convey this in a simple manner through English translation.

The contrast between purposeful reflexives and non-controlled transitives ('accidental reflexives' in English translation) is further brought out by the compound verb gidar + gunda-l 'paint in pattern' (see 6.I.1). This is built up from a noun gidal 'mark' and the transitive verb gunda-l 'cut'. Corresponding to (469) we have the acceptable Yidin sentence:
(474) yayu gidar + gunda:dinu I painted myself up

However the sentence patterned on (470),

## *(475) yanan gidal + gunda:dinu

was judged quite unacceptable by informants, since it is impossible to get painted accidentally (if a pot of paint were spilt on one, it would not fall into an accepted pattern).

Other examples of 'jnanimate A' transitive sentences with -:di-n marking include (172) in 3.7.2, (376) in 4.1.7 and:
(476) dunda:lay duyga:y gaba:yndal walba:y bunda:dinu car-ABS run-Past road-loc stone-ERG hit-:di $i$-PaSt
A car was going along the road, and a stone [rolling down the hillside] smashed into it
(477) A - yanan mandi baga:dinu

I-o hand-ABS pierce-:di-PAST
My hand was pierced
B-wapi:ndu nunin baga:dinu
what-erg you-o pierce-:di-Past
What pierced you?
Note that the inanimate interrogative wani:ndu is used in (477), emphasising the 'inanimateness' of the subject of baga:dinu. (If the person responding had wished to ask 'who pierced you?' he would have said wandu nunin baga:l, using the human interrogative wandu and not marking the verb with -:di-n.)

In 4.1.5 we distinguished two kinds of transitive verb. There is a small class, members of which must take an inanimate agent, and a complementary large class whose agent is normally animate (and usually human). The types can be exemplified by the 'semantic minimal pair' guba-n '(fire) burns' and wadu-l'(person) burns/cooks'.
-:di- $n$ is only used to mark an inanimate A with verbs from the larger class, whose A NP is normally human. Thus, corresponding to the simple sentence:
（478）bama wagu：da bupa：y buyi：wadu：l person－AbS man－abs woman－ERg fire－INST burn－PAST The woman burnt the man with the fire
we can have：
（479）bama wagu：da buri：y wadu：dinu
The man burnt himself，accidentally，on the fire（＝The fire burnt the man）
Note that（479）appears to have exactly the same meaning as the corres－ ponding simple sentence involving guba－n（cf．（346－7）above）：
（480）bama wagu：da buri：y guba：n The fire burnt the man
Either（479）or（480）could be used，in appropriate circumstances；（480） would normally be preferred on the grounds that it is simpler．
guba－n，and other verbs that demand an inanimate A，cannot take －：di－n with the sense described in this section．A reflexive sense is like－ wise impossible；but verbs of this set do form antipassives，which are marked in the regular way by $-: d i-n$ ．Corresponding to（480）there is：
（481）buri guba：dinu bama：nda wagudanda 〈＝（480）〉
When－：$d i-n$ is added to wadu－l it can have any of the three senses described in this and the last two sections．wadu：di－n is a transitive verb with non－controlling A in（479）；it functions as a derived intransitive in the reflexive sentence：
（482）bama voagu：da dama：ri wadu：dinu buri：
The silly man burnt himself on the fire（on purpose）
and in the antipassive version of（ $47^{8}$ ）：
（483）buna wadu：dinu bama：nda wagudanda buri：〈＝（478）〉
A semantically based generative grammar－cf．McCawley（1968），Lakoff （1971）－might explain these facts by suggesting that the lexical item guba－n is substituted for wadu－l＋－：di－n in the syntactic representation of a sentence like（479），yielding（480）．This lexical insertion would have to follow the semantico－syntactic operation of recognising that A is inanimate and as a result marking the verb by－：di－n．If the lexical insertion were not applied， （479）would simply result．The Dyalguy avoidance style（1．6）typically has one lexical item corresponding to several distinct words in everyday Yidij．There is just one Dyalpuy verb＇burn，cook＇－maba－l．It is significant that in－ formants gave maba－l as the Dyalnuy correspondent of wadu－l and maba：di－n for guba－n，explicitly showing that guba－n is precisely equivalent to wadu－l plus－：$d i-n$ understood in the＇inanimate agent＇sense．

We mentioned that -: $d i-n$, in the sense discussed in this section, can only be added to members of the large class of transitive verbs that expect animate subjects. It can, in fact, only be used with certain verbs from this class. -: $d i-n$ is used to mark an inanimate agent only with a verb which describes an action which effects some physical change in the patient, and demands an instrumental NP (referring to a weapon or implement). It is this weapon or implement that becomes the A NP in a -: di-n construction of the type just described. We use the term 'affect verbs' to refer to this semantic class, which includes 'hit', 'cut', 'split', 'spear', 'burn' and so on. (The class corresponds roughly to the semantic type 'affect' set up for verbs in Dyirbal - Dixon 1968: 331-45 and 1971.)
Verbs outside the 'affect' class seldom have an inanimate A, but if they do this can not be marked by verbal -:di-n. See (343-5) in 4.1.5 and the conversation:
(484) A - yanan muni:ldu gufi duga:l

I-O vine-ERG waist-ABS grab-Past
The Munil-vine grabbed me by the waist (that is, its barbs hooked onto me)

> B - nundu giyi galin yuygu:run/ muni:ldu duga:ldi you-sa Don't go-IMP that way vine-ERG grab-Lest-ABS Don't you go that way, lest the Munil-vine grab you!

Other non-affect verbs which cannot take -: $d i-n$ in the 'inanimate A' sense include 'cover' (as in 'the bark fell off the tree and covered the person lying beneath it') and 'coil' (as in 'the vine coiled around my foot').
Note that duga-l could not bear the suffix -:di-n in either of the sentences of (484) and still retain its transitivity. Informants insisted that duga:di-n could only be used in a derived intransitive sentence such as the antipassive
(485) munil yanda duga:diju The Munil-vine grabbed me

There is thus a restriction on condition (ii) from our explanation of the use of -:di-n in 4.2.2. The suffix will only mark a non-controlling inanimate subject with a verb from the 'affect' class. Note, however, that -: $d i-n$ can indicate that a human A accomplished some action by chance, whatever the semantic type of the verb involved. This is discussed in the next section.

In 4.1.4 we explained the case inflections on pronouns, deictics and nominals in terms of a hierarchy 'human-animate-inanimate'; it was
noted that an A NP is most likely to have human reference, and an 0 NP inanimate reference. The sense of -: $\mathrm{di} i-n$ described above could be taken as marking the reversal of the norm - that is, inanimate A and human O - for the class of affect verbs.
4.2.6 Chance events. There are two ways in which condition (ii) of 4.2.2 - that the A NP have volitional control over the action - may not be met. The A NP may refer to something non-animate, as described above; or, there could be a human agent, which achieves some result by pure chance.

There is a contrast between the two transitive sentences:
(486) bama:l bana wawa:l The person saw the water [he was looking for]
(487) bama:l bana wawa:dinu The person saw the water [unexpectedly] (486) implies that the person was looking for, say, a stream that he knew to be somewhere around, and did find it; (487) suggests that he encountered a stream entirely by chance, when he was engaged on some other errand.

There are thus four ways of translating into Yidin the English sentence ' $I$ saw the dog'. Firstly (cf. (430-2) from 4.2.3) a 'simple sentence' and the corresponding antipassives:
(488) a. yayu guda:ga wawa:l
b. yayu wawa:dinu gudaganda $\{$ looked at the dog
c. yayu wawa:dipu gudagala
and secondly (cf. (402) in 4.1.9):
(489) yayu guda:ga wawa:diju

I saw the dog [when I wasn't looking for it]
An informant stressed that (489) might be used when one almost bumped into a dog, before one realised it was there.

Most of the known examples of the 'chance' sense of $-: d i-n$ are on verbs of perceiving or finding:
(490) yayu wanal bandi:dinul wunanunda

By chance, I found the boomerang, lying [by the roadside]
Compare with line 38 of text 2 in which bandi-l (without -:di-n) describes the finding of a camp that had been specifically sought in a certain locality.

However, it does seem that -:di-n, with 'chance' meaning, can be suffixed to a verb of any semantic type. (427) above describes a man cutting a woman accidentally. Note also:
(491) yayu yiŋu ganda yundu:nda bama:nda

I-sa this-abs yamstick-abs that-dat person-dat nurayura:l | yipu yindu:y bada:qdinu show-redup-past this-abs this-erg leave-: $d i$-past
I showed this yamstick to that person 'This [woman] has left this [yamstick] by mistake' (i.e. she should have taken it with her on her yam-collecting expedition)
(492) gidi yayu gilbi:dinu I threw the Gidi torch away accidentally
(492) indicates that as the narrator was walking along, waving a Gidi torch about, he suddenly lost his hold and it flew out of his hand. The informant translated gilbi:di-n here as 'drop' (whereas he normally gave 'chuck' for gilbi-l).

This sense of $-: d i-n$ is used quite sparingly, to draw attention to the accidental nature of some event when this does have significance in the context of discourse. If the fact that something was more accidental than planned is essentially immaterial to the chain of events, then -:di-n need not be employed.
4.2.7 Continuous action. The final sense in which -: $d i-n$ can be used is quite distinct from antipassive, reflexive, 'inanimate $A$ ' and 'chance' uses described above. It can indicate a continuous (or repeated) action, extending into the past and future - something which cannot be viewed as a whole by looking in either direction from the vantage point of the present. (428) and (429) illustrated with 'keeps grumbling' and 'keeps vomiting'; other examples include:
(493) yanan bama:l bunda:dinu The people kept on hitting me
(494) bangilandu bama gaymbi:n gadayadi:n 'Name'-ERG person-abs do to all-Past come-comit-: $d i$-past Bangilan brought all the people with him (to a new territory he had chosen for his tribal group, after their previous home had been submerged by rising water)
In (494) the VC contains the transitive adverb gaymbi-n 'do to all O ' and transitive verb gada-na-l 'come with, bring'. The inclusion of -:di-n here suggests that it took a fair time for Bangilan to bring all his people the full distance to the new home he had found for them.

It seems that -: $\mathrm{dj} i-n$, in its continuous sense, can be affixed to a verb of any semantic type. For example:
(495) yandi bulmba wawa:din

We keep looking around the camp (mourning the fact that one of its owners has been murdered)
It thus seems quite likely that a fifth sentence could be added to the paradigm at ( $488-9$ ) in the last section.
-: $d i-n$, in the 'continuous' sense, can sometimes completely alter the semantic character of a verb (so that a different English translation would be appropriate). From budi-l 'put down' we derive budi:di-n 'own, have around', as in:
(496) baygal garu wapdu:nim dugal / galya:y yuұи
axe-abs by-and-by who-cau get-Pres uncle-erg that-abs
bangal budi:din
axe-ABS put down-:di-Pres
'Who can [we] get a tomahawk from ?' [Two young boys ask each other] 'Uncle usually has some around' [one of them suggested]
When budi-n 'tell' bears a continuous -:di-n it has the sense 'be called (a name)' - see line 15 of text 2.

Like the 'chance' sense discussed in the last section, -:di-n is only used to mark a verb as continuous if there is some special significance attached to the duration of the action. Thus when Dick Moses told the story of how, when a boy, he and a friend had dug up some mission potatoes, he emphasised that, when the missionary came upon them:
(497) yundu:y guman danayadi:n | jayu guman
that-erg one-abs stand-comit-: $d i$-past I-sa one-abs
danayadi: $n$
stand-comit-: $d i$-Past
That one [Dick Moses's friend] was standing with one [potato in his hand], and I was standing with one [in my hand]
Here the addition of -:di-n to the comitative dana-ya-l 'stand with' stresses that the boys had the potatoes in their hands for a fair period, so that the white man could see quite plainly what they had been doing (and there was no point in their denying it).

Imperative inflection on a continuous -: $d i-n$ yields an exhortation to continue something that has already been commenced:
(498) mandi: galabudun galiya:din daba:ngu hand-loc spear-ABS-still go-comit : :di-IMP eel-PURP Keep going, with your spear still in your hand, for eels!

A fair number of Australian languages do have a special verbal affix or combination of affixes for 'continuous imperative'. These include Yidin's westerly neighbour Mbabaram (Dixon, forthcoming - b). Other languages showing this distinction are mentioned in Dixon 1972: 16.

Some verbs, referring to an action that is normally likely to be drawn out, occur almost exclusively in -:di-n form - for instance, wurba-n 'search for'.

Finally, it is only in the continuous sense that -:di-n (occasionally) occurs with intransitive verbs. See (429) and:

## (499) yayu bayi:dinu bama:nda

I kept coming out [and showing myself] to the people
(500) mayi wanda:dinu

The fruit is falling [off the tree] now
An intransitive example of continuous imperative involves a narrator describing how he and two women jumped down some rocks and into a boat below. bilndi-n 'jump down' is a hyponym of the generic verb burwa-l'jump':
(50I) gana yandi gida bilpdi:n | burwa:din munu/ TRY we-sA quick-ABS jump down-past jump-:di-IMP inside buna dambu:l woman-ABS two-ABS
We all quickly jumped down [the rocks, and I said to my companions: 'You] two women, carry on jumping into [the boat]!'
4.2.8 -: di i - summary. We can summarise, in table 4.2, the five senses of -: $d i-n$ in terms of the referent of the A NP in underlying structure, the semantic possibilities of the verb and its underlying transitivity, and whether the action was performed deliberately or not (that is, whether the agent had volitional control over it). Note that a verb cannot involve two tokens of the affix -:di-n (3.8.1). It is possible, however, that one occurrence of -:di-n could cover two of the senses listed here.

The uses of -:di-n at first appeared to be quite diverse. We attempted, in 4.2.2, to relate them all to deviations from a norm. 5.5.2-3 provides

TABLE 4.2 The five senses of verbal derivational affix-:di-n

| Reference of deep A NP | verb <br> type | underlying transitivity | does A have volitional control? | syntactic effect |
| :---: | :---: | :---: | :---: | :---: |
| any | any | trans. | yes | derives (antipassive) intransitive sentence; becomes surface S , deep O marked by dative/locative |
| animate | any (?) | trans. | yes | derives (reflexive) intransitive sentence; $d$ A/O becomes surface $S$ |
| inanimate | affect | trans. | - | - |
| animate | any | trans. | no | - |
| - | any | any | immaterial | - |
| further condition on sense (b) $-A=O$ referentially <br> further condition on sense (e) - action extends into past and future |  |  |  |  |

further discussion of the semantics and syntax of -: di $i-n$, relating the facts in Yidin to those in a number of other languages, from Australia and from other language families.

### 4.3 Comitative constructions

The verbal derivational affix -ya-l ( $\sim$ maya-l, 3.8.5) can be suffixed only to an intransitive stem; it always derives a transitive form. But although $-\eta a-l$ does - unlike -: $d i-n$ - have an invariable syntactic effect, its range of uses is scarcely less wide than that of -: $\mathrm{di} \mathrm{i}-\mathrm{n}$.

We mentioned in 3.1.I that an intransitive simple sentence involving a comitative NP:
(502) wagu:da buna:y galin The man is going with the woman can effectively be paraphrased by:
(503) wagudaygu buna gali:yal 〈= (502)〉
in which the S NP has become A, the comitative NP now fills the O slot, and the verb is marked by verbal comitative - $\eta a-l$.

We can refer to this sense of - $y$ - $-l$ as $S \equiv \mathrm{~A}$, in terms of the referential identities of NPs filling the functional slots in (502) and (503). In fact, examples like (502-3) account for the great majority of - $\eta a-l$ verbs in texts. But there are also constructions like:
(504) wagudaygu bupa badi:yal The man is crying for the woman which corresponds to intransitive:
(505) wagu:da badiy buna:nda
$\mathrm{S} \equiv \mathrm{A}$ again, but the O NP in (504) corresponds to dative - and not comitative - in (505). In fact
(506) wagu:da buna:y badiy The man is crying with the woman
has a quite different meaning from (504-5), implying that both the man and the woman are crying over some third person.
There is a third type of $-\eta a-l$ construction, exemplified by:
(507) yayu dugi gundinalnu I broke the stick

The corresponding intransitive sentence, from which we could suggest (507) is derived, is:
(508) dugi gundi:n The stick broke

Here $\mathrm{S} \equiv \mathrm{O}$; (507) appears to be a simple causative counterpart of (506). (Although on detailed study 'causative' is not the most appropriate term here - see 4.3.7.)

- $\eta a-l$ constructions also relate to instrumental NPs. It will be recalled that a simple sentence can involve an NP marked by instrumental case (which coincides formally with locative):
(509) bama:l dugi galba:nda gunda:l
person-ERG tree-ABS axe-INST cut-PAST
The person cut the tree with an axe
This can be placed in antipassive form:
(510) bama galba:nda gunda:dinu dugi:l

And then a $-\eta a-l$ construction can be derived from (510), which has the instrumental NP in absolutive case:
(511) bama:l galban gunda:dina:l dugi:l $\langle=(509)\rangle$
(510/II) are most similar to (505/4); S becomes A and here the instrumental NP becomes O . This can be particularly useful for purposes of conjunction (5.I.3) and subordination (4.4-6); the fact that galban is here the 'syntactic pivot' (i.e. the NP is S/O function) can be brought out through translating (5II) as 'The man used the axe to cut the tree'.

We first discuss the semantic range of comitative (4.3.1) and instrumental (4.3.2) NPs, and then (4.3.3-7) deal in turn with the various syntactic-semantic uses of - $\eta a-l$ (only some of which have been previewed here).
4.3.I Comitative NPs. The addition of the comitative affix $-d i \sim-y i$ (3.3.4) to any nominal stem serves to derive a form that functions like an adjective; it will take the same case inflection as the head noun which it qualifies. Thus we can have a comitative form occurring in an A NP, taking ergative case; see (182) and
(512) yanan buna:n wawa:l gandayingu

The woman with a yamstick saw me
An example of comitative followed by dative case is at (57) in 3.3.4.
There is a further comitative affix -muday (3.3.6) that has exactly the same syntactic and semantic properties as $-d i$; the two suffixes are substitutable one for the other, and are often alternated for stylistic effect (3.1.3).

Comitative can mark a complete NP (embedded within a further NP); every word in the NP will take the derivational affix, plus case inflection. An NP may mix -di and muday:
(513) yayu gada:n yingumuday wira:y

I-SA come-Past this-comit-abs moveable object-comit-abs wvalba:y stone-COMIT-ABS
I came with this piece of [gold-bearing] rock
In fact, an informant emphasised that all four alternatives:
(514) yuyu bama $\left\{\begin{array}{l}\text { mayi: yabi: } \\ \text { mayi: nabimuday } \\ \text { mayimuday pabi: } \\ \text { mayimuday nabimuday }\end{array}\right\} \begin{aligned} & \text { That person has a lot } \\ & \text { of food }\end{aligned}$
are equally acceptable.
The nominal comitative in Yidin covers a considerable semantic range. This includes:
[r] Describing some quality of a person or animal. A 'minor sentence' (3.1.10), which does not include a verb, is normal in this case.
(a) an inherent physical characteristic - see (271) and
(515) yipu wurgun numbu:ldi This teenage boy has a beard
(b) an induced characteristic:
(516) yadin galbin muypgamuday

My son has his tribal marks (cicatrices)
(c) alienable possession - see (90) and (514).
(515) or (516) may of course function just as an NP within a verbal sentence:
(517) puygum yandi ninay muypgamuday

Then we all sit [there] with our [newly acquired] tribal marks
[2] Characteristics of a place - as (411) and
(518) bulmba dira:y
place-abs twig-comit-abs
There are [lots of] twigs in [this] place
[3] Referring to someone at rest
(a) with some inanimate object - see (455)
(b) in human company:
(519) yayu ninay waga:ldi I'm sitting ( = staying) with [my] wife

There is close similarity of meaning between (519), where wagal 'wife' is marked by comitative suffix with the S NP, and
(520) yayu ninay waga:lnda 〈= (519)〉
in which it constitutes a separate peripheral NP, marked by dative case. There is, however, a basic syntactic difference between these two sentences - whereas (519) indicates accompaniment, (520) implies that the act 'I am sitting' is performed with respect to 'my wife'. (520) could be glossed 'I'm sitting next to my wife' against (519)'s 'I'm sitting with my wife'. The contrast emerges most clearly with an inanimate noun; there is considerable difference of meaning between comitative
(521) yayu waya:ldi ninay

I'm sitting with a boomerang (e.g. holding it in my hands)
and locative
(522) yayu ninay waya:lda I'm sitting on a boomerang

Choice of locative - as in (522) - or dative (as in 520 ) - is conditioned by the hierarchy described in 4.1.8. (520) and (522) belong to the same syntactic type as $(380-96)$.

Informants noted that sentences like (519) and (520) - which have very similar meanings - can be alternated to meet the requirements of stylistic felicity (3.1.3); a reply to pundu ninan waga:ldi might be gayu ninay waga:Inda. This is of course not the case for sentences which involve an inanimate noun, like (521) and (522).
[4] Referring to some inanimate object in a container. See (36-7) and

$$
\begin{aligned}
& \text { (523) yaydi gubu:m bizal bundu:y } \\
& \text { we-sA black pine-ABS hang up-PRES dilly-bag-comir-ABS } \\
& \text { We hang up the black pine nut in a dilly-bag }
\end{aligned}
$$

Note that in (523) gubu:m bundu:y comprise the O NP - literally 'we hang "black pine in a dilly-bag" up'. A similar sense could have been obtained by placing bundu in locative, rather than comitative, inflection - but bundu would then have been syntactically bound to the verb gira-l, rather than to gubu:m.
[5] Referring to someone in motion
(a) with something that does not assist his movement in any way; see ( 513 ) and (89) in 3.3.6.
(b) with something that does aid him in walking or climbing (and is effectively an 'instrument', with respect to this type of action):
(524) yayu gana guwa gali:na mandi: dubu:y

I-SA TRY west go-PURP hand-LOC walking stick-COMIT-ABS
I tried to go west [i.e. uphill] with [the help of] a stick in my hand
(c) in human company; see (502), (34-5), (154-5) and
(525) bama bangi:lan warda:nda gada:n
person-ABS 'name'-ABS canoe-LOC come-PAST
bama:y
person-COMIT-ABS
Bangilan came in a canoe with [many] men
The meaning similarity between comitative and dative on a human noun, that we noted under [3b] for a verb of rest, does not hold for a verb of motion. Thus dative yayu galiy dada:nda is 'I'm going for $(=$ to $)$ the baby' as against yayu dada:y galiy 'I'm going with the baby'.
[6] Referring to something inanimate in motion, with inanimate accompaniment:
(526) mayun bugal banamuday gaday
cloud-abs black-abs water-COMIT-ABS come-PRES
A black cloud full of rain is coming
[7] Referring to an instrument - see the discussion in 4.3.2.
[8] Referring to a time or season
(a) the time at which some event takes place, as (245) in 3.8.8 and
(527) yandi gana gundiy yiza:ndi
we-sa Particle return-Pres wind-comit-abs
In the wintertime we return [from the tableland to the coast]
(b) the duration of some event
(528) yayu wunayaday bugamuday guma:ndi

I-sA lie down-coming-Pres night-comit-abs one-comit-abs I'll come and stay for one night
[9] Describing a physical or mental state - e.g. 'hungry' ('with hunger') in (39), 'jealous' ('with jealousy') in ( 179 ), 'sick' ('with sickness') in (214), and 'full of food' (literally 'with stomach') in (42) and (193).

We noted in 3.2.2 that Yidin has abstract nouns for some concepts which are expressed by verbs or adjectives in many other Australian languages (including the neighbouring Dyirbal). Nouns such as muran 'sickness' and birmbir 'jealousy' most commonly occur with the comitative suffix, which
derives an adjectival stem. As explained in 3.1.3, the syntactic evidence does not make clear whether daliyi is basically a noun ('hunger') or an adjective ('hungry'); it may possibly have dual membership (which could imply that it is - diachronically - shifting from one word-class to another).

Comitatives can, like all other nominal stems, be verbalised; this is encountered particularly frequently with 'state' descriptions such as:
(529) bibiyuwuy mura:ndidaga:n Bibiyuwuy became sick

The noun mundu appears to refer centrally to 'wind (from the lungs)', with metaphorical overtones of 'life-force'; it can also mean 'temper', 'ease' or 'desire'. For instance:
(530) yayu munduyingu dugi gundal

I-SA ease-COMIT-ERG tree-ABS cut-PRES
I can easily cut that tree
An informant glossed (530) as 'I feel up to cutting that tree', and indicated that either mundu:y 'ease-ERG' or munduyingu could be employed in it, without change in meaning. Examples of mundu:y being used to indicate 'want' or 'desire' were discussed at (357) and (366) in 4.1.6.

Guugu-Yimidhirr wawu appears to have exactly the same meaning and function as mundu in Yidin (Roth 1gora: 7, 21; and Haviland, personal communication). The Lutheran missionaries at Hopevale used wawu to translate 'the soul' (missionaries at Yarrabah never attempted to learn Yidin or to translate the Bible into the language, but mundu could be an effective gloss for 'spirit' or 'soul'). wawu does have one extra sense that is not held by mundu - 'centre' or 'inside' (a meaning that appears to be covered by the locational qualifier munu in Yidin).
[10] It is the custom in this region to derive a tribal name by the addition of $-d i \sim-y i$ to the appropriate language name; the Yidindi are literally '[people] with the Yidin language'. This system of naming is used for all the tribes speaking Yidin and Dya:bugay, for two of the six tribes speaking Dyirbal, to the south, and for Ngayguyu, to the west of Yidin (1.3).
The comitative in Yidin appears to have a much wider semantic range than comparable affixes in other Australian languages. In Dyirbal, for instance, comitative $-b i l a \sim-b a$ could be used only in senses [ $\mathrm{I}-3,5 \mathrm{a}, 5 \mathrm{c}$ ] above. A survey of the syntactic and semantic ranges of the nominal comitative affix in twenty Australian languages is in Dixon (1976a).

There is an obvious formal similarity between nominal comitative -di and the verbal derivational affix -:di-n. Cognate affixes occur in a number of other Australian languages - thus Guugu-Yimidhirr (Haviland, forthcoming) has nominal comitative -dir and verbal derivational suffix -di with very similar functions to $-d i$ and $-: d i-n$ in Yidin. It is not clear whether this similarity between nominal and verbal affixes is merely coincidental, or whether it is the reflection of an underlying syntactic connection (if not in the modern languages, then perhaps in some common ancestor language). This point is discussed in Dixon 1976a.

The privative affix -gimbal (3.3.6) is far less common than either comitative, but it does appear to cover essentially the same semantic range. Thus -gimbal can be substituted for -di/-muday in the examples quoted under [ 1 -6] above. To the sentences given at (91), (59-60), (412), (65) and (62) can be added:
(531) yiyu wurgun numbulgimbal The teenage boy has no beard

Corresponding to (245) of 3.8 .8 under sense [8a] 'time at' there is:
(532) yandi burgin ginda:ngimbal

We'll go walkabout on a moonless night
Privative equivalents of state descriptions (sense [9]) would not be common, but can be used when the presence of a quality in one person is contrasted with its absence in another:
(533) yuฑu bama mura:ndi/ nayu murangimbal

That person is sick, [but] I'm not sick
daliyi 'hunger/hungry' cannot occur with -gimbal, it seems. An informant preferred to employ the negative particle $\eta u d u$ in saying 'I'm not hungry':
(534) yayu wala buga:dinu / yudu daliyi

I-sa stop eat-:di-PAST not hungry-abs
I've stopped eating, I'm not hungry [any more]
mundu 'temper, ease, desire' can occur with -gimbal, just as it does with -di:
(535) yayu mundugimbal ninay | gula gagal | padin

I-SA ease-without sit-pres body-abs light-abs I-gen-abs wagal duøga:n wife-ABS run-Past
I'm sitting [here] feeling sad, my body feels light [because] my wife has run away [and left me]
mundugimbal can also mean 'broken-voiced', in terms of the central meaning of mundu, 'wind'.

The semantic range of privative does not, of course, perfectly correspond to that of comitative. There appears to be no privative equivalent of sense [8b] 'duration of an event'. And whereas we can say diligimbal 'eye-without' to describe someone who has his eyes halfshut, or is pretending to be asleep, it would not be normal to use a comitative with dili to refer to someone who was wide awake.
-gimbal may be used to mark some unusual event (where -di or muday would not normally be invoked in the unmarked circumstances). Thus (64) of 3.3.6 describes a car running away by itself, bamagimbal ' without a person [in it]'. This involves a sense not listed above: inanimate object with[out] human accompaniment.
4.3.2 Instrumental NPs. Any sentence may involve an instrumental NP (4.r.6). This will typically refer to a weapon or tool used in some action which 'affects' the physical state of an object. Thus 'pierce with a spear' in (372), 'cut with an axe' in (459-64), 'dig with a yamstick' in lines 54,57 of text 2 , and:
(536) yanan wugul pundu:y dugi:l bunda:n

I-o nape-abs that-ERG stick-INST hit-Past
That [person] hit me in the back of the neck with a stick
(537) buriburi:y nunin gulgi: dandar
old man-Erg you-o sand-inst rub-pres
[When, as a young man, your cicatrices are cut, after they have healed over] an old man [will take you to the river and] rub sand on your [scars]
(538) yanan bama:l nambi:n gambu:da

A person painted me with white clay
Note also that 'fire' is marked by instrumental case with wadu-l 'burn, cook' - see (35I).

Instrumental NPs are not confined to occurrence with 'affect' verbs. Line 62 of text 2 describes how animals are caught with a trap, (373) in 4.1. 6 refers to a hut being thatched with blady grass and in (539) the instrumental NP involves gidal 'mark' and biba 'paper', a set collocation that refers to 'money' (or the chits used as a substitute for money, in early mission days):
(539) yandi gambi dugal gida:da biba: we-SA clothes-ABS get-Pres mark-INST paper-INST We buy clothes with money (cf. text 9.20)

Body part nouns can occur quite freely in instrumental case. The affect verb baya-l, which refers to a short, sharp blow delivered with a rounded implement, covers both 'kick' and 'punch'. These are distinguished by the inclusion of dina 'foot' or mandi 'hand' in instrumental inflection. Thus (433-4) and
(540) yayu bama dina: baaa:l I kicked the person
(541) yayu bama mandi: bala:l I punched the person

Dick Moses mentioned that dungu: bara-l'butt with the head' describes a way of fighting called 'double butt', practised by Kanakas (Pacific Islanders, brought as indentured labourers to the sugar fields of North Queensland during the late nineteenth century).

Other body part instrumentals include 'bite with the mouth', 'look with one eye', 'feed with the breast' or, in a story telling how an alligator ran off with a woman, holding her close to his belly with one paw:
(542) ganaraygu bigu:nda yanan nambi:l
alligator-ERG fingernail-INST I-o hold with hand-PAST
'The alligator held me with his claws' (the woman exclaimed to her rescuers apropos of the wounds on her skin)

Comitative can sometimes be used in place of instrumental for referring to an implement; for instance, a text concerning food preparation included:
(543) najdi dalygal vvalba: | muga:yndi we-Sa chop-PRES stone-INST grinding stone-COMit-ABS

## yuygal

grind-PRES
We chop [the black pine] with a stone, and then grind it with a Mugay stone

Note here that instrumental is used with dayga-l 'chop' but comitative with yuyga-l 'grind'. It seems from the limited evidence available that the use of comitative in place of instrumental depends on the natures of the object and of the action. Instrumental case would have to be used when the patient is human, as in ( $536-8,540-2$ ), or when the state of
the object is profoundly altered, as with 'chop' in (543). It is only weak instrumentals - describing a mild action on an inanimate patient - that can alternate with comitative. (The alternation may in part be conditioned by a hierarchy similar to that which motivates the choice between 'human' and 'inanimate' deictics, between dative and locative, and between different types of possessive construction-3.1.2, 3.7.1, 4.1.8, 4.7.3.)

Where comitative is used with an instrumental sense, ergative case can optionally be added to it. There is then alternation between instrumental, comitative plus absolutive, and comitative plus ergative:
(544) bama:l badil $\left\{\begin{array}{l}\text { muga:ynda } \\ \text { muga:yndi } \\ \text { mugayndingu }\end{array}\right\}$ yugga:l

A person ground Badil nut with a Mugay stone
See also (182) in 3.7.2.
Although instrumental inflection coincides formally with locative, there are grammatical reasons tor recognising two separate cases. Thus, uses of locative that are not local in the strictest sense ('at a place') alternate with dative in the way described in 4.1.8; but dative can never be substituted for instrumental in examples like $\left(53^{6-42}\right)$. The interrogative wanda 'where' corresponds to strictly local uses of locative; but the instrumental interrogative is wayi:nda-see (173) and (183) in 3.7.2. (We could regard wani:nda as involving locative-instrumental inflection added to the syntactic stem wapin-, see 3.7.3. Instrumental coincides with dative here just as it always does with $-n$-final stems.)

The alternative to recognising two distinct cases would be to say that instrumental and locative were two 'senses' of a single case. But both can occur in the same sentence, as in antipassive:
(545) bama:l gurilinda baga:dinu gala:

The person speared the wallaby with a spear
If we did allow the 'single case' hypothesis, sentences like (545) would constitute the only exception to an empirical rule that no Yidin sentence can involve two distinct NPs, each marked by the same case (from the list in 3.3.1).
4.3.3 Verbal -ya-1 (i) comitative sense. Senses [3], [5] and [6] of the nominal comitative, listed in 4.3.I, involve an intransitive verb of position (that is, 'rest' or 'motion' - 4.1.7) whose S NP includes an
embedded comitative NP. Corresponding to each sentence of this type there is a transitive construction in which the comitative NP becomes $\mathrm{O}, \mathrm{S}$ becomes A and the verb is marked by the derivational affix $-\eta a-l$. This is exemplified by ( $502-3$ ); it can be summarised (with || joining identical constituents):
(i) intransitive
transitive


Taking the senses of nominal comitative one at a time:
[3] Referring to someone at rest
(a) with some inanimate object
(546) a yayu danay dugi: $\}$ I am standing with a stick [in
b yayu dugi dana:yal $\}$ my hand]
Note that (546b) can only refer to someone standing with a stick in his hand, or else standing with his hand on a tree (showing the tree to some other person). The corresponding Dyirbal sentence (Dixon 1972: 96) nada bala yugu danayman may mean 'I am standing with a stick or under a tree or on a block of wood'; the latter two senses have to be rendered in Yidin by yayu danay dugi:l, with 'tree' in locative case.
(b) in human company
(547) a wagu:da ninay waga:ldi \} The man is sitting with [his]
b wagudaygu wagal nina:pal $\}$ wife
[5] Referring to someone in motion
(a) with something that does not assist his movement. Note line 12 from text 14:
(548) malu:way gana gada:n gulugulu:y |
spirit-abS Particle come-Past black bream-comit-abs
gulugulu gadayalnu gabulala
black bream-abS come-COMIT-PAST fish stick-LOC
The spirit came with a black bream [for all the people to eat]; he brought the black bream on a Gabu:l stick
Here the first clause involves a nominal comitative, and the second clause repeats the same information using a verbal comitative construction.
(b) with something that does assist his movement. Corresponding to (524) there is:
(549) yayu dubu gali:yal mandi:

I'm going with a walking stick in [my] hand
(c) in human company - see (502-3) as well as (494) and (329).
[6] Referring to something inanimate in motion, with inanimate accompaniment. Parallel to ( 526 ) there is:

## (550) maqu:ndu bana gada:yalala

The cloud is bringing rain now
Senses [r], [2], [4] and [9] of nominal comitative do not in the same way involve an intransitive verb of position, and there is no corresponding verbal comitative construction. Sense [8], however, does yield nominal/verbal comitative pairs on the same pattern as [3], [5] and [6]. The sentence

## (551) yayu ginda:n nina:yal

is in fact ambiguous between [8a] and [8b] - it can mean either ' I 'll sit by moonlight' or 'I'll stay for a month'.
Note that the possibility of ambiguous interpretation depends on the verb. nayu ginda:n burgi:yal can - like (245) - only be taken to mean 'I'll go walkabout by moonlight' since no one would go walkabout for a month. To specify the 'sit by moonlight' sense for (551) one need only add buga: 'night-Loc' (this restricts ginda:n to the meaning 'moonlight' rather than 'month').

Sense [8b] 'duration of event' is unambiguously shown by:
(552) nundu wandi:r buga nina:nal

How many nights will you stay here for?
We have already indicated the wide range of semantic and syntactic effects of verbal - $\eta a-l$. The comitative sense described in this sectionderiving a transitive sentence from an intransitive, where $O$ corresponds to a comitative NP and A to S - is far and away the most frequent; more than $80 \%$ of the textual occurrences of -ya-l fall under this heading. It is in view of this that we employ 'comitative' as the conventional name for the verbal derivational affix - $\eta a-l$. But it must be emphasised that in fact comitative is ONLY ONE of the five or six functions of $-\eta a-l$; the others are detailed in the following sections.
The comitative sense of -ya-l occurs most frequently with verbs of position, but it can probably occur with any intransitive stem, including derived antipassives (see 4.3.8).

Over and above these various functions, each of which has a distinctive syntactico-semantic characterisation, there is a further use of $-\eta a-l$
which is entirely dictated by considerations of discourse structure. This is to derive a transitive verbal stem which can occur in a VC with some other transitive form; examples were given in 4.1.3.

Often a verb which is in - $\eta a-l$ form to satisfy the ' VC transitivity' requirement will conform to the specifications we have given above. Thus gali:yal in (327) can be paraphrased by an intransitive sentence involving gali-n and a nominal comitative. But in other examples the transitivity requirement demands a syntactic derivation that does not conform to the semantic guidelines we have described. Thus in one myth Dick Moses gave:
(553) yayu yandar guwa banda:r galinalyu

I-SA creek-abs west follow-past go-comit-past I went following the creek to the west.
where there is no nominal comitative

## *(554) yayu gali:n yanda:rdi

and even

## *(555) yayu yandar galinalnu

is not, in isolation, an acceptable sentence. To express 'I went by the creek' one has to put yandar in locative case:
(556) yayu gali:n yanda:da

That is, the object of galina-l must be something that one takes with one; in contrast, the O NP of banda- $\tau$ can refer to a geographical feature. In (553) banda- $\tau$ is the 'head' verb in the VC, and dictates selectional requirements on NPs.

Similar comments apply to jayu dananalnu wawa:l'I stood watching' in (328) of 4.1.3.
4.3.4 Verbal -ya-1 (ii) locative sense. There are basically two ways of saying 'You talk in the Yidin language!'. The noun referring to the language can be in absolutive case, within the S NP (so that it might be regarded as a type of inalienable possession -4.7.3):
(557) nundu yidin nanga:din or it could be in locative case:
(558) nundu nayga:din yidi:nda

Now there is a transitive－$\eta$ a－$l$ construction corresponding to intran－ sitive（557－8）：
（559）nundu yidin nanga：dina 〈＝（557－8）〉
If we choose to relate（559）to（558）（although（557）could perhaps equally well have been chosen）the correspondence can be summarised：
（ii）intransitive $\mathrm{NP}_{\mathrm{S}} \mathrm{NP}+$ Loc VC
transitive $\quad \mathrm{NP}_{\mathrm{A}} \quad \mathrm{NP}_{\mathbf{o}} \quad \mathrm{VC}+$ ya－l
This construction is used in line 3 of text 9 ：
（560）．．．gada：y ．．．budi：na guru：n nuni：ndal bama：l
．．．white man－ERG tell－pURP language－ABS you－Dat person－ERG nayga：diva：lna guru：n speak－COMIT PURP language－ABS
［As children we were told to come into the mission］＇so that the white man could tell you stories，so that［white］people could speak to you in［their，English］language＇

There is a meaning difference here between budi－n＇tell＇and payga：dina－l ＇speak in＇．As the O of budi－n，guru：n refers to stories in（the English） language；as the O of payga：dina－l，guru：$n$ just has general reference to this language．
－na－l constructions of this type can only be used with verbs of ＇speaking＇；and the locative NP in the intransitive sentence－which becomes $O$ in the transitive－$\eta a-l$ construction－must refer to some language or style of speech．Note that there are no $-\eta a-l$ constructions corresponding to intransitive sentences with a normal locative NP（of the type exemplified in 4．r．7，4．r．8）．For instance，we mentioned in the last section that corresponding to（556）we can NOT have＊（555）．
The intransitive verb badi－n＇cry＇refers to a child sobbing or to a wailing style of mourning recitative．In the latter sense badi－$n$ could take a locative NP referring to the speech style employed：
（561）bama badiy gugulula or bama gugu：lu badiy
The person is crying in［men＇s］Gugulu style
There is here a corresponding－ya－l construction：
（562）bama：l gugu：lu badi：pal 〈＝（561）〉

4．3．5 Verbal－ya－1（iii）dative and（iv）＇fear＇senses．We can distin－ guish two kinds of intransitive verb．Firstly，those for which S NP and VC normally provide a full specification of some event－thus nayu wunay＇I＇m lying down＇，puyu daruy waymbay＇that bird is flying＇，yivu bama burygal＇this person is snoring＇．

There is a second class of intransitive verbs，describing an action that is directed towards some other person or thing．Thus
（563）yinu gurnga yanda mangan
This kookaburra is laughing at me
（564）yuqu bupa badiy mupga：nda
That woman is crying for［her］husband
（565）yuyu bama yulbal yadinunda waga：lnda
That person is sneaking up on my wife
These verbs commonly take a dative（sometimes purposive）NP， referring to some object towards which the action is orientated．
We could in fact follow Hale（1970：759ff．）in referring to them as＇middle verbs＇，that obligatorily take an $S$ and a dative NP．Cases where badi－n， mayga－$n$ and yulba－$n$ occur without a peripheral NP could then be accounted for in terms of ellipsis．

Since these verbs effectively involve reference to two NPs we might expect to find that the corresponding verbs in other languages are in some cases transitive．In fact，in Guugu－Yimidhirr（Haviland 1972）＇laugh＇can be expressed only by a transitive verb di：ya－l＇laugh at＇．

There are transitive $-\eta a-l$ constructions for all verbs of the＇obligatory indirect object＇type．O NP corresponds to dative and again A is identical to S ：
（iii）intransitive

as in
（566）yanan yipdu：y gurnga：y manga：yal 〈＝（563）＞
（567）yurdu：y bupa：y mulga badi：nal 〈＝（564）〉
（568）ทadin wagal yupdu：y bama：l yulbalmajal 〈＝（565）〉
The important point to note here is that $-\eta a-l$ constructions of this ＇dative＇variety are only attested for intransitive verbs that refer to an action which must be motivated by or directed towards some＇indirect object＇．

## 4 Syntax

For instance, it is not possible to get nayu dada gali:yal with the meaning 'I am going то the child', corresponding to yayu galin dada.nda; a sentence like gayu dada gali:yal is, as described in $4.3 \cdot 3$, restricted to a 'comitative' interpretation ' I am going with the child'.

We mentioned that when badi-n refers to mourning recitative - rather than to simple sobbing - it can take a locative NP referring to the language used, and that there is a corresponding - $\eta a-l$ construction of the 'locative' type. There are thus two kinds of - $\eta$ a-l form for:
(569) bama yanda badi:n gugulula

The person cried for me in Gugulu style
Either the 'dative' construction:
(570) bama:l yanan badinalyu gululula

The person CRIED FOR me, in Gugulu style
or else 'locative'
(571) bama gugu:lu yanda badiyalyu

The person cried in Gugulu style, for me
There is of course no possibility of confusion, since the O NPs are referentially quite distinct in (570) and (571).
badi- $n$ and mayga- $n$ do not enter into comitative -ya-l constructions (which are more-or-less restricted to verbs of position); maygaya-l has a unique interpretation 'laugh at'. But yulbalmaya-l can have a comitative sense; corresponding to:
(572) mudam dada:y gada:n / yulba:l yanda

Mother came with the baby, and sneaked up on me
there is
(573) muda:mbu dada gadaŋalnul yulbalmana:l yanda 〈= (572)〉

The inclusion of a dative NP with yulbalmana-l in (573) precludes a 'dative' interpretation, on the lines of (568). But (568) itself is potentially ambiguous - it could mean 'that person is sneaking up on my wife' or 'that person is sneaking up with my wife (on someone else)'.

However, a verb of motion that can take - $\eta a-l$ in the 'dative' sense is normally restricted to this interpretation. (568) would usually be taken as 'sneak up on' and in fact (573) is only interpretable in the 'sneak up with' sense because no Yidindi adult would be likely to sneak up on a child! It seems that if, for some grammatical reason, one wished to put into absolutive case the

NP referring to a person who accompanied one on a furtive expedition of this kind, a verb other than yulba-l would be preferred. In place of (568) one informant gave:
(574) yadin wagal yupdu:y bama:l gamba:yal

That person is crawling with my wife
although this too is ambiguous (it could mean 'that person is crawling up to my wife', the interpretation depending entirely on the situation in which the utterance occurs). In fact gambayalyu is preferred over yulbamaya:l in (573), although both are acceptable.

The three types of $-\eta a-l$ construction discussed thus far serve to place a non-core NP in O function (taking absolutive case, if a nominal). This can be for purposes of discourse emphasis and semantic orientation, or else to facilitate syntactic coordination or subordination. Thus, in a text about how the original Yidindi invaded Gungand, territory and found them speaking a strange language (Guŋgay), a sick Yidindi man fears that
(575) yudu garu badi:yal yanan gada

NOT by-and-by cry-COMIT-PRES I-o spirit-aBS wunanunda lie-dat subord
[The Gungandi] won't be able to mourn me [in my own language] when I'm lying as a spirit (i.e. when I'm dead)
If a subordinate clause, marked by verbal inflection -nunda, has an NP in common with the main clause, this must be in $S$ or $O$ function in EACH of the clauses; the $-\eta a-l$ construction ensures that ' $I$ ' is here the O NP of the main clause, and secures the subordination.

Only a handful of verbs (all intransitive) are normally found with a peripheral NP in 'fear' inflection - for instance manya-n, as in bupa manya:n wagudayi:da 'the woman was frightened of the man'. There is a special $-\eta a-l$ construction for these few verbs where the A corresponds to the S NP, and the O NP to the 'fear' constituent - buna:y wagu:da manyayalyu'the woman was frightened of the man'.
4.3.6 Verbal -ya-1 (v) instrumental sense. The mechanism of coordination in Yidin is discussed in 5.1.3. Basically, if two sentences involve the same nominal, they can only be coordinated if the nominal is in absolutive case in both. Suppose we wish to join together, say:
(576) bama gala:y burgi:n

A person went walkabout with a spear
（577）bama：l gangu：l gala：baga：l
A person speared a wallaby with a spear
on the basis of the common NP gala＇spear＇．For this to be possible，gala must be placed in absolutive case in both sentences．From（576）we can derive a＇comitative＇－$y a-l$ construction：
（578）bama：l gala burginalnu 〈＝（576）〉
We can first obtain the antipassive version of（577）：
（579）bama gala：baga：dipu gangulala 〈＝（577））
and then derive a－$\eta a-l$ version of（579），in which $S$ takes on $A$ function and the instrumental NP becomes O：
（580）bama：l gala baga：diya：l gangulala 〈＝（577）〉
We can now coordinate（ 578 ）and（ 580 ）to obtain： （581）bama：l gala burginalnu／（bama：l）baga：diya：l gangulala

The person went walkabout with a spear，and speared a wallaby with it
（580）illustrates a fourth sense of verbal－ya－l，that we can term ＇instrumental＇：
（iv）intransitive


Note that the original O NP gangu：l－which was put into locative case by the antipassive transformation－is unaffected by the－$\eta$ a－$l$ derivation and remains in locative case in（580）．A－$\eta$ a－l construction could not normally be based on the locative or dative NP realising deep O in an antipassive．
This provides further support for our recognising locative and instru－ mental as two distinct cases（despite their formal identity）．

Other examples of－：$d i+\eta a-l$＇instrumental＇constructions are at （243），（511），（590）and
（582）yupdu：y dugi mandi：bunda：dina：lna buna：nda that－ERG stick－Abs hand－Loc hit－：di－COmit－purp woman－dat That［person］had a stick in his hand to hit the woman

The－na purposive inflection on the verb in（582）provides the irrealis sense－ the person raised a stick to strike the woman，but did not carry through his action．
(583) yayu wawa:l walba bunda:diyalyunda bama:l

I-sa see-PaSt stone-abs hit-: $d i$-COMIT-dat subord person-ERG
wagudangu bupa:nda
man-ERG woman-DAT
I saw the stone used by the man to hit the woman
Here the instrument walba 'stone' has to be brought into O function to satisfy the constraints on subordinate clauses - 4.4.1.

We have already mentioned that body-parts can occur in instrumental inflection. They can be placed in surface O function within a -: $d i+\eta a-l$ construction; see (590) and
(584) gini buyal bama:l dumba:dipal
penis-ABS strong-abs person-ERG swive-: $d i$-COMIT-PRES buna-nda
woman-DAT
The man will swive (copulate with) the woman with [his] strong (i.e. erect) penis

Some languages have a single morphological/syntactic marking which covers comitative and instrumental NPs (for example English 'with'). Yidin comitative differs from instrumental in both form and function (for instance, only comitative can be followed by a case inflection); but it is worth noting that the two productive types of $\mathrm{S} \equiv \mathrm{A}-\eta a-l$ derivation are based one on comitative NPs and the other on instrumentals.
Locative and dative senses of -ya-l are - by comparison with comitative and instrumental uses - relatively restricted, applying only to a small number of intransitive verbs. Note that the peripheral cases on which $-\eta a-l$ can be based - dative, locative, instrumental and 'fear' - are just those that are not concerned with syntactic or local 'to' or 'from' (3-3.1).
4.3.7 Verbal -ya-1 (vi) controlling sense. The four senses of - $n a-l$ discussed above all belong to what we call the ' $\mathrm{S} \equiv \mathrm{A}$ type'. The A NP of the $-\eta a-l$ construction corresponds to the S NP in a simple sentence, with O corresponding to a peripheral NP , or to a comitative NP that is embedded within the intransitive $S$.
The fifth sense is quite different. Here $\mathrm{S} \equiv \mathrm{O}$, and transitive A constitutes an additional factor (not referred to in the intransitive simple sentence) which controls the action. Thus:


A gloss along the lines ' $\mathrm{NP}_{\mathrm{A}}$ made $\mathrm{NP}_{\mathrm{o}}$ do VC ' is sometimes but not always appropriate. Our reasons for preferring the label 'controlling' over 'causative' are explained below.

Examples have already been provided at (222) 'the food made me vomit', (223) 'the person made him fall down' and (507) 'I made the sTick break'. Others are:
(585) a mula:ri wanga:dipu

The initiated man got up
b buriburi:y mula:ri wayga:dina:l
The old man lifted up the initiated man
(586) a yayu bundi:l bupa:nda

I collided with the woman
b yapan bama:l bundilmaya:l buna:nda
The person (who was pulling me this way) made me collide with the woman
(587) a yayu warygi:n

I turned around
b yanan gudunuygu warnginalyu
The wind spun me round
As in all its other senses, $-\eta a-l$ can only be added to intransitive stems here wanga:di-n 'rise up', bundi-l 'burst, explode, collide (with)' and the adverb warygi-n 'do all around, turn round'.
Occasionally, controlling - $\eta a-l$ makes a difference to the lexical import of a verb (at least, qua English translation equivalents). Intransitive givea- $n$ means 'stirred up' as in yiju bana givay 'this water is all stirred up'. One sense of transitive giwaya-l is 'tickle (a person)', as in:
(588) jayu murnga:lda nunin bina givayalna | jundu

I-sA feather-inst you-o ear-ABS stirred up-comit-purp you-SA
mayga:na
laugh-PURP
I'll tickle your ear with a feather so that you will laugh
A 'controller' - $y a-l$ construction can refer to an agent dealing with some other object:
(589) a yipu bulmba balay

This house is open
b yayu yiyu bulmba bala:yal
I'll open up the house (open the door, or make a hole in the wall)
or it can refer to an agent controlling some part of his own body. Thus in a story about an old man trying to catch an alligator, the narrator said:
(590) ganaraygu wayi balayalnu / bada:dina:lna
alligator-ERG mouth-ABS open-COMIT-PAST bite-:di-COMIT-PURP
nundu:nda buriburi:nda
that-dat old man-dat
The alligator opened its mouth, to use it to bite that old man
Here the first clause corresponds to intransitive:
(591) ganarani wayi bala:n
alligator-GEN-ABS mouth-ABS open-PAST
The alligator's mouth opened
under an $\mathrm{S} \equiv \mathrm{O}-\eta a-l$ correspondence. The second clause relates to the simple sentence:
(592) ganaraŋgu yuŋu buriburi waүi: bada:l
alligator-ERG THAT-S old man-abS mouth-INST bite-PAST
The alligator bit the old man with its mouth
being placed in the $-: d i+\eta a+l$ instrumental construction (described in the last section) by a - $\eta a-l$ transformation of the $S \equiv A$ variety. The net result is that wayi is in absolutive case (and gana:r in ergative) in both clauses allowing a purposive subordinate construction (4.5) with deletion of repeated constituents.
Another example of an agent controlling a body part is
(593) bama:l yuŋu dina bilayalyu guga:

A person put his foot into the stirrup
guga 'skin' is used to denote 'leather', being extended here to a stirrup made of leather.

Sentences involving bilaya-l 'put in' with an O NP that is not a body part are in line 57 of text 2 and line 10 of text 9.

Verbal suffix -ya-l may, in the $\mathrm{S} \equiv \mathrm{O}^{\text {'controller' sense, be attached }}$ to verbs of any semantic type. There appear to be just two small classes of exceptions:
[a] Verbs which take - $y a-l$ in the dative or locative sense (4.3.4, 4.3.5) do not form 'controlled' transitive counterparts. Thus:
(594) bama:l yanan badiyalnu
can only mean 'the person cried for me', never 'the person made me cry'. The latter meaning has to be rendered by a two-clause sentence, specifying what was done to provoke the tears, say
nanan bama:l dirmbinalnu/ yayu badi:n
The person teased me, and I cried
When asked 'made me laugh' the informant gave:
(596) yanan yundu:y budi:n manga:na

That [person] told me to laugh
Note that we can obtain bama:l yanan muri:dina:l 'the person made me cry out (by frightening me)'; muri:di-n 'cry out' does not take an indirect object, and so can form an $\mathrm{S} \equiv \mathrm{O}-\eta a-l$ construction.

Similarly, it seems that nayga:dina-l can Not be used for 'someone made someone talk' (only for 'talk in a particular language or style', or 'talk about some person or thing').
[b] Yidin has a number of pairs of verbs that have the same semantic content, but differ only in transitivity. Some of these pairs are of the type $S \equiv \mathrm{~A}$ (e.g. I speak (to you), I tell you) but all those in the semantic class of 'position' are of type $S \equiv 0$. They include:

$$
\begin{array}{lll}
\text { dana-n } & \text { 'stand up' } & \text { dara-l } \\
\text { nina-n } & \text { 'put standing up' } \\
\text { bayi-l down' } & \text { jirda- } \text { 'come out' } & \text { dayga-n } \\
\text { 'put sitting down' }
\end{array}
$$

A single event could be described by either an intransitive or a transitive sentence, where S and O NPs coincide:
(597) yipu dada danay

This baby is standing up
(598) muda:mbu yindu:n dada daral

Mother is standing this baby up (i.e. holding its hand while it tries standing for the first time)
Plainly, pairs like ( $597 / 8$ ) are exactly equivalent to ( $585-7 \mathrm{a} / \mathrm{b}$ ), and so on. That is, dara-l corresponds to what would be the 'controller' sense of danaya-l.
The distribution of $\mathrm{S} \equiv \mathrm{O}$ and $\mathrm{S} \equiv \mathrm{A}$ intransitive/transitive pairs in the various semantic types in Yidig is similar to that in Dyirbal (Dixon 1972: 296-301, 1971: 46I-7). Dyirbal has one $\mathrm{S} \equiv \mathrm{A}$ pair amongst 'position' verbs - 'follow'; Yidin deals with 'follow' only through transitive verbs.

When an intransitive verb has a transitive congener of the type $\mathrm{S} \equiv \mathrm{O}$, then -ya-l cannot, in fact, be applied to it with the 'controlling' sense. That is, danaya-l can only mean 'stand with' (in the comitative sense), never 'make stand (= put standing)'; and similarly for nina-n,
bayi-l, and so on. This is a convenient exception. We mentioned that the comitative sense of $-y a-l$ occurs predominantly with verbs of position, and that the controlling sense can occur with verbs of all semantic types. This gives rise to the possibility of considerable ambiguity; the possibilities are reduced by the exclusion of the 'controller' sense for intransitive verbs of 'position' that have $\mathrm{S} \equiv \mathrm{O}$ transitive congeners.

It is interesting to note that the $-\eta a-l$ form of bayi-l 'come out' can only be understood in the comitative sense, since it has an $S \equiv O$ transitive congener dayga- $n$ 'take out'. But there is no transitive correspondent of bila-n 'go in' and so bilaya-l can mean either 'put in', as in (593), or else 'go in with', as in
(599) yayu waga:ldi bila:n dugu:da $\}$ I went into the house with (600) yayu wagal bilayalnu dugu:da $\}$ [my] wife

In the case of the commonest verbs of motion - 'go', 'come' and maybe also 'run', 'jump' and a few others - a - $\eta a-l$ construction could, when the O NP has human reference, be understood in the $\mathrm{S} \equiv \mathrm{O}$ or $S \equiv A$ sense, without any difference in meaning. For instance (cf. (502-3)):
(601) wagudaךgu buna gadayalnu

The man came with the woman (= The man brought the woman)
implies both
(602) wagu:da (buna:y) gada:n

The man came (with the woman)
and also
(603) bupa gada:n The woman came

Whereas, in the case of a verb of rest, there is considerable difference between nirda- $\boldsymbol{l}$ 'put [someone] sitting down' and jinaya-l'sit down with [someone]'.

With an inanimate $O$ there is no difficulty, only the $S \equiv A$ interpretation being open. Thus:
(604) wagudaŋgu gala gadayalnu

The man came with a spear ( $=$ The man brought a spear)
implies
(605) wagu:da (gala:y) gada:n The man came (with a spear)
but not
*(606) gala gada:n The spear came

It is in view of this that we prefer the $S \equiv A$ interpretation for (601), linking it to (602).

An inanimate NP such as gala cannot normally be the subject of gada-n. It could be argued from this that (601) is indeed syntactically - although not semantically-ambiguous, with the second reading being excluded on selectional grounds. We are here preferring the other alternative, of recognising a small class of verbs of 'motion' that cannot take - $\eta a-l$ in a 'controller' sense.

The important point here is that the only way a man can 'control' a woman's coming (from point A to point B ) is to COME WITH her; the semantic structuring of (60I) is, in essence 'the man controls [the woman comes]'. That is, a -ya-l form in Yidin can not mean that someone made someone do something by telling them to do it. The fifth sense of $-y a-l$ involves control of a physical nature; just as one can only make someone fall down by pushing them, so one can only make someone travel a certain path by going with them (setting them off in a certain direction would not ensure that they arrived - it would just be ' make set off').

This can be illustrated by the $-\eta a-l$ form of dangi-l 'get caught, snagged, bogged'. The only sense that can be attached to dangilmaya-l in a sentence like (607) bama:l baba:y yanay dangilmaya:l

The silly person got me bogged
is that I followed a person who went into boggy ground and got me stuck I should have remembered that he was half-witted ( $b a b a$, literally 'deaf') and that it could be foolish to follow him. dangilmaya-l can not mean 'he got me bogged by telling me to go a certain way'.

Thus the controller of an action must be with the person he is controlling. It was in view of this that we stressed, in 3.8.6, that (236) duyga:ripa:ldanu could not be interpreted in such a way that ' A is going but O is coming' (or vice versa).

Examples like (222), (507), (585-7) might be taken to suggest that the $S \equiv$ A sense of $-\eta a-l$ could be described as 'causative'. The explanation just given - that it implies control by physical means, and not by words could be held merely to specify the type of causation admitted. The description 'causative' is, however, misleading; we prefer to characterise this use of $-\eta a-l$ in terms of an agent 'controlling' or even 'using' some action referred to by an intransitive verb, rather than 'causing' it. This can best be illustrated by considering the effect of $-\eta a-l$ with $g u b a-n$ 'burn'; the data here are amongst the most interesting and important
available on any aspect of Yidin syntax and it will be worthwhile presenting them quite carefully.
First, recall the 'semantic minimal pair' wadu-l 'burn, cook' which must take a human A, and guba-n 'burn, cook' whose A NP must be 'sun', 'fire' or something hot or burning (4.r.5). wadu-l behaves like a normal verb of 'affect', taking an instrumental NP:
(608) yayu mina buri: wadu:l I cooked the meat on the fire which is unaffected by the antipassive $-: d i-n$ transformation (cf. (483) in 4.2.5):
(609) yayu buri: wadu:dinu mina: 〈=(608)〉
and can then be placed in absolutive case by application of $-\eta a-l$ in the 'instrumental' sense (4.3.6):
(610) yayu buri wadu:dina:l mina:

I used the fire to cook the meat
Alternatively, one can say:
(611) yipu gima:l dugi buri:gu zvadu:dina:lna this-ABS firestick tree-ABS tree-ABS fire-purp burn-: $d i$-comit-pURP This firestick tree is for making fire (i.e. lighting firewood)
Compare with (351) and (350).
From a transitive simple sentence involving guba-n:
(612) buri:y mina guba:n The meat was cooked in the fire we can form an antipassive in the normal way:
(613) buri guba:dinu (mina:) The fire has cooked (the meat)

For ( $6 \mathbf{1} 2-13$ ) we quote glosses exactly as supplied by the informant.
Corresponding to ( 613 ) there is a $-\eta a-l$ construction, which must be of the $\mathrm{S} \equiv \mathrm{O}$ 'controlling' type:
(614) yayu buri guba:diya:l mina:

I used the [light of] the burning fire to [look at] the meat
Here buyi guba:di-n describes 'the fire burning'. The - $\eta a-l$ clause which is derived from this refers to an agent - here gayu ' I ' - making use of the burning fire to throw light on something. (6io) can mean 'I made the fire burn' but (614) can NOT carry this interpretation.
mina: in (613) is the deep O of guba-n; this should probably not be directly related to the mina: in (614), which refers to something that the agent is interested in seeing.

In normal use guba:diya-l would be likely to have an O NP which specifically referred to, say, a burning torch:
(615) gidi maba / mina:gu daba:ngu guba:dina:lna torch-abs light-IMP animal-PURP eel-PURP burn-:d $i$-COMIT-PURP Light a Gidi torch, to use it [to look] for eels
Corresponding to guba:diya-l, Dyirbal has lexical items - intransitive ginda-y, transitive ginda-l 'look with a light' (quite distinct from ganda-y 'fire burns', the Dyirbal equivalent of guba-n). To be syntactically precise guba:dipa-l corresponds to the instrumentive gindalma-l in Dyirbal (Dixon 1972: 96-9 and cf. $383-5$ ).

It is in view of the meaning attached to $(614-15)$ that the $S \equiv O$ sense of $-\eta a-l$ appears to be better termed 'controller' than 'causer'. The point here is that guba-n describes a fire or light which is burning by itself; ( $614-15$ ) describe some person exploiting this for his own ends (by holding the torch in such a position that the flame throws light on a certain object). Any description of a person causing a fire to burn or cook something must employ wadu-l.

The interpretation of agent as 'controller' (rather than 'causer') is supported by
(616) a yayu bugu:lda wudi:n I grew up at Woree (Bugul)
b bimbi:y yanan wudinalyu Father brought me up
Here father can be thought of as overseeing or controlling a boy's development (whereas he certainly does not make the child grow up).

But 'controller' may not be the perfect label. A controller need not, for instance, always be human. Note (222) in 3.8 .5 'The fruit made me vomit' and also
(617) yajan waba:du gula baygaqmaya:l

I-o walk-ERG body-abs feel sore-comit-past
The walk made my body feel sore/tired
where the A NP is the abstract noun wabay 'a walk'.
4.3.8 -ya-1 and -:di-n. The six senses of verbal -ya-l we have discussed are summarised in table 4.3. Each of the intransitive sentences corresponds to the transitive structure in the last line, with identity holding between NPs that are in the same column. The domain of application of each sense is summarised very roughly on the right.

TABLE 4.3 Types of -ya-l construction


There is another affix - $y a-l$, which derives a transitive verbal stem from a noun or adjective. This is very similar to sense (vi) of verbal -ya-l; in 4.8.1 we show that the verbaliser - $\eta a-l$ can appropriately be labelled 'causative'.

Note that Dyirbal has a verbal comitative affix, -mal $\sim-m b a l$, which is entirely of $\mathrm{S} \equiv \mathrm{A}$ syntax, corresponding roughly to the Yidin 'comitative' and 'dative' senses (Dixon 1972: 96-9, 296-9). The transitive verbalising suffix in Dyirbal, -mal $\sim-(m) b a l$, has - like its counterpart in Yidin - an entirely 'causative' meaning (Dixon 1972: 85-7).

Compare the syntactic effect of $-\eta a-l$ with that of the other major derivational affix -:di-n. In its major, antipassive sense we get correspondence between:

|  | transitive | $\mathrm{NP}_{\mathrm{A}}$ | $\mathrm{NP}_{\mathrm{O}}$ | VC |
| :--- | ---: | :--- | :--- | :--- |
| and | intransitive | $\mathrm{NP}_{\mathrm{S}}$ | $\mathrm{NP}+$ dAT/LOC | $\mathrm{VC}+: d i-n$ |

-: di-n does of course occur in a number of other senses (4.2.4-7) some of which do not affect transitivity.

We can now summarise, from a syntactic point of view, the co-occurrence of these two derivational affixes in a verbal stem.
[A] -: $d i-n$ followed by - $n a-l$
Almost all examples here fall under the 'instrumental' sense of $-\eta a-l$, discussed in 4.3.6. Thus:
$\begin{array}{lllll}\text { transitive } & \mathrm{NP}_{\mathrm{A}} & \mathrm{NP}_{\mathrm{o}} & \mathrm{NP}+\text { Inst } & \mathrm{VC}\end{array}$ antipassive -:di-n:
intransitive $\quad \mathrm{NP}_{\mathrm{S}} \quad \mathrm{NP}+\mathrm{dAT} / \mathrm{LOC} \quad \mathrm{NP}+\mathrm{INST} \quad \mathrm{VC}+: d i-n$ instrumental -ya-l:
transitive $\quad \mathrm{NP}_{\mathrm{A}} \quad \mathrm{NP}+\mathrm{DAT} / \mathrm{LOC} \quad \mathrm{NP}_{\mathrm{O}} \quad \mathrm{VC}+: d i+$ na- $l$ as illustrated by ( $577,579,580$ ).

There are, however, two examples in the writer's corpus of the comitative sense of $-\eta a-l$ being added to an antipassive, according to the scheme:
transitive $\quad\left[\begin{array}{llll}\mathrm{NP} & \mathrm{NP}+\mathrm{comit}_{\mathrm{A}} & \mathrm{NP}_{\mathrm{o}} & \mathrm{VC}\end{array}\right.$ antipassive -: $d i-n$ :
intransitive $\quad\left[\mathrm{NP} \quad \mathrm{NP}+\right.$ comit $_{\mathrm{S}} \quad \mathrm{NP}+$ dat/Loc $\quad \mathrm{VC}+: d i-n$ comitative - $\eta a-l$ :
transitive $\quad \mathrm{NP}_{\mathrm{A}} \quad \mathrm{NP}_{\mathrm{O}} \quad \mathrm{NP}+\mathrm{DAT} / \mathrm{LOC} \quad \mathrm{VC}+: d i+\eta a-l$
Thus:
(618) a bama:l wayaldingu yanan
\(\left.\begin{array}{c}wawa:l <br>
b bama waya:ldi yanda <br>
wawa:diju <br>
c bama:l wayal yanda <br>

wawa:dina:l\end{array}\right\}\)|  |
| :---: |
| The person with a boomerang |
| saw me |

(619) a bama:l yadundingu dugi gunda:l
b bama gadu:ndi gunda:dipu dugi:l
c bama:l yanan gunda:dina:l
dugi:l
The informant glossed (618c) as 'Person, he looking at me when he has boomerang' and ( 6 rgc ) as 'Person been take me to cut that tree down'.
guba:dina-l, in ( $6 \mathbf{r}^{-15}$ ), involves antipassive -:di-n followed by the 'controller' sense of $-\eta a-l$. Note that no instance of $-: d i+\eta a-l$ involves -:di-n in any sense other than antipassive; and none involves the locative or dative senses of -ya-l.
[B] - $y a-l$ followed by -:di-n
We can classify the examples here in terms of the sense of $-y a-l$ involved. There are no examples of 'locative' or 'instrumental' - $y a-l$ but we do have:
(i) comitative - $y a-l$. This appears only to be followed by $-: d i-n$ in the 'continuous' sense (4.2.7); examples have already been given, as (494), (497-8) and (244).
(iii) dative -ya-l. There are relatively few verbs that take -ya-l in the dative sense, and just one example is attested with a following -:di-n. Compare (563), (566) and:
(620) yiyu guryga yanda mangaya:diy

The kookaburra is laughing at me
Note that (620) is identical with (563) except for the verb - $(563)$ has intransitive root mayga-n whereas ( 620 ) shows the derived intransitive mayga $+\eta a+: d i-n$. Here $-\eta a-l$ and $-: d i-n$ appear exactly to cancel each other out. The reason for using (620) in place of $(563)$ is unknown - it may involve some systematic syntactic-semantic difference not known to the writer, or it may simply be stylistic.
(vi) controlling - $\eta a-l$. This use has the widest possibilities and can be followed by -:di-n in any one of several senses.

To giwaya-l 'tickle' - cf. (588) - we can add -:di-n in the reflexive sense (4.2.4):
(621) yayu ganagayuy muryga:lda giwayadi:n

I tickled myself with a feather (on purpose)
or in the 'inanimate $A$ ' sense (4.2.5):
(622) yanan murnga:Idu giwayadi:n

The feather tickled me ( $=\mathrm{I}$ tickled myself on the feather, accidentally)

Finally, controlling $-\eta a-l$ can be followed by antipassive $-: d i-n$. The derivations involved are:


This places the controlling agent in surface $S$ function, allowing it to serve as the pivot of a subordinating construction, as in

## (623) yanda bambayaya:dinum | bama duyga:n

I-dat be frightened-comit-: di-cau subord person-abs run-past After having made me frightened, the person ran away

### 4.4 Dative and causal subordinate clauses

There are in Yidin three types of subordinate clause, with distinctive verbal inflections (3.8.4):

$$
\begin{aligned}
& \text { dative subordinate -nunda } \sim-\ln u n d a \sim-\text { rnunda } \\
& \text { causal subordinate }- \text {-num } \sim-\ln u m \sim-\text { nnum } \\
& \text { purposive subordinate } \quad-n a \sim-\ln a \sim-\downarrow n a
\end{aligned}
$$

Causal subordinate clauses show a syntactic connection with causal NPs (with case inflection $-m \sim-m u$ ), and purposive clauses show an exactly parallel connection with purposive NPs (case marking $-g u$ ). There are also grounds (partly negative) for establishing a connection between the unmarked subordinate clause (with -nunda marking) and the unmarked type of peripheral syntactic NP (showing dative inflection $-n d a)$.

Semantically, a -nunda clause will normally describe something that is happening concurrently with the main clause, a -num clause will refer to a prior, completed action (that may have resulted in some state or happening described by the main clause) and a -na clause will detail some anticipated or intended event (which will normally follow from some action described by the main clause).

It is in view of this syntactic and semantic connection - and the morphological similarity between verbal - punda, -num and nominal -nda, $-m \sim-m u-$ that we employ peripheral case names dative, causal and purposive for the three types of subordinate clause.

Morphological analysis suggests a segmentation $-\eta u+n d a$ and $-\mu u+m$; we can say that $-\mu u$ - proves a 'foundation' for a subordinate verb, to which is added the relevant nominal inflection (3.8.4). It is in fact necessary to recognise a morpheme boundary in the middle of $-n u+n d a$, in order to explain its reduction by Rule 2 (2.3.2, 2.3.3).

There is no morphological similarity between nominal purposive -gu and verbal purposive -na. But comparison with Dya:bugay does suggest that an
earlier stage of the language had a verbal purposive based on $-g u$ (with $-n a$ then being future tense inflection) - 3.8.4.

The three types of subordinate clause have almost identical basic syntax. In each case there are two main subtypes - a majority pattern where the subordinate clause has an NP in common with the main clause, and a minor pattern that provides temporal qualification and does not demand a coreferential NP. We deal in turn with dative and causal clauses below. Since the purposive inflection can occur in a main or in a subordinate clause, this is described in a separate section (4.5).
4.4.1 Dative clauses - coreferential type. About $85 \%$ of subordinate clauses in the writer's corpus are of what we can term the 'coreferential type'. They can in almost every case be translated through a relative clause in English (the exact grammatical status of subordinate clauses in Yidin is discussed at length in $5 \cdot 3$ ).

Subordinate clauses of this type must satisfy the
coreferentiality constraint: There must be an NP common to main clause and subordinate clause, and it must be in surface S or O function in each clause.

We thus encounter four syntactic possibilities:
[i] Coreferential NP in O function in the main clause and in S function in the subordinate clause (this is the most frequent variety). From
(624) yajdi gapa:l bina:yal We can hear the locust
(625) gana:l badin The locust is crying
we can form
(626) yandi gana:l bina:yal badinunda We can hear the locust crying Other examples are at (116), (181), (278), (285), (368), (490) and (575) above.
[ii] Coreferential NP in O function in both clauses:
(627) yayu wawa:l mina mugin bidu:y

I-SA see-PAST animal-ABS mouse-ABS eaglehawk-ERG buganunda
eat-DAT SUBORD
I saw the mouse being eaten by the eaglehawk
[iii] Coreferential NP in S function in both clauses. See (256) and
(628) yuทu bupa duygay mayganunda

That woman ran along as she was laughing (literally: That woman who was laughing ran along)
[iv] Coreferential NP in S function in main clause and in O function in subordinate clause:
(629) dalyudalyu dalmba bundi:l / yandi yuŋgu
ringing-abs sound-AbS bump-PAST we-SA there binayalnu:n hear-dat subord
The bell rang a peal, which we heard there [in the mission] (cf. text 9 line 27)
(630) yimu dugi danay / mada dambu:ndu

THIS-ABS tree-ABS stand-PRES sawdust-ABS grub-ERG badalpunda chew-dat subord
This tree, which has had sawdust chewed out of it by grubs, is standing [here]
Any sentence may function as main or as subordinate clause. Thus from:
(631) yayu buna bunda:n I hit the woman
(632) bupa da:wurga:n The woman yawned we can form either
(633) yayu bupa bunda: $\boldsymbol{\sim} /$ da:wurgapunda

I hit the woman who was yawning
or
(634) bupa da:wurga:n/ yayu bundanunda

The woman whom I was hitting yawned
A subordinate clause can show all the complexities that are available to main clauses. It can involve a multi-verb VC , as in ( 256 ) and
(635) yayu nunin zwawa:l wagudaygu binarnalpu:n

I-sA you-o see-past man-ERg warn-dat Subord budinunda
tell-dat subord
I saw you being warned by the man
A subordinate clause can take the full range of peripheral constituents for instance the - nunda clause in (181) of 3.7.2 includes a locative NP.

A sentence can involve more than one subordinate clause. Thus in
(636) yayu wawa:l bana gadanunda / gundu:ydu

I-sa see-PAST water-ABS come-dat subord brown snake-erg
bana mundalpunda
water-AbS pull-dat subord
I saw the water coming [into the creek], being drawn up by the brown snake
the common NP bana 'water' is in O function in the main clause, in S function in the gadayunda clause, and again in O function in the final clause.

If two clauses do involve a common NP, but it is in deep A function in one or both of them, the antipassive transformation (4.2.3) must be applied to bring it into surface $S$ function, in order to satisfy the coreferentiality constraint. For instance, if we wanted to have as matrix clause:
(637) yayu guŋga:mbur wawa:l I saw a butterfly
and as constituent clause:
(638) mayi guygambudu mada: $\boldsymbol{n}$

The butterfly was sucking nectar [from the flower]
then ( 638 ) would have to be put into antipassive form:
(639) guyga:mbuy mada:diju mayi: 〈=(638)〉
before it could be attached to (637). We then get:
(640) yayu wawa:l guyga:mbuy mada:dinu:n mayi:

I saw the butterfly sucking nectar
There is another example at (442) in 4.2.3.
An example where the main clause has to be put into -:di-n form is:
(641) yuyu bama yanda bunda:diju/ maŋgajunda

The man who was laughing hit me
Although pronouns have a single form for $S$ and $A$ functions (and a different one for $O$ function) the coreferentiality constraint applies to pronominal just as to nominal NPs. Thus, although yayu is included in both
(642) yayu bama wawa:l I saw the person
(643) yayu wanda:n I fell over
the pronoun is in A function in (642) and in $S$ function in (643); it thus cannot serve as a basis for subordination. The sentence:
(644) yayu bama wawa:l wandapunda
can only mean 'I saw a person fall over'. See also (654-5).
Attempts by the writer to elicit a subordinate clause which has an NP coreferential with the surface A NP in the main clause - along the lines of 'I saw the person as I fell over' - yielded only - $d i$ clauses. These are discussed in 4.6.2.
Either main or subordinate clause may involve verbal -na-l-see (575) and
(645) yayu wawa:l dada bama:l binda:

I-sa see-past baby-abs person-ERG shoulder-loc
madindayalyunda
walk up-COmit-dat subord
I saw the baby being carried uphill by the person, on his shoulder
(583) provided an example where the constituent clause involves a -: $d i+\eta a-l$ sequence, putting an instrumental NP into surface 0 function in order to satisfy the coreferentiality constraint.

As can be seen from the examples thus far, a - $n u n d a$ subordinate clause refers to an event that takes place to the same time as the event referred to by the main clause; the syntactic link is provided by an 'object' that it simultaneously involved in the two events. The choice of which of the two clauses is 'main', and the choice of 'common NP', indicates the orientation of the observer. This can be seen in a story where the narrator relates how:
(646) yayu bandi:liju / gindadaygu bulmba

I-sA find-going-past cassowary-ERG camp-abs
balgalpunda
build-dat subord
I went and found a camp that the cassowary was building with the focus clearly on 'the camp'. The storyteller then has a conversation with the cassowary and helps him clear his site before leaving; the description of the departure places the focus on 'the cassowary':
(647) yayu bada:r ginda:da bulmba: bilma:dinu:n

I-sa leave-past cassowary-abs camp-loc clear-:di-dat subord I left the cassowary clearing the campsite

More than half the hundred and fifty or so examples of - junda clauses in the writer's corpus involve as matrix verb wawa-l'see, look at' or else a hyponym such as bandi-l'find'; the next commonest verb is binaja-l 'hear'. (Four of the five instances of dative subordinate clauses in texts 2,9 and 14 involve wawa-l!) But the balance of the examples cover a wide semantic range, and it does seem that any verb can feature in a matrix, as in a subordinate, clause.
4.4.2 Order of constituents. We can now comment on the place which a relative clause takes in the word order of the complete sentence; we will discuss first the common NP, and then the verb (and any further constituents) of the subordinate clause.

It will be seen from the examples above that the NP common to main and subordinate clauses is normally stated once only, and is sometimes before the verb of the main clause and sometimes after it. In a survey of 95 subordinate clauses in texts the NP preceded the main verb in 40 instances, and followed it a further 40 times. In the remaining 15 sentences the NP was split (cf. 4.I.9) with, for example, a generic noun before the main verb and a specific noun after:
(648) yayu bana bandi:liju bugun

I-SA water-ABS find-GoING-PAST spring-ABS
bayilpunda
come out-DAT SUBORD
I went and found a spring coming out [of the ground]
or else the head noun first and an adjective following the verb:
(649) bulmba wawa:l guripbudun wunanunda
camp-abs see-past good-abs-still lie-dat subord
The camp was seen to be lying there alright still
or a deictic first, and a nominal later:
(650) yayu wani:ra wawa:l dungu bayilpunda

I-sa what kind-abs see-past head-abs come out-dat subord
What kind [of animal] was it whose head I saw pop out [above the surface of the water] ?
In (630) the main clause included dugi 'tree' with the subordinate clause mentioning a part of the tree (something inalienably possessed by it)mada 'sawdust'.

However, there are some instances (half-a-dozen in the sample) in which at least part of the common NP occurs twice. Thus in

## (651) yayu yabul bandi:linu bana jabul I-SA noise-ABS find-GOING-PAST water-ABS noise-ABS bundilnunda <br> burst-Dat subord

I went and found the water [making a] noise [as its bubbles] burst
we get $\eta a b u l$ before the verb and bana jabul after it. And note the two occurrences of bana in (636).

We use ' $/$ ' to mark the end of an intonation group - that is, 'sentence final intonation', on which an utterance could terminate. In some cases including ( 651 ) - both main and subordinate clauses fall into a single intonation group; in other examples the two clauses are in separate intonation groups. This is so with:

## (652) yandi binayalpu dupur / dupur wunanunda we-sa hear-past noise-abs noise-abs lie-dat subord We heard a noise, which was lying [over the whole country]

which also features two occurrences of the common NP.
From the fact that, on occasion, both main and subordinate clause NPs appear to occur, we might suppose that when only one instance of the common NP is apparent it may belong to either the main or the subordinate clause. We can thus suggest that either the occurrence of the common NP in the main clause, or its occurrence in the subordinate clause may be deleted; or neither may be.

There should be a fourth possibility - that both occurrences are deleted. Three or four examples of this type have been encountered in texts. For instance:

## (653) wawa:l guva yanda:da ninayunda

see-PAST west creek-LOC sit-DAT-SUBORD
[The narrator] saw [something] sitting by the creek over to the west.
We now need to devise a criterion for deciding which clause a single occurrence of the common NP belongs to. If there are two intonation groups - as in (652) - then we can say that the NP belongs in the clause of the verb whose intonation group it shares. But in very many cases main and subordinate clauses do comprise a single intonation group. We noted in 4.r. 9 that an absolutive NP will normally (but not quite invariably) precede its verb. This suggests saying that if the NP precedes
the main verb - as in (626) - it belongs to the main clause (and the subordinate clause NP has been deleted); and if it follows the main verb - as in (640) - it belongs to the subordinate clause (with the main clause occurrence being lost). If absolutive nominals occur at two different places in the sentence, then we can say that parts of both NPs are preserved; that these are normally different parts - e.g. in (648) a generic noun in the main clause and a specific term in the subordinate clause-accords with Yidin's preference for alternation-between successive sentences in discourse, or between successive clauses in a sentence - for the sake of stylistic felicity (3.1.3).

The discussion in the last paragraphs - although perhaps not without some theoretical interest - is essentially irrelevant to an understanding of Yidin syntax. It does not appear to make any difference to the meaning or grammatical properties of a sentence WHERE the common NP comes, or which clause we choose to relate it to.

Since the common NP must be in S or O function in both clauses it will - if composed of nominals - have the same case marking in each occurrence (and it is this which gives rise to the difficulties we have tried to resolve above). But a pronoun has different forms for S and O functions (although, as stressed in the discussion of (644), exactly the same coreferentiality condition applies to pronouns as to nouns).

If a pronoun does have $S$ function in one clause and $O$ in another we can, of course, easily distinguish the two occurrences of the common NP. Consider:
(654) muri:du yandi:n bada:l / buga: yandi mosquito-ERG we-o bite-past night loc we-SA wunapunda
lie-dat subord
Mosquitoes bit us in the night as we were sleeping
and note that either yandi:n or pandi can be deleted. In fact the informant immediately followed (654) with
(655) muguy yandi wayga:dinul yudu wuna:n badalnunda
all the time we-sa get up-past not lie-past bite-dat subord muguy
all the time
We kept getting up all the time, [we] couldn't sleep through being bitten all the time
in which the common NP has been deleted from the second main clause (underlying $\eta$ and $i$ ) and from the subordinate clause (underlying $\eta$ andi $i: n$ ). See also (685) below.

This lends support to our suggestion that all or part of the common NP in the main clause, or in th: subordinate clause, can be retained; or both can be; or neither.

It remains to consider the place which the remainder of the subordinate clause (the verb, plus ergative and/or peripheral NPs) occupies in the sentence. It will have been noticed that in every one of the examples given so far the subordinate clause (leaving aside common NP) follows the main clause. The writer's corpus does contain four examples of -nunda subordinate clauses coming first in a sentence. In each of these cases the subordinate clause comprises a distinct intonation group (whereas more than half of postposed subordinate clauses fall in the same intonation group as the main clause). Examples are:
(656) yayu mula:ri ninanunda / dambulaygu yanan

I-SA initiated man-AbS sit-dat subord two-ERG I-o dili + budil
eye-put down-pres
Two [old people] were looking after me, who was sitting, newly initiated
(657) muøgun gadilala zunajunda / nunin
wound-Abs small-ABS-now lie-dat subord you-o gali:yal take-COMIT-PRES
[We'll] take you [out of camp] now that your wound is lying small (i.e. is almost healed)
4.4.3 Dative clauses - non-coreferential type. The 'coreferential NP' type of subordinate clause, that has been dealt with in the last two sections, describes a certain object entering simultaneously into two events: 'I saw the mouse' and 'The eaglehawk was eating the mouse'; or 'The woman ran' and 'The woman laughed'; and so on.

There is another type of -nunda clause simply describing two events that take place at the same time without being directly related through a common object. In this case there need not, of course, be any coreferential NP:
(658) mayi yayu bugabuga:n / yuŋu bama vegetable food-abs I-sa eat-REDUP-PAST THAT-S person-ABS wunanunda wurmba lie-dat subord asleep-abs
I ate vegetables while that person slept
(659) yayu wawa:l bulmba/ marun waygi gurbilnunda

I-SA see-PAST camp-abs cloud-abs up get dark-dat subord
As I looked around the camping place, a cloud up [in the sky] was getting darker and darker [presaging a volcanic eruption]
Other examples are at (426), (279) and (57) above.
This type of construction can detail two specific co-occurring events, or it can refer to two things that habitually happen together (sometimes in a conditional relationship - if X then Y ):
(660) yandi dugu:da wunay bulmba: dimurula / dama
we-SA house-LOC lie-PRES camp-LOc house-LOC dangerous-ABS
dimba:ral gadanunda
cyclone-ABS come-dat subord
We stay in a [big low] hut, when [we know] a cyclone is coming
Non-coreferential dative subordinate clauses are outnumbered six times (in the writer's corpus) by the coreferential type. But there are a score or so examples attested, enough to establish this as a productive grammatical device.

There is a close relationship between the two types of -nunda clause. In fact in some cases either an NP-relative or a T-relative interpretation (as Hale 1976b labels these alternatives) could be given. Thus:
(661) gana nundu:ba yajan wamban/ wurba:dipu:n dambu:nda

TRY you all-SA I-o wait-IMP seek-: di-dat subord grub-Loc
You wait for me, who is seeking grubs or You wait for me, while I seek grubs
(662) jundu yundu:n bayga:lda garu bunda:nal yayu
you-sa that-o axe-Inst by-and-by hit-PURP I-sa yaymilpunda minamuday ask-dat subord meat-comit-abs
You must presently hit that [person], whom I'm asking for meat, with the axe
or You must presently hit that [person] with the axe, while I'm asking him for meat (and distracting him so that he doesn't notice you creeping up behind him)

Examples (628), (633-4) and (654-5) can also receive either type of interpretation.
A subordinate clause of what we have termed the 'non-coreferential type' (that is, one which does not meet the coreferentiality constraint) can - coincidentally as it were - have an NP in common with the main clause; it need not be in $\mathrm{S} / \mathrm{O}$ function. Isolated examples are known (as against scores of instances of the regular coreferential type) where this NP is in dative case in the main clause:

## (663) yayu mina wiwi:n yundu:nda manganunda

I gave the meat to that [person] while the person was laughing or in ablative or fear inflection:
(664) yayu duyga:n ganaramu (/ganarayi:da) pabanunda

I swam quickly away from the crocodile (/for fear of the crocodile) which was bathing (there)
or in locative inflection:
(665) yayu wawa:dinu bunbudalal dada:n

I-SA see-: $d j$-PAST top-LOC child-GEN-ABS daraldaralpunda put standing-Redup-dat subord
I saw the child's top, while the top was being made to spin round or in genitive form:
(666) yipu ganda bupa:n / wurmba

THIS-ABS yamstick-ABS woman-GEN-ABS asleep-ABS
wunapunda
lie-dat subord
This yamstick belongs to the woman, and the woman is sleeping (over there)

Sentences like these do appear to be related to the majority 'coreferential NP' syntactic pattern. If an NP from the main clause is repeated in the subordinate clause then the latter occurrence can be deleted only IF it is in S or O function in the subordinate clause; this has happened in ( $66_{3}$ ) and (664). Note that in (665) the NP bunbu:da dada:n 'the top belonging to the child' is split - bunbuda appears in locative case, appropriate to its function in the main clause, while dada: $n$ is in absolutive case, qua $O$ function in the subordinate clause. Similarly, in (666) the subject NP is buna wurmba 'woman sleeping'; buna has
already occurred with genitive marking in the main clause and just the adjective is stated for the subordinate clause.

Note, though, that a repeated NP cannot be omitted from the subordinate clause if it is not in S or O function there. We can have a -nunda clause of the non-coreferential type:
(667) yanan muru:ydu bada:l / yayu mayi gundalnunda

I-o white bee-erg bite-Past I-sa honey-abs cut-dat subord The white bee bit me as I was cutting honey (out of the bee's nest) and here $y a y u$ (which is in A function in the subordinate clause) can Not normally be deleted.

Compare this with a regular coreferential-type subordinate clause: (668) yanan muru:ydu bada:l (yayu) mayi: gunda:dinu:n

The white bee bit me who was cutting honey (out of its nest) (668) does satisfy the coreferentiality constraint - with yanan being in O function in the main clause and yayu in S function in the subordinate clause - and here yayu can, optionally, be omitted.
4.4.4 Causal NPs. We have already mentioned (3.3.1) that the case inflection $-m u \sim-m$ can either have an ablative meaning ('motion from') or a causal sense. In the latter case it indicates a reason for the state or activity referred to by the main verb of the sentence. See (42), (175) and (368).

The inflection -nim can indicate past possession (and could then be semantically analysed as genitive-plus-ablative/causal) or it can be used as a causal case marking, alternating with $-m u \sim-m$ (3.3.4). Thus we can have (cf. (367)):
(669) muøgun wawa $\left\{\begin{array}{l}\text { galam } \\ \text { gala:nim }\end{array}\right\} \begin{gathered}\text { Look at [this] sore, resulting from a } \\ \text { spear [wound]! }\end{gathered}$ (670) yiŋu mungun wunay $\left\{\begin{array}{l}\text { bindi:nmu } \\ \text { bindi:nim }\end{array}\right\} \begin{aligned} & \text { This sore lying [on my body] } \\ & \text { was caused by a hornet } \\ & \text { [stinging me] }\end{aligned}$ (671) yiŋu mandam wunay $\left\{\begin{array}{l}\text { muøgu:nmu } \\ \text { muøgu:nim }\end{array}\right\} \begin{aligned} & \text { This mark lying [on my } \\ & \text { body] is from an [old] } \\ & \text { sore }\end{aligned}$

The conditions for the alternation between $-m u \sim-m$ and $-n i m$ are unclear. It may possibly be determined by a hierarchy similar to that described in 3.1.2, 4.1.8; but there is no real evidence supporting this.

Although $-n i m$ and $-m u \sim-m$ show considerable overlap, there are still important differences. Thus it seems that $-m u \sim-m$ could not be used in
(672) yiyu wagu:da danay gadi bupa:nim this-s man-ABS stand-PRES long way woman-nim This man is standing a long way away from the woman bupa:nim in ( 672 ) implies that the woman used to be the man's girlfriend, but they fell out and he is now behaving stand-offishly towards her.
The nominal affix -gara: appears to have a similar meaning to causal $-m u \sim-m$ and -nim. Compare (669-71) with (97-8) in 3.3.7.
4.4.5 Causal clauses - coreferential type. Causal subordinate clauses follow the syntactic patterns we have described for dative clauses; the norm variety - making up around $90 \%$ of instances recorded - demands that a common NP be in S or O surface function in both main and subordinate clauses.

The main difference between dative and causal clauses is in time reference relative to the main clause. A dative clause will always describe an event that is taking place simultaneously with the event of the main clause; thus 'I saw the woman swimming', 'Mosquitoes bit me whilst I slept', 'He trod on leaves that were lying there', and so on.

A causal clause will describe something that took place prior to the event described by the main clause (and was in fact finished before the main clause event began). A causal clause will explain or comment on the state or position of the referent of the common NP, as it is at the time described by the main clause.

The main clause can be in past tense:
(673) yayu walba wawa:linu yaygi:num

I-sa stone-ABS see-going-past split-cau subord
I went and saw the rock that had been split
and the subordinate clause then refers to 'past-in-past'. Or the main clause can be in present or imperative form, with the causal clause referring to something in the immediate past:
(674) gulugulu jundu:ba buganala / mina yayu
black bream-abs you all-sA eat-IMP-Now fish-ABS I-sA gadayalyum
come-COMIT-CAU SUBORD

You all eat the black bream, that I've brought [here for you]! (text 14.21)

Alternatively, the main clause can describe a habitual action, which normally follows the event of the subordinate clause:
(675) yandi bana: yabay / yungum buga:dinum
we-SA water-Loc bathe-pres there-abl eat-: $d i$-cau subord We (habitually) bathe in the (river) water, after we've eaten

A causal clause can be used to indicate logical or pragmatic consequence. Following soon after (675) in a text about olden-days tribal life came a warning:
(676) yandi:n gala: bagal / guwa yaba:mum | yandi:n we-o spear-INST pierce-PRes west bathe-cau subord we-o dubu:da dudal / guwa yaba:num stone-ERG throw at-PRES west bathe-CAU SUbORD
We'd be pierced by spears if we'd bathed to the west (i.e. upstream from the camp); we'd be pelted with stones if we'd bathed to the west (i.e. any child who bathed upstream from the camping place, and thus polluted the drinking water, would be punished by his elders)

The usefulness of causal clauses in specifying the exact ordering in a series of events is seen in:
(677) muynga gunda:lyum | wanga:dipa:l | dungudilygu
cicatrices-ABS cut-CAU SUBORD get up-COMIT-PAST head-down nina:n / wayga:dina:lyum sit-Past get up-COMit-cau subord
After having had [my] cicatrices cut [I] was lifted up [into a sitting position]; and sat with my head down after having been lifted up

Most of the syntactic possibilities for causal clauses of the coreferential type have already been illustrated: in (673), (674) and (677) the common NP was in O function in the main clause and also in O function in the subordinate clause; in ( 676 ) it was in $\mathrm{O} / \mathrm{S}$, and in the last part of (677) in $\mathrm{S} / \mathrm{O}$. The common NP is in S function in both clauses of (203) and of
(678) buriburi garu wula:n/ mura:ndi wuna:mum

By-and-by the old man died, after having lain sick (for a while)

If the common NP is in underlying A function in either clause, an antipassive will have to be formed, as in (623), (675) and:
(679) dambu:l gadigadi: burmu nina:n/manda two-ABS children-ABS quiet-ABS sit-PAST culprit-ABS bunda:dinum hit-:dij-CAU SUBORD
The two little children sat there quietly (while everyone wondered who had killed the old man), they were the culprits who had murdered [him]

As with - nunda clauses, an instrumental NP can be brought into surface O function through a -: $d i+\eta a l$ construction, in order to satisfy the coreferentiality constraint:
(680) yayu yipu bulin darabayal /

I-sA THIS-ABS plate-ABS shake-COMIT-PRES
buga:dina:lyum
eat-: $d i$-comit-cau subord
I'll clean this plate, which has been used for eating off
Causal clauses are typically used to describe an action that gave rise to some state described by the main clause; for instance:
(681) yayu giramgira:mdi ninay / bala

I-SA cramp-REDUP-COMIT-ABS sit-PRES leg-abs baygarmbaygal yadi:Inum be sore-REDUP-PRES walk about-CAU SUBORD
I'm sitting [here] with cramps, my legs are feeling sore from walking about [a lot]
Sometimes the main clause may involve just an adjective (with no verb) as ' I 'm full from eating' - (99), (193).

The Yidingi and Gungandi people named places after events that are reported to have taken place there; and explanations of the meanings of names frequently involve a causal subordinate clause (but no verb in the main clause):
(682) yinu bulmba bilma / gindadaygu bilma:num this-abs place-abs 'name'-abs cassowary-erg clear-cau subord This place is [called] Bilma, since the cassowary cleared it
A main clause can be qualified by both dative and causal subordinates:
(683) bama:l gana:r baga:linu / mипи
person-ERG alligator-ABS spear-GOING-PAST inside
wunanunda / dabu: bila:num
lie-dat subord ground-loc go in-cau subord
The people went to spear the alligator, who was lying inside [his lair] after having gone into [a hole in] the ground

Yidin does also allow iteration with, say, a dative clause qualifying a causal subordinate clause:
(684) wuba:ydu gana:r banda:r /
alligator bird-ERG alligator-ABS follow-PAST
wawa:linum walygalnunda | gana dadu:l
see-going-cau subord float-dat subord try shade-Loc
wunapunda
lie-dat subord
The alligator bird followed the alligator, after having watched him floating [in the water] and trying to lie in the shade

All of our comments (in 4.4.2) about the ordering of dative clauses apply to causal clauses. Surface structure may retain parts of the common NP from main or from subordinate clause (or from both, or from neither). Considerations of stylistic felicity will normally ensure that there is no exact repetition - as in (674) where the specific noun gulugulu 'black bream' occurs in the main clause and generic mina ' meat, fish' in the causal clause.

Again, occurrence of the common NP in Bотн clauses is shown most clearly with a pronoun:
(685) yanan dugi:y baga:dinu / (yayu)

I-o stick-ERG pierce-:di-PAST I-SA
gaygu + duyga:jum
take short cut-Cau subord
The stick pierced my [foot], when I had taken a short cut
(Note that in (685) -: di $i-n$ marks an inanimate A NP, which does not 'control' the action.)

Causal clauses normally follow the main clause and can then fall into the same intonation group or comprise a separate one. They are occasionally encountered preposed - as (623)-and in that position always constitute a separate intonation group.
4.4.6 Causal clauses and causal NPs. Yidij has two syntactic means of showing the 'cause' of some action. Suppose that a person hits a woman and then, in fright or fear of retribution, runs away. These episodes can be described by simple sentences:
(686) bama:l buna bunda:n The person hit the woman
(687) bama duyga:n The person ran away

If we wish to specify in (687) why the person is running away we can simply include a causal NP:
(688) bama duyga:n buya:nim

The person is running away because of (what he has done to) the woman
or we could append a causal clause. To satisfy the coreferentiality constraint (686) must first be placed in antipassive form:
(689) bama bunda:dinu buna:nda 〈= (686)〉 giving
(690) bama duyga:n bunda:dinum buna:nda

The person is running away after/because he hit the woman
Although (688) and (690) are acceptable Yidin sentences, the most frequent construction is a blend which includes causal marking on NP and on verb:
(691) bama duyga:n bunda:dinum bupa:nim $\langle=(690)$ )

Similarly we get (cf. (99), (193)):
(692) yayu galiy mayim buga:dinum

I'm going out after eating food
and here *yayu galin buga:dijum mayi: was judged scarcely acceptable by informants.

We could assign to (691) a deep structure of the type bama dupga: $n$ buna:nim bunda:dipu buna:nda (that is, involving both a causal NP and a separate causal clause), and then say that buna:nim - with causal inflection - takes precedence over dative buna:nda in the environment of a verb showing causal inflection.

Or we could, alternatively, say that the antipassive transformation marks the underlying O NP as dative or locative EXCEPT within a causal clause when it can instead be in causal case (and except within a
purposive clause when it can be in purposive case-4.5.4). This suggests a syntactic relation:

> dative case $:$ dative clause
> $::$ causal case $:$ causal clause
> $(::$ purposive case $:$ purposive clause $)$

Within a dative subordinate clause there is no possibility of alternation since the clause marking is the same as the unmarked inflection on an O NP in an antipassive construction. It is only when a subordinate clause has 'to' or 'from' marking, that this can be extended to a constituent peripheral NP.

The latter explanation is perhaps marginally preferable since it simply involves alternative case assignment (causal within a causal clause, etc.). If we took the first alternative it would be necessary precisely to specify the limits of 'precedence' (what case takes precedence over what other case and under what conditions).
'Causal case', in the discussion here, covers the causal senses of $-m u \sim-m$ (3.3.2) and of -nim (3.3.3), and also the nominal affix -gafa: - see (99) in 3.3.7.

A textual example similar to ( 691 ) but with the main clause referring to an action that is intended to atone for the crime (not escape it) is:
(693) yanannuri nundu:ba bundayadan / yayu manda /

I-O-THIS ONE you all-sA hit-COMING-IMP I-SA culprit-ABS
buriburi:nim bunda:dinum
old man-cau hit-:di-CAU subord
You [fellows] can come and hit me now! I'm the culprit, who killed the old man

A verb of rest will naturally be accompanied by a noun in locative case, indicating the place of rest. There is a typical construction pattern in Yidin which involves a verb of motion in the main clause and a verb of rest in the causal subordinate clause; the noun indicating place of rest may then be in ablative case:
(694) dama:ri gali:n / dabu:lmu dana:num
'name'-abS go-PaSt beach-abl stand-CAU sUbord
Damari went on, from the beach, after having stood on the beach [for a while]
Here the ablative dabu:lmu does double duty - it indicates that Damari went from the beach (in ablative function to gali-n) after having stood on the beach (here dabul is, in underlying form, in locative relation to dana-n). Other examples are:
(695) daruy wala waymbay/ nina:num manum

The bird flew away from the top of the tree, after having sat there
(696) yuyu garu bama bayil/ dugim garbam nila:pum

By-and-by that person came out from behind the tree, after having hidden himself there

Note that this kind of construction can also be used where the NP that is understood in a locative sense in the subordinate clause has causal (not ablative) function in the main clause:

## (697) yayu banbay dadum nina:num

I'm cold from sitting in the shade
Sentences (694-7) involve an NP that has purely local function in the causal clause and are quite different from ( $69 \mathrm{r}-3$ ) where the common NP had syntactic function (deep O in an antipassive) within the subordinate clause. It is important to note that causal case can only 'be used in place of' dative - as in (691-3) - or locative - as in (694-7) never instead of any other case.
The sentence:
(698) yiju muygun zuunay / bindi:nmul yazan bada:lyum
THIS-ABS sore-ABS lie-PRES hornet-cau I-o bite-cau subord
This sore lying [on my skin] is from a hornet, from having been bitten
[by a hornet]
has been recorded. At first sight it might appear to be a blend of ( 670 ) and the coreferential causal sentence (where the coreferential NP is jayu muygun 'my wound', involving inalienable possession):
(699) yipu muggun wunayl yanan bindi:ndu bada:lyum

This sore, which is from a hornet biting me, is lying [on my skin]
along the lines of $(691-3)$. But note that ( 698 ) involves three distinct intonation groups - one for the main clause, one for the causal NP bindi:nmu, and one for the causal subordinate clause. It appears that this (isolated) example simply involves a causal NP and a causal clause (from which the ergative NP has been deleted) and does not parallel the productive syntactic patterns exemplified in ( $691-3$ ) and ( $694-7$ ).
4.4.7 Causal clauses - non-coreferential type. Again paralleling dative clauses, there are in the writer's corpus just a handful of -num clauses which do not involve a common NP with S or O function in each
clause (but they are outnumbered ten times by clauses that do meet the coreferentiality constraint). For instance:

```
(700) yayu garu bama guga:l / burudu:%
    I-sA by-and-by person-ABS call to-PAST wallaby-ABS
    duga:lpum
    catch-cau subord
```

    I called out to the people that the wallaby had been caught [in
    the trap]
    Note also that ( $675^{-8}$ ), (68I), (683-5) and (694-6) are as it were ambiguous, being each capable of interpretation in terms of a relative clause, or of a 'while' adverbial clause.

There can - coincidentally - be some NP common to the two clauses in this type of construction; as in the case of dative clauses the repeated NP may be omitted in the subordinate position if it is in S or O function there:
(70r) dada gadil nina:n naru waygulanda
child-abs little-abs sit-past on top of white cockatoo-dat zuula:num
die-dat subord
The little child sat on the white cockatoo, after it had died
(702) bama yabi gada:n / bulmbam
person-ABS many-ABS come-PAST camp-ABL
dari:pum
be submerged-cau subord
Many people came [here] from the[ir original] camp, after it had been submerged (by the sea level rising)

Note that we could not take ( 702 ) as symptomatic of a further syntactic type in which 'the ablative/causal NP in the main clause is coreferential with the $S$ or O NP in the causal clause'. If this were a general possibility we could in place of (692) say simply:
*(7०3) yayu galiy mayim buga:num
But ( 703 ) is not grammatical; we can here only use ( 692 ), which is based on referential identity between the $\mathrm{S} / \mathrm{O} \mathrm{NP}$ in the subordinate clause, and the $\mathrm{S} / \mathrm{O} \mathrm{NP}$ in the main clause.

### 4.5 Purposive constructions

4.5.1 Purposive NPs. A purposive NP (marked by inflection -gu, 3.3.2) refers to something towards which the action described by the sentence is orientated, something that would be expected to be a core participant (S, A or O NP) for a succeeding action. See examples (360-2), (365) in 4 .r. 6 as well as (137), (498), (406) and
(704) burawuyal bana:gu gali:n

The Burawunal (water sprite woman) went for water
(705) waruwaru gabi gawal+dana:n/ murimuri:dipu /
children-ABS lots-ABS call-stand-past scream-REDUP-PAST guga:dinu bama:gu / ganaraygu bama call to-:di-PAST person-PURP alligator-ERG person-ABS galialyu:n | murba go-comit-dat subord under water
All the children cried out, screamed, and called out то тне adults, about an alligator taking a person away, under the water
(706) gawu: guga daygan buda:gu tree sp.-ABS skin-ABS take off-imp blanket-PURP
Take the Gawu: bark off [the Gawu: tree] for a blanket (i.e. to use it as a blanket)
(707) payu yiri: walba mugaypalpu

I-sa slatey stone-ABS stone-ABS grinding stone-CaUS vBLSR-PaST mayi:gu badi:lgu vegetable-PURP rickety nut-PURP
I made that piece of Yiriy stone into a Mugay (grinding stone) FOR RICKETY NUT (i.e. to grind rickety nut with it)

In 4.r. 6 we contrasted purposive NP - whose referent is likely to play an active role in a succeeding event - with dative NP - which indicates more of a passive participant. The contrast is brought out by:
(708) bama yanda garbay

The person is hiding from me (i.e. just so that I will not see him)
(709) bama yadu:ngu garbay

The person is hiding from me (i.e. with the intention of jumping out and frightening or hurting me)

Dick Moses suggested that the dative (708) could be continued bama yanda garbay wawa:dina 'The person is hiding from me, to watch me (without me knowing I am being observed)' whereas purposive (709) might be part of a dialogue with a second person asking wajinbara: 'What for?' and the first speaker replying gurbi yanan bunda:na ' $[\mathrm{He}]$ might be about to hit me'.

There is in fact a third possible translation of 'The person is hiding from me', involving fear inflection on the pronoun (4.1.6, 4.6.1):
(710) bama yadundida gaybay

The person is hiding from me (for fear of me e.g. of what I might do to him)

A purposive NP can consist just of an adjective, and will then indicate the attainment of a certain state. Thus:
(711) bama:l mayi badil muga:ynda bulba:l/ budalagu

The people ground the rickety nut with a Mugay stone, to [make it] fine

It was mentioned in 3.4.1, 3.7.2 that $-g u$ can be used to indicate allative case with locational qualifiers and deictics (and occasionally with nouns such as bulmba 'camp, place'). This usage is of course grammatically quite distinct from purposive.
$-g u$ can also be used with words that have temporal reference to indicate 'until a certain time' (3.5). But there are also instances of purposive $-g u$ being added to a time word:
(712) yayu biya dugur balgal / yiwa:ygu

I-sa particle house-abs build-pres winter-PURP
I [haven't yet but] should build a hut for the winter
The central meaning of yizay is 'wind'. 'Winter-time' is rendered either by yizay or by yizva:ndi (with the comitative affix). Particle biya is discussed in 4.10.
4.5.2 Purposive verbs - in main clause. The purposive inflection -na (3.8.4) can occur on a VC in a subordinate clause (parallel to -nunda and $-n u m$ ) or in a main clause (instead of tense or imperative). Within a main clause purposive refers to future time but specifies a particular 'need' - that the actor has to, or tries to, or wants to, or should perform the action; in contrast, the present-future tense inflection (3.8.4) is used for straightforward prediction about the future - see (528), (552), (575), (584), (589b), (657) and (680).

Purposive main verbs often occur with the particle gana 'try' (4.10) and then indicate the necessity of making an attempt at something. See (308), (326), (524) and
(713) gana yayu gida gundi:na bama:gu

TRY I-SA quick-ABS return-PURP person-PURP
I must try to hurry back to the people [at the main camp, to warn them of the danger which is approaching]
Without gana, purposive can indicate necessity:
(714) yandi garu warayadi:na

We'll all have to shift camp soon (we have exhausted the food resources around this camping place)
(715) jundu yadin wagal/ yayu nunin galinalna wagal bulmba:gu

You're my wife [now]; I must take you, wife, back to the camp
Other examples are at (94), (228), (312), (324), (352) and (662). Verbal -na may sometimes be used in giving instructions:
(716) dilygu mayi wayu wuna:na bana:
down vegetable-abs long time lie-PURP water-LOC
[This] vegetable food must [be allowed to] lie in the water for a long time [before it is fit to eat] (text 2.50)

A main clause purposive NP may refer to the need for food, water or shelter, to something that must be done in order to escape an enemy or fulfil a social obligation, or just to the desire to continue with a journey:
(717) yayu bada:rna yivu bulmba gandugandu

I must leave this place Gandugandu [and continue my travels]
Purposive can also be employed to stress 'it's my turn', as in (257) of 3.9.1 'You've eaten, now I must eat'.

The context will often indicate that the agent did perform the action referred to by a purposive clause (that is, in fact, the unmarked interpretation). But a purposive verb will sometimes be used to indicate that a person intended to do something but for some reason did not carry it through - see (582) in 4.3.6 'the person [raised his stick] intending to hit the woman (but did not bring it down on her)'.

Verbal purposive may also have a 'potential' sense, indicating that something can suitably be involved in a certain action:
(718) yiyu bana wuna:na This water is drinkable
or, in reference to the undistinguished fare served in early mission days:
(719) mina mulam gurin / buri:ndi buga:na
meat-ABS stew-ABS good-ABS bread-COMIT-ABS eat-PURP
Stew is alright, it is eatable [if taken] with bread

See also line 76 of text 2.
4.5.3 Purposive subordinate clauses - coreferential type. Purposive inflection occurs quite frequently on the VC of a main clause (as can be seen from examination of text 2). And, as the inflection in a subordinate clause, it is probably more common than - nunda (which is, in turn, more frequent than $-n u m$ ).

The great majority of -na subordinate clauses conform to the syntactic type described in 4.4.I and 4.4.5: main and subordinate clause must show a 'common NP' which is in S or O function in each clause. If a common NP is in underlying A function, the antipassive transformation has to be employed to bring it into a surface S slot. Pattern $\mathrm{S} / \mathrm{O}$ is exemplified in (456) of 4.2.4 and $\mathrm{O} / \mathrm{S}$ in (115) from 3.3.8. $\mathrm{O} / \mathrm{O}$ and $\mathrm{S} / \mathrm{S}$ occur in:
(720) yundu:ba bana duga:lin/ wupa:na

You go and get water to be drunk (by us)
(721) yayu bila:n dugu:dal wuna:na

I went into the hut to lie down (and sleep there)
Example (109) in 3.3.8 involves a main clause with understood O NP bupa dina 'the woman's feet' and a subordinate clause with understood S NP buya 'woman'. The common head noun is sufficient to satisfy the coreferentiality condition.
The discussion of place of common NP and ordering of clauses, in 4.4.2, carries over to purposive subordinate clauses.

The most usual semantic interpretation is that the event of the main clause is performed in order that the action described by the subordinate clause may be possible. This is the case with the examples referred to above, with ( 590 ) in 4.3 .7 'the alligator opened its mouth to use it to bite the old man', and with:
(722) dada dudu:mbu garbagarbayalnul yudu wawa:lna

Auntie hid the [corpse of the] child so that it should not be seen
(723) yayu mina gali:yall bama:nda wiwi:na

I'm taking some meat, to give it to the people [in the camp]

A variant of this sense is where the main verb is budi-n 'tell' and the subordinate clause specifies what its object was ordered to do - see (596) and line 104 of text 2.

There is an alternative meaning - the event referred to by the subordinate clause may be a natural result of that described by the main clause (without any intention being involved). This is the interpretation for (473) in 4.2.5 and for:
(724) yayu burawuyal duga:l/ dinbidinbi:lna

I grabbed the Burawuyal (water sprite woman) and as a result she kicked and struggled (trying to escape)
(725) yayu manga:n/ bama:l bandi:ldana/ yayu nilanunda

I laughed, and as a result the people came and found me, who had been hiding (from them)

With a negative subordinate clause, these two interpretations appear to be neutralised. (726), which involves purposive inflection in both main and subordinate clauses, was uttered by a Yidindi man trying to creep up on a Burawuyal woman to grab her unawares. He ascertains that the wind is blowing from the south, and remarks:
(726) yayu guøgagunga:r gali:nal garu yanan yamu:ray yudu

I-sA north-REDUP go-PURP by-and-by I-o smell-ABS NOT numa:lna smell-PURP
I must go [round] by the north, so that [she] will not smell me (approaching her)
The actor approaches from the north in ORDer that the Burawugal will not smell him as a natural consequence of his coming close to her.
4.5-4 Purposive clauses and purposive NPs. The reason for an action can be indicated either by a purposive NP:
(727) yayu galiy miza:gu

I'm going out for meat (e.g. to spear a wallaby)
or by a purposive subordinate clause:
(728) payu galiy miza:(/mina:nda) duga:dina

I'm going out to get some meat
The underlying form of the purposive clause here is:
(729) yayu mina duga:lna 1 must get some meat

It is placed in antipassive form - with the deep O mina taking locative or dative inflection - to satisfy the coreferentiality constraint.

Both (727) and (728) are grammatical sentences, but they are encountered less frequently than:
(730) yayu galiy mina:gu duga:dina $\langle=(728)\rangle$
in which both noun and verb show purposive inflection. (730) exactly parallels causal ( 69 I) in 4.4 .6 ; it suggests modifying the description of antipassive in 4.2.3 to say that a deep O NP takes dative or locative marking in an antipassive construction EXCEPT in a purposive subordinate clause where it can instead be in purposive case (and except within a causal subordinate clause where it can be in causal case-4.4.6).

The syntactic connection between nominal causal $-m \sim-m u$ and verbal causal -num is of course supported by morphological similarity. There is no formal resemblance between nominal $-g u$ and verbal -na (although there is comparative evidence suggesting that -na may originally have been a future tense suffix, and that proto-Yidin perhaps had a verbal purposive based on $-g u-3.8 .4$ ).

Dick Moses once made an error which appeared to reveal a psychological connection between nominal -gu and verbal -na. When illustrating the nominal affix -dulu: (3.3.7) he said:
(731) yivu bana nagi:ldulu:/ guda:rna garu dara this-abs water-abs hot-dulu: cold-na by-and-by let stand-imp This water is hot, let it stand to get cold

Here the verbal affix was added to adjective guday 'cold'. However, Moses immediately corrected himself and said it should be guda:rgu not guda:rna.

An example similar to (730), but with the common NP in O function in the main clause, is $(363)$ in 4.r.6. We can also just have an adjective (and no verb) in the main clause:
(732) yayu guli bama:gu bunda:dina

I'm angry with the person so that I want to hit him
This syntactic pattern is similar to the 'favourite construction' in Dyirbal (Dixon 1972: 73-7). Important differences are (a) the Dyirbal construction is much more frequent than are sentences like (730), (732) in Yidin; (b) the Dyirbal favourite construction is recursive ('I told the man to fetch the woman to bring you...') whereas no example of iteration has been encountered in Yidin; (c) unlike Dyirbal, Yidin has an exactly analogous construction involving causal NP and causal verb.

This type of construction is found very frequently with -: $d i+y a-l$ VCs, for which the instrumental NP is in surface O function:

## (733) gana bizvi duga mina:gu

particle stick knife-abs get-imp meat-purp gunda:dipa:lna cut-: $d i$-COMIT-PURP
Pick up the Biwi knife to cut the meat with it!
Except within a purposive subordinate clause the deep O, mina, of (733) would be - because of the antipassive transformation-in dative or locative case (4.3.6).

Sentences like (733) are frequently used to define the use or function of some plant or implement. See (6II) in 4.3.7. and:
(734) guginarmu biggal mayi:gu buga:diya:lna
coconut-ABL spoon-abs vegetable-purp eat-:di-comit-PURP
Spoons made out of coconut shell are for eating vegetable food with
(735) duludulum bagur gunda / bama:gu

Johnson hardwood tree-ABL sword-ABS cut-IMP person-PURP bunda:dina:lna hit-: di $i$-COMIT-PURP
Cut a sword from the Johnson hardwood tree, to fight people with!
4.5.5 Purposive clauses - non-coreferential type. As with dative and causal subordinate clauses, the writer's corpus includes a small number of purposive subordinate clauses that do not satisfy the coreferentiality condition. To establish a logical connection between the clauses there will often be some common element, as in (cf. (106)):
(736) garu bama:l dubur yubi:n| bana duøga:na munum dubu:rmu| wayi:mari
By-and-by the people rubbed [the woman's] stomach, so that water would run out from the inside of [her] stomach, through her mouth
where dubur is in O function for the main clause, but in ablative case in the purposive clause.

In (364) of 4.r. 6 bugul 'loya vine' is in $O$ function for the main clause and implicitly in instrumental for the subordinate clause. In lines $2-3$ of text 9 fundu 'you' is in $S$ function in the main clause and in dative case in the subordinate clause.

There are several examples where a peripheral NP in purposive case in a main clause occurs as O NP in a subordinate clause. $(233-4)$ in 3.8.6 provided one instance; others are:
(737) nundu bana duga:lin / gada:y | you-SA water-ABS get-GOING-IMP come-COMIT-IMP
mayi:gu / yandi wadu:lna
vegetable-PURP we-SA cook-PURP
You go and get the water, bring it to [soak the] vegetables, then we can cook them
(738) yandi yuyay dugal/ naygu:gu wunaya:Ina

We'll get (i.e. pull up) kangaroo grass, for a mattress to sleep on wunaya- $l$ is a -ya-l derivative of the 'comitative type' (4.3.3); here its O NP is naŋgu 'mattress'.
(739) yiyu badar guni wudin / mina:gu buga:na

THIS-ABS leave-IMP LET BE grow-IMP meat-PURP eat-PURP
Leave this [chicken] alone, let him grow up! So that [he'll get big enough to be an edible animal] and can be eaten

The implication in (739) is that the chicken is at present too small to be described as mina 'edible animal' (6.2.1); it should be allowed to go free so that it can grow into mina, and can then be eaten.

The recurrence of constructions like ( $737-9$ ) suggests that this may be a productive syntactic type in Yidin. There are no parallels involving dative or causal clauses (corresponding dative and causal sentences are definitely ungrammatical - for instance *(703) in 4.4.7).

### 4.6 Apprehensional constructions

There are two ways of indicating that the action described by a sentence is orientated towards avoiding undesirable involvement with some person or thing - the sentence can involve a peripheral NP in 'fear' inflection -dida $\sim$-yida (3.3.2), or a subordinate clause whose verb is in 'lest' inflection $-d i(3.8 .4)$. We deal with these mechanisms in turn, and then (in 4.6.3) discuss their interrelationship.
4.6.1 'Fear' NPs. Some examples of 'fear' NP were given in 4.r.6; it refers to something that is to be avoided, and the action referred to by the main verb will normally be directed towards this avoidance.

In 3.3.1 we mentioned that gayu galin mayim is potentially ambiguous. mayim can be understood in a causal sense - 'I'm going out after [having eaten] food' - or in ablative - 'I'm going away from the food'. In explaining this ambiguity Dick Moses suggested that there would have to be a reason for anyone to disregard food, and this should be stated; say,
(740) yayu galiy mayim/ bamayida

I'm going away from the food, out of fear of [that] person (who owns the food; he is known to be mean and might harm me if I touch it)
Other examples of 'fear' NPs are at (184), (664), (7ro) and:
(741) yuŋu gaday gadigadi / jadundida
that-s come-pres long way-redup I-fear
That [person] is coming [by a circuitous route which keeps him always] a long way from me (for fear of me)
(742) jundu:ba waraya:din banayida gulbuldida
you all-SA shift camp-:di-IMP water-FEAR wave-FEAR nalaldida big-fear
You'd better shift camp, for fear of the very high waves (that threaten to engulf your present camp)
4.6.2 'Lest' subordinate clauses. The types of subordinate clause we have described thus far - marked by verbal inflections -nunda, -num, -nahave almost identical syntactic behaviour. The fourth variety - with verbal inflection -di-shows a number of striking differences (although there is also at least one important similarity).

A 'lest' subordinate clause refers to an undesirable event that some person or thing referred to in the main clause might get involved in; the main clause will describe action that can be taken to try to avoid this:
(743) nundu giyi galin/ wanda:ndi

Don't you go [there], you might fall down!
(744) nundu gadidagan | giyaraygu you-sa long way-INCHO vBLSR-IMP stinging tree-ERG guba:ndi burn-LEST-ABS
Youkeep away, lest you get stung (lit.: 'burnt') by the stinging tree
(745) yinu bupa wandi:rim wunay / gana nulga /
this-S woman-ABS how long lie-pres particle wake-IMP
wayuwayu wuna:ndi
long time-redup lie-Lest-abs
How long has this woman been lying [asleep] for? Better wake her up, otherwise she might sleep for too long
Note that the (potential) event described by a 'lest' subordinate clause is always something undesirable. Thus the final clause of (745), besides stating that if the woman isn't wakened soon she'll have slept for a very long time, also asserts that this would be a bad thing.

The main clause will, naturally, often be imperative, as in (743-5) and also ( 132 ) and (484) above. But it can be tensed, as in a narrative telling what would have happened if a certain course of action HAD NOT been followed:
(746) gula dandar nunin| buybur | bundur | body-abs rub-pres you-o blow-Pres fan-Pres wira:y-yadi dama:y duga:ldi thing-ERG-INTENSIFIER dangerous-ERG grab-Lest-ABS
[When you are a newly initiated man] your body is rubbed down, you are blown on and fanned [with bushes, to drive troubles away] since otherwise that dangerous thing [the rainbow serpent] might catch you
or the reason why a certain course will not be followed:
(747) yayu dada pudu badar / bama:l yudu

I-sa baby-abs not leave-pres person-ERG NOT
dili + budi:ldi
eye-put down-LEST-ABS
I won't leave the baby in case there's no one to mind it
Note that 'lest', 'might', 'since otherwise', 'in case', used in the translations of (743-7), could be employed interchangeably for any of these sentences.

A 'lest' construction describes efforts made to avoid involvement in some undesirable event; note that these may not necessarily be successful. Thus:
(748) yayu nila:n | muda:mbu wazva:ldi yanan/ yapan I-sa hide-past mother-erg see-lest-abs I-o I-o
bidinalfu wawa:l muguy / yanan
properly-CAU vBlSR-PaSt see-past all the time I-o
bunda:na
hit-PURP
I hid lest mother see me; but she kept looking for me very thoroughly to spank me (and did find me and spank me)
All the examples given so far satisfy the 'coreferentiality constraint' which was established for dative, causal and purposive subordinate clauses - there is a common NP, in S/O function in each clause. The functions were O in main clause, S in subordinate in the final part of (745), O/O in (746-7), $\mathrm{S} / \mathrm{S}$ in (743) and $\mathrm{S} / \mathrm{O}$ in (744), (748).

In addition to the S/O 'common NP' there may be a further NP repeated between the two clauses. In (749) it is in locative case in the main clause and ergative in the subordinate clause:

## (749) giyi danan maga:da | digurula / digurungu <br> DON'T stand-IMP outside-LoC thunderstorm-LOC thunderstorm-ERG <br> bunda:ndi <br> hit-Lest-ABS

Don't stand outside in a thunderstorm, lest a thunderbolt strike you!
In (750) the NP in ablative case for the main clause is the (implicit) A NP for the 'lest' clause:
(750) pundu yuygu gadan durinumul nunin bada:ldi
you-Sa there-loc come-imp leech-abl you-o bite-lest-Abs
You come away from the leeches there, or they will bite you
Almost all the examples of 'lest' clauses in the writer's corpus do have an NP common to main and subordinate clause. And the common NP must always be in S or O function in the 'lest' clause (this is the point of similarity with -nunda, $-n u m$ and $-n a$ constructions). But the common NP can be in any function in the main clause, and the 'lest' verb will agree - in case inflection - with the common NP in the main clause (here 'lest' clauses depart radically from the patterns described in 4.4-5).

Thus, when illustrating the meaning of adjective ganan 'be engaged in an activity only briefly' Dick Moses gave:
(751) yanan bama:l gana:ndu bundapada:n duygandiygu

I-o person-ERG brief-ERG hit-COMing-Past run-LEST-ERG
The person came running up, hit me quickly, and then ran off (literally 'the person who was running came and quickly hit me')

The semantic interpretation of 'undesirableness' still holds for (751); this sentence includes the assertion that it is not a good thing to run up, hit someone and run off again (if there is some reason to hit another person it should be a fair fight, with the victim given some warning and allowed a chance to retaliate).

There is an important difference between (743-50) and (751). In the former action was taken to avoid an undesirable event - which then might or might not take place - while (751) describes an actual event that was undesirable. It may be that we should recognise two subtypes of 'lest' clauses - one where the coreferentiality constraint is satisfied in both clauses, and one where the common NP is not in S/O function in the main clause. But there is certainly a unity to all 'lest' clauses, and it is clear that the semantic common factor is the 'undesirability' of the event referred to by the subordinate clause (and not necessarily the idea of avoidance).

Attempts to obtain a subordinate clause qualifying a noun in A function for instance $y a y u$ in (642) of 4.4.I - yielded only -di clauses. Thus:
(752) yayu bama wawa:l wandandingu

I-SA person-ABS see-PAST fall-lest-ERG
I saw the person as I was (unfortunately) falling over
is a perfectly acceptable sentence. The interpretation here is helped by the fact that 'falling down' is surely always an undesirable action.

A - $d i$ verb inflects exactly like a nominal. It is in absolutive case (with zero realisation) when the common NP is in S or O function in the main clause, and in ergative case when it it is in surface A function. Ergative - $\eta g u$ reduces (by Rule $2-2.3 .2$ ) when added to an even-syllabled root. Thus:
(753) nanan bama:l bunda:n $\left\{\begin{array}{c}\text { mangandingu } \\ \text { wiwi:dindi:y }\end{array}\right\} \begin{gathered}\text { The person hit me whilst } \\ \text { he was laughing/giving } \\ \text { [things away] }\end{gathered}$

Again, the implication is that laughing/giving things away is not an appropriate action to indulge in whilst one is hitting someone.

An example with the common NP in dative case in the main clause is:
(754) yayu mayi wiwin bama:nda mangandinda

I'm giving food to the person who is laughing (but it is inappropriate to laugh whilst one is being given food)
'Lest' clauses with the verb in oblique case are not common, and in fact only ergative and dative examples are attested. Note in particular that it has not
been possible to obtain a 'lest' verb in the nominal 'fear' inflection -(di)da. When asked 'Don't you go, for fear of the person who is walking about' an informant gave:

## (755) nundu giyi galin/ bamayida burginunda

which is of the same syntactic type as (664) in $4 \cdot 4 \cdot 3$. He would not permit *burgindida (or *burgindiyi:da) in place of burginunda here.

It might be suggested that in (743-54) -di actually derives a participle, a deverbal form that functions as an adjective; this would naturally be expected to take nominal inflections. Two arguments can be given against a 'participial' interpretation.

Firstly, the fact that -di marks a subordinate clause can be seen from:
(756) yanan bama:l bunda:n wawa:dindi:y buna:nda

I-o person-ERG hit-PAST see-:di-LEST-ERG woman-dat
I was hit by a person who was looking at a woman (which he shouldn't have been doing whilst he was hitting me)
Here the subject of antipassive wawa:di-n is coreferential with yanan (stated only in the main clause); but its O NP, buna:nda, is clearly included in the subordinate clause.

The second reason against regarding a -di verb as an adjective is that in all examples gathered it follows the main verb, whereas an adjective would be expected normally to occur with its head noun, before the verb.

Verbs in 'lest' inflection are less common than -nunda, -num or -na forms (although the author has recorded a couple of score instances, and gathered more by elicitation).

We have said that if there is an NP common to a main and a $-d i$ clause, then the $-d i$ verb agrees in case with the occurrence of that NP in the main clause. But, as with other types of subordinate clause, there are odd examples where there is No common NP:
$\begin{array}{lll}\text { (757) yivu walndi } & \text { galal dunday } \\ \text { THIS-ABS cliff-ABS big-ABS hang down-PRES you all-SA DON'T } \\ \text { bidibidi } & \text { galin / wanga:m gula:dindi } \\ \text { close up-REDUP go-IMP overhang-ABS break-:di-LEST-ABS }\end{array}$
There's a big overhang on this cliff. Don't go too near [the edge], since it might break off
(758) yindu:y dabi:l guma:ndu| nundu giyi baga this-erg tell not to-past one-Erg you-sa don't spear-imp gala: | yandi:n dangandaga:ndi | yandi:n spear-INST we-GEN-ABS bad-INCHO vblsr-Lest-abs we-o buriburi:y gayyi:n old man-ERG warn not to do-PAST
One of these [young newly initiated men] told [the other] not to do it: 'Don't you spear [anything] with that spear [during our period of taboo] lest trouble comes to our camp (literally: lest our [camp] becomes bad). The old people warned us not to do it (and assured us it would anger the rainbow-serpent, who would then visit trouble on the whole camp)'
4.6.3 'Lest' clauses and 'fear' NPs. There is a syntactic pattern that involves a 'fear' NP to the main clause, and a 'lest' subordinate clause. The referent of the S NP in the main clause is frightened of someone, lest that person do something to him:
(759) yayu yarnga:n yundundida bamayidal nanan bunda:ndi I'm frightened of that person, lest he should hit me

Or the referent of the A NP does something to the referent of the O NP for fear of some third party, lest they do something undesirable to the O referent:
(760) yuทu dudu:mbu bilayŋgida bambi:l / bamayida
that-abs auntie-ERG blanket-loc cover-past person-fear nabiyida wawa:ldi
many-FEAR see-LEST-ABS
Auntie covered that [baby's corpse] with a blanket, for fear of all the people, lest they should see it

Sentences (759-60) are of exactly the same type as (749-50). The subordinate O NP is coreferential with the main clause S/O NP and there is a second 'common NP', that is in 'fear' function in the main clause and in A in the 'lest' clause:


Under these conditions, the ergative NP in the subordinate clause is likely to be omitted.
We can, of course, have a 'fear' NP within the subordinate clause:

## (761) yayu dada binda: magilmayal | bamayida <br> I-sA baby-abs shoulder-Loc climb up-comit-pres person-fear manya:ndi

be frightened-LEST-ABS
I'm carrying the baby on my shoulder as we climb uphill, since he's frightened of that person
This is a quite different syntactic type from ( $759-60$ ).
The association between 'fear' case and 'lest' verbal inflection is thus substantially different from the interrelation of causal NPs and causal clauses (4.4.6) and of purposive NPs and purposive clauses (4.5-4). There we had an antipassive O NP being marked by causal (/purposive) case within a causal (/purposive) subordinate clause. Here it is the A NP that is deleted when coreferential with a main clause 'fear' constituent.
There are semantic reasons for this difference. Dative, causal and purposive clauses describe someone doing something at the same time as, or previous to, or as a result of the action described by the main clause (in which he is involved). A 'lest' clause, on the other hand, depicts something that might be done to someone involved in the event of the main clause.

We justified employing the names 'dative', 'causal' and 'purposive' both for types of NP and for types of subordinate clause - in terms of syntactic, semantic and morphological similarities, and the type of syntactic connection just mentioned. Since this is lacking in the present case it seemed best to use separate names - 'fear' and 'lest' - for the type of NP and of subordinate clause that can be included under the general semantic label 'apprehensional'.
There are morphological similarities between Yidip and Dyirbal qua the marking of apprehension, and its relation to nominal comitative. First note the facts in Dyirbal - 'fear' is one sense of the locative case - $\eta$ ga; nominal comitative has the form -bila $\sim-b a$; verbal 'lest' involves the affix - $(m) b i l a \sim$ $-(m) b a$, which can be followed by (at least dative) case inflection (Dixon 1972: 237-8, 222-3, 112-13).

The points of similarity are:
(i) 'Fear' is dealt with by locative case in Dyirbal. It may be that the 'fear' inflection in Yidin originally involved locative added to comitative *-dir (3.3.2, 3.3.4); this remains as $-d i d a$ after comitative has reduced to $-d i$.
(ii) Verbal 'lest' is identical with nominal comitative in Dyirbal. 'Lest' in Yidin has exactly the same form as nominal comitative (the verbal affix is always preceded by a conjugation marker, so only the 'post-consonantal' allomorph appears).
These similarities may be coincidental. Or they may be indicative of the development of these affixes in the two languages (and perhaps of deep syntactic relationships that are as yet barely glimpsed). For instance, it is perfectly feasible that 'fear' originally involved the addition of locative to comitative in each language; Dyirbal then dropped the comitative while in Yidin the combination came to be recognised as a single affix, through reinterpretation under phonological change. (But it must be stressed that there is no close genetic connection evident between Yidiy and Dyirbal - that is, they are probably no closer than are any two Australian languages, whatever their geographical placement. And the different forms involved in the two languages, $-d i(r)$ and $-b i l a$, scotch any idea that these facts could suggest anything about proto-Australian.) Our comments here could at best be taken to refer to an 'areal feature' at some time in the not-too-distant past.

In addition, there may conceivably be some genetic connection between nominal - $d i(r)$ and the verbal derivational affix -:di-n (see 3.3.4 and Dixon 1976a); but this is - in our present state of knowledge - even more speculative than the possibility of a connection between nominal comitative and verbal 'lest'.

### 4.7 Possession

Like most other Australian languages, Yidin distinguishes between two kinds of possession. We can call these by the received names 'alienable' and 'inalienable'; in fact 'inalienable possession' refers only to partwhole relationships, while 'alienable possession' covers all elsematerial possessions, kin relations and social group membership.

Possession can be shown either by use of the genitive affix, or by simple apposition. The choice between these two methods appears to be governed by a semantic hierarchy, described in 4.7.3.
4.7.1 Alienable possession. Any possession other than whole-part relationship must be marked by the genitive suffix $-n i \sim-n u$. As mentioned in 3.3.3 this can be thought of as a derivational affix, forming a stem that functions as an adjective and taking the case inflection of the noun it modifies. We can effectively have a full 'genitive NP' embedded within the NP that refers to the thing possessed:
(762) yipu gala guran yundu:n bama:n

THIS-ABS spear-ABS long-abs THAT-GEN-ABS person-GEN-ABS mayayani
initiated man-GEN-ABS
This long spear belongs to that Maya: $\tau$ man
Genitive can be followed by any of the case inflections (listed in 3.3.2). Examples of ergative, locative and dative onto genitive stems are in 3.3.3; purposive case occurs in:
(763) yayu galiy dila:gu gambinuni:gu

I'm going for the pigeon's feather
Genitive is used to mark ownership of a material object, and also for a person or animal's camping place or habitat - someone's house, a bird's nest or favourite perch - see (163) - or
(764) yawu: danay galambara:n

The grass standing there belongs to the march fly
It is also used to mark ownership of a dog - see (47-9) - for kin relationship, as in ( 715 ) and:
(765) bama:l yadin mudam bunda:n The person hit my mother and for membership of a local group or tribe. For instance, in line 27 (and succeeding lines) of text 2, Damari and Guyala run off with two women who are described as bama:n yiju buna dambu:l 'these two women belong[ing] to the people [who live in this place]'. And in an autobiographical story Dick Moses told how he escaped from the mission and went to Cairns where:
(766) yandi bandi:linu bama yandi:n

We went to look for one of our own people (i.e. searching for a Yidindi amongst the predominantly white population of Cairns)
A simple statement of possession involves just an NP with embedded genitive (and does not take any verb) - see (88) in 3.3.6 and
(767) yadin yiyu guda:ga This is my dog

Note that (767) is very close in meaning to
(768) yayu yindu:ndi gudagayi I own this dog

In (767) gudaga 'dog' is head noun and yadin 'mine' provides modification to it. In (768) yayu ' I ' is the head and comitative yindundi gudagayi are modifiers; see also (514-18) in 4.3.1.

Thus, in this particular context (a verbless statement of possession) comitative is effectively the converse of genitive. But note that this relationship between genitive and comitative does not apply when they are within an NP that is in S or A function to a verb. yadin guda:ga galiy is 'my dog is going' whereas gayu gudagayi galiy means 'I am going with [my] dog' (see also Dixon 1972: 222).

Australian languages typically have a wideish range of constructions involving verbs of giving (Dixon 1972: 300). In Yidin the 'gift' is normally the O NP, with the 'recipient' being described by a peripheral NP in dative case - as in (352) from 4.r.6. But there is an alternative, in which the recipient is in genitive marking within the O NP:

## (769) уауи mina muda:mi wiwi:na <br> I-sA meat-ABS mother-GEN-ABS give-PURP <br> I must give meat to mother

The implication here is that I have an obligation to give mother a certain portion of any animal I kill, and she is merely receiving that which she has a right to. With a more general group of recipients, to whom I do not have the same food supplying obligations, dative would most likely be preferred:
(770) yayu mina wiwi:na bama:nda I must give meat to [those] people We can of course also have:
(771) yayu mina wiwi:n muda:mi bama:nda I must give the meat belonging to mother (/originally intended for mother) to the [other] person.
4.7.2 -nim. We have already mentioned the genitive-plus-ablative/ causal combination -nim (which appears to be moving in the direction of becoming an additional, non-analysable, case inflection-3.3•3). -nim can have a variety of meanings.

Firstly, it can refer to 'past possession' (and in this sense it can be semantically related to 'genitive' plus 'ablative') in contrast with $-n i$, which marks present ownership. See (56) in 3.3.3, (259) in 3.9.1 and

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(772) yi\etau wayal yadin / bimbi:nim/bimbi:y
    THIS-ABS boomerang-ABS I-GEN-ABS father-nim father-ERG
        \etaanda wiwi:n /
        I-DAT give-Past
```

This boomerang is mine; it used to belong to father but he gave it to me.

At least as frequent as the 'past possession' sense is the use of -nim simply with 'causal' meaning (and it then appears to be in free variation with $-m u \sim-m-4 \cdot 4 \cdot 4$ ). Causal -nim can be used to mark an O NP in an antipassive construction when this constitutes a causal subordinate clause - see 4.4.6 and
(773) Yayu dira:ndi bandabanda :rdipum yundu:nim

I'm tired from following that [person]
Occasionally, -nim can have just ablative meaning (again alternating with $-m \sim-m u$ ). Note that a causal/ablative NP may mix these different types of inflection (just as a comitative NP can mingle $-d i \sim-y i$ and -muday suffixes-4.3.r); thus in a story concerning an alligator that came and grabbed a sick woman while she was bathing in the river amidst a crowd of children:
(774) garu yuүu duga:ldapu | bama:nim yabim by-and-by that-s grab-coming-past person-nim many-abl Soon [the alligator] came and grabbed that [woman] from amongst the crowd of people (= children)
An occurrence of -nim may sometimes combine 'ablative' and 'past possession' senses. For instance, a myth describes how a legendary woman Bindam escaped from her husband Gamburguman:
(775) yipu bama bupa bindam/gali:n/gamburguma:nim duyga:n

This woman Bindam went, ran away from Gamburguman
In (775) gamburguma:nim indicates that Bindam ran away from Gamburguman who had owned her (in the sense shown in (765-6)). See also (56) and (672).
Informants indicated that, for felicity of discourse, -nim could be alternated with causal or with ablative $-m \sim-m u$, within a statement/response framework (3.1.3). Thus, if someone said yayu gada:n waga:lnim 'I've [just] come from [my] wife', an appropriate reply could be nundu gada:n waga:lmu '[Oh!] you've come from [your] wife!'.
4.7.3 Inalienable possession. There is a different syntactic process employed for 'inalienable possession' (part-whole relationship). The two nouns are simply placed in apposition within an NP, and take the same inflectional suffixes. Examples were at (307-8) in 4.1.I and (318) in 4.T.2.

We mentioned (4.I.I, see also 6.2.I) that the 'head' noun in an NP can 'select' a generic modifier. Now in a syntagm of inalienable possession it is the 'possessor' that determines which generic noun can occur in an NP; in view of this we regard 'possessor' as the head, with the 'part' noun having a modifying role. Thus:
(776) yayu wuyul gambil wawa:l I saw the carpet snake's tail
can be expanded to
(777) yayu mina wupul gambil wawa:l $\langle=(776)\rangle$
since wounul 'carpet snake' falls within the scope of generic mina 'edible animal'. But bima 'death adder' is not classed as mina and thus
(778) yayu bima gambil wawa:l I saw the death adder's tail
cannot be expanded in this way.
There are, in fact, no generic terms corresponding to parts of bodies or of other objects-6.2.1.

We mentioned that a genitive construction can be regarded as 'an NP embedded within an NP'; a deictic can occur both with the possessorwith genitive marking - and with the 'possessed' head noun, as in (180) of 3.7.2. In contrast, an appositional construction is just a simple NP, with the constituent possibilities listed in 4.r.1, 4.1.2; it can only involve one deictic, for instance.

The central semantic reference of 'whole-part' relationships is obvious enough - 'the man's head', as in (433-4); 'the tree's bark/leaf' as in (706), (308); and so forth. But note that bodily secretions are dealt with in the same way:
(779) yayu yudu nunu:ngu duwu gaday

I-SA NOT you-PURP tears-ABS come-PRES
I'll have no tears for you (literally: 'my tears will not come [out] for you') (text 14.10)
Inalienable possession also covers smell, as (256) and (726), or - on a more abstract level - a person's name (guwal wana occurred in (70) from 3.3.6).
The scope of this construction provides interesting insight into the Yidindi world-view. bulmba is used to refer to a 'house', a 'camp', any 'place' that could be used for camping, or 'the world' (as in 'God made the world'). yigan 'sky' is regarded as part of bulmba - the whole sky is part of the world, or the sky above a particular place is regarded as a part of that place. Thus:

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(780) bulmba yigan yiyu garan-ganday

The sky at this place is turning a burning yellow colour
See also (274) in 3.9.2 in which the noise evident at a certain place is regarded as 'part' of the place.

In 4.I. 8 and 4.2.3 we discussed the case-marking on an 'appositional NP' when in unmarked peripheral function, or in $O$ function within an antipassive. Although both nouns can take dative case, the most normal circumstance is for the 'possessor' head noun to be in dative inflection, and for the 'part' noun to be in locative. Compare (cf. (307), (391)):
(781) bupa dungu baygar The woman's head is sore
(782) guli gambay buna:nda dungu:

A louse is crawling on the woman's head
Inalienable possession is most often realised by an appositional construction. But it can, like alienable possession, be marked by genitive. Thus we can have:
$(783)\left\{\begin{array}{ll}\text { EITHER (a) yanan dungu bama:l bunda:n } \\ \text { OR } & \text { (b) yadin dungu bama:l bunda:n person hit me }\end{array}\right\}$ The
(784) $\left\{\begin{array}{ll}\text { EITHER (a) dugigivi dunday } \\ \text { OR } & \text { (b) dugi:n givi dunday }\end{array}\right\} \begin{gathered}\text { The branch of the tree is } \\ \text { hanging down }\end{gathered}$

Similarly, 'the sky at a place' can be described by bulmba yigan or by bulmba:n yigan. Note also the contrast between (317) and (318) in 4.1.2. Genitive is used to mark inalienable possession in ( 180 ) and (283) above, whereas an appositional construction suffices in (477), (536) and (588).

It appears that the choice between the two types of construction is motivated by a hierarchy similar to that described in 3.1.2, 3.7.1 and 4.1.8. Specifically:
alienable possession (necessarily human/animate possessor)



That is, genitive marking can be used for any type of possession, alienable or inalienable, whatever the possessor. Apposition is only normally used for inalienable possession, and is most frequently employed when the 'possessor' is inanimate ('the leaf of a tree'), less frequently when it is a non-human animate ('the wing of a bird'), and only occasionally when it is human. As we descend the hierarchy, the chances of encountering apposition increase, and genitive is thus progressively less frequently encountered (although genitive is always possible, and always grammatical). The (a) alternative is most likely in the case of $(784)$, but with sentences like $(783)(b)$ is probably as common as (a) in texts (and is preferred when elicitation is directed onto this point).

The hierarchy controlling the choice of possessive constructions has one important difference from that motivating dative/locative and human/inanimate deictics (3.1.2, 3.7.1, 4.1.8). Here apposition can be used even with a human 'inalienable possessor', and is only considered ungrammatical in the case of alienable possession; with dative-locative and deictics one choice was possible with all types of nouns ExCEPT those that have human reference.

The 'past possessive' affix -nim can - like unmarked genitive $-n i$ - be used on occasion for inalienable possession, and extends even to abstract whole-part relations such as:
(785) yiyu guwal da:buga:ynim gurununim

This word belonged to the Dya:bugay language
An NP can involve both alienable and inalienable possession - the first being realised by genitive marking and the second by apposition:
(786) yayu yadin dada yumbal wawva:lna

I-sa I-gen-abs child-abs face-AbS see-Purp
I must look at my child's face
Attempts to elicit an NP which involved genitive marking for both alienable and inalienable possession (with double embedding) failed. The unacceptability of a construction of this type is probably due as much to a wish to contrast these different types of possession as to a desire to avoid syntactic over-complexity.

The alternative ways of expressing inalienable possession are sometimes exploited for stylistic felicity (3.1.3). Thus, a reply to (784a) might be ( 784 b ) or vice versa.

There are two kinds of construction in Yidin that it is difficult to know how to classify. With a verb such as nayga:di-n 'talk' the noun describing the language that is being used can occur in absolutive case, apparently within the S NP - see (557) in 4.3.4. And the noun wabal 'a walk' commonly functions in the same way with verbs like gali-n 'go':
(787) yayu wabay galin I'm going out for a walk

In the absence of any reason for treating them in any other way, it seems simplest to suggest that these may be a type of 'inalienable possession', with 'language' and 'walk' being regarded as 'part' of the actor in these cases! It would probably need a native speaker trained as a linguist to decide whether this is in fact a valid assignment.

### 4.8 Verbalisation

There are four derivational affixes that can be added to non-verbal forms, yielding a verbal stem. We first discuss the fully productive verbalisers - intransitive -daga-n and transitive - $\eta a-l$. The less popular and semantically more restrictive suffixes - intransitive -madi-n and transitive -luya-l- are dealt with in 4.8 .2 and 4.8.3.
4.8.I Inchoative and causative verbalisers. It appears that any non-verbal stem (excepting pronouns and most deictics) can be verbalised by the addition of
inchoative -daga-n, forming an intransitive verbal stem causative - $y a-l$, forming a transitive verbal stem
Note that, unlike -daga-n, -na-l coheres phonologically with the stem to which it is added (2.4), and is reduced by Rule 2 when attached to an even-syllabled stem and followed by the zero imperative inflection (-ya $\rightarrow-: \eta, 2.3 .3$ ).

Inchoative - daga- $n$ indicates a state recently attained (and can be aptly translated into English by 'become'). There is a contrast between a simple adjectival description (cf. 4.r.io):
(788) yiyu gumba mura:ndi This girl is sick
and inchoative:
(789) yinu gumba mura:ndidagay This girl has become sick
(788) can be taken as describing a permanent state - the informant suggested extending it to yiju gumba mura:ndi muguy zounay 'this girl
lies [here] sick all the time' - whereas (789) implies that the onset of illness was quite recent. (203) in 3.7 .8 was given as an extension of (789).

Note also the informant's gloss to

## (790) yayu dira:ndidagay

I-SA tiredness-COMIT-INCHO VBLSR-PRES
'All of a sudden I get a cramp'
Here the 'all of a sudden' emphasises the change of state that is realised by inchoative -daga-n. See also (758) above.

Causative -ya-l added to a nominal indicates that someone (A) put something ( O ) into the state referred to by this nominal. There is an important contrast between:
(791) ŋayu wayal balga:l gadil

I made a small boomerang (out of a tree-spur)
(792) yayu wayal balga:l gadilyalnu

I made a boomerang small (i.e. I made a big boomerang smaller)
In (791) gadil 'small' modifies wayal 'boomerang' within the absolutive O NP; but in (792) gadil $+n a+l+n u$ appears in the VC with balga:l (a reduction, by Rule 2, from underlying $b a l g a+l+n u$ ), agreeing with it in transitivity and inflection.

Affixed to a number adjective $-\eta a-l$ indicates that the action referred to involves that number of objects:
(793) yayu wayal balga:l dambulaya:l I made two boomerangs

Similarly dambulaya-l bunda-n is 'hit two [people]'; and so on. -daga- $n$ and -ya-l occur most frequently with adjectives:
(794) yiju bana gadu:ldagay This water is getting dirty
(795) yandi:n gula yundu:y yingilibi:du
we-o body-abs that-erg English bee-erg
gurinjalnu
good-CAUS VBLSR-PAST
[Drinking] that English bee [honey dissolved in water] made our bodies [feel] good

Note that the A NP in (795) has inanimate reference. Other examples of verbalised adjectives are at (300), (252), (758), (295), line 67 in text 2 , and line 6 in text 14 .

The two verbalisers also occur quite freely with derived adjectives. Comitatives were exemplified in ( $789-90$ ); privative occurs in:
(796) yipu bulmba banagimbaldagayala

This place is getting to be without water now (i.e. the water supply is drying up)
-daga-n and - $\eta a-l$ are encountered less frequently with nouns, but it does seem that ANY noun CAN be verbalised, if this would be semantically plausible:
(797) gudugudu muray dura:dinu /
rainbow-ABS hair-ABS take off-: $d i$-PAST
gunduydaga: $n$
brown snake-INCHO vBLSR-PAST
The rainbow shed its hair and turned into a brown snake (the informant later corrected this, and said it should have been a carpet snake)
Dyirbal has a special adjective wayu 'turn into' (that does frequently occur with the inchoative verbaliser-Dixon 1972: 391); Yidin has no corresponding lexical item, but must simply use a verbaliser.
(798) garu bama dambu:l durudurudaga:n

By-and-by the two [boys] became grown men
In (707) we illustrated mugay + na-l 'make [a piece of stone] into a Mugay grinding implement'.

Inchoative occurs quite commonly with locational qualifiers (3.4):
(799) gunga:r yayu warygi:nala gali:n niyamanmu/ gali:n guyga:rdaga:n I went round by the north from Ngiyaman; I went northwards
(800) gana yandi gida/ biridagayala gaday

We must be quick, in coming up close [to the island] now and causative is also possible here (although encountered less frequently):
(801) yayu buna galinalnu gungariya:l

I took the woman to the north
In 3.4.1 we contrasted locational qualifiers guyga:y 'north', yara 'south' with adjectives daygir 'northern' and guyin 'southern'. Corresponding to (799), in which daga- $n$ is added to gupga: $\gamma$, there is (802) yayu gali: $n$ daygi:dadaga: $n$ I went northwards in which the inchoative affix is added to the locative form of the adjective.

It is, in fact, possible to form a verbal stem from a local case form of any nominal referring to a place or geographical feature. Illustrating with allative, locative and ablative forms:
(803) Dayu galiy bulmba:gudagayala

I'm getting close to the camp now
(804) nundu dimuruladaga:n

Did you get to the house ?
(805) yayu galiy gaba:ymudagay

I've got off the road as I've gone along
-daga- $n$ has also been encountered following the locative of guman 'one':
(806) yuyu bama guma:ndadagay

Those people are coming together to make a single [large] group
Time qualifiers can take (at least the inchoative) verbaliser. Either directly on to the root:
(8०7) bulmba guygaguygamdaga:n
camp-ABS evening-INCHO vBLSR-PAST
[Then] the camp started to get dark (with the onset of twilight)
or following an inflection. Thus:
(808) yayu yadagura:ngudagay ninay I'll sit [here] until morning is an alternative to
(809) yayu yadagura:ngu ninay 〈=(808)>

As will be inferred from the examples, a verbalised form can be the sole verb in a sentence, or else it can occur in a VC with a non-derived verb.
-daga- $n$ and $-\eta a-l$ can be added to a word belonging to any non-verbal part of speech excepting pronouns (even particles can be verbalised 4.io). Deictics follow pronouns in not permitting verbalisation, with the exception of the inanimate indefinite stem wanin-. This forms interrogative verbs:
intransitive wanindaga-n 'do what'
transitive waninya-l 'do what to [someone/thing]'
These normally constitute a complete VC:
(810) bama yiju wanindagay

What are these people doing? (or: What's wrong with these people ?)
(811) garu yayu wani:nyal yinu gana:r

What shall I do to this alligator [in order to rescue the woman he is holding ?]

See also lines 50,51 of text 2 , and line 17 of text 14 .
wandarun ' which direction' (3.7.2) can also be verbalised, and used to question how some action was performed (the 'how' being understood in a directional sense). For instance:
(812) nundu dugi wandarunya:l gunda:l

Which way did you cut the tree?
to which a reply could be 'starting at one side and cutting right through it', or
(813) yayu warnginalyu gunda:l I cut all around it employing the adverb warngi-n 'do all around'.
4.8.2 -madi-n. There is a further affix, -madi-n, which derives an intransitive verbal stem from a nominal; this is - like all disyllabic affixes - non-cohering (2.4). It occurs predominantly with number adjectives and indicates something happening 'so many at a time':
(814) nundu:ba gumanmadin galin You go out one at a time!
(815) yajdi dambu:lmadi:na gali:na We must go in pairs
(816) bama ninay yabimadiy

A whole mob of people sat down together
dambu: $l+$ madi-n appears to have exactly the same semantic effect as the reduplicated dambudambu:l-see (121) in 3.3.9.
-madi- $n$ has very occasionally been encountered suffixed to a nonnumber adjective:
(817) bama gadilmadiy galiy

The [group of] people is getting small as they go along
(817) appears to imply that people must be dropping out 'a few at a time'. But there are other examples that do not have an 'incremental' or 'decremental' interpretation. In fact, it seems that -madi-n may sometimes alternate with -daga-n simply for the sake of stylistic felicity (3.I.3) - thus a reply to yuyu bama yalaldagay 'that fellow is getting big now' could be yuyu bama yalalmadiy '[yes], he certainly is growing up'.
-madi-n is probably cognate with -mayi-n, which Hale (1976a: 239) reports as the (only ?) intransitive verbaliser in Dya:bugay.
4.8.3 -luya-1. The fourth verbaliser has the form -luya-l; it is noncohering and derives a transitive stem. Like -madi-n, -luya-l is far less frequent than -daga-n and $-\eta a-l$ and is also restricted in the class of words to which it can be suffixed.
[a] With body-part nouns.
When added to an appropriate body-part noun, -luya-l indicates that something is 'touched' with this body-part. As would be expected, the most frequent form is mandi + -luya- $l$ 'touch with the hand':
(818) giyi mandiluya dugi damuy

Don't touch the forbidden tree (it is tabooed since it is sacred to the rainbow-serpent)
We can also get dina + luya-l 'touch with the foot', and:
(819) yayu nara binaluya:l/ nara yanda bina: gunda:diju

I touched a (prickly) vine with my ear. The vine cut my ear
Notice that binaluya-l cannot mean 'hear' (referring to the main function of an ear) but only 'touch with the ear'. (And it will be seen that -luya-l does not distinguish between purposeful and accidental touching.)
-luya-l, in this sense, is precisely limited to 'touch'. It cannot be added to mila 'tongue' simply because to touch with the tongue would normally involve 'tasting', and this is described by banda-l (which takes mila in instrumental case):
(820) yayu bana mila: banda:l I tasted the water with [my] tongue.
[b] With locatives.
-luya- $l$ can be added to a noun in locative case, and then indicates that something is put, or is moving, in or on the referent of that noun:
(821) yayu buna bulmba:luya:l bada:qna

I took the woman to [my] camp to leave [her there]
(822) yayu bupa gaba:ndaluya:l gadanalnu

I brought the woman along the road
[c] With datives.
When suffixed to a noun or pronoun in dative case, -luya-l indicates an action that is performed for the benefit of the referent of that noun or pronoun - the unmarked meaning is 'giving':

## (823) bama:l yupu mina nuni:ndaluyal

A person is giving that meat to you
But it seems that a dative form is sometimes ambiguous. It can have the 'giving' sense, or else a 'locative' meaning as described under [b]. Apparently
(824) bama:l yuyu yadu:ndaluyal
can mean 'the person is giving that to me' or 'the person is bringing that close to me'. In view of this, yadunda could well be taken as having locative in addition to dative function (cf. 3.6.2).
The fact that the last syllable of -luya-l is identical to regular causative - $n a-l$ might be thought to suggest a segmentation - $l u+\eta a-l$. There are two arguments against this. Firstly, -luya-l does not cohere - we get gaba:ndaluya:l in (822), not gabaydaluyalyu - suggesting that it is a simple disyllabic affix. Secondly, there is no further occurrence of $-l u$-, that would support the recognition of a morpheme here.

The writer was not able to elicit -luya-lon to a stem ending in a consonant. Note that this point is of considerable phonotactic interest since $-l$ - is never permitted as the second element of a consonant cluster in Yidin (the postinflectional affix -la has allomorph -ala following a consonant-3.9.1. 2.3.9).

### 4.9 Imperatives

An imperative can be formed from any verbal stem in Yidin. It normally has an explicit or implied second person subject (S or A function):
(825) ( $n u n d u$ ) guwa galin (You) go west !
(826) (nundu:ba) buna wawa (All of you) watch the woman!

See also (107-8) in 3.3.8 and (445-6), (454) in 4.2.3-4.
The subject of an imperative is sometimes a first person non-singular pronoun, as in (143) and line 29 of text 14. It can be a first person singular pronoun, in a sentence suggesting an exchange:
(827) yanda wiwin wayal / yayu nuni:nda gala

I-dat give-imp boomerang-abs I-sA you-dat spear-abs
wiwin daybar
give-imp particle
[You] give me [your] boomerang, and I'll give you [my] spear in exchange!
(daybay 'in turn' is discussed in 4.10). And an imperative with third person subject is attested at line 54 of text 2.

Imperatives frequently occur with the particle gana 'try' (4.10).
The inclusion of derivational affix -:di-n in the 'continuous action' sense yields a 'continuous imperative' - an exhortation to continue an action that is already in progress - see (498) in 4.1.7.

A negative imperative involves a verb in regular imperative inflection, preceded by the particle 'don't' - this has the form giyi in the coastal dialect (as in line 33 of text 2 ) and gupi in the tablelands dialect (as in line 8 of text 14). See (77), (132), (818) and:
(828) ( $n u n d u$ ) bulmba giyi wawa Don't (you) look around the camp!

Like most other Australian languages, Yidin will often include a positive with a negative imperative; in addition to being told what he should not do, the addressee is also advised about what would be an appropriate course of action to undertake. See line 33 of text 2 , and:
(829) giyi wayga:din/ ninan munubudun

Don't get up! Sit down right inside [the camp]!
(830) mayi giyi wupday dula / badar vegetables-ABS DON'т stolen-ABS dig-IMP leave-IMP Don't dig up vegetables that don't belong to you (literally: 'stolen vegetables')! Leave [them] alone!

One sentence has been recorded with giyi but no verb - see (201) in 3.7.8. minan 'sit-IMP' is understood here, but has been omitted from the surface form of the sentence.

Positive or negative imperatives are frequently used in the main clause of a sentence that has a 'lest' subordinate clause. Examples are in 4.6.2 and at line 32 of text 9 .

Note that Yidin uses imperatives to refer to desirable or proscribed actions, but not usually to advise on states or attitudes (differing from English in this regard). Thus, for telling someone to behave himself the appropriate Yidin construction would be:
(831) nundu wani:ngu yarundagaך
you-SA what-PURP silly-INCHO vBl.SR-PRES
[Literally: 'Why are you being silly ?']
which the informant glossed as simply 'Don't be silly!'

### 4.10 Particles

Yidin has a number of non-inflecting words - that we call 'particles' which provide logical- or modal-type qualification of a complete sentence.

Particles are set off from the other parts of speech in that they do not inflect for case or for tense. (At least some) particles can, however, be verbalised - details are at the end of this section. The post-inflectional affix -(a)la can occur with particles.

It appears that the preferred position for all particles is immediately before the verb, although they may occur earlier in the sentence. Some (but probably not all) particles are occasionally encountered following the verb.
[r] yudu 'not, never' is the negative particle in all but imperative sentences.
Examples in which $\eta u d u$ immediately precedes the verb are at (85), (300), (655), (722), (726) and:
(832) yayu yudula bugay I'm not now eating (I've had sufficient)

It occurs sentence-initially in (575) and - unusually - follows the verb in (833) yayu dina budi:linu yudu

I couldn't go and put my foot [in the water, because the water was too hot]
A sentence whose sole 'comment' is an adjective (i.e. when there is no verb) can be negated quite normally, with $\eta u d u$ usually immediately preceding the adjective. See (534) and
(834) yinu dada yudu gurin / gaba mayi this-S child-ABS NOT good-ABS feed baby-IMP vegetables-ABS jabi lots-ABS
This child is not [looking too] good. Feed him with lots of vegetables (to make him healthier).
$\eta u d u$ can also be used to negate a noun 'comment', as in (79), lines io and 19 of text 9 , and
(835) yayu bama gada:yal yudu mina

I've brought a person, not an animal
There appears to be a contrast in Yidin between - cf. (73) - mina yudu 'there is no meat', and yayu minagimbal 'I've no meat' (see 3.3.6).

In this regard Yidin behaves rather differently from Dyirbal. The negative particle gulu in Dyirbal can only normally co-occur with a verb (which it will as a rule immediately precede); in the Mamu dialect gulu can negate an adjectival comment, but it MUST then occur sentence-initially (Dixon 1972: 117-18). In Dyirbal only the privative suffix can be used to 'negate' a noun, as in 'there is no meat'.

We have mentioned (3.1.3) that Dyirbal is on the whole far more elliptical that Yidin. In contrast to the general tendency, it appears that negative constructions in Yidin are far more fluid than those in Dyirbal. Note, for instance, (299) above, in which the adjective wigilwigil is omitted from banga yudu wigil 'honey is not [so] sweet [as molasses]'; and see the comment in 4.9 on (201) from 3.7.8.

Examples of the post-inflectional affix -(a)la added to $\eta u d u$ are at (265), (832) and in line 25 of text 14 .
yudu also functions as a negative interjection 'no, no more, nothing' 4.12.

This is further manifestation of the wide range of use of $y u d u$ in Yidin, in contrast with Dyirbal's gulu. Dyirbal has a quite separate form for the negative interjection - yimba or maya (depending on dialect). See Dixon 1972: 124 and 3.1. 3 above.
[2] giyi 'don't'. This is the negative imperative particle in the coastal dialect - see 4.9. It also serves to negate a tensed sentence involving particle biya - see (863) below.
[3] guni. This particle has negative imperative meaning in the tablelands dialect (corresponding to coastal giyi) - see 4.9.
guni does occur in the coastal dialect, but with a quite different, positive sense 'let [him] do [it]'. It can occur with an imperative verb, as in (739) and
(836) yayu bada:rna bama munu guni ninan

I must leave [these] people, and let them sit inside [their cave undisturbed]
or with a verb in tense or purposive inflection - see (102) and
(837) yayu wala dugi budi:l gavour /

I-sa particle stick-abs put down-Past crossways-abs
gunila gubay
Let-now burn-pres
I've put down the sticks crossways (i.e. each layer at right-angles to the one below) so that they'll be able to burn now
(838) nundu wiwin guri buga:na

You give [the food to him] and let [it] be eaten [by him]
[4] gana 'try'. This is by far the commonest particle, occurring in texts (pages 513-39) as often as all the other particles put together. Its semantic content is slight and elusive, and is probably best summed up in the informants' gloss 'try'. The preferred position for gana appears to be immediately before the verb, but it does often occur sentence-initially.
gana can occur in a sentence with a verb in any inflection; it is frequently found with imperatives (4.9) and especially with purposives (4.5.2) - (143) and (713) are typical examples.

The close association between gana and verbal purposive -na might be thought to suggest an etymological connection (the suffix being a degenerate form of the particle). But note that such a suggestion would be incompatible with our inference (3.8.4) that -na originally had a future meaning, in proto-YidinDya:bugay (with verbal purposive then being based on $-g u$ ).

There is an adverb (4.r.3) banda-l'try to do, taste' with more specific conative effect; this often co-occurs with gana:
(839) yayu gana dugi banda:lna gunda:lna garu wanda:na

I must try to cut the tree, so that by-and-by it falls down
ganawaygi 'belly up', involving the homophonous nonce-form gana, is mentioned in 3.3.8.
[5] ganagayuy 'self'
[6] ganamaybu 'self'
These two particles appear to be based on gana. There is an adjective marbu 'one's own' (which can be used to refer to something that is considered an inseparable - but abstract - part of a person: one's conception site, one's wife, or one's language), whereas gayuy does not occur elsewhere.
ganagayuy and ganamarbu have similar meanings, covering both 'reflexive' and 'intensive' functions (very like English 'self'). Reflexive examples are at (453-4) in 4.2 .4 and
(840) bama yuyu $\left\{\begin{array}{l}\text { ganagayuy } \\ \text { ganamaybu }\end{array}\right\}$ gunda:dipu That person cut himself
'Intensive' examples are at (64) in 3.3.6 and
(841) nunin pudu budi:n / ganagayuy gali:na
you-O Not tell-past self go-purp
You hadn't been permitted to go out alone

Compare with post-inflectional affix -di (3.9.2) and particle yadi.
[7] ganaygar 'do first' appears also to be based on gana (although no explanation can be given for the -ngar).
ganaygar indicates that the ( S or A ) subject was the first to perform a certain action - see (437) and
(842) yayu gana:ngar gali:n/ yanan dada:y garba bandabanda:r gadayalpu
I went first, the child came behind following me
(843) yayu gana:ygar gunda:l

I was the first person to cut [that tree]
It appears that 'the first time' can also be indicated by the adjective guman 'one' in an appropriate case inflection:
(844) yayu yivu guma:ndu dugi gundagunda:l/ bulmba: yingu

Its the first time I've cut a tree down in this place
ganaygar can also be used with a purely locational sense 'in front'; particle ganaygar is then the complement of locational qualifier gayba 'behind' (3.4.1), as in (842). For instance, in a story about how a sacred woomera was used to calm the raging seas:
(845) balur budi gana:ทgar Put the woomera in the prow [of the boat]!
[8] wala 'ceased'. This particle indicates that the ( S or A ) subject has stopped performing a certain action, for example:
(846) yayu bupa wala bunda:n I've finished hitting the woman wala can have a perfective meaning with, say, wula-n 'die'. See (3I6) and another sentence from later in the same text:
(847) yayu wala wula:n/ yayu galwayala burgin

I really did die; I'm walking about as a spirit now
Note that wala is 'subject-orientated', normally indicating that a certain person has stopped doing something of his own volition. Thus in (534) from 4.3.1 wala buga:dinu indicates that the subject has stopped eating (even though there is still food left) because he's full. Complementing wala, there is an adverb gaymbi-n (4.I.3); gaymbi-n is 'object orientated', indicating that an action is finished because the set of possible objects is exhausted. Compare (846) with
(848) yayu buna gaymbi:n bunda:n I've hit all the women

Discussion of 'subject/object orientation', with reference to Dyirbal and English, is in Dixon (1970b).
wala often occurs with an adjective bearing the post-inflectional particle $-d i$, and then serves to emphasise the judgement (being best translated as 'really')-3.9.2. yuyudi wala (gurin) 'it's alright' is a fairly frequent idiom.
[9] bifi 'do again, return'. This particle frequently occurs with gundi-n 'return, go back' (the sense of particle and verb here overlapping and reinforcing each other); see line II5 of text 2 and
(848) yayu gana gali:na/ biri gundi:na

I tried to go, [that is] to return home
With other verbsbiri makes a more discernible semantic contribution, e.g.
(849) yayu biri burwal

I've jumped over again (I've already jumped over a log, say, and I'll now jump back)
(850) yayu biri nayga:dinu I talked again
(851) yayu biui mayga:n I laughed again
(852) yayu mipa biri buga:na I must eat some more meat

In sentences like (849-52) bili indicates that the event is repeated exactly (except that the direction of movement may be reversed). (850) implies talking again to THE SAME PERSON, (851) is laughing again at the same thing, and (852) must refer to the actor returning and eating a bit more of a piece of meat that he has already sampled. (849) describes someone jumping over a log that he has already vaulted - he could now be jumping in the other direction (just as $(848)$ refers to someone retracing his path back to the point of origin).
[Io] yurga'still' suggests that the subject is engaged in a certain action for a considerable time (up to the 'present'). Thus:
(853) yanan bama:l yurga wawa:l
[That] person was still looking at me
(854) yurga wiwiy mayi [He] gives [me] food all the time
yurga can indicate that someone is still capable of a certain action, at a certain time:
(855) gala dubu:da/dayga:n/ bama yurga burgi:n
[There was] a spear in [his] stomach. It was pulled out. [And] he could still walk about
but can apparently not be used in a general statement of the form 'People still talk Yidin'.
[II] babay 'couldn't manage it' indicates that the actor tried to do something but was unable to accomplish it:
(856) yayu gana babar dugi gunda:l/ buyal

I tried to cut the tree but failed - [the wood was too] hard
(857) wanda yayu bunda: magi:lna/ babar yayu nina:n

I wanted to climb up the hill at some point, but failed and had to stay [down on the plain]
(858) yayu babar wawa:l wana

I tried to see who that was, but couldn't
As might be expected, babar often co-occurs with the particle gana 'try', as in (856), and/or with a verb in purposive inflection, as in (857). (Note the occurrence in $(857 / 8)$ of indefinite/interrogative deictics - wanda 'somewhere, where' and wana 'someone, who'.)
[12] biya refers to something that has not been done (or has not happened) but should have been done (or could have happened).

The most frequent sense is to indicate that someone has been remiss in not doing something he should have. See (712) and
(859) yandi:nda biya gadil badar
[You] should leave a bit [of meat] for us [but you've left nothing] (860) yayu biya gali:n I wish I had gone

If referring to some involuntary action, biya can imply that something didn't happen but could well have:
(861) nundu biya wanda:n dugim

You could well have fallen from [that] tree [andare lucky you didn't]
It can also refer to the veracity of some assertion (if X then Y , but not Y , thus not X ). Thus, in text 2, Damari had stayed away from a fight but tells his brother Guyala that he was in fact there (sporting false, selfinduced wounds as proof). Guyala then says (line roi)
(862) biya yayu nunin yudu wawa:l

I'd have seen you [if you'd been there] but didn't
Note the occurrence with biya in (862) of $y u d u$ 'not', emphasising the non-occurrence of the event. To indicate that something was done that
shouldn't have been (the negation of biya) giyi - and not $y u d u$ - is used with biya:
(863) nundu mina giyi biya wizi:n mundu:nda

You shouldn't have given meat to that [person, since he wasn't behaving properly at the time]
Outside sentences like (863), giyi 'don't' only occurs with verbs in imperative inflection.
[13] wara 'done the wrong way'. This particle can indicate that a transitive action involved an inappropriate O NP. See (871-2) and:
(864) nundu yindu:n bama wara budi:n You told the wrong person
(865) nundu dugi wara gunda:l

You cut the wrong tree down (you were told to fell a different one)
In other instances wara can refer to an inappropriate place:
(866) yayu yindu:n bama wara galiyalnu

I took this person to the wrong place
or else just to an inappropriate manner in which an action was performed:
(867) nundu gangu:l wara baga:l

You speared the wallaby in the wrong place (i.e. you missed the vital spot, at which you should have aimed)

Some examples could be classified in terms of 'inappropriate place' and/or 'inappropriate manner':
(868) bama wara biri gundij

He walked home the wrong way (e.g. straying off the path)
With nayga:di-n 'speak, talk', wara forms an idiom-like collocation 'tell a lie'; see, for instance, line 8 in text 14.

Dyirbal has a particle wara with similar implications of inappropriacy. There is, however, an important difference of detail-Dyirbal wara implies an inappropriate O or S NP, NOT a mistaken place or an ill-advised 'manner'.

Dyirbal also has a particle biya, whose range of meaning may be more restricted than Yidin biya - the Dyirbal word can be used in senses similar to (861) and probably also (859-60), but has not been heard in sentences like (862) or (863). See Dixon 1972: 118-19.
[14] mugu 'couldn't help it' indicates something that was quite unsatisfactory but which it was impossible to avoid doing (it appears to
coincide exactly in meaning with the particle mugu in Dyirbal-Dixon 1972: I 18).
(869) yауи mugu maŋga:n

I couldn't help laughing (but, say, I shouldn't laugh when someone hurts himself)
(870) yandi mayi mugu buga:n

We had to eat the food (it was not really ripe, but there was nothing else to eat)

See example (292) above, lines 33 and 34 of text 9 , and line 2 of text 14 .
When the writer was trying to elicit examples of the affix -na (3.3.7) with kin terms, he thoughtlessly asked how to say 'I hit my father'. He was given gayu bunda:n bimbi:n, and the informant insisted that anyone hearing such a statement would respond with:
(871) mundu gurbi wara bunda:n bimbi

You shouldn't have hit your father (he is an inappropriate person for you to hit)
whereupon the original speaker could try to excuse himself by saying:
(872) mugula/bunda:n/wara

It was impossible to avoid [hitting him] although I know I should not hit [my own father]
[15] daybar 'in turn'
[16] daymbi 'in turn'
These two particles indicate that something happened to redress a balance - once X has done something to $\mathrm{Y}, \mathrm{Y}$ should reciprocate towards X. The particle normally accompanies the second, or 'redress' clause. If the subject (A) of the redress clause is the speaker, daybar is used; if it is someone other than the speaker, daymbi is the appropriate particle. That is:

INITIAL CLAUSE
ACTOR
speaker
someone else
REDRESS CLAUSE
ACTOR
someone else
speaker

PARTICLE IN REDRESS CLAUSE
daymbi
daybar

As in:
(873) yayu bama bunda:n/ nanan bama:l daymbi bunda:n

I hit the person and the person hit me in return
(874) bama:l yanan bunda:n/ yayu bama daybax bunda:n The person hit me and I hit him in return
or
(875) yayu nuni:nda mayi wiwiy/ pundu yanda mina daymbi wiwin

I'll give you some vegetables and then you can give me some meat in exchange
(876) jundu yanda mina wiwiy/ yayu nuni:nda mayi daybar wiwin

You give me some meat and then I'll give you some vegetables in exchange
Other examples are (827) in 4.9 and
(877) yayu yundu:nda guru:n wiwi:n/ yanda daymbi guru:n budi:n yindu:y bama:l
I told [this person] a story, and then he, in turn, told me one
(878) yundu yanda mayi dimir nibal yayu garu nuni:nda gangu:l niba:lna/ daybal
You show me where mountain yams [grow] and by-and-by I'll show you [some] wallabies, in exchange
If neither of the 'reciprocating actors' is the speaker, daymbi may be included in both clauses:
(879) daymbi yindu:n gidar + gunda:ll yindu:ท daymbi yundu:n gidal + gunda:l
[That person] painted this [one], and this [one] then reciprocated by painting that [one]
[17] padi'self'. This particle can bear an intensive or reflexive meaning see (746) and
(880) yayu nadi baga:dinu I DID spear myself
(88) bama nadi yuŋu wawa numbayl gangu:lyuri yumbar

Look at that man's face, it is like a wallaby's face
jadi is the only word in Yidin with stress on a non-initial syllable that does not involve a long vowel. It is related to the post-inflectional affix -di (3.9.2); it is in fact possible that yadi would be more appropriately regarded as a clitic, and not a particle.
[18] julan 'it's a good job that -' describes an event that is regarded as quite desirable and satisfactory:
(882) mayi nulan nundu gadayalnu

It's a good job you brought the food
(883) nulan nundu gada:n/ nayu nuni:ngu wamba:dinu

It's lucky you came, I've been waiting for you

## (884) bama nulan gali:n

It's a good job [that] person has gone away (he wasn't welcome here)
There are two other forms, gada and gurbi, whose status as particles is in doubt.
[19] yada 'might be'. This particle has been encountered about a dozen times, always referring to some event that would be unpleasant, and occurring with a verb in 'lest' inflection:
(885) gana bigu:n dalbal waayga:diyal bama:l yada bunda:ndi

Try to hold the shield up high, lest someone might hit you
(886) pundu giyi galin/ yada wandanali:ndi

Don't you go, you might go and fall down
(887) nundu bambi:din buda:/ garu wumbul wuna:nal nundu yada banba:ndi

You wrap yourself in a blanket, so that you can lie down warm, otherwise you might feel cold [in the night]
In explaining these (and other) sentences, the informant glossed gada as 'might be'. But at other times he remarked that there was only one word yada in Yidin, the time qualifier 'tomorrow'; and it proved impossible to elicit further examples of the particle.
In view of this difficulty (which was not encountered with any other word!) the status and meaning of gada must remain in doubt.
[20] gurbi 'maybe, perhaps' indicates the possibility of a certain event or a certain state. See (70), (73), (185), (250), (871) and
(888) yivu bama gaday dunguwaygi/ wugul gurbi gupdi: $n$

This person is coming [holding] his head up - maybe his neck is broken
(889) garu yayu dangandagay gurbi I think I may die by-and-by
(890) bulmba gurbi yipu bama:n

This place may [already] belong to some people
gurbi may be used with each of a sequence of clauses to indicate open disjunction:
(891) bama gurbi yalupunda gaday/ gurbi yada gaday
[The] person may come today, or he may come tomorrow
(892) yayudi gunduy wawa:dinu/ gurbi bima

I [think I] saw a brown snake, or it may have been a death adder

In examples like (885-9) gurbi behaves exactly like a particle. Its behaviour only becomes syntactically anomalous when it is found (unlike any other particle) in ergative case:
(893) yanan yundu:y bama:l gurbi:y bunda:n

It could be that [same] person who hit me [again]
But compare ( 890 ) with:
(894) gurbi yiju daban yingu walba: ninay bana:

This might be an eel sitting here in the water by this rock
This suggests recognising two distinct functions of gurbi:
[a] as a particle, qualifying a complete sentence-(888-92). In this function gurbi cannot decline.
[b] as an adjective, qualifying a noun (or pronoun) - (893-4) and perhaps also (73) above. In this function gurbi would be expected to take the full range of nominal inflections.

We have already stressed that the main distinguishing mark of particles is their inability to take inflections of any sort. Some of them can, however, be verbalised by inchoative -daga-n (4.8.1):
(895) yayu babardagay miwa:diy

I failed to lift [something, because it was too heavy]
(896) yuyu badar/gunidaga:na

Leave that [person] to let him be [undisturbed]
(897) yayu bunda:dinu daybazdaga:n

I hit [him], paying him back
(898) yayu bigidagay gundiy I went back again

And they can also take the causative verbaliser - $y$ a-l:
(899) yayu dugi yurgayalnu gunda:l I was still cutting the tree

## 4.1r Questions

Yidin has a full set of indefinite/interrogative items (these begin with wa-, and correspond exactly to 'wh- words' in English) for asking nonpolar questions; these were discussed in 3.7.

Polar questions - demanding a yes/no answer - are marked solely by sentence-final rising intonation. There is no word, clitic, affix, or ordering of words to mark polar questions.
Note that Dyirbal does have an interrogative clitic -ma (which is added to the first word of a sentence, whatever this is). But this is only used occasionally,
yes/no questions in Dyirbal being normally marked just by intonation, as in Yidin. See Dixon 1972: 122-3.

### 4.12 Interjections

Interjections have no syntactic function, and most often occur in a separate intonation group at the beginning of an utterance. Those encountered are:
yiyi 'yes'
yudu 'no' (this can be emphasised by the addition of the postinflectional affix -di-3.9.2)
yurun $\sim$ yuru: (always with high final rising intonation) 'why' yara: 'what!'

The use of $n u n d u$ as an exclamation or interjection was discussed in 3.1.5.

There is also an exclamation [yar:] - with an emphatic long final roll - that is used to indicate displeasure with 'dirty talk' going on in the vicinity.

## 5 Deep syntax

### 5.1 Symbolisations for syntactic structure

5.I.I 'Nominative-accusative' versus 'absolutive-ergative' tree structures. We plainly require some system of syntactic notation as a basis for describing the underlying structure of Yidin sentences, and 'explaining' the various derivational processes detailed in chapter 4.
'Tree structures' have, over the past score or so years, become accepted as a convenient system of explanatory graphs. The most accepted convention for a language like English has been to adopt trees of the form:
(i) nominative-accusative-type trees

'intransitive'

'transitive'
where $\Sigma$ indicates 'sentence' and subscripts A (transitive subject), S (intransitive subject) and $O$ (transitive object) indicate the underlying functions of NPs. Languages for which trees (i) are appropriate have been said to have a 'nominative-accusative' syntax -S and A are identified for various syntactic operations (and may receive the same morphological marking).

But it has been shown (Dixon 1972: 130-7, and see Hale 1970) that some languages demand basic trees of a different type:
(ii) ABSOLUTIVE-ERGATIVE-TYPE TREES

'intransitive'

'transitive'

Note that we are here only contrasting the various hierarchical arrangements of constituents one in another, not their orderings. Thus, we pay no attention
to the difference



or finally is immaterial to our arguments. Since the discussion here is orientated towards the syntactic description of Yidin, we have utilised the ordering that corresponds most closely to that of Yidin surface structure.

In Dyirbal, for instance, all operations of coordination and subordination identify $S$ and O NPs, treating A NPs in a quite different way; in addition, nouns have one case inflection for $S$ and $O$ functions (absolutive, with zero realisation) whilst 'ergative case' marks A NPs.

Our first task, then, is to decide which of these two possible types of tree structure is most appropriate for Yidin. 'Nominative-accusative trees', (i), claim that $\mathrm{NP}_{\mathrm{o}}$ forms a constituent (called VP) with the transitive verb, and that $\mathrm{NP}_{\mathrm{A}}$ and $\mathrm{NP}_{\mathrm{S}}$ have analogous roles in syntactic operations. In contrast, 'absolutive-ergative trees', (ii), claim that $\mathrm{NP}_{\mathrm{A}}$ groups with $\mathrm{V}_{\text {tr }}$ (as VP ) and that $\mathrm{NP}_{\mathrm{o}}$ and $\mathrm{NP}_{\mathrm{S}}$ have equivalent roles in certain transformations.

The next section assesses the syntactic evidence presented in chapter 4, to decide which syntactic type Yidin falls under.
5.1.2 The Yidin evidence. In assessing whether a language is of grammatical type (i) or (ii) we should plainly take into account data from all areas of the grammar - morphological as well as syntactic. Taking the pieces of evidence one at a time:
[I] - Case marking. We saw (3.6.2) that pronouns have a single form for $S$ and $A$ functions - evidence for (i) - whereas (3.3.1-2) nouns employ one case for $S$ and $O$ functions - evidence for (ii). Deictics can have different forms for all three basic functions, falling between noun and pronoun in terms of the 'grammatical hierarchy' mentioned in 4.I.4. [2]-subordination. It was mentioned in 4.4.1 that about $85 \%$ of subordinate clauses in the corpus have an NP coreferential with one in the main clause; and the coreferential NP must be in S or O function in
each clause. (This was the case for dative, causal and purposive subordinate clauses; for 'lest' clauses only the common NP in the subordinate clause has to satisfy this condition.)

This provides strong evidence for (ii) - an ergative-type deep structure. [3] -- :di $i n$ TRANSFORMATIONS. We saw (4.2) that $-: d i-n$ has a range of syntactic and semantic effects. In attempting to relate together the senses of -:di-n we suggested (4.2.2) that it was used to mark certain 'deviations from the norm'. The 'antipassive' and 'reflexive' uses were explained in terms of a failure to meet the condition that the deep A NP should not occur in surface $S$ function.

In an antipassive construction the deep A NP becomes surface $S$ (and deep $O$ is placed in dative or locative case). In reflexives, deep $A$ and $O$ coincide referentially and there is a single, $S$, NP in the surface realisation. These two uses of -:di-n have in common that deep A is different from, and then becomes surface $S$. There is, however, no evidence relating $S$ to $O$, or contrasting $A$ with $O$; we simply have an important distinction between $A$ and $S$. This could be taken as evidence AGAINST an accusative deep structure, (i) - we plainly do NOT have syntactic identification of $A$ and $S$ functions, which is what (i) implies. But it could hardly be taken as positive evidence in favour of (ii). [4]-verbal derivational affix -ya-l. The evidence here is quite mixed, and inconclusive. Five of the six senses of -ya-l distinguished in 4.3.8including the most frequently occurring sense, 'comitative'-derive a transitive sentence whose A NP is identical to the original S constituent. But the 'controlling' sense derives a transitive construction whose O NP is equivalent to the S NP of the underlying intransitive sentence.

These sets of facts could be interpreted in various ways. Thus, for the 'controlling' sense we could suggest that

effectively becomes the VP of a transitive sentence:
(iv)


Here (iii) might be dugi gundi: $n$ 'the stick broke' and (iv) payu dugi gundinalnu 'I broke the stick' - see $(508,507)$ in 4.3. This interpretation would plainly support the accusative alternative, (i).

Alternatively, we could maintain that the derivation

$$
\ldots \mathrm{NP}_{\mathrm{s}} \ldots \Rightarrow \ldots \mathrm{NP}_{\mathrm{o}} \ldots
$$

indicates a connexion between $S$ and $O$, providing support for ergative deep structure, (ii).

Similarly, the data from the 'comitative', 'dative' and other senses of $-\eta a-l$ could plausibly be interpreted as supporting either type of deep structure. As we have said, the evidence from - $\eta a-l$ is, overall, inconclusive.
[5] - imperatives. Imperative constructions treat S and A NPs alike. The ( S or A ) subject of an imperative verb is most frequently a second person pronoun, which can be deleted. This constitutes exemplary evidence for the accusative tree, (i).
[6] - particles. Particles provide modification of the meaning of a sentence. The semantic interpretation of some particles refers to certain sentence constituents. In each of these cases, S appears to be grouped with A.

Thus (4.10) ganaygar indicates that the referent of the S or A NP was the first to perform a certain action, babar that he tried but couldn't manage to achieve some end, and wala that the subject stopped doing something of his own volition. Note also the particle wara, which can indicate that an action involved an inappropriate O NP referent (not $S$ or $A$ referent). These four particles all suggest a grouping of $S$ with $A$, opposed to O .

The discussion thus far can be summarised:
for accusative structure (i) for ergative structure, (ii) or against accusative, (i)
[5] Imperatives
[2] Subordination
[6] Particles
[3] -:di-n construction
INCONCLUSIVE
[r] Case marking
[4] Syntax of verbal affix -ya-l
The deep structures that are set up to relate together instrumental and comitative verbal and nominal constructions could conceivably be taken as additional evidence for an 'accusative' position - see 5.4.5.

The evidence appears thus far to be about equally balanced. But we have not broached the area that, in many languages, provides strongest evidence for the shape of a deep structure: coordination. This is investigated in the next section.
5.1.3 Coordination. There is no overt sentence coordinator in Yidin, along the lines of 'and' in English. Investigation of possible rules of coordination must thus pay attention to:
(a) the conditions under which an NP, that is plainly present in the underlying structures of two successive sentences, is deleted (in all or part) from the surface representation of one sentence (usually the second).
(b) the conditions under which two clauses can occur in a single intonation group.
(b) is encountered relatively rarely; when it is it invariably coincides with an instance of (a) - as in line 5 of text 2.

Yidin's southern neighbour, Dyirbal, has a very strong principle of coordination that is a major factor in assigning Dyirbal an 'ergative' deep structure. A string of a dozen or more clauses may have a 'common NP' that is in surface S or O function for each clause. This 'topic' is normally stated just once, in the first clause of the chain, and is then commented on by each succeeding clause. Yidin has nothing resembling the Dyirbal 'topic-chains'.

Deletion within a Dyirbal sentence is constrained by the principle that each clause must relate to an explicit topic NP. That is, it must either itself involve an NP in surface $S$ or $O$ function, or it must be (directly or indirectly) coordinated to a clause which does. Deletion appears to be freer in Yidin - any (S, A or O) NP is potentially deletable from any Yidin sentence. This again makes it harder to investigate coordination from a formal viewpoint. In fact, recognition of instances of coordination in Yidin has to be partly in terms of the semantic connection between sentences.

There appear to be two main kinds of coordination in Yidin. In each case the two (or more) clauses that are to be joined together involve a 'common NP':
(I) non-pronominal np, must be in s or o function in each clause The common NP will only normally occur in the first clause in this case. Thus (line io of text 2):
(900) dama:ri gada:n/ wurba:dipu Damari came, and searched and (line x of text 14):
(901) dambu:l wagu:da dada gaba:l/../ bambi:l dimurula/

Two male children were born...[they] were covered up [in their cribs] in the big house

In (900) dama:ri functions as S NP for both gada:n 'came' and wurba:diju 'searched'; another example of S-S coordination is at line 96 of text 2. In (901) dambu:l wagu:da dada 'two male children' is the O NP for gaba:l 'gave birth to' and for bambi:l 'covered'; other O-O examples are at (491) above and line 77 of text 2. Coordination involving an $S$ identified with an O NP is in (427) and (476), while O-S sequences are in lines 5 and 121 of text 2.
(II) pronominal np, must be in s or a function in each clause

Again, the common NP will normally only occur in the first clause. Thus (line 9 of text 2):
(902) gana yandi gaymbar/ wawa

Let us sneak up, and have a look [at them]!
Here gandi 'we' functions as S NP for intransitive gaymbar 'sneak up' and as A NP for transitive wawa 'look, see'. Other S-A pronominal sequences are in lines 6 and 26 of text 14, and (989) below.

An example of three coordinated clauses, with the common NP in A function in the first two, and in S for the third, is
(903) yayu guri:li gala: baga:linu / mina

I-sA wallaby-ABS spear-INST spear-Going-PAST animal-ABS bada: / biqi gundi:n / leave-past particle return-past
I went and speared a wallaby with a spear, [then] left the meat [lying there] and went home

Instances of coordination where the pronominal NP is in S function in both clauses are in lines 2 and in of text 9 ; an A-A sequence is in line 18 of text 9 .

Note that the verbs in two coordinated sentences must show identical inflection - that is, they must both be in imperative, in past, or in present (-future) form. (Purposive can occur on the verb in a main clause -4.5.2; in a non-initial clause purposive is interpreted as marking subordination.) Thus, verbs in both clauses are in imperative inflection
in (902) and (904), in past tense in (900), (901) and (903) and in present tense in line 96 of text 2 , for instance.

These 'favourite' schemes of coordination can co-occur, when two clauses have a common pronominal A NP, and also a common nominal O NP, as in line 46 from text 2:
(904) gana nundu:ba mayi yipu bana: budi /

TRY you all-SA fruit-ABS this-ABS water-LOC put-IMP
gurdi:lna / garu daygan |
be soaked-PURP by-and-by take out IMP
You all try to put this food in the water, to let it soak; by-and by [you] take [it] out!
We mentioned in 4.I. 4 that the unmarked role for pronominal referents is 'agent', whereas the unmarked role for nominal referents is more likely to be 'patient'. Sentencs like (904) involve a pronoun in the unmarked, nominative, form and a noun in the unmarked, absolutive, form; this type of 'pronominal $\mathrm{A}-\mathrm{A}$ '/ nominal $\mathrm{O}-\mathrm{O}$ ' coordination is, on several counts, the most natural and typical kind of syntactic sequence.

But suppose that we have a transitive sentence with pronominal A and nominal O, and coordinate this with an intransitive sentence. Suppose further than either O or A NP could plausibly function as intransitive subject. With
(905) yayu bama banda:y I followed the person
and
(906) bama wanda: $n$ The person fell down
we have a sequence of type ( I ); the repeated NP can be deleted giving (907) yayu bama banda:r/ wanda:n

But (905) and
(908) yayu wanda: $n$ I fell down
also constitute a valid pair of coordinands, this time of type (II), and the common NP could again be omitted, also yielding ( 907 ).
(907) is thus ambiguous between 'I followed the person and he fell down' and 'I followed the person and I fell down'. If it were necessary to resolve this equivocation, bama or yayu could of course simply be retained in the second clause.

S/A coordination, type (II), is definitely restricted to pronominal NPs. Thus, when the writer asked what could be the meaning of
(909) bimbi:y gudugudu wawa:l/bigi gundi:n father-ERG rainbow-ABS see-PAST PARTICLE return-PAST
he was told it could only mean 'Father saw the rainbow, and the rainbow went back [into its lair in the water]', never *' Father saw the rainbow and then he [father] went home'. That is, coordination is not possible on the basis of the A NP bimbi: $\eta$ and S NP bimbi. The informant said that whilst ( 909 ) was alright, it would be stylistically better to employ a subordinate clause:
(910) bimbi:ท gudugudu wawa:l/ bī̌i gundinunda bana:

Father saw the rainbow going back into the water
Similarly, no examples of S/O coordination involving pronouns are attested. It appears, in fact, that coordination directly mirrors morphological form. Nouns have one case for $S$ and $O$ functions, and provide a basis for coordination which involves the identification of $S$ and $O$ NPs, while pronouns have a single form for $S$ and $A$ functions and here coordination operates on the principle of S/A coreferentiality.
Yidin syntax here contrasts strongly with that of Dyirbal where-independently of morphological form - coordination depends on a 'common S/O NP' for all parts of speech (Dixon 1972: $130-7$ ).

A deictic would seldom be found making up a complete NP in two successive Yidin clauses. It appears that deictics pattern with nouns qua coordination; it is thus more accurate to talk of 'pronominal' and 'non-pronominal' (rather than 'nominal') NPs.

It will be remarked that the rules we have inferred for coordination in Yidin are quite wide-ranging. In fact, a hearer's interpretation of any coordinated sentence is motivated firstly by considerations of semantic common-sense. A sentence will tend to be understood in such a way that it describes a culturally normal and acceptable event.

Considerations of common-sense can resolve syntactic ambiguities such as (907) above. And sometimes semantic considerations may overrule syntactic constraints in the interests of providing a culturally plausible interpretation.

This can be illustrated by two sentences which the writer put to a male informant, a week apart. Firstly
(911) yayu buna wawa:l yargga:n

I-SA woman-abs see-PAST be frightened-past
was suggested. The informant confirmed that this was an acceptable Yidin sentence. When asked who was frightened he stated emphatically that it was the woman, and that she was scared of the speaker; he repeated the sentence, adding yadindida 'I-FEAR'. In fact, on syntactic grounds, yaryga: $n$ could have as underlying S NP either buna - by (I) or yayu-by (II). It was, to the informant, unrealistic to think that a man could be frightened of a woman.

The second sentence simply has A and O NPs reversed in the first, transitive clause
(912) yapan buna:y wawa:l yaryga:n

I-o woman-ERG see-PAST be frightened-past
Here the gloss given was 'The woman saw me and she was frightened'. According to the syntactic constraints we have outlined the onLy interpretation of this coordination should be 'The woman saw me, and I was frightened'. But this interpretation was rejected in favour of a semantically acceptable reading that involved the grammatically odd identification of non-pronominal A and S NPs. (It is the only example of this type in the writer's corpus.) Compare (912) with (909) where an A-S interpretation was firmly rejected (here the $\mathrm{O}-\mathrm{S}$ reading was, of course, quite plausible).

In view of (912) we should perhaps describe (I) and (II) as 'preferences' rather than rules. The conclusion to be drawn from our study of coordination is that semantic considerations are at least as important as grammatical conventions; and that there is no hard-and-fast syntactic matrix in this area of Yidin grammar.

The principles of coordination we have been able to adduce do not help us one bit in the choice between 'accusative' and 'ergative' deep structure. Coordination appears simply to follow the morphological paradigm - nouns identify $S$ with $O$ and pronouns $S$ with $A$.
5.r. 4 Is there an 'accusative'/'ergative' dichotomy? It has been suggested (Dixon 1972: 128-37) that every language is either strictly ' nominative-accusative' or else strictly 'absolutive-ergative' in underlying syntax. That is, either $S$ and $A$ are identified, and $O$ can be grouped with V into a VP constituent - as in (i) - or else S and O are identified, with the A NP being grouped with V - as in (ii).

This was put forward as a strong hypothesis, in the hopes that an exhaustive study of a number of languages would reveal whether it
could be maintained, or whether it needed to be modified or weakened in some way.

If we had to push Yidin into one of the structures (i), (ii) it would seem that the ergative alternative, (ii), is slightly more appropriate. The ' $\mathrm{S} / \mathrm{O}$ coreferentiality' condition on subordination is the most convincing piece of evidence, and could be taken to outweigh the data from imperatives and from particles. But it would be, at best, a 'weak ergative' language, lacking the cumulation of syntactic detail that goes to make Dyirbal such a convincing example of this syntactic type.

The difference between Dyirbal and Yidij is symptomatised by wara, a particle indicating the inappropriacy of some aspect of an event, that occurs in both languages. In Dyirbal (Dixon 1972: 118) wara specifies an inappropriate person or thing as referent of the S or O NP (this is quite in keeping with the tendency to group together $S$ and $O$ that recurs throughout the grammar of Dyirbal). In Yidin, however, wara indicates an inappropriate place or manner or referent of just the $O$ (not the $S$ ) NP - see 4.io.

The real conclusion to be drawn is that there is insufficient reason to prefer the accusative or the ergative alternative, in the case of Yidin. The evidence is pretty equally balanced and really resists a procrustean push in either direction. It is clear, too, that Yidin is not alone in this. A 1974 conference symposium (Dixon (ed.) 1976a: 485 ff .) addressed to the question of whether individual Australian languages had 'accusative' or 'ergative' deep structures elicited four detailed studies - in each case the evidence seemed pretty evenly balanced. (Indeed, several of the contributors changed their minds in revising their papers for publication from a 'just ergative' to a 'barely accusative' viewpoint, or vice versa.)

We seem in fact to have a continuum:


The labels for ends of the continuum could be phrased in different ways e.g. 'A (/or $O$ ) is, in transitive sentences, the pivot for transformational operations'. Since $S$ is necessarily the pivot in intransitive sentences, this naturally leads to analogous treatment of $\mathrm{A}(\mathrm{jor} \mathrm{O})$ and S . See Heath 1976.

Some languages fall near enough to one end - English to the left and Dyirbal to the right, for instance - to be untroubled by attempts to replace the scale by a dichotomy. But Yidin and most other Australian
languages lie somewhere in the middle of the range, and the syntactic workings of these languages belie the appropriacy of a strict 'ergative versus accusative deep syntax' dichotomy. In 4.i. 4 we summarised Silverstein's (1976) explanation of the occurrence of 'ergative' and 'accusative' cases in terms of a universal hierarchical scale; it now appears likely that a similar scale operates at the syntactic level.

In investigating the syntactic nature of a language linguists have typically assessed each type of transformational operation (whether it identifies $S$ and $O$, or $S$ and $A$, etc.) and then totted up the overall balance. Heath (1976) and McKay (1975) suggest an alternative approach-study the operation of a certain type of rule in a wide variety of languages, and see whether it has a constant syntactic effect. It does seem, in fact, that certain rules are likely always to treat S and O in the same way, whereas others will group S and A . That is, certain types of rule have universal (or near universal) syntactic effect, and do not depend on the 'syntactic type' of each language in which they occur.
Thus McKay (1975: 364-7) remarks that noun incorporation appears always to work in terms of S and O (never A) NPs, whereas a rule of jussive complementation (e.g. He told me to go, I told him to spear the fish) must surely always specify that it is the S or A NP of the complement which must be coreferential with main clause object. He suggests that whenever there is a process of noun incorporation in a language it will involve 'identification of $S$ and $O^{\prime}$ and whenever there is a jussive complement construction it is likely to involve 'identification of $S$ and $A$ '. (Although it must be pointed out that there can be alternative ways of dealing with jussives. In the case of a sentence like 'I told him to spear the fish' for instance, Dyirbal insists on the constituent sentence 'he speared the fish' being antipassivised before it is embedded, so that the deep A NP is in surface S function. In this way the Dyirbal requirement that the coreferential NP in a complement clause must be in S or O function is satisfied.)
Imperative is perhaps the classical example of a construction which must identify $S$ and $A$, in every language. That is, a verb in imperative form must always select an ( S or A ) subject of a certain type - usually second-person pronoun. (But, over and above this, imperatives can also show some 'ergative' characteristics. For instance, Rigsby (1975: 349) mentions that in NassGitksan transitive imperatives will delete the (second person pronominal) A NP while retaining a specification of $O$ NP, but that intransitive imperatives must retain the $S$ element - which is here second person singular nominative pronoun. In this language, although the same selectional restrictions apply to S and $\mathrm{A}, \mathrm{S}$ behaves like O (and unlike A ) is not being subject to deletion.)
5.1. 5 Specification in tree structures. The obvious answer to our quandary concerning a choice between tree structures for transitive sentences:
(i) accusative

or (ii) ERGATIVE

is of course not to group either NP with $\mathrm{V}_{\mathrm{tr}}$, that is, simply not to recognise a VP node. This gives us:
(v)

in addition to


In terms of position on the tree, we can easily refer to $\mathrm{NP}_{\mathrm{A}}$ and $\mathrm{NP}_{\mathrm{S}}$ by

$$
\# \# \text { NP X \#\# (indicating the leftmost NP on the tree) }
$$

or $\mathrm{NP}_{\mathrm{o}}$ and $\mathrm{NP}_{\mathrm{S}}$ by
\#\#(X)NPV\#\# (indicating the NP that comes immediately before V) Here \# \# indicates sentence boundary and X any (non-null) sequence of constituents.

We could suggest using (i) for English, (ii) for Dyirbal and (v) for Yidin. But if there really is a syntactic continuum linking these types as the facts from a variety of languages (e.g. Dixon 1976a: 485 ff .) indicate there is - then we would get languages on the 'threshold' between the Dyirbal and the Yidin types for which we would not be able to decide between (ii) and (v); and so on. Plainly, one type of deep structure would have to be adopted as the universal base, and this could only be (v).

We have been forced to the conclusion that the question posed in 5.1.1, concerning a 'deep structure' choice between (i) and (ii), was misconceived. This question was formulated within the framework of constituent analysis that was largely begun by the post-Bloomfieldians
and then taken over by Chomsky and incorporated as the base component of transformational generative grammar. Early work on immediate constituent analysis often insisted that a construction would have 'two and only two' or else perhaps 'two or a few' immediate constituents (Bloch and Trager 1942: 67; Gleason 1969: 133, 1965: 141; Hockett 1958: 147ff.). It was partly this tradition that led to the adoption of diagrams like (i), and later attempts to justify the VP node in transformational terms (e.g. Lakoff and Ross 1966).

Our trying to force all languages into (i) or (ii) was, then, a function of the syntactic model employed. This specifies that each (deep or surface) sentence must be divided into a number of constituents, and each constituent then analysed into further constituents, and so on, until the sentence is reduced to its component morphemes. As part of the notion that analysis should be maximally structured - and proceed one step at a time - splits into two (or, at any rate, as few as possible) constituents are preferred.
It now appears that the ternary split of a sentence into $\mathrm{NP}_{\mathrm{A}}, \mathrm{NP}_{\mathrm{O}}$ and $\mathrm{V}_{\mathrm{tr}}$, as in (v), must be substituted for (i) and/or (ii). We should beware, though, of merely amending a theoretical model in this way. If the 'preferred binary' condition was misconceived might there not be other inadequacies in a 'constituency tree' method of syntactic symbolisation? It will surely be worthwhile to examine other aspects of the model, in some detail.

A feature of tree descriptions is that they demand 'total accountability'. Any constituent that is recognised must be connected to some higher node. Thus, in the case of a subordinate clause we must decide whether it is immediately dominated by an NP node, or by $\Sigma$, or perhaps by VP. This can put us in mind of the discussion of (i) and (ii). We demanded in 5.1.I that Yidin be described in terms of one type of VP tree or the other, but then found the evidence was pretty equally balanced between (i) and (ii). What if some constituent could equally well be related to any of several nodes on a tree?

There are, in fact, many examples of this nature. There are strong arguments for some constituency groupings - thus in $A$ dog bit the great big man all linguists would surely agree in relating together the, great, big and man (as an NP). Other groupings will have less strong justification, but will be accepted by a fair number of linguists - the majority of transformational grammars of English (not paying attention to a universal base which would be equally appropriate for languages at any
point on the 'accusative-ergative' continuum - 5.r.4) group bit and the great big man as a 'verb phrase'. But there are other constituents which it is difficult to know where to place. In a passive sentence The great big man was bitten by a dog, there are strong reasons for grouping by with a dog. There are, however, no really conclusive reasons for attaching by a dog to the VP node rather than to the $\Sigma$ node, or vice versa. Those linguists who would say there is here a VP node, including the verb and also by a dog, would be likely to agree that the syntactic connection between verb and $b y$-phrase is less strong (and certainly, of a different type) than the connection between verb and direct object in an active sentence. But the 'theory' does not allow us to be non-committal - the by-phrase must directly be related to VP, or to $\Sigma$, however arbitrary the decision may be.
The 'passive' example is given as a typical and fairly simple illustration of the point being made. Many others could be provided, from English or from other languages.

It could be argued that if there is no reason for attaching a certain constituent to any lower node then it is to be automatically linked to $\Sigma$. This can be a helpful convention (for resolving cases of difficulty) but it is not entirely satisfactory in that it would lump together (a) those constituents for which positive reasons can be given for their being dominated by $\Sigma$ and by nothing else, and (b) those which could be attached at any of several places on the tree. That is, this solution would fail to observe a 'non-committal' category.

The discussion in 5.3.3 of whether subordinate clauses in Yidin are embedded (attached to an NP node) or adjoined (attached to the $\Sigma$ node) provides a further example of 'evenly balanced' evidence which must lead to an arbitrary decision qua tree structuring. This provides further Yidin evidence against a conventional tree model.

A theoretical model should surely aim at providing maximum explanatory power on the basis of a minimum of internal complexity and specification within the model itself. Our discussion suggests that the 'immediate constituent'/'tree structure' model demands over-specification which sometimes requires arbitrary decisions. Having recognised a number of groupings of forms within any sentence we should surely specify the minimum of hierarchical ordering consistent with providing maximum explanation of those linguistic facts which are to be accounted for. To add further, unmotivated or scarcely motivated, connections between theoretical elements when these add little or nothing to the overall explanation is surely to weaken the theory.

It is important to note that saying 'a by-phrase belongs to a certain sentence' but not committing oneself to say whether it is linked to VP or to $\Sigma$ or whatever is not 'being vague'. It is simply avoiding making an unnecessary and arbitrary decision.

Finally, we can point out that recent work on constituency trees attempts a homogeneous treatment of linguistic relations that are essentially quite different. One can do no better than go back to Sapir for an account of the different sorts of concepts and of grammatical processes that are involved in the synthesis of a simple sentence. Firstly, we can follow Sapir (i92I: 24-4I) in emphasising the centrality of 'word' (cf. 2.4) and 'sentence' as the main grammatical units of each language. Adapting Sapir's (192I: 82-II9) remarks slightly we can then recognise three types of syntactic process. In brief and crude outline:
(a) WORD BUILDING PROCESSES, deriving a word stem from a root. The specification of number on nouns or aspect on verbs are typical examples e.g. the derivation of horses from the root horse in English or of the word stem baga:li-n 'spear-GOING' from root baga-l in Yidin. Processes of this type synthesise a 'word' from its component elements (except for inflectional endings - if any - which are added under (c)).
(b) WORD GROUPING PROCESSES, modifying the meaning of a word through the attachment of other words. This maintains the same area of reference, but will provide for more exact specification within it. Examples from English are fat old horses from horses and run slowly from run. Processes of this type form a noun phrase (NP) or verb complex (VC) by adding modifier words to a head.
(c) SENTENCE BUILDING PROCESSES, taking groups of words - as synthesised by (b) - and relating them together, to create the description of a complete event. Inflections, clitics/particles, or just word order may be used to mark the type of relation that is involved. An example from English could involve putting the referential elements fat old horses and run slowly together in that order to form fat old horses run slowly. Processes of this type derive a sentence from NPs and VCs.

Plainly these processes are quite different from each other, both formally and semantically. An account of the internal organisation of a language stands to lose a good deal by treating the relation between the components of, say, boys, in the same way as that between the constituent words of men ran:


Although the nodes are of course labelled differently, the relations between the elements are dealt with in the same way (qua 'domination', 'constituency', etc.) in standard tree theory. Treating language in this way - as if it were a purely algebraic-type system, with simply distributional properties - obscures the various types of semantic structures, morphophonological rules, and so on, which effectively define 'human language' (and are remarkably recurrent across the whole spectrum of known languages).
5.1.6 Types of grammatical process. In the last section we argued against a homogeneous, distributional 'bricks-and-mortar' view of linguistic structure - that morpheme bricks are put together to make words, word bricks to make phrases and phrase bricks to make sentences (or, the other way round, that a sentence can be divided up into a sequence of phrases, a phrase into a sequence of words, and a word into a sequence of morphemes). Instead, we recognised three different types of semantic process involved in the synthesis of a sentence from the minimal elements of meaning:
(a) word building processes. These are based on a central formal element, a root. Various processes of semantic specification of the root may be realised by - again following Sapir's (192I: 6Iff.) excellent classification affixation, internal modification, reduplication, or accentual modification.

Processes of affixation in an agglutinative-type language will be likely to be amenable to a 'bricks and mortar' description. But in other types of language it is not always fruitful to attempt to 'segment a word into its component elements'. The proper procedure is to assign a phonological shape to the root, and then to specify how this shape is altered by the various morphological processes, paying attention to the different types of 'boundary' that must be recognised, and the various types of phonological rule (assimilation, apocope etc.) operating within and across them.

Each language will normally have a further word-building process of compounding (or composition) whereby two or more roots are combined to gether as the basis for a single word. Some languages can also mark semantic specification of a root by clitics, forms that cannot occur by themselves (and do not normally take stress)but are only loosely bound phonologically to a lexical word. The specification of an NP head in English as definite/ indefinite - something that is shown by affixation, internal modification etc. in other languages - falls at least in part into this category (and the clitics the, $a$ are represented as separate words in the orthography).

Word building processes in Yidin have been described quite exhaustively, though informally, in chapter 3 . There would be no advantage in repeating this discussion in the present chapter.
(b) word grouping processes. This is again an 'endocentric' process, based on noun or verb as 'head' element. Other words are adjoined to this - adjectives or adverbs of various types - and serve to modify the reference of the head. It is important to note that there are fundamental differences between morphological modification, under (a), and syntactic modification, under (b). A word-building process will always operate in terms of closed systems - for instance: singular, dual or plural - whereas in wordgrouping any one of an open class of adjectives (including, say, any number adjective) may modify a noun. Morphological processes are often (although not invariably) obligatory - thus, every count noun in English must be specified for number and definacy; the modification of a noun by an adjective, or of a verb by an adverb, is in contrast always a matter of choice.

Grouping of words into phrases is often marked simply by their contiguity within a sentence, perhaps in a fixed order (say, modifiers always preceding head) or perhaps in any order so long as all the words occur in one block. But where a sentence building process uses inflectional marking - and the inflection goes on to every word in a phrasal grouping - the words can (in some languages) be freely scatterable, their connection being shown by the recurring inflection.

The grouping of words is always an incremental, agglutinative-type process (the occurrence of external sandhi in some languages is of a quite different order from internal modification). Thus a 'bricks-and-mortar' approach is likely to be most applicable in this area - a phrase can be analysed into its constituent words; or, looked at the other way round, the words can be put together to synthesise a phrase. Internal structuring within a phrase-[old [excitingly fast] trains] as against [ [excitingly
fast] white trains] - can adequately be described through hierarchical tree diagramming (but see the comments at the end of 5.6.1).

We return to word grouping processes in Yidij in 5.6.
(c) sentence building processes. Taking 'word' and 'sentence' as the fundamental units of any language we have discussed (a) the morphological make-up of words, and (b) the grouping of words into syntactic units. Finally we need to describe the semantic structuring of sentences, in terms of the word-groups synthesised under (b). It is not, however, very useful to say that phrases are 'grouped together' to form sentences, using the terminology that we found appropriate for the grouping of words into phrases. Phrases are endocentric, each modifier being clearly related (directly or indirectly) to the head. Sentences, on the other hand, are exocentric, with each component bearing a relation to the whole (and with relations of government and so on holding between members) but without there being any central pivot.

We shall, in the next sections, consider the network of semanticosyntactic relations that go to make up a sentence, and suggest an appropriate symbolism in terms of which we may discuss the syntactic organisation of Yidin.
5.1.7 A semantico-syntactic symbolism. We first distinguish the obligatory from the optional elements of a sentence. 'Subject', 'object' and 'verb' are regarded as universally obligatory not because they must necessarily occur in the surface structure of every sentence in every language, but because the speaker and hearer must have some understanding of the subject and verb - and object, if the verb is transitive for the sentence to form a conceptual whole, with the potentiality of referring to some actual, possible or habitual event.
There are a number of apparent exceptions, but these are all quite easily accounted for. Thus, passives can frequently have the agent-phrase deleted; and on hearing $\mathfrak{f o h n}$ was hit one would surely not have any ideas about the deep subject. But there are semantic and syntactic reasons for regarding passives as derived intransitives, with the A NP having been taken out of the core to become a peripheral component (which can freely be deleted - see below). In this semantic view, a passive describes some state of an object; the cause of this state may optionally be specified e.g. John was hit by Fred.

A sentence like It is raining, which appears to have no semantically perceptible surface subject, can be related to an underlying sentence Rain is falling (or, more precisely, Rain is VERB-ing, where VERB is any item that can typically occur with rain as subject).

We can say that these obligatory elements comprise the core of the sentence; we will use square brackets to enclose the core. Using the abbreviatory letters for semantico-syntactic functions employed in chapter 4 we can characterise the two universal types of core, which we claim constitute the semantic basis of every human language, by:
(viii) [S V]
(ix) $[\mathrm{AOV}]$

Here V indicates a verb. If it occurs in a core with two NP functives it must be a transitive verb, and in a core with just one functive the verb must be intransitive.
(viii) and (ix) should be regarded not as 'structures' or 'sequences' but simply as 'configurations' of elements. We adopt the convention whereby each position in (viii) and (ix) is associated with a certain element. The choice of convention is inconsequential - we could equally have chosen [A V O] or [ OA A ] or [ V A O ] etc. in place of (ix). With the choice shownin(ix) we will always know that, in $\left[\mathrm{NP}_{1} \mathrm{NP}_{2} \mathrm{~V}\right], \mathrm{NP}_{1}$ is the subject and $\mathrm{NP}_{2}$ the object, and that, say, [(the) knife (the) shoot cut] represents the English sentence The knife cut the shoot.

What we are trying to represent with (viii) and (ix) is the semanticosyntactic relations between $S$ and an intransitive verb, in the one case, and between $\mathrm{A}, \mathrm{O}$ and a transitive verb, in the other. Note that in the latter case we do not have to relate A and O each to the verb ('subject-of' and 'object-of' respectively) or indeed attempt any other grouping - we simply note that a transitive sentence has a ternary core, and adopt a convention for representing its components.
A case can be made out for there existing a connection between each pair out of $A, O$ and $V$. Thus - with, say, a verb of action like 'hit' - it is the referent of $A$ who is responsible for some change in the state of the referent of $O$; the referent of A initiates an action described by V ; the referent of O suffers in an activity referred to by $V$. (ix) is intended to subsume all of these relationships.

As we have already mentioned, languages employ a number of alternative means of marking the relations between $\mathrm{A}, \mathrm{O}$ and V (and between S and V). Sometimes the verb involves affixes that cross-reference A , O and S . Or the non-verbal components may be marked by case inflections. Or the syntactic relations can be indicated solely by relative ordering in surface structure. None of these methods of realisation needs to be included in configurations (viii) and (ix); after all syntactic operations have been completed 'marking rules' will assign the appropriate realisations.

Languages can be classified into two types on the basis of the role of word order in their grammars. There are those like English which mark syntactic relations largely by word order; ordering is here quite strict, in keeping with its significant syntactic role. Then there are those languages which make other arrangements for showing syntactic relations; these can sometimes have quite strong word order preferences (as Yidin does-4.1.1, 4.1.9), but they are always preferences, of a different nature from the ordering rules in English.

Since, from the point of view of relational syntax, we can adopt any convention for the arrangement of $A, O$ and $V$ in (ix), we might as well put the elements in a sequence that corresponds most closely to surface word order. $\mathrm{A}+\mathrm{O}+\mathrm{V}$ seems most appropriate for Yidin and we have adopted it here. (Ideally, a universal convention should be adopted, to fit best with the ordering rules/preferences of most languages, taking account of both the types distinguished in the last paragraph.)

In addition to the obligatory core, any sentence may contain any of a number of optional constituents - things like 'dative NP' (or indirect object), locational qualifier, and so on. We refer to these as PERIPHERal components. Generally speaking, any type of peripheral element may occur with either type of core (which is an additional reason for distinguishing periphery from core), subject of course to selectional restrictions, semantic plausibility, and the like. Thus in English peripheral components like for Bill or to see what I can learn or into the Park can occur equally with an intransitive or with a transitive core - for example, with I'll go and I'll take the book.
It could be argued that, in some languages at least, we should recognise a third type of core, involving subject (A), object (O) and indirect object, as in I'll give the book to Mary. We can argue against this for Yidin by pointing out that whereas ergative (nominal) and accusative (pronominal) NPs occur only in transitive sentences, a dative NP can occur with a 'ditransitive verb' like wiwi-n 'give' and also with virtually any transitive or intransitive verb - see $\left(35^{-6}\right)$ in 4.1.6. We thus treat wiwi-n as a transitive verb, that will often (but need not always) involve a peripheral dative NP, just as we also have some intransitive verbs that display an identical preference (see 4.3.5).

But this is very much an open question. It may be that for some languages (and/or for some linguists) there would be sufficient reason to include one or two further types of core. Further work on a variety of languages will be required in order to resolve this point.

We must distinguish two sorts of peripheral component : syntactic and local. Local elements simply specify the place or direction, and do not add any information about the participants, the purpose or cause of the
activity, and so on. Syntactic elements typically refer to some further participant who is being involved in the chain of events (a beneficiary, for example).

We use ' :' to introduce syntactic and ';' for local peripheral elements. Thus:
(x) $[I \mathrm{go}]:$ Bill
could, with the appropriate marking conventions, represent I'll go for Bill, whereas
(xi) $[I g o] ; L o n d o n$
could indicate I'll go to London. We will also adopt the convention that syntactic elements are placed before local ones; thus
(xii) [I go]:Bill;London
could represent I'll go to London for Bill.
Subordinate clauses can be regarded as peripheral elements of the syntactic type. I'll go to see Bill would be represented by (again under the appropriate realisational conventions):
(xiii) [I go]:[ I Bill see]

Note that under our conventions the leftmost core constituent is always the main clause of a sentence.

Conjunction can be shown simply by ','. Thus I went and I saw Bill would be
(xiv) [I go],[ I Bill see]
whereas fohn and Mary came would be
(xv) [fohn, Mary come]

Note that we do not employ commas or any other punctuation to separate the basic elements within a core - that is, we write [A O V] and not [A, O, V]. Spaces seem sufficient demarcation here (so that any specific punctuation would be redundant). If there is any danger of confusing an orthographic word space with the spacing between core components, a symbol like ' $=$ ' could be employed to separate the components and/or \# to separate orthographic words within a phrase; thus [snakes $=d o g \# m e a t=e a t]$ to indicate Snakes eat dog meat (rather than *Snakes dog eat meat).
Tense specification has been silently omitted from the examples quoted in this section. The treatment of tense in Yidin, in terms of this model, will be found in 5.5.1.

To the basic representation of core and peripheral elements must be added (i) statements of coreferentiality constraints e.g. between main and
subordinate clauses; (ii) syntactic derivations ( = transformations) which will remove elements from or put them into the core, or combine two cores into one; (iii) statements of the types of phrase that correspond to each core and peripheral element; (iv) selectional restrictions; and (v) marking conventions-the surface realisations of the syntactic relations (by inflections, word order, prepositions, etc.).

The semantico-syntactic symbolism that we have attempted here to outline, in fairly general terms, is put forward to assist our grammatical discussion of Yidin in the remainder of this chapter. Study of this application of the model should provide some clarification concerning details of its possible organisation and utilisation.
5.1. 8 Kinds of syntactic identification. We have suggested:
(viii) [S V]
(ix) $[\mathrm{A} O \mathrm{~V}]$
as universal representations of the semantic core for the two kinds of sentence that we believe occur in all human languages. Taken by itself, such a core is the basis for a 'simple sentence' (John laughed, or Mary hit $\mathfrak{f o h n}$ ).

But speakers do not, of course, simply utter a string of simple sentences, with or without peripheral syntactic and local expansions. Each language has a technique of relating together two or more events one as the reason for or as the natural result of another, one as happening simultaneously with another, one as sequentially following another, and so on. A speaker will also try to abbreviate the stream of words, cutting out repetitions and redundancies and generally attempting to conform to whatever aesthetic standards of 'style' are current for his language.

These two kinds of consideration give rise to principles of syntactic identification and deletion. For instance, a language may demand that a subordinate clause have an S or A NP that is coreferential with some NP in the main clause. This can be shown (using $a, b, c, \ldots$ to refer to specific NPs, and $\mathrm{X}, \mathrm{Y}, \mathrm{Z}, \ldots$ for any non-null sequence of components) by:
(xvi) given [...]:[b X] there must be some a in the leftmost core such that a is coreferential with b .

To take another example, suppose that a language must obligatorily delete an NP in the second sentence of a coordination if it is identical to
an NP with the same syntactic function ( $\mathrm{S}, \mathrm{A}$ or O ) in the preceding sentence. This could be shown (with $\mathrm{V}, \mathrm{W}, \ldots$ indicating any verb):
(xvii) in [(X) a (Y) V], [(Z) b (T) W]
if (I) $X$ and $Z$ are either both present or both absent; and (2) $Y$
and T are either both present or both absent; and (3) $\mathrm{a}=\mathrm{b}$, then $\mathrm{b} \rightarrow \varnothing$
Constraints and rules of these and other types are narrowly syntactic as opposed to the universal semantico-syntactic configurations (viii) and (ix) - and tend to be language-particular.

Although, as we noted in 5.1.4, Heath (1976) has suggested that an individual rule may have a 'typical form' - presumably determined by the semantic nature of the elements to which the rule refers - in most or all languages in which it occurs. The obvious example of imperative - imposing the same selectional restriction on S and A - has already been mentioned.

Some languages may have a majority of their constraints and rules referring to ' S or O '. This can be specified (cf. 5.1. 7 and the discussion at the beginning of 5.1.5):
(xviii) [(X) a V]
that is, 'the NP next to V'. Other languages may make more syntactic reference to ' S or A ', that is, ' $a$ ' in
(xix) $[\mathrm{a} \mathrm{X}]$
in other words, the leftmost NP in a core configuration.
Languages that have been described as having an 'absolutive-ergative' underlying syntax would simply involve a large number of syntactic specifications of type (xviii) (although it is worth noting that every language of this kind also employs some specifications of type (xix)). Similarly, languages that have been characterised as strongly 'nomi-native-accusative' in their syntax will make major use of specification (xix). But, as we have already mentioned, there are many languages that lie on a continuum joining these two extremes, identifying S and A in some instances and S and O in others. Yidin is of this type. In the following sections we set out the syntactic derivations, constraints and marking rules of Yidin, working in terms of core-plus-peripheral configurations.

### 5.2 Basic syntactic configurations for Yidin

5.2.1 Core elements. Working in terms of the symbolism described in 5.1.7, we recognise two universal core configurations:
(viii) [S V]
(ix) $[\mathrm{AOV}]$

Here $A$ refers to the agent of a transitive sentence and $O$ to a transitive patient; $S$ of course refers to an intransitive subject. $V$ is a verb.
The distinction between 'intransitive' and 'transitive' constructions is an important one in Yidig, for both deep and surface syntax (see 4.2.1). Any sentence whose leftmost core involves just two elements (a verb and one NP) is intransitive, while a core involving three elements (a verb and two NPs) is transitive.
Realisation rules differ for pronouns and nouns. For pronouns, the marked function is O , involving the accusative case $-: n \sim-n(3.6 .2-3)$. Thus, with X representing any non-null element and $\mathrm{M}(\mathrm{a})$ indicating the case marking of a :
( xx ) in [X Pronoun V], M (Pronoun) $=$ Accusative
In contrast, the marked nominal case is ergative, for A function:
(xxi) in [Nominal X V], M(Nominal) $=$ Ergative

All other core occurrences of pronouns and nominals receive zero marking ('nominative' and 'absolutive' respectively). If we allow this specification to follow ( xx ) and (xxi), then, where [...a...] indicates 'any a in the core':
(xxii) in [...Pronoun/Nominal...], M(Pronoun/Nominal) $=\varnothing$

We noted in 4.I. 4 that there is in fact a hierarchy of syntactic marking, the extremes of which are defined by the behaviours of pronouns and nominals. In the middle region, human deictics bear both ergative and accusative marking (zero form being restricted to $S$ function). We can take care of this simply by having вотн ( xx ) and (xxi) apply in this case. The conventions then become:
$(\mathrm{xx})^{\prime}$ in $[\mathrm{X} \mathrm{Pronoun/Human} \mathrm{Deictic} \mathrm{V]}$,
$\mathrm{M}($ Pronoun $/$ Human Deictic $)=$ Accusative
$(\mathrm{xxi})^{\prime}$ in $[$ Nominal/Human Deictic X V $]$,
$\mathrm{M}($ Nominal/Human Deictic $)=$ Ergative

The definite inanimate deictic has an accusative form in free variation with the absolutive. This can be handled by extending ( xx$)^{\prime}$ to cover this
category, but making the convention optional in this case only; if it does not apply an extended version of (xxii) will naturally specify zero marking.
5.2.2 Peripheral elements. Yidin has a symmetric set of peripheral elements: three syntactic functives - purposive, dative and causal - and three corresponding local forms - allative, locative and ablative. We use symbols a, b, c, ... to represent specific NPs and can append superscripts as follows:

+ 'to/in order to' elements - purposive and allative
- 'from/as a result of' elements - causal and ablative
- unmarked elements - dative and locative

Generally, "can be omitted and the symbol simply left with no superscript in this case. ${ }^{\circ}$ is used when abbreviating reference to several possibilities by means of the disjunctive slash / 'or'. Thus $a^{+/-10}$ indicates ' $\mathrm{a}^{+}$or $\mathrm{a}^{-}$or a ' (to use instead $\mathrm{a}^{+1-1}$ might prove confusing).
Treating dative and locative as 'unmarked' can be justified both semantically and syntactically (see the discussion throughout chapter 4). The two cases are in fact semantically-conditioned alternants in a wideish range of constructions (4.1.8).

To summarise, the syntactic configuration of a simple sentence in Yidin is:
(xxiii) CORE PERIPHERY

$$
\left.\left.\begin{array}{l}
{\left[\begin{array}{ll}
\mathrm{a} & \mathrm{~V}
\end{array}\right]} \\
{[\mathrm{b}} \\
\mathrm{c}
\end{array}\right]\right\}: \mathrm{d}^{+1-1 a} ; \mathrm{e}^{+1-1 a}
$$

where ' $:$ ' introduces syntactic and ';' local peripheral elements.
It is an integral part of our universal hypothesis (5.1.7) that core elements are obligatory and peripherals optional. We can have both ' marked' local choices (i.e. allative and ablative simultaneously) but we cannot have the unmarked local choice co-occurring with a marked element (that is, we cannot have locative plus allative, or locative plus ablative). It is likely that an identical restriction holds between syntactic peripheral elements.

There are only four distinct nominal case markings for these six peripheral functions. Abbreviating by means of / 'or':
(xxiv) a. In $X ; a^{+10}, M(a)=$ locative(-allative)
b. In $X: / ; a^{-}, M(a)=$ ablative(-causal)
c. In $X: a^{+}, M(a)=$ purposive
d. In $X: a, M(a)=$ dative $\sim$ locative

Thus, one inflection is used for the local functions 'locative' and 'allative' with nominals (deictics have distinct forms - 3.7.2); and there is one nominal inflection covering both the syntactic function 'causal' and the local 'ablative' (here the inanimate deictics have different forms 3.7.2).

For the unmarked syntactic peripheral function, either dative or locative case marking can be employed. The choice appears to be basically determined by a hierarchy, as set out in 4.1. 8 and 3.1.2. Thus, with nominals locative is both the sole realisation of local function ' $; a$ ', and also an alternative realisation of syntactic function ' $: a$ ' (just as one case marking realises both ' $: \mathrm{a}^{-\prime}$ and ' $; \mathrm{a}^{-}$'). In the case of deictics, however, locative is restricted to the local function ' $; a$ ' (and pronouns do Not have locative - or any other local - case form).
Locative and dative are of course not always interchangeable. For a local function, ' $; \mathrm{a}$ ', only locative can be used. And we mentioned (4.1.8) that only dative has been encountered on the beneficiary of a verb of giving, irrespective of animacy, etc. The latter case can be dealt with in terms of the regular dative $\sim$ locative alternation by saying that here the verb (by its semantic nature) demands a dative direct object. We are thus suggesting that the choice between dative and locative, as the realisation of ' $a$ ', depends partly on the nature of the referent of this peripheral element and partly on the verb and its rules of government.

We can exemplify with representations for some of the sentences given in 4.I. 7 and 4.1.6. For instance, the locative ( $=(374)$ ):
(913) nunin bulmba: bada:day / buriburi:y

The old man brings you and leaves you in the camp
is
(xxv) $[\text { buriburi jundu bada:da-n }]^{\text {PRES }} ;$ bulmba
whereas a sentence involving ablative and allative NPs (= (375)),
(914) buya yūu gaday banam bulmba:

That woman is coming from the river to the camp
would be shown
(xxvi) $[\text { puyu \#buna gada-n }]^{\text {PRES }} ;$ bana ${ }^{-} ;$bulmba $^{+}$

An imperative, (362), with deleted subject (see 5.5.1)
(915) bugul duga:lin bundu:gu

Go and pull loya vines for dilly-bags !
has underlying
(xxvii) $[\boldsymbol{n u n d u | p u n d u b a ~ b u g u l ~ d u g a : l i - n ] ~}]^{\text {IMP }}:$ bundu $^{+}$
whereas a 'giving' construction, (352),
(916) yandi mayi galya:nda wiwi:na

We must give some food to uncle
is simply
(xxviii) [yandi mayi wiwi-n] ${ }^{\mathrm{PURP}}:$ galya

There is one further peripheral element that we have not so far mentioned - that marked by the syntactic case 'fear' (4.1.6, 4.6.1). This reveals an asymmetry - there is no corresponding local case (although, as mentioned in 3.3.2, the 'fear' inflection may be historically derived from comitative *-dir $\sim-y i r$ plus the regular locative inflection). The superscript ${ }^{\text {ap }}$ (for 'apprehension') can be employed in this case. The basic configuration is now:
(xxiii)' $\left.\begin{array}{ll}{[\mathrm{al}} & \mathrm{V}] \\ {[\mathrm{b}} & \mathrm{C}]\end{array}\right\}: \mathrm{d}^{+l-l / / \mathrm{ap}} ; \mathrm{e}^{+/-/ \omega}$
with an addition to the marking conventions:
(xxiv) e. In $\mathrm{X}: \mathrm{a}^{\mathrm{ap}}, \mathrm{M}(\mathrm{a})=$ 'fear'

Thus, (371) from 4.I. 6
(917) yinu dada yarggay/ gurilindi:da

This child is frightened of the wallaby
is represented by
(xxix) $[\text { yigu\#dada yavyga-n }]^{\text {PRES }}:$ guriliy ${ }^{\text {ap }}$

There is further discussion of the 'apprehensional' functive, and of the other six peripheral functives, when we come to deal with subordinate clauses in $5 \cdot 3$.
The ordering of words in surface structure is organised in terms of the 'preferences' outlined in 4.r.1-3 and 4.1.9. These specifications should presumably follow the marking conventions. Word order in Yidin is at least partly determined by considerations of style, and ordering specifications should - ideally - relate to a 'stylistic interpretational' component of the grammar.
5.2.3 Antipassive construction. In putting forward the configuration for any antipassive construction we must take account of the following points (4.2.1-3):
(I) although derived from an underlying transitive simple sentence, an antipassive is intransitive;
(2) the deep A NP becomes surface $S$;
(3) the deep O NP takes dative or locative case (the choice being conditioned by a semantic hierarchy - 5.2.2, 4.1.8, 3.1.2).

We can accommodate these requirements by suggesting that the derivation of an antipassive takes the following form:
( xxx ) antipassive derivation (optional)

$$
[\mathrm{abl}] \Rightarrow\left[\mathrm{a} \mathrm{~V}^{\mathrm{x}}\right]: \mathrm{b}
$$

where superscript ${ }^{x}$ indicates that the verb is marked by the affix $-: d i-n$.
We are thus simply saying that the antipassive transformation takes the O NP out of the core and places it in the periphery - as the unmarked syntactic peripheral element. The originally ternary (and thus transitive) core loses a term, and is thus recognised as (derived) intransitive. The leftmost core NP (originally A function) is now naturally in S function, and the verb (in its -:di-n marking) is identified as intransitive.

Taking specific examples (cf. (420) and (421) in 4.2.2):
(xxxi) [waguda buna giba-l] PAST
(xxxii) [yayu nundu giba-l] ${ }^{\text {PAST }}$
are realised as
(918) wagudaygu buna giba:l The man scratched the woman
(919) yayu nunin giba:l I scratched you
respectively. From (xxxi) and (xxxii) we can derive antipassives:
(xxxiii) [waguda giba-lx $]^{\text {PAST }}:$ bupa
(xxxiv) [yayu giba-l $\left.l^{\mathrm{x}}\right]^{\text {PAST }}: n u n d u$
which are realised as
(920) wagu:da giba:dinu buna:nda $\langle=(918)\rangle$
(921) yayu nuni:nda giba:dinu 〈= (919)〉

The statement of antipassive in ( xxx ) perfectly explains all occurrences in main clauses. We shall need, in 5.3.1, to refine the statement of this derivation for 'marked' subordinate clauses.
5.2.4 Reflexives. If in a ternary deep core - involving a transitive verb - the two NP components are simply identical, then one of them is obligatorily deleted and the verb is marked by -:di-n (effectively, as a record of this deletion). That is:
(xxxv) Reflexive derivation (obligatory)

$$
[\mathrm{a} \mathrm{a} \mathrm{~V}] \Rightarrow\left[\mathrm{a} \mathrm{~V}^{\mathrm{x}}\right]
$$

Again, a binary (intransitive) core is derived from an underlying transitive configuration; ' $a$ ' in the derived core thus has $S$ function. (Note that we do not say which of the original occurrences of ' $a$ ' is deleted - that in A or that in O function. There is no evidence on which to 'decide' which occurrence goes and which stays; a decision of this nature is totally unnecessary, in terms of the syntactic symbolism that is being employed.)

Thus (cf. (424) and (425) in 4.2.2):
(xxxvi) [waguda waguda giba-l] ${ }^{\text {PAST }}$
(xxxvii) [ jayu jayu giba-l] ${ }^{\text {PAST }}$
must be obligatorily reduced to
(xxxviii) $[\text { waguda giba-l }]^{\text {TAST }}$
(xxxix) $[\text { yayu giba-l }]^{\text {Past }}$
which are realised as
(922) wagu:da giba:dipu The man scratched himself (on purpose)
(923) yayu giba:dinu I scratched myself (on purpose) respectively.

Langacker and Munro (1975: 800) discuss 'a phenomenon found in many languages of the world, namely the extension of a reflexive morpheme to mark passive sense in addition to its basic reflexive use...'. Their explanation differs from ours in detail (including an 'unspecified' A element for passives, whereas we prefer 'movement out of the core' for O in an antipassive) but the facts they quote suggest that 'reflexive $=$ passive' and 'reflexive $=$ antipassive' are different instances of a single universal grammatical tendency. Reflexive - marking A and O as identical - may also be used to indicate that the member of the pair $\mathrm{A}, \mathrm{O}$ which normally receives 'marked' case inflection is brought into $S$ function, where it will receive unmarked inflection (and will be available as 'pivot' for various syntactic operations).
5.2.5 Sentence coordination. The principles of sentence coordination that we enunciated in 5.1.3 can be summarised (where $\mathrm{CR}(\mathrm{a}, \mathrm{b})$ indicates that a and b are coreferential):
(xl) coordination condition, and np deletion rule If $[\ldots],[\ldots]$ then it should be the case that
either ( I ) $[\mathrm{a}(\mathrm{X}) \mathrm{V}]^{\mathrm{i}},[\mathrm{b}(\mathrm{Y}) \mathrm{W}]^{\mathrm{j}}$ where $\mathrm{CR}(\mathrm{a}, \mathrm{b})$ and $\mathrm{a}, \mathrm{b}$ are pronominal, and $\mathrm{i}=\mathrm{j}$
or (2) $[(\mathrm{X}) \text { a } V]^{\mathrm{i}},[(\mathrm{Y}) \mathrm{b} V]^{j}$ where $\mathrm{CR}(\mathrm{a}, \mathrm{b})$ and $\mathrm{a}, \mathrm{b}$ are nonpronominal, and $\mathrm{i}=\mathrm{j}$
and then all or part of $b$ can be deleted
The first condition indicates that the two conjoined clauses have coreferential S/A pronominal NPs, while the next line specifies coreferential $\mathrm{S} / \mathrm{O}$ nominal NPs. $\mathrm{i}=\mathrm{j}$ demands that the two clauses make identical tense/mood choices (see 5.5.1).

It was stressed in 5.1.3 that these principles of coordination are best regarded as 'preferences' rather than rules. If the conditions of (xl) are met, then deletion of the NP in the second clause is always possible (so this much is predictable and 'rule-worthy'). But the rule is not exclusive - the coreferential NP in the first clause could instead be deleted, or an NP could be deleted - under semantic duress - in quite different syntactic conditions.
5.2.6 Verb coordination. In 4.1.3 we discussed 'verb complexes', involving two or more verbs; an overriding condition was that they should agree in surface transitivity and in final inflection. We will now deal with the various types in turn, and see whether they might be derived by reduction of coordinated sentences.

Firstly, verb-plus-adverb combinations should surely not be derived from coordinated clauses. An adverb does not have any independent reference, but can only provide modification for a verbal concept (e.g. 'do quickly,' 'try to do') exactly as an adjective modifies a noun. We should thus nот begin with separate sentences, one containing a verb and one an adverb, and - coincidentally as it were - later conjoin them (in the same way that we should not derive an adjective-noun syntagm from two underlying clauses - 5.6.1).

Secondly, we do have occasional but quite grammatical instances of two lexical verbs appearing together in one clause - for instance ( $328-30$ ) in 4.r.3. Here we can surely suggest biclausal origin:
(xli) verb coordination (optional)

$$
[\mathrm{X} \mathrm{~V}]^{\mathrm{i}}(\mathrm{Y}),[\mathrm{X} \mathrm{~W}]^{\mathrm{i}}(\mathrm{Y}) \Rightarrow[\mathrm{X} \mathrm{~V} \neq \mathrm{W}]^{\mathrm{i}}(\mathrm{Y})
$$

We specify that the two clauses make the same choice, $i$, from the mood/tense system (that is, they are both imperative, both past tense,
or both present tense -5.5 .1 ). Note that our requirement that everything before the verb be identical across clauses automatically ensures that V and W have the same surface transitivity. The word boundary symbol \# indicates that $V$ and $W$ make up one 'verb complex' that occupies one core position (cf. 5.1.6, 5.6.1).

For example, from (cf. (330))
(xlii) $\left[\right.$ ganar $A$ yayu bada-ll ${ }^{\text {PAST }},[\text { ganar } A \text { yayu buga-n }]^{\text {PAST }}$
we get
(xliii) $\left[\operatorname{gajar} A\right.$ yayu bada-l\#buga-n] ${ }^{\text {PAST }}$
realised as
(924) ganaraygu yanan bada:l buga:n

The alligator bit and ate me
Finally, there are a fair number of clauses which involve either gali-n 'go' or gada-n 'come' together with some other lexical verb. These should presumably be dealt with in the same way as (xlii). But there is a complication in the case of 'go' and 'come': the other verb will in such cases normally take the appropriate aspectual suffix (see 4.1.3, 3.8.6).

This brings up the whole question of the syntactic treatment of aspects. We believe that historically these morphemes derive from a syntactic association (3.8.6). Then why not treat aspect in this way within a synchronic syntax of Yidin? From
(xliv) $[\mathrm{X} \text { gali-n/gada-n }]^{\mathrm{i}},[\mathrm{X} \mathrm{V}]^{\mathrm{i}}$
the coordination rule, (xli) derives
(xlv) [X gali-n/gada-n\#V] ${ }^{i}$

We would need a rule roughly of the form:
(xlvi) ASPECT INCORPORATION (optional)

$$
[\ldots \text { gali-n/gada-n\#V] }][\ldots(\text { gali-n/gada-n }) \not \# \mathrm{~V} \text { GO/СОМЕ }]
$$

where the superscripts indicate a morphological process (5.1.6) applying to V.

Note that the free verb gali-n/gada-n would not normally be retained after the aspectual incorporation, although it could be-hence the parentheses in the right-hand side of the rule. And although a verb occurring in the same VC as gali-n or gada-n will normally receive aspectual specification this is not absolutely necessary - see 3.8 .6 ; to accommodate this (xlvi) must be regarded as optional (although it would nearly always be applied).

But the aspect incorporation rule, as we have stated it, will only deal with aspect on intransitive verbs (that is, verbs with the same surface transitivity as gali-n and gada-n themselves). Whereas in fact aspect occurs with all verbs, quite independently of transitivity. This complicates the situation. It seems on balance that a syntactic explanation of aspectual affixes - although according well with diachronic development - is more complex and cumbersome than it is revealing, within a synchronic grammar. We should perhaps leave it at (xlv) and then include an 'agreement rule' ensuring consistency between lexical and affixal specification of 'going' and 'coming' within any VC.

Note that it is possible to derive aspect on transitive verbs from underlying gali-n/gada-n\#V. We must first of all transitivise gali-n/gada-n, presumably in terms of the dummy verb INV (see 5.4). Thus
(xlvii) $[\text { a gali- } n]^{1} \&[\mathrm{ab} \text { INV }]^{l} \Rightarrow\left[\mathrm{ab} \text { gali- } n^{\mathrm{INv}}\right]^{1}$
and then

An optional INV would have to be specified in the aspect incorporation rule:
 $\left.\mathrm{V}^{\mathrm{eog} / \mathrm{comis}}\right]$
Note that we do in fact need procedures for transitivising and intransitivising verbs in order to deal with coordinations that do not involve gali- $n$ and gada-n - for instance ( 328 ) in 4.1.3.
5.2.7 NP coordination. For sentence coordination we require only one coreferential NP linking the two sentences (together with one of two schemes of syntactic identification). For verbal or nominal coordination everything in the sentence, bar the items to be conjoined, must be identical. Thus for NPs we can specify simply

$$
[(\mathrm{X}) \mathrm{a}(\mathrm{Y})],[(\mathrm{X}) \mathrm{b}(\mathrm{Y})] .
$$

Yidin does have an affix to mark coordination of nominal, pronominal and/or deictic elements - the derivational affix $-b a$; this appears to be restricted to occurrence with words that have human reference (3.3.6). Thus
(xlix) NP COordination (optional)

$$
[(\mathrm{X}) \mathrm{a}(\mathrm{Y})]^{\mathrm{i}},[(\mathrm{X}) \mathrm{b}(\mathrm{Y})]^{\mathrm{i}}, \ldots \Rightarrow\left[(\mathrm{X}) \mathrm{a}^{+\mathrm{ba}} \# \mathrm{~b}^{+\mathrm{ba}} \neq \ldots(\mathrm{Y})\right]^{\mathrm{i}}
$$

For instance, from
(1) $[\text { zwaguda madinda-n }]^{\text {PReS }},[\text { buna madinda-n }]^{\text {PRES }}$
is derived the sentence (cf. (74) in 3.3.6):
(925) wagudaba buna:ba madi:nday

The man and the woman (and possibly other people, too) are walking uphill
And from (cf. (149) in 3.6.5):
(1i) $[\text { nundu gali-n] }]^{\text {PRES }},[\text { darygidarggi gali-n] }]^{\text {PRES }}$
we get
(926) nundu:ba darngidarygi:ba galiŋ

You and the old woman (and possibly other people, too) are going

We can, however, run into difficulties with this 'coordination' approach to -ba forms. A Yidin sentence can have an NP which involves just one noun or pronoun suffixed by $-b a$; for instance:
(927) wagudaba (/pundu:ba) galiy

The man (/you) and one or more other people are going
We could suggest an underlying structure of the type:
(lii) $\quad[\text { waguda gali-n }]^{\text {PRES }},[\quad \text { gali-n }]^{\text {PRes }}, \ldots$
that is, a coordination of cores, only the first of which has its S slot specified. The alternative to using partly-specified cores in this way is to avoid treating -ba in terms of coordination and instead simply say that (926) corresponds to
(liii) $[\text { SET gali-n }]^{\text {PREs }}$
where SET refers to a set of individuals, including the referents of $n u n d u$ and of darygidarygi; and so on. (Cf. Dixon 1972: 212-15.)

### 5.3 Subordination

5.3.I Status of subordinate clauses. We can now turn to an examination of the appropriate representation for subordinate clauses. Let us first consider the three commonest types, marked by verbal inflections $-n u+n d a$, $-n a$ and $-n u+m$ (4.4-4.5), and then in 5.3.2 extend our discussion to 'lest' clauses.

There is a three-way correspondence between subordinate clauses and peripheral syntactic NPs, paralleling the correspondence already
recognised between syntactic and local NPs. This can all be summarised:

|  | $\begin{gathered} \text { FROM }\left(^{+}\right) \\ (/ \text {as a result of }) \end{gathered}$ | $\begin{aligned} & \text { UNMARKED ( }() \\ & \text { ('at') } \end{aligned}$ | $\begin{gathered} \text { то }(-) \\ (/ \text { in order to }) \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| local NP | ablative | locative | allative |
|  | $-m u \sim-m$ | $-l a \sim-: \sim-d a$ | $-l a \sim-: \sim-d a$ |
| peripheral | causal | dative | purposive |
| syntactic NP | $-m u \sim-m$ | -nda | -gu |
| subordinate | causal | dative | purposive |
| clause | $-n u+m$ | $-n u+n d a$ | -na |

The points of similarity - most of which have already been mentioned in chapters 3 and 4 - can be summarised:
mORPHOLOGICAL. All inflections in the 'from' column involve $-m u \sim-m$ (in the case of a subordinate clause the second allomorph is added to the subordinate 'foundational' morpheme $-n u-3.8 .4$ ). Similarly, dative case is $-n d a$ and dative subordinate has $-n d a$ added to $-n u$.
syntactic. (1) The O NP in an antipassive subordinate clause may be placed in causal or purposive case (in place of the expected dative) if the subordinate clause is of the causal or purposive type, respectively (4.4.6, 4.5.4). With an antipassive dative subordinate clause the O NP must be in dative case.
(2) Dative and locative case are in hierarchically determined alternation, in a variety of constructions (4.1.8, 4.2.3).
(3) With locational qualifiers $-g u$ has allative - not purposive - sense.

And with some common nouns that have locus-type reference a -gu form can function allatively (in addition to the regular purposive use). See 3.4.r.
semantic. Correspondences of meaning are summarised in the column headings. On the right-hand or 'prospective' side of the table allative refers to motion то a place, purposive case to action directed to or FOR some end, and a purposive subordinate clause to an action that is undertaken IN ORDER that some further action may result. On the left-hand or 'retrospective' side, ablative refers to motion from a place, causal to some state or activity that was CAUSED BY some object, and causal subordinate to a state or activity that FOLLOWED ON FROM some earlier event.

In the middle column, locative indicates 'position at' (i.e. neither motion to nor from). Dative case marks a 'passive' peripheral participant (in contrast to purposive, which indicates that someone or something is being actively involved in the chain of events-4.1.6). Dative subordinate marks some action that is simultaneous with that of the main clause, with no temporal or logical connection of 'purpose' or 'cause' holding between them.

In chapter 4 we noted that there are two distinct varieties of each of the three types of subordinate clause. By far the commonest involves an NP that is coreferential with an NP in the main clause; and this 'common NP' must be in surface S or O function in both clauses. The relation between a coreferential subordinate clause and a main clause is similar to that between a peripheral syntactic NP and a main clause. Compare, for example (cf. (727-8)):
(928) purposive NP
(a) yayu galiy gangulagu

I'm going for a wallaby
purposive clause (b) yayu galiy gangulanda baga:dina
I'm going to spear a wallaby

Just as a peripheral syntactic NP indicates a 'further participant', that is intimately connected with subject or object in the event described by the main clause, so a coreferential subordinate clause specifies an event that concerns one of the core participants (and is logically connected to the event of the main clause).

These similarities can be reflected by extending ' $:$ ' to represent the relation between main and subordinate clauses. Underlying (928-a) we have, as established in 5.2.2,
(liv) $[\text { nayu gali-n }]^{\text {PRES }: ~ g a n g u l a ~} A^{+}$

We are now suggesting, for (928-b):
(lv) $[\text { yayu gali- } n]^{\text {PRES }}:[\text { yayu gangulA baga-l] }]^{+}$

Subscripts ${ }^{+1-10}$ will be applied to subordinate clauses, just as they are to syntactic and local peripheral NPs.

This gives the possible configuration for a Yidin sentence:

$$
\begin{equation*}
\mathrm{a}(\mathrm{~b}) \mathrm{V}]: \mathrm{c}^{+1-10 / \mathrm{ap}}:[\mathrm{d}(\mathrm{e}) \mathrm{W}]^{+1-/ \omega} ; \mathrm{f}^{+1-10} \tag{lvi}
\end{equation*}
$$

Non-coreferential subordinate clauses, on the other hand, are less closely syntactically tied to the main clause. A non-coreferential clause often provides mainly temporal qualification of the event described by
the main clause ('I ate while he slept', 'The people came here after the camp had been submerged' and so on $-4.4 .3,4.4 .7,4.5 .5$ ). It has some similarities with local NPs, suggesting that we could employ ';' to represent the relation between a main clause and a non-coreferential subordinate clause. Thus

## (lvii) [yandi wuna-n] ${ }^{\text {RES }} ;$ bulmba; [dimbaral gada- $n$ ]

is realised as (cf. (660) in 4.4.3):
(929) yandi wunay bulmba:/ dimba:Yal gadanunda

We stay in the house when a cyclone is coming
This enlarges the configurational possibilities to:

We are here maintaining that ' $:$ ' (in $\mathrm{X}: \mathrm{Y}$ ) has a constant semantic import, as does ';' (in $\mathrm{X} ; \mathrm{Y}$ ). The difference between [...];[..] and [...];a can be explained in terms of the different semantic statuses of ' $Y$ ' in each case. An NP refers to some object, that (usually) has a location in space; it is thus natural that ';' in [...];a should indicate locational qualification. In contrast, a clause refers to an event, which is normally of limited temporal extension; and ';' in [...];[...] indicates predominantly temporal qualification. (The same sort of reasoning applies to X :Y. If Y is an NP then ' $:$ ' indicates a further participant drawn into the main event; whereas when Y is a clause ' $:$ ' indicates a logical-type connection between two distinct events.)
A main clause must be specified for mood/tense - see the discussion in $5 \cdot 5 \cdot \mathrm{I}$. Specifications of this sort are not available for subordinate clauses, which instead make a choice from the system ${ }^{+1-\mid \phi}$ (purposive/causal/ dative).

Subordinate clause type is, of course, shown by verbal inflection i.e.
(lix) $\ldots\left[\mathrm{X} \mathrm{V} \mathrm{V}^{+/-10} \ldots \Rightarrow \ldots\left[\mathrm{X} \mathrm{V}^{+/-/ \rho}\right] \ldots\right.$

The realisation rules are then straightforward:
( lx ) $\mathrm{M}\left(\mathrm{V}^{+}\right)=$purposive; $\mathrm{M}\left(\mathrm{V}^{-}\right)=$causal subordinate; $\mathrm{M}\left(\mathrm{V}^{\mathrm{p}}\right)=$ dative subordinate.

There are no syntactic restrictions on non-coreferential subordinate clauses. Subject to semantic plausibility, any core can occur following ';' in (lviii). A sentence involving a coreferential clause, on the other hand, must satisfy (cf. 4.4.1, 4.4.5, 4.5.3):
(lxi) coreferentiality constraint

In every configuration of the form [...]:[...] there must be $\mathbf{a}, \mathrm{b}$ such that $[(X)$ a $V](Y):[(Z)$ b W](T)
and $\operatorname{CR}(\mathrm{a}, \mathrm{b})$
All or part of $a$ and/or $b$ may then be deleted.
That is, there must be an NP that is in S or O surface function in the main clause, coreferential with an NP in S or O function in the subordinate clause. (lv) does not satisfy this constraint. The subordinate clause must be put into antipassive form (5.2.3):
(lxii) $[\text { yayu gali-n }]^{\mathrm{PRES}}:\left[\text { jayu baga- }{ }^{[x}\right]^{+}:$gangulA

This does satisfy (lxi). And, deleting the occurrence of gayu in the subordinate clause, the marking conventions yield ( $928-\mathrm{b}$ ).

We can now turn to the case marking on the O NP in an antipassive, when this is in a subordinate clause. In an antipassive main clause the O NP must take dative or locative inflection. But - as was mentioned above as proof of the syntactic connection between peripheral NPs and subordinate clauses - in a purposive/causal clause, purposive/causal case can be used in place of dative $\sim$ locative. Examples were given at ( $691-3$ ) in $4 \cdot 4.6$ and ( $730,732-5$ ) in 4.5.4.

The standard statement of antipassive - ( xxx ) in 5.2.3-must be augmented by
(lxiii) antipassive derivation in subordinate clause (optional)

$$
\mathrm{X}:[\mathrm{ab} \mathrm{~b}]^{+1-} \Rightarrow \mathrm{X}:\left[\mathrm{a} \mathrm{~V}^{\mathrm{x}}\right]^{+/-}: \mathrm{b}^{(+1-)}
$$

This indicates that if the subordinate clause is marked by ${ }^{+}$or - , a peripheral NP (extracted from the subordinate core by the antipassive derivation) can have the same marking. The superscripts to $b$ are placed in parentheses since the regular unmarked dative $\sim$ locative can still be used, as an alternative to purposive/causal.
Thus, applying the transformation (lxiii) to (lv) we obtain:
(1xiv) $[\text { nayu gali-n }]^{\mathrm{PRES}}:\left[\text { jayu baga- } \mathrm{l}^{\mathrm{x}}\right]^{+}:$gangulA ${ }^{+}$
which is realised as
(930) yayu galiy gangulagu baga:dina 〈= (928-b)〉
as an alternative to ( $928-\mathrm{b}$ ).
(lxiii) could be written in such a way that it applies equally to dative as well as to purposive and causal clauses. That is:
(lxiii) $\mathrm{X}:[\mathrm{abV}]^{+/-10} \Rightarrow \mathrm{X}:\left[\mathrm{a}^{\mathrm{x}}\right]^{+/-/ 0}: \mathrm{b}^{(+/-10)}$

In the unmarked dative case the two alternatives simply coincide ( $\mathrm{b}^{\infty}=\mathrm{b}$ ). Whether to write the rule in the maximally general way - applying to all types of subordinate clause - as in (lxiii)', or whether to restrict it to non-null applications, as in (lxiii), is a theoretical issue over which it is unnecessary to commit ourselves here.

No sentence has been encountered with all four types of peripheral component allowed by (lviii) - that is, peripheral syntactic NP, local NP , coreferential subordinate clause and non-coreferential subordinate clause. It is likely, though, that such a combination is potentially allowable (there is certainly no obvious restriction that we could impose). A sentence may have both + and - values of any NP category (but, generally, not both ${ }^{6}$ and ${ }^{+}$or ${ }^{-}$). This restriction appears not to apply in the case of subordinate clauses - (683) in $4 \cdot 4 \cdot 5$ involved both dative and causal coreferential subordinate clauses.

Although the extremes of 'syntactic' and 'local' relations are clear enough, there is a considerable middle ground in which it is not always possible to decide whether a relation of type ' $:$ ' or type ';' is involved. This fuzziness applies equally to peripheral $\mathrm{NP}_{\mathrm{s}}$, and to subordinate clauses. Thus in yayu galiy bulmba:gu 'I'm going to the camp', bulmba could be intended as an ad hoc place name (merely indicating the focus of movement) or as an indirect object ('I'm going to [build/clear/etc.] the camp'). (See 3.4.1 for the use of $-g u$ as an allative marker with nouns like bulmba.) Similarly, subordinate clauses can sometimes be amenable either to an NP-relative (i.e. ':'-type) or to a T-relative (';'-type) interpretation - 4.4.3.
5.3.2 'Lest' clauses. Most examples of 'lest' subordinate clauses (4.6) follow exactly the pattern of dative, purposive and causal subordinates. The majority of instances show an NP coreferential with the NP in the main clause; the few 'fear' examples that escape coreferentiality appear to have largely local impact - as ( $757-8$ ) in 4.6.2. This suggests extending the apprehensional marking ${ }^{\text {ap }}$ - adopted in 5.2.2 for 'fear' NPs - to cover both types of 'lest' clause. The full configurational pattern is now
(lxv) [a (b) V]:c $\mathrm{c}^{+1-10 / \mathrm{ap}}:[\mathrm{d}(\mathrm{e}) \mathrm{W}]^{+1-10 / \mathrm{ap}} ; \mathrm{f}^{+1-10} ;[\mathrm{g}(\mathrm{h}) \mathrm{U}]^{+1-\text { lo/ap }}$

The only assymetry is that ${ }^{\text {ap }}$ does not occur in the peripheral local category (' $;$ f $^{\prime}$ ).
Apprehensional ${ }^{\text {ap }}$ marks both NPs and subordinate clauses: it has a general sense of 'undesirableness' (something or some event that is likely to affect the status quo in some unwelcome way). Although
syntactically parallel to ${ }^{+1-\mid \phi}$, ap is thus semantically quite different from the 'to/from/at' system, involving as it does a value judgement of desirability (and carrying strong emotional overtones).
'Lest' clauses of the coreferential type insist that the common NP be in S or O function in the subordinate clause, but allow wider possibilities in the main clause. Corresponding to (lxi) we can formulate (lxvi) 'LEST' COREFERENTIALITY CONSTRAINT

In every configuration involving ...:[...] $]^{\text {ap }}$ there must be some $a, b$ such that $\ldots a \ldots:[(X) b V]^{a p}$ and $C R(a, b)$

Then all or part of $a$ and/or $b$ can be deleted.
Here ...a... indicates any NP in any part of the core or periphery preceding :[...] $]^{\text {ap }}$. The verb of the subordinate clause bears the 'lest' inflection $-n d i \sim-l d i \sim-r d i$, and then a case ending agreeing with the coreferential NP in the main clause ('a'). Thus
(lxvii) 'lest' Marking

If $\ldots \mathrm{a} . \ldots:[(\mathrm{X}) \mathrm{b} \text { V] }]^{\mathrm{ap}}$ and $\mathrm{CR}(\mathrm{a}, \mathrm{b})$
then $[(X) b V]^{a p} \rightarrow\left[(X) b V^{a p+M(a)}\right]$
We mentioned in 4.6.2 that 'lest' subordinate clauses are not common, and that the great majority of examples involve the coreferential NP in S/O function in main as well as in subordinate clauses. Examples where it was in ergative or dative case in the main clause (this inflection then going on to the 'lest' verb) have been encountered spontaneously, and it has been possible to elicit further instances involving these cases. The writer has not, however, been successful in eliciting any other case with 'lest' verbs. Note that ergative and dative are the only non-zero core case, and the 'unmarked' peripheral syntactic case respectively; we should expect them to be the most likely candidates for the marking of subordinate clauses.

There are a number of other common types of main-plus-subordinate combination. But they appear not to involve any significant generalisations and can simply be listed, as frequently-occurring construction types.

Thus, in 4.6.3 we mentioned that a coreferential 'lest' clause will often have a second coreferential NP - this will be in 'fear' function qua the main clause and will fill the A slot in the subordinate clause. That is:
(lxviii) [(X) a V]: bap : [c d W] ${ }^{\text {ap }}$ with $\operatorname{CR}(a, d)$ and also $\operatorname{CR}(b, c)$
Then c will frequently be deleted

Another sentence type that must simply be mentioned was described in 4.5.5. Here a purposive clause of the 'non-coreferential type' has O NP identical to a purposive NP in the main clause. 'That is:
(lxix) [(X) a V]: $\mathrm{b}^{+}$; [c d W] ${ }^{+}$
with $\operatorname{CR}(b, d)$
Then $d$ will frequently be deleted
These sentence-types illustrate the attraction that exists between NPs and clauses with the same 'value' from the system ${ }^{+/-/ \rho / a p}$. The synctactic nature of each individual association depends on the semantic nature of the relationships involved and on extralinguistic plausibility (see the discussion in 4.6.3).
5.3.3 'Embedded' versus 'adjoined' clauses. Many of the instances of dative and causal subordinate clauses correspond to 'relative clauses' in languages such as English - 'I hit the woman who was yawning', 'I went and saw the rock that had been split', and so on. Purposive subordinates, on the other hand, most often correspond semantically to complement clauses - 'I'm going to spear a wallaby', and so on. But these three types of clause in Yidin do seem to be syntactically parallel, and they demand to be treated and named in the same way.

The solution we have adopted is not to commit ourselves by names such as 'relative clause' or 'complement' (which might be apt for certain types but inappropriate for others) but simply to talk of dative, purposive and causal subordinate clauses. In terms of our syntactic symbolism a subordinate clause belongs in the periphery of a sentence and bears the same type of syntactic relation to the main core as does a peripheral NP in syntactic case.

In an important recent article Hale (1976b) has discussed the syntactic status of 'relative clauses' in a number of Australian languages (Hale's use of the term 'relative clause' corresponds roughly to 'subordinate clause' in the present discussion); it will be instructive to see how Hale's remarks and criteria apply to Yidin.

Hale distinguishes 'embedded' relative clauses - which are dominated by an NP node, as in (lxx) - from 'adjoined' relative clauses - which are directly related to the main clause $\Sigma$, as in (lxxi).
( lxx ) 'Embedded' clauses

(lxxi) 'adjoined' clauses


He believes that in Walbiri, for instance, relative clauses are entirely of the adjoined variety, whereas Kaititj could be said to have relative clauses that are adjoined at the level of deep structure but are - through the operation of an 'attraction rule' - embedded in surface structure. Hale suggests that Australian languages may originally have had just adjoined clauses and that the Kaititj attraction rule is a later historical development; he also considers it likely that the process may in some languages have gone further, so that relative clauses are now embedded in deep structure.
Hale indicates a number of criteria which can be used to distinguish the two kinds of relative clause:
(I) position. An embedded clause will often occur mid-way through the main clause, next to the main clause NP which it is qualifying. An adjoined clause, on the other hand, will normally be found on the margins of the sentence 'and it has been widely observed that, in languages which make extensive use of the adjoined relative, when the subordinate clause precedes the main clause, it is terminated with a characteristic falling-rising intonation and followed almost invariably by a pause; but when the main clause precedes the subordinate clause, the intonation over both clauses is more often falling, and the pause between them, if any, is brief' (Hale 1976b: 78).
(2) coreferentiality and case-marking. An embedded clause will always have some NP coreferential with an NP in the main clause (that is, with $\mathrm{NP}_{2}$ in (lxx)); but adjoined relatives may only sometimes feature a coreferential NP.

The verb of an embedded clause will often show ' case agreement' with the coreferential NP in the main clause; this is less likely to be the case for adjoined relative clauses.
(3) SEMANTIC INTERPRETATION. An embedded clause will normally 'make
more determinate or...supply additional information about an argument [NP] in the main clause' - Hale calls this the 'NP-relative interpretation'. But an adjoined clause may have an NP-relative and/or a T-relative interpretation, the latter specifying 'the temporal setting of the event depicted in the main clause, or [making] a subsidiary comment holding at the time specified in the main clause' (Hale 1976b: 79).

We can now see how the facts of Yidin, as set out in 4.4-6, satisfy these criteria:
(i) position. Hale's description of the placing of an adjoined relative clause exactly corresponds to the facts in Yidin. A subordinate clause never intervenes between main clause constituents. It is sometimes preposed, and then always constitutes a separate intonation group; it is most frequently postposed and then can fall into the main clause's ntonation group, or else form a distinct intonational unit of its own. (2) coreferentiality and case marking. $85 \%$ or so of subordinate clauses in Yidin do have an NP coreferential with some element of the main clause, and there is then a strict 'coreferentiality constraint'- the common NP mustbe in S/Ofunction in each clause. This would appear to favour an 'embedded' interpretation in these cases (but it would, presumably, still be appropriate to treat non-coreferential clauses as 'adjoined').

The question of case concord cannot be answered for Yidij. The coreferential NP must be in S or O function in the main clause, which is marked by absolutive case. If there were case marking on the subordinate verb, it would have zero realisation.
(3) semantic interpretation. All of the coreferential clauses can be given an NP-relative interpretation, but some can also be understood in a T-relative sense. Non-coreferential clauses, on the other hand, are all or almost all restricted to T-relative interpretation.

The evidence appears to be split almost equally between the 'embedded' and 'adjoined' alternatives. $85 \%$ of subordinate clauses behave syntactically and semantically according to the 'embedded' pattern (although there is a significant minority of $15 \%$ which do not). But the positioning of all subordinate clauses suggests an 'adjoined' interpretation. As with the choice between 'accusative' and 'ergative' deep structures, in 5.1.1-4, the data in Yidin appears pretty equally poised between these two, quite distinct, syntactic alternatives.

And extending our discussion to cover 'lest' clauses does not help to resolve things. 'Lest' clauses are mostly coreferential (but again, there is
a significant minority which are not) and they Do agree in case with a coreferential NP in the main clause - new evidence for 'embedded' status. But they must always be positioned on the margins of the sentence - in (751) of 4.6 .2 for instance duygandingu 'run-LEST-ERG' can NOT be placed next to the ergative A NP, before the main verb.

Plainly, we want to avoid making what would have to be a pretty arbitrary decision between representing subordinate clauses in Yidin according to (lxx) or to (lxxi). Note also Hale's (1976b: 86) remarks that while his discussion implies 'that the distinction between the NPrelative and T-relative interpretations is a discrete and clear-cut one... it is important not to accept this as an established fact'. Often a Yidin sentence could receive either interpretation, and sometimes it seems that there would in effect be no pragmatic difference - cf. $(66 \mathrm{I}-2)$ in $4 \cdot 4 \cdot 3$.

The necessity of making a choice between (lxx) and (lxxi) is one further argument against a tree-diagram approach to sentence structure. The requirement of maximal hierarchical structuring necessitates a subordinate $\Sigma$ being attached to NP, if there appear to be syntactic reasons for this. (Further, the implicit requirement that surface ordering should be inferrable from the order of elements in a tree structure necessitates a treatment like (lxx), in the case of a language such as English.)

The syntactic symbolism we have adopted limits itself to a minimal specification of hierarchical inclusion; and it attempts a representation simply of abstract syntactic relations between the components of a sentence, paying no attention at all to word ordering (which is held to be a surface realisational matter, on a level with the specification of allophony). We do not have forced upon us a choice between (lxx) and (lxxi). It is instead likely that every type of subordinate clause (certainly in every Australian language with which the writer is familiar, including Dyirbal, where relative clauses are - in terms of Hale's criteria - clearly of the embedded variety; see Dixon 1972: 99-105, $176-9,197^{6 a}: 3-6$ ) can be adequately represented by a configurational scheme similar to (lxv).

With the symbolism we are using every type of subordinate clause will be shown as an element on the periphery of the main clause. Languagespecific constraints will detail coreferential and other restrictions. The semantic commentary that must be provided for each grammar will explain the effect of relations like ' $:$ ' and ';' in specific instances. Marking conventions will assign inflections, deal with concord and
specify syntactically-significant ordering restrictions. Other types of word order preference will be described in later realisational statements.

There is in Yidin a certain 'fuzziness', with some clauses falling partway between the 'unambiguously NP-relative' and 'plainly T-relative' extremes. But this is treated simply as an alternation between ' $\because$ ' and ';' (rather than between tree structures of markedly different types) and is paralleled by a ' $\because$ '/';' fuzziness between some types of syntactic and local peripheral NPs.
Dixon (1972: 176-9, $156-60,112-13$ ) describes a number of types of subordinate clause in Dyirbal: (i) Imperfective and perfective 'relative clauses', whose S/O NP has to be coreferential with some NP in the main clause; the clause was treated as embedded onto this main clause NP node, the subordinate verb agreeing with the NP in case; (ii) 'Purposive' favourite constructions, which must have their S/O NP coreferential with the S/O NP of the main clause; these were treated as complements, attached directly to the main $\Sigma$ node; (iii) 'Lest' clauses - the syntax of these is not fully understood but it appears that they must have an S/O NP coreferential with some NP in the main clause; a verb in 'lest' inflection can be followed by (at least) the dative case inflection.
As these types of subordinate clause were described, in terms of traditional tree structures, they appear rather different from the subordinate clauses in Yidin. Yet, if we adopt for Dyirbal the configurational symbolism explained in 5.1.7, the differences appear minimal. In both languages - always or almost always in Dyirbal, and in six out of seven instances for Yidin - a subordinate clause must have its S/O NP coreferential with some NP, $X$, in the main clause. The functions allowed to X can be summarised:

| dyirbal |  | Yidin |  |
| :---: | :---: | :---: | :---: |
| TYPE OF subordinate clause | function of x In main Clause | TYPE OF subordinate clause | FUNCTION OF x IN main Clause |
| purposive | S/O | purposive | S/O |
| imperfective | any | dative | S/O |
| perfective | any | causal | S/O |
| 'lest' | any(?) | 'lest' | any |

It may even be that there is a (quasi-universal?) hierarchy involved here (similar to the hierarchy employed by Silverstein to account for the occurrence of ergative and accusative case marking-4.r.4) with Dyirbal and Yidin differing simply in where the division between ' $\mathrm{S} / \mathrm{O}$ ' and 'any' is drawn on this hierarchy. (Further work would be needed to check whether there is any
basis for this comment, which is here a fairly free speculation from the data of two languages.)

The differences between subordinate clauses in Yidin and Dyirbal are, then, differences of degree rather than of type. There are four kinds of subordinate clause in each language: purposive and 'lest' have apparently identical meanings but causal ('as a result of') differs substantially from 'perfective' ('which had happened earlier').

Although both Dyirbal and Yidin show 'preferences' of word order, sequence carries no syntactic load in either language, and deviations from the norm occur quite freely. In Dyirbal texts relative clauses occur about as often in the middle of the main clause - normally, immediately following the coreferential NP - and sentence-finally. Purposive clauses normally occur after the main clause but they can occur before it, or part-way through. Effectively, all possibilities are open in each case in Dyirbal (and there can be at best statistical justification for a division between embedded (imperfective and perfective) as against adjoined (purposive) types.) There is here a significant difference from Yidin, where subordinate clauses must precede or (more often) follow the main clause. But in each language all types of subordinate clause seem pretty comparable, in this as in other respects.

### 5.4 Comitatives and instrumentals

5.4.1 The dummy verb INV. Every sentence has an obligatory core, of type (viii) or (ix). In making this claim we are suggesting that every language classifies events into two types: those in which an action involves a single person or thing (as in The boy runs, The girl cries, The bough breaks) and those in which something is transmitted from one person or thing to another (as in The girl slaps the boy, The man hears the woman, The woman tells the man). But although a rough first division of events into single-argument and double-argument does appear to be a universal feature of human languages, this by no means satisfies all the special semantic demands of particular classes of verbs.

For instance, 'cry, sob, weep' is normally classified as intransitive that is, it involves a core of type (viii): [S V]. But in the majority of instances there will be a reason for someone crying (there need not, in the same way, be a reason for anyone coughing, or running, or even speaking). Typically, we might say 'the woman is crying over her husband' (he might be ill or unaccountably absent or unfaithful or whatever). Here there is the core [the woman cry] and in addition a relation joining 'the woman' and '(her) husband'.

Then there is a set of verbs that describe an actor affecting a patient
through the medium of some tool or weapon (The man hit the wallaby with a stick, or The girl swept the camp with a broom). Here the core will specify the two obligatory constituents - as in [the man the wallaby hit] but the instrument which, although it need not always be obligatorily specified in surface structure, is an integral component of the event, cannot be dealt with within the core. (Nor is it obviously covered by the peripheral relations we have recognised for Yidin.) We have, effectively, a further relation connecting 'the man' and 'a stick'.
There is a semantically natural class of 'affect' verbs which refer to actions that always require an instrument - see 4.2.5 (and also Dixon 1968: 331-45, 1971). But odd verbs from other semantic classes can also take an instrument - the examples given in 4.3.2 included look with one eye, feed with the breast and buy with money.

As a third example we can mention the case of some core (or peripheral) participant having someone or something with him, which will then necessarily be directly or indirectly involved in the event. Thus, say, The man went with the girl. Here, in addition to the core - [the man go]we have a relation between 'the man' and 'the girl'. (This type of comitative relationship can apply to almost any participant in any type of action.)

Fourthly, we can have a variant on the comitative. Rather than ' X does $V$ with $Y$ ', we could have ' X ensures that Y does V ': for instance The man gets the boy up (i.e. helps him into a standing position). The basic core description of this action is plainly [the boy get $u p$ ]; but we have also a second participant 'controlling' the actor in this event. There is an additional relation between 'the man' and 'the boy'.

The examples given have dealt with four quite different cases where the core/periphery configuration cannot fully specify all relevant aspects of an event. Yidin appears to treat these through a single syntactic device. We will say that in each case an additional core specification is invoked, with a dummy verb INV[olve]. The full configurations for our sample sentences are then:
(lxxii)
a. The woman cried for her husband - [the woman cry] and [the woman (her) husband INV]
b. The man hit the wallaby with a stick - [the man the wallaby hit $]$ and [the man a stick INV]
c. The man went with the girl-[the man go] and [the man the girl INV]
d. The man gets the boy up - [the boy get up] and [the man the boy INV]

Now Yidin does not have, on the surface, any 'purely relational' verbs, like English have, become, make (cause to do), be and do. Every item that can take verbal inflections has a fairly concrete reference to some actual event (we are here leaving aside the set of five adverbial modifiers 4.1.3). Corresponding to cases where languages like English employ relational verbs, Yidin - like most Australian languages - uses verbal or nominal derivational affixes, and so on. It is not surprising, in view of this typological characteristic, that INV cannot be realised as a distinct word in surface structure. But the language has a variety of means for syntactically exploiting the INV core, and thus ensuring some sort of morphological-syntactic record of this deep relation. These will be described in the next sections.
The major reason for our recognising INV in this range of uses is to explain the verbal derivational affix -ya-l ( $\sim$-maya-l) -4.3 . INV also serves to link together nominal comitative and verbal comitative constructions; verbal and nominal instrumental constructions; the dative sense of $-y a-l$ and intransitive sentences with a dative NP; and so on. In each case we have two sentences with the same meaning that demand to be related to a single underlying structure: this is achieved by use of INV.

We recognise six distinct subtypes of INV, corresponding exactly to the senses of $-\eta a-l$ dealt with in $4 \cdot 3 \cdot 3-7$. Each is marked by a superscript:

$$
\begin{array}{ll}
\text { INV }{ }^{\text {com }}=\text { 'comitative' } & \text { INV dat }=\text { 'dative' } \\
\text { INV }{ }^{\text {inst }}=\text { 'instrumental' } & \text { INV }{ }^{\text {loc }}=\text { 'locative' } \\
\text { INV }{ }^{\text {tear }}=\text { 'fear' } & \text { INV }
\end{array}
$$

The verbal interpretations are identical, but for INV ${ }^{\text {cont. }}$. Nominal realisations are, however, quite different for the two major 'comitative' and 'instrumental' senses, and here we must always be careful to specify the appropriate superscript.

We have not indicated the nature of the relationship between the 'lexical verb core' and the 'INV core' in (lxxii). Presumably we could employ one of the established syntactic means for linking cores - ',' or ' $\because$ ' or even ' $;$ '. Alternatively, we could invoke some new symbolism for an INV core. But while there is syntactic reason for recognising a transitive core containing INV inasmuch as this effectively serves to derive transitive from intransitive lexicalverb configurations - there is no strong reason for choosing any one of these three (or four) linking alternatives over the others. In each case a single
'blended' core is derived from the pair shown in (lxxii), or else the INV core is simply deleted. The coordinate and subordinate coreferentiality constraints do not apply per se to INV cores (it could of course be argued that INV incorporation and deletion PRECEDE the application of these constraints). It would not necessarily be wrong to employ ' $:$ ' or ',' (or ';'). But, mainly to avoid what would be an arbitrary and unmotivated decision between these, we prefer to use a new symbol, ' 8 ', to link lexical-verb and INV cores, in each line of (lxxii).
5.4.2 Verbal comitatives. In discussing an event like 'The man went out with the girl' we first recognised a regular intransitive core [the man $g o]^{\text {Past }}$, as in 'The man went'. But there is also a relation between 'the man' and 'the girl' and we used the dummy verb INV to represent this within a subsidiary core [the man the girl INV]. In terms of the syntactic symbolism we have been using for Yidin we thus have (reverting now to Yidin lexical forms):
(lxxiii) [waguda gali-n] ${ }^{\text {PAST }} \&[$ waguda yabur $U$ INV]

But INV, representing an abstract relation, cannot be realised as a surface verb in Yidin. There is in fact a syntactic derivation:
(lxxiv) INV incorporation

$$
[\mathrm{a} \mathrm{~V}]^{\mathrm{i}} \&[\mathrm{a} b \mathrm{INV}] \Rightarrow\left[\mathrm{a} b \mathrm{~V}^{\mathrm{INV}}\right]^{\mathrm{i}}
$$

where INV bears any superscript excepting cont
That is, from an intransitive core containing a lexical verb, $V$, and a transitive core involving INV - where the two cores have the same leftmost argument - is derived a transitive core based on the lexical verb. INV is realised as an affix, -ya-l $\sim$-mana-l (3.8.5) to this V. Note that only the lexical core is specified for tense/mood, here shown by ' $i$ ' - see 5.5.1.

Thus from (lxxiii), INV incorporation forms:
(lxxv) [waguda yabur $U$ gali- $\left.n^{\mathrm{INV}}\right]^{\text {PAST }}$
which is realised, by the marking conventions of 5.2.1, as:
(931) wagudaygu yabu:r galinalnu
man-ERG girl-ABS go-COMIT-PAST
The man went with the girl ( = The man took the girl)
We have thus explained the transitive nature of $-\eta a-l$ verbs through a transitive deep core involving the dummy verb INV. The important point to note about INV incorporation is that it demands that the
core containing the lexical verb be intransitive (that is, it must involve just one NP argument). If we have an underlying configuration:
(lxxvi) [ac V] $]^{i}$ [ab INV]
whether or not $\mathrm{c}=\mathrm{b}$, there is no mechanism for deriving a simple core with INV as affix to V. What we must do, in this case, is derive the antipassive form of the transitive lexical-verb core:
(lxxvii) [a $\left.\mathrm{V}^{x}\right]^{i}: c$ \& [a b INV]
and INV incorporation can then apply quite normally, giving (lxxviii) $\left[a b V^{x+1 N V}\right]^{1}: c$

This was exemplified in (618-19) of 4.3.8. From:
(lxxix) [bama yayu wawa-l] PAST $\&[$ bama wayal INV]
antipassive derives:
(lxxx) [bama wawa-lx] $]^{\mathrm{PAST}}:$ :yayu \& [bama wayal INV]
and then INV incorporation yields:
(lxxxi) [bama wayal wawa-l $\left.l^{\mathrm{x}+\mathrm{INV}}\right]^{\mathrm{PAST}} ;$ nayu
which is realised (with the verb being marked by derivational affixes -: $d i-n$, for ${ }^{\mathrm{x}}$, and $-\eta a-l$, for ${ }^{\mathrm{INv}}$ ):
(932) bama:l wayal yanda wawa:dina:l

The person with a boomerang saw me
' b ', in [ab INV], is in the critical syntactic function $O$, which acts as a pivot for nominal coordination and all types of subordination. INV incorporation brings ' $b$ ' into this pivotal position in the lexical-verb surface core [ab V ${ }^{\text {INv }}$ ]. Certainly one of the major reasons for a speaker to choose an underlying configuration like that on the left-hand side of (lxxiv), and then apply INV incorporation to it, is to place ' $b$ ' in a surface function where it can be the basis for coordination and subordination.
5.4.3 Instrumental sense of - $\boldsymbol{\eta}$ a-1. Similarly, there may be syntactic reasons for placing an instrumental NP into surface S/O function, so that it can be the pivot for operations of coordination or subordination, as in (58r) and (583) of 4.3.6 respectively.
An event such as 'the man hit the wallaby with a stick' has underlying representation:
(lxxxii) [waguda gangulA bunda-n] $]^{\text {PAST }} \&[$ [waguda dugi INV]

This is treated in exactly the same way as (lxxix). That is, the antipassive transformation acting on the lexical-verb core gives:
(lxxxiii) [waguda bunda- $\left.n^{\mathrm{x}}\right]^{\mathrm{PAST}}$ :gangulA \& [waguda dugi INV]
and INV incorporation now yields:
(lxxxiv) [waguda dugi bunda-n $\left.{ }^{\mathrm{x}+1 \mathrm{Nv}}\right]^{\text {PAST }}:$ gangulA
which is written out as:
(933) wagudaygu dugi bundaa:diva:l gangulanda man-ERG stick-ABS hit-:di $i$-COMIT-PAST wallaby-dat The man hit the wallaby with a stick
Thus, although (lxxxiii) is actually in terms of INV $^{\text {inst }}$, whereas (lxxiii) and (lxxx) contain INV com, the INV incorporation rule, (lxxiv), operates identically in each case, blending an intransitive and a transitive core together, and adding the form - $n a-l \sim-m a y a-l$ (as surface realisation of dummy verb INV) to the lexical verb as a derivational affix.
5.4.4 Minor senses of -na-1. We began the discussion of INV (in $5 \cdot 4.1$ ) with 'the woman is crying over her husband' (cf. 4.3.5). This can be rendered in Yidin by an intransitive sentence with peripheral dative:
(934) buya badiy muyga:nda
woman-ABS cry-PREs husband-DAT

Note that a causal NP could not be used to describe a woman crying out of worry for her husband. buna badiy muygam would imply that she is crying involuntarily because, say, the husband had hit her.

But 'husband' is here an intrinsic part of the event. While being undoubtedly less central than the core participant (here buna) an NP in dative case with a verb like badi-n is certainly more important than a run-of-the-mill dative, such as might be encountered with the majority of verbs e.g. that in:

## (935) buna ninay muyga:nda

The woman is sitting by [her] husband
It is presumably in view of the special status of dative with a verb of this type - part-way between a core and a peripheral element in its semantic cohesion with the other elements of the sentence, and in its deletability - that Yidin can, as an alternative to (934), represent the relation between bupa and mupga through an INV core. That is:
(lxxxv) [bupa badi-n] ${ }^{\text {PRES }} \&[$ bupa muyga $\operatorname{INV}]$

INV incorporation can apply to this configuration, yielding: (lxxxvi) [bupa muyga badi- $\left.n^{\text {INV }}\right]^{\text {PRES }}$ which is realised as (cf. (567) in 4.3.5):

$$
\begin{aligned}
& \text { (936) buya:y munga badi:yal } \\
& \text { woman-ERG husband-ABS cry-comit-PRES } \\
& \text { The woman is crying over [her] husband }\langle=(934)\rangle
\end{aligned}
$$

The subtype of INV occurring in (lxxxv-lxxxvi) is INV ${ }^{\text {dat }}$. Note that, whereas an INV ${ }^{\text {oom }}$ core can, it seems, co-occur with potentially any lexical verb, and INV ${ }^{\text {inst }}$ can occur with any of a largish set of verbs that describe an action which could be assisted by a tool or weapon or body-part etc., INV dat is restricted to a very small class of verbs - those that could be said (in their intransitive usage) to ReQuIre a dative or purposive NP. See 4.3.5.

The 'locative' and 'fear' senses of - $\eta a-l$ (4.3.4-5) are syntactically very similar to the 'dative' sense. INV ${ }^{100}$ can only occur with verbs of talking or singing; it relates together the actor and the language or speech/song-style he is employing. Thus, from
(lxxxvii) [ $\mu u n d u$ nayga:di $-n]^{\mathrm{IMP}} \&[$ nundu yidin INV]

INV incorporation derives:
(lxxxviii) $\left[n u n d u \text { yidin nayga:di- } n^{\mathrm{INV}}\right]^{\mathrm{IMP}}$
which the marking conventions realise as (cf. (559)):
(937) pundu yidin panga:diga You talk in Yidin!

The language or style used can alternatively be shown through a specialised use of the locative case, with an intransitive core, as in (cf. (558) in 4.3.4):
(938) nundu nayga:din yidi:nda 〈= (937)〉

A 'fear' NP can be added to a core involving any type of verb; it indicates that the action is performed to avoid undesirable contact with the referent of the NP. We can thus have mundu galin 'you go!' or jundu galin wagudayi: da 'you go for fear of [that] man!'. But there are two or three verbs of fearing (all intransitive) that mUST take an NP in 'fear' inflection e.g.
(939) buna manya:n wagudayi:da

The woman was frightened of the man

With a verb from this set, the necessary connection between actor and that which is feared can be rendered by an INV relation:
(lxxxix) [bupa manya-n] ${ }^{\text {PAST }} \&[$ buna waguda INV]
giving, by INV incorporation:
(xc) [buna waguda manya-n $\left.{ }^{\mathrm{INV}}\right]^{\text {PAST }}$
which is realised as:
(940) buna:y wagu:da manyayalpu 〈=(939)〉
'Fear', 'locative' and 'dative' senses of INV each co-occur with just a small set of verbs; these stand out from other verbs by virtually requiring a peripheral NP of the appropriate type, in their regular intransitive usage.
The configurations we have suggested might be taken to imply that we could, in (lxxxv) say, have muyga both as a peripheral constituent to [buna badi-n], and also as O element in the INV core. We would then get two occurrences of munga in (936), one in absolutive case and one in dative; similarly for the locative and fear types. Sentences of this nature are not possible in Yidin and could be disallowed simply by specifying that if an NP does occur twice in the surface structure of a single sentence (leaving aside subordinate and coordinated clauses) then the core occurrence takes precedence over (and causes the deletion of) a peripheral occurrence.
5.4.5 Nominal instrumentals. We suggested, in 5.4.3, that underlying an event involving 'a man' (waguda) as actor, 'a stick' (dugi) as instrument, 'a wallaby' (gangulA) as patient, and a 'hitting' action (bunda-n) were the two transitive cores:
(lxxxii) [waguda gangulA bunda-n] ${ }^{\text {PAST }} \&\left[\right.$ waguda dugi INV $\left.^{\text {inst }}\right]$

Since INV incorporation can only apply to an intransitive lexicalverb core and a transitive INV core we allowed antipassive to apply to the bunda-n clause. INV incorporation was then applied, producing a structure that was realised as
(933) wagudaygu dugi bunda:diya:l gangulanda
man-erg stick-abs hit-:di-comit-past wallaby-dat The man hit the wallaby with a stick
Now suppose that instead of applying the antipassive derivation to the bunda-n core in (lxxxii) we form the antipassive of the INV clause. That is:
(xci) $[\text { waguda gangulA bunda-n }]^{\text {PAST }} \&\left[\right.$ waguda $\left.\mathrm{INV}^{\text {inst }+\mathrm{x}}\right]: d u g i$

Marking conventions applied to (xci) would place the three NPs all in different cases - voaguda in ergative, gangulA in absolutive, and dugiqua its unmarked peripheral syntactic function - in locative or dative case (according to the hierarchy described in 4.I.8). But what of [waguda INV $^{\text {inst }+\mathrm{x}}$ ] ? Dummy verb INV ${ }^{\text {inst }}$ cannot remain as a separate word in surface structure, and the conditions for INV incorporation are plainly not met. The only possibility seems to be simply to delete INV ${ }^{\text {inst }}$. Let us say in fact that we delete the core involving INVinst :
(xcii) INV ${ }^{\text {inst }}$ core deletion

$$
[\mathrm{ab} V]^{i \mathrm{X}} \&[\mathrm{a} \text { INVinst+x}]: d \Rightarrow[a b \text { V }]^{1}: d \mathrm{X}
$$

This incorporates a 'condition' that the subject of the lexical verb be the same as the subject of INV. The peripheral NP of the erstwhile INV core is joined on to the lexical-verb core. We now have:
(xciii) [waguda gangulA bunda-n] ${ }^{\mathrm{PAST}}: d u g i$
which will be realised as:
(941) wagudaygu gangu:l bunda:n dugi:
man-ERG wallaby-ABS hit-PAST stick-INST 〈= (933)
This is in fact a typical transitive sentence involving an instrumental NP (4.3.2).

We have thus suggested that (941) - involving an instrumental NP and (933) - involving a -: $d i+\eta a-l$ instrumental construction - can both be derived from the same pair of underlying cores (lxxxii). These sentences do have the same basic meaning, and we should expect them to be related to the same deep structure. They differ in syntactic orientation: in (941) the 'patient NP' (gangulA) is in absolutive case and thus available as the pivot for operations of subordination and coordination, whereas in (933) the instrumental NP (dugi) has this role.

The different surface structures are the results of the varying syntactic operations applied. For (933) the lexical-verb core is antipassivised and INV incorporation then applied; for (94i) the INV core is antipassivised and INV ${ }^{\text {inst }}$ core deletion then applied.

The derivation of (941) provides an 'explanation' for the identity of instrumental and locative inflections. An instrumental NP is, here, simply the O NP in an antipassive, which has the unmarked peripheral syntactic function, realised by dative $\sim$ locative. In terms of the semantic hierarchy (4.I.8), locative is the predominant choice when the
reference is inanimate (as it must be in the case of an instrument) so it is entirely natural that an instrumental NP muSt be in locative case.

We cannot, however, dispense with 'instrumental function' and talk just of locative. As the realisation of a syntactic (as against a local) function, locative always alternates with dative. But dative could not be substituted for locative in (94I) (without radical change of meaning, that is). There is thus one additional nuance to the derivation of a transitive sentence with an instrumental NP, as in (941): where the unmarked peripheral syntactic functive originated within an INV ${ }^{\text {inst }}$ core, it can only bear locative - never dative - marking. This can be shown by marking the NP with a special feature, perhaps as part of the antipassive derivation (as we already have the special variety of antipassive for subordinate clauses, transferring the core ${ }^{+1-}$ marking to the extracted peripheral NP - 5.3.1):
(xciv) antipassive of INV ${ }^{\text {inst }}$ clause (optional)

$$
\mathrm{X}\left[\mathrm{ab} \text { INV }{ }^{\text {inst }}\right](\mathrm{Y}) \Rightarrow \mathrm{X}\left[\mathrm{a} \text { INV } V^{\text {inst+x }}\right]: \mathrm{a}^{\text {INV Vinst }}(\mathrm{Y})
$$

And the marking convention must specify:
(xxiv-d)' In $\mathrm{X}: \mathrm{a}^{\text {INvinst }}, \mathrm{M}(\mathrm{a})=$ locative(-allative-instrumental)
There is other evidence for instrumental as a separate case. The inanimate indefinite deictic has two distinct forms: instrumental waninda and locative wanda-3.7.2. (Note that the locative forms of deictics can only be used in local function-i.e. only as realisation of ' $; a$ ', not of ' $: a$ '.)
Dyirbal also has both 'nominal' and 'verbal' instrumental constructions. Here the instrumental inflection on an NP is identical in form with ergative case (rather than with locative); there is a simple verbal affix marking a construction in which the instrumental NP is in surface $O$ function (absolutive case) while the deep O NP is in dative case, -gu. For Dyirbal the writer put forward exactly the same two deep cores as for Yidin (but called the dummy verb INST rather than INV ${ }^{\text {inst }}$ - Dixon 1972: 188) and derived the two surface structures by regular operation of the established syntactic rules of Dyirbal.

In Dyirbal, as in Yidin, the 'instrumental NP' receives the marking appropriate to a deep O NP in an antipassive construction: in Dyirbal this is, in the unmarked case, ergative (quite different from Yidin's dative $\sim$ locative). Thus, if we attempted to generalise from the successful syntactic explanation of the form of 'instrumental inflection' in these two languages, it would be to say that instrumental is related to the surface marking of a deep O NP within an antipassive construction.
(It might be suggested that we could in Yidin simply say that an instrumental NP is the unmarked peripheral syntactic functive - i.e. ' $a$ ' in [b c V]:a. Note that this would not do for Dyirbal since there ergative cannot be used to mark a (non-derived) peripheral NP. And even if it could be justified syntactically, it would evade the semantic task, of relating together (933) and (941).)

It is difficult to check for other languages the hypothesis that 'an instrumental NP bears the case marking appropriate to a deep O NP in an antipassive construction' simply because, although morphological details are available for a fair number of Australian languages, very little in the way of adequate syntactic investigation has yet been attempted. But note that H. A. E. Meyer - an acute and insightful early linguist, whose description of the Encounter Bay language has not received the attention it deserves from modern workers - described a transformation of the antipassive type that substitutes nominative for the ergative inflection on a transitive subject, and ergative for the nominative inflection on the object NP (Meyer 1843: $3^{8-9}$ ). We would now expect instrumental to coincide with ergative, and this does seem to be the case (Taplin (1880: 8) quotes 'ergative' as having instrumental function, although the data here are not totally clear - locative may sometimes be used to denote an instrument (Meyer 1843: 15).)

But in fact, although we might expect our deep syntactic explanation of why instrumental coincides with ergative in Dyirbal and with locative in Yidin to hold for some other Australian languages, we should not anticipate its applying in every case. (Many Australian languages do have an 'antipassive' transformation, placing a deep A NP in surface $S$ function - often as a secondary sense of the 'reflexive' - but it is unlikely that they all possess this derivational process. And of course the 'antipassive' is an integral part of our Dyirbal/Yidin explanations.)
There is in Dyirbal (Dixon 1972: 196-8) strong evidence for positing two distinct cores to underlie a structure like (933) (and similarly for comitatives like ( 93 I )). Basically, a verbal affix -day indicates 'lots' of the referent of the deep S/O NP. If -day is placed between verb root and instrumental suffix it indicates 'many patients' (referring to the deep O of the lexical verb); if -day comes between the instrumental suffix and the final inflection it indicates 'many instruments' (referring now to the deep O of $\mathrm{INV}^{\text {inst }}$ ). There is no corresponding affix in Yidin, but the Dyirbal evidence is surely relevant here in view of the fact that applying the rather different syntactic rules of Yidin and Dyirbal to the same deep structures we get in each case the correct surface output (involving quite different case markings in the two languages).

Incidentally, we can note that structures like (lxxiii) and (lxxxii), and the structural description of (lxxiv), involve identification of S and A NPs, and could conceivably be taken as evidence for an 'accusative deep structure', in terms of the debate conducted in 5.1.1-4. In Dyirbal there is overwhelming
evidence from other areas of the syntax for an 'absolutive-ergative deep structure', and the S-A identification was (perhaps not altogether plausibly) 'explained' through a device for linking together topic-chains that identifies A with S/O (and carries verbal marking - $\boldsymbol{y} u r a$ ). See Dixon 1972: 184 -98.
5.4.6 Nominal comitatives. We can now return to nominal comitatives. It will be recalled that
(lxxiii) [waguda gali-n] ${ }^{\text {PAST }} \&\left[\right.$ waguda yabur $U$ INV $\left.{ }^{\text {com }}\right]$
was set up as the underlying structure from which, by INV INCORPORATION,
(931) wagudaygu yabu:r galinalyu The man went with the girl was derived.

Suppose that we now repeat the operations applied in the last section, and apply the antipassive derivation to the INV core in (lxxiii). This gives:

Here we transfer the feature 'INV'com' to yabur $U$, as we had to transfer 'INV ${ }^{\text {inst' }}$ in $5 \cdot 4.5$. Deleting the core containing INV'om would then yield:
(xcvi) [waguda gali-n] ${ }^{\text {PAST }}: y a b u r U^{\mathrm{INV} \text { com }}$

The sentence we are aiming at here - with the same meaning as (93I)is
(942) wagu:da gali:n yaburuyi
man-ABS go-PAST girl-COMIT-ABS $\langle=(931)\rangle$
This suggests a marking convention:
(xxiv-f) In X: $a^{\text {INVoom }}, M(a)=$ comitative
There is thus a radical difference between INVinst and INV ${ }^{\text {com }}$ as features to NPs. Whereas the former merely selects locative from the locative $\sim$ dative alternation, INV ${ }^{\text {com }}$ demands a quite new suffix nominal comitative $-d i \sim-y i$.
In 3.3 .4 we noted the formal similarity between nominal comitative $-d i \sim-y i$ and the verbal derivational affix -:di-n, and mentioned that a number of other Australian languages show formal similarity between these two affixes (see Dixon 1976a: 203-309). At our present stage of knowledge it remains an open question whether the similarity of form is coincidental, or is perhaps indicative of some as-yet-unperceived deep grammatical relationship.
'There is another, more significant, difference between the nominal constructions corresponding to 'inst' and 'com' varieties of INV. Whereas an INV ${ }^{\text {inst }}$ core must have its A NP coreferential to the A NP of the lexical-verb core, an INV ${ }^{\text {com }}$ core can have its A NP coreferential with any NP in the core or periphery of the main clause, and the comitative NP will then agree in case with that NP. Thus, from
(lxxix) [bama yayu wawa-l] ${ }^{\text {PAST }} \&[b a m a ~ w a y a l ~ I N V] ~$
is derived (cf. (512) in 4.3.1):
(943) yanan bama:l wawa:l wayaldingu

I-o person-ERG see-PAST boomerang-COMIT-ERG
The person with a boomerang saw me
whereas from
(xcvii) [yayu bama wawa-l] PAST \& [bama wayal INV]
is derived
(944) yayu bama wawa:l waya:ldi

I-sa person-abs see-PaSt boomerang-Comit-abs
I saw the person with a boomerang
Note here that comitative bears zero case marking when the coreferential NP in the main clause is in O or S function, ergative when it is in A function. With instrumental configurations like (lxxxii) the coreferential NP must be in A function in the main clause, and there is no case ending (beyond the 'instrumental' affix).

Similarly when the coreferential NP is in dative case in the main clause (cf. (57))
(xcviii) [yayu dana-n] ${ }^{\text {PAST }}$ :galya \& [galya miza INV ${ }^{\text {com }]}$
will yield:
(945) yayu dana:n galya:nda minayinda

I-sa stand-past uncle-dat meat-comit-dat
I stood [waiting] for uncle, who has meat (literally '...for uncle, with the meat')

We are now in a position to state the convention that puts an inflection on to a comitative (where ....... refers to any core or peripheral NP): (xcix) COMITATIVE NP MARKING CONVENTION

If there is some ' $a$ ' such that ...a... \& [b c INV $\left.{ }^{\text {com }}\right]$ and $C R(a, b)$, then $\ldots \mathrm{a} . . . \&[\mathrm{bc} \text { INV }]^{\mathrm{com}} \rightarrow \ldots \mathrm{a} . . . \&\left[\mathrm{bc}\right.$ INV $\left.{ }^{\mathrm{com}+\mathrm{M}(\mathrm{a})}\right]$

This marking is transferred to the comitative NP through an extension to the special case of antipassive, (xciv):
(xciv)' antipassive of inv ${ }^{\text {inst } / c o m+c}$ clauses (optional)
(Here ' $c$ ' indicates a case marking.) Then rule (xcii) can be extended to cover the deletion of a core containing INV ${ }^{\text {com }+x}$.

The other varieties of INV mentioned above have narrower possibilities of coreference. The A NPs of the two underlying cores must coincide, for INV ${ }^{\text {inst }}$ core deletion to apply and a sentence like (941) to result. For 'inst', 'dat', 'loc' and 'fear' (as for 'com') senses, INV incorporation will only apply if A of INV is coreferential with the S NP of the lexical-verb core. If INV cannot be incorporated as an affix, or deleted, through these transformations it will remain in surface structure, and an illicit string will result.

The main reason for our deriving a nominal comitative from an INV core was to provide a common deep origin for (931) and (942). Support for considering a nominal comitative to emanate from a separate clause, rather than being generated within an NP like any normal adjective, comes from its positioning in surface structure. A comitative, even though it agrees in case with an NP preceding the verb, will MOST OfTEN follow the main verb of the sentence - see the examples given in $3 \cdot 3 \cdot 4$ and 4.3.1 - just as will a subordinate clause. (But note that a comitative NP can be interposed within the main clause - as can a peripheral NP - whereas a subordinate clause cannot be.)
5.4.7 'Controlling' sense of -ŋa-1. Finally, INV ${ }^{\text {cont }}$ can be used to refer to an actor controlling the activity of some person or thing. Thus, for 'the man (waguda) gets up (intransitive wanga:di-n) the boy (wurgun)' we have underlying

## (c) $[\text { wurgun wayga:di-n] }]^{\text {PAST }} \&\left[\right.$ waguda wurgun INV $\left.{ }^{\text {eont }}\right]$

Incorporation takes the form, for INV ${ }^{\text {cont }}$ :
(ci) $[\mathrm{a} \mathrm{V}]^{\mathrm{i}} \&\left[\mathrm{~b}\right.$ a INV $\left.{ }^{\text {cont }}\right] \Rightarrow\left[\mathrm{b} \text { a } \mathrm{V}^{\text {INV }}{ }^{\text {cont }}\right]^{\mathrm{i}}$

This will derive, from (c) (cf. (585) in 4.3.7)
(946) wagudaygu wurgun wayga:dina:l The man got the boy up

The controlling sense of - $y a-l$ will be seen to be quite different from the other senses, for all of which INV incorporation takes the form shown in (lxxiv). We are using INV ${ }^{\text {cont }}$ - rather than some quite different dummy symbol -
simply because the morphological realisation is - $\eta a-l$. It may be that we should in fact recognise two homonymous -ya-l suffixes: (i) a verbal affix, covering 'com', 'inst', 'dat', 'loc' and 'fear' senses; and (ii) a suffix covering the 'controlling' sense of verbal $-\eta a-l$, and also the denominal verbaliser - $\eta a-l$ (5.4.8).

We can now go through the derivations of the $-: d i+\eta a-l$ forms of wadu-l 'cook, burn' (which selects a human A NP) and guba-n 'cook, burn' (demanding an A NP which refers to something actually burning) - see (610) and (614) in 4.3.7. For wadu-l, 'fire' is an instrument:
(cii) [yayu mina wadu-l] ${ }^{\mathrm{PAST}} \&\left[\right.$ [yayu buri INV ${ }^{\mathrm{inst}}$ ]

Applying antipassive to the lexical-verb core we get:
(ciii) $\left.[\eta a y u \text { wadu-l }]^{\mathrm{x}}\right]^{\text {PAST }}: m i n a$ \& [ $\eta a y u$ buri $\left.\mathrm{INV}^{\text {inst }}\right]$
to which INV incorporation applies, yielding
(civ) [yayu buri wadu-l $\left.{ }^{\mathrm{x}+\mathrm{INV}}\right]^{\mathrm{PAST}}:$ mina

That is $(=(6 \mathrm{r}))$
(947) yayu buұi wadu:diya:l mina:

I used the fire to cook the meat
With guba-n, on the other hand, we must employ INV ${ }^{\text {cont }}$ :
(cv) [bui X guba-n $]^{\mathrm{PAST}} \&\left[\eta a y u\right.$ buri $\left.\mathrm{INV}^{\mathrm{cont}}\right]: m i j a$

Now applying antipassive to the leftmost clause in (cv):
(cvi) $\left[b u{ }^{2} i g u b a-n^{\mathrm{x}}\right]^{\mathrm{PAST}}: \mathrm{X} \&\left[\eta a y u\right.$ buri INT $\left.{ }^{\mathrm{cont}}\right]: m i n a$

The unspecified NP, $X$, is now in peripheral position and may be deleted. INV incorporation, (ci), yields:
(cvii) [yayu buri guba- $\left.n^{\mathrm{x}+\mathrm{INV}}\right]^{\mathrm{PAST}}: m i n a$

That is $\left(=\left(61_{4}\right)\right)$
(948) yayu buri guba:diga:l mina:

I used the [light of] the burning fire to [look at] the meat
Note that mina in (947) originates as the deep O of wadu-l, whereas mina in (948) began as a peripheral NP to the INV ${ }^{\text {cont }}$ core. Although (947) and (948) appear to be syntactically parallel, and involve verbs that have very similar meanings, they in fact correspond to quite different deep structures - featuring different senses of INV - and have radically different meanings.

We have already indicated, in 4.3, the selectional restrictions on the various senses of -ya-l. These can best be dealt with by saying that a lexical verb of a certain type can co-occur with a core containing a certain variety of INV. The various types of mutual exclusion summarised in 4.3 .7 can be stated in the same way - INV ${ }^{\text {eont }}$ cannot normally occur with a verb that takes INV ${ }^{\text {dat }}$ or INV ${ }^{\mathrm{bc}}$, and so on. (Most of these are probably best regarded as 'preferences' rather than absolute exclusions. For instance, wanda $+\eta a-l$ has been encountered in the 'controlling' sense 'make fall down'; however, when elicitation was directed to this form only the comitative sense 'fall down with' was allowed (this is certainly the central and most frequent sense in texts, but it is not the only sense of wanda $+y a-l$ ).)
5.4.8 Transitive verbaliser. In 4.1.10 we gave examples of 'minor sentences' which involve no verb, and thus have no tense/mood specification. These consist of just a noun phrase - that is, a grouping of words as described under (b) in 5.1.6. In the case of sentences of this type there is no trace of the third type of grammatical process - putting a series of phrases together in certain syntactico-semantic relationships ((c) from 5.1.6). A minor sentence cannot refer to an activity, but instead describes some state or property of some thing. It will most frequently consist of a specific noun, commented on by a generic noun, or an adjective, or a genitive NP.

We can thus have a sentence with the configuration $B \neq C$, where $B$ will be a noun (with or without modifiers) and C a noun or adjective. \# represents a word boundary (it is further commented on in 5.6.1). A typical realisation is
(949) yiŋu bana gadu:l This water is dirty

Now a single-NP configuration of this type can occur with a core involving INV ${ }^{\text {cont }}$ :
(cviii) yiyu\#bana\#gadulA \& [yayu yivu\#bana INV $\left.{ }^{\text {cont }}\right]^{P A S T}$
and INV ${ }^{\text {cont }}$ can then be 'incorporated', as a verbalising suffix $-\eta a-l$ to the adjective, giving:
(cix) $\quad\left[\text { yayu yiyu \#bana gadulA }{ }^{\mathrm{IND}}\right]^{\text {PAST }}$
which would be realised as (cf. 4.8.1):
(950) yayu yiŋu bana gadulaya:l I made this water dirty

The general statement of INV ${ }^{\text {cont }}$ incorporation onto nominals is:
(cx) $B \neq C \&\left[a \operatorname{B~INV}{ }^{\text {cont }}\right]^{i} \Rightarrow\left[a^{1} \mathrm{C}^{\mathrm{INV}}\right]^{\mathrm{i}}$

Note the similarity between (cx) and (ci). In fact the causative denominal verbaliser and the controlling sense of verbal derivational affix -ya-l also have almost exactly the same semantic effects.

We have here introduced a third type of sentence nucleus, B \#C, consisting just of a number of words joined together in NP-type semantic relations (see 5.6.1). This occurs instead of a core of type (viii) or (ix).

We have not put forward $\mathrm{B} \# \mathrm{C}$ as a universal - on a par with (viii) and (ix) since it is by no means clear that this minimal configuration would have to be recognised for all languages. Certainly further work on a variety of languages (not constrained by any desire relentlessly to force all sentences into a 'verbal' pattern) is needed. But it is clear that for Yidin B\#C must be added to the configurational pattern summarised in (lxv); it can occur with peripheral NPs, with subordinate clauses and, as shown here, with INV cores. (The first sentence of 5.4. I should thus be amended accordingly.)
5.4.9 Intransitive verbaliser. The inchoative verbaliser -daga-n is the intransitive congener of causative $-y a-l$, and this is perhaps reason for setting up a similar underlying representation, with dummy verb INCHO. And then an INCHO incorporation rule:
(cxi) $\mathrm{B} \# \mathrm{C} \&[\mathrm{~B} \mathrm{INCHO}]^{\mathrm{i}} \Rightarrow\left[\mathrm{B} \mathrm{C}^{\mathrm{INCHO}}\right]^{\mathrm{i}}$

Thus, from underlying
(cxii) yivu\#bana\#gadulA \& [yivu\#bana INCHO] $]^{\text {Pres }}$
is derived
(cxiii) $\left[y i j u \# b a n a \text { gadul } A^{\mathrm{INCHO}}\right]^{\text {PRES }}$
which is realised as ( $=(794)$ in 4.8.1):
(951) yipu bana gadu:ldagay This water is getting dirty

However, INCHO cannot be supported by the same strength of syntactic evidence as can INV. Whereas INV can occur with a transitive or an intransitive core, or with $\mathrm{B} \# \mathrm{C}$, INCHO is restricted to occurrences with $\mathrm{B} \# \mathrm{C}$, as on the left-hand side of (cxi).

There are further uses of $-\eta a-l$ and - daga- $n$. These suffixes can form verbs from time qualifiers and from particles (5.5.4); and from locational qualifiers or nominals in local cases. For the latter we might appear at first sight to have a derivational process roughly as follows:

$$
\text { (cxiv) }[\mathrm{a} \mathrm{~V}]^{1} \mathrm{X} ; \mathrm{b}^{+/-10} \Rightarrow\left[\mathrm{a} \mathrm{~V} \# \mathrm{~b}^{+/-/ 0+\mathrm{Ischo}}\right]^{1} \mathrm{X}
$$

Thus, corresponding to:
(952) yayu galiy gaba.ymu I'm going away from the road there is $(=(805)$ in 4.8.1)
(953) yayu galiy gaba.ymudagay I've got off the road as I've gone along

But note that these two sentences do not have exactly the same meaning. (952) implies motion away from the road (maybe purposely breaking off passage along the road and setting off, say, at right-angles to it). (953), in contrast, implies that the subject 'became' off the road as he went along it e.g. he just wandered off it. This might cause us to reject (cxiv) and instead include an INCHO core after the local NP, incorporate INCHO as an affix, and then coordinate the two cores, something along the lines of:
(cxv) $[\mathrm{a} \mathrm{V}]^{1} ; \mathrm{b}^{+/-/ \mathrm{s}} \&[\mathrm{a} \mathrm{INCHO}] \Rightarrow$

$$
[\mathrm{a} \mathrm{~V}]^{1},\left[\mathrm{a} \mathrm{~b}^{+1-/ 0+\mathrm{inCHo}}\right] \Rightarrow\left[\mathrm{a} \mathrm{~V} \nexists \mathrm{~b}++^{1-/ \mathrm{la}+\mathrm{INCHO}}\right]^{1}
$$

And similarly for - $\eta a-l$.
Minor verbalising affixes -madi- $n$ and -luya-l are not well enough understood to justify any attempt at suggesting a 'deep' interpretation for them (the examples quoted in $4 \cdot 8.2-3$ constitute more than half the corpus for these suffixes!).

### 5.5 Sentence modification

5.5.1 Tense and mood. There are some similarities between locational and temporal qualifications. There is, for instance, semantic iconicity between the ternary locational system 'to/at/from a place' and the ternary temporal system 'until/at/since some time', and there are a number of languages which are like Yidin (3.4.1, 3.5) in having similar or identical inflections for the two series. The connection is sometimes made even more specific - thus in both Chinese and Dyirbal 'past' and 'future' time can be referred to by words for 'uphill' and 'downhill' respectively. And so on.

But the differences are perhaps more significant. Local specifications tend to blur into syntactic ones - it is sometimes not clear whether a particular form is to be given allative or purposive interpretation (or ablative or causal, and so on). We mentioned in 5.3.1 that yayu galiy bulmba:gu 'I'm going to the camp' could be referring to camp simply as a destination, or as an object with which the speaker is about to become involved. Indeed there are many languages which are like English in using a single formal device (preposition 'to') corresponding to the morphologically, syntactically and semantically distinct case endings allative and purposive in Yidin.

Time, on the other hand, is conceptually quite apart from local and syntactic peripheral elements. It is true that $-g u$ on to a time word in Yidin can have either temporal 'until' or purposive interpretation e.g. in (cf. (712) in 4.5.1)
(954) yayu yiwan budil yingu yiwa:ygu

I-SA small shelter-ABS put-PRES here-LOC winter-gu
yiza:ygu can have a nominal purposive meaning ' I 'll put the small shelter here FOR THE WINTER' or else a temporal sense ' I'll put the small shelter here until the winter'. These two readings are inconsistent one with the other: the first states that the shelter will be put up before winter begins and kept there during that season, whereas the second implies that the shelter will be removed at the onset of winter. There is ambiguity here but no fuzziness, as there was between allative and purposive.

There are two obvious alternatives for dealing with temporal information. We could establish an additional peripheral slot, or specify a 'temporal feature' attached to the sentence as a whole. The existence of temporal qualifiers as separate words (3.5) might be thought to favour the first alternative, while the fact that the main verb of a sentence inflects for tense (3.8.4) could be taken as evidence for the second.

There are, of course, other possible treatments. In fact most traditional grammars have treated sense as a semantic specification of the verb, just as a noun may be specified for number; here semantic relations are plainly being inferred from morphological structure. We prefer to follow Lyons (1968: 305), among others, in considering time/tense to be always essentially a qualification of the event referred to by the complete sentence.

The 'feature' alternative seems marginally more appropriate for Yidin. A tense/mood specification is obligatory for all sentences (other than the minor variety, which do not involve a core-4.r.10) and the tense/mood feature can thus conveniently be associated with the core. (There is considerable homogeneity amongst peripheral components, shown by the series of semantic similarities between syntactic $\mathrm{NP}_{\mathrm{s}} /$ local NPs/subordinate clauses - 5.2.2, 5.3.1 - and various mergings and fuzzy areas. As we have already shown, time qualification stands quite apart from this matrix.)

Every Yidin sentence (excepting the 'minimal' non-verbal variety 4.I.Io, 5.4.8) involves just one choice from the system of tense-mood
inflections: \{imperative, past, present(-future), purposive\}. The inflection goes on to every verb/adverb in the VC of the main clause.

A subordinate clause is specified for +1 -lo/ap instead of tense/mood. In the case of coordination we could either say that each clause must show identical tense/mood specification - as we did in (xl), (xli) and (xlix) - or else say that a tense/mood choice is made only once for any string of clauses conjoined by ',' (and show this on the first clause in sequence). With a verbal core and an INV core joined by ' $\&$ ' there is again just one overall tense/mood specification.

It is natural to suggest, in all these cases, that it is just the main core - which is written on the left in the sentence configuration (before any ' $\because$ ', ';', ',' or ' 8 ') - that involves a choice from the tense $/ \mathrm{mood}$ system. However, this would not cover configurations like (cviii) in 5.4 .8 which at the deepest level involve just a noun phrase joined to an INV core by \&. The derived sentence, (950), has a tense/mood inflection - whereas a sentence consisting just of an NP, as (949), would not have; this must presumably be associated with the INV core in (cviii).

We are thus led to:
(cxvi) Every sentence that involves a core, [...], makes one choice from the tense/mood system.

We can, rather arbitrarily, write this as a feature on the first core in deep structure - it will thus be on the V core in $[\mathrm{X} \mathrm{V}]^{i} \&[\mathrm{Y}$ INV] but on the INV core in $\mathrm{X} \&[\mathrm{Y} \text { INV }]^{i}$. The feature is realised on the verb of the leftmost core in surface structure:
(cxvii) $[\mathrm{X} \mathrm{V}]^{\mathrm{i}} \mathrm{Z} \Rightarrow\left[\mathrm{X} \mathrm{V} \mathrm{V}^{\mathrm{i}} \mathrm{Z}\right.$
where ' i ' is a choice from the system \{imperative, past, present, purposive\}
Turning now to the breakdown of the tense/mood system, we can first separate off the imperative:
(cxviii) - imperative - tense-purposive choice

An imperative sentence has limited selection of $S / A$, which can be freely deleted; and it takes a different negative particle from tensed sentences (4.9, 4.10).

Amongst the other three inflections, purposive stands out since it can occur on a subordinate as well as on a main clause (4.5.2-3). Allied to
this, we mentioned in 5.I.3 that purposive cannot occur on a series of coordinated clauses.

That is, if purposive occurs in a non-initial clause we interpret it as a subordinate marking - as in (726) from 4.5.3. It may be that we should also allow a sequence of conjoined clauses, all in purposive inflection, and recognize that it is on the surface impossible to tell apart the two types $[\ldots]^{\text {PURP }},[\ldots]^{\text {PURP }}$ and $[\ldots]^{\text {PURP }}:[\ldots]^{+}$.

Note that it is semantically plausible that, of the two marked inflections on subordinate clauses, only ${ }^{+}$should also appear on main clauses. One may say that someone needs to do something (without stating the reason) whereas it would scarcely be usual to state a cause without also mentioning the result.

Semantically, purposive is quite different from the two tenses. It indicates necessity or desirability whereas past tense merely refers to something that has already happened, and present(-future) to something already under way or predicted to occur (with no modal overtones).

We can thus organise the system from which each sentence having a core makes one obligatory choice:
(cxix) -imperative


In addition, if 'past' is chosen, a member of the subset of time qualifiers that has past time reference may optionally be added - guygam 'yesterday', girgan 'last year' or yurun $U$ 'a long time ago', and so on. If 'past' is not chosen then a member of the complementary set of nonpast qualifiers may be added to the sentence: garu 'by-and-by', yada 'tomorrow' and so on.
5.5.2 'Non-animate agent' and 'chance' senses of -:di-n. The somewhat bewildering array of uses of the verbal derivational affix -:di-n were surveyed in 4.2. Those senses which have syntactic effect antipassive and reflexive - were dealt with in 5.2.3-4. We can now consider uses of -:di- $n$ which do not change transitivity, and can only occur with a transitive verb - indicating that the agent of an 'affect' verb is non-animate (4.2.5), or that a certain result was obtained by chance (4.2.6).

For a single affix to indicate sometimes syntactic derivation and sometimes semantic modification is unusual, and something that it is not immediately obvious how to deal with in terms of a standard transformational model (for instance, Chomsky 1965). But -:di-n in Yidin is by no means unique. In Arabic, for instance, what is traditionally called the second derived form of the verb involves doubling the middle consonant of the root; it serves ( I ) to derive a transitive causative from an intransitive verb e.g. 'die' $\rightarrow$ 'kill', 'walk' $\rightarrow$ 'make walk', 'be glad' $\rightarrow$ 'gladden'; (2) to derive a ditransitive causative from a transitive verb e.g. 'understand' $\rightarrow$ 'explain', 'carry' $\rightarrow$ 'make carry'; (3) to intensify the meaning of a verb, indicating that something is done with great violence, or continued for a long time e.g. 'break' $\rightarrow$ 'smash', 'kill' $\rightarrow$ 'massacre'; (4) to supply an estimative meaning e.g. 'to lie' $\rightarrow$ 'to think one a liar'; (5) to form a denominative verb e.g. 'leather' $\rightarrow$ 'to bind', 'soldiers' $\rightarrow$ 'to levy troops' (Wise 1975: 45-54; Haywood and Nahmad 1962: 159-61). There is no similarity of detail with Yidin - sense ( I ) is in fact close to the 'controller' sense of verbal $-\eta a-l$, (5) to the causative verbaliser $-\eta a-l$, while (3) shows some similarities to the continuous sense of Yidin -:di-n. But this Arabic derivational process would pose similar problems for any grammatical description that attempted rigidly to separate syntactic from semantic considerations.

Now in 4.2.2 we suggested that the use of $-: d i-n$ could be explained in terms of various types of deviation from a transitive sentence 'norm'. The 'non-animate agent' and 'chance' senses were said to go against the requirement that the deep A NP have 'volitional control' over the action. This suggests establishing a feature system ' $\pm$ controlled' as follows:
(a) Verbs in the small set that demand inanimate subjects - e.g. guba-n 'burn, cook' (4.1.5) - cannot be marked for ' $\pm$ controlled'. All other transitive verbs can be, and the unmarked specification is ' + controlled'.
(b) If the A NP to an 'affect' verb (a well-defined semantic class, listed in the dictionary -4.2 .5 ) has non-animate reference, then the verb is marked ' - controlled'.
(c) A transitive verb can simply be directly marked ' - controlled' (corresponding to the 'chance' sense).
(d) A verb marked ' - controlled' bears the suffix -:di-n.

Note that a ' - controlled' verb cannot occur with imperative inflection (on semantic grounds, the idea of ordering an agent to do something, and an event which the agent does not control, are clearly incompatible). This is probably best stated as a feature co-occurrence
restriction - rather than building 'controlled' into the dependency tree (cxix) just after ' - imperative' - since control specification can apply to subordinate as well as to main clauses.

Our linking the 'inanimate agent' and 'chance' senses of -: $d i-n$ together through a specification ' - controlled' is not entirely happy. Whereas an affect verb with non-animate subject must as a rule receive -:di-n marking, this affix is only sometimes used to mark chance events, when there is some compelling reason to draw attention to the accidental nature of the activity (4.2.6).
5.5.3 'Continuous' sense of -:di-n. The fifth use of -: $d i-n$ is to mark a transitive or intransitive verb as referring to a 'continuous' action, that cannot be viewed as a whole by looking in either temporal direction from 'the present'. As with the 'chance' sense, $-: d i-n$ is not obligatory in this use and will only be employed when there is some special reason for drawing attention to the non-discrete nature of the activity.

There is, in fact, little that we can add here to the account in 4.2.7, 4.2.2. No obvious way of linking 'continuous' to the other senses of -:di-n presents itself. In a main clause the continuous suffix can be followed by imperative - as in (498), (501) - or present - as in (496) - or past inflection-as in (494). 'Continuous'-: $d i-n$ has not been encountered in a subordinate clause but this may simply be a gap in the writer's data; it would seem, on a priori grounds, to be possible in a dative subordinate clause (although perhaps not when followed by causal or purposive inflection).

We can simply allow for a verb to be specified '+ continuous' (' - continuous' being taken as the unmarked value). This choice is made independently of ' $\pm$ controlled', tense/mood or + --lo/ap values; but '-continuous' should perhaps be regarded as incompatible with + or ${ }^{-}$.

The syntax of ergative languages has been little studied (and still less understood). Nevertheless, it is possible to perceive some recurrent patterns. First, note that no language is known to be 'wholly ergative' (although there are many examples of 'fully accusative' languages). Even Dyirbal, which is recognised to have a clearly 'ergative syntax', has pronouns inflecting in a nominative-accusative pattern.

A common characteristic is for there to be an 'ergative' construction in past tense e.g. Tibetan (Regamey 1954: 370-3) or in perfective/aorist aspect e.g. Hindi (Allen 1950/1; Kachru 1965) and Georgian (Catford mimeo: 17;

Comrie 1973: 245), and a 'nominative' construction elsewhere. Thus for Georgian the case marking is:

|  | A | O |
| :--- | :--- | :--- |
| Aorist | ergative | nominative |
| Other | nominative | Dative-Accusative |

Here the non-aorist construction appears to be intransitive and to bear the same relation to the transitive 'ergative' construction as an antipassive does to the transitive 'ergative' construction in Yidin (and Dyirbal).

A plausible explanation of this split is suggested by Regamey (1954:373). For a completed or past action we can focus either on the agent or, as here, on the patient, and describe what has happened to it. But something that has not (yet) occurred can only be viewed with respect to the potentiality of the agent doing it - we can think of a particular person being liable to do an injury (to someone) but not normally, say, of a person being liable to be injured by someone or other. There is thus a semantic reason for having the agent as 'pivot' (in the unmarked case) for uninstantiated events, even though the patient may be pivot for attested events.
(In the North-West Caucasian languages there are two classes of 'semantically double-argument' verbs. The so-called 'transitive' class has ergative A and nominative $O$ NP, while the 'intransitive' class has nominative $A$ and ergative $O$ (pronominal prefixes to the verb are also in reverse sequence). It is worth noting that the 'transitive' class covers mostly verbs referring to some actual event (e.g. 'see', 'write') while members of the 'intransitive' class have potential meanings (e.g. 'look at', 'read') - Catford mimeo: 32-3.)

Yukulta, in north-west Queensland, provides a paradigm example of a tense/aspect-type split. Transitive verbs occur in two constructional patterns, with NP case markings:

|  | A | O |
| :--- | :--- | :--- |
| (i) | ERGATIVE | NOMINATIVE |
| (ii) | NOMINATIVE | DATIVE |

The normal Australian 'ergative' pattern, (i), applies to sentences describing actual past events or future intentions. (ii), which looks like a characteristic antipassive construction, is used in all other cases - with future irrealis (e.g. ' wishing') and past negatives (e.g. 'he didn't do it'). And (ii) must also be used when $A$ is third person and $O$ first or second person OR when $A$ is second person and $O$ first person dual or plural. See Keen 1972 and McConvell 1976.

Now Yidin has an ergative construction in all tenses and aspects; and an antipassive can be derived from it irrespective of time or perfectivity. But note that the antipassive marker $-: d i-n$ is also used to indicate that the agent does not control the action (with the ergative construction being retained); we have suggested that in languages like Georgian a nominative construction must be
used when a sentence simply describes some potential action of a possible controller, and that an ergative construction is used for completed events, where the factor of control is to an extent irrelevant.

Yidin -:di- $n$ is also used to mark a 'continuing' non-discrete action; this is reminiscent of the use of an ergative construction in Georgian (and Hindi) only for some completed event. And Catford (mimeo: 42) mentions that in the Caucasian Tsakhur the A NP - normally in ergative case - is placed in nominative when the verb is expressing a durative action (e.g. 'father is cutting firewood in the yard').

These semantic similarities - such as they are - may be coincidental. Or, on the other hand, they may be amenable to principled explanation in terms of an articulated semantico-syntactic theory of 'ergative constructions', which will hopefully be worked out at some time in the future.
5.5.4 Particles. Finally, there is the set of twenty 'particles' (4.10). These qualify the description of a complete event (rather than, say, specifying the meaning of a VC or an NP) and must be dealt with at the level of sentence syntax. They could be regarded as a special type of peripheral element (the inclusion of a particle is quite optional), or as a heterogeneous system of 'sentence features' (following our treatment of tense/mood).
There appears to be little syntactic or semantic reason for preferring one of these alternatives over the other. Note, however, that particles can occur with 'core-less' minimal sentences, whereas tense/time qualifiers can not. This might be taken as an argument against the 'feature' approach.

The semantic interpretation of particles is sometimes quite complex, often referring the complete event to some property of the $S$ or $A$ (e.g. ganaygar, babay, etc.) or of the O NP (e.g. wala); see 5.1.2. Other particles simply supply an aspectual-type comment on the event e.g. biya 'it didn't happen but it should or could have done'.
Particles and time qualifiers can be verbalised (4.10, 4.8.1); but, unlike the verbalisation of locational forms ( $5 \cdot 4.9$ ) no semantic difference is perceptible between sentences with verbalised and non-verbalised forms. Data on this topic are scanty, and any attempt at 'deep interpretation' would be premature.

### 5.6 Structure of phrases

5.6.1 Types of semantic relation. We now move on to a second type of grammatical process - (b) in 5.1.6, the grouping of words together to form 'phrases'. We first describe the semantico-syntactic structuring of
phrases, and then describe the relationship between phrases and the core and peripheral elements of the sentence configurations. Possessives are deferred until 5.6.2.

This level of syntax does not lend itself to explanatory generalisation in the way that investigation of sentence structure does. That is, there is at the phrase level nothing as syntactically interesting as the $3 \times 3$ matrix of peripheral syntactic $\mathrm{NP} /$ local NP/subordinate clauses dealt with in terms of $+1-1 s$, or the modification of the antipassive rules whereby subordinate clause marking ${ }^{+1-}$ is carried over to an extracted peripheral NP.

A phrase simply involves a head word, to which are adjoined specifiers of various types, that serve to delimit or qualify its meaning. But the relation between a head word (specific noun) and a generic noun, or an adjective, or a deictic, are of different semantic types, just as the relations between sentential core and locative NP, or 'lest' clause, or causal NP are semantically different. Just as we employed a syntactic symbolism which would draw attention to the various types of relation between the components of a sentence, so must we adopt an appropriate symbolism to represent the semantic relations which hold between the constituents of a phrase.

That is, we are suggesting that to provide, as the syntactic representation of an NP like yigu bama yabur $U$ galal 'this person girl big' a tree like:
(cxx)

or a labelled diagram like
(cxxi) ${ }_{\mathrm{NP}}[\text { yipu bama yabur } U \text { nalal }]_{\mathrm{NP}}$
(whether or not any hierarchical grouping is shown) is insufficient basis for a comprehensive account of the overall meaning of a sentence. Individual symbols for each type of inter-phrasal relationship will not be likely to be the basis for any syntactic generalisations or explanations, but they are necessary if our symbolic representation of a sentence is to provide an adequate representation of semantic (rather than solely syntactic) structuring.

## STRUCTURE OF NOUN PHRASES

A noun phrase in Yidin (4.I.1) will normally have as head a specific noun, B (i.e. any noun that is not a member of the set of about twenty generic terms listed in 6.2.1). This can contract the following semantic relations:
(a) With a generic noun C - represented by '/' i.e. $\mathrm{C} / \mathrm{B}$ (' B is a C ' or ' C includes B '). There are, as will be illustrated in 6.2.1, two kinds of generic - those based on the 'nature' of an object (e.g. 'a girl is a person', 'a yellow walnut is a tree') and those based on its 'use' (e.g. 'a possum is edible flesh food', 'a yellow walnut is edible non-flesh food'). '/' can be used for either type of relation, but if it is desired to be more specific we can employ:
// for 'nature' generics e.g. bama|/yabur $U$, 'person'//'girl'
$\nrightarrow$ for 'use' generics e.g. mina $\neq$ gadar $A$, 'edible flesh food' $f$ 'possum'
An NP can involve at most two generics, either two 'nature' terms
$\mathrm{D} / / \mathrm{C} / / \mathrm{B}$ ' B is by nature a C , and C is by nature a D ' e.g. bama//buna// yabur $U$, 'person'//' woman'//'girl'
or a 'nature' and a 'use' specification:
$\mathrm{D} \neq \mathrm{C} / / \mathrm{B}$ ' B is by nature C , and B is by use a D ' e.g. mayi $\neq$ dugi//gangi, 'edible non-flesh food' $f$ 'tree'//' yellow walnut'
(b) With an adjective (including numerals) or a logical-type modifier, C - represented by ' $\leftarrow$ ' i.e. $\mathrm{B} \leftarrow \mathrm{C}$. For instance bama yabur $U$ galal 'person girl big' would be bama|/yabur $U \leftarrow$ yalal; and wira gala guran dambulA 'moveable-thing spear long two' would be wira $\neq$ gala $\leftarrow$ guran $\leftarrow$ dambulA.
(c) With an (inalienably possessed) 'part' noun (4.1.1, 4.7.3), C represented by ' r ' i.e. $\mathrm{B} \mid \overline{\mathrm{C}}$. Thus mina gadar $A$ bina 'edible-flesh-food possum ear' is mina $f$ gadar $A \mid \overline{b i n a}$.
(d) With a deictic, C - represented by ' $\{\ldots\}$ ' where the braces would normally enclose the whole of the rest of the NP i.e. C\{X B Y\}. For example yigu bama yabur $U$ yalal would be yigu \{bama//yabur $U \leftarrow$ nalal\}.

A pronoun or proper name, C, may make up a complete NP, or occur with any of the constituents listed above. One way of dealing with this suggested in 4.I.2 - is to say that we here have two NPs in apposition, making up a 'compound' phrase which will correspond to a single
element of sentence configuration. This can be shown by ' $\leftrightarrow$ ' i.e. C $\leftrightarrow$ XBY. For example, yiju bama buna bindam' this person woman Bindam' - in (320) of 4.1.2 - will be symbolised as bindam $\leftrightarrow$ yipu\{bamal/buna//\}.

A noun phrase in Yidin may involve any selection from these constituents (4.I.I-2). None is obligatory; although a specific noun occurs in the majority of NPs, there are plenty of examples involving just a generic noun, or just a deictic, or even just an adjective; and so on. However, from the point of view of semantic structure it is most straightforward to take the 'specific noun slot' as pivot, and when it is not specified simply leave a gap in the pattern, as in the example at the end of the last paragraph, or in yuyu mina gadil 'that edible-flesh-food small' i.e. $y$ uivu $\{$ mina $\neq \leftarrow$ gadil $\}$.

As with sentence structure, we are here interested in representing abstract semantic relations, and can adopt any arbitrary convention for the ordering of elements. Since all else is equal, we follow the preferred surface structure ordering where known (4.I.I, 4.1.2) i.e.
(cxxii) $\mathrm{C} \leftrightarrow \mathrm{D}\{\mathrm{E} / / \mathrm{F} \not \subset \mathrm{B} \mid \overline{\mathrm{G}} \leftarrow \mathrm{H}\}$
and, to facilitate comparison of noun phrase structures, we should always state the elements in this order, irrespective of the details of surface structure sequence in any given case. (Note that we gave bindam $\leftrightarrow y$ yiju \{bama $/ / b u n a / /\}$ for yiju bama buna bindam since a proper name or pronoun appears (on the slight data available) more often to precede than to follow the apposed NP.)
relation between noun phrases and positions in sentence structure
A noun phrase can fill the following configurational positions:
(I) non-final element in any core i.e. ' $a$ ' such that $[(\mathrm{X}) a(Y)] V$
(2) syntactic peripheral element i.e. ' $a^{\prime}$ such that $\mathrm{X}: \mathrm{a}^{+/-/ 0 / \mathrm{ap}}(\mathrm{Y})$
(3) local peripheral element i.e. ' $a$ ' such that $\mathrm{X} ; \mathrm{a}^{+i-10}(\mathrm{Y})$

Exactly the same possibilities for NP expansion apply to (1) and (2). The structure that was indicated in (cxxii) is appropriate here (taking account of the fact that the two generics can both be of the 'nature' type, and that there can be more than one adjective). We could conceivably get a pronoun and a personal or place name in addition to the nominal components.

A local noun phrase, filling position (3), has slightly different possibilities. A locational qualifier can be included (whereas it cannot occur in
a core or peripheral syntactic NP). We use '.' to indicate the relationship between this and the head noun i.e. C.B (a locational qualifier most often precedes a nominal in local inflection). Thus dabu:lda yara 'beach-LOC south(-LOC)' in (123) is represented as yala.dabul.
When a specific-noun-plus-part-noun combination occurs in the periphery, its components receive dative and locative inflections respectively, indicating that it must be a syntactic element (the alternative is for both nouns to be in dative case, an even surer indication of syntactic status - 4.r.8). In view of this we could perhaps tentatively exclude (inalienably possessed) 'part' nouns from the local slot.

This yields the following possibilities for a local NP, (3):
(cxxiii) $\mathrm{C} \leftrightarrow \mathrm{D}\{\mathrm{J} . \mathrm{E} / / \mathrm{F} \not \subset \mathrm{B} \leftarrow \mathrm{H}\}$

There is one further difference. Whereas ' C ' in (cxxii) covers pronoun and both personal and place names, ' C ' in (cxxiii) is restricted to place names. Proper nouns and pronouns (the latter not having any locational forms) can only occur on the periphery in syntactic function.

## VERB COMPLEXES

The verb complex in an underlying core has very much simpler structure than an NP. It involves a head verb, B, and one (or, conceivably, more) adverbs, C. Adverbs provide the same type of semantic modification for verbs as adjectives do for nouns - compare waguda gida 'man quick' and gida-n gunda-l'do-quickly cut'. We can thus use the same symbol i.e. $\mathrm{C} \rightarrow \mathrm{B}$. (Adverbs seem to prefer a position before the verb, while adjectives most often follow a noun; in each case we write the head of the arrow pointing towards the head of the phrase.)

Verbs and adverbs (V) are strictly subcategorised into two classes transitive (Vtr) and intransitive (Vintr). Vtr correspond to the final slot in a ternary deep core - [abV], while Vintr are restricted to binary cores - [a V].
Antipassive and INV incorporation can of course derive a surface verb of different transitivity. And, as was mentioned in 4.3.3, - $n a-l$ can sometimes be added to an intransitive verb simply to make it agree in transitivity with another verb which is to occur in the same VC. (Note that (553) in 4.3.3 involves two verbs - not a verb and an adverb; we suggested in 5.2.6 that a diverbal VC should arise from sentence coordination. This considerably complicates the treatment of syntactically-motivated - $\eta a-l$. ) This type of - $n a-l$ does Not satisfy any of the semantic conditions outlined in 5.4 ; it appears to be no more than a syntactic convenience.
\# is used as a general symbol to indicate any of the types of relation between words listed above (that is, it effectively functions just as a
 thus special cases of \#.

We noted in 4.1.Io and 5.4 .8 the existence of a class of sentences in Yidin which involve no verb. They have the structure of an NP, with the head noun being 'commented on' by the other constituents. These 'nominal sentences' can take peripheral NPs and even subordinate clauses, just like intransitive and transitive cores.

There is no justification, in terms of the grammar of Yidin, for recognising an 'underlying verb', which is then 'deleted'. Instead, we simply allow for a third type of sentence nucleus (a core-like NP): $B \# C$, where $B$ is a noun. (The 'comment' may in fact precede or follow the head in terms of (cxxii); for the purposes of rules (cx) and (cxi) we assume that B is the head noun.)

Cores involving INV and INCHO can be adjoined to $\mathrm{B} \# \mathrm{C}$, and a verb formed from C by the incorporation of INV or INCHO as an affix - 5.4.8-9.

An important difference between a sentence consisting just of a corelike NP and one involving also an INV core is that the latter involves tense/mood specification. Thus
(955) yiŋu bama yalal This person is big
describes a (permanent) state. But the tensed inchoative
(956) yiyu bama yalaldaga:n This person has become big
refers to an activity, with a previous state, a process of change, and a new state.

The syntactic representation of (955) differs in one important way from the structure of, say:
(957) yivu bama yalal gaday This big person is coming

In (957) yigu qualifies bama $\leftarrow$ yalal i.e.
(cxxiv) $[y i y u\{b a m a \leftarrow$ yalal $\}$ gada-n] PRES
whereas in (955) yiyu qualifies just bama, and yalal is then the comment (providing the 'new information' of the clause). Thus the configuration appropriate to (955) is
(cxxv) yiyu\{bama $\} \leftarrow$ yalal

The semantic difference between (955) and (956) is perfectly brought out by the representations (cxxv) and (cxxvi) $\left[y i \eta u\{b a m a\} \text { balal }{ }^{\mathrm{INCHO}}\right]^{\text {PAST }}$
respectively. (It would be obscured if the underlying structure of (955) were made to involve a verb.)

The difference in semantic organisation between (955) and the NP in (957) cannot adequately be shown in a normal 'tree structure' treatment. (955) plainly is just an NP with yalal being in the same relationship to \{yipu\} bama as it is to bama in (957). A tree statement might take galal in (955) to be a 'deep verb' (i.e. promoting what is a difference in relationships between phrase components to be a relation between sentence components) but there are strong arguments against this position - for instance, it is impossible to have tense or any temporal qualifier in (955). Or else, if (955) were recognised as just an NP it might be assigned the 'same structure' as the NP in (957), which again is clearly missing a semantic trick (for an example of this treatment see Dixon 1972: 205-8).
5.6.2 Possessives. In chapter 3 we mentioned that comitative and genitive nouns behave like adjectives - that is, they normally co-occur with a noun for which they provide semantic modification and with which they agree in case inflection. An NP can contain all three types of modifier:
(958) yadin yaba guran gali:n gudagayi

I-gen-abs brother-abs tall-abs go-past dog-comit-abs
My tall brother went with a dog
(959) yadinuygu yaba:y gura:ndu dada

I-GEN-ERG brother-ERG tall-ERG child-abs
dimba:n gudagayi:y
carry on shoulder-PAST dog-COMIT-ERG
My tall brother, who was accompanied by a dog, carried the child on his shoulder

We have not, however, provided similar deep treatment for the two members of this set that have so far been discussed - comitatives and (simple, underived) adjectives. Partly to explain the paraphrase relation that exists between nominal and verbal comitatives, we introduced a core with the dummy verb INV, and then a series of syntactic rules and conventions (5.4). Adjectives, on the other hand, were not related to
sentence structure: the relation of an adjective to its head noun appears to be appropriately described at the level of phrase structure (and facilitates an explanation of the contrast between nominal sentences like (955) and verbal constructions similar to (956)).

If $-d i$ forms are derived from a subordinate clause, then the same origin should presumably be adopted for -muday comitatives. But what then of privatives, based on -gimbal, and of the various other nominal derivational affixes (3.3.6) ? Where to draw the line here is an important grammatical question, but one which the writer does not feel competent to pursue further in the present context.

Adjectives and comitatives do show different ordering preferences. An adjective most frequently comes immediately after the head noun, whereas a comitative will habitually follow the main verb (in the typical position of a subordinate clause, which we suggest as its syntactic origin!). Possessives are different again-a genitive NP normally PRECEDES the head noun it is modifying. (It must be clearly noted that these are only ordering PREFERENCES; in fact each of the three modifiers has been found in all of these positions - 4.r.I.)

Genitive marks a complete NP, as it were embedded within the possessed NP (4.I.r, 4.7.1). This might be taken to suggest an underlying core with a dummy verb 'possess'. That is, for (958):
(cxxvii) $[y a b a \leftarrow \text { guran gali-n] }]^{\text {PAST }} \&[$ [yayu yaba POSS] $\&$
[yaba gudaga INV $\left.^{\text {com }}\right]$
We would have to specify that the O NP of the POSS core must be coreferential with some other NP, and then supply a rule putting genitive marking on to the A NP of the POSS core, plus a case agreeing with that on the coreferential NP in the main clause; finally POSS would have to be deleted.

But this syntactic apparatus would be quite ad hoc and unmotivated. Whereas INV served to explain and relate together a variety of nominal and verbal constructions, a dummy verb POSS would serve merely to complicate the syntax of Yidin. It would not add any measure of explanation or simplification to the grammar as a whole.
There are substantial reasons for deriving possessives in Dyirbal as special cases of relative clauses involving a dummy verb POSS (Dixon 1972: 176-84). This does not carry over to Yidij and constitutes a major grammatical difference between the two languages.

Since there is no syntactic reason to proceed otherwise, we treat possession as a semantic relation between elements of a phrase. The only point of note is that the possessor can itself be an NP. We use ' $\rfloor$ ' to indicate this relation i.e. ' $\mathrm{C} \mid \mathrm{B}$ ' ' C possesses B '. For example, yipu wuru yingu:n gala:n 'this handle belongs to this spear' - from (180) in 3.7.2 - would be yiju \{gala\}| yipu \{wuru\}. For inalienable possession either a genitive construction (' $ل$ ') or simple apposition (' $\ulcorner$ ') can be employed, the choice being determined by the hierarchy described in 4.7.3. Thus, a paraphrase of yipu wuru yingu:n gala. $n$ could be yiju gala wuru i.e. yipu $\{$ gala $\} \mid$ wuru. (And note that whereas ' C ' in $\mathrm{C} \mid \mathrm{B}$ can be a complete NP, with its own deictic, adjectival etc. modifiers, C in $\mathrm{B} \mid \overline{\mathrm{C}}$ is a single noun.)

Finally, the notation suggested for relationships between components of phrases can be exemplified by the underlying configuration for a reasonably complicated sentence:
(960) mina:y ganarangu yala:ldu yadin bama edible animal-erg alligator-ERG big-ERG I-GEN-ABS person-abs buna voagal bala bada:l dira: gura:nda woman-ABS wife-ABS shin-ABS bite-PAST teeth-INST long-INST A big alligator bit my wife's shin with his long teeth
This is:
(cxxviii) $[\text { mina } \neq \text { ganar } A \leftarrow-\text { galal yayu|bama } / \mid \text { buna } \mid / \text { wagal } \mid \overline{b a l a} \text { bada-ll }]^{\text {PAST }}$ $\&\left[\right.$ mina + ganar $A \leftarrow \overline{\text { aalal }}$ dira $\leftarrow$ guran INV $\left.^{\text {inst }}\right]$

### 5.7 Summary

We can now usefully summarise the sentence configurations, and the derivations, constraints and marking conventions that have been introduced throughout the chapter. Phrase structure possibilities were stated quite fully in 5.6 and there would be no advantage in repeating them here.
configurations
The basic sentence configuration for Yidin is:
( $\alpha$ ) $[\mathrm{a}(\mathrm{b}) \mathrm{V}]^{\mathrm{i}}: \mathrm{c}^{+1-10 / \mathrm{ap}} ; \mathrm{d}^{+1-l \mathrm{o}}:[\mathrm{e}(\mathrm{f}) \mathrm{W}]^{+1-10 / \mathrm{ap}} ;[\mathrm{g}(\mathrm{h}) \mathrm{U}]^{+1-10 / \mathrm{ap}}$

$$
[\mathrm{pp} .408,410,418,419,42 \mathrm{I}]
$$

Here $\mathrm{a}, \mathrm{b}, \mathrm{c}, \ldots$ refer to elements corresponding to noun phrases, and $\mathrm{V}, \mathrm{W}, \mathrm{U}$ to elements corresponding to verb complexes.

The leftmost [...] is called the main core; other cores are referred to as subordinate. The main core is obligatory; all other elements including subordinate cores - are referred to as PERIPHERAL and are optional.
i represents a choice from the system \{imperative, purposive, present, future $\}$. In addition, the verb in any core can be specified ' - controlled' (5.5.2) and/or ' + continuous' (5.5.3).

To a deep structure configuration ( $\alpha$ ) can be added a transitive core with INV, giving:

## $(\beta)(\alpha) \&\left[j k N^{u}\right]$

[pp. 429-31]
where $\mathbf{u}=$ 'com', 'loc', 'dat', 'fear', 'inst' or 'cont'. However, a surface structure configuration cannot involve INV as an element in a core (although it may occur as a feature to a verb).

A sentence may involve any number of conjoined $(\beta)$ 's, separated by ','.
There is one variation on the basic configuration. $\mathrm{B} \nRightarrow \mathrm{C}$ may be substituted for the main core in ( $\alpha$ ); peripheral and INV possibilities remain unchanged, but in this case an INV core will carry a tense/mood choice ${ }^{i}$. Here B represents a noun (with or without modifiers) and C any noun or adjective.

A core $\mathrm{B} \neq \mathrm{C}$ can also be joined by \& to $\left[\mathrm{j}\right.$ INCHO] ${ }^{\mathrm{i}}$.

## DERIVATIONS

$(\gamma)$ ANTIPASSIVE (optional)
$[\mathrm{abV}] \Rightarrow[\mathrm{a} \mathrm{V}]: b$
[p. 41 I]
$(\gamma)^{\prime}$ antipassive in subordinate clause (optional)
$\mathrm{X}:[\mathrm{a} \mathrm{b} \mathrm{V}]^{+1-} \Rightarrow \mathrm{X}:\left[\mathrm{a} \mathrm{V}^{\mathrm{x}}\right]^{+1-}: \mathrm{b}^{(+1-)}$
[p. 420]
$(\gamma)^{\prime \prime}$ antipassive of inv ${ }^{\text {inst/com+c }}$ clauses (optional)
$\mathrm{X}[\mathrm{ab}$ INV inst/com +c$](\mathrm{Y}) \Rightarrow \mathrm{X}\left[\mathrm{a} \mathrm{INV}^{\text {inst }+\mathrm{x} / \mathrm{com}+\mathrm{x}+\mathrm{c}]}\right]: \mathrm{b}^{\text {INVinst/com }+\mathrm{c}}(\mathrm{Y})$
[pp. 437, 44r]
( $\delta$ ) REFLEXIVE (obligatory)
$[\mathrm{a} \mathrm{a} \mathrm{V}] \Rightarrow\left[\mathrm{a} \mathrm{V}^{\mathrm{x}}\right]$
[p. 412]
( $\epsilon$ ) INV INCORPORATION
(i) if $u \neq$ 'cont'
$[\mathrm{a} \mathrm{V}]^{i} \&\left[\mathrm{a}\right.$ b INV $\left.{ }^{\mathrm{u}}\right] \Rightarrow\left[\mathrm{ab} \mathrm{V}^{\mathrm{INV}}\right] \mathrm{i}$
[p. 43 ${ }^{\text {I }}$
(ii) if $\mathbf{u}=$ 'cont'
$[\mathrm{a} \mathrm{V}]^{\mathrm{i}} \&\left[\mathrm{~b}\right.$ a INV $\left.{ }^{\mathrm{u}}\right] \Rightarrow[\mathrm{b} \text { a VINV }]^{\mathrm{i}}$
[p. 441]
or $\quad \mathrm{B} \neq \mathrm{C} \&[\mathrm{a} \text { B INVu }]^{\mathrm{i}} \Rightarrow\left[\mathrm{a} \mathrm{B} \mathrm{C}{ }^{\mathrm{INV}}\right]^{\mathrm{i}} \quad[\mathrm{p} .443]$
(弓) INCHO incorporation
$\mathrm{B} \# \mathrm{C} \&[\mathrm{~B} \mathrm{INCHO}]^{\mathrm{i}} \Rightarrow\left[\mathrm{B} \mathrm{C} \mathrm{C}^{\mathrm{INOHO}}\right]^{\mathrm{i}} \quad[\mathrm{p} .444]$
( $\eta$ ) INV core deletion
$\begin{array}{ll}\text { (i) }[\mathrm{ab} V]^{\mathrm{i}} \&\left[\mathrm{a} \mathrm{INV} V^{1 n s t+\mathrm{x}}\right]: \mathrm{d} \Rightarrow[\mathrm{ab} \text { V }]^{\mathrm{i}}: \mathrm{d} & {[\mathrm{d} .436]} \\ \text { (ii) }(\mathrm{X}) \mathrm{a}(\mathrm{Y}) \&\left[\mathrm{a} \mathrm{INV} V^{c o m+\mathrm{x}+\mathrm{c}}\right](\mathrm{Z}) \Rightarrow(\mathrm{X}) \mathrm{a}(\mathrm{Y})(\mathrm{Z}) & {[\mathrm{p} .44 \mathrm{I}]}\end{array}$
$(\epsilon)$, $(\xi)$ and $(\eta)$ can be regarded as optional rules. If they do not apply INV will remain as an element in surface structure, and an illicit string will result.
( $\theta$ ) verb coordination (optional) $[\mathrm{X} \mathrm{V}]^{\mathrm{i}}(\mathrm{Y}),[\mathrm{X} \mathrm{W}]^{1}(\mathrm{Y}) \Rightarrow[\mathrm{X} \mathrm{V} \neq \mathrm{W}]^{\mathrm{i}}(\mathrm{Y})$ [p. 413]
( l) NP COordination (optional)
$[(\mathrm{X}) a(\mathrm{Y})]^{\mathrm{i}},[(\mathrm{X}) \mathrm{b}(\mathrm{Y})]^{\mathrm{i}}, \ldots \Rightarrow\left[(\mathrm{X}) \mathrm{a}^{+\mathrm{ba}} \neq \mathrm{b}^{+\mathrm{ba}} \# \ldots(\mathrm{Y})\right]^{\mathrm{i}} \quad[\mathrm{p} .415]$
constraints
( $\kappa$ ) sentence coordination condition
if $[\ldots],[\ldots]$ and neither $(\theta)$ nor $(t)$ has applied, then it should be the case that
either $(\mathrm{I})[\mathrm{a}(\mathrm{X}) \mathrm{V}]^{1},[\mathrm{~b}(\mathrm{Y}) \mathrm{W}]^{\mathrm{i}}$ where $\mathrm{CR}(\mathrm{a}, \mathrm{b})$ and $\mathrm{a}, \mathrm{b}$ are pronominal
or (2) $[(\mathrm{X}) \text { a } V]^{1},[(\mathrm{Y}) \mathrm{b} W]^{1}$ where $\operatorname{CR}(\mathrm{a}, \mathrm{b})$ and $\mathrm{a}, \mathrm{b}$ are nonpronominal
and then all or part of $b$ can be deleted.
[pp. 412-13]
( $\lambda$ ) general subordinate clause coreferentiality constraint
in every configuration of the form [...]:[...] ${ }^{+1-10}$ there must be a,b such that $[(\mathrm{X}) \text { a } \mathrm{V}]^{\mathrm{i}}(\mathrm{Y}):[(\mathrm{Z}) \mathrm{b} \mathrm{W}]^{+1 / \mathrm{ol}}(\mathrm{T})$ and $\operatorname{CR}(\mathrm{a}, \mathrm{b})$
All or part of $a$ and/or $b$ may then be deleted.
( $\mu$ ) 'Lest' Clause coreferentiality constraint
In every configuration involving $\ldots . .[\text {... }]^{\text {ap }}$ there must be some $\mathbf{a}, \mathrm{b}$
such that ...a...: $[(\mathrm{X}) \mathrm{b} V]^{\mathrm{ap}}$ and $\operatorname{CR}(\mathrm{a}, \mathrm{b})$
Then all or part of $a$ and/or $b$ can be deleted.
Here $\operatorname{CR}(a, b)$ indicates that $a$ and $b$ are coreferential.
marking conventions
There are two 'case transfer' or agreement rules:
(v) 'LeSt' marking

If ...a... [(X)b V] ${ }^{\text {ap }}$ and $\operatorname{CR}(a, b)$
then $[(\mathrm{X}) \mathrm{b} \mathrm{V}]^{\mathrm{ap}} \rightarrow\left[(\mathrm{X}) \mathrm{b} \mathrm{V}^{\mathrm{ap}+\mathrm{M}(\mathrm{a})}\right]$
$\mathrm{M}(\mathrm{a})$ refers to the case marking on a.
[p. 422]
( $\xi$ ) comitative np marking convention
If there is some a such that ...a... \& [bc INV ${ }^{\text {com }] ~ a n d ~ C R(a, b), ~}$ then $\left[\mathrm{b} \mathrm{c} \mathrm{INV}{ }^{\text {com }}\right] \rightarrow\left[\mathrm{b} \mathrm{c} \mathrm{INV}{ }^{\text {com }+\mathrm{M}(\mathrm{a})}\right] \quad\left[\mathrm{p} .44^{\circ}\right]$
Case markings of NPs are given by:
(o) in [X Pronoun/Human-deictic V],
$\mathrm{M}($ Pronoun/Human-deictic $)=$ Accusative $\quad[\mathrm{p} .407]$
This rule should also apply, optionally, for definite inanimate deictics.
$(\pi)$ in [Nominal/Human-deictic X V],
M(Nominal/Human-deictic) $=$ Ergative
[p. 407]
( $\rho$ ) in [...Pronoun/Nominal/Deictic...],
$\mathrm{M}($ Pronoun $/$ Nominal/Deictic $)=\varnothing$
[p. 407]
$(\sigma)$ a. In $\mathrm{X}: \mathrm{a}^{+18}, \mathrm{M}(\mathrm{a})=$ locative $(-$ allative-instrumental)
b. In $\mathrm{X}: / \mathrm{a}^{-}, \mathrm{M}(\mathrm{a})=$ ablative(-causal)
c. In $\mathrm{X}: \mathrm{a}^{+}, \mathrm{M}(\mathrm{a})=$ purposive
d. In $\mathrm{X}: \mathrm{a}, \mathrm{M}(\mathrm{a})=$ dative $\sim$ locative
e. In $\mathrm{X}: \mathrm{a}^{\text {INVinat }}, \mathrm{M}(\mathrm{a})=$ locative
f. In $\mathrm{X}: \mathrm{a}^{\mathrm{INVoom+c}}, \mathrm{M}(\mathrm{a})=$ comitative +c where $c$ is a case marking assigned by $(\xi)$
g. In $\mathrm{X}: \mathrm{a}^{\mathrm{ap}}, \mathrm{M}(\mathrm{a})=$ 'fear' $\quad$ [pp. 408, 437, 439-41, 410]

Syntactic derivational affixes on verbs are assigned by
( $\tau$ ) $\mathrm{V}^{\mathrm{VNV}} \rightarrow \mathrm{V}+y a-l$
(v) -:di-n ASSIGNMENT RULE
(1) $\mathrm{V}^{\mathrm{x}} \rightarrow \mathrm{V}+: d i-n$
[p. 41I]
(2) In $[a b V]$ if a has non-animate reference, and $V$ belongs to the 'affect' class, then V is marked ' - controlled'
(3) If V is ' -controlled' and/or ' + continuous' then it bears the affix -:di-n
[pp. 449-50]
Tense/mood and 'subordinate values' are transferred to the verb:
$(\phi)\left[\mathrm{X} \mathrm{V}^{1 /+1-10 / \mathrm{ap}+\mathrm{c}} \rightarrow\left[\mathrm{X} \mathrm{V}^{\mathrm{i} /+1-\mathrm{lo} / \mathrm{ap}+\mathrm{c}}\right]\right.$
[pp. 447, 419]
and then realised:
( $\chi$ ) a. In $\ldots \mathrm{V}^{+} \ldots, \mathrm{M}(\mathrm{V})=$ purposive
b. In $\ldots \mathrm{V}^{-} \ldots, \mathrm{M}(\mathrm{V})=$ causal subordinate
c. In $\ldots \mathrm{V}^{\mathrm{s}} \ldots, \mathrm{M}(\mathrm{V})=$ dative subordinate
d. In $. . . \mathrm{V}^{\mathrm{ap}+\mathrm{c}} \ldots, \mathrm{M}(\mathrm{V})=$ 'lest' +c
where c is a case marking assigned by $(\nu)$
[pp. 419, 422]
and similarly for tense/mood specifications.

ORDERING
Generally, derivations should apply before constraints and marking conventions. For instance, it is necessary that $(\gamma),(\delta),(\epsilon)$ and $(\zeta)$ have applied before, and not after, constraints $(\lambda)$ and $(\mu)$; and ( $\iota$ ) before $(\kappa)$.

The only extrinsic ordering condition on derivations is that the obligatory reflexive rule ( $\delta$ ) must apply before antipassive $(\gamma)$; otherwise $(\gamma)$ could move one of the coreferential NPs out of the core and produce the unacceptable surface configuration *[aV]:a. Since ( $\delta$ ) is the only obligatory rule, this could be formulated in terms of a requirement that 'obligatory rules apply before optional ones' (cf. Ringen 1972).

The examples in 4.3 .8 show that antipassive $(\gamma)$ must be allowed to apply either before or after INV incorporation ( $\epsilon$ ). And so on.

As stated here $(\xi)$ should apply before $(\gamma)^{\prime \prime}$. However, this is due to the way in which the rules have been formulated; an alternative statement could be found, which would not require this ordering.

## 6 Lexicon

### 6.1 Word formation

6.1.r Compound verbs. Yidin has a type of verb that involves 'noun incorporation' (Sapir 1911:257). This is formed by prefixing a nominal to a regular verbal root; the resulting compound has the same transitivity as the verbal root. The meaning of a compound verb is not, as a rule, directly inferrable from the meanings of its constituent words (although it does not usually require too great a metaphorical extension). Thus from dili 'eye' and budi-l'put down' is derived dili +budi-l'look after', as in (656) and
(961) nundu dambu:l gadan / galinalna / yandi nunin
you-sa two-ABS come-IMP go-comit-purp we-sA you-o
dili+budi:lna | wugu burgi:na
look after-PURP work-ABS walkabout-PURP
You two come, so that [I can] take you, so that we can look after you, and you can work [for us, in Cairns]
The components of dili + budi-l can, of course, occur as free forms:
(962) yanan bama:l wawa:l dili: guma:nda

I-o person-erg see-past eye-inst one-inst
The person watched me with one eye
(963) yayu dada budi:l yawu: I put the baby down on the grass

Incorporated nouns (all examples of which are disyllabic) do not cohere phonologically with a following verb root. Thus dili and budi:lna are distinct phonological words (2.4) in (961), just as are dili and baygar in
(964) yadin dili baygay My eye is sore

It may thus be asked on what grounds we assert that dili + budi-l is a compound verb, whereas in (964) dili is the head noun of the S NP, quite separate from the verb baygal. Semantic grounds would not, of course, be sufficient - two words may often have extended meanings in an idiomatic collocation.

There are two main criteria for recognising compound verbs:
(i) Ordering. Although there are definite preferences for the ordering of words in Yidin sentences, a given word can - potentially - occur at any position (4.1.1, 4.1.9). Thus the words in (964) could be rearranged, with no change in meaning, as baygar yadin dili, dili yadin baygar, yadin baygat dili, and so on.

The roots in a compound verb occur in fixed order, and nothing can come between them. The simplest way of testing whether a putative sequence is a compound verb is to negate it - $\eta u d u$ 'not' normally occurs immediately before the verb, as in
(965) yadin dili yudu baygar My eye is not sore

With dili + budi-l, $\eta u d u$ must precede dili, as in (747) from 4.6.2.
Note that wagal 'wife' is often heard followed by budi-l 'put down', this collocation having the meaning 'marry [a woman]'.
(966) yayu yindu: $n$ wagal budi:lna I want to marry this woman

But the elements are separable - wagal yudu yayu budi:lna was obtained. We must thus take zoagal in (966) as making up, with yindu:n, the O NP, and conclude that wagal does not form a compound verb with budi-l; in this case there is simply an idiom-like noun-verb collocation wagal budi-l.
(2) syntactic function. In
(967) buna:y dada dili+budil The woman is looking after the children the incorporated noun dili must effectively be referring to the woman's eyes. If it were - with buna 'woman' - part of the A NP, it should be in ergative case; if it were in instrumental function it should have the case-form dili:. Since dili does not show any inflection it would - if it were a separate word in $(967)$ - have to be taken as being in absolutive case, presumably part of the O NP together with dada 'baby'; but dili does not refer to any part of the baby!

Thus, there is no plausible syntactic interpretation of (967) with dili taken as a separate word (we cannot have two distinct absolutive NPs). So dili + budi-l must be a compound verb.
budi-l can involve a dative NP, referring to someone for whose benefit an action was performed. For instance:
(968) buna:y buda budi:l dada:nda

The woman put a blanket down for the child

Note that we can not have the 'object' of dili + budi-l in dative case (which is what we would expect if dili were a separate word - presumably O NP):
*(969) buna:y dada:nda dili + budi:l
The object of the compound verb must be in O function (absolutive case) as in ( 967 ) and ( 961 ). When the writer tried to elicit $*(969$ ) he was given the antipassive version of ( 967 ), where the underlying $O$ NP does of course occur with dative inflection:

## (970) buna dada:nda dili+budi:dinu $\langle=(967)\rangle$

There are also intransitive verbs that involve noun incorporation. For instance, the noun guybil 'a whistle (noise)' and dana-n 'to stand' yield guybil + dana-n 'to whistle'. The criterion of ordering applies just as in the case of transitive verbs. For 'Stop whistling!' one must say

## (971) nundu giyi guybil + danan

and not
*(972) nundu guybil giyi danan
Note that here it is the 'whistling' that is (metaphorically) 'standing', not the whistler himself. There is an important difference between:
(973) guybil jundu danay You can stand up and whistle
in which guybil is part of the S NP ('inalienably possessed' by nundu); and
(974) nundu guybil + danay You can whistle
(974), involving the compound verb, does not specify any stance. The informant suggested that, after having issued the instruction in (973), one could a little later on say

## (975) nundu guybil + danay wunay

[Now] you whistle [the same tune] lying down emphasising that in (973) dana-n has its regular lexical meaning.

We can invoke the second criterion, of syntactic function, for intransitives but this takes a somewhat different form from that for transitives. Most of the nouns incorporated into intransitive compounds refer to types of noise. When used outside compounds these are, apparently, regarded as being inalienably possessed by their utterer, this being marked either (a) by the genitive affix, or (b) by simple apposition (4.7.3, and cf. 4.3.4). Thus:
$\left.\begin{array}{l}\text { (976) a. yayu bama:n gawal binayalpu } \\ \text { b. yayu bama gawal binayalyu }\end{array}\right\}$ I heard the person's call
There is a compound verb gawal + dana-n 'to call out', involving gawal 'a call' and dana-n 'to stand'. Thus (cf. (705)):
(977) bama waruwaru yabi gawal + danay

Lots of children are calling out [as they play]
But note that the word(s) referring to 'the caller' can Not take the genitive suffix with gawal + dana-n. That is, *(978) bama:n waruwaru:n yabi:n gawal + danay
is not an acceptable Yidin sentence. The head of the O NP in (976) can be either gawal or bama. But in the case of (977) it must be bama, since gawal is incorporated as part of the verb. In ${ }^{*}\left(97^{8}\right)$ there is nothing 'possessed' that bama:n could be understood to be qualifying.
It is possible sometimes for a sentence to include a noun both in free form (within the S or O NP) and also as part of a compound verb. While the writer was checking to see whether gawal + dana-n really was a compound stem, he tried to separate the components with the particle giyi 'don't'. When asked whether jundu gazval giyi danan was possible, the informant responded that it wasn't, but one could say:
(979) fundu gawal giyi gawal + danan Don't you call out!

The writer has gathered 25 compound verbs, out of a total corpus of about 320 verbal items (a full list is given below, classified by nominal member). 13 different verb roots are involved, five of them used more than once:

```
transitive dara-l 'set up, put standing' (in 5 compounds)
    budi-l 'put down' (3)
    gunda-l 'cut' (2)
```

intransitive dana-n 'stand' (4)
woanda-n 'fall down' (3)
while 8 verbs occur each in only one compound:
transitive
bambi-l 'cover' baqa-l 'kick, punch' (see 4.3.2)
bada-l 'bite'
baga-l 'pierce with pointed implement'
biya-l 'blow'
gada-n (see below)
guba-n 'burn'
intransitive
duyga-n 'run'
yuyar 'thought' occurs only in intransitive yuyar + wanda-n 'think' (based on wanda-n 'fall down') and transitive puyar + gada-n. Each compound verb except $\eta u y a r+g a d a-n$ has the same transitivity value as its constituent simple verb, suggesting that we should NOT identify gada-n here with the common intransitive root 'to come'. We are thus led to regard gada-n as a 'cran' root, occurring only in this compound.

Sixteen nominals are incorporated, six of them in more than one compound. Most of these occur as free forms in NPs, but three appear (on the data available) to be confined to occurrence in compound verbs.
[a] BODY PART NOUNS
(1) dili 'eye'
dili + budi-l'look after'
dili + dara-l 'stare at'
dili $+g u b a-n$ 'be jealous
concerning'
dili + gunda-l 'stop looking'
(2) bina 'ear'
bina + bambi-l 'forget'
bina + bara-l'deafen'
(3) diyay 'nostril'
divay + dara-l 'sneeze (at)'

Note that although dili and dara-l can make up a compound verb, as in
(980) yandi yabi:y wira dili+dara:l
we-sa all-ERG moveable object-abs stare at-Past
We all stared at the aeroplane
dili has been encountered in the S NP and dara-l in the VC of a sentence:

```
(981) yadin dili bugabuga dara:dinu
    I-gEN-abS eye-ABS darkness-REDUP-ABS put standing-:di-PAST
    My eye has become dark (i.e. I can't see)
```

There is nothing semantically in common between the syntactic co-occurrence of dili and dara-l, in (98r), and their inclusion as morphological partners within a verb, in (980).
dinay + dara-l is encountered most frequently in the antipassive, meaning just 'sneeze':
(982) yayu diyay + dara:diy I sneezed
without any implication of an 'object'. But it can also be used in a transitive sentence:
(983) bama:l yajan dinay + dara:l The person sneezed at me
[b] CONCRETE NOUNS
(4) nari 'hole in ground'
nari + baga-l'dig hole to bury [something] in'
$\left.\begin{array}{l}\text { nari }+ \text { budi-l } \\ \text { nari }+ \text { dara-l }\end{array}\right\}$ 'put in hole and cover over'

No difference in meaning between nari $+b u d i-l$ and nari + dara- $l$ could be ascertained. Both verbs are typically used for the 'kapamari' method of ground cooking.
(5) gidar 'mark, line'
gidar + gunda-l 'paint in pattern' - cf. $(474-5)$ in 4.2 .5 , and (879) in 4.10 .
(6) gaygu 'side of mountain' (also used as body part noun 'waist', and as a locational qualifier-3.4.1).
$g a \eta g u+d u \eta g a-n$ 'take short cut'
Compare the compound verb in
(984) yayu gavgu + du $\quad$ ga: $n ~ g a b a: n d a$

I crossed the road, taking a short-cut
with gaygu used as a noun (to indicate the manner of motion) in
(985) yayu duyga:n gaygu:y

I ran with my waist (i.e. my waist was hurting as I ran)
[c] NOISES AND SONG/DANCE STYLES
(7) dubun 'squeaky noise made (10) wulygu'a female song-style' by young animal' wulygu + dana-n'to sing
$d u b u n+d a n a-n$ 'to squeak'
(8) gazval 'a call'
gawal + dana-n'to call'
(9) guybil 'a whistle'
wulygu style'
(ıI) yaru'shake-a-leg dance style' yaru + wanda- $n$ 'to dance
guybil + dana-n'to whistle'
Note that all compound verbs referring to noise-making involve dana-n. It is not the case, though, that any noun referring to noise can be incorporated to dana- $n$ (it appears that No others can be). Thus the generic noun gugu'noise' can occur as the subject of dana-n:
(986) digirdigir gugu danay

The willy wagtail noise is audible (literally: 'standing') [at that place] but is not compounded with it, as can be seen from:
(987) gugu wana danay Whose noise is it that is audible [here]? where wana 'who', the 'inalienable possessor' of gugu, intrudes between it and dana-n.
[d] abstract nouns
(12) bidar 'dream'
bidar + wanda-n'to dream'
bidar + bada-l 'to dream about'
(13) Duyar 'thought'
puyar + wanda-n 'to think' yuyar + gada-n' to think about'
biday and yuyar occur only in these compounds. Note that there is in each case a transitive/intransitive pair. What is 'thought/dreamt of' will be marked by peripheral case with the intransitive, and will be the O NP of the transitive verb:
(988) a. wagu:da nuyar + woanday bupa:gu) The man is thinking about the b. wagudangu buna nuyar + gaday $\}$ woman

If one thinks or dreams about an event (rather than just about a person or thing) it is described through a subordinate clause:
(989) yayu wurmba wuna:n/ bidar + bada:l bama

I-sA asleep-abs lie-PAST dream-PAST person-ABS
gadapunda margan bulmba:gu
come-dat subord fighting men-abs camp-all
I lay asleep, and dreamt that the fighting men were coming home
(14) dirbi 'promise, promised time'
$\left.\begin{array}{l}\text { dirbi }+ \text { budi-l } \\ \text { dirbi }+ \text { dara-l }\end{array}\right\}$ ' to promise to do something at a certain time'
The object of these verbs can be the person or thing who would be the 'focus' of the promised action:
(990) yanaj bama:l dirbi + budi:l/ garu yanan wawa:day

The person promised to come and see me by-and-by.
(991) bama:l yanda bindabinda dirbi+budi:l
person-ERg I-dat shell-abs promise-past
The person promised me we'd have [a ritual exchange of] shells [for a dilly-bag]
or it can be, say, the place at which a planned fight will take place:
(992) yandi dirbi+dara bulmba
we-sa promise-Imp place-abs
We must [fight] at that promised place
No clear difference in meaning could be ascertained between dirbi+budi-l and dirbi $+d a r a-l$, as it could not between nari $+b u d i-l$ and nari + dara-l (and note the interchangeability of existentials wuna-n and dana-n, the intransitive correspondents of budi-l and dara-l-6.2.4).
dirbi occurs as a free form in lines 66,80, 100 and 102 of text 2 , and within a compound in line 15 of text 9 .
( 15 ) budu 'bad luck'
budu + biya-l'blow on [someone] whilst asleep, to blow away bad luck'
$b u d u$ appears only in this single compound verb.
[e] adjective
(16) yaga 'split in half'
yaga + dara-l 'to split in half'
Although a fairly small number of nouns and verbs enter into compounds of this sort, the process is not productive; it was not, except in isolated cases, possible to elicit new noun-incorporated stems.

Noticing that the corpus contained dili+dara-l, dili + budi-l; dirbi + dara-l, dirbi + budi $-l$; and nari + dara- $l$, the writer enquired about nari $+b u d i-l$ and found that this was a compound stem. But when, on the basis of bidal + wanda-n, bidal + bada-l and yuyar + wanda- $n$ he suggested yuyar + badal, it turned out that this is not a possible compound in Yidin.

There are a number of idiomatic collocations (some involving nouns and verbs from these lists) which do not constitute compounds. wagal budi-l 'marry' was mentioned at ( 966 ) above; and 'to kneel' is expressed through buygu 'knee' and dara-l 'put standing' - as in (354) - but here bungu is simply the object of the verb, and is not morphologically connected to it (one can say, for instance, buygu dabu: dara 'kneel on the ground').
(240) in 3.8.7 involves buygu and the reflexive form dara:di-n-here 'the actor' and 'his knee' occur together (presumably in a relation of inalienable possession) within the S NP.
In 4.7.3 we mentioned that constructions like ( 787 ) yayu wabal galin 'I'm going for a walk' do not have any obvious place within our syntactic description. But it is not the case that woabay gali- $n$ - or wugu burgi-n in (961) - are compound verbs. The components are separable.

There are syntactic and semantic similarities between this class of compound verbs in Yidin and the phenomenon of 'noun incorporation' in a number of Arnhem Land languages. In Tiwi (Osborne 1974: 46-50) an 1 Rembarya (McKay 1975: 287-309), for instance, a noun can be included in a verb word, and is placed between different classes of prefix. In these languages a noun which is incorporated would be expected to be part of the S or O (never A) NP if it occurred outside the verb. Many examples in Yidin follow this pattern - for instance bina + bambi-l 'forget' is literally 'cover ears' (and see the discussion of guybil + dana-n above) - although in some cases the noun would be expected in instrumental case (as dili + budi-l 'look after') and in others it is difficult to make any firm judgement.

Other Arnhem Land languages showing noun incorporation include Dalabon (Capell 1962: 101), Gunbalang (Harris 1969:4,5,8), Gunwinggu (Oates 1964: 55) and Nunggubuyu (Hughes and Healey 197I: 54). See also Sapir (i91r) for discussion of this phenomenon in American Indian languages.

A main difference is that incorporation appears to be (at least to a degree) productive in languages like Tiwi, whereas in Yidin each compound must, it seems, be learned separately. It may be that we are witnessing, in Yidin, the beginnings of a grammatical process - it would be likely to begin with a few compounds and, once a pattern had been established, these could be generalised to yield a productive process (any nominal of a certain type could, within the limits of semantic plausibility, be incorporated into any one of a certain set of verbal roots).

The writer has a relatively small vocabulary of Yidin (about 1800 words, excluding proper names). A more extensive dictionary would be likely to include a higher proportion of compounds. But the data to hand, and the results of systematic eliciting from them, do clearly show that the process is not at present productive.
6.1.2 Formation of proper names. Proper names of people and places are, in almost every case, based on dictionary items. A place will be named after some object or event which a storytime traveller found there (1.4). A person will be named after something connected with a totem that belongs to his moiety ( I .5 ).

A sample of one hundred proper names ( 87 of places and 13 of living or recently deceased people) were surveyed:
(a) 42 are identical to a common noun, adjective, locational qualifier or verb root;
(b) 47 involve some addition or phonological alteration to a dictionary root;
(c) Io are compounds of two dictionary roots (one of which may have undergone phonological alteration);
(d) I appears unrelated to any other form.

We now discuss and exemplify these types one at a time.
(a) IDENTICAL TO DICTIONARY ROOT

See the examples quoted in 1.4, gandugandu in (717), and bilma in (682) - the latter is the only item under (a) to involve a verbal root, here bilma-n 'clear [ground]'. Also:
(i) A place at the south end of Oombunghi Beach is called dulugunu 'black myrtle tree' because this species of tree grows there.
(ii) A rock at Cape Grafton Point is called yawuyu 'salt-water turtle' because when Gulndarubay ( 1.4 ) first came to this place he saw a turtle's head emerge from the water, and then sink down again.
(iii) One of Tilly Fuller's names was badigal 'fresh-water turtle', an animal connected with the guramina moiety.

## (b) Phonological addition or alteration

I4 of the 47 examples here involve verbs. dariyi, Dick Moses's name, was discussed in I.5. Also:
(i) Robert Patterson is called nalmbi from narmbi-l 'to approach but not reach the ground'; this is after a moiety association with the whirlwind, whose passage is appropriately described by this verb.
(ii) A place on the beach just south of Cape Grafton Point is called giviga since Gulndarubay found there a mob of children shouting in play ( $g i \eta i-n$ ).

There is one name based on a particle:
(iii) Dick Moses's sister, Ida Burnett, is named yudun, after the particle/interjection $\eta u d u$ 'no/not'.

Eight place-names involve a nominal root plus comitative affix $-d i \sim-y i(3.3 .4,4.3 .1)$ e.g.
(iv) A place just inland from Cape Grafton Point is called dirgaydi 'with blady grass' since Gulndarubay found lots of blady grass (dirgal) growing there.

Three names involve the affix -gara: 'from' (3.3.6) e.g.
(v) A sandbank just off Fitzroy Island is called gandagara:, after ganda 'yamstick'.

The remaining names in class (b) involve unexplainable addition or alteration to a nominal or locational root e.g.
(vi) A point in Mission Bay is called yandiga after the noun nandi ' body, flesh, meat'.
(vii) The name of Deception Point is wuygu, after the noun wuygur referring to ritual shouts ' $w$ ', wo'. It is said that when the storytime hero Bangilan first landed at Deception Point his group of warriors cut a rock there, which they celebrated with a corroboree, dancing round the rock and singing ' $w$ ', wo'.

We can now look at the phonological forms of these names. Those that involve an established affix $-d i \sim-y i$ or gaya: are explainable. Most
of the remainder involve the ADDITION to the root of one or two final segments; these appear quite unmotivated:

| root | $\eta u d u$ | name | nudun |
| :---: | :---: | :---: | :---: |
|  | giri-n |  | giriga |
|  | dari-n |  | dariyi |
|  | widi |  | widiy (see 2.3.7) |

Attempts to elicit an explanation for these accretions met with no success. For instance, there is a place on the side of a hill near Turtle Bay named jiyaman, after the noun jiya 'rim of dilly-bag, edge of creek or mountain'. Dick Moses insisted that it was called yiyaman because it is in a piya location, the appropriacy of the first two syllables being regarded as an entirely sufficient justification for the form of the complete name.

His discussion of this point had a Socratic flavour. In Cratylus (393ff.) Plato suggests that names have a natural basis but can also involve an arbitrary, or conventional, component. For instance, 'beta' as the name of a letter is appropriate by virtue of the initial $b$ (employing the sound of the letter which is being named) and the 'addition of $e, t$, a gives no offence, and does not prevent the whole name from having the value which the legislator [giver of names] intended - so well did he know how to give the letters names'.

In some cases the final segment of a root has been DELETED to form a name - thus wuygu (Deception Point), from wuygur, and dimidimi, a flat spot between Palm Beach and King Beach where there are many dimir 'mountain yams'.

In other cases the name may involve the substitution of unmotivated segments for part of the root. The place (on White Rock Creek) at which the skin of a storytime cassowary turned soft and dropped off is called giraba, based on the adjective girar 'soft (skin)'. And a place at which Gulndarubay heard the noise of a spear-fight is duyuŋu, from the verb duyi-l 'fight with spears'. See also (414) in 4.1.10.
bandi names a place in Mission Bay at which Gulndarubay heard people grumbling and groaning; it is based on the root bani-n 'to grumble', and could be said to involve insertion of $-d$ - in the middle of the root. Even with this degree of phonological difference, Dick Moses said that the spot was called bandi 'because they baniy there', again regarding this as entirely sufficient justification for the form.

The 47 names of type (b) involve four cases of more drastic phonological reshaping. They are:

| verb root | narmbi-n | name | nalmbi |
| :--- | :--- | :--- | :--- |
| adjective root | niwir |  | nirwiy |
| noun root | nandi |  | yandiga |
| locational | nambin |  | mambin |

nalmbi and yandiga were discussed above. The place nirwiy is so called because a storytime boomerang broke up (niwir) there-2.3.7. At mambin there is a stone that has fallen belly-up; the name is based on locational qualifier yambin 'belly down' (3.4.1). (Note the semantic complementarity, correlating - in this instance only - with opposing types of non-coronal nasal!)

In a few cases the form of a name may attest to some historical stage in Yidin. Thus, it may not be a coincidence that a few names based on - $n$ conjugation verbs end in $-y$-for instance, gubay, the name of a stream running into Mission Bay at bilma, that was in storytime days heated by a hot stone (from guba-n 'burn'). Note that in most languages of eastern Australia the open intransitive conjugation has marker $-y$, not $-n$ (cf. Dixon 1972: 13-16, 54-5).

And there are two instances of a name having three syllables (and not being reducible), where the corresponding common noun is, in absolutive case, reduced by Rule 2 (2.3.4):
absolutive

| noun | nominal root | place |
| :---: | :---: | :---: |
| dimu:r | dimur U'house' | dimuru 'a place just above |
|  |  | Reeve's Creek' |
| garba $:$ r | $\operatorname{garbay} A$ 'mangrove $\underset{\text { tree' }}{\text { man }}$ | gaybara 'a place on the beach, just south of the mouth of Badubadu creek' |

Note also
gandi:l gandilA 'crab' gandira 'a stoney island in
in which there is also an $l-l$ correspondence.
(c) COMPOUNDS

Five of the ten compound names involve a sequence of two nominals. Either a noun followed by guman 'one':
(i) balaguman 'shin-one' a place to the west of False Cape where an alligator bit one of Damari's legs off at the knee (line 121 of text 2 ).

Or a sequence of two nouns:
(ii) George Davis told how his grandfather had two personal gambun $U$, small spirits (said to be rather like 'guiding angels') who told him what was happening elsewhere. One was called baybagawar 'squirt blood', from gawar 'blood' and bayba 'spring (usually of water)'.

There are five nominal-plus-verb compounds, including:
(iii) duburwulay 'stone-die', a stone near which storytime people are said to have died.
(iv) wayaldungay 'boomerang-run', the name for Double Island (near Cairns) through which a storytime boomerang travelled fast.
(Note that we have here two more examples of a final $-y$ on verbs belonging to the $-n$ conjugation - wula-n 'die' and duyga-n 'run'; see also 2.3.7.)

Leaving aside the final segment of verbs, there is only one example of a compound showing deviation from the normal forms of roots. Dick Moses's elder brother was called diliwanin (see line I of text 9), based on dili 'eye' and yapin 'side of face between eye and ear'. Here $w$ corresponds to $y$ in the root.
(d) unexplainable forms

Only one of our sample of 100 place and contemporary personal names cannot be related to any other word - murubay, the name of a grassy mound near Gordonvale (that has never sported any trees) which is today called 'Green Hill'.
But, when we look to the names of storytime heroes - such as Gulndarubay, Bangilan, Damari and Guyala (I.4, I.5) - we find that almost all are without explanation. Only Bibiyuwuy, the name of a man who 'began death' (text 14) can be explained - the final part is related to the cry 'wu:y wu:y wu:y...' that Bibiyuwuy emitted (line 20) on being confronted with his own decayed head.
6.1.3 Root structure. Very little can at present be said about the historical origin of Yidin roots. There are a few obvious similarities across parts of speech:

| Nouns | verbs | ADJECTIVES |
| :---: | :---: | :---: |
| mala 'palm of hand' | mala-l'to feel with the hand' |  |
| bina 'ear' | binaya-l'to hear, listen' | binagal 'paying attention' |
|  | binarya-l'to tell, warn' <br> binagali- $n$ 'to forget' | binabanda 'sad, forgetful' |

binaya-l could be the regular causative of bina (4.8.1) but no explanation can be put forward for the $-r$ - in binarya-l or for the second elements of binagal, binabayda, bingagali-n.
And a few other sets of likely cognates, on the lines of:
buga 'night(time)' bugamugu 'daylight'
dili 'eye' is, like bina, one of the forms most commonly incorporated into verbs (6.I.1). In addition, a number of roots begin with dili:
dilibugabi 'the next day'
dilibiti 'barramundi'
dilibura 'green ant'
but the semantic connection with the body part noun is far from obvious here. And while buga 'night' can be recognised in dilibugabi, there is little semantic reason to associate dilibivi with the particle biyi 'again', or dilibura with nominal burabura 'dusty place'.

There are a small number of cognate pairs of verb/adverb and adjective:

$$
\begin{array}{ll}
\text { gida-n 'do quickly' } & \text { gida 'quick' } \\
\text { yayga-n 'forget' } & \text { yavga 'deaf' }
\end{array}
$$

and some miscellaneous pairs of other types where there is a possible correlation between semantic and phonological similarities e.g.

> burmu, Adj. 'quiet' burmbay, Noun 'well-behaved person'

A number of roots involve the repetition of a disyllabic unit (see also 3.3.9):
barabara '(common) fly' bidibidi 'beetle'
birbibirbi 'small flat fish' wabarwabay 'sacred/tabooed object'

There are no roots bara or birbi; and no reasons for connecting the other two forms with the locational qualifier bidi 'near' or the abstract noun wabay 'a walk'.

Some roots may involve what was once a productive affix; it is difficult to do more than guess about these cases. For instance, four of the thirteen known trisyllabic roots have $-b a$ - as the third syllable (3.8.3); note the comment at the very end of 3.8 .8 about a possible affix $-b a$.

We can make a few remarks on the historical origin of bound morphemes. For instance, some free forms have certainly developed into (productive or semi-productive) affixes: damu is a particle in Dyirbal (Dixon 1972: 120) but functions, with similar meaning, as a derivational affix in Yidin (3.3.6). 'To yawn' is in Yidin wurga-n or da:wurga-n (wurga-n does not have any other meaning); da:- here may well relate to the noun dawa which occurs in many Australian languages with the meaning 'mouth' or 'doorway' (2.4). It is presumably the same da:that is involved in locational forms like da:guyga:r 'northwards' (3-4-3) but here the semantic connection is difficult to discern.

Finally, the number adjective dambulA 'two' - absolutive dambu:lmay be related to the common Australian root bula (Capell 1956: 77-8). The first syllable cannot confidently be explained (one hypothesis could involve da:-, with da:bula becoming dambula, but this is highly speculative).
The form in Mbabaram is mbil, pretty certainly a development from dambula ~ dambu:l. Without the documentation of an intervening stage, in Yidin, it would surely be impossible to relate this to *bula.
6.I.4 Loan concepts. Many European and Asian artefacts and ideas were described through existing Yidin words. Thus bingal'spoon (made from a shell)' was also used for 'chopsticks' (through similarity of function). dama 'anything dangerous (such as a poisonous snake or a centipede)' was extended to cover 'alcoholic beverages, opium and medicines'. Other examples are given towards the end of 6.2.1.
It is interesting to compare the names given to a certain new concept in different Australian languages. Thus the Yidindi use the verb munda-l 'pull' for rowing a boat whereas the Dyirbalnan employ baga-l 'pierce with a pointed implement'; in the first case it is the effect the rower has on the oar that is described, while in the second it is the action of the oar on the water.
In other cases Yidin introduced a compound name. Thus 'policeman' -buliman or bulidiman in most neighbouring languages - is in Yidin
gidardi, literally 'with stripes'. This involves the abstract noun gidar 'line, mark' and comitative affix -di.

Some English words were taken over as loans, and adapted to conform to the phonological structure of Yidin; all words must begin with a single consonant, must have at least two syllables, and must end in a segment other than a stop or w. Thus yingilibiy 'English bee', duwa'saw', biya 'beer', bagi 'bag', gawuda 'coat', giladi 'glass' and gabadi 'cabbage'.

The loan-word correspondences between English and Yidin sounds are similar to those described for Dyirbal (Dixon 1972: 326). Also like Dyirbal, loans are almost all nouns or adjectives (the only known exception is landima-l'teach' from English learn - see line 3 of text 9).

Dick Moses is careful always to speak pure Yidin. Thus, whereas some recent speakers have muddled together Yidin and Dya:bugay, or Yidin and Gungay, Moses is very particular about excluding non-Yidin items (and will correct himself when these do inadvertently intrude). He takes this to the extreme of eliminating loans from English that must - in his youth - have beenfirmly established in the language (they are retained by all other speakers). In place of mudaga 'motor car' and biligan 'billy-can' he always used dundalay and gunbu:l (which Moses says were originally the Dyalguy terms for these items - see 1.8).

### 6.2 Topics in semantics

The Yidin lexicon reveals a number of interesting semantic contrasts and dependencies. These will be fully detailed in a projected dictionary/ thesaurus of the language. In the present chapter we comment on four topics in semantics that have particular relevance for an understanding of the grammar of Yidin.
6.2.I Noun classification. As already mentioned (4.I.1), an NP in Yidin will typically involve a generic, in addition to a specific, noun. For instance:
(993) bama:l yabuүuŋgu nina gangu:l wawa:l
person-ERg girl-ERG animal-abs wallaby-ABS see-Past Literally: 'the person girl saw the animal wallaby'

An early, fairly superficial, examination of this phenomenon revealed the following occurrences of classifiers:
bama, with any noun referring to human beings;
mina, with many nouns referring to non-human animates e.g. species of snakes, guanas, frogs, possums, bandicoots, kangaroos, grubs, fishes, birds, etc.;
mayi, with any noun referring to non-flesh food - edible yams, nuts, fruit, ferns, etc.;
bana, with nouns referring to fresh water, salt water, river, swamp, tide, beer, etc.;
buri, with nouns referring to fire, sparks, charcoal, a light, etc.;
dugi, with nouns referring to types of tree;
wira, with 'inanimate nouns' such as shell, clothes, boomerang, aeroplane, motor car, stick.
It appeared that this set of generics(together with perhaps a few more terms which had not then been uncovered) probably divided up the universe into mutually exclusive areas. It seemed likely that wira was defined negatively as 'anything else', after the positive specifications 'human' (bama), 'non-human animate' (mina), 'edible plant' (mayi), 'liquid' (bana), 'associated with fire' (buqi), and 'tree' (dugi) had been disposed of.

However, difficulties soon arose with this scheme of interpretation. For instance, it was discovered that mina did not cover all animals, but only those considered edible. Thus yalbur, a grey frog species, is mina, but a smaller frog, widi, is not. The white-tail rat, durgim, can be eaten - and is included under miza - whereas a small rat, referred to by the species name mugin, is not. It appeared that mina refers to 'edible animals', just as mayi covers 'edible plants'.

It was also discovered that whereas anything burning (including even 'hot smoke') is buri, only certain liquids are describable as bana. bana applies to waterfall, steam and dew, but not to blood, urine, spittle, snot, semen or sweat. bana appeared to be basically 'any drinkable liquid' (although the use of bana with birin 'salt water' was something of an embarrassment).

A number of new generic terms were uncovered at this stage of the investigation - maygum refers to all frogs (whether edible or not) and daruy to all birds. walba 'stone' is used with specific nouns referring to any type of stone or rock or rocky feature:
walba malan 'flat rock'
walba bunda 'mountain'
walba buray 'cave'
walba yiriy 'type of slatey stone' (as in (707))

And dabu 'ground, earth, dirt' is used with specific nouns such as mud, sand, white clay, dust, and so on.
bulmba refers to any type of hut or house or windbreak or camp, or even to a potential camping-place. bulmba can be used with the proper name of any habitable place, and also with a variety of specific common nouns:
> bulmba dimurU 'house'
> bulmba dabul 'beach'
> bulmba buluba 'fighting ground'
> bulmba buray 'cave'

Note that buray can occur with walba or with bulmba, suggesting that the generic terms are not strictly exclusive of each other. We could have, in fact, an NP containing bulmba walba buray (just as we could also have mina maygum yalbur 'edible-animal frog-genus grey-frog-species').

But the conditions on co-occurrence of these terms appeared, on investigation, not to be straightforward. For instance, we can have wira walba, but not *wira bunda. And whereas dugi can mean 'tree', 'wood' or 'stick', wira dugi must be referring to a stick, not a growing tree. Similarly, wira dabu is a possible collocation for describing a handful of dust, but wira cannot be used with dabu when it refers just to 'ground'.

It was obvious, at this stage, that re-appraisal was needed. Generics were found to be of two distinct types.
[I] Those classifying specific nouns according to the inherent nature of their referents - bama 'person', mangum 'frog', dugi 'tree', buri 'fire', walba 'stone', dabu 'solid inanimate matter other than stone or wood', and so on.
[II] Those classifying specific nouns according to the FUNCTION or USE of their referents: edible flesh food (miza), edible non-flesh food (mayi), drinkable liquid (bana), habitable place (bulmba) or moveable thing (wira).
Before discussing each generic in turn we can, in table 6.I, diagram the way in which these two types of classificatory term divide up the universe. The dots at the extreme left refer to specific nouns; 'inherent nature' generics are in the left-hand column, and 'function/use' classifiers on the right. Many-one relations between specific and generic terms are shown schematically (rather than quantitatively - in total over sixty names of bird species are known, all included under daruy, for instance). Where there is a natural grouping of species for which there is no 'inherent nature generic' in Yidin, a dash is shown in the left-hand
table 6.1 Scope and interrelation of generic nouns INHERENT NATURE GENERICS FUNCTION/USE GENERICS

column (for instance 'possums'). Note that in many of these cases there Is (only) a generic term in Dyalnuy (6.3) justifying recognition of a taxonomic grouping. Where a specific term appears not to be grouped with anything else - as with 'dog', 'sun', 'moon' and 'boomerang' for instance - a single horizontal line is shown.

Table 6.1 is intended to illustrate the scope of the score or so generic terms, rather than just to list all types of Yidin nouns. Dots are freely used to indicate areas for which generics are lacking. (Generally, just a few sample types are quoted for the non-generic sectors - thus to 'kangaroos/wallabies' and 'possums' should be added 'snakes', 'lizards/guanas', 'turtles', 'bats' and so on.)
[I] INHERENT NATURE CLASSIFIERS
(a) waguda 'man, human male'
(b) buna 'woman, human female'
(c) bama 'person'

This is the only instance of a hierarchy among generics. An NP can contain bama, AND waguda or bupa, together with a specific noun. Thus the S NP in (775) has bama, buna, the proper name bindam and deictic $y i y u$; another example is
(994) yandi bama wagu:da wurgun muynga
we-SA person-ABS man-ABS pubescent boy-abs cicatrice-abs gunda:lna
cut-PURP
We must cut tribal marks [on] the teenage boy
Beyond bama buna and bama waguda, all occurrences of two generic nouns in an NP must involve one 'inherent nature' term and one 'function/use' classifier - see below.

Most nouns referring to humans are sex-specific - thus wayaqI 'prepubescent boy', gumba 'prepubescent girl', and so on. But for very young children a common term is used for either sex - yumbubu 'new born baby', dada 'crawling or just-walking baby', waruwaru'small child (aged around five)', etc. We can in this case get either generic - buna dada 'girl child' or waguda dada 'boy child'-the classifier serving to specify sex.

Note that bama effectively translates the generic sense of English 'man' (as in 'Man is mortal') whereas waguda corresponds to the
specific 'male' sense. Bilingual speakers of Yidin have institutionalised as translation-equivalents:

bama person<br>waguda man

Note that bama occurs much more frequently than 'person'/generic 'man' in English (it may well be the most frequent noun in texts). And it is interesting that the English of young Aborigines at Yarrabah - most of whom know no Yidin beyond a dozen or so simple words - is characterised by a high incidence of 'person'.
These three classifiers can be used with terms referring to stages of life 'baby', 'adult man', 'old woman' etc.; with kin terms; and with proper names of people. Animals are believed to have once been 'people' and in storytime texts referring to this era the name of an animal can co-occur with bama. The names for ghosts and spirits (for anything not living) do not fall within the scope of bama.
gada 'spirit of a man' is also used to cover 'white man', and guypgan 'spirit of a woman' for 'white woman'. But whereas in the spirit senses gada and guyngan can NOT occur with bama (and are restricted to the 'use' generic, wira - see below), in the 'white person' sense they ARE classified as bama.
waguda and buna can be used, in marked circumstances, to specify the sex of an animal - thus buna gangulA 'female wallaby', waguda gangulA 'male wallaby' (similarly for 'dog', 'bird' etc.). In these cases bama could not be included with waguda/buna.

Note that there are no classifiers for body parts (or parts of any other object). A noun like dina 'foot' will normally be shown as inalienably possessed by some person or animal, and it is the possessor that selects a generic qualifier.

There are only three generic terms for non-human animates in everyday Yidin. Note particularly that there is no term 'fish' (in this Yidin differs from its neighbours, and in fact from most Australian languages); the term mina is employed, the context usually making it clear that it is aquatic edible creatures that are being referred to (for example, line 109 of text 2 ).
(d) daruy 'bird'

This covers all birds except the giant flightless cassowary (emus do not occur in this region). Note that daruy does include daruga 'scrubhen', wawun 'scrub-turkey' and various birds with distinct mythic roles, which are not included under the generic dundu in Dyirbal (Dixon 1972: 303).
(e) mangum 'frog'

This classifier covers all eight species of frog for which the writer has collected names. (Dick Moses was asked the Yidin term for 'cane toad', a fairly recent invader; he replied that it had not yet been given a Yidin name but that it would certainly be called maygum.)
(f) munimuni 'ant'

Of the ten or so types of ant (each with its own species name) all but one can be classified by munimuni - thus munimuni gadu: 'black tree ant', munimugi burbal 'red ant'. The exception is dilibura 'green ant'; this insect has a special place in Yidin culture because of its medicinal properties ( t .4) and it may be for this reason that it is not regarded as a type of munimuni.

Most plants are included under dugi 'tree' or nara 'vine'. Note that although there are half-a-dozen specific terms for types of grass (and a few more for types of tree-fern, weed and seaweed) there are no classifiers applicable here.

## (g) dugi 'tree'

The semantic extension of this term appears (as far as can be determined) to be about coextensive with the English noun 'tree'. Thus, dugi covers even fairly low plants such as $\eta$ ulugun 'small pandamus' (which would not be included within the scope of the generic term yugu 'tree' in Dyirbal, for instance - Dixon 1972: 303). Harmful plants - such as the stinging tree giyar $A$ - are also regarded as a type of dugi (these are again excluded in Dyirbal).
Note that a single noun will be used to refer to a specific tree, its wood, its fruit, or to a stick broken off it. Similarly, dugi can be translated in different contexts as 'tree' or 'wood' or 'stick'.
(h) nara 'vine'

This classifier is used with more than a dozen species nouns, including the vines of ground vegetables such as yams, and vines growing on trees - for instance, mudi 'thick black edible loya vine'.

There are three generics referring to types of natural phenomena. Note that there are no classifiers dealing with celestial objects or meteorological events (digur $U$ 'thunderstorm' is discussed below).
(i) buri 'fire'

As indicated above, anything burning is included within the scope of buri. Thus we can have:

```
    buri birmal '(hot) charcoal'
    buri mimi 'a flying spark'
    buri yandal 'a light (from a burning torch)'
and even buyi wupdu '(hot) smoke'
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The class of buti nouns almost makes up the whole set of possible subjects for guba-n 'burn' (4.1.5). The exception is buyan 'sun' which as in (347) - can be the A NP for guba-n, although it is not included under buri. (Note also that 'lightning' is not regarded as a type of buri.)
(j) walba 'stone'
walba can be used for any moveable rock or pebble, or for a geographical feature made of stone; thus:
walba baypga 'a stone heated in the fire and thrust inside a dead animal in kapamari cooking'
walba daruway 'a small hill, or island'
walba gaybi' 'an overhanging mountain ledge'

## (k) dabu 'ground'

This term is complementary to walba. Any type of terrain that is not covered by walba is describable as $d a b u$. Thus $d a b u$ can be used with a noun describing any type of earth or ground:
dabu gabudu 'white clay'
dabu dalmbul 'mud'
dabu gulgi 'sand'
dabu yumbun 'heaps of soft sand'
or a place that is characterised by a particular sort of ground:
dabu dabul 'beach'
There are three classifiers referring to types of implement. Note that these only cover a fraction of the traditional artefacts known to the Yidindi. There are no generic terms for woomeras (just two specific names: dajin 'straight woomera' and balul 'curved woomera'), yamsticks, axes, knives or traps (quite apart from items like boomerang and shield, which do not naturally group with anything else).
(1) gala 'spear'

There are half-a-dozen types of spear, all with rather specific uses. They include: gala baygur 'multi-prong fish-spear' gala birdi 'small hook spear'
(m) bundu 'bag'

This is apparently a generic term for any type of traditional basket. Only two hyponyms are known:

> bundu dugubil 'bark bag'
> bundu durbal '(small) woven grass basket'

But note that $b u n d u$ is used by itself to refer to a dilly-bag plaited from loya-cane (the commonest type of carrier for the olden-times Yidindi). bundu does not extend to metal containers, such as biligan 'billy can'.
(n) badi 'canoe'

It seems likely that this was a classifier. It has been encountered with only two specific nouns:
badi bida 'bark canoe' or 'bark trough' (for soaking badil 'rickety nut' etc. - see the illustration in Roth 1904: Fig. 230)
badi ginu 'dug-out canoe'
Dick Moses insisted that ginu was not a loan from English, the similarity to 'canoe' being quite coincidental. Be that as it may, there is strong anthropological evidence that dug-out canoes were not known in this region before white contact. This would suggest that badi evolved as a generic term at a very late stage. badi is complementary to wardan, describing all types of 'raft' (or other 'plank boats').
At one time the informant explained that wuru meant 'any type of spear handle' (or 'spear stick', as he put it) and named individual types by wuru barin $U$ and wouru wudigay. However, bayinU ('species with small leaf') and wudigay ('wild guava') are the names for types of trees, from which spear handles are manufactured. These names are thus of the same type as 'oak table' in English, and there are no grounds for considering wuru a generic term.

Similar comments apply to gubu 'leaf' and ginga 'prickle'; they are often accompanied by the name of a tree or vine, indicating the origin of the leaf/ prickle.

There are two other terms that might possibly be regarded as 'inherent nature' classifiers - digur $U$ 'thunderstorm' and dayga 'hole'.
(o) digur $U$ 'thunderstorm'

There are special names for the types of thunderstorm blowing from different compass directions (each characterised by the amount of rain it brings and the intensity of its winds): guyga:rbara 'from the north', yayabara 'from the south', guzwabara 'from the west', and nalabara 'from the foot of the land-mass, from the east'. They all involve -bara, and are discussed under that affix in 3.3.6.
digur $U$ behaves like a generic term in co-occurring with each specific name - thus digur $U$ nalabara. But it may not properly belong in the set of classifiers since each of the specific names is a derived stem (and its root does not have primary reference to a storm).
(p) dayga 'hole'

Any type of hole is classified under dayga. Thus:
dayga muygal 'hole dug as a trap (and then disguised by being covered with sticks and leaves)'
dayga murgu 'hole dug as cooking pit'
danga dingal 'anus'
dayga dingin 'vagina'
dayga can also occur with other generics - dabu dayga (or dayga dabu) 'ground hole' covers muygal, murgu and also animal burrows. buna dayga 'woman hole' would be taken to refer to dingin (cf. 4.1.8).

It is possible that dayga should be regarded as a rather general 'body part' term, rather than a classifier proper - dabu dayga and buna dayga would then simply specify inalienable possession (several other body-part terms are extended to aspects of the environment). Or it could be looked upon as the only (body-)part classifier.

## [II] FUNCTION/USE CLASSIFIERS

(a) mina 'edible animal'

This term is used for anything animate that is habitually eaten by the Yidindi. Some species covered by munimupi 'ant' are eaten, while others are considered inedible; thus gadu: 'black tree ant' and burbal 'red ant' are mina, but gudin 'bull ant' and balawa 'sugar ant with red head and black body' are not. Similarly for mangum 'frog'. It appears that all birds - included under the 'inherent nature' generic daruy - are edible.

An animal may only be describable as mina when it reaches a size sufficient to warrant killing and eating - see (739) in 4.5 .5 . Any dish made from meat - for instance, 'stew' in (719) - is also mina. An egg, diyal, is regarded as a type of flesh food, and is also included within the scope of mina.

The class of mina includes all kangaroos/wallabies, possums, bandicoots, bats, turtles, guanas, grubs, eels, most fishes and some snakes, lizards, frogs, rats, snails as well as echidna (porcupine), platypus and cow. Note that some (but not all) poisonous snakes are eaten, as is the potentially harmful gar-fish (but the stone-fish and toad-fish are not considered edible). The remaining classes of insect - flies, leeches, grasshoppers, spiders, worms, cockroaches, etc. -are never eaten. One potential source of meat, the dog, could never be called mina; people in all parts of Australia felt a close relationship to the dog (sometimes including it within the kinship system) and certainly the Yidindi would never have considered eating a dog. (Horses are, perhaps for similar reasons, also excluded from the class of mina.)
(b) mayi 'edible plant'

This term covers all sorts of non-flesh food. In Yidin the same name may be applied to, say, a tree and to anything obtained from it - badil is both a rickety nut, and the rickety nut tree. Generally, dugi badil would be used to describe the wood of this tree, while mayi badil refers to the fruit (although dugi mayi badil is perfectly normal - referring to the tree and its fruit). mayi comprise a subset of dugi 'tree', a subset of nara 'vine', and a number of plant species that are not included under any 'inherent nature' classifier - for instance dalgaram 'flat bottle fern'.

The most interesting aspect of mayi (to a speaker of English) is that it also covers bees and honey. Honey is classed as a non-flesh food, coming within the scope of mayi, and the bees that make the honey fall into the same category (just as a tree can be referred to as mayi-even out of season - if at some time of the year it bears edible fruit). Thus, among others:

> mayi muruy 'white bee' mayi divu 'small ground bee' mayi yingilibiy 'English bee'
dumbagi 'tobacco' is not regarded as mayi, although it can be chewed as well as smoked. Yidiy here differs from Dyirbal, which does place 'tobacco' in its 'non-flesh food' gender class (Dixon 1972: 312).
(c) bana 'drinkable liquid'
bana is used as the unmarked term for referring to 'fresh water' (just as mina can, when it occurs without any other noun, often be translated as 'meat' and mayi as 'vegetables', and buri used alone indicates 'fire'); it is also used as a classifier with a noun referring to a water feature:
spring, creek, lake, rain, dew, steam, and so on. It cannot be used with blood, sweat, urine, spittle or any other type of liquid that is not normally consumed.

The use of bana with nouns referring to 'salt water' might be thought to constitute an exception to the 'drinkable' criterion. Note:

> bana 'fresh water'
> (bana) birin 'salt water'

However, study of the meaning and use of the adjective gilga sheds some light on this apparent anomaly. gilga is used to indicate anything imperfect or inadequate for its purpose - 'soft wood (that will break easily if made into an implement)' or 'a weak (easily breakable) fishing line'. 'Salt water' is characterised as gilga-the informant stressed that it is 'soft' just like 'soft wood'. birin is thus regarded as 'contaminated or inadequate bana'. Just as a soft wood will be described as dugialthough it could not be used for anything - so salt water is included under bana-although it could not be drunk.

Salt water is thus held to belong to the same category as fresh water, but to be an imperfect instance of it. It contrasts with blood, urine, semen etc. which are assigned to a quite different category.
bana is also used with nouns such as gulbul 'wave' (which can of course occur on fresh-water lakes as well as on the sea) and badagal 'tide'.
(d) bulmba 'habitable place'
bulmba can be used with a noun referring to a hut or type of structure, e.g.
bulmba yizwan 'shelter for one person'
bulmba dugur 'hut holding two or three people'
bulmba dimur $U$ 'hut holding from half-a-dozen to ten people'
Or with a description of any geographical feature at which one might camp (some examples were given above). For instance, an informant said that bulmba walba only made sense if it were bulmba walba malan-one could only camp at a rock (walba) if it were a flat rock (malan).
bulmba, used without any other noun, can be translated 'place'- it can refer either to an actual camping-site (so that if one says 'I'm going back home to sleep', bulmba would be used for 'home') or else to any past or potential camping place. bulmba also has a more general meaning:
'the world' (as in 'God made the world') - here 'the world' is effectively identified at the complete set of places at which people can live. ('Sky' is regarded as part of bulmba - see 4.7.3.)

Just as bama commonly occurs with the names of people, so bulmba can be used with place names, as in (414). Similarly, bana occurs with the names of lakes, rivers and creeks; and bunda 'mountain' or daruway 'island, small hill'both hyponyms of walba 'stone' - with the names of rocky features.
(e) gugu' purposeful noise'

Yidin has more than a score of specific nouns for referring to different types of noise - cf. $(629),(65 \mathbf{I}-2)$ above. Some are animal or language noises:
gugu gawal 'a call'
gugu gugulu 'a recitative mourning style used by men'
gugu gayagay 'a whisper'
gugu nurugu' the sound of talking a long way off (when the words cannot quite be made out)'
gugu dubun 'squeaky noise made by young animal'
while others are noises of banging or clapping or sawing, and so on:
gugu maral 'the noise of a person clapping his hands together'
gugu mida 'the noise of a person clicking his tongue against the roof
of his mouth, or the noise of an eel hitting the water'
gugu gada 'the noise of sticks being banged together for dance accompaniment'
gugu dalyudalyu 'the noise of a bell ringing'
It appears that gugu is used with the name of any sound that results from some person or animal purposefully making a noise. That is, this generic covers all controlled attempts at communication (including, of course, all types of language and para-language activity). It can be used with the NAME of an animal, to describe the noise it makes - for instance, gugu digirdigir 'the call of a willy wagtail' in (986) from 6.1.1.

However, gugu does not cover 'involuntary noises', that are sideeffects of some other activity. That is, the following nouns are not included in the scope of gugu:
yuyuruygul ' the noise (" shshshsh ") of a snake sliding through grass'
gayga 'the noise of some person approaching e.g. the sound of his feet on leaves or through the grass, or even the sound of a walking-stick being dragged along the ground'
duyur 'reverberations caused by someone walking over floorboards, or treading heavily over the ground outside'
gugu is also used with the noun gurun $U$ 'language'. (Note that in many languages to the north gugu means 'language', corresponding to gurun $U$ in Yidin. It is often included in the proper name of the language - e.g. GuguYalandi, Gu:gu-Yimidir.)
gurun $U$ (and/or gugu) can be used with a language name, although it is not a necessary part of its citation form. Thus:
(995) guru:n yidin nayga:din Talk the Yidin language!

Also attested are gurun $U$ guygay, gurunU da:bugay, gurun $U$ yadan and (referring to the 'mother-in-law' style) gurun $U$ dalyuy. But since gurun $U$ only occurs with proper names it is not properly regarded as a generic term.
(f) wira 'moveable object'

This is perhaps the most difficult and most interesting classifier. It is translated as 'thing' by informants and occurs most frequently with the names of artefacts like 'boomerang', 'shield', 'saddle', and also 'stick', 'stone' - see (513) - and so on. In one enlightening discussion Dick Moses indicated that wira could only be used of something moveable wira walba could be a stone, but not a mountain, wira dabu a handful of soil or sand, but not the ground itself, and wira dugi a stick but not a tree. It can be used for the sun and moon - see (26I) - which certainly move in the sky, and for wind and cloud.
wira cannot be used for anything that is describable as mina, mayi or bana (since the Yidindi did not camp on anything moveable, it is impossible for wira and bulmba to be applied to the same object). It does thus appear to be defined as, in a way, a residue set - AFTER all other nature/use classifiers have been assigned. Most things that are not included under mina, mayi or bana can - if moveable - be classed as wira. Thus wira covers non-drinkable liquids (like blood) and inedible fruits; and even noises (like gayga) that are not gugu. It can be used for inedible insects and reptiles (although it is not too frequent in this sense) but would not be employed with a noun like gudaga 'dog'. wira is used with severed body parts, and with excretions (faeces and urine). It occurs with the names of spirits - for instance in (746) wira is referring to the rainbow-serpent.
wira also has a quite different use; it is a crude term for referring to female genitalia, with very similar overtones to the English term 'cunt'. It appears that these two senses of wira did not cause confusion, the
context indicating whether the speaker was employing a nominal classifier (probably a feature of good style) or whether he was swearing! (The two senses are certainly related - compare with the use of 'thing' for genitalia in colloquial English.)

This account of wira applies to the coastal dialect only. It has not been possible exhaustively to investigate the term in tablelands dialects, but it does seem to have had a quite different meaning there, referring effectively to 'dangerous thing' (e.g. a poisonous snake, a stinging tree, or a harmful substance such as opium).
The inclusion of 'moveable' as the criterial condition for wira (a frequent and important term in Yidin discourse, and a major indicator of 'world view') is of anthropological interest. One is reminded of Benveniste's (1973:40-51) discussion of Indo-European *pecu; this 'originally meant "personal chattels, moveables", and it was only as the result of successive specifications that it came to mean in certain languages "live-stock", "smaller live-stock" and "sheep"'. It was further specialised to 'wealth in the form of live-stock' and then simply 'money' (Latin pecunia). Mulvaney (1975: 238-48) refers to the Australians as 'incipient agriculturalists', and one can but speculate that the semi-nomadic rain-forest dwellers were perhaps further advanced in this direction than groups elsewhere. Certainly the evolution of a term like wira could (speculatively) be regarded as a conceptual step on the path towards an agricultural society.

There is one other noun, dama, that could perhaps be regarded as a function/use classifier.
(g) dama 'something dangerous or bad'
dama in the coastal dialect refers to anything harmful (appearing to correspond to the use of wira in tablelands Yidin) - dangerous snakes, centipede, stinging trees, strong drink, opium (or, the writer was told, medicine-presumably classed as dama because of its unpleasant taste). dama refers to the rainbow-serpent in (746), and co-occurs with dimbaral 'cyclone' in (660). It is used most often to refer to snakes (sometimes, in fact, dama seems to be used as a generic term 'snake').
There is a contrast between dama and wabaqwabal; the latter refers to anything subject to cultural taboo - for instance, the flame tree (which is held to be sacred to the rainbow-serpent) or a young girl (who must remain a virgin up to a certain age).

Some specific nouns can co-occur with two distinct classifiers (there are no examples of occurrence with more than two). Leaving aside bama bupa 'person woman' and bama waguda 'person man', these cases
always include one 'inherent nature' and one 'function/use' generic. Examples involving animals (mina plus maygum, munimuni or daruy) and plants ( mayi plus dugi or nara) have already been quoted, as has buray 'cave' with walba 'stone' and/or bulmba 'habitable place'.
A piece of hot charcoal (nirgil), say, can be described as buri and as wira, and a plot of ground both as dabu and bulmba. Some co-occurrences are less predictable: a tree species, diwiy, holds water inside its bark (which can be tapped and drunk) yielding bana diwiy in addition to dugi diwiy.

We mentioned in 3.I. 3 that, for stylistic felicity, a generic noun may be employed in a statement or question and a specific noun in the reply (or vice versa). Similarly, in a main-plus-subordinate clause construction, a specific term can occur in one clause, and its classifier in the other (4.4.2).

Finally, loan items are sometimes dealt with through unusual combinations of generic and specific nouns. gulgi 'sand' normally falls within the scope of $d a b u$ 'ground' - referring to a patch of sand - or of wira 'moveable object' - referring to a handful of sand. In recent times 'sugar' has been described as mayi gulgi-it looks and feels like sand, but it is edible.

In other cases introduced items may, in the absence of any appropriate specific term, be described simply by a classifier. Dick Moses told the story of the first aeroplane sighted in Cairns; the plane was simply described as wira throughout the text. Similarly, in line 3 of text 9 gurun $U$ is used to refer to the English language, in the absence of any specific name. And we mentioned earlier that the cane toad could be described only as maygum.

One criterion for checking whether a word is a generic noun is cooccurrence with wanira 'what kind of'. In 3.7.1 the two levels of inanimate interrogative were detailed: wani 'what', enquiring as to the genus of an object; or, if the genus is known, wanira, enquiring as to species. Thus mayi wapira 'what sort of food' occurs in lines 40 and 44 of text 2. And in the story of the first aeroplane Yidingli children keep asking wanira wira ' what sort of moveable object [is this]?'

Corresponding to inanimate wayi there is a human interrogative wana. In an attempt to discover whether wapira corresponds - at a more specific level - to wana as well as to waji, the writer enquired whether it was possible to say waanira bama. He was told that it was, and that this would be equivalent to wandabara. Now wandabara has the structure of
a local group name (1.2) with wanda 'where' in the slot normally reserved for a noun describing a certain type of terrain, and it is plainly enquiring as to local group affiliation. It appears that local group membership (for humans) is regarded as a parallel semantic level to species membership (for animals and plants). Thus:


Systems of noun classification similar to that in Yidin have been reported for three languages from the east coast of the Cape York Peninsula - see Thomson (1945: 165-7) on Wik-Monkan, Sommer (1972: 74-80) on Oykangand, and Hall (1972: 70-1) on Thaayore. Unfortunately, although these three writers each list a dozen or so classifiers, none has attempted a full semantic investigation of the phenomenon. See also Dixon (1970a) for discussion of how (syntactic) noun classification might be developing into (morphologically marked) noun classes in Olgolo.

Dyirbal has some generic nouns ('tree', 'snake', 'fish', 'bird' etc.) but does not normally include them in an NP with a specific noun. Instead of a system of noun classification, Dyirbal has four noun classes - a noun is normally accompanied by an article-like 'noun marker', agreeing with it in case and showing its class. The semantic basis for the assignment of nouns to these 'gender' classes can be explained, and involves quite detailed knowledge of Dyirbalgan beliefs and mythology (Dixon 1972: 306-11).
It is worth enquiring whether the Yidin system of noun classification (involving about twenty generic terms) evolved from something like Dyirbal's restricted system of gender classes; or whether the grammatically more complex phenomenon in Dyirbal developed out of multiple syntactic cooccurrence relations, as in modern Yidin. It is, in fact, likely that neither of these alternatives holds. Both the Yidin and Dyirbal systems may well have developed from a proto-organisation of the same type, but this would probably have been simpler than that shown by either modern language. A smallish set of half-a-dozen or so classifiers - used fairly optionally and haphazardly in the first place - may have increased in size and semantic complexity to yield the system described above for Yidin; and it may have moved in quite a different direction in Dyirbal, being here incorporated as an obligatory morphological category.
6.2.2 Logical modifiers. The adjective class in Yidin contains three items which involve logical-type quantification or identification of the reference of the head noun.
(a) wawur 'some'

See (319) in 4.1.2 and
(996) yayu nuni:nda budi:n wawur wiwi:na

I-SA you-dat tell-past some-Abs give-purp
I promised to give you some [food] (Literally: I told you about some [food], that I would give some [food] to you)
Note also the double use of wawur in Dick Moses's explanation of the language situation at Yarrabah today:
(997) bama yiju wawur gurin nayga:din yidin |
person-AbS this-S some-abs good-abs speak-pres Yidin-ABS gada:y duga:lna / bama yiju wazvur white man-ERG catch-PURP person-ABS this-S some-ABS dagudagu yangay | nudu bama:l new-chum-ABS can't understand-pres not person-erg budi:n guru:n jayga:dina tell-PAST language-ABS speak-PURP
Some people here talk good Yidin, for the white man to catch (in his tape-recorder and notebook); some others think they know a bit but in fact can't understand [or speak] it; they were never taught [told] to speak the language by the [old] people
The adjective dagudagu refers to someone who is unable to perform some task but thinks he can do it. It was always translated by informants through the colloquial Australian term 'new chum' (originally referring to the overconfident behaviour of immigrants fresh out from England in the last century).

The quantification 'all' is expressed in Yidin not by a separate word but by the nominal affix -damu (3.3.6).
(b) bagil 'another - a further token of the same type'
(c) gayal 'another - a token of a different type'
bagil describes another object similar to something already referred to.
In line 17 of text 2 , having elicited Damari's name the people ask his brother nundu wana bagil 'Who are you, other fellow?' Similarly, (330) from 4.I. 3 describes how people left a wounded alligator, saying that another alligator would come along soon and eat him (using the ergative case-form of bagil). Note also
(998) yadin bimbi ninay yingu bulmba:/ yayu galin bulmba: bagi:lda wunayalip
My father is staying in this place; I'm going to sleep in another (but similar) place

When explaining to the writer that waguda ' man' and bupa ' woman' can be used to describe the male and female of animal species, Dick Moses said yipu buna gangu:l 'this is a female wallaby' and yipu bagil wagu:da gangu:l 'this other wallaby is male'.
gayal indicates something totally novel. In line 34 of text 9 - quoted as (311) in 4.I.I-gayal describes traditional Yidindi fare, contrasting it with the totally different kind of sustinence offered by the mission. George Davis told a story about the origin of fire; the rainbow had hidden the original fire in a cave and the birds tried one-by-one to snatch it from him, each being in turn repulsed. Finally the satin bird, badin, tried and:

The rainbow tried to catch that [satin bird]. But no, he was a different sort of bird (i.e. he succeeded) and went (away unscathed, with the fire)...
gayal is appropriately used to describe novel aspects of European culture, including the English language:
(1000) gaya:lbi guru:n gada:n
ANOTHER-bi-ABS language-ABS white man-GEN-ABS
The language belonging to white man is a quite different sort of
thing

Note that both gayal-in (70) and (1000) - and bagil can occur with the nominal derivational affix -bi 'another', the meanings of adjective and affix reinforcing each other.
6.2.3 Semantics of time qualifiers. Yidin takes 'today' as focal point for its analysis of the temporal continuum. Immediately preceding and following today are:

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guygam 'yesterday'
\etaada 'tomorrow'
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The unmarked reference of guygam is actually to 'yesterday afternoon' and of yada to 'tomorrow morning' (the parts of those days that are nearest to today). Based on these forms are general terms for parts of a day (whose unmarked reference is to parts of 'today'):
guygaguygam 'afternoon/evening'
yadaguran 'morning'
(There is an adjective guran 'long, tall', but there is no semantic reason to identify it with the second element of yadaguran.)

Members of these pairs can be combined, to give explicit reference to a part of yesterday or tomorrow; for instance:
(гооі) guygaguygam jada bana daral It'll rain tomorrow afternoon
(1002) bana guygam dara:l guygaguygam It rained yesterday afternoon

Note that, for phonological felicity, guygam and guygaguygam should be separated by some other word(s), as in (r002).
yaluyunda was given for 'today' and could be used in this sense when, say, providing disambiguation:
(⿺辶03) bana yaluךunda dara:l yadaguran It rained this morning
but normally it has the more general sense 'nowadays':
(1004) yaluŋunda bama wuฤa:diyala dulugunu:

Nowadays people drink [too much] alcohol
Dyirbal organises time in a quite different way, taking the point 'now', rather than 'today', as its focus (cf. Dixon 1972: 114-16). There are terms 'earlier on today', 'now' and 'later on today' whose reference depends on the time of utterance (they are thus 'shifters', of the same semantic type as pronouns and tenses). Dyirbal has no words for 'afternoon' or 'evening' (but would have to use a phrase describing the position of the sun in the sky). Similarly, Yidin has no words for 'earlier on today' or 'now'; and garu 'by-and-by, soon' referring to a time from half-an-hour to a couple of days off-does not correspond to Dyirbal's gilu 'later on today'.
It seems that most Australian languages describe time either through the Yidin 'today as focus' model, or the Dyirbal 'now as focus' pattern. Les Hiatt (personal communication) reports a complex arrangement in Gidinali (from Arnhem Land) that in effect superimposes these two systems. Gidinali has two past tense suffixes - $-d a$ and $-n a$ in one conjugation - used as follows:
(a) present: -da
(b) time earlier today: $-n a$
(c) recent past before today: $-d a$
(d) time further in the past: $-n a$

We can recognise a contrast $-d a$ 'now/recently' versus -na 'earlier on' that applies both within today, and in the time span before today. (See Glasgow 1964; and compare with Hymes 1975.)

There is what appears to be a bound-form classifier used for counting on the fingers; this was employed most frequently for working out the number of days or nights between two events. As the fingers are touched in turn, beginning with the smallest one:
> waramguman 'one'
> waramdambulA 'two'
> waramdagul 'three'
> waramyamugundi 'four'
> zvarammala 'five'

Regular number adjectives are added to zvaram for 'one', 'two' and 'three'. There are no Yidin roots for numbers beyond three, so the name of the index finger, yamugundi, is used for 'four', and mala 'palm of the hand' is utilised for 'five'. Gribble ( 1900 : 135) gives the Gungay forms for one,...eleven; eighteen, ..., twenty. mala is 'five' here but zvaram is not included. On Gribble's evidence Gungay had mugu for 'seven' and muguyabi for 'four' (cf. pabi 'many'). These names were not recognised by present-day Yidin informants and we cannot ascertain whether Gribble's forms relate to the particle mugu (4.10) or to some homonym.
The importance of the notion of 'day' to the Yidin system of temporal reference is seen in the interrogative. 'When' involves an affix to wapddirI 'how many ?' - literally, 'how many days [since/until]...?' See 3.7.8 and 3.5.
6.2.4 Existential verbs. We mentioned in 4.1.io that Yidin does not have any verbal copula. However wuna-n 'to lie' can be used in an existential sense (covering a small part of the range of 'to be' in English).
See ( $670-1$ ) in $4.4 .4,(387-8)$ in 4.1. 8 and
(1005) mayi burin giyi budi / munimuni:y
food-ABS bread-ABS DON't put down-IMP ant-ERG buga:ndi /bambi garu gurin vouna:na eat-LEST-ABS cover-IMP by-and-by good-Abs lie-PURP
Don't leave bread [uncovered] lest the ants eat it. Cover it up so that by-and-by it'll [still] be good
(1006) nundu gana bulin bana: darabaya /
you-sA Particle plate-ABS water-LOC shake-comit-IMP
baga garu gałan wuna:nal
wash-IMP by-and-by clean-ABs lie-PURP
You rinse the plate in water and wash it, so that by-and-by it'll be clean

But note that in each of these cases the referent of the absolutive NP could be said to be 'lying'.
wouna- $n$ is also used for 'live', as in:
(1007) yadin mudam waygi wunay gambǐala

My mother lives up on the tableland
And it is the unmarked verb for indicating the 'existence' of some geographical feature:
(1008) yinu bulmba wunay yaygi:da

This place is [called] Yangida
However, dana-n must be used for anything which has greater vertical than horizontal extension - say, a tree or a house:
(1009) bulmba dimu:r yalal dana: $\boldsymbol{n}$

There was a big house standing [there]
An informant spontaneously contrasted wuna-n and dana-n in the context of daruway 'island, small hill' and bunda 'larger hill, mountain' respectively:
(1ого) a. yiju walba daruway wunay This is a hill
b. yipu walba bunda danay This is a mountain

In Yidin 'lie down' appears to be the unmarked term from the universal 'posture' system \{lie; sit; stand\}. wuna-n is used for 'live' and 'exist' and, for instance, budi-l 'put down' - the transitive correspondent of wuna-n-is employed for 'marry'; see also 6.I.I. In Dyirbal 'sit' is the unmarked term: nina-y is used for 'live' and the comitative form ninayma-l for 'marry' (cf. Dixon 1972: 96).

### 6.3 Dyalguy or 'mother-in-law language'

It appears that each member of the Yidindi tribe had at his disposal two distinct speech-styles: Yidin (called 'ordinary Yidin' or 'straight-out Yidin') and also an avoidance style called Dyalyuy which had to be used in the presence of certain taboo relatives (see I.6). Dyalguy has not been in active use for something like fifty years, but the writer was able to elicit a little information from Pompey Langdon and Tilly Fuller, taking care (until the time of Tilly Fuller's death) carefully to cross-check all data obtained. Almost two hundred Dyalguy words were painstakingly elicited, over a period of five years. In addition, some text material and sentences were obtained.

Dyalnuy has exactly the same phonology and grammar as Yidin，but an entirely different lexicon．Pronouns，deictics and all affixes are identical between the two speech－styles，but nouns，adjectives，verbs， locational qualifiers and time qualifiers（that is，all dictionary words）are quite different．For instance，the Dyalguy sentence：
（⿺𠃊⿴囗十）yayu yulanzangi barmay／maygay yulandilygu gumbiraya：linga：lin I＇m going uphill，going to pick up black pine［that is］down［on the ground］
corresponds to Yidin：
（土о12）yayu waygi galiy／gubu：m dilygu gumbi：linga：liy
These involve the following lexical equivalences：

| Dyalnuy | Yidin |  |
| :--- | :--- | :--- |
| yulanwangi | zvangi | ＇up＇ |
| balma－$n$ | gali－$n$ | ＇go＇ |
| maygay | gubumU | ＇black pine＇ |
| yulandilygu | dilygu | ＇down＇ |
| gumbiraya－l | gumbi－l | ＇pick up＇ |

The pronoun yayu＇$I$＇is constant，as are the aspectual and tense affixes． It is interesting to note that the＇reduplicated aspectual＇suffix －：lingali－$n$＇going＇is carried over，even though the lexical item gali－n ＇go＇，on which it is presumed to be historically based（3．8．6），is rendered in Dyalyuy by barma－n．

The formal relationship between corresponding Yidin and Dyalyuy items can be of several types：
（a）In ninety per cent of the cases the forms are totally dissimilar－as barma－n／gali－$n$ and maygay／gubumU．
（b）Sometimes the first syllable of the Dyalyuy form may coincide with that of the Yidin word－Dyalyuy birmbida，Yidin birin＇salt water＇； similarities of this type can usually be dismissed as＇accidental＇．But there are four pairs that involve stronger formal similarity：

| Dyalyuy | Yidin |  |
| :--- | :--- | :--- |
| yaldan | yandal | ＇a light＇ |
| duwur | dubur | ＇stomach＇ |
| gumbiraya－l | gumbi－l | ＇pick up＇ |
| dariyiy | daruy | ＇bird（generic）＇ |

These do not, however, reveal any systematic correspondence. (The members of each pair May be distantly Genetically related, the Dyalyuy term perhaps descending along some other branch of the Australian 'family tree' and being recently taken over from some other language into Yidindi Dyalnuy.)
(c) There are a number of cases of a derived stem in Dyalnuy corresponding to a monomorphemic root in Yidin. Thus Yidin yagupU 'echidna (porcupine)' is rendered by bingaldamba - Dyalyuy bingal is the correspondent of Yidin gala 'spear', and -damba is a productive nominal affix 'with a lot of -_' (3.3.6); the Dyalnuy term precisely describes the porcupine's prickly exterior. The nominal affix -bara 'belonging to -, pertaining to -' (3.3.6) occurs in a number of Dyalyuy names. For instance, gayibara - based on gayi 'ground, soil', the Dyalnuy equivalent of Yidin dabu-was given by Pompey Langdon as the name for a number of animals who live on or in the ground: bandicoots, worms, and so on.

There is just one productive way of deriving Dyalyuy forms from Yidin roots. The major locational qualifiers have - like all other dictionary words - a distinct form in Dyalnuy. But here the Dyalnuy term merely involves gulan prefixed to the Yidin word:

| Dyalyuy | Yidin |  |
| :--- | :--- | :--- |
| yulanvangi | waygi <br> nulandilygu <br> dilygu | 'up' |
| nown' |  |  |
| nulanguwa | guwa | 'west' |
| nulannaga | naga | 'east' |
| nulanguya | guya | 'across the river' |

We mentioned in 3.4.1 that there is both a locational qualifier and an adjective with the meaning 'north', and similarly for 'south'. In these cases Dyalnuy simply has a yulan locational qualifier corresponding to both Yidin words:

| Dyalyuy | Yidin |
| :---: | :---: |
| yulangungąI | $\begin{cases}\text { gungarI } & \text { 'north' } \\ \text { daygit } & \text { 'northern' }\end{cases}$ |
| yulanjara | $\begin{cases}\text { yara } & \text { 'south' } \\ \text { gunin } & \text { 'southern' }\end{cases}$ |

It is probable that this process does not apply to all locational qualifiers.

When the writer asked Pompey Langdon to translate sentences involving munu 'inside' or naru 'on top of' into Dyalyuy, the locational qualifier was simply ignored. Thus:
(1013) a. Yidin: yayu ninay naru walba:

I'm sitting on top of the stone
b. Dyalyuy: yayu niya:rdiy diyu:nda

I'm sitting on the stone
'Prefixing of yulaf' is thus a lexical process which ensures that locational qualifiers - like other lexical items - have distinct form in Dyalyuy.

In Dyirbal, locational qualification is dealt with by a complex grammatical
 grammatical words - pronouns and so on - these carry over in the same form into Dyalguy. But the northerly dialect Mamu inserts the form yulan into the middle of a noun or verb marker in Dyalyuy - e.g. yaluyulandayi, as against yaludayi in the everyday style (Dixon 1972: 315). The form pulan is inexplicable, and seems quite redundant, in Mamu; but it is plainly related to yulan in Yidindi Dyalyuy.

Compound verbs (6.1.1) appear to be translated morpheme-formorpheme into Dyalguy. Thus:

| Dyalyuy gamar | Yidin gidar 'mark' |
| :---: | :---: |
| mulbi-n | gunda- $l$ 'to cut' |
| gamar + mulbi-n | gidar + gunda-l 'to paint in pattern' |
| gildu-l | bada-l 'to bite' |
| waruyu + gildu-l | bidar + bada $-l$ 'to dream about' |

Some of the examples given already illustrate the one-to-many correspondences that hold between Dyalpuy and Yidin lexical items. We have mentioned that gayibara covers a number of bandicoots, worms etc. (all of whom have specific names in Yidin) and that julangungar $I$ corresponds to guygaŋI and daygir. In 4.2 .5 we described how the Dyalguy verb maba-l 'cook, burn' covers both wadu-l and guba-n in Yidin (with maba:di-n being the specific equivalent of $g u b a-n$ ).

It seems clear that Dyalyuy had a smaller vocabulary than Yidin, often showing just a generic term where Yidin would have a number of species names (and perhaps no generic term). Thus, the Dyalyuy noun dilmay 'grass' corresponds to a number of Yidin forms, including dirgar 'blady grass' and muyay 'kangaroo grass'; see also i.6. In some cases,
important semantic distinctions can be neutralised in Dyalyuy: Pompey Langdon gave Dyalyuy midaguran for yadaguran '(tomorrow) morning' and also for guygam 'yesterday' - cf. 6.2.3; tense inflection on the verb would indicate whether past or future reference was intended.

For Dyirbal the writer was able without difficulty to elicit the Dyalyuy equivalent for almost every word from his 2,500 -word dictionary of the 'everyday style', and on the basis of this draw quite detailed conclusions about the semantic organisation of Dyalyuy, and so on (Dixon 1971). In the case of Yidin, Dyalnuy equivalents were obtained for less than $20 \%$ of the vocabulary, and in each case a considerable effort of memory on the part of the informants was involved. It is in these circumstances impossible to be certain about many details of the correspondences between Yidin and Dyalyuy lexicons.

It does appear that Yidindi Dyalnuy resembled Dyirbal Dyalnuy in having no lexical item in common with the everyday style of speech. This contrasts with Guugu-Yimidhir - a hundred or so miles to the north of Yidin - which allows just a few everyday language items to be used in its avoidance (so-called 'brother-in-law') style; see Haviland, mimeo.

Since Yidij intervenes geographically between Guugu-Yimidhir and Dyirbal, it might be expected that its Dyalyuy would, in terms of complexity, fall part-way between the well-documented avoidance styles of these two languages. There is no evidence that it did.

In searching his memory for Dyalnuy correspondents Pompey Langdon appeared to be working on the principle that there was in most cases a separate Dyalyuy correspondent for each separate Yidin word. Thus, he remembered Dyalyuy dumalA for Yidin darin 'straight woomera' but believed there should be another Dyalguy term for Yidin baluy 'curved woomera' (and rejected the writer's tentative suggestion that dumala might cover both darin and balur). In some areas of vocabulary Yidin certainly has more one-to-one correspondences than are exhibited by Dyirbal. For instance, Yidindi Dyalyuy appears to have a separate term for each wallaby species - walurubara for Yidin guriliy 'black-nose wallaby', bugi for Yidin gangulaA 'grey wallaby', and so on - whereas Dyirbal Dyalguy has just one generic term covering all types of wallaby and kangaroo.

The evidence thus suggests that Yidindi Dyalguy may originally have been - in terms of number of avoidance style items, in proportion to the number of everyday style words - richer than Dyirbal Dyalyuy, which was in turn richer than the Guugu-Yimidhir avoidance style. There are often one-to-many correspondences between Dyalnuy and Yidin; but there may have
been less of these, and more one-to-one relationships, than in languages to the north and south.

We are thus suggesting that, in a region characterised by this avoidance language phenomenon, Yidin may have been a focus of maximum complexity, with the phenomenon tailing off gradually in surrounding languages. But this is, on the slender data available, very much in the nature of a speculative extrapolation. (It is difficult to know whether a response of a certain type indicates something of the original nature of the organisation of Dyalyuy, or simply reflects lack of knowledge on the part of the informant.)

One-to-many correspondences have been gathered involving all parts of speech. The Dyalyuy adjective yarbul was given for Yidin dangan'no good', and dirandi 'tired'. Verb examples include:

$$
\text { Dyalŋuy } \quad \text { Yidin }
$$

| gumbiraya-l | $\left\{\begin{array}{l} \text { gumbi-l 'pick up' (TR) } \\ \text { maba-l 'lift' (TR) } \end{array}\right.$ |
| :---: | :---: |
|  | wayga:di + na-l 'wake up' (TR) |
| $\int d i n d a-l$ | dara-l 'put standing' (TR) |
| $\left\{\operatorname{dinda}+: \mathrm{d}_{\mathrm{j}} \mathbf{-} \boldsymbol{n}\right.$ | dana-n 'stand' (INTR) |
| \{bayma-n | gali-n 'go' (INTR) |
| $\{$ baqma + ya-l | banda-r 'follow' (TR) |

In the cases of dinda- $l$ and bayma- $n$ we have a single verb in Dyalyuy corresponding to a transitive/intransitive pair in Yidin. dinda-l is transitive, and the antipassive -:di- $n$ form is used for dana- $n$; barma-n is intransitive, with the derived 'comitative' form being used in the case of banda- $r$.
A third of the Dyalyuy verb forms have a final syllable $-: d i-n$ or $-\eta a-l$ which must be regarded as part of the root (see 3.8.3). Thus 'sit' - nina-n in Yidin is niya:rdi-n, but there is no form niya- $l / r$; and 'pick up' is gumbiraya-l, but gumbira- $n$ does not occur. (Compare with Dyirbal, where many Dyalyuy verbs appear to be, historically, verbalised adjectives e.g. madirabi-l for nina-n 'sit'; see Dixon 1972: 323.)

One verb exists in both $-y a-l$ and $-: d i-n$ forms:
Dyalguy wouyubaya-l Yidin budi-n 'tell' (TR) wuyuba:di-n nayga:di-n 'talk, speak' (INTR)
but there is no verb wuyuba-n. This example emphasises that $-\eta a-l$ and $-: d i-n$ are here parts of the root, rather than being instances of the productive derivational suffixes $-\eta a-l$ and $-: d i-n$ (although they are certainly historically related to them). In Yidin - pa-l can only be added to an intransitive and -: $d i-n$ to a transitive stem; a given stem can thus only select one of the two suffixes.

> 6.3 Dyalyuy or 'mother-in-law language'

In some cases a single Dyalyuy form may be used for two Yidin nouns, according as something is used for a certain purpose:

Dyalŋuy Yidin
bidilin $\begin{cases}\text { baguy } & \text { 'sword' } \\ \text { duludulu } & \text { 'Johnson hardwood tree' (from which swords are } \\ \text { usually made) }\end{cases}$
or has a certain characteristic:

$$
\text { milgal }\left\{\begin{array}{l}
\text { dili 'eye' } \\
\text { dawugan 'silver bream' }
\end{array}\right.
$$

There is just one 'grammatical word' which has a different form in Dyalpuy - muway corresponds to the Yidin particle/interjection yudu ' not, no'. Other particles appear to occur in the same form in Dyalyuy.

Dyirbal has separate particle gulu 'not' and interjection yimba 'no'. The particle occurs in Dyalguy but the interjection comes out as dilbu 'no'.

In Dyirbal those interrogatives which cover lexical classes - 'what', 'do what/do how' - have different forms in Dyalyuy, whereas those based on grammatical classes - 'who', 'where'-are unchanged. It seems that all deictics - whether definite or indefinite/interrogative - occur in identical form in Yidin and in Yidindi Dyalyuy.

Finally, we can note that Dyalnuy maintains the distinction between 'person', 'man' and 'woman' that characterises Yidin (in contrast to, for instance, Dyirbal and English):

Dyalyuy | bayabay | Yidin |
| :--- | :--- |
| buama 'person' |  |
| bulanbay |  |
| mugi:mugi: |  |
| waguda 'man' |  |
| buna 'woman' |  |

## Appendix Previous work on Yidin

Although there has been close white settlement in the Yidij language area for a hundred years, almost no attempt has been made to record the language. The City of Cairns (with a population of around 30,000 ) has its Historical and Naturalists' Societies, but these bodies have never initiated any project to study the Aboriginal language or culture.
A few scraps of language were recorded, almost exclusively by visitors to the region. These are listed below under the three main dialects Gungay, Wanur(u) and Yidin (see 1.2). Nothing at all is recorded of the Maday dialect, the last speaker of which died in the late nineteen-sixties (the writer had tried, without success, to contact her in 1964); it is not certain whether Maday was another name for Wanur(u), or a separate linguistic/tribal unit.
[I] Guygay
(a) Rev. E. R. B. Gribble, missionary at Yarrabah from 1892 to 1909 , published a number of short vocabularies and anthropological scraps. Chiefly:
(I) 'By Rev. Mr Gribble, Yarrabah Station, Tribal Dialect of Goon-gan-je', Australasian Anthropological Yournal, vol. i, no. 1, p. 13 (1896). About 45 forms - nouns, pronouns and some phrases.
(2) 'C. Grafton dialect of Goonganji tribe, by Rev. E. R. B. G. of Bellendenker Mission', Australasian Anthropological fournal, vol. 1, no. 3, pp. 16-17 (1897). About 100 items in a comparative table of vocabularies from a number of languages. (This whole table was reprinted almost in toto in Science of Man, vol. 12, pp. 211, 231, 251 (1912).)
(3) 'Class systems' of the 'Goonganji Myarah and Dungarah Tribes, being tribes on Cape Grafton, the Mulgrave River and the Lower Barron River' by Rev. E. R. Gribble. Australasian Anthropological Fournal, vol. 1, no. 4, p. 84 (1897). Includes some totem names.
(4) 'Three songs of Australian blacks' by Rev. R. B. Gribble. Science of Man, vol. i, no. 1, p. 13 (1898).
(5) 'Linguistics of the Koo-gun-ji Tribe, Chief Camp at Cape Grafton, Queensland' by Rev. E. R. B. Gribble, Bellenden Kerr. Science of Man. vol. 3, no. 8, pp. 134-5 (1900). About ioo words see comments below on Roth.
(6) In Gribble's books The Problem of the Australian Aboriginal (Sydney, 1932) and A Despised Race (Sydney, 1933) there are odd words and scraps of information. The former has a song with translation on p. 53, and fragments of legends on pp. 56-8.
(b) Dr W. E. Roth, Protector of Aborigines (based at Cooktown), filled in one of the four-page printed vocabulary forms he used, with the heading: 'Kung-gan-ji, occupying the tract of country to the east of the Murray Prior Range, Cape Grafton, etc., see letter book p. 305. Speak Kung-gai. 1898' (in Uncatalogued Manuscript 216, Mitchell Library, Sydney).

Gribble's vocabulary (5) is very close to this list by Roth, following the same order of glosses, and having the same Gungay words with similar spellings. There are enough consistent spelling differences to suggest that Gribble and Roth may have taken down the same vocabulary at the same time from the same informant - e.g. Gribble regularly uses 'ar' where Roth has just ' $a$ '. Gribble's transcription is inferior to Roth's (even though he had lived with speakers of Gungay for six years). Gribble has ko-la-ga where Roth has ko-da-ga for /gudaga/ 'dog', and koo-roo-la-pa where Roth has ku-ru-pa-pa 'large lizard' (/gurbaba/ may have been meant), for instance.

Note that the three vocabularies by Gribble - (1), (2) and (5) - are quite dissimilar in spellings, etc., suggesting that they were compiled quite separately (with copies not being retained and referred to).
(c) N. B. Tindale took a vocabulary of 'Konkandji' at Yarrabah on 19 September 1938, and also compiled a kinship/section table (the writer is grateful to Dr Tindale for making these manuscript materials available to him). This is on the whole well transcribed, with virtually all segments accurately recorded (including the contrast between long and short vowels).

Other fragments on Gungay include a few words by Ursula McConnel (Oceania $\mathrm{I}: 349,1930 / \mathrm{I}$ ) and a short note on the moiety sytem by R. H. Mathews (Proc. Am. Phil. Soc. 1900, p. 89). There are quite a lot of anthropological data, with a fair number of words, throughout Roth's North Queensland Ethnography Bulletins (1901-10). A duplicated version of a hymn in Gungay was produced at Yarrabah (probably in the 1960s);
it is called Gnungin Bimbi - |yandi:n bimbi/ 'our father' was intended and the transcription is poor throughout.
[II] Wapur(u)
(a) N. B. Tindale took down a vocabulary at Palm Island on 7 November 1938, heading it 'Wanjuru - mouth of Russell River - 2 moiety people in rain forest: Korakulu/Kuraminja'. See comments above.
(b) The microfilm publication Australian Languages (Micro-Bibliotheca Anthropos vol. 10, 1953) by H. Nekes and E. A. Worms is generally of a very low linguistic standard. The section on 'The Pygmoid tribes of the South-East of the Cape York Peninsula' (pp. 942ff.) is based on material collected by Worms at Palm Island in the late 'forties. This includes about 130 words attributed to the 'Wundjur tribe'. The standard of transcription is very poor, much worse than Roth and Tindale. Thus, Worms recorded djumbul for 'beard'in place of $\mid$ mumbul/, gulgam for 'yesterday' in place of $/ \mathrm{guyg} \mathrm{gm} /$, and so on (although occasional long vowels are marked).
[III] Yidin
(a) Archibald Meston led two government-sponsored expeditions to the Bellenden Kerr range, in 1899 and 1904. His papers include vocabularies assigned to three rivers: the Mulgrave, the Russell and the Johnstone. The latter two are entirely Dyirbal but the Mulgrave words begin with some Dyirbal items and end with Yidin words.

In Meston's published account of the first expedition (Queensland government papers CA $95 / \mathrm{I} 889$ ) the Mulgrave vocabulary is published in three columns, on page 10 ; the first column and the top two-thirds of the middle one are the Ngaçan or Mamu dialects of Dyirbal, while the remaining column and a third is Yidig.

This vocabulary also occurs in Meston's notebooks (uncatalogued holdings, Oxley library, Brisbane). The published vocabulary is repeated on pages 12-13 of Folio 2, and here a line drawn part-way across the second column separates off the Dyirbal from the Yidin items; some of the Yidin items are also repeated on page 18 of Folio 2, and the whole vocabulary is again given at the front of Folio 4. It is likely that these are not field notebooks, but Meston's workbooks into which he copied miscellaneous field notes (the originals appear not to have survived).
(b) Roth's manuscript papers contain two vocabularies identified as Yidij. There is one questionnaire that is almost identical to the Guygay listing mentioned above; although it is on separate sheets it appears to
have been taken down at the same time as the Gungay vocabulary; and is in fact of Gungay, not of Yidin. It is headed 'Yi-din-ji-occupy the valley of the Mulgrave River, along the coast line, Murray Prior Range to Cairns, see letter book p. 305; speak Yi-di. 1898 '.

Roth's other Yidin listing is a questionnaire on which both Ngadan and Yidin are entered, in parallel columns; the heading reads 'Ngachanriver scrubs of Barron River from Mr Gillett's [ ?], back of Cairns, up to Tinaroo - mates with Yidin (mob) - Yidin-ji blacks of Cairns. 1898'. The two columns are almost identical, being both Ngadan! They were presumably gathered from a single speaker, on the tablelands, just as the Gungay/Yidin vocabularies were presumably obtained at Yarrabah.

Roth's two 'Yidin listings' have only about $30 \%$ items in common. They are, in fact, neither of them vocabularies of Yidin.
(c) N. B. Tindale gathered a vocabulary of 'Idi:' from Bob Rose, on 4 September 1938 (probably at Mona Mona mission); to this is attached a kinship/section chart. Tindale's journal of his 1938 field trip also includes at least three Yidin texts (the stories of Damari and Guyala, of Gambilguman, and of Danba); the transcription and interlinear glossing are of good quality.
(d) Nekes and Worms's microfilm publication contains about 200 words, four pronouns, and some short phrases attributed to the 'Idin tribe'.
(e) About 1960 Ken Hale spent a day or so at Yarrabah. He worked out the phoneme system, recognised that there were three verbal conjugations, gathered data on pronouns and case affixes, and collected about 300 words. The writer is grateful to Hale for making available his nine-page manuscript grammatical sketch, and field notes.
(f) La Mont West Jnr took down about 150 words at Yarrabah about 1961, and recorded a short text there in 1965.
(g) E. H. Flint recorded and transcribed about 100 words in 1964.
(h) E. F. Aguas visited Yarrabah in 1966 for the Australian Institute of

Aboriginal Studies. Her unedited first draft MS 'A partial vocabulary of Idindji' contains notes on phonemes and grammar; it is held in the AIAS library.
(i) Peter Sutton visited Yarrabah for the AIAS in July 1970, and recorded some vocabulary and sentence material in addition to two very short texts and some songs.
(j) Alice Moyle recorded some Gungay and Yidin songs at Yarrabah in 1966. These were later issued by AIAS on an LP record; the accompanying booklet contains transcriptions and translations by Moyle.
(k) P. C. Griffin recorded some Gungay and Yidin songs in 1968 (issued on the same LP), and also a tape of reminiscences in English, interspersed with the odd Yidin word.
(l) In 1972 the writer asked Tasaku Tsunoda to investigate whether there were any speakers of Guggay on Palm Island. Tsunoda recorded a tape which - while still (at the time of writing) catalogued by the AIAS as Gungay - contains almost entirely Yidin vocabulary.
(m) In May 1974 a film unit from Sydney, led by Carolyn Strachan, recorded some text material from Dick Moses (making it immediately available to the writer).

Of recent work, only that by Hale and Moyle can be considered fully reliable. Aguas's transcription is extraordinarily poor, and her attempts at analysis quite useless (to take just one example, nominal derivational affix -bara 'pertaining to' (3.3.6) is divided up into verb root ba-plus aspectual affix -ra!). Flint's transcription misses some consonantal segments and contrasts whilst vastly over-differentiating vowels. (Griffin, Tsunoda and Strachan attempted no transcription.)

It is possible to infer the phonemic form of Gungay items from comparison of several vocabularies, and knowledge of present-day Yidig. For instance
'shield' 'two' 'echidna'

Yidin

| Root | \|bigunU| | \|dambula| | $\mid$ yagun U\| |
| :---: | :---: | :---: | :---: |
| Citation form (absolutive) | \|bigu:n| | \|dambu:l| | \|yagu:n| |
| (c) Tindale | piku:n | tjambu:l |  |

## Gungay



## Texts

Tape-recordings of the three texts given below, in addition to recordings and transcriptions of the twenty other Yidin texts collected, have been deposited with the Australian Institute of Aboriginal Studies, P.O. Box 553, Canberra City, A.C.T., 2601, Australia.

Each numbered line constitutes a complete 'sentence' (as defined in chapters 4 and 5). ' $/$ ' indicates the end of an intonation group (the utterance could finish at such a point).

## Text 2

The myth of Damari and Guyala - see 1.5. Guyala was a sensible man, who tried to organise the details of life logically and easily; but his brother Damari was silly and obstructive, often being intent on making things as complex and difficult as he could. Told by Dick Moses in the coastal dialect (recorded at Yarrabah on 15 December 1970; duration $12 \frac{1}{4}$ minutes).

1. damaringu yaymi:ldanu bulmba /

Damari-ERG ask-Coming-past place-ABS
Damari came and asked [his brother] about the place.
Damari and Guyala have come from the north looking for a home. When they reach the Mulgrave region Damari suggests that a likely place may be close by.
2. gana bulmba yipu wawa /

TRY place-ABS this-ABS look-IMP
'Come and have a look at this place!' [Damari says].
3. gana yali gali:na / gana bulmba numbin / yandi
tRy we two-SA go-PURP TRY camp-abs look for-imp we-sa gana galin /
TRY go-IMP
'We two should try to go. Let's try to look for a camping-site ! We must try to go!' [Damari continued].
The first clause is in purposive inflection ('must do') and the remaining two in imperative with first person non-singular subject ('let's do'); these seem
similar enough to be regarded as a (loose) example of coordination (6 below is similar).
4. gali:n / wawa:linu bulmba /
go-PAST look-GOING-PAST place-ABS
[They] went, went looking for a [suitable] place.
5. nundú/bama binay yiŋu gugu ninay/
hey! person-ABS hear-PRES this-ABS noise-ABS sit-PRES
'Hey! [We can] hear this noise [and the noise is coming from some] people sitting around [in the back country somewhere hereabouts]', [Damari said].
6. gana wawa / gana yandi wawa:lina /

TRY look-IMP TRY we-SA look-GOING-PURP
'Let [us] try to have a look! We should try to go and have a look.'
7. gali:n / wawa:linu / bama jabi ninanunda /
go-PAST look-GOING-PAST person-ABS many-ABS sit-DAT SUBORD bulmba dimu:r / camp-ABS house-ABS
[They] went, went and saw lots of people sitting [there]; [they saw] a large house [there].
8. bama yiŋu yabi jinay /
person-abs this-ABS lots-ABS sit-PRES
'A lot of these people are sitting [there].'
9. gana yapdi gaymbar / wawa |

TRY we-sa sneak up-IMP look-IMP
'Let us sneak up and have a look [at them]!' [continued Damari].
10. wawa:linu /
look-GOING-PAST
[Damari and Guyala] went up and looked [at the people in the camp].
11. bama:l wawa:l/
person-ERG see-PAST
The people [in the camp] saw [the brothers, and spoke amongst themselves:]
12. yiŋu bama waja dambu:l gada:n /
this-ABS person-abS who-ABS two-ABS come-PAST
'Who are these two people who have come here ?'
13. gana yaymi /

TRY ask-IMP
'Go on, ask them!' [one of the men said to another of the group].
14. bama:l yaymi:l/
person-ERG ask-past
[One of the] people asked [the brothers:]
15. nundu wanal guwal budi:dinu /
you-SA who-s name-ABS call-: $d i$-PAST
'Who are you? How is your name called?' (= 'How do you call your name?')
16. yayu dama:ri

I-sA Damari-ABS
'I'm Damari.'
17. nundu wana bagil /
you-sA who-s another-ABS
'Who are you, other fellow?'
18. nayu guya:la |

I-sA Guyala-ABS
'I'm Guyala.'
19. nundu:ba wanda:l galin /
you all-SA where-all go-PRES
'Where are you all going ?' [the people asked Guyala and Damari].
20. yandi warda:nda gada:n /
we-sa raft-loc come-past
'We came by raft' [the brothers replied].
21. bulmba dangan / gana gali:na yandi/
camp-abs no good-abs try go-PURP we-SA
'[Our] camping-place was no good [and] we had to try to go [to find an alternative one].'
22. nundu:ba dambu:l wunan/
you all-SA two-ABs lie-IMP
'You two lie down [and sleep here]!' [the people told Guyala and Damari].
23. dambu:l wuna:n/ bulmba: dimurula /
two-abs lie-past camp-loc house-LOC
The two [brothers] lay down [to sleep] in the big house.
24. dama:ri wayga:diju buga / gunaguna /bulmba

Damari-ABS get up-PAST nighttime middle of night camp-ABS gunaguna /
middle of night
Damari woke up in the darkness, in the middle of the night. It was the middle of the night in the camp.
25. diri | nulga:l |
daybreak wake up-past
At daybreak [Damari] woke up [his brother Guyala]:
26. mundu gana wanga:din/
you-SA TRY get up-IMP
'You try to wake up'
27. yapdi bama:n yiju bupa dambu:l
we-SA person-GEN-ABS this-ABS woman-ABS two-ABS duyga:rina:lna run-GOING-COMIT-PURP
'We must run away with these two women who belong to the people [that have offered us hospitality]', [Damari suggested to his brother].
28. bama:l wagal guman duga:l duyga:rina:l
person-ERG wife-ABS one-ABS grab-PAST run-GOING-COMIT-PAST gali: $n /$
go-PAST
[Each] person (i.e. brother) grabbed one woman and ran off with her; [they] went off.
29. bama:n bunadamu murimuri:dipu /
person-GEN-abs woman-all-abs scream-redup-: di-Past
All the women belonging to those people really screamed and screamed.
30. yanan badar / yanan badar bama:n

I-o leave-IMP I-o leave-IMP person-gen-Abs gudu:ga | another person's-ABS
[The victims cried out:] 'Leave me. Leave me, I belong to these other people (i.e. to the local group that had offered hospitality to Damari and Guyala).'
guduga 'that which belongs to someone else' is opposed to marbu 'one's own' - used to refer to something that is considered an inseparable - but abstract - part of a person e.g. wife, or conception site.

| 31. nundu gadan | nadin | wagal / yayu nunin |
| :---: | :---: | :---: |
| you-SA come-IMP | I-GEN-ABS | wife-AbS I-SA you-o |
| galinalna \| | garu | nayu dulbun dara:din |
| go-COMIT-PURP nayu galinalyu | by-and-by | I-sA fight-ABS put standing-:di-PRES |
| I-sA go-comit | -past |  |

[Damari told the woman he had abducted:] 'You come on, you're my wife [now]! I must take you off. Soon I'll be prepared to fight over you. [Now] I'm taking [you off].'
Adjective dulbun describes a man who is ready to fight over his recognised wife. It must be distinguished from gunugunu which describes a man offering his body as a target for spear-throwing, to expiate some crime he has committed; and from guli 'wild, angry, ready to fight' which lacks the 'wifedefending' sense of dulbun and the retributional overtones of gunugunu.
32. damaringu yaymi:l/

Damari-ERG ask-PAST
Damari asked [his brother]:
33. nadin vanda guman/nundu dambu:l giyi budi

I-gen-abs where-loc one-AbS you-SA two-AbS DON't marry-Imp wagal / nundu yanda wiwin guman/ wife-abs you-sa I-dat give-IMP one-Abs
'Where's my one [woman]? You mustn't marry two wives! You give one to me!'
34. nundu gadan | yayu garu nunda wiwinalin |
you-SA come-IMP I-sa by-and-by you-dat give-going-Pres bulmba: / camp-Loc
You come on! I'll give [a wife] to you by-and-by, when we reach the camp', [said Guyala].
It appears that during the flight Guyala took charge of both women, and began behaving as if they were both his wives. Dick Moses later said that although Guyala here promises that he will eventually give one to Damari, his understanding is that he never did.
> 35. yandi bulmba:gu galinalna | bayi:lina bama:nda | we-SA camp-ALL go-COMIT-PURP emerge-GOING-PURP person-DAT 'We must take [the women] to the camp; we must go so that we emerge [from the bush] at the people['s camp]', [Guyala said, and then added:]
> 36. wanda bulmba /
> where-LOC camp-ABS
> 'Where is the camp ?'
37. bulmba yanda budin yingu:n yara wanda /
camp-abs I-dat tell-pres this-acc south somewhere-loc waygi/
'I was told this camp was somewhere to the south, uphill', [Damari replied]
38. gali: / waygi gali: / bama bandi:linu /
go-PAST up go-PAST person-ABS find-coing-PAST
[They] went, [they] went uphill, went and found [another group of] people [sitting in their camp].
39. nundu:ba yipu ginay /
you all-SA this-ABS sit-PRES
[The people welcomed the brothers:] 'You can sit [here with us].'
The S NP here involves pronoun munduba and deictic $y i j u$-literally 'you, these [people], can sit...'.
40. mayi wani:ra garu jandi bugay / mayi
fruit-ABS what kind-ABS by-and-by we-SA eat-PRES fruit-ABS
banga gunda:l/ yijgilibi: mayi gunda:l/
native bee-ABS cut-past English bee-abs fruit-abs cut-past dardi dara:l / muygal budi:l / net-trap-ABS set-past hole-trap-ABS put-past
[Guyala asked:] 'What sort of food shall we eat by-and-by ? Native bee has been cut down. English bee has been cut down. Nets have been set (to catch, say, turkeys), and holes have been dug (for wallabies or cassowaries).'
Guyala is commenting on an apparent dearth of food. Supplies of honey have been exhausted and although traps have been prepared they may not yield much. Very shortly, Guyala will demonstrate a number of new vegetable foodstuffs.
41. bulmba: guma:nda wuna:n dimur [ula] bama yabi | camp-LOC one-loc lie-Past house-loc person-abs many-ABS 'Lots of people are sleeping in this one big house.'
42. nundu:ba dambu:l wunayadan yiggu / yandi nina:na you all-sA two-ABS lie-coming-Imp here-Loc we-sa sit-purp guma:nda/ one-LOC
'You two come and sleep here! Then we can all settle down together (i.e. all in one group).'
43. mayi / mayi bama:l guwal budi:n |
fruit-ABS fruit-ABS person-ERG name-ABS tell-PAST
The people told [Guyala and Damari] the names of the fruits [they were eating; and then enquired of Guyala what it was he was consuming:]
44. wani:ra mayi bugay /
what kind-abs fruit-ABS eat-Pres
'What kind of fruit or vegetable are [you] eating?'
45. wanda guyalangu budi: $\boldsymbol{n}$ /
where-Loc Guyala-ERG tell-past
Guyala told [them] where [the food he was eating came from, and where it had to be prepared, to render it edible:]
46. gana nundu:ba mayi yinu bana: budi /

TRY you all-SA fruit-ABS this-ABS water-LOC put-IMP gurdi:lna | garu / dangan | be soaked-PURP by-and-by take out-IMP
'You all try to put this food in the water, to let it soak; by-and-by [you] take [it] out!'
47. damaringu budi: $\boldsymbol{n}$ /

Damari-ERG tell-PAST
[Then] Damari told the people:
48. bana: giyi gurdi / mayi gurdi:lna |
water-LOC DON'T be soaked-IMP fruit-ABS be soaked-pURP budi / wanda guygaguygam mayi daygan / put-IMP sometime evening fruit-ABS take out-IMP mamba / sour-ABS
'Don't let [it] be soaked in the water [for too short a time!] Put the fruit to soak, and then take it out sometime in the evening. It'll be sour [if not soaked for a considerable time].'
This is the first of a number of arguments between the two brothers. Guyala is trying to arrange it so that this fruit (which is never named in the narrative) will be fresh and ready to eat after just a few minutes soaking in water. But Damari wants to make it very sour, so that it will require a full day's soaking to get rid of the bitter flavour and render it edible.
49. guyalaygu budi:n / mayi gurin budi / bana

Guyala-ERG tell-PAST fruit-ABS good-ABS put-IMP water-ABS diga / daygan / mayi buyal / mayi pour water on-IMP take out-IMP fruit-ABS hard-ABS fruit-ABS garu buga:na gabun / by-and-by eat-purp fresh-abs
Guyala told [them all]: ‘[Just] put the fruit into water and it'll be good. Pour some water on it, and take it out - it'll be hard. By-and-by the fruit will be fresh and ready to eat.'
50. nundu wani:nyal juŋu / dilngu mayi wayu you-Sa what-TR VBLSR-PRES that-ABS down fruit-ABS long time wuna:na bana: / guygaguygam daygan | lie-PURP water-LOC evening take out-IMP
[Damari responded:] 'Why are you doing that to that [fruit]? The fruit must [be allowed to] lie down in the water for a long time [before it is fit to eat]. Take it out in the evening!'
51. nundu wani:nyal yuya:rin / mayi
you-SA what-TR VBLSR-PRES that sort of thing-ABS fruit-ABS wayula wala / wambawamba:ndi bama / long time-NOW Particle wait-REDUP-LEST-ABS person-ABS
[Guyala said to him:] 'Why do you want to do that sort of thing? The fruit [has to lie in the water] for a long time now - and the people will unfortunately have to wait [a long time for their food.]'
52. garu bama:l mayi buga:nal gida:na
by-and-by person-ERG fruit-ABS eat-PURP do quickly-PURP dayga:na banam /
take out-PURP water-ABL
'People should be able to eat it soon. It should be able to be taken out of the water quickly [and eaten straightway]' [Guyala continued.]

Damari, through sheer stubborn persistence, won this round. Dick Moses affirmed that this fruit does require lengthy soaking before it can be eaten. The brothers then turned to a different type of food: yams.
53. gana mayi dimir dula:lin / munda nara / TRY fruit-abs yam-abs dig-GOING-IMP pull-rMP vine-abs [Guyala said:] 'Go and try to dig some yams up. [Just] pull on the vine [and the yams will come out of the ground]!'
54. damaringu budi:n / mayi dimir bilan / dilygu/

Damari-ERG tell-PAST fruit-ABS yam-abs enter-IMP down
dabu: / murgu: jina:na durgu:nda/ garu
ground-LOC hole-LOC sit-PURP deep-LOC by-and-by
ganda: dula:lna/
yamstick-INST dig-PURP
[Then] Damari told [him]: 'The yam must go down into the ground. It must sit at [the bottom of] a deep hole. By-and-by it will have to be dug up with a [long pointed] yamstick (i.e. it is set too deep to be just pulled up by the vine).'
55. guyalaygu budi: $/$ garu mayi muygun

Guyala-ERG tell-past by-and-by fruit-abs yam-vine-ABS
mundu: $\boldsymbol{y}$ munda / muygun munda / garu mayi ease-ERG pull-IMP yam-vine-ABS pull-IMP by-and-by fruit-ABS bayi:lna / gabun garu bayi:lna /
emerge-PURP fresh-ABS by-and-by emerge-PURP
[But] Guyala told [him]: 'By-and-by [just] easily pull the vine, pull on the vine, and by-and-by the fruit will emerge; it will come out fresh [and ready to eat].'
56. damaringu budi: $/$ mayi garu dilygu durgu:nda

Damari-erg tell-past fruit-abs by-and-by down deep-Loc
wayu nina:nal
long time sit-PuRP
Damari told [him]: '[This] fruit must sit deep under the ground for a long time.'
57. wani:ngu pundu puya:rin bila:yal
what-PURP you-SA that sort of thing-ABS enter-COMIT-PRES dilygubudun durgu:ndal garu ganda: dula:Inal down-Still deep-loc by-and-by yamstick-inst dig-purp wayuzvayu:na dula:lnal mayi muygun mundu long time-REDUP- $n a$ dig-PURP fruit-ABS yam-vine-ABS ease-ABS munda / pull-IMP
[Guyala remonstrated with him:] 'What did you put that sort of food so deep down for ? By-and-by it'll have to be dug up with a yamstick. It'll take a long time to dig. It's easier just to pull up the fruit by the vine.'
Damari got his way again - the mountain yam known as dimir does grow at a fair depth and requires some solid digging.
58. garu yungum gali:n/
by-and-by there-abl go-past
By-and-by [Guyala and Damari] went on from there.
59. dabu - dabu dula:l / dabu dula:l
ground-ABS ground-abS dig-PAST ground-ABS dig-Past muygal budi:l | bambi:l | hole-trap-abs put-PaSt cover-PaSt
[They] dug the ground. [They] dug the ground and made a trap in the form of a hole, and covered it over [with bushes, to hide the entrance].
60. mina ginda:da gangu:l / wanda:n muyga:lda | animal-ABS cassowary-ABS wallaby-ABS fall-past hole-trap-LOC mina duga:l muyga:lmu/
animal-abs take-past trap-ABS
Animals - cassowaries and wallabies - dropped into the hole. The animals were taken out of the trap [to be eaten].
61. dardi: / mina wawun dardi: duga:l /
net-trap-INST animal-ABS turkey-ABS net-trap-inst catch-PAST dardim $\mid$
net-trap-ABL
Turkeys were caught in a net, and [taken] out of the net [to be eaten].
62. gayu:n dara:l / mina mani:n dardi: /
bush-trap-ABS set-PaSt animal-ABS catch-past trap-INST
Bushes were set up (in a cone-shaped pattern, and animals chased into the trap so that they could be speared as they came through the narrow apex). Animals were caught in the traps.
63. yuygum / guwal dara:l galinalyu |bulmba |
there-ABl name-ABS assign-past go-comit-past place-abs
And then [Guyala] gave names to all the places as he went along.
64. nundu wani:ngu guwal daral gali:yal |
you-SA what-PURP name-ABS assign-PRES go-comit-Pres
'Why are you giving out all these names as we go along?' [asked Damari].
65. bama:n guwal daral gali:yal / garu
person-cen-abs name-abs assign-pres go-comit-pres by-and-by
binayalna bulmba zvanda galiy / bulmba
listen-PURP place-ABS where-LOC go-PRES place-ABS
biribiri dara / gadi daral /
close together-REDUP assign-IMP long way apart assign-Pres
wurba:ndi
search for-LEST-ABS
[Guyala replied]: ‘People's names must be given to places all along the way. So that by-and-by [people] can listen to [and remember the sequence of place-names along a route and know] where the places are going to. Names must be given to places close together. If names were [only] assigned [to places] a long way apart, people might have to search [around a lot for them, and get lost].'

Damari was suggesting that place names be given out sparingly, a mile or two apart. But Guyala insisted that names be allocated quite generously, so that people could learn a route by a sequence of place-names; and each place could be easily accessible from the previous one. Guyala got his own way in this instance.
66. gana galin / dirbi / bulmba |

TRY go-IMP promised time camp-abs
'[We must] try to go on [now]. [We] promised [to be at a certain] place [at a certain] time.'
67. badil / mundi:may / damaringu
rickety nut-ABS vegetable sp.-ABS Damari-ERG
mambayalnu / bitter-TR VBLSR-PAST
[Then] Damari made rickety nuts and Mundimay (a long yam-like vegetable found on the beach) sour (i.e. so that they would require lengthy preparation).
68. mayi mamba / diga / buya:nda wanda
fruit-ABS bitter-ABS pour water on-IMP sun-LOC somewhere yiju waygi dungu: ninay buyan / mayi daygan / this-S up head-LOC sit-PRES sun-ABS fruit-ABS take out-IMP
[Damari said]: 'The fruit is bitter. Pour water on it! [Until] the sun is where? - [until] the sun is sitting high [in the sky] (literally: at the head of the sky). Take the fruit out [of the water then, after it has soaked for half-a-day].'
69. guyalaygu budi:n / mayi wanda bana: budi /

Guyala-erg tell-past fruit-abs somewhere water-LOC put-IMP daygan / garu gabun buga:na/ take out-IMP by-and-by fresh-ABS eat-PURP
Guyala told [Damari]: '[Just] put the fruit somewhere in the water, and take it out [again after a couple of minites ] - it'll be fresh and ready to eat.'

Guyala wanted to make these vegetables only mildly bitter, so that they would only require a few minutes immersion to wash out the poisonous overtones. Damari - who again got his own way - insisted that they be made really bitter and require lengthy preparation.
70. damaringu budi:n / mayi mamba / wayu wuna:na
Damari-ERG tell-PAST fruit-ABS sour-ABS long time lie-PURP
bana: /
water-Loc

Damari told [him]: 'The fruit is sour! It must lie in the water for a long time.'
71. guyalaygu bada:r /

Guyala-erg leave-past
Guyala left [it i.e. gave in to Damari's persistence].
72. gali:n /
go-PAST
[The two brothers] went on.
73. gubu:m / gubu:m duga:l /
black pine-abs black pine-ABS pick up-Past
[They] picked up black pine nuts.
74. guyalangu budi:n / yimu mayi gabun / gubu:m |

Guyala-ERG tell-past this-ABS fruit-ABS fresh-ABS black pine-ABS
Guyala told [his brother]: ‘This fruit is [always] fresh, the black pine.'
75. damaringu budi:n / bana: budi | diga |

Damari-ERG tell-PAST water-Loc put-IMP pour water on-IMP mamba /
sour-ABS
[Then] Damari told [him]: 'Put it in the water, pour water on it, it's bitter!'
76. guyalangu budi:n / garu bana: - buri: zvadu /

Guyala-ERG tell-past by-and-by water-loc fire-Inst heat-IMP
duygun buga:nal gabun / bana:
half-cooked black pine-ABS eat-PURP fresh-ABS water-Loc
diga | garu banam buga:nal
pour water on-IMP by-and-by water-ABL eat-PURP
Guyala told [Damari]: 'Heat it in the fire [for a few minutes] and the Dyungun (the name for lightly roasted Gubu:m) can be eaten - it's fresh. Pour water on it [for a very short time] and it can be eaten straight from the water.'
77. guyalaygu-damariggu budi:n / yuyudi wala

Guyala-erg Damari-erg tell-past that-abs-intens particle
gurin | mayi gurin bana:
good-ABS fruit-ABS good-ABS water-LOC
digadamu buri: wadu /
pour water on-IMP-JUST fire-INST heat-IMP
duygun bundan / buga:nal
half-cooked black pine-ABS beat-IMP eat-PURP

Guyala - I mean, Damari told [his brother]: 'That's all right then. The food'll be good if it's just soaked in water [briefly], [quickly] heated in the fire, then the Dyungun can be hammered [with a stone] and eaten.'
Damari gives in to Guyala. In fact black pine needs only a few minutes preparation - as described here by Damari. It can even be eaten raw (whereas rickety nuts (badil) are poisonous when raw).
78. dama:ri gali:n / gali:n bulubagu /

Damari-abs go-PaSt go-Past fighting ground-all
Damari went, he went to the fighting ground (to arrange a fight with an inland local group).
79. nundu gadan / bulubagu 1
you-SA come-IMP fighting ground-all
[On his return he told Guyala] 'You come, to the fighting ground!'
8o. guyalaygu budi:n wandayunda dirbi
1
Guyala-ERG tell-past what time promised time
Guyala asked: 'When have we promised [to fight] ?'
81. dilibuga:bi/
next day
'Tomorrow'
82. garu bugamugu waךga:din/
by-and-by daybreak get up-IMP
'We must get up at daybreak.'
83. guyalaygu budi:n / binabina: wunan/garu

Guyala-ERG tell-past ear-REDUP-LOc lie-IMP by-and-by nulga:lday / wake-COMING-PRES
Guyala told [his brother]: 'Lie with your ears alert! I'll come and wake [you] by-and-by.'
Damari was intent on avoiding the fight; he got up and sneaked out of the camp before his brother was awake. Guyala imagined that Damari had already set off for the fighting ground and followed (as he imagined) in the same direction. But Damari had gone the other way - he ran up against a Bougainvillea tree, piercing himself on the tree's prickles to simulate spear wounds. Damari eventually appeared at the fighting ground after the battle was over.
In 85 and 86 the storyteller says 'Guyala', when 'Damari' was intended.
84. guya:la wayga:dipu bugamugu / difi /

Guyala-abs get up-PAST early morning daybreak
Guyala got up in the early morning, at daybreak.
85. nundu guya:la wanda:run gali:n /
you-Sa Guyala-abs which way go-Past
'You, [Damari], which way did you go?' [Guyala called out].
86. wala gali:n / guya:l gali:n /
particle go-past Guyala-abs go-past
'He'd completely gone, [Damari] had gone.'
87. wagal dambu:l galiyalnu
wife-abs two-abs go-COMIT-PAST
[Guyala] took the two women with him:
88. nunda:ba dambu:l gadan / yayu galiyalna /
you all-sa two-abs come-IMP I-SA go-COMIT-PURP
'You two come! I must take [you].'
89. dama:ri wanda /

Damari-ABS where-LOC
'Where's Damari?'
90. dama:ri gurbi ninay /

Damari-abs might be sit-PRES
'Damari might be stopping back.'
91. wala gali:n / gana:ygar/

PARTICLE go-PAST PARTICLE
'[Or he may] have gone already; [he may have been] the first to [go].'
92. banda:r /
follow-PAST
[Guyala] followed [Damari, as he thought].
93. dama:ri gali:n / yambu / danba /

Damari-ABS go-PAST part-way Bougainvillea tree-ABS danba wawa:l/ Bougainvillea tree-ABS see-PAST
Damari had gone only part-way [along a route from the camp], and saw a Bougainvillea tree.
94. danba yiyu danay /
Bougainvillea tree-ABS this-ABS stand-PRES
'Here's a Bougainvillea tree standing' [Damari said to
himself].
95. yayu yingu duygaduygan /

I-SA here-LOC run-REDUP-PRES
'I'll run up and down here.'
96. bundil | dugi:l bundi:lin danba: |
bump-Pres tree-LOC bump-going-Pres Bougainvillea tree-LOC gula baga:diy / body-ABS pierce-:-d $j$-PRES
[Damari runs up and] bumps [into the tree; he] goes and collides with the Bougainvillea tree; and spears his body [on its prickles].
97. yayu duyga:nal yanan gula baga:dina

I-sA run-PURP I-o body-ABS pierce-: $d i$ i-PURP
'I had to run [in the fight], and as a result my body got speared'.
98. garu yapan yaymi:lna/
by-and-by I-o ask-PURP
[I'll tell this to Guyala when] by-and-by [he] asks me [where I was in the battle, Damari thought to himself.]
Damari uses verbal derivational affix -:d $d i-n$ in the 'inanimate agent' sense, so that the verb baga:di-n in 97 is still transitive (this is clearly shown by the O pronominal form yajaj); he is thus implying that his wounds were caused accidentally. In fact they were self-inflicted, and he should have used the 'reflexive' sense of -:di-n, deriving an intransitive stem, and said payu gula baga:di-n. See 4.2.5.

## 99. nundu wandam |

you-SA where-ABL
[When Damari eventually did turn up at the fighting ground, Guyala asked him:] 'Where have you [come] from?'
100. nayu dirbi dana:n / mupgun yija:rin wawal /

I-sa promised stand-past wound-abs this sort of-abs see-Pres galam / spear-cau
[Damari replied]: 'I've been standing [fighting] as promised; [you can] see all these sorts of wounds, caused by spears.'
гог. guyalaygu / biya gayu nunin yudu wawa:l/ nundu
Guyala-erg particle I-sa you-o not see-past you-sa
wandam gada:n /
where-ABL come-past
Guyala [said]: ' $I$ 'd have seen you [in the fight if you'd been there] but didn't. Where did you come from?'
102. yayu dirbi guman bayi:l |

I-sa promised one-ABS emerge-past
'I'm the one who came out of the promised [fight]', [Damari insisted].
103. nundu yanan yudu wawa:l danajunda diva: /
you-sA I-o not see-past stand-dat subord middle-Loc bigunuyi / shield-comit-ABS
'Didn't you see me standing in the middle [of the fight], with [my] shield?'
104. wandu budi:n nundu dana:na yungu /
who-ERg tell-past you-sA stand-purp there-Loc
'Who told you [where] to stand there [in the fighting ground]?' [asked Guyala].
105. yayu nunda wurba:dinu /

I-SA you-dat look for-: $d i$-past
'I've been looking for you.'
106. yayu gada:n / gada:n / gada: $\boldsymbol{n}$ / yayu wawa:l

I-sa come-past come-past come-past I-sa see-past
nadin yaba guya:la /
I-GEN-ABS brother-ABS Guyala-ABS
'I came, I certainly came, and saw my brother Guyala there' [Damari said].
107. jundu yuygu danan | yayu galiyala bulmba:gu|
you-sa there-LOC stand-IMP I-sA go-pres-now camp-all
'You stand there! I'll go at once to the camp' [Damari now said to Guyala].
108. duyga:n/ dama:ri duyga:n/
run-past Damari-abs run-past
[He] ran away, Damari ran away.
ro9. nayudi yuygu dilygu galin | biri:nda |
I-SA-Intensif yonder-Loc down go-pres salt-water-Loc mina:gu |
animals-PURP
'I'm going myself a fair way down to the saltwater, for fish' [Damari called out].
ıro. dama:ri gada:n | wurba:dinu |
Damari-abs come-past look for-:di-PAST
[Eventually] Damari came [back], searching:
rir. wapda yadin yaba / where-LOC I-GEN-ABS brother-ABS
'Where's my brother?'

I12. yaba gali:n dilygu/biri:nda /
brother-ABS go-PAST down salt-water-LOC
[His] brother [Guyala] had gone down to the salt-water [too].
113. guya:la gada:n /

Guyala-abs come-PAST
Guyala came back [after a while, and Damari said to him:]
114. nundu galin / guni:nda / nundu guni:nda galin/
you-SA go-IMP south-LOC you-SA south-LOC go-IMP
'You go, to the south. You go to the south!'
115. yayu gunga:r biri gundiy / bulmba:gu/ yayu wardan

I-SA north particle return-Pres camp-all I-SA raft-abs
daybil gali:yal / guygarigu/biri:nda
take-Pres go-COMIT-PRES north-all salt-water-all
biqi gundiy /
PARTICLE return-PRES
[But Guyala told him:] 'I'm going back north to the camp [we came from]. I'll take the boat, to the north, returning [home] by sea.'

The brothers split up at this stage of the story. Guyala returns north, and dies in that region some time later. The storyteller follows Damari, to the south.
116. dama:ri gada:n /

Damari-ABS come-PAST
Damari came.
117. yayu guman / gana yayu gali:na/

I-sa one-abs try I-sa go-PURP
'I'm on my own [now]' [said Damari,] 'I must try to go [along by myself].'
118. wanda yivu wuүи: /
where-LOC this-ABS river-abs
'Where is the big river ?' [Damari said to himself].
ı19. yūa:n bana: / dala: wudayada:n /
cross river-PAST water-LOC shallow-LOC cross-COMING-PAST gada:n / come-PAST
He crossed the river, came across into shallower water.
120. yandar banda:r galinalnu guwa:gu/ creek-abs follow-PaST go-COMIT-PAST west-ALL [He] went following a small creek up to the west.
121. bana: yuya:n / ganaraygu bala bada:l /
water-LOC cross river-PAST alligator-ERG shin-ABS bite-PAST
bala bada:r / bala gulga gali:n |
shin-abs leave-PAST shin-abs short-ABS go-PAST
[He] was crossing the creek [when] an alligator bit one shin off. [He] left [the bitten] limb and went on with one leg short.
122. yayu gana gamba:na / gali:na / yagaldida: wuna:na/

I-SA TRY crawl-PURP go-PURP Yagaldida-LOC lie-PURP yagaldida: yayu wulayaliy yuygu / Yagaldida-LOC I-sA die-GOING-PRES there-LOC
'I must try to go on by crawling, in order to lie down at Yagaldyida [my home]. I'm going to die there in Yagaldyida.'
123. guya:la yadin guyga:r yaba gali:n / bulmba: /

Guyala-ABS I-GEN-ABS north brother-ABS go-PaST camp-all murgu: / daruwaynda ninayaliy | Murgu-all hill-LOC sit-GOING-PRES
'My brother Guyala has gone north, to a place [called] Murgu, gone to settle down [and eventually die] on that hill [Murgu].'
124. yayu yiyu wula:n/

I-SA this-s die-Past
'I'm dying here.'
Dick Moses later mentioned that Damari died near by the present-day site of Yarrabah mission.

## Text 9

Autobiographical reminiscence by Dick Moses of his early life soon after being brought into the mission. Told in the coastal dialect (recorded at Yarrabah on 30 December 1971; duration $7 \frac{1}{2}$ minutes).

1. yanan gadayalyu/ yaba:y/ diliwayi:ndu/

My brother, Dyiliwayin, brought me [into the mission, when I was about nine years old].
2. nundu gadan midi:nda/ ninayadan/
'You come into the mission! Come and settle down [here]!'
3. gada:y garu nuni:nda guru:n budi:na/ niba:lna/ wanda yanga:din nundu/ landimalnal budi:na guru:n nuni:nda/ bama:l nayga:dipa:lna guru:n|
'So that by-and-by the white man can tell you stories, and show you things. [Show you] where to speak, and teach you things. He'll tell you stories, the [white] people will talk to you in [English] language.'
4. nundu:ba gadigadi:/ yayu gada:n/
'All you little children, I've come' [Moses shouted out to the Yidindi children already at the mission].
5. bandi:ldanu bama yabi/gadigadi:/
[I] came and found lots of people [at the mission, lots of] children.
6. nundu bama yabi yiŋu waruwaru ninay/gana yandi mugu bama:nda maga/burgi:na/ yandi dundi:n waruwarubama:nda/ nabi waruwaru/ bama gadigadi:/
'All you children sitting [there]. It doesn't matter [being in the mission] since we're all together, and can go walkabout [together]. All us little children can play together in a mob. All the children the little ones.'
7. yandi:n bama:lguga:l mayi:gu dinner time now-mayi:gu/buga:dina/ A man called us all to eat vegetable food.
8. nundu:ba gadan/mayi:gu/buyan waygila/ mayi bugayadan/
'You all come, for food. The sun is high now (i.e. it is noon), come and eat some food.'
9. yandi yaymi:l/ mina gurin/ mina gurin/

We asked: 'Is the meat good ?' 'Yes, the meat is good.'
10. yandi buga:n/ muru:dum/ dinil/ mara bayga:mu/gubu bamu:gin/ ทuฤа:rin/ diwa bilaŋalnu mina: mula:mba/ dulmbu:ran/ yuฤa:rin mina yandi buga:n/burin yudu/damba yandi buga:n/
We ate stingaree, and whip-tail stingaree, potato tops and pumpkin leaves - that sort of thing. All mixed into a meat soup. And dugong - we ate that sort of meat. There was no bread; but we did eat damper.
11. yandi mayim galiy/ yadjl waruwaru/ burgin/ bama:nda yabi:nda diwadaga:n/ yandi bandu burgi:na/ yandi gayal muyubaral bama yabi yiyu ninay/
After having [eaten] food, all of us children went out walkabout. We all got into one mob and travelled together. I was the new fellow amongst us. This group [of us] all sat down together.
12. mayi galiya:din/ ninayali:na/ wanda wabay ninayaliy/ wunayaliy bulmba:/
[The white man said to us:] 'Take this food with you, for when you
rest after having gone along [for a while]. Wherever you rest on the walk, when you go and sleep in a camp (i.e. make a temporary onenight camp in the bush during walkabout).'
13. mala:di galinalnu/ yumu mayi damba:gu galiyalyu mala:di/
[We] took molasses with us. Took those molasses for damper (i.e. to spread the molasses on damper we cooked, like jam).
14. yandi gundi:n/ nundu:ba nina:n gurin/ yandi gurin nina:n/

We returned home [and asked the people who had remained at the mission:] 'Have you been alright sitting [here]?' 'Yes, we've been sitting [here] alright.'
15. gana nundu:ba gada:n guygaguygam/ bimbi: nandi:nda/ dirbi + budil nundu:ba guygaguygam/ yalmbin danan/ wurmba:gu/ yandi budi:dinu yiyi/ garu yajdi yalmbin danay bulmba: wurmba:gu/ guygaguygam/ yajdi nina:n/
You promised to come [to church] in the evening, for Our Father you promised to come in the evening. 'Stand in line [after church before returning home] to sleep!' We said 'yes'. By-and-by we stand in line [before going back] to sleep in the camp, in the evening. We sat down [waiting].
16. nandi burgi:n/ nandi burgi:n/gada:nda burgi:na/

We went walkabout - we worked for the white man.
17. budi:n/nundu:ba burgin/ yandi nundubanda garul gambi muray wiwi:na/ mayi garu wiwi:na/
[He] told [us]: 'You all work! So that by-and-by we can give you clothes, and by-and-by give you food.'
18. yandi dirgar munda:l/ yawu: munda:linu/ dugu:rgu/ dugur balga:l dirga:da/ dugi burmbur gunda:l/
We pulled up blady grass; [we] went and pulled up shorter grass, for a house. [We] made [ = thatched] a house with blady grass. [And we] cut a palm tree down [for the floor].
19. bini:r yudu/ biba giday yandi:nda bini:r wiwi:n/
[We were given] no money. We were given paper with a mark on (i.e. an ad hoc mission docket) [in place of] money.
20. yandi yungu/ gambi duga:l/ gida:da biba:/

We bought clothes there [at the mission store] with the docket.
21. garu yuygum yandi yaymi:l/ bama yabi/ bini:r yudu/

By-and-by we asked all the [other Yidindi] people 'Is there no money ?'
22. yupudi bini:r nuni:nda wiwi:n gidar/ biba gunda:l/
'That is money you've been given - paper with lines drawn on it' [they answered].
23. yandi budi:n/ nuyudi wala/ nuyu gurin/

We told [them then]: 'Oh, that's alright. That's good [then].'
24. yandi burgi:n/gadigadi:/ bama:l yandi:nda budi:n/ nundu:ba burgin/ mayi:gu/
All of us little children went for walkabout. Someone asked us: 'Are you coming on walkabout, for food ?'
25. yandi gali:n yinarindal/ bama yabi waruwaru galiy/ yiyarindal dimudimurula/dugu:da yabi bandu galiy/gidar + gunda:dina biba:/ yuya:rin yandi:n wugu/
We went to this sort of place. All of us children went to this sort of big house (i.e. schoolhouse). We all went together in a group to the house, to make lines on paper (i.e. to learn to read and write). That was our sort of work.
26. garu yuygudi yala:lda bimbi:nda gali:n/ dugu:da bilayali:n yuŋgu/ wurmba:gu/
By-and-by we went yonder there to the big father (i.e. the missionary); we went and entered the house [church] to [attend evening service before] sleep.
27. wanda yiyu dalyudalyu/ dalmba bundil/ yandi yuŋgu binayalnu:n/ garu yandi galinunda yuygu dalyudalyu wanda/ dalmba bundil/ yabi yandi yalmbin galinunda/ guranguran/ yuฑgu:gu dugu:rgu bila:na/
Where is the bell ringing? - the sound is banging out, and we heard it. By-and-by we go when the bell rings there - the clapper hits. We all go in a long line, to enter the building [church] there.
28. yandi yuøgu bimbi:nda/ buøgu dara:linu/ nina:n/garu yuŋgum bayi:l yandi guygaguygam/ bayi:l gali:n dugu:da/
We all went and knelt there [in Church] for the [Heavenly] Father. [Then we] sat. By-and-by in the evening [we] came out [of the church] and went to [our own] huts.
29. garu dugu:rmu/ gada:ท yandi:nda budi:n/ nundu:ba garu wawa yiŋu gidal wunanundal yiŋu garu mandam wunayadayl nundu:ba binabinay/bulmba: wurmba:gu/ wuna:na buga/ yuךudi wala/
By-and-by [in the morning we came] out of the house (i.e. came out of the dormitory and went across to the schoolhouse). The white man told us: 'You see these lines lying [on the page]!' [He
continued:] 'By-and-by this mark [the hand of the clock] will come and lie [at this position]. You people listen [to the prayers I tell you] so that [when you're] at home [you can say them to yourselves] before sleep, when you lie [in bed] at night. That's right!'
30. yandi yungum/ nina:n/ yandi nina:n/

Then we sat down, we settled down [there].
31. yandi:nda gada:ท wiwi:n/ nundu:ba yina:rin bugan/ yiya:rin nuba bugan dadam/
The white man gave us [food]: 'You eat this sort of thing! Eat these ripe wild bananas!'
32. nundu:ba wunday giyi bugan/ nundu:ban gada:ך danganyaldi/ yina:rin/ yina:rin mayi diradiral giyi duga/ gada:ท nundu:ban danganyaldi/ yandi bada:r/
'Don't you eat stolen [food], or the white man might punish you. Don't take this sort of thing, this kind of corn [planted here] or the white man might punish you.' We left [it alone].
33. garu yuygum/ yandi gada:n mayi:gu/ mayi binay gurinךuri/ mayi dangan/ yandi mayi mugu buga:n/ mina wuda/ mina muru:dum/ mina didin/ mara budidanda/ gabadila/ wadu:l mulam/ yandi mugu buga:na/
Then we came for food. We thought the food was good - but it was no good. We had to eat it anyway - shark, and stingaree, and periwinkles, and leaves, in a potato and cabbage [stew]. Cooked up in a stew. We ate it anyway (i.e. the food was poor and we didn't like it, but there was nothing else).
Dick Moses is here regretting that they were fed on scraps of European-type food, instead of on traditional Yidindi fare. They had to wait until they were old enough to go foraging for themselves, before they could obtain the sort of food they wanted.
34. yandi gayal mugu yayga:n/ yandi yudu binayalnu/wanda mayigurin/ garu yandi:nda bama:l budi:n/ wanda yalalyalalalal yandidi binayalnu/ yuŋa:rin yandi mayi buga:n/ yandi walnda:l/ mayi jandi buga:na gurin/ nupa:rin/
We'd had to forget the other things. We didn't listen to [the old] people [of the tribe] telling us where good food [was to be found]. When we got to be big men, then we listened. And we ate that kind of [traditional] food. We picked over the food [in the bush] and ate the good stuff, that kind of thing.
35. yuyumbudun/ yandi bimbi:nda gada:n/ yandi:n gadayalnu/ gidaq + gunda:Ina/ yandi:n gadayalyu/ bungu dara:dina dabu:/ yindu:nda waygi bimbi:nda/ nandi:n gadayalnu/ milbadaga:nal yingu bimbi:nda waygi/ wanda giday budi:lna/
And then the same thing. We came to the father; he brought us [to school] to write. He brought us to kneel on the ground 'To Our Father on high'. He brought us, to make us clever 'For Our Father on high'. When he'll write our names (i.e. at a certain educational stage, the missionary would baptise us, and write our names in the register).

## Text 14

The myth of Bibiyuwuy, a man who was killed by his brother and returning as a spirit - set eyes on his own skull. Bibiyuwuy then went off to the land of spirits, calling all his people to follow him in due course this was the origin of 'death'. Told by Tilly Fuller in the tablelands dialect (recorded at Kairi on 3 November 1972; duration $5 \frac{1}{2}$ minutes).

1. dambu:l wagu:da dada gaba:l/ yingu dugu:da/ dimu:r dugur/ guygi/ guygi: bambi:l dimurula/
Two male children were born, in this house. [It was] a large house, of loya vine. [They] were covered over [in their cribs] in the big loya vine house.
2. dada dambu:l wagu:da/ yalalala/ guman bunamuday/ guman mugu/ nina:n/
The two male children were now big (i.e. grown-up). One had [two] wives, but the other had no option but to sit [in front of the fire alone, since he had no wives].
3. guman bada:r bulmba:/ dambu:l gali:n| dambu:ngu| dambu:ngu daga:dina/ dambun daga:l/
One [man - the unmarried brother] was left at the camp. Two [people - the married brother and one wife] went for grubs. To cut out grubs. [They] cut grubs [from the rotten wood in which they burrow].
4. guman gunda:dinu/galba:nda/ banda:l/

One [the married brother] cut [an ash tree] with an axe. [He cut out a grub, and] tasted [it. He found it tasted of semen, and knew that his brother was misbehaving with his other wife, back at the camp.]
5. yadin wagal/ durmay/ yandaguma:ndu/dambu:nda yayu yiŋu/ mina bundal/
'My wife is being swived ( = made love to) by my brother. I've [tasted] a bad slimey animal taste in this grub' [the man said to himself].
6. yayu gana gundiy bulmba:gu| yadin wagal wawa:lijga:liy /dada/ danga:nyal yadin/ bulmba:/ gana gundiy/ wawa:ldayga:day/
'I must return to the camp, go right up and have a look at my wife, and my child. Something bad has been done to my [folks] in the camp. I must return - come close and have a look.'
7. nundu durma:n yadin wagal/ yudu/
'You've been swiving my wife' [the married man challenged his brother, getting the reply] 'No'.
8. guni wara nayga:din/ nundu durma:n/ yayu nunin garu bunday/
'Don't tell lies! You swived [her]. By-and-by I'm going to hit [and kill] you.'
9. and he bunda:n/gurga:mari/

And he hit him across the [back of the] neck [and killed him].
1о. nundu wulayala/ yayu yudu nunu:ngu duwu gaday/ yayu bumba ninay/ nundú/ yudu duwu bayil yanda/ bunda:n/ wula:ni
'Now you're dead. My tears will not come [into my eyes] for you. I'm sitting here dry[-eyed]. Hey! No tears will come to my eyes. [You] were hit [by me] and [you're] dead.'
1 1. gula nari + baga:l/ dungu guga: budi:l/
[He] dug a hole [to bury] the body. And put the head [which had been cut off] into a bark [container].
12. gali:n bana: yabayali:n/ biri:nda/ malu:way/gana gada:n gulugulu:y/ gulugulu gadayalyu gabulula/
[The spirit of the murdered man] went to the water, went and bathed in the salt-water. The spirit came with a black bream [for all the people to eat]. He brought the black bream on a small stick (gabu:l).
13. nundu wana/ yayuna/ nundu yanan bunda:n/ yayu gana gundi:n/
'Who are you ?' [all the people in the camp ask the returning spirit]. 'It's me alright.' 'You killed me' [he tells his brother in front of all the other people] 'but I've come back.'
14. wani:ngu nundu gaday/ yayu gada:ndi wawa:dina bulmba:gu/
[The people ask him]: 'What are you coming [here] for ?' [and he replies] 'I've come to have a look at the camp.'

On playback Tilly Fuller said that although yayu gada:ndi is grammatical, gayudi gada: $n$ would really be better here.
15. nundu:ba gurin ninay/mon yandi gurin ninay/
'Are you all alright sitting [here]?' [he asks them] 'Yes, we're alright sitting [here].'
16. waji bulu gudil/ yandi dubun/ yuru:/
'What's the stink [I can] smell ?' [the spirit asked]. We were all silent [not answering him]. Why ?
17. nandi wani:nyal yivu dungu/ nundu:y dungu numa:l/
'What shall we do with this head? That [spirit] smelt [his own] head' [the people spoke amongst themselves].
18. nayudi manyalala/ nari + baga:lna/ yayu budi:n/ nuridulu:/ nari + baga:lnal
'I'm really frightened. We'll have to dig a hole [and bury the head]' [the dead boy's mother said] 'I told you some time ago, to dig a hole [and bury the head].'
19. yayu garu budiy/ nunin yuฑu dungu yayu gunda:l/ wula:n/ yadin numbar wawawawa:lna/dungula baba:l/
'I'll have to tell [him] soon' [Mother says, and when the spirit of her son next returns she says to him:] 'I cut off your head [after you'd] died. I wanted to gaze on the face of my dead child-on his skull.'
20. yayu gundiyalal yayu nundu:ban yiyu badaralal yayu galiyala/ [wu:y] [wu:y] [wu:y] [wu:y] [wu:y]/ yayu dugimari dada:may/ guman dadamayal/ guma:nbi dadamayal/ yayu guma:nbi/ yayu bana: biri:nda galiy/
[The spirit said] '[Having seen my own skull], I'm returning now [to my spirit-home in the water]. I'm leaving you all now. I'm going away now.' [And as he went he called out] 'Wuy, wuy, wuy, wuy, wuy...' [being known as Bibiyuwuy from then on]. [He continued:] 'I'm jumping through the trees; I jump over one [stick], I jump over another [stick], then I [jump over] a third one. I go into the salt-water.'
21. gulugulu nundu:ba buganala/ mina yayu gadayalnum/
'Now you can all eat the black bream, the seafood that I brought [for you]!'
22. yayu gana gundiy/ yayu nunin wawal dambulamay/ dambulamay gadan/
'I'm returning [to the water]. I'll see you in two [days]. Come in two [days]!'
23. yayu gana:ygar galiy| badiy/
'I'm the first to go [to heaven] crying as I go.'
Having seen his own head, Bibiyuwuy has to go to the land of spirits and remain there (effectively, dying). He tells the other people that they will in time follow him. The reference to 'in two days' here is obscure. On replay Tilly Fuller mentioned that she should have said 'in three days'. In fact, Bibiyuwuy is supposed - in other versions of this myth that the writer has heard - to have returned on each of the three days after his death, to have seen his head on the third day and then 'gone to heaven'.
The remainder of the story given by Tilly Fuller (below) is essentially irrelevant to the main theme.
24. bunadamu mudam badi:n/bimbi/ yandaguman badi:nala bunda:dipum/ [First], just the women, including mother, are crying. Then father [joins in]. And now brother cries because he had killed him.
25. yayudi waaga:lgu bitmbi:rdidagay/ wagal yadin dangan/ yayu yandaguman yayu wani:ngu bunda: $\mu$ yayu bunda:n yadin yandaguman/ gadin guyi:gul guyi:gu|mundu bindula $/$ yudula $/$ pudula badi:na/ wula:nala/
[The murdering brother said]: 'I was jealous over my wife. But it was my wife who was no good [and seduced my brother]. Why did I kill my brother? I killed my [own] brother. My heart is broken [because of my deed]. I'm spiritless, sad and depressed. But no more now. No more crying now [because] he's dead and gone [and nothing can bring him back].
26. yandi yingu ninayala/ bulmba wawa:diy/ wawa:din/ bulmba yali:nala/
'We all sit about here now, looking around the camp, gazing about the camp. The camp [just] belongs to you and I now' [the murdering brother tells his son].
27. bama badiy bulmba:/ yadin wagu:da dada/ yayu gumanalal bimbi badiy/galya/ dudum/ yandaguman/ daygul/ badiv/ wuyga yupgu:gu guma:ngu/ wagudagul
The people cried and prayed in the camp. 'There's [only] my boy child, I'm on my own' father cries. And uncle, auntie, brother, and sister [all] cry, pray for that one dead man.
28. gurin/ bulmba:gu yuygu buri:gu daga:dina| bana:gu duga:dinal buya:ndu|
[He was a] good [man]. [He] would cut wood for the fire at the camp there, and [he] would fetch water, in the daytime.

On playback, Tilly Fuller said that the last word should be buya:ndi, rather than buya:ndu.
29. yandi yuygum galinala/ dugur yuygula dara:lna/ yiyu yamu:ray/dungu nari + bagal/ nandi numbar/ numbar wawa:l yingu/ bulmba:/
'We must go [from here] now, to build a camp in another place, some way off. This place [smells] stale. [First] we'll bury the head. We've been seeing his face all the time here in this camp.'
30. yandi galiy yungu/dalabinala nina:nal
'We'll go far away, to settle on the other side [of the creek].'
31. yayu yudula yadin dungu/ yumbar wayba:dinalal dungul yadin nudula/
[Mother said]: 'I feel like nothing. My head - my face and head are going round (i.e. feeling dizzy). There's nothing for me (i.e. nothing left in life for me).'
32. bama dandi:n yuygum bulmbam/gali:n/

The people shifted camp from that place, and went away.
33. duga:bal dara:l/ bulmbabinala/
[They] set up house-frames, at another place.
34. yiju gurin/gaday/ numbar/ wawa:l burginunda/

This [mother] felt better [when she] came [to the new camp]. Her head [felt alright now], and she could be seen walking about.

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## Vocabulary

Only words occurring in the discussion, examples and texts of this book are listed here; proper names are not included. Each root is specified for part of speech, and also transitivity (in the case of verbs and adverbs) and whether generic or not (in the case of nouns -6.2.1). Verbal conjugation membership is shown by a final $-n,-l$, or $-r$. The following abbreviations are used:

| N gen | generic noun | Vint | intransitive verb |
| :--- | :--- | :--- | :--- |
| N | other nouns | Vtr | transitive verb |
| Adj | adjective | Adint | intransitive adverb |
| Loc | locational qualifier | Adtr | transitive adverb |
| Time | time qualifier | Part | particle |

Although particles are listed, no attempt has been made to cross-reference other 'grammatical words' - pronouns and deictics; however, some initial segments of roots are identified.

All roots given occur in the unmarked 'everyday' variety of Yidin, unless Dyalnuy is specifically indicated. Where a root is known to occur in only one dialect the letter ' C ' (coastal) or ' T ' (tablelands) is included. All loan words are clearly identified.

Since this vocabulary is intended mainly to facilitate understanding of the grammatical examples and texts, it has not been thought appropriate to give a full statement of the 'meaning' of each item. Instead, entries are mostly confined to one or two English words that give some indication of the most central meanings of the Yidin word. The writer hopes soon to complete a dictionary/thesaurus of Yidin which will attempt comprehensive statements of meaning, with citations etc.

The alphabetical order followed is:

| $b a b a, ~ A d j: ~ d e a f, ~ h a l f-w i t t e d ~$ | $b a d a-r, \mathrm{Vtr}$ : leave |
| :---: | :---: |
| babalA, N : bone | badi, N gen: canoe |
| $b a b a \tau$, Part: couldn't manage it | badigal, N: fresh-water turtle |
| badil, N: rickety nut | badin T, badindi $\mathrm{C}, \mathrm{N}$ : sutton bird |
| badi-n, Vint: cry, sob, weep, mourn | $b a g a-l, \mathrm{Vtr}$ : piece with pointed |
| $b a d a, \mathrm{~N}$ : grassy plain | implement, spear |
| badagal, N: king tide | bagi, LOAN, N: bag |
| bada-l, Vtr: bite | bagil, Adj: another (see 6.2.2) |

bagiram $\mathrm{T}, \mathrm{N}$ : tea-tree sp.
bagur, N: sword
bala, N : shin
bala-n, Vint: open out, become wide
balawa, N: black and red sugar ant
balbarA T, N: crane
balbun, N: tree species
balga-l, Vtr: make, build
balmbin, N: grasshopper
balyga-r, Vtr: hit with a stick
balur, N: curved woomera
bama, N gen: person
bambara- $n$, Vint: be frightened, nervous
bambi-l, Vtr: cover
bamugin, LOAN, N: pumpkin
bana, N \& N gen: fresh water, drinkable liquid
banba-n, Vint: be cold
banbar $A \mathrm{C}, \mathrm{N}$ : crane
banbi, N: eyebrow, river bank
$b a n d u$, Adj: all together in a mob
banda-l, Adtr: try to do, taste
banda- $r$, Vtr: follow
bandar $A$, N: madness in head
bandi-l, Vtr: find
banga, N: small native bee and its honey
bani:di-n, Vint: grumble
baygal, N: large stone axe
baygamu, N : English potato
bayga-n, Vtr: pass by
baygur, N: multi-prong fish-spear
bayudulu: T, Time: a few months ago
barganda-n, Vtr: pass by
baryga-n, Vtr: praise
bayabara, N : common fly
bara-l, Vtr: deliver short, sharp blow with rounded implement, e.g. kick, punch
bargu, N: cane knife
barinU, N : small-leafed tree, used for spear handles
barma-n Dyalguy, Vint: go
barumbar, N : wattle tree grub
bawu:, N: backbone
bayabay Dyalyuy, N: person
bayba, N : spring (of water)
bayga- $r$, Vint: feel sore, have pain
bayi-l, Vint: come out, emerge
baynga, N: hot stone used in cooking
biba, loAN, N: paper, docket
$b i b a-n, V t r:$ look back at
bibiya, N: coconut tree
bida, N: bark canoe, bark trough
bidi, Loc: near (and Time: just now)
bidibidi, N: beetle species
biday + bada-l, Vtr: dream about
bidar + wanda-n, Vint: dream
bidi, Adj: proper, properly
bidilin Dyalnuy, N: sword, and Johnson hardwood tree
bidir, N : loya cane sp.
bidu:, N: eaglehawk
bigun $U, \mathrm{~N}$ : shield
bigun, N: finger- and toe-nail, claw
bila- $n$, Vint: enter, go in
bilayggir, loan, N: blanket
bilgill, N: spur wood tree
biligan, LOAN, N : billy-can
biliybiliy, N: small hickory tree
bilma-l, Vtr: clear the ground (for a camp)
bilydi-n, Vint: jump down
bima, N : death adder
bimbi, N : father, and father's brother
bina, N: ear
bina + bambi-l, Vtr: forget
binabanda, Adj: sad, forgetful
$b i n a+b a z a-l$, Vtr: deafen
binagal, Adj: paying attention
binagali-n, Vtr: forget
bina-n, Vtr: hear, think
binaya-l, Vtr: listen to, hear
binarya-l, Vtr: tell, warn
binda, N: shoulder, top of tree, top of waterfall
bindabinda, N : type of shell
binduba, N: crayfish, small fig tree
binirI, N: shell, money
bindin, N : hornet
bindu, Adj: weak, innocuous, useless, tired
bingal C, N: spoon, chopsticks
bingal T Dyalguy, N: spear, yamstick
birbibirbi, N: small flat fish
birgalA, N : night hawk
birgil, Time: for a short while
biri, Loc: very near
birin, N : salt-water
birmbida Dyalguy, N: salt-water
birmi-n, Vtr: wait for
birdi, N: small hook spear
biti, Part: do again, return
bigmar, N: charcoal
bifmbir, N : jealousy
birndali-n Dyalguy, Vint: run
biwi, N: stick knife
biwur, N: fish spear
biya, Part: could have happened
biya, loan, N: beer
biyal, N : ripple on water
biya-l, Vtr: (wind) blows, pushes
buda, N: blanket
budidaf, loan( ?), N : potato
budi-l, Vtr: put down, marry
budalA, Adj: fine, finely ground
budibin, N : a black and red pigeon
budi- $n$, Vtr: tell, call (a name)
budu + biya-l, Vtr: blow off bad luck buga, N: a night, nighttime, darkness bugal, Adj: black
bugamugu, N: daylight, daybreak buga-n, Vtr: eat
bugi Dyalyuy, N: grey wallaby
bugul, N: small loya vine
bugun, N: spring (of water)
bulanbay Dyalyuy, N : man
bulba-l, Vtr: grind (food), rub
bulgur $U, \mathrm{~N}$ : swamp
bulin, LOAN, N: plate
buliyit, N : chicken hawk
bulmba, N gen: habitable place, camp
bulna, Adj: impure, poorly defined
bulu, Adj: rotten, stinking
buluba, N : fighting ground
bulur $U, \mathrm{~N}$ : storytime person, thing or place
bumba T, Adj: dry
bunbuda, N: (spinning) top
bunda, N: mountain, big hill
$b u n d u, \mathrm{~N}$ : plaited loya-cane dilly-bag; \& N gen: bag
bundal, N : bad taste or smell
bunda-n, Vtr: strike, beat, hit, kill
bundi-l, Vint: burst, explode, bump, collide
bundu-r, Vtr: (doctor) fans to wipe off pain
bupa, N gen: woman, female human
buyan, N: sun
buygu, N: knee
buray, N: cave
burawuyal, N : female mythic people who live in streams
burbal, N: red ant
burga-l, Vtr: pull out
burganbaya-l Dyalyuy, Vtr: dig
burgi-n, Vint: walk about
buriburi, N : old people
burin, LOAN( ?), N : bread
burmbur, N : palm tree sp.
burna, N : heart
burndi- $n$, Adtr: finish off, make die out
burnga-l, Vint: snore
burudur, N : pademelon (wallaby sp.)
burwa-l, Vint: jump
burabura, N: dusty place
buri, $\mathrm{N} \& \mathrm{~N}$ gen: fire, anything burning
burimburim, N : small red bird
burmbay, N : well-behaved person
buұmu, Adj: quiet
burur $U$ Dyalŋuy, N : cloud
buwum C, N: a vine
buyal, Adj: hard, solid, strong, brave
buybu- $\boldsymbol{\text { , Vtr: }}$, blow, spit at
dabul, $\mathrm{N}:$ beach
dabuy, N : a brown bird
dadu- $\boldsymbol{r}$ T, Vtr: put blanket out
daga-l, Vtr: cut, chop, sever
dagul, Adj: three
dalbal, Adj: on high, reaching up
daliy(i), N/Adj: hunger/hungry
dalmba, N : noise of cutting or ringing
dalyudalyu, N : sound of bell ringing
dalu, N : forehead
damari, Adj:silly (person), cf. damari, name of mythic character (text 2)
damba, LOAN, N: damper
danba, N : Bougainvillea tree (prickle pine)
dandaba- $n$, Vint: dance about, feeling lively and pugnacious
dandada-n, Vtr: (doctor) rubs
danda- $r$, Vtr: rub
dangil, N : bank of creek
dandiri- $n$, Vint: feel frisky
dayga-n, Vtr: take out
daraba-n, Vint: shake, rinse mouth
darngidarngi, N : old woman
darba-n, Vint: slip, slide
dawugan, N : silver bream (in freshwater)
daybi-l, Vtr: pick up and take
digara, N : coast, beach
digil, N : Mulgrave walnut
digir, N : nose
dila, N : long feather
dimba-n, Vtr: carry on shoulder
dinda-l Dyalnuy, Vtr: put standing, set up, erect
dijal, $\mathrm{N}:$ egg
dinun Dyalyuy, N gen: stone
$\operatorname{dira}, \mathrm{N}$ : tooth, cutting edge of axe
diradira, N : corn, maize
dirgul, N/Adj: fat
diwiy, N : tree species
diwu, N : small ground bee
dubur, N : stomach
$d u d a-l, V t r:$ throw (sticks or stones) at
duga-l, Vtr: catch, grab, pick up, fetch, buy, get
dugubil, N: bark bag
duguldugul, N : tree with large blue leaves
dugur, $\mathrm{N}:$ house
dulnbilay, N : white cedar
dumbul, N : blue-tongue lizard
dumbun $U, \mathrm{~N}$ : scorpion
dundalay Dyalyuy (?), N : motor car
dundi-n, Vint: feel happy, lively; (children) play
dungu, N : head, top of mountain
duøgul, N : stone fish-yard (i.e. trap)
duøur, N : reverberating noise
durgim, N : white-tail rat
durgu:, N : mopoke owl
durwu Dyalyuy, N : leaf
duwu $\mathrm{T}, \mathrm{N}$ : tears
duwur Dyalnuy, N : stomach
duyi-l, Vtr: fight with spears
da:-, a prefix: see $3 \cdot 4 \cdot 3$
daban, N: large freshwater eel
$d a b i-l, V t r:$ tell not to do, stop
dabir, N : flat rock
dabu, N gen: ground, earth; solid inanimate matter other than stone or wood
da:bugay, Proper: name of language;
da:bugandi: name of tribe
dadam, N : wild banana
dadu, N : shade
dadu-l, Vtr: put blanket out
dada, N : small child
dada-l, Vtr: (sacred water) turns against (some person who has broken a taboo)
dadama- $n$, Vint: jump over
dadirI, N: seven sisters (stars); a trap
dagudagu, Adj: can't do some task (but thinks he can)
dala, Adj: shallow
dalabi, Loc: on the other side of a creek
dalamU, Adj: fresh, young (e.g. leaf) dalga, N : small snail sp.
dalgayam, N : flat bottle fern
dalmbul, N : mud
dalyga-l, Vtr: chop, cut into pieces
dalygan, N : small black bird
dalyuy, N : avoidance language style
dama, N gen (?): anything dangerous,
e.g. snake, strong drink, opium
dambulA, Adj: two
dambun, N : grub sp. (on candlenut and pine trees)
damuy, Adj: sacred, forbidden
dana-n, Vint: stand
dangan, Adj: no good, bad
dangi-l, Vint: get caught, snagged, bogged
daydi-n T, Vint: shift camp
danga, N gen (?): hole
dayga-l, Vtr: grumble at, jealously growl at
daygir, Adj: north, northern
daygul, N : sister
dayguy, N : black and white possum
daraga, $\mathrm{N}: \operatorname{step}(-\mathrm{relative})$
dara-l, Vtr: put standing, set up, erect, assign (name), rain
dardi, N : net trap, spider web
dargi-n, Vtr: embed (e.g. spearpoint in handle, meat in ashes)
dari-n, Vint: be submerged, sink down, disappear, become lost, fall asleep
daruga, N : scrub hen
daruway, N : small hill, island
daruy, N gen: bird
darin, N : straight woomera
dariyiy Dyalnuy, N gen: bird
dazoadazva, N : scrub magpie
da:wurga-n $\sim$ zurga-n, Vint: yawn
daybat, Part: in turn
daymbi, Part: in turn
dayggar $\mathrm{T}, \mathrm{N}$ : rapids in river
diba, N : liver, front of shield
dibi, Gungay and Wajur only, N:
hair
dibin, N : navel
dibudibu, Adj: fancying oneself to know more than one does
didin, N : periwinkle sp.
diga-l, Vtr: pour water on
digirdigir, N : willy wagtail
$\operatorname{digur} U, \mathrm{~N}$ : thunderstorm
dilariy Dyalyuy, N : black guana
dili, N : eye
dilibici, N : barramundi
dili + budi-l, Vtr: look after
dilibugabi, Time: next day
dilibura, N : green ant
dili + dara-l, Vtr: stare at
dili + guba- $n$, Vtr: be jealous concerning
dili + gunda-l, Vtr: stop looking
dilmay Dyalyuy, N: grass
dilyay, N : diamond-shaped shell dilggu, Loc: down
dimba-n, Vtr: catch (something that is in a trajectory)
dimbaral, N : cyclone
dimir, N : a mountain yam
$\operatorname{dimur} U, \mathrm{~N}$ : a large house
$\operatorname{dina}, \mathrm{N}$ : foot
$\operatorname{dinar} A, \mathrm{~N}$ : root
dinbi-l, Vint: wriggle, struggle
dindalam, N : grasshopper sp .
dinil, N : whip-tail stingaree
dijay, N : nostril
diyay + dara-l, Vtr: sneeze at
diggal, N : anus
dingin, N : vagina
dira, N : dry twigs
diran, N : tiredness
dirbi, $\mathrm{N}(?):$ promise, promised time
dirbi + budi-l, Vtr: promise to do
something at a certain time
dirbi+dara-l, Vtr: promise to do
something at a certain time
dirgar, N : blady grass
diri, Time: daybreak
dirmbi-n, Vint: play up, misbehave
dizwa, Adj: middle (of some geographical feature)
diyuya, N : catbird
$d u b u, \mathrm{~N}$ : walking stick
dubun, N : squeaky noise made by young animal
$d u b u n+d a n a-n$, Vint: squeak
dubun, Adj: quiet
dubur, N : stone
duda-n, Vint: go down
dudulu, N : brown pigeon
dudum, N : father's sister
dugabal, N : house frame
dugarba-n, Vint: have unsettled mind
dugi, N gen: tree, stick, wood
dula-l, Vtr: dig
dulbun, Adj:ready to fight over woman
dulmburan, N : dugong
dulpulU, N : waterfall
duludulu, N : Johnson hardwood tree
dulugunu, N : black myrtle tree (used for fish poison); alcoholic drink
dumalA Dyalguy, N: straight woomera
dumbagi, loan, N : tobacco
dumba-l C, Vtr: swive (= copulate with)
dumbariy, N : grandchild
dunda-n, Vint: hang down
dundu, N : stump
dungi, N : freshwater shrimp
duyda- $r$, Vint: wade across stream
duøga-n, Vint: run, move quickly
duggum $U, \mathrm{~N}$ : worm
duygun, N : half-cooked gubum $A$
dura:di-n, Vint: shed hair, skin
durgun, Adj: deep
durin $U, \mathrm{~N}$ : leech
durma-n T, Vtr: swive (= copulate with)
duruduru, N : adult man
durbal, N : small woven grass basket
duri, Adj: sharp, pointed
duwa, LOAN, N: saw
duwi-n, Vint: swim
duwar $A, \mathrm{~N}$ : wattle tree
duyu-n, Vint: (long thing, e.g. snake) wriggles
gabadi, loan, N: cabbage
gaba-l, Vtr: give birth to, feed (baby)
gaban $U, \mathrm{~N}$ : rain
gabar, N: lower arm
gabay, N: road, track, pad
gabudu, N : white clay
gabulU, N: stick for carrying fish
gabun, Adj: fresh
gada, N : noise of sticks being banged
together for dance accompaniment
gada- $n$, Vint: come
gadigadiy, N : very small children
gadil, Adj: very small
gada, N : spirit of a man, white man
gadar $A, \mathrm{~N}$ : brown possum
gadi, Loc: long way
gadu:, N: black tree ant
gadulA $\sim U$, Adj: dirty (e.g. water)
gagal, Adj: light (in weight)
gala, N : gen spear
galambara:, N: march fly
galban, N : small stone axe
galbin, N : son
galbiy, N : catfish
galgali, N: curlew
gali-n, Vint: go
galya, N : mother's brother
galygir, N : sister
galway, N: spirit, shadow, reflection
gama-n, Vint: vomit
gamar Dyalyuy, N: line, mark
gamar+mulbi-n Dyalyuy, Vtr: paint
in pattern
gamba-n, Vint: crawl
gambi, N: clothes; \& Adj: flat
gambil, N: tail; mountain spur
gambin $U, \mathrm{~N}$ : top-knot pigeon
gambir $A, \mathrm{~N}$ : tablelands
gambun $U, \mathrm{~N}$ : a type of spirit
gambur, N : white clay (for face painting etc.)
gamim, N : father's father
gamu, N: flower, blossom
gana, Part: try
ganagayuy, Part: 'self'
ganamarbu, Part: 'self'
ganan, Adj: be doing briefly
ganaygar, Part: do first
ganawangi, Adj: belly up
ganayir, Loc: underneath
ganba, Loc: very long way
ganda, N: yamstick
gangulA, N : grey wallaby
gani, Loc: way outside the camp
gapalA, N : black scrub locust
ganar $A, \mathrm{~N}$ : alligator
gandilA, N : crab
gandugandu, N : tree with small black fruit
gayar $A, \mathrm{~N}$ : European-type axe
ganga, N : noise of a person nearing
gangi, N: yellow walnut
gaygu, N : side of mountain, waist
gangu $+d u \eta g a-n$, Vint: take short cut
gayunA, N : bushes arranged as
animal trap
garanganda-n, Vint: (sky) glows
burning yellow
garaway, N: brown snail
garu, Time: by-and-by
garan, Adj: clean
garana T, N: black cockatoo
garaygal, N : vine with white inedible fruit
garba, Loc: behind
garba-n, Vint: hide
garbar $A, \mathrm{~N}$ : mangrove tree
garbi, N : overhanging mountain ledge
garna $\mathrm{C}, \mathrm{N}$ : black cockatoo
gawal, N: a call, shout
gawal+dana-n, Vint: call out
gawam, N : broken bank
gawanday, N : spirit of a dead person
gawar, N: blood
gawirI, Adj: crescent shaped
gawu:, N : tree sp.
gawuda, LOAN, N: coat
gawulA ( $\sim U$ ?), N : blue gum tree
gazour, Adj: crossways
gayagay, N : whisper
gayal, Adj: another (see 6.2.2)
gayba- $r$, Vtr: make body feel good
gayi Dyalyuy, N gen: ground, earth; solid inanimate matter other than stone or wood
gaymba- $r$, Vtr: follow, sneak up on
gaymbi-n, Adtr: do to all of a set of objects
gaypi-n, Vtr: warn not to do
giba-l, Vtr: scrape, scratch
gidi, N: tea-tree torch
gidigidiy, N : small children
gidil, Adj: small
gida, Adj: quick
gida-n, Adtr: do quickly
gidar, N : line, mark
gidardi, N : policeman
gidar + gunda-l, Vtr: paint in pattern
giladi, loan, N : glass
gilbay, N : guana sp .
gilbi-l, Vtr: throw, chuck away
gildu-l Dyalyuy, Vtr: bite
gilga, Adj: imperfect, 'soft'
gimalA, N : tree from which firedrills are made
gindada, N : cassowary
gindalba, N : small lizard sp.
gindan $U, \mathrm{~N}$ : moon
ginga, N : prickle
gini, N: penis
ginu, N : (dug-out) canoe
gipa, N : fever
gija:, N : vine sp .
giragundiy, N : green frog sp.
giramgiram, N: cramp
girgan, Time: last year
girat, Adj: soft (skin)
giri, N: branch, fork of tree
gizi-n, Vint: (children) shout in play
giwa-n, Vint: be stirred up
giyar $A, \mathrm{~N}$ : stinging nettle tree
giyi C, Part: don't
guba-n, Vtr: burn, cook
guban, N: big butterfly
gubi, N(?): 'storytime' (see 1.4)
$g u b u, \mathrm{~N}:$ leaf
gubum $A, \mathrm{~N}$ : black pine
gudaga, $\mathrm{N}: \operatorname{dog}$
gudar, Adj: cold
gudubur, N : stinking rat sp.
gudal, Adj: pregnant
gudara, N : broom-like implement made of weed
gudi- $l, \mathrm{Vtr}$ : smell
gudin, N : bull ant
guduga, Adj: belonging to someone else
gudugudu, N: rainbow
gudun, N : bottom (anat.)
gudun $U, \mathrm{~N}$ : wind
guga, N: skin, bark
guga-l, Vtr: call out to
gugal, N : fire drill
gugat, N: large guana
guginar, LOAN, N: coconut
gugind, N : flying fox
gugu, N gen: language or other controlled noise
gugulu, N : recitative mourning style used by men
gula, N: body
gula-l, Vtr: break, break up
gulan $U, \mathrm{~N}$ : walnut tree
gularI, N: big-leafed fig tree
gulbul, N: wave
gulga, Adj: short
gulgi, N: sand, sugar
guli, Adj: wild, ready to fight
guli, N: louse
guludu, N : dove
gulugulu, N : small freshwater black bream
guman, Adj: one, alone
gumari, Adj: red (normally applied to mineral-coloured water)
gumba, N : pıepubescent girl
gumbalA, N : a stage in the development of grubs
gumbi-l, Vtr: pick up
gumbiraya-l, Dyalyuy, Vtr: pick up
gunaguna, Time( ?): middle of the night
gunbulA $\sim U$ Dyalguy( ?), N : billy-can
gunda-l, Vtr: cut
gunduy, N: brown snake
gundi-n, Vint: return
gunugunu, Adj: ready to fight to expiate crime
gundilbay, N : short tiger snake
gundi-n, Vint: break
guni, Part: T don't, C let do
gupin, Adj: south, southern
guggambur, N : small butterfly sp.
guygar $I$, Loc: north
guygay, Proper: name of language;
guygapdi: name of tribe
guralygan, N : curlew
guran, Adj: long, tall
gurbi, Part: maybe, perhaps
gurbi-l, Vint: (sky) darkens
gurdi-l, Vint: be soaked
gurga, N : neck
gurgiya, N : fresh-water khaki bream
guriliy, N : black nose wallaby
gurin, Adj: good
gurgga C, N: kookaburra
gurunU, N: language, story, news
guruyga T, N: kookaburra
gulabay, N: small lizard sp.
gurbaba, N : lizard sp.
gurban $U, \mathrm{~N}$ : crow
guic, N: waist
guruyga, N : a scrub insect
guwa, Loc: west
guzal, N : name
guya $\sim$ guyabay, Loc: across (the river)
guyalA, N: fish hawk cf. guyala, name of mythic character (text 2)
guybil, N : a whistle (noise)
guybil+dana-n, Vint: whistle
guygaguygam, Time: afternoon/even-
ing
guygal, N : long-nose bandicoot;
large salt-water eel
guygam, Time: yesterday
guygi, N: leafy loya vine
guyi, Adj( ?): heart-broken (?)
guyirI, Adj: calm (water)
guypgan, N : spirit of a woman, white
woman; grasshopper sp.
guypgilbi, N: Moreton Bay tree
guyu, N: tree vine sp.
guyur $U, \mathrm{~N}$ : storm
landima-l, loan, Vtr: teach
lululumba-l, Vtr: rock baby to sleep
maba-l C, Vtr: light torch, fire
maba-l, T Dyalyuy, Vtr: burn, cook
maba-l, Vtr: lift up
mabi, N: tree-climbing kangaroo
mada, Adj: soft
mada, N : sawdust
madalA, N : tree fern
mada-n, Vtr: suck, chew
madinda- $n$, Vint: walk up
madur, N : small frog sp.
maga, $\operatorname{Adj}(?):$ in company
magal, Adj: outside (house)
magi-l, Vint: climb up
magu, N : chest (\& lap?)
$\operatorname{magulA}(\sim U$ ?), N : a root vegetable
mala, N : palm of hand
maladi, LOAN, N : molasses
mala-l, Vtr: feel with hand
malan, N : flat rock
malan $U, \mathrm{~N}$ : right hand
malaa $A, \mathrm{~N}$ : spider web
malgay, N : small freshwater fish sp. maluway $\mathrm{T}, \mathrm{N}$ : spirit, shadow malway $\mathrm{C}, \mathrm{N}$ : spirit, shadow mamba, Adj: sour, salty, bitter mandi, N : hand
manda, N : culprit
manda- $n$, Vtr: fill up any part of body
mandalA Dyalyuy, N : water mani- $n, \mathrm{Vtr}$ : catch (e.g. in trap) manya- $n$, Vint: be frightened manu, N : top of tree
majdam, N : mark (e.g. from wound, writing)
mayga, N: (bird's) nest
mayga-n, Vint: laugh, smile
maygum, N gen: frog
maygumbar, N : leaf grub
margan, N : fighting men
margu, N : grey possum sp.
mara, N: leaf
mazal, N : noise of hand-clapping
marbu, Adj: one's own (part of oneself)
mazun, N : cloud
mayar $A, \mathrm{~N}$ : young initiated man of the gurabana moiety
maygay Dyalyuy, N: black pine
mayi, N gen: non-flesh food
mida, N : clicking noise
midaguran Dyalyuy, Time: yesterday, tomorrow
midi-l, Vtr: block (e.g. road)
midin, LOAN, N : mission
mila, N : tongue
milba, Adj: clever
milgal Dyalyuy, N: eye; silver bream
milirI, N: cramp, pins and needles
milma-l, Vtr: tie up
$m i m i, \mathrm{~N}$ : flying spark
mindil, N: tick
mindir $I, \mathrm{~N}$ : salt-water centipede
mina, N gen: edible animal, meat
mirimbal, N : yellow cockatoo feather miwa-l, Vtr: pick up, lift (anything heavy)
miwur, Adj: gathered up
miyir, N : wind connected with thunderstorm
mudaga, N : pencil cedar tree
mudaga, LOAN, N : motor car
mudalA, N : black mangrove tree; garfish
mudi, N : thick black edible loya vine
mudam, N : mother, and mother's sister
mugaru, N : fish net
mugay, N : upper grinding stone
mugin, N : small rat
mugir $V, \mathrm{~N}$ : small mussels
mugiymugiy Dyalyuy, N: woman
mugu, Part: couldn't help it
muguy, Time: all the time
mulam, N: stew, soup, meat gravy
mulari, N : initiated man
mulbi-n Dyaljuy, Vtr: cut
mulnari Dyalnuy, N: blanket
munda- $l$, Vtr: pull
mundimay, N : vegetable sp.
mundu, N : wind (in lungs), spirit, temper, desire, ease
munil, N : wait-a-while vine sp.
munu, Loc: inside
mujdur $U$, Adj: plenty
muпimuni, N gen: ant
muyarA Dyalguy, N: scrub turkey
mujga, N: husband
muygun, N : wound
muran, N : sickness
muray, N : headhair
murba, Loc: under water
murgan, N : quandong tree
murgu, N : hole in ground, cooking pit
muri:di-n, Vint: scream
murggal, N : short feather
muray, N : snake skin that has been
shed; clothes
murin $U$, N: ashes
murir, N : mosquito
murudum, N: stingaree
muruy, N: white bee
muway Dyalyuy, Part/Interjection: not/no
muygal, N : hole dug as animal trap
muygun, N : yam vine
muypga, N : cicatrices (tribal marks)
muypgin, Adj: cooked
muyubara, Adj: strange, foreign, new
nada-l, Vtr: peel skin off
naga, Loc: east
nambi-l, Vtr: hold, hold down
nani-l, Vtr: growl, swear at
naygu, N : grass mattress
nara, N gen: vine
naypu- $r$ Dyalyuy, Vtr: throw
niba-l, Vtr: show
nila-n, Vint: hide
nirgil, N : hot charcoal, hot coals
$n u b a$, Adj: ripe
nulga-l, Vtr: wake up
numa-n, Vint: move about (e.g. eyes
blink, adam's apple moves up and down)
numbi-n, Vtr: look around for
nagill( $\sim A$ ?), Adj: warm
nala, N : butt of tree; coast
nalan, Adj: unfamiliar, strange (place)
nambi-n, Vtr: paint
nandi, N : body, flesh, meat
nanga:di-n, Vint: talk, speak
nari, N : hole in ground
nari + baga-l, Vtr: dig hole (to bury something in)
nari+budi-l, Vtr: put in hole and cover over
nari + dara-l, Vtr: put in hole and cover over
narmbi-l, Vint: approach (but not quite reach) the ground
naru, Loc: on top of
miban, Adj: stubborn
nina-n, Vint: sit
nirda- $\varphi$, $\operatorname{Vtr}$ : put sitting down
nirini $\sim$ nirni, N : long peppery fruit
nizvir, Adj: broken up
niya.rdi-n Dyalyuy, Vint: sit
mulan, Part: it's a good job that-
numa-l, Vtr: smell
numbul, N : beard
nundu, 2 sg pronoun
nunduba, 2 n -sg pronoun
nuni-, 2 sg pronoun oblique root
nunmul Dyalguy, Adj: one
nundu- $\boldsymbol{r}$ Dyalyuy, Vtr: smell
nuyga- $\boldsymbol{r}$ Dyalyuy, Vtr: smell
nupgulU, N: Torres Straits pigeon
nurugu, N : sound of talking a long way off (when the words cannot quite be made out)
naba-n, Vint: bathe
$\eta a b i$, Adj: many, a lot of
jabul, N : a clicking noise
jabuyga, N : wattle tree sp.
yadi, Part: 'self'
nada, Part( ?): 'might be'(?)
yada, Time: tomorrow
yadaguran, 'Time: morning
yadan, Proper: name of language;
nadandi: name of tribe
nadu-, I sg pronoun oblique root
nalal, Adj: big
naldan Dyalyuy, N: a light
nali, 1 du pronoun
nambin, Loc: belly down
nambu, Adj(?): part-way
yamugundi, N : index finger
jamuray, N : a smell
yandar, N : creek
gandaguman, N : brother
gandal, N : a light
yandi, in-sg pronoun
yanga, Adj: deaf
yayga-n, Vtr: forget
gara:, Interjection: 'what'
yara, Loc: south
$\eta a r u, \mathrm{~N}$ : shake-a-leg dance style; \&
Adj: between legs
yaru+wanda-n, Vint: dance shake-a-leg style
yawuyu, N : salt-water turtle
yayu, I sg pronoun
jiduban, N : small salt-water mussel jira-l, Vtr: hang up
jiya, N: rim of dilly-bag, side of creek or hill
$\eta u$-, deictic root 'that'
jubirbin, N : leech
$\eta u d u$, Part/Interjection: not/no
nulan-, prefix to Loc in Dyalyuy (see 6.3)
yulugun, N : small pandamus tree
yumbar, N : face
jumbubu, N : new-born baby
yumbun, N : heaps of soft sand
junaygara, N : whale yunyun Dyalyuy, N : breast $\quad$ upur $U, \mathrm{~N}$ : initiated man yuyarin, deictic 'that kind of thing' jupudi wala, IDIOM: that's alright pura-l, Vtr: show by lifting up yuridulu: T, Time: a few days ago yurun ~ yuru:, Interjection: 'why' yuril T, Time: just now yurulU, N : shade (of a bushy plant) puyar + gada-n, Vtr: think about nuyar + wanda-n, Vint: think puyay, N: kangaroo grass
muygun $U, \mathrm{~N}$ : whispered talk
wabar, N : a walk
wabarwabar, $\mathrm{N}($ ? ): anything subject to cultural taboo
wadir, N : serrations (e.g. cicatrices, ribs, washboard, on grinding stone)
wadu-l, Vtr: cook, burn
wagal, N : wife
wagar $I \sim A$, Adj: wide
waguda, N gen: man, male human
wala, Part: ceased
walba, N gen: stone
walmbay, N : waterfall
walmbir, Adj( ?): beside - see 3.4.2
walnda-l, Vtr: select best of anything
walndi, N : cliff
walyga-l, Vint: float (in water), glide (through air)
walygu- $r$, Vtr: peep in/around at
walu, N : side of head above ear, side of hill
walurubara Dyalguy, N : black nose wallaby
wamba- $n$, Vtr: wait for
wanda-n, Vint: fall down, drop
wangam $U, \mathrm{~N}$ : kidney
wana, 'who', human indefinite/interrogative
wand $a$, 'where', indefinite/interrogative locational root
wandarin, deictic 'what kind of'
wapdayunda, Time: when
wandirI, Adj: how many
wandirim, Time: how long
zoandirimay, Time: when
wandu-, 'who' human indefinite/interrogative oblique root
wanduluy, deictic 'how/which way'
wani, 'what', non-animate indefinite/ interrogative
waninbara:, 'what's the matter'
wanira, 'what kind of' wayal, N : boomerang wayarI, N: prepubescent boy wayga:di-n, Vint: wake up, get up waygam $U, \mathrm{~N}$ : overhanging cliff wangi, Loc: up
waygulay, N : white cockatoo
wara, Part: done the wrong way
warabal, N : flying squirrel
waram-, Classifier for counting dayssee 6.2.3
wara-n, Vint: shift camp
wardan, N : raft, plank boat
wargin, N : forest
wari-n, Vint: jump (e.g. animal jumps, or person jumps away in fright)
zvarygi-n, Adtr: do all around, turn around
waruyu + gild $u-l$ Dyalyuy, Vtr: dream about
svaruwaru, N : small child
waraba, N : wide creek
wara:buga, N : white apple tree
wayi, N: mouth
waril, N : doorway of house, mouth of trap
wawa- $l$, Vtr: see, look at
wawun, N : scrub turkey
wawur, Adj: some - see 6.2.2
wayba-n, Vint: go round
wayill, N : red bream
waymbala- $n$, Vint: roll
waymba-n, Vint: fly
wayu, Time: for a long time
widi, N : small frog sp.
wigi-l, Vtr: (rich food) makes
(a person) feel satiated and sick
wigilwigil, Adj: sweet
winar $A$ Dyalyuy, N : foot
wira, N gen: movable object; N : 'cunt'
wira- $n$, Vint: be bent, twisted
wirulU, N : shell fish sp.
wizwi-n, Vtr: give
wubay, N : alligator bird
wubulV, Adj: lucky (at hunting, etc.)
wuda, N : shark
wuda-n, Vint: cross river
wudar, N : dew, frost
roudigay, N : wild guava
wudi-n, Vint: grow up
wugam $U, \mathrm{~N}$ : firefly
wugu, LOAN, N/Adj: work(ing)
wugul, N : nape
wula-n, Vint: die
wulmbur $U$, N: leafy broom
wulyga-n, Vint: covered by water, drowned
zuulygu, N : a female song-style
wulygu + dana-n, Vint: sing wulygu style
wumbul, Adj: hot
wuna-n, Vint: lie down, sleep; exist
wunday, N : stolen article
wundu, N : smoke
wuyaba-n, Vtr: look for meat, hunt
wuya-n, Vtr: drink, swallow
wuyga, N : mourning song style used by women
wuygur, N : shouts of 'wo wo' during dance
wuyul, N : carpet snake
wurba- $n$, Vtr: look for, search, seek
wurga- $\boldsymbol{n} \sim d a:$ wurga- $\boldsymbol{n}$, Vint: yawn
wurgulV, N : pelican
wurmba, Adj: asleep (\& N : a sleep ?)
wurgun, N : postpubescent boy
wuru, N : spear handle
wuru:, N : large river; small slateycoloured snake
wurun Dyalyuy, N: shrimp, crayfish
wuzuy $\mathrm{T}, \mathrm{N}$ : small bean tree
vunyuba:di-n Dyalguy, Vint: speak, talk
wuyubana-l Dyalguy, Vtr: tell, call (a name)
$y a b a, \mathrm{~N}$ : brother
$y a b i, \mathrm{~N}$ : grey possum
yabulam, N : an edible loya vine
$y a b u_{r} U, \mathrm{~N}:$ postpubescent girl
yadi-l, Vint: walk about
yaga, Adj: split in half
yaga + dara-l, Vtr: split in half
yaga- $r$, Vtr: hunt away
yagun $U, \mathrm{~N}:$ echidna, porcupine
yalbur, N : grey frog sp.
yalmbin, Adj: in line
yaluga, Loc: (motion to) close up
yaluyunda, Time: today, nowadays
yangal $A$, Adj: straight
yangi- $n$, Vtr: split, rip, tear, slice
yainin, N : side of face between eye
and ear
yaraman, LOAN, N : horse
yarga, Adj: nothing, none
yarbul Dyalyuy, Adj: no good, bad yaryga-n, Vint: be frightened
yarun, Adj: silly, stupid (person)
yawu:, N : grass sp.
yaymi-l, Vtr: ask
$y i$-, deictic root 'this'
yibu:, $\mathrm{N}($ ? ): miming in dance routine yidin, Proper: language name;
yidindi: tribal name
yigan, N : sky
yilari- $n$, Vint: be scattered, spread about
yigarin, deictic 'this sort of thing'
yingilibiy Loan $\mathrm{C}, \mathrm{N}$ : English bee
yijiliman loan T, N: English bee
yiraba:di-n Dyalnuy, Vint: bathe
yiriy, N : type of slatey stone
yizan, N : small shelter
yizaay, N : wind
yiway $\sim$ yizandi, Time: wintertime $y i y i$, Interjection: yes
$y u$-, deictic root 'that' (C: far distant; T: not visible)
yubi-n, Vtr: rub
yulba-l, Vint: sneak up
yulu:, N : flat-tail stingaree
yumba- $r$, Vtr: send message to
yuya-n, Vint: cross river
yuyarin, deictic 'that other sort of thing'
yuqga-l, Vtr: grind
yurga, Part: still
$y$ yrun $U$, Time: a long time ago
yuriya, N : saltwater snake sp.
yuyuruygul, N : noise of snake sliding through grass

## List of affixes

All allomorphs of grammatical affixes are listed below, together with the section(s) containing major discussion of their morphological occurrence and conditioning.

C indicates an affix that is cohering (2.4) but is not reduced by Rule 2 (2.3.2-3). CR denotes an affix that is cohering and does reduce. N indicates non-coherence (and therefore non-reduction).
-(a)la N 'now' - 2.3.9, 3.9.1
-(a) $m \mathrm{C}$ durational time-3.7.8
-(a)may C point time -3.7 .8
$-b a$ C locative-3.3.2
$-b a \mathrm{C}$ one of a group -3.3.6, 3.6.5,
3.7.5, 5.2.7
-bap C juxtapositional - 3.4.2
-bara N 'belonging to' -3.3 .6
-bi C 'another' - 3.3.6
-bidi- $n \mathrm{~N}$ dispersed activity - 3.8.8
-bu C ergative - 3.3.2
-budun N 'still' - 3.9.5
-da C locative - 3.3.2
-(n)da C dative - 3.3.2, 3.6.2-3
-daga- $n \mathrm{~N}$ inchoative verbaliser2.4, 3.7.2-3, 4.8.
$-: d a-n$ C coming - $2.3 .5,3.8 .6-7$
-:daygada-n reduplicated coming 3.8.6
-damba N 'with a lot of' -3.3 .6
-di N 'self' - 3.9.2
$-d u$ C ergative - 3.3.2, 3.7.2-3
da:- N 'towards' $-2.4,3.4 .3,3.8 . \mathrm{I}$
-damu N ‘only, all' - 3.3.6, 3.9.7
-da C locative-3.3.2
-di C comitative-2.4, 3.3.4, 3.6.2-3,
3.6.5, 3.7.2-3, 4.3.1
-di C 'lest' - 3.8.4, 4.6.2-3
$-d i+d a \quad$ C 'fear'-3.3.2, 3.6.2-3,
3.7.2-3, 4.6.1, 4.6.3
-dilggu N 'down' - 3.3.8
-: di-n C antipassive etc. -2.3.5-6, $2.6 .4, \quad 3.8 .5, \quad 3.8 .7, \quad 4.2, \quad 4.3 .8$,
5.2.3-4, 5.5.2-3
-d $u$ C ergative - 3.3.2
:dulu: N durative - 3.3.7, 3.5
-gara: N 'from'-3.3.7
-gimbal N privative - 2.4, 3.3.6,

$$
3 \cdot 7 \cdot 2-3,4 \cdot 3.1
$$

$-g u \quad \mathrm{C}$ purposive-3.3.2, 3.6.2-3,
3.7.2-3, 4.5.1, 4.5.4
$-g u$ C allative $-3.4 .1,3.7 .2-3$
$-g u$ C 'until' - $3.5,3.7 .8$
-guwa N 'west' - 3.3.8
-l- C conjugation marker - 3.8.3
$-l$ C present tense - 3.8.4
$-: l$ C irregular ergative - 3.3.2
-:l C irregular locative-3.3.2

-     - $l \mathrm{C}$ allative - 3.7.2-3
-la $\mathrm{CR}($ ? ) locative - 2.3.3, 3.3.2
-la N 'now' - 2.3.9, 3.9.1
-: $: 1 i-n$ C going - 2.3.5-6, 2.5.1,3.8.6-7
-: lingali-n reduplicated going - 3.8 .6
$-l(n) d a \mathrm{C}$ irregular dative -3.3 .2
-luya-l N transitive verbaliser - 4.8.3
$-m \mathrm{C}$ durational time -3.7.8
$-m \mathrm{C}$ ablative-causal - 2.3.3, 3.3.2,
3.4.1
$-m$ C 'since' - $3.5,3.7 .8$
-madi-n N incremental verbaliser 4.8.2
-maya-l N verbal comitative-3.8.5, 3.8.7, 4.3, 5.4
-mari N 'along' - 3.3.7, 3.9.7
- may C point time -3.7 .8
-mu $\mathrm{CR}($ ? ) ablative-causal-2.3.3,
3.3.2, 3.4.1, 3.7.2-3, 4.4.4, 4.4.6
$-m u$ CR( ?) 'since' - $3.5,3.7 .8$
-muday N comitative-2.4, 3.3.6, 3.7.2-3, 4.3.1
-mungal N 'lots, all' - 3.3.6
- $n$ - C conjugation marker - 3.8.3
- $n \mathrm{C}$ imperative-3.8.4
$-n a$ Cverbal purposive $-3.8 .4,4.5 .2-5$
-naga N 'east' - 3.3.8
- :nbidi- $n \mathrm{~N}$ dispersed activity -3.8 .8
-nda C dative - 3.3.2, 3.6.2-3, 3.7.2-3
$-n i \sim-: n$ CR genitive-2.3.2, 3.3.3, 3.6.2-3, 3.7.2-3, 4.7
-nim C causal/past possessive - 3.3.3, 3.6.2-3, 3.7.2-3, 4.4.4, 4.4.6, 4.7.2
$-n a \sim-: n$ CR accusative-3.3.7,
3.6.2-3, 3.7.2-3
$-n a \mathrm{~N}$ emphatic-3.3.7, 3.9.7
-nda C locative-3.3.2
$-n d i \mathrm{C}$ comitative $-3.3 \cdot 4$
$-(n) d u$ C ergative - 3.3.2
$-\eta u \sim-: n$ CR past tense - 2.3.2, 3.8.4
$-n u+n d a \sim-n u:+n$ CR dative sub-ordinate-2.3.2, 3.8.4, 4.4.1-4 $-n u+m \mathrm{C}$ causal subordinate-3.8.4, 4.4.5-6
$-\eta \mathrm{C}$ present tense $-2.6 .3,3.8 .4$
$-\eta a d a-n \mathrm{~N}$ coming $-2.3 .5,3.8 .6-7$
$-\eta$ adaygada- $n$ reduplicated coming 3.8.6
-ya-l CR verbal comitative-2.4, $2.6 .4,3.8 .5,3.8 .7,4.3,5.4$
- $\eta a-l \mathrm{CR}$ causative verbaliser -2.4 , 3.7.2-3, 4.8.1
-yali-n N going - 2.3.5, 2.4, 2.5.1, 3.8.6-7
- yalingali- $n$ reduplicated going -
3.8.6
$\cdot \eta g u \sim-: \eta$ CR ergative - 2.3.2, 3.3.2, 3.7.2-3
- ${ }^{-\eta u i} \mathrm{~N}$ 'this-, like-'-3.9.3
-     - uru N 'for another thing'-3.9.4
$-r$ C imperative - 3.8.4
-:ri-n C going - 2.3.5-6, 2.5.1,3.8.6-7
- rup C allative of direction -3.7.2-3
$-r$ - C conjugation marker -3.8 .3
$-r$ C present tense - 3.8.4
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plate i Dick Moses (dariyi), principal informant for the coastal dialect (Yarrabah, August 1973).

plate 2 Tilly Fuller (buru: $n$ ), left, and her sister Katie May (dugulum), speakers of the tablelands dialect (Aloomba, January 1972).

plate 3 From left: Dick Moses, Robert Patterson ( (almbi) of the Guggandi tribe, and Pompey Langdon (daluru), a tablelands Yidindi (Yarrabah, August 1975).


Plate 4 Illustration from the Annual Report of the Chief Protector of Aboriginals [Queensland] for the year 1gog (Brisbane: Government Printer, 1910): ‘Wedding of Albert, Prince of Yarrabah’ (Albert was the son of minminiy - see 1.7).


[^0]:    (245) yandi gindanuyi burgiy | mina:gu
    we-sA moon-comit-ABS walkabout-pres animal-dat
    zurba:din $/$ minam napdi gaday |
    look for-: $d i$-PRES animal-Abl we-SA come-PRES
    ninayaday | wuna:nbidin wurmba
    sit-coming-pres lie down-:n-bidi-Pres asleep-abs
    wunay
    lie down-pres

