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## ABBREVIATIONS AND CONVENTIONS

| A | Accusative | ERG | Ergative |
| :--- | :--- | :--- | :--- |
| ABL | Ablative | ETC | Etcetera |
| ACC | Accusative | F | Female |
| ADV | Adverbial | F $_{n}$ | Formant n |
| AG | Agent | FACT | Factive mood |
| ALL | Allative | FUT | Future tense |
| C | Consonant | GD | Good at |
| CC | Classifier Complex | GEN | Genitive |
| CHAR | Characterised by | GL | Goal |
| CL | Classifier (in the VP) | g-unit | Grammatical unit |
| COMIT | Comitative | H | Hearer |
| cps | Cycles per second | IC | Immediate Constituent |
| CTV | Continuative | INC | Inceptive |
| DAT | Dative | Incl | Inclusive |
| DEF | Definite mode | IND | Indefinite |
| DEP | Deprivative | INF | Infinitive |
| DESID | Desiderative | IRR | Irrealis |
| DET | Detcrminer | IT | Itcrative mode |
| dII | dual inclusive (pronoun) | K | Clause |
| DIF | Different | K $_{n f}$ | Non-finite clause |
| DISJ | Disjunction | LOC | Locative |
| du | Dual number enclitic (in | M | Malc |
|  | the VP) | MD | Mode |
| DU | Dual number postposit- | MED | Medium |
|  | ion | MNR | Manner |
| d-unit | Distributional unit | N | Nominal, Nominative |
| DW | Dweller of a niche |  | case (in glosses of pro- |
| DY | Dyadic kinterm |  | nominal prefixes) |
| EMP | Emphatic | NOM | Nominative |
| EN | Enclitic | NP | Noun Phrase |
|  |  |  |  |


| nsg | Non-singular <br> O <br>  <br>  <br>  <br> Other, Oblique case (in <br> glosses of pronominal | S | Stressed syllable, <br> Speaker <br> enclitics) |
| :--- | :--- | :--- | :--- |
| OBL | Oblique | SEM | Semblative |
| ON | Only | SEQ | Sequential |
| P | Postposition | Sg | Stem formative |
| pa | Paucal number enclitic |  | Singular (in pronominal |
|  | (in the VP) | categories) |  |
| PAST | Past tense | Subjunctive mood |  |
| PC | Phrase complex | TOO | Also, too |
| PER | Perlative | u | Unmarked |
| PF | Prefix | U | Unrestricted, Unstressed |
| pl | Plural (of pronominal |  | UNKN |
|  | categories) | Unknown identity |  |
| PL | PluraI postposition | $V_{n f}$ | Verb, Vowel |
| POT | Potential mode | VP | Verb Phrase |
| PP | Postpositional Phrase | VP | Non-finite Verb Phrase |
| PRES | Present tense | WC | Word complex |
| PROG | Progressive aspect | 1 | First person |
| R | Restricted | 2 | Second person |
| REP | Repetition | 3 | Third person |

## Kinterm abbreviations

| B | Brother | S | Son |
| :--- | :--- | :--- | :--- |
| Ch | Child (either sex) | W | Wife |
| D | Daughter | Z | Sister |
| F | Father | + | Older |
| H | Husband | - | Younger |
| M | Mother |  |  |

## Symbols and conventions

// enclose phonological representations and tone units
[] enclose phonetic representations, features, and constituents
( ) enclose morphophonemic representations
< > enclose constituents interpolated within other constituents
( ) enclose optional material
$\rightarrow \quad$ becomes (in phonological rules); acts on (elsewhere)

| 7 | is conflated with |
| :---: | :---: |
| 1 | in the environment |
| ~ | alternates with |
| $<$ | derives from, is less than |
| > | is greater than |
| $\wedge$ | concatenation: indicates that the connected items occur in strict order |
| . | syllable boundary, pause within a tone unit |
| , | primary stress |
| , | secondary stress |
| ... | constituents in apposition |
| + | positively specified for the feature, morpheme boundary within the CC |
| - | negatively specified for the feature, morpheme boundaries of all types except those within the CC |
| $\left\{\begin{array}{l}a \\ b\end{array}\right\}$ | a or b (in phonological rules) |
| $\left\{\begin{array}{l}a \\ b\end{array}\right\}$ | exactly one of a or b ; the same one is chosen on each side of $\rightarrow$ |
| $\rightarrow L_{b}^{a}$ | feature a or feature b, but not both |
| $\left\{\begin{array}{l} -\mathrm{a} \\ -\mathrm{b} \end{array}\right.$ | feature a and feature b |
| \$ | stem boundary |
| \# | boundary of distributional word |
|  | unstressed vowel |

Phonetic transcriptions use IPA symbols as far as possible. The main exception is that a dot under a vowel is used to indicate retroflection, and a dot under the symbol l indicates the retroflex lateral. Elsewhere, Gooniyandi words are represented in a practical orthography, which is described in section 1.8. Words in other languages are written according to the accepted or recommended orthography for that language if there is one, and otherwise according to the spelling in the source.

Verbal classifiers are cited throughout the text in capitals (e.g. +BINDI), and are not usually glossed. Pronominal prefixes to the classificr are glossed as
follows: the person and number information is enclosed in brackets, and is followed by a letter referring to the case form. Thus, (1R)N indicates the nominative form of the first person restricted.

Function labels are given with an initial capital letter.
Example sentences normally consist of three parts: (a) Gooniyandi text; (b) interlinear gloss; and (c) free translation.
(a) The Gooniyandi text is divided into distributional words, bounded by spaces. Morpheme boundaries are not necessarily indicated, except for the morphemes under discussion, or where relevant to the discussion. The first lines of example sentences are not punctuated. However, where relevant, suprasegmental features (e.g. tone units, salience, etc.) are indicated. Bolding indicates that a syllable is salient.
(b) Interlinear glosses are unit by unit, each full unit distinguished in the Gooniyandi line being glossed. Where more than one English word is required for the gloss of a unit, the words are separated by a colon (:). For typographic convenience, 'he' is used in the glosses instead of the more cumbersome 'he, she, or it' (Gooniyandi does not make gender distinctions in its nominals and pronominals).
(c) A free translation is given for each example. This is enclosed in quotes: double quotes for translations provided by the speaker himself/herself, and single quotes otherwise.

## CHAPTER 1

## INTRODUCTION

### 1.1 Language type

Gooniyandi ${ }^{1}$ is an Australian Aboriginal language spoken by about one hundred Aborigines in the southern Kimberley region of Western Australia. It was classified in the lexico-statistical surveys of the 1960s as a member of the Bunuban (Bunaban, in the earlier spelling) language family, a small family consisting of just two languages, Bunuba being the other member (O'Grady, Voegelin and Voegelin 1966:28, 35, Wurm 1972:123). This classification accords with the earlier classification of Capell (1940:244), who grouped Gooniyandi and Bunuba together, on typological grounds, as "prefixing languages without noun classification". To date, genetic relationships have not been definitely established with any other language family in Australia (or elsewhere), Dixon (1980:3) notwithstanding.

The language shows many characteristics which have come to be regarded as typical of Australian languages, but is in a number of other respects atypical. For the initial orientation of the reader, I will mention a selection of these typical and atypical features. It is not suggested that they represent a significant typologising of the language.

Gooniyandi has a phonology which accords with the normal Australian pattern. It shows six distinctive points of articulation for stops and nasals (bilabial, apico-alveolar, apico-postalveolar, lamino-dental, lamino-palatal and dorso-velar), and three for laterals (apico-alveolar, apico-postalveolar, and lamino-palatal). There is a retroflex frictionless continuant, an apical tap, and two semivowels. Three short vowels are distinguished; length is contrastive for

[^0]the low vowel only. There are no sibilants or fricatives, voicing is not distinctive, and stress has a purely delimitative function (Trubetzkoy 1969:27). Words almost always begin with a consonant, very rarely with a consonant cluster; the apical distinction is neutralised word initially. Word medially a fairly large number of two member consonant clusters occur. Non-verbal roots are nearly all disyllabic or longer and typically end in vowels. Verbal roots are phonotactically unusual (cf. Dixon 1980:159): a large number are monosyllabic, and many end in consonants, occasionally consonant clusters.

Lexical words may be divided into three main classes or parts-of-speech, each with a number of subclasses: nominals, verbals, and adverbials. These are open classes, each with a large number of members. Pronominals constitute a distinct closed class and distinguish three persons and two numbers. Instead of the inclusive/exclusive distinction normally found in the first person nonsingular in Australian languages, Gooniyandi makes a restricted/unrestricted distinction. In this system, the unrestricted pronominal refers to the speaker, the hearer, and at least one other individual; the restricted pronominal refers either to the speaker and the hearer, or to the speaker and one or more persons other than the hearer. In terms of the traditional categories, the unrestricted pronominal corresponds to first person plural (more than two) inclusive, while the restricted pronominal corresponds to the first person dual (either inclusive or exclusive) or the first person plural exclusive.

Noun classes are not distinguished in Gooniyandi, and nominals do not inflect for number or case. Instead, number and case information is conveyed by means of phrase-level enclitics, which are referred to in this book as postpositions. There are number-marking postpositions distinguishing dual and plural numbers, and case-marking postpositions conveying ergative, dative, ablative, allative, locative, and other local meanings. Gooniyandi nominal phrase marking is not split ergative (Silverstein 1976b, Dixon 1979): any NP regardless of its person or number may be ergatively marked. The ergative postposition is, however, optional for all phrase types in the 'transitive subject' function. Word order in the NP is free in the sense that determiners and adjectives may precede or follow the nominal they modify. However, the NP may be described in terms of a fixed sequence of functions or roles that the constituent words realise.

The verbal complex has properties characteristic of both phrases and words. It is phrase-like in its position on the rank scale (Halliday 1961/1976): it is a clausal constituent whose "granddaughters" are items of morpheme rank; it is word-like in that it is a single distributional unit, the constituents of which
occur in a fixed order. There are two obligatory constituents in the verbal complex: a verbal stem, which always occurs initially, and a 'classifier complex'. This classifier complex consists of, in the following order: a tense marking prefix, bound pronominal prefixes which cross-reference certain actants in the clause, and a 'classifier'. The tense system distinguishes four tenses (past, present, irrealis and future); the pronominal prefixes on the whole inflect on a nominative-accusative pattern, and generally show the same person and number distinctions as do the free pronominals; and the classifiers distinguish twelve classes of processes (based on aspectual type and valence, to put it loosely). In addition the verbal complex may have one or more of a number of optional constituents which provide aspectual and modal qualification, and a further system of bound pronominals referring to other ('oblique') actants. Although these constituents occur in a fixed order, their phonemic shapes, and the boundaries between them, are frequently obscured by morphophonemic processes.

Spatial adverbs, indicating location and direction, are frequent in motion (and other) clauses: compass directions are used in preference to left-right orientation, and temporal sequence is expressed by spatial metaphor. There are also temporal and manner adverbials.

Modality and other forms of speaker evaluation of a proposition are encoded in free particles (marking negation, mistaken belief, retribution, repetition, certainty, uncertainty, and so on) and enclitics (carrying meanings like 'only', 'again', 'clse', 'like', 'etcetera', and so on).

Two main types of clause, verbal and verbless, are distinguishable, depending on whether or not there is an inherent (see page 293 below) verbal complex. Verbal clauses show four (not two - cf. Dixon 1980:278ff) distinct 'transitivity' types: intransitive, transitive, middle and reflexive/reciprocal. These are defined by the "case frames" of the inherent nominal phrase constituents. Intransitive clauses take a single unmarked NP; transitive clauses have a phrase which may be ergatively marked and an unmarked phrase; middle clauses have a phrase which may be ergatively marked together with a dative phrase; and reflexive/reciprocal clauses have a single phrase, which is optionally ergatively marked. Verbless clauses are either attributive, identifying, or existential. As in the majority of Australian languages, constituent order is 'free' (Dixon 1980:441), in the sense that changing it does not affect the referential or experiential meaning (Halliday 1974:47) of a clause. Constituent order is, however, significant in respect of the textual organisation of the clause (Halliday 1974:47) - that is, the way in which the clause is organised as a message
bearing unit. In particular, Gooniyandi is a theme-first language.
Clause complexes consist of paratactically or hypotactically related clauses. However, it is impossible to distinguish these two types (or any others) on purely formal criteria. There are no morphological markers signalling the interclausal relationships, no structural differences between constituent clauses of clause complexes and independent clauses, and no necessary cross-clause reference relations (see Mathiessen and Thompson forthcoming, and compare Dixon 1980:461). The clause complex types have linguistic validity as COVERT categories (Whorf 1945/1972:104). There is, however, a close connection between subordination and mood, whereby subordinate clauses always have their verb in a marked, non-indicative mood, either subjunctive or factive.

### 1.2 Territory and surrounding languages

The Gooniyandi people traditionally occupied quite a large tract of land, extending from Fitzroy Crossing in the west to the vicinity of Margaret River Station in the east, a distance of some one hundred and fifty kilometres, west to east. This territory abuts on the Great Sandy Desert in the south, and extends into the King Leopold Ranges in the north. Two large rivers, the Margaret River and Christmas Creek, as well as a number of smaller creeks, water the countryside, which is predominantly river flats intersected by numerous limestone ranges. The approximate extent of the Gooniyandi territory, as well as the territories of the neighbouring peoples, is shown on Map 1 (see also Tindale 1974).

The languages spoken in the vicinity are representatives of five distinct language families, according to O'Grady, Voegelin and Voegelin (1966), and Wurm (1972) - compare Capell (1940) and (1956/1966). Although it has more recently been suggested that all Australian Aboriginal languages (with two or three possible exceptions) belong to a single family (Dixon 1980:3), genetic relations between these five families have not yet been conclusively demonstrated.

Walmajarri, Jaru, and Wangkajunga, traditionally spoken to the south and east of Gooniyandi, are the local representatives of the Pama-Nyungan family, which covers most of the Australian continent (see e.g. map facing page 112 of Wurm 1972). The Jarrakan (Djeragan, in older spelling) family, of which Kija is a member, was located to the north and north-east of Gooniyandi; languages of the Nyulnyulan family, which includes Nyikina, were spoken to the west of Gooniyandi; the Worrorran (elsewhere spelled Wororan) languages, including Worrorra and Ungarinyin, were spoken to the north and north-west of Bunuba,


Map 1: Gooniyandi territory
Key:

- Towns
$\times$ Communities
- Stations
-     -         - Approximate language boundaries
and were not geographically contiguous with Gooniyandi.
A comparison of Gooniyandi with surrounding languages shows the following lexical resemblance rates:

| Bunuba: | $45 \%$ | (see below) |
| :--- | :--- | :--- |
| Kija: | $38 \%$ | (on Hale's 100 item list; Tsunoda 1981:5) |
| Jaru: | $23 \%$ | (on Hale's 100 item list; Tsunoda 1981:5) |
| Ungarinyin: | $22 \%$ | (on an 138 item list (see above), Rumsey pers.comm.) |
| Walmajarri: | $22 \%$ | (based on Hudson's (1978:97-110) wordlist of approx- <br> imately 400 items - but cf. Tsunoda 1981:5.) |
|  |  | (198 |

Nyikina: $\quad 8 \% \quad$ (on approximately 1500 items of Stokes et al 1980)
Wangkajunga: $3 \%$ (on Hale's 100 item list; my own ficld notes)
The two members of the Bunuban family, Gooniyandi and Bunuba, are fairly close genetic relatives, and are lexically, grammatically, and typologically quite similar. They are perhaps as similar as Italian and Spanish. There is also quite a high degree of bilingualism in the two languages, especially among the older generation of Gooniyandi and Bunuba people.

The phonological inventories of Gooniyandi and Bunuba are identical except that Bunuba has a phonemically distinct lamino-dental lateral phoneme /h/ (Alan Rumsey pers.comm.), not found in Gooniyandi. Gooniyandi and Bunuba showed a cognate density of about $45 \%$ on a 138 item list, which included the 100 items of Hale's core vocabulary for Australian languages (the words marked by double asterisks in Sutton and Walsh 1979), plus some other starred words from an AIAS word list current as of 22/1/1975 (Rumsey pers.comm.). A count of some of the more frequent and easily segmentable bound morphemes ( 36 in number) showed a somewhat higher cognate rate of $66 \%$. The verbal constructions in the two languages are quite similar. But whereas in Gooniyandi the verbal complex is a minimal free form in which the verbal stem and the classifier complex (see section 3.9.3.2) are bound to one another, in Bunuba one of the verbal auxiliaries (which are the Bunuba counterparts of Gooniyandi classifiers), namely -ma, has the privilege of free occurrence (Rumsey pers.comm.).

The Bunuban family differs in a number of typological respects from the surrounding families. For example, unlike the Worrorran and Jarrakan families, noun classes are not distinguished, and the nominal phrase exhibits ergative marking. Secondly, the lamino-palatal vs. lamino-dental contrast in stops and nasals is found in the Bunuban and Jarrakan languages, but not in the nearby Pama-Nyungan or Nyulnyulan languages, and in only one Worrorran language,
namely Unggumi (which is geographically contiguous with Bunuba).
However, the five families are by no means totally dissimilar, and there are a number of common features shared by two or more families, or pairs of languages from different families. A number of these similarities are fairly certainly the result of areal diffusion; none can be said with certainty to be retentions from putative earlier proto-languages. For example, all of the languages shown on Map 1 have bound pronominals which cross-reference certain actants in the clause. In the non-Pama-Nyungan languages, they are typically prefixed to the verbal auxiliary (or classifier in the case of Gooniyandi), while in the Pama-Nyungan languages they are suffixed to a "catalyst" (Capell 1956/1966:11), or to the first word of a clause. It is also likely that at some stage the preverb-auxiliary construction, as it may be called (following McConvell pers.comm.), typical of most languages in the area, including the Pama-Nyungan ones, was diffused. Such a construction is undoubtedly the historical source of the Gooniyandi verbal complex, in which the two elements, the preverb and the auxiliary, have fused into a single free word. Changes have led to a reanalysis of the verbal complex into root plus classifier.

### 1.3 Geographical variation

A few minor geographical differences were encountered in Gooniyandi speech. These were almost entirely lexical. In boundary regions there is usually a slightly higher percentage of common vocabulary, shared with the neighbouring language. For example, in the speech of the Gooniyandi people of Yiyili, which is near the eastern border of their territory, a couple of words were encountered which are shared with Kija and/or Jaru, but which are not usually heard in the Gooniyandi speech of Fitzroy Crossing and nearby communities. One such word is gardij- 'cut', which is shared with Kija. However, the differences are too few to justify the identification of distinct dialects, and none are named (but cf. below).

The speakers themselves are aware of variation in their language, some of which they attribute to regions, some to particular individuals in these regions - but never, in my experience, to socio-linguistic factors such as formality. The main variation perceived is lexical, but speakers are also conscious of some minor grammatical differences, ${ }^{2}$ and of a handful of words which have two

[^1]slightly different phonemic representations. However, it seems that speakers are not always strictly correct in their expressed beliefs. My observation of actual usage showed that the variant pronunciation of ginharndi 'you know' as ginyarndi, for instance, was not geographically determined, despite native speakers' claims. The so called 'light' form, with the lamino-palatal nasal in the second syllable, was found in the community in which it was claimed to be used, but beside the 'heavy' form with the lamino-dental. Moreover, the light form was also found in other, geographically remote, communities. It may be that the choice is governed by other factors such as the age or linguistic provenance of the speaker or the degree of formality of the speech situation, but I was unable to verify any of these possibilities.
Quite often speech differences were labeled joowarliny by native speakers of Gooniyandi (although this term was never used to name anything which could be unequivocally identified as a dialect). Interestingly, this term (Juwarliny in Walmajarri orthography) is also the name of a western dialect of Walmajarri (Hudson and Richards 1978:3). Tentatively, it would seem that the Gooniyandi term signifies unusualness, non-standard variety (with reference to the speaker's variety), with connotations of barbarism.

### 1.4 Gooniyandi culture and society

### 1.4.1 Traditional way of life

Traditionally the Gooniyandi were hunters and gatherers. Like all other Australian Aboriginal groups, they were restricted nomads (Maddock 1972/1974:26), who moved in small foraging bands over relatively limited areas within their tribal territory. Being an inland group, of course, the majority of their foodstuffs came from the land; the numerous rivers, creeks and waterholes were, however, also regularly exploited for the rich range of vegetable, reptile, fish and crustacean resources that they provided.

As in other Aboriginal groups there was a quite rigid division of labour according to sex. Men did the majority of the hunting, especially for larger game animals, reptiles, and birds such as kangaroos, crocodiles, echidnas, emus, bustards, etc.. Women did the majority of the gathering of the staples: vegetable foods such as yams, berries, grass seeds, water lily roots, and so on, as well as small animals such as witchetty grabs and frogs, and animal products such as honey. However, the women were also sometimes involved in the larger operations of hunting kangaroos by fire; and smaller game, such as lizards, goannas and fish, were caught by both men and women as opportunity arose.
forms I gathered in Fitzroy Crossing.

Material culture was relatively simple. Men used a variety of different types of spears and boomerangs for hunting and fighting; women used digging sticks for gathering yams, stone axes for chopping honey from hollows in trees, and coolamons (a type of dish) for carrying water, seeds, berries, babies and so on. In addition, the tool kit included fire drills, fire saws and grinding stones. Permanent dwellings were not made, but rough shelters were constructed from spinifex and branches for occasional protection from the elements.

The Gooniyandi had an intimate and detailed knowledge of their environment, including its geography; the distribution of plant species and their uses; and the seasons, and ripening times of various plant species. For instance, some plants, and parts of plants, were known to have medicinal properties; others were used as poisons (for example, one type of sap was used in small waterholes to poison fish). The men in particular were excellent trackers, who could identify animal species, and individual human beings by their tracks, an ability which was of course crucial to their success as hunters (and later to the success of white occupation - see McGregor 1988b).

Although most everyday social interaction of the Gooniyandi would have been within their group (or "tribe"), there was also significant and important interaction with other nearby groups, principally the Bunuba, Kija, Walmajarri, and Nyikina peoples. This is evidenced by the high degree of multilingualism among the older Gooniyandi; and quite likely inter-tribal marriages were not uncommon. There is also, on Gooniyandi territory, an important waterhole, Jiliyardi, where inter-tribal ceremonies and corroborces were once held. Furthermore, the Gooniyandi participated in - and still participate in, perhaps to an even greater extent today, thanks to modern vehicles - an extensive network of trade and exchange (Akerman 1979, Kolig 1981:126-127), which they call wirnandi (wurnan in most other nearby languages). This took place in two main streams of exchange. In a direct line through the major Aboriginal communities of the southern Kimberley region, and in a westerly direction, move myths, rituals, and body designs associated with the "Woagaia" (Kolig 1981:126) tradition. From the west Kimberley and Dampier Land, moving in the opposite direction, come mainly material items, including large quantities of shells (especially the highly coveted pearl shell) and shiclds. Thus many of the songs and sacred myth cycles associated with important initiation ceremonies presently "owned" by the Gooniyandi originated in the east, a fact which they readily acknowledge. Many others have, within living memory, been passed on to the west in exchange for goods.

Writing was unknown in Aboriginal Australia. Inscribed message sticks
were used by the Gooniyandi to convey important information concerning ceremonies and so on, but these attested more to the validity of the messenger and his message than represented any particular text. Sand drawings are occasionally used to illustrate spoken texts, but the system is not as well developed, nor used as extensively as in the Centre (cf. Munn 1973). Various hand signs were employed; these usually involved particular hand shapes, together with movement. However, it seems that the repertoire of signs was small by comparison with the desert peoples'. There were signs for common animals, birds, and reptiles (at least those which were eaten), some basic actions, affirmation and negation, and questions. Hand signs were presumably used when verbal communication was not appropriate (e.g. in hunting), or suitable (c.g. over a great distance). Hand signs are rarely used as adjuncts to spoken texts, and there is no evidence that there was a well developed sign language such as is found in Warlpiri (see Kendon 1978). Direction and location could be indicated non-verbally by lip pointing, which may be concomitant with speech, giving rise to phonetically lip-rounded vowels and consonants.

The Gooniyandi traditionally practised various forms of bodily operations on young males as rites of passage into manhood. These included circumcision around puberty, and a few years later on, subincision; even later, horizontal cicatrices were made across the chest, and a hole was made through the nasal septum. Only the oldest living Gooniyandi men have undergone all of these rites of passage; the majority of young adult and middle aged males have been circumcised only, although some middle aged men do also have a few cicatrices. The operations of circumcision and subincision were accompanied by a series of preparatory and follow-up stages and ceremonies. Prior to the operation of circumcision, the novice was taken on a trip to visit various relevant groups to formally invite them to the ceremony. The operation itself took place during a corroboree involving both men and women; today the main circumcision corroboree is the Waloongaddi (Walungarri in Walmajarri orthography). Following their circumcision, the initiands were secluded in the bush for some months during which time they were permitted to engage in limited contact only with one another and the older men - usually a mother's brother - who looked after them. During this time, they also received ritual instruction; this was followed up later with further instruction, as the man went through later stages of initiation.

There is an extensive mythology relating to events from a time in the distant past referred to in Gooniyandi and nearby languages by the term mgaddanggarni (ngarrangkarni in Walmajarri and Kija orthographies), and in the
anthropological literature by the term "dreamtime". Aborigines in the region also refer to this period as the dreamtime, although there seems to be no direct connection with dreams. The myths explain the origin and names of geographical formations, origins of animal species and social practices, geographical location and land tenure of language groups, and so on. For instance, Text 2 (see Appendix 1) is a myth about fire, which apparently explains its social value, and also, perhaps, its usefulness (cf. Hodge and McGregor forthcoming).

Most Gooniyandi myths have a strong orientation to place. They typically relate the travels of mythical beings over the countryside, from place to place, and various events that happened along the way at these places, including, for instance, ceremonies, conflicts with other mythical beings, and putting names to the significant places. The more important myths - which are usually also associated with important ceremonies, particularly initiation - refer to paths which extend right across Gooniyandi country, and into neighbouring territories. For instance, one very important kangaroo myth begins in the Napier Ranges, and extends through Bunuba, Gooniyandi and Walmajarri countries, thence into (and possibly through) Wangkajunga territory. Particular individuals have ownership rights to parts of the macro-myth, namely the parts which intersect their own land; and they usually know the outlines of the larger travels, but will not relate them since they lack the rights to do so. Some myths (see e.g. Text 2), however, lack this place orientation; these are invariably of lesser importance, and are never associated with significant ceremonial activities.

Songs are both sacred and secular. They are sung to the accompaniment of clapsticks; although the didgeridoo was known, it was not used in song. As noted above, many songs originated in the east: this includes both sacred songs associated with initiation ceremonies, and secular songs such as love songs (cf. Akerman 1979:249). These usually (though not always) retain the language in which they originated. For instance, the Gooniyandi repertoire includes love songs in Gurindji, and songs from the Waloongaddi (Walungarri) cycle in Wunambal. But there are also songs in the Gooniyandi language, including traditional sacred songs associated with Gooniyandi mythology and land, and secular songs invented - rather, dreamed - by Gooniyandi speakers.

As in other Australian Aboriginal groups, the Gooniyandi observed a taboo on uttering the name of a recently dead person (Nash and Simpson 1981, Dixon 1980:28-29). This taboo extended to lexemes of a similar phonological shape, and today, to varying extents, to a person's gardiya (white person) name also. Reference to a recently dead person would usually be indirect - see, for
instance, line (42) of Text 1. Whenever I revisit my Gooniyandi friends at Fitzroy Crossing, one of the first things I am invariably told is who has died since my last visit; this is presumably done in order to avoid the potentially embarrassing situation of my mentioning that person's name. Reference is usually made by uttering the person's gardiya name in a low whispering voice. The taboo on the name of the dead person might last for a number of years (cf. Dixon 1980:28), depending on the closeness of the relationship between the speaker and the deceased: close relatives would observe the taboo for a much longer period than others. Close relatives of the dead would observe, in addition to the name taboo, a meat taboo, which could last for a considerable time, and could only be broken by the enactment of a neutralising rite (cf. Hudson and Richards 1978:44-45).

There was a complex series of funerary rites according to which the bodies of adults, both men and women, were disposed of (see McGregor forthcoming-a for further details). The first stage involved putting the dead body on a platform in a tree. Below the body were placed a number of rocks, each representing a person potentially responsible for the death. The body would be left on the platform for some months until it had begun to decompose, at which time an inquest would be held. The rocks under the platform would be examined, and the person responsible for the death identified: the rock representing that person would be marked with the dripping exuviae of the dead body. Once the murderer had been determined, the death could be avenged, either by sorcery or by a specially set up avenging party. If no rock had been marked, the process might be repeated; if (as in one case I was informed of) a number of repetitions still failed to point to the murderer, it might be decided that no one was responsible, and no avenging action taken. After the body had fully decomposed, and bones only remained, it was usually finally disposed of either by burial, or by placement in a small cave. Today, white institutions have control of the rites, and the dead are given a Christian burial.

### 1.4.2 Social organisation

In Gooniyandi culture as in other Aboriginal cultures, interpersonal and intergroup rights, obligations, duties and behaviour were, and still are, to a large extent determined by "kin" relationships. The 'kindred' is perceived as coterminous with society. And, partly because of this, the kin-relation between a pair of individuals is usually to some extent negotiable, and not as fixed by actual genealogy as it is for Westerners.

Gooniyandi has a sizeable system of kin-terms. There are over twenty
unmarked or simple kin-terms, all of which are used in both reference and address (there are no morphologically distinct vocative forms). These may be suffixed with one of two possessor indicating morphemes -wa 'his/her' and -badi 'yours' (number of the possessed is not indicated). There are no forms for other possessors, such as first person or third person non-singular; these must be indicated by a possessive pronoun. There is also a suffix -langi which forms dyadic terms. When added to the appropriate simple term, it refers to a group of two or more individuals in the designated kin-relation to one another. In addition to the simple kin-terms, there is a small set of 'triangular' terms, which indicate the relation of both the speaker and a distinct propositus, usually the addressee, to the referent. (For a discussion of triangular terms, see McConvell 1982 and Laughren 1982.) The system of triangular terms is restricted to configurations in which at least one of the relationships is affinal. Some of the distinctions made in the simple system are neutralised in this system.

The Gooniyandi kinship system is a variant of the Arrernte (Aranda) type (Radcliffe-Brown 1931), in which four kinds of kin are distinguished in the grand-parental generation (cf. Scheffler 1978: chapter 9). In Aranda systems, two different types of cross-cousin are usually distinguished terminologically: first cross-cousin, and second cross-cousin, the latter being a prescribed spouse of Ego, and designated 'spouse'. In Gooniyandi, however, certain cross-cousins are designated goorndi (females) and goornda (males), which terms also apply to first cross-cousins (i.e. FZCh and MBCh), and marriage was proscribed. The first choice of spouse is from the same subsection as the actual MMBDCh and FMBSCh (provided the marriages were all first preference - see below). However, s/he must be distant from Ego: a classificatory and not an actual crosscousin. Speakers explained this to me in geographical terms: marriage with a classificatory second cross-cousin living in a distant place would be acceptable, whereas marriage with a second cross-cousin residing nearby would be unacceptable. This may perhaps susgest a predilection for local group exogamy. (Compare Elkin 1938/1974:101 and Rumsey 1982a:161-162.) Summing up, gencalogy (or imputed genealogy) is not the only factor determining the kinterms actually used in particular speaker-referent-(propositus) situations. Distance, which is likely to be a more complex factor than mere geographical distance (see Rumsey 1982a:162), is also taken into account.

Genealogy and distance may conflict, and the present evidence indicates that such conflicts need not be definitely resolved one way or the other once and for all. Rather, where there is such a conflict, the choice of kin-term applied (and presumably also the interpersonal behaviour) may depend on context. For
example, in formal elicitation sessions, not surprisingly, genealogy is the main factor determining choice of kin-term and defining appropriate behaviour, while distance plays a subsidiary role. In other contexts, such as speaking of initiation, distance may emerge as the pivotal factor. For instance, in speaking of his own initiation, my main teacher referred to the men of the jawandi subsection, who he would normally call ngaboo 'father', as nyaanyi 'mother's brother, etc.'. This was because they were his mother's countrymen, and thus her brothers, not her spouses. (When questioned about this in a later elicitation session, my teacher denied ever calling a jawandi man nyaanyi!)

Elkin (1938/1974:103) distinguishes another system, the Alurija (Luritja) system, in which there is a merging of cross-cousins with siblings: in this system the cross-cousin of Ego's $M$ and $F$ are called by the same term as their siblings, $M Z, M B$ and $F Z, F B$ respectively. This is precisely the merging found in the Gooniyandi system, when the distance is small. Moreover, there is occasional merging of cross-cousin and sibling. In one case I encountered, two individuals who should have called one another goornda, preferred to use ngaja 'younger brother' - their mothers were countrywomen, and hence sisters. (Note that actual MMBD becomes a ngaddanyi 'mother', and so her children become siblings: these cross-cousins are always treated as siblings.)

These two factors, genealogy and distance, are by no means the only ones that may be relevant in a particular socio-cultural circumstance. To give one example, the opposition of generation levels - same or alternate vs. adjacent is important in the context of disposal of the dead. As there is no term for alternate generation sets in Gooniyandi, those of the same generation as the dead are referred to as marna-wa (older:brother-his) 'his (older) brother', the others as joogoo-wa (child-his) 'his children'.

The Gooniyandi social universe - including everyone they have close social interaction with - is divided into eight classes which anthropologists call subsections, the terms for which are shown in Table 1-1.

The subsections are referred to in the local form of Aboriginal English and English based varieties as "skins", and in Gooniyandi as gooroo. The subsection system is today found over a large geographical area, including the southern Kimberley and much of the Northern Territory. The terms are strikingly similar, sometimes even identical, over quite large areas (McConvell 1985a:66).

There are distinct terms for the males and females of each subsection, the terms being in most instances transparent cognates. The male terms all have an initial $j \mathrm{~V}$, while the female terms have initial $n \mathrm{~V}$ or $n y \mathrm{~V}$, where the vowel V , which must be either /a/ or $/ 00 /$, is usually identical with the vowel of the

Table 1-1: The subsections


Key $\quad \begin{aligned} & \quad: \text { mother-child relation } \\ & =\end{aligned}$
following syllable. (These features are typical of the subsection terms of the area - see Tsunoda 1981:8, McConvell 1985a:66.) Except in the case of A1 and D2, what follows the initial syllable is identical, or nearly identical, in the corresponding male and female terms. In a number of cases this piece can be identified etymologically. The terms for A1, B1, D1, and possibly C1, are evidently cognate with the corresponding section terms in use over a large area, including the Great Sandy Desert and the Pilbara, $j \mathrm{~V}, n \mathrm{~V}$, or $n y \mathrm{~V}$ being prefixed to balyaddi (A), garimadda (B), banaga (D), and booroongoo (C) respectively. Cognates for A2 and B2 are to be found in the section terms in use in the northern region around the present site of Darwin (see McConvell 1985a:72). In order to derive the Gooniyandi terms, we must postulate a regular lenition rule $b$ $\rightarrow w / \mathrm{V} \quad \mathrm{V}$, and various syllable and consonant deletions and additions for which there is no apparent regularity.

Marriage is arranged according to subsection membership. Table $1-1$ shows the ideal or first choice of marriage partner. Second choice is for a partner in the opposite matri-moiety (represented by the columns in Table 1-1), and two
generations distant: that is, from what would be the same section as the first choice, in the four class system. For example, the two choices for an A1 male are B 1 and B 2 females.

Today, at least, there is a high frequency of 'wrong' marriages, even among the older Gooniyandi (as well as other groups in Fitzroy Crossing - see Kolig 1981:100-101). In all cases of non-ideal marriage, the subsection of the child is determined by the subsection of the mother, irrespective of the father's subsection. ${ }^{3}$ I encountered no instances of individuals claiming membership of two subsections, one determined by the mother's subsection, the other by the father's subsection, as has been found in the neighbouring areas to the east (Tsunoda 1981:11, McConvell 1982:90). (However, I did encounter some such instances in the Wangkajunga Community at Christmas Creek.)
Wrong marriages have probably always occurred, no doubt traditionally with a lower frequency (Kolig 1981:101). Interestingly there is a traditional way of legitimating a wrong union. A male may paint himself with ochre from a site somewhere in the desert south of Gooniyandi country, and, when he appears before the woman of his choice, she will immediately (in the words of my collaborator) "fall in love with him", and their union will be legitimate.

Subsection and kin-terms are frequently used in address and reference; personal names are used infrequently. In my observation, which was mainly of the means by which I was addressed, kin-terms were used in more intimate contexts, while use of subsection term apparently signified greater distance and less intimacy. (For a more detailed discussion of these issues in a wider context, see McConvell 1983b.)

### 1.5 Speech styles

As mentioned in the previous section, 'kin'-relations determine the tenor of interpersonal interaction amongst the Gooniyandi, and they are in part reflected in, and constituted by, the style of language employed (Rumsey 1982a:160). Two extremes will be discussed here: joking and avoidance behaviour, and the respective styles of speech. Other interaction types may be placed somewhere between these extremes on a scale of familiarity.

Joking behaviour is institutionalised between individuals in the MM relationship (i.e. jaja-langi (mother's:mother-kin:dyad) 'grandmother-grandchild (and classificatory equivalents) pair'), who enjoy free and familiar relations with

[^2]one another (see for example Thompson 1935, Stanner 1982). Complete avoidance was observed between a man and his actual WM (maddiyali): they would not enter into close physical proximity, or talk to one another. Any interchange between them, whether verbal or a gift, would be effected through an intermediary such as the man's wife. Less strict avoidance was practised between a man and his actual or classificatory WMB, or a man and his classificatory WM. Individuals related in these ways could sit together, or go on trips together, and engage in limited verbal interaction.

The joking relation has both verbal and non-verbal manifestations. The non-verbal behaviour included horseplay such as removing property, and bodily contact. Speech interaction included obscene joking and ritualised insults (cf. Stanner 1982). I use the term 'ritualised insult' since in the data - which consisted almost entirely of reports of how the interaction would proceed, rather than actual joking behaviour - the utterances took the form of short, apparently set phrases and responses. Two favourite topics were joking about taking the other's sister for a wife ${ }^{4}$, and joking about the other's promiscuity.

Joking behaviour is still in evidence amongst Gooniyandi people, and its verbal manifestation is not restricted to the traditional language. I have observed such interactions (involving young children and adults, who later claimed to be in the appropriate kin-relations to the children) conducted in Kriol (Hudson 1983).

Avoidance behaviour, too, has manifestations in speech, in the use of an 'avoidance style', frequently referred to in the Australianist literature as the 'mother-in-law language' (e.g. Dixon 1972 and 1977). The Gooniyandi appear to have had no particular term for this variety. There is, however, a verb goonmeaning 'to speak shamefacedly, to avoid speaking directly to', which is clearly cognate with the Bunuba term for the avoidance style, gun-gunma (Rumsey 1982a:160). This style was reportedly used in four main contexts: (1) when speaking to a classificatory maddiyali; (2) when speaking to the actual (or a close) WMB; (3) in making reference to any maddiyali; and (4) in the presence of (within earshot of) a close maddiyali.

[^3]Unlike its counterpart in Dyirbal, Dyalnguy (Dixon 1972:32), the Gooniyandi avoidance style is not a fully distinct and separate language, with its own vocabulary. Nor is it obligatorily and mechanically chosen in response to a fully predetermined interaction type. As Rumsey (1982a:160) has pointed out, the use of the style is "a part of the means for CONSTITUTING the relationship between the interactants as one of 'avoidance' or potential affinehood" (his emphasis). The avoidance style is characterised by a cluster of formal features and strategies of language use which distinguish it from other Gooniyandi styles of speech, and which may be found to varying degrees in actual utterances. Different degrees of avoidance can thus be 'marked' or 'indicated' by varying usage of avoidance features (see below).

In formal terms, the avoidance style differs somewhat in lexicon, but has the same bound morphemes as ordinary Gooniyandi. There are over one hundred distinct avoidance lexemes; these tend to be longer than ordinary words, and to exhibit a higher frequency of heterogeneous consonant clusters than is found in ordinary words. Not every ordinary word has a distinct avoidance counterpart, however. Some gaps, such as the absence of terms for sexual organs and acts are expected; others are not - for example, despite intensive questioning, I was able to find a distinct term for only one animal, the dog. (I have been unable to discern general principles characterising the lexical range of the avoidance vocabulary.)

Avoidance words in Australian languages tend to be more general than their everyday counterparts (Dixon 1972, Haviland 1978, Rumsey 1982a). In Gooniyandi it is primarily the verbal roots of the avoidance style that are more general than their ordinary counterparts. For instance, gamalg- 'say, tell, speak, etc.' has a range of meanings that is covered by a number of more specific everyday terms, including jag. 'say', jijag- 'speak', miga- 'tell', etc. Avoidance verb roots typically occur with a larger range of classifiers (see section 3.9.3.2) than do ordinary verbs, and in this way some, though certainly not all, of the lexical ambiguity may be resolved. The avoidance verb root gamalg-, for example, occurs with the classifier + MI 'effect' to convey the sense 'tell, say'; with + DI 'catch' to convey the sense 'put a question'; and with +I 'be, go' to convey the sense 'speak, talk'. On the other hand, jag-occurs with only the classifier + MI, jijag- with only +I , and miga- with only +MI and +I . In this respect the Gooniyandi avoidance style contrasts sharply with the Bunuba one, which has a particular auxiliary verb (see page 6 above, and Rumsey 1982a:167) specific to the style. In the Bunuba system, the choice of auxiliary verb is not available to distinguish among the senses of a lexical verb root.

Nominal roots generally have the same meaning as their everyday counterparts. For example, the avoidance nominal ngarloomali 'spear' corresponds to the ordinary generic term for spear, jinali, including in its range precisely the same subtypes. On those occasions when I requested an avoidance equivalent for a more specific type of spear. I was invariably given the ordinary term. The response was invariably the same when I requested other specific terms, and I could detect no tendency to extend the range of an avoidance nominal beyond the range of its corresponding ordinary term. It thus appears that avoidance nominals have exact, or nearly exact, ordinary equivalents, and can not be used to effect higher order taxonomic groupings than those which are already made in the ordinary language (cf. Dixon 1972:292ff).

A few closed class grammatical items also have distinct avoidance terms. For example, there is a particle woomoorla 'no, not, nothing, without', which corresponds to the particle marlami 'not, nothing, without' of the everyday style, and perhaps also to mangaddi 'no, not' (see page 496 below); there is also a nominal yawinhingi 'some, other' corresponding to the everyday terms yanya 'other' and yaabja 'some'. At least in the latter instance, a distinction made in the everyday vocabulary is neutralised in the avoidance vocabulary.

It will come as no surprise that in Gooniyandi avoidance speech, as in the Bunuba variety (Rumsey 1982a), not every word in an utterance need be - or even could be - an avoidance word. Often only a single word in an utterance marks it as avoidance speech, whether or not other ordinary words COULD BE replaced by avoidance terms. Indeed, a single feature, such as use of a nonsingular free pronoun, pronominal enclitic or prefix with singular reference, may even suffice.

Strategies of language use differ between avoidance speech and everyday speech. There are differences in: (1) modes of address and reference; (2) frequency of propositional modification; and (3) degree of precision of expression.
(1) A man was of course not supposed to address his actual WM; nor could he utter her name, or a close homonym. Reference to her could be oblique (e.g. by using the term moonga 'dark'), by use of a marked or triangular kin-term (e.g. manaroo '(your) mother', speaking to W or WB), or by use of the third person non-singular pronominal bidi 'they'. Other maddiyali, with whom speech was permitted, were addressed with the second person non-singular pronominal gidi, instead of the singular form nginyji. S/he would be referred to by means of the third person plural bidi if the relationship was a close one, but otherwise more frequently by the singular niyi; and the first person unrestricted yaudi'we three or more inclusive' would be used instead of ngidi 'we two, we exclusive' (sce
section 3.6) in reference to the speaker-hearer dyad. The bound pronominals within the verbal complex are also skewed in this way. This is familiar as a 'politeness strategy' in Indo-European and many other language farmilies.
(2) In contrast to the situation in ordinary speech, in avoidance speech modal modification - such as by the enclitic -mi $\sim-m a$ 'dubitive/indefinite' (see section 6.3.8) - is more frequent in both questions and statements, winhi 'just', and woomoorla and marlami 'no, without' are also more frequent in avoidance. speech, presumably with the intended effect of softening the force of the utterance (cf. Stubbs 1983:113).
(3) Avoidance speech is characteristically vaguer in expression than is ordinary speech (Rumsey 1982a:173, McConvell 1982:97), and this vagueness is iconic of the relation of avoidance or lack of intimacy which it encodes. Although an avoidance verb is typically vaguer than an ordinary one, much of the potential ambiguity is resolved once the context is taken into account. For example, in
(1-1) malab -mi gooddgoo
make he:effected:it hole
'He dug a hole.'
it is quite clear that the intended sense of malab- 'make, construct' is 'dig'. It should be noted that potential ambiguities are rarely if ever resolved by paraphrase in actual texts (cf. Dixon 1972:293). And I suspect that this is partly because in real terms the ambiguity of a contextualised utterance is usually relatively small, and far less than the potential ambiguity, and partly because vagueness is an inherent semantic characteristic, and not just a formal feature of the avoidance style.

### 1.6 Contact history

The first major contact between the Gooniyandi people and whites occurred just over one hundred years ago, in the mid- to late eighteen-cighties, when pastoralists established cattle and sheep stations in the Fitzroy Vallcy. In 1879 the first white men entered Gooniyandi territory, skirting its northern extremities (see map in Hicks 1938/1977:17, and Tindale's 1974 tribal map). They were the surveyor Alexander Forrest and his party, whose route followed an castward path along the Fitzroy and Margaret Rivers. (Before this, white explorers had travelled through parts of the Kimberley region, without entering Gooniyandi country: in 1837 and 1838 G.Grey began exploration of the northern Kimberley region, travelling south from Hanover Bay; and in 1856 A.C.Gregory and his party
exploted the region immedately to the cast of the Filaroy Valley, travelling through Jaru eomntry.)

Forrest's glowing report of the potential of the region for pastoralism and mining rapidy attracted setters and prospectors. Pastoratists entered the Kimberley in wo wayes. Cattemen came from the east. drowing their catle from as far away as Quensland, and even, in one instamee, Victoria. The other group came from the south and west, bringing mostly sheep (Kolig 1981:17. Jack Bohemia, perscomm.). The cattemen settled manly in the Fast Kimberley, the sheep farmers in the West Kimberley; there was, however some overlap, as the wo waves intersected just to the cast of Fitaroy Crossing. The first catle station in the Fitaroy Consting area was Fossil Downs statom. established by the Maclonalds in 1885 (R. MeCiregor 1985:20): it was focated on land which likal Atworgines tolay generally claim to be Gonimandi Kija 'mixed'. This was followed shortly afterwards by Old Bohemia station (Jack Bohemia, pers.comm.).

Labour was recroited mainly from the local Aborginal population, often by coercion. Imitally only small numbers of Aboribines lived and worked on the stations at any one time, whilst the majority still lived tratitional lives in the bush. However, this stuation did not meet with the approval of the pastoratists, who in the 1880 s and early 1890 sactively tobhice the Government (at first without success) for strong meatures to be implenented against the threats both real and imagined .... posed by the presence of "bush blacks" on their properties. (For further discussion, see R. MeGregor 1985. especially chapters 2 and 3.) It seems contradictory that, during the wet season (roughly Nowember to March), when their labour was not required. the Atorigimal workes were nommaty free to return to the bush and lead their traditional lives. Apparently cconomic considerations over-fode fats of the deteterious effects the "bush blacks" might have on the "civilised" stockworkers. The wet season thus became, and has remaned, the time for ecremonal activities, especially mate initiation.

Active Atxoriginal resistance is well documented, and a number of white men and their caule were speared or shot. Pigeon, the famous "outhur of the Leopolds" (Idriess 1952), was a Bunuba man who urganised a band of Aborigines who, for some years in the mid-1890s, carricd ent guerilla style warfare against the white intruders from their base in Tunnel Creek in the Ostar Ranges (Pedersen 1984). The river tribes, including the (innolyandi, were to bear the brunt of the European rexponase the the Pigeon episode. In 1894 Inspector Lawrence was sent by Police Commissioner Phillips to assume command of the
police operations against the Aborigines (R. McGregor 1985:80). He travelled east from Derby to the Fitzroy Crossing area, where he started a campaign of "dispersal" against those Aborigines not needed for labour on the stations (Pedersen 1980:82, R. McGregor 1985:91). In January 1895 he moved up the Margaret River "dispersing" and killing the Aboriginal population. Shortly thereafter, a party led by special Constable Blythe reported killing two Aborigines on Christmas Creek and four at Gogo (Pedersen 1980:84-85). Presumably Gooniyandi people were amongst those killed in these operations, as is attested to by oral accounts.

But Aboriginal resistance ${ }^{5}$ was not completely quelled by the ravages of Lawrence and Pilmer and the killing of Pigeon in 1897. Resistance was, however, as a rule more sporadic, less organised and usually involved single individuals, rather than organised guerilla bands. Cattle and sheep spearing, which was not always motivated by the need for food (Pedersen 1980:18, R. McGregor 1985:52), continued until well into this century as the predominant form of protest. There was also the odd instance of murder or attempted murder of white pastoralists (Jack Bohemia, pers.comm. - see also Lawrence 1979:46).

Such exploits were frequently followed by punitive measures such as massacres, murder, and jailing of prisoners in irons for the term of their sentence (Jack Bohemia, pers.comm.). There is reliable evidence of at least one massacre as late as the 1930s (Kolig 1981:20), and my oral accounts place one at the time of the Second World War. However, not all massacres were motivated solely or even primarily by retaliation; rather, retaliation provided an excuse for implementing stern measures against Aborigines. Contemporary claims to the contrary, the so called retaliatory measures usually bore little relation to the 'crime' (cf. Kolig 1981:20, R. McGregor 1985:50), and could hardly have taught "the blacks [to] ... begin to understand the Mosaic law of a life for a life" as was claimed by a Derby correspondent to Northern Public Opinion (a Rocbourne newspaper) in 1895 (cited in Gill 1977:18). The aim was to subjugate the

5 The term "resistance" is not unproblematical: it raises questions of interpretation and motivation. It cannot be assumed that every act committed by Aborigines against the whites was motivated by a desire to remove whites from their lands, or as a protest to occupation. For instance, in the contact stories related to me by Jack Bohemia, Aboriginal activities against whites were always motivated by SPECIFIC white actions, particularly the appropriation of women. In such circumstances Aboriginal actions would seem to be better described as retaliatory than as acts of resistance.

Aboriginal people, to provide a cheap labour force, and to ensure the personal safety of the white pastoralists and their property (see also R. McGregor 1985:160 and Reynolds 1981, especially chapter 3).

Sometime late last century the desert 'people' of the Great Sandy Desert began to move into the Fitzroy Valley (Kolig 1981:21). This was presumably precipitated by the decimation of the Fitzroy Valley people (Elkin 1932 estimates a decrease of at least fifty percent in the tribes which, like the Gooniyandi, had very close contact with whites). The Walmajarri were the first desert arrivals, who filtered in gradually up to about the beginning of the Second World War. Their influx was partly overlapped by the arrival of the Wangkajunga, Kukatja, and Yulparija peoples, whose traditional country was located some hundreds of miles south of the Fitzroy River, in the Pilbara region (Kolig 1973:38, 1981:18). The last of the Wangkajunga did not leave the desert until the mid-sixties or perhaps later. Some Northern Kimberley people also moved into the Fitzroy Crossing area, although their major population movements were to the towns of Wyndham, Kununurra, and Derby. The groups to the east, including the Jaru, tended to centre around Halls Creek. There are thus today, broadly speaking, two major cultural blocs in the Fitzroy Crossing area: the Kimberley and the desert cultures.

The United Aborigines Mission (UAM) established their Mission in Fitzroy Crossing in 1951 (Kolig 1981:23; cf. Hudson 1983:13), and around it a small Aboriginal community, Junjuwa (named after the hill on which the Mission stands), grew up. Until then, only a few Aborigines lived in Fitzroy Crossing, those who worked for the police and those who worked for the publican (Jack Bohemia, pers.comm.). Unlike the pastoralists, the missionaries DID attempt to modify Aboriginal beliefs, and to stop those traditional practices they deemed heathen (Kolig 1981:23). Shortly after it was established, the Mission opened up the first school in the area, and a hostel for the children from the outlying stations. The speaking of their mother tongues was apparently banned in the hostel (Hudson 1983:13, 174-175). This was probably an important factor in the demise of traditional languages, and the rise of Kriol. The first Government school was established in 1957 at Gogo station; there is no evidence that it fostered any better attitudes to the traditional languages or cultural values than did the Mission.

Until equal wages were introduced in 1969, most of the Aboriginal population lived relatively sedentary lives in small communities on the pastoral properties, and (after 1951) in Fitzroy Crossing, conducting their ceremonies and going on long bush trips during the wet season. With the coming of equal
wages, many were forcibly displaced from these communities, and shifted to Fitzroy Crossing (Kolig 1981:52-55). Recently an outstation movement has become popular, and many Aboriginal groups are returning to their former stations, where they have established, or intend to establish, independent communities on small excisions, usually of one square kilometre in area.

### 1.7 Present language situation

Today the majority of Gooniyandi speakers live in Homeswest (State Housing) houses in small communities in the Fitzroy Crossing region (most of these communities are shown on Map 1). The largest numbers live in Bayulu village and Mulurrja (Moolooddja) on the Gogo pastoral lease, Yiyili on Louisa Downs, and Junjuwa in Fitzroy Crossing. Smaller numbers reside at Cherrabun, Margaret River, Fossil Downs, Lamboo, and Brooking Springs stations, and in the independent settlement at Ngumban (Pinnacles) on Christmas Crcek station; scattered individuals are also to be found on other stations in the Fitzroy Valley. A few speakers live outside of this region, in Halls Creek and Kununurra.

Of the fluent speakers of Gooniyandi, around a half would identify themselves as Gooniyandi people, and 'owners' of the language, Birdsell (1970:118) notwithstanding. The remainder are primarily Bunuba, Kija, Jaru and Walmajarri people who learnt Gooniyandi as a second, or even as an equal first language, but who are not 'owners'. A few Aborigines from the Northern Kimberley groups also speak Gooniyandi fluently. On the other hand, I encountered no Wangkajunga person fluent in Gooniyandi, although a few have some speaking control as a second or third language, or can at least understand it a little.

As is the case for most traditional languages in the Kimberley region, there has been in recent times a strong shift from speaking Gooniyandi to speaking Kriol (Hudson 1983) or some form of Aboriginal English. All fluent speakers of Gooniyandi are over the age of thirty. Some individuals under this age can understand the language when it is spoken to them, but do not normally speak it. Those under thirty are mother tongue speakers of Kriol, and use it as their normal mode of intra-group (Aboriginal to Aboriginal) communication; however, when speaking to whites, they use a variety of Aboriginal English (cf. Hudson 1983:19-20). The older generation all understand some English, and speak an English based variety, sometimes called Pidgin, in the presence of whites. They apparently also use it in most of their conversation with the younger generation, from school age children to young adults (less than thirty years of age). However, in speaking to very young children, members of the
older - usually grandparental - generation frequently use Gooniyandi (or another traditional language). Parents usually speak to their children (of whatever age) in Kriol (cf. McConvell 1986:115-116), albeit with the addition of Gooniyandi words, especially names of bush foods. Thus children do generally have some exposure to Gooniyandi, and generally know some of the more common words.

When conversing among themselves, members of the older generation usually speak a traditional tongue. Most of them are bi- or multi-lingual: the majority of older Gooniyandi people also speak Walmajarri (which for a time was a lingua-franca in the Fitzroy Crossing region), and many speak fluent Bunuba and/or Kija in addition. Speakers frequently switch between their languages, including Pidgin or Kriol, and even mix words from different languages within a single utterance. The choice of language presumably expresses social and cultural meanings; however, it is beyond the scope of this book to investigate this complex issue (for discussions of language choice in multilingual Aboriginal situations, see for example, Elwell 1977 and McConvell 1985b). Gooniyandi is thus still in daily use. The avoidance style (section 1.5), however, seems not to be actively used today between individuals in avoidance relations. Some speakers maintain that it is sometimes used for fun, as a type of joke, but I have not encountered this usage myself.

### 1.8 Education and orthography

Until very recently, no consideration was given in either the Government or the Church schools in the Kimberley to the different cultural and linguistic backgrounds of their Aboriginal pupils. Their traditional languages were not just ignored, but their use was at times actively discouraged by physical punishment (for example, as mentioned above, at the carly UAM hostel in Fitzroy Crossing). But there are encouraging signs of changes in attitudes of teachers and educators, and in the last few years many have started, or are keen to start language programmes in their schools. In 1982, a language and culture programme in the local languages was started in the Fitzroy Crossing State High School, and the involvement of the adults in the local Aboriginal community, Junjuwa, was sought and encouraged. This programme ceased operation in 1983, for reasons unknown to me. It was restarted by the new principal in 1985. Daily classes were conducted in three local languages, Bunuba, Gooniyandi, and Walmajarri, and these classes are attended by both Aboriginal and white pupils. Unfortunately, this programme also lapsed within the year, although there seems to be some interest in reviving it.

A Gooniyandi language programme has been in operation in Gogo School, a primary school with predominantly Gooniyandi pupils, since 1987. It seems to be progressing successfully, and is popular with the children.

Other Government schools in the Kimberley region - of which La Grange School is the most notable example - have recently started language programmes. However, the Western Australian Education Department lacks a policy on bilingual/bicultural education, and these initiatives are at the whim of the school principal. This, together with the consequent unavailability of professional expertise both in matters of linguistic description and in establishing and running language programmes, and lack of funds, has certainly done nothing to improve the chances of success of any language programme. To date, only Catholic Education in the Kimberley has a language policy, and employs linguists to implement it.

In 1982 the Yiyili Community School, independently run by that Community, started operation. At that time it employed one white school teacher, Robyn Dickinson. The community felt that, in addition to educating their children in English and mathematics, education in their own language and culture was equally important. One of the aims of the school (to quote from the School Policy) is "To develop and introduce a Gooniyandi language and literacy programme".

During my 1982 field trip the Yiyili Community requested my assistance as a linguist. I spent a few weeks at Yiyili, during which time I devised a practical orthography for Gooniyandi, and produced some introductory materials for their programme, including a preliminary draft of a collection of Gooniyandi stories, a short dictionary, and a brief description of the principles of writing the language, intended for literate Aborigines and teachers involved in the programme. In 1983 the Yiyili Community employed a Summer Institute of Linguistics (SIL) linguist, Joyce Hudson, on a part-time basis, to initiate the language programme in their school. In the following year, Annette Walker, another SIL linguist, took over this job, but left due to her marriage. From then until 1988 no linguist was employed, and the language programme ceased operation. In 1988 it was begun again, with the assistance of Barbara Jones, a teacher-linguist for the Kimberley Language Resource Centre.

Hudson produced some basic literacy materials, and developed the following orthography, in consultation with two literate native speakers, David Street and Topsy Chesinut (Street and Chestnut 1984:4, Hudson 1984a, 1984b): Vowels: $a$, ar (long $a$ ), $i, i i$ (long i), oo (short and long IPA $u$ );

Consonants: $b, m$ (bilabials); $d, n, l$ (apico-alvelolars); $d, a, b r$ (apicodomals); th, $n h, l h$ (lamino-dentals); $j, n y, l y$ (lamino-palatals); $g, n g$ (dorso-velars); and w, y (semi-vowels).
This orthography was designed principally in order to facilitate the transfer of literacy skills from English (although personally I do not feel that it went far enough in this direction). It is not phonemic. The symbol $d$, for example, represents two distinct phonemes: the apico-alveolar stop, and the apico-alveolar tap or trill. Elsewhere the systern over differentiates, in distinguishing the long $i i$ vowel sound from both the short $i$ and the sequence $i y i$ (see section 2.1.6.1), and a lamino-dental lateral, which to the best of my knowledge occurs only as a conditioned variant of the lamino-palatal lateral (section 2.1.5.2).

It seems that there is a very positive attitude towards this orthography among both staff and students. However, the fact that it is non-phonemic makes it inappropriate and cumbersome for a work of this nature. And since there is no substantial body of literature written in the Hudson-Street-Chestnut orthography, I have decided not to employ it here. The ideal choice for this book would undoubtedly be the practical phonemic orthography I had suggested in 1982, and which I used in some carly publications (McGregor 1985 and 1986a). This orthography was based on the well established Walmajarri orthography (see, for example, Hudson and Richards 1978:72), to which the two digraphs th and $n h$ had been added, and the long vowel digraphs $i i$ and $u u$ omitted; it is the same as the Kija orthography recommended by McConvell for use in the Turkey Creek School. However, I have felt that this orthography is unnecessarily different from the native speakers' choice. I have therefore proposed (McGregor 1986b), for academic purposes only, a phonemic orthography which employs letters and digraphs which accord more closely to the speakers' choices. This system will be employed throughout this book, except where a narrow phonetic transcription is necessary, where I will use IPA symbols. The following letters and digraphs are used:

Vowels: $a, a a$ (long $a$ ), $i, o o$ (IPA $u$ );
Consonants: $b, m$ (bilabials); $d, n, l, d d$ (apico-alveolars); $r d, r n, r l, r$ (apicodomals); th, $n h$ (lamino-dentals); $j, n y, l y$ (lamino-palatals); $g$, $n g$ (dorso-velars); and $w, y$ (semivowels).

Cluster restrictions prevent ambiguity between digraphs and consonant clusters, except in the cases of $n g$ and $l y$. The cluster $/ \mathrm{n}-\mathrm{g} /$ oceurs within morphemes, where it contrasts with both the velar nasal / ng / and the nasal stop
sequence /ng-g/; I follow the Hudson-Street-Chestnut decision to distinguish the first sequence (i.e. the apical $n$ followed by the dorso-velar stop $g$ ) by placing a full stop between the $n$ and the $g$, thus: $n . g$. The cluster $/ l-y /$ occurs at certain morpheme boundaries. But because it is entirely predictable morphologically, and contextually unambiguous, there is no need to distinguish the phoneme $/ \mathrm{ly} /$ from the phoneme sequence /l-y/ in writing.
In choosing to use an orthography at odds with the one decided on by native speakers of the language, I realise that I leave myself open to criticism from the speakers, as well as certain linguists. However, I assure both groups that I do not mean to question the speakers' decisions, or their rights to make orthographic decisions; nor so I suggest that they should use my orthography. There seems to me to be no reason why the two orthographies cannot coexist, each to be used for its own purposes - mine in academic linguistic descriptions, the Street-ChestnutHudson orthography in literacy materials. (It goes without saying that in any case at least two systems of writing the language will be necessary: an adequate dictionary should at least indicate the phonemic representation of each word and, given the present precarious state of Gooniyandi, perhaps also accurate information on their pronunciation.) Furthermore, this book being addressed to an audience of linguists, I can foresee no likelihood of confusion resulting from my decision. On the other hand, in publications intended principally for use by Gooniyandi people and/or for use in language programmes in schools, I have emplayed the Street-Chestnut-Hudson orthography (see for example McGregor 1988d and in preparation-b).

### 1.9 Other work on Gooniyandi

Previous to my investigations, very little linguistic work had been done on Gooniyandi, and there are only scattered references to the language in the literature. (See McGregor 1984a (a copy of which has been lodged in the A.I.A.S. library) and 1988e for lists of the major references to the language.)

The first written reference to Gooniyandi appears in Bates (nd), which is a compilation of wordlists in languages from the Kimberley region, collected by various local white residents around the turn of the century. This manuscript contains a wordlist in the Warranarrie (presumably a mis-hearing of Waringaddi 'many people') language compiled by C.J. Annear. The majority of words are clearly Gooniyandi, and on the whole they are reasonably well transcribed.

Capell (1940:416-418) gives a short list of nineteen words, all but two of which are identifiable and reasonably accurately transcribed. He also provides a part of the present tense paradigm of the verb ward- 'go' (Capell 1940:416). However, most of the forms given are inaccurate: the plural marker ge $(=/ \mathrm{gi} /)$ given for the first person non-singular forms is found in Bunuba only, and most instances of word final $/ \mathrm{i} /$ have been mistranscribed as /a/ (cf. 2.1.6.1 below). To
the best of my knowledge this is the only published data on Gooniyandi (prior to my own work). Capell ( $1940: 244$ ) was the first linguist to correctly identify Bunuba and Gooniyandi as members of a single language group, referring to them as "prefixing languages without noun classification". The linguistic surveys of O'Grady, Voegelin, and Voegelin (1966:78), Oates and Oates (1970), and Wurm (1972) repeat Capell's remarks without adding anything new.

Worms apparently did a little field work on Gooniyandi in the thirties or forties (Worms 1953:960). However, virtually nothing about the language appears in Nekes and Worms' monumental Australian languages (Nekes and Worms 1953), and Worms wrongly typologised it as a SUFFIXING northern Kimberley language (Worms 1953:961), despite Capell (1940).

In 1953 the anthropologist Norman Tindale collected a vocabulary of about a hundred or so basic terms in Gooniyandi (Tindale 1952-1954). All but a couple of his terms are readily identified, and most are reasonably accurately transcribed. The main inaccuracy is that he misses many lamino-dental and retroflexed stops and nasals, most of which he transcribes as apico-alveolars.

The next linguist to record Gooniyandi seems to be Father Anthony Piele, who in about 1960 recorded, but did not transcribe, an hour or so of Gooniyandi words.

By far the best and most extensive early work on Gooniyandi is undoubtedly that done by the missionary-linguist Howard Coate in the mid1960s. Coate worked for a short time with the Fossil Downs "mob"; the Kija bias in the lexicon is evident (see section 1.3). He elicited a number of words, and recorded and transcribed some excellent and valuable texts (totaling about forty minutes in duration), traditional and historical, all told by a very knowledgeable old man (Fossil Pluto), since deceased, who is still remembered as an expert jalngangooddoo 'doctor' - i.e. person knowledgeable in traditional Aboriginal law and ritual. Coate has generously made his material available to me, and because of the value of the texts, I have retranscribed them, hopefully more accurately.

Coate's transcription was quite accurate, except that: (1) He did not always distinguish the lamino-dental stop/th/ and nasal $/ \mathrm{nh} /$, which he usually wrote as apico-alveolar $/ \mathrm{d} /$ and $/ \mathrm{n} /$ respectively. This distinction is, in fact, very difficult for the English speaker to hear, and it is quite likely that there are some such mistranscriptions in the present work. And (2) he took the mid vowels [e] and [ o ], which are allophones of /i/ and /oo/ respectively to be distinct phonemes. Coate undertook some grammatical analysis, but did not publish any of his findings. His analysis is good, as far as it goes, and considering the very short
time he spent on the language. He correctly identified the free pronominal forms - but he sometimes confused yaadi 'we unrestricted (=we plural inclusive)' as 'we plural exclusive' - and his verbal paradigms are reasonably accurate, though incomplete. There are just a few unidentified forms in Coate's corpus, some of which may perhaps be Kija: for example, mangany 'no, not' (mangaddi and marlami in Gooniyandi), and -ningi 'to him/her/it' ( $-n h i$ in Gooniyandi).

In the mid- to late nineteen seventies two academic linguists, namely Alan Rumsey and Tasaku Tsunoda, recorded small amounts of Gooniyandi; both have kindly made their recordings available to me. Working with Bunuba bilinguals in Fitzroy Crossing, Rumsey collected a short word list of around a hundred items for the purposes of lexical comparison; Rumsey's list, of course, shows some Bunuba influence. Tsunoda recorded four or five hours of words and sentences at Margaret River station with speakers of the easternmost variety of Gooniyandi (see section 1.3). This is the only material available in this maximally divergent variety.

In the last decade two SIL linguists have been involved in more practical work on the language. In 1978 Carol Morris, in collaboration with a speaker of Gooniyandi who was fully literate in English, David Street, produced a short dictionary of a few hundred entries, on the whole accurately transcribed. Morris recognised the phonemic distinctiveness of the lamino-dentals, but, like Coate, took the mid vowels [e] and [ 0 ] to be phonemically contrastive. And, as mentioned in the preceding section, in 1983 Joyce Hudson produced some Gooniyandi literacy materials, and published a few articles on the orthography which she designed in collaboration with Street and Chestnut. Most of the words appearing in these works are accurately written in the Hudson-Street-Chestnut orthography, although there are a few instances of mistranscription of laminodentals as apico-alveolars, and some phonetically long, but phonemically short vowels are mistranscribed as long.

A number of anthropological studies have at least touched on the Gooniyandi people, and a couple of them include some Gooniyandi words (for a list of these works, see McGregor 1984a). The most recent study is Kolig (1981), who cites a number of identifiably Gooniyandi words; these are not accurately transcribed. Moreover, Kolig generally does not identify these terms as Gooniyandi, nor does he distinguish them from terms in the other languages of the Fitzroy Crossing region.

### 1.10 Data used in this investigation

This study is based almost entirely on a corpus of material I gathered in the
course of two field trips, totaling about fourteen months, conducted in 1980 and 1982. This corpus includes texts, as well as formally elicited words, phrases and sentences, all of which were recorded on cassette and transcribed in the field into notebooks. (Copies of the cassettes and field notebooks are lodged with the Australian Institute of Aboriginal Studies.) Almost the entire body of text was spoken onto tape at my request, or offered for recording by the narrator. Although Gooniyandi is in daily use, I recorded no spontaneous monologues addressed to an Aboriginal (or primarily Aboriginal) audience, and little free conversation: perhaps an hour in all, and none surreptitiously. A secondary source of data were the observations I entered into my notebooks of freely occurring speech, where circumstances did not permit recording on cassette. The only other primary sources I had access to were the texts Howard Coate had recorded in the mid-1960s (see previous section), Rumsey's short wordlist, and, more recently, Tsunoda's elicitation tapes in the Gooniyandi spoken at Margaret River station.

About twenty Aboriginal people contributed material to the field investigation.

Jack Bohemia (BEM), Nyibaddi, the oldest living speaker of Gooniyandi (aged over eighty), was my main collaborator. A tracker of some thirty two years service to the Western Australian Police Force (see Aboriginal and Islander Identity, October 1971, page 15, and Lawrence 1979:46), Jack Bohemia has an incomparable knowledge of the history of the Fitzroy Crossing area since the turn of the century. The account of the history since first contact (section 1.6) is based principally on information he conveyed orally to me. Where possible I checked and extended (especially by providing dates) his account by a study of the written sources. I have found no substantial inconsistencies; Bohemia was always careful to distinguish fact from supposition, and refused to tell me storics of events about which he had no certain knowledge. He loved telling of his experiences as a police tracker and as a stockman. I recorded a substantial body of such texts, which, in accordance with his wishes, are in the process of being prepared for publication. But Jack Bohemia also participated in the traditional law; and he never went completely over to the white ways. He is a fully initiated man knowledgeable in traditional lore and law; he provided me with numerous mythological texts, accounts of traditional customs (including initiation and funerary rites), stories of first contact with whites, and songs. During my periods in the field, Jack Bohemia worked with me for a couple of hours almost every day, despite his age, telling me stories and assisting me in their transcription, providing and checking lexical and verbal forms, and translating

English sentences. His daughter Daisy, herself a fluent speaker of Gooniyandi, also told me a number of stories.

Dave Lamey, a community leader at Bayulu, was another important collaborator. He told me numerous stories, in a variety of genres, including a particular type which he alone gave: expository texts, which assert relations between entities, and attributes of entities, rather than, like narratives, describe situalions and events in temporal sequence. (Expository texts are characterised linguistically by a significantly greater than usual frequency of verbless clauses.) A number of icxical items, verbal forms, constructions, and so on elicited from Jack Bohemia were counter-checked with Dave Lamey. In 1982, a middle-aged man, Lamey started to learn to read and write English. At the same time, I worked intensively with him, developing Gooniyandi writing materials, and teaching him the elements of writing Gooniyandi.

Bigfoot jagadda (sec page 14 above), probably the most knowledgeable living Gooniyandi jalngangooddoo or 'lawman', and Joe Dimay, the owner of a dingaddi (tingarri) tradition (Kolig 1981:38), provided a number of important mythological (and other) texts. Bigfoot, Dave Lamey and Jack Bohemia, were the primary sources for avoidance style speech. Not only did each give me lexical items peculiar to the style, but they also recorded texts, both monologues and planned conversations with one another.

David Street, one of the youngest, and one of the two fully literate speakers, his brother Rainbow, Saturday W. (deceased) and Mick Smith all contributed a number of words and texts. Banjo Birndayminy (Bunuba), George Nayndu (Kija/Bunuba/Ngarinyin) and Lanis P. (Kija/Gooniyandi, deceased) provided invaluable assistance in text transcription.

At the Yiyili Community, Norman Cox, Ivy Cox, Judy Cox, Dorris Cox, Frank Cox, Irene, Jocelin, Penny Madeline, Lyon, and Mervin Street (the youngest fluent speaker of Gooniyandi, and an accomplished artist and story teller) all told me stories and assisted in detailed articulatory-phonetic work (see below), and in the preparation of texts for a school reader.

A corpus consisting of over six thousand sentences plus some thousands of isolated words was assembled as the primary database for the present study. The major part of this corpus was systematically elicited from native speakers of Gomiyandi in response to English prompt words and sentences. Included in the corpus is all formally elicited material, as well as all sentences from half a dozen or more texts. Nearly all of the textual material gathered has been scanned at some time or other, and a seleclion of the interesting utterances have also been included in the corpus.

Very early in the course of the fieldwork I became aware of problems inherent in the standard field procedure of eliciting responses to decontextualised English sentences. It was frequently the case that speakers would, on different occasions give three or four distinct translation equivalents to a single English prompt. This problem was particularly bothersome in dealing with categories which express the speakers' vicwpoint and evaluation of the proposition. For example, a single English verbal category such as future tense, which, as is well known, expresses modal as well as temporal meaning, might emerge as any one of three or four Gooniyandi verbal categorics (see section 6.5.1.3). The difficulty is that evaluative meanings such as these are not as readily accessible to the linguist as are the representational or content meanings - that is, experiential meaning in Halliday's (e.g. 1970, 1985) terms. It is as a rule casier to determine whether or not the linguist and the native speaker have matching conceptualisations of the situation described by the English prompt than it is (t) determine (out of context) whether they coincide in their perceptions of the viewpoints and evaluations expressed.

It was clear that in the majority of cases native speakers did not perceive equivalences, or even unmarked correlations between grammatical categories of English and Gooniyandi. They did not translate prompt sentences category by category; they appeared to regard translation as a semantic procedure, rather than a formal operation on strings of linguistic symbols. I could detect no tendency for speakers to invent calques on English constructions, which, like 'to want' complement clauses, are expressed by means of totally different categories and constructions in Gooniyandi (cf. Heath 1984:582). In seeking a transtation for an English prompt, ${ }^{6}$ it seemed that the Gooniyandi speaker first imagined some context in which the English sentence might be uttered, and then found a suitable Gooniyandi sentence which would have roughly the same sense in that context. The problem was that I had no access to the imagined context. As a consequence, it was necessary to modify my method of elicitation so as to circumscribe, and gain some control of the contexts. This was done by verbally constructing imaginary and real scenarios, especially ones of which both participants (Gooniyandi speaker and linguist) had some knowletge. I would request utterances appropriate to describing these situations, and utterances which

[^4]an interactant in the situation might make. In this way the possible senses of the English prompt are relatively restricted and there is a better chance that the linguist and the native speaker were referring to the same situations, from similar viewpoints.
Formally clicited utterances can never be completely decontextualised, and all sorts of speakers' behaviour indicated that they did not perceive either their own or my utterances as isolated. For instance, frequent switching of topic, elicitation of paradigms, and requests for implausible utterances (such as 'you died') were frequenlly met with by resistance such as boredom, and, less frequently, refusal to produce the requested form. More interestingly, the entities I established in my English prompts were treated as belonging to the participant-register of the discourse, and where possible, treated as "given" (Halliday 1970:162). Speakers did not like being forced to translate the English NPs verbatim (see also below page 251 and section 5.3.1). It is clear that speakers regarded the elicitation process as text-producing, and their responses were characteristic of genres appropriate to the referential content. Much of the formally elicited data is, then, in a sense controlled, or consiructed text, rather than isolated, decontextualised sentences. The primary thrust of elicitation was to develop and construct such contexts as might not frequenlly arise in conditions where recording was possible.

Because elicitation is text-producing, and because many morphemes and morpheme combinations are unlikely to arise in free texts, I do not even aspire to Heath's (1984:4) ideal of a "corpus-based grammar" (where 'corpus' includes frec texts only). Although I am mindful of the many dangers inherent in using elicited materials, I cannot concur with Heath's assessment that he had "... no confidence whatever in such data, since my own early "data" of this type often turned out to be seriously wrong" (Heath 1984:5). As I will discuss later, I feel that this misrepresents the nature of linguistic data, by taking it to be an observable object, independent of the observer.

By far the most problematic aspects of elicitation seem to me to relate to the practices of seeking speakers' judgements of utterance acceptability (see below), and their intuitions and explanations of meaning differences. In the circumstances of my fieldwork these did not prove to be very satisfactory field methods, and I avoided their use as much as possible. As a rule, in those instances in which two distinct forms might conceivably refer to the same referent situation, speakers were unable to pin-point the subtle distinctions in meaning conveyed by the variant modes of expression. I was invariably informed that no mesning difference existed.

In the course of producing material for the Gooniyandi language programme in the Yiyili Community School (see section 1.8), I had opportunity to carefully check my transcriptions of a number of words, and my phonemic analysis. Careful attention was paid to 'problem areas', especially: (1) distinguishing between apico-alveolar, apico-postalveolar and lamino-dental consonants, which I experienced great difficulty in telling apart (since then I have found that the phonetic contrasts in Gooniyandi are not as perceptible to the English ear as are the phonetic contrasts between the corresponding segments
in some other Australian languages); and (2) the question of whether the contrast between apico-alveolars and apico-postalveolars is neutralised word initially (as it is in many Australian languages). Many words were checked with more than one speaker, and over more than one repetition (successively and on different occasions), using both auditory and visual evidence. From this work, I produced a dictionary of about 1000 items , the phonemic representation of which I am relatively confident. This dictionary, which includes all items of Hale's 100 word list, the relevant items of Douglas (1959/1977), as well as all words from the texts chosen for the school book, and a number of 'suspicious' and crucial words, is the primary data base for the statistical analysis of phoneme distributions (section 2.2.5).

The investigation into the textual organisation of the clause (section 5.3), as well as a significant part of the study of the clause complex (section 5.6), is based primarily on textual material. (Initial hypotheses were, however, formulated on the basis of the elicited corpus.) From a large corpus of twenty or more hours of recorded texts, fifteen texts were selected for close scrutiny; three of these appear in Appendix 1. These fifteen texts, which were chosen more or less at random - and not for any reasons of their merit as coherent texts - are monologues encompassing all genres represented in the corpus. There is no reason to believe that they are not typical representatives of their genres. They were narrated by three different individuals, including the youngest and the oldest speakers. The chosen texts vary in length from about a minute and a half to over ten minutes, in all totaling about forty-five minutes. Altogether there are about 800 clauses. The texts had been transcribed word for word in the field with the assistance of the speaker; most had also been worked over on at least one occasion with another native speaker. I studied them again away from the field, attempting to identify and mark in significant suprasegmental features, which I was convinced played an important role in the organisation of the text as a message bearing unit (see section 5.3).

The reader will notice that no sentences are starred as unacceptable or ungrammatical in this grammar. The present description is based entirely on occurring, and ipso facto acceptable, sentences. Problems in cliciting acceptance or rejection of constructed examples are well known, and I will not go into them here - but see for example Bolinger (1968), Christic (1980), Haas (1973), and Quirk and Svartvik (1966). Suffice it to make the following three observations, specific to the context of my research. Firstly, speakers were as a rule unwilling to label utterances I produced as unacceptable - rather than respond to the actual form of my utterance, they almost invariably presumed that I intended to express
some meaning, and attempted to determine and respond appropriately to that. And secondly, on the other hand, in more than one instance in which a speaker had firmly rejected an invented example, he later used the same construction himself. The reasons for the initial rejection always remained unclear to me. Finally, my theoretical purpose is not, and was not, to delimit the class of grammatical sentences (if indeed such a class is well defined - cf. Hockell 1967), but rather to describe and account for the meaning potential of Gooniyandi utterances.

## CHAPTER TWO

## PHONETICS AND PHONOLOGY

### 2.1 Phonemes and their realisations

### 2.1.1 Phoneme inventory

Gooniyandi has ninetcen consonant phonemes and three vowels, one of which has distinctive length. They are as indicated in Tables 2-1A and 2-1B.

Table 2-1A: Consonant phonemes

|  | Bilabial | Apico- <br> alveolar | Apico- <br> post- <br> alveolar | Lamino- <br> dental | Lamino <br> palatal | Dorso- <br> velar |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Stops | $b$ | $d$ | $n d$ | $t h$ | $j$ | $g$ |
| Nasals | $m$ | $n$ | $m$ | $n h$ | $n y$ | $n g$ |
| Laterals |  | $l$ | $n$ |  | $l y$ |  |
| Tap/Flap |  | $d t$ |  |  |  |  |
| Glides | $w$ |  | $r$ |  | $y$ |  |

Table 2-1B: Vowel phonemes

|  | Front | Back |
| :---: | :---: | :---: |
| High | $i$ | 00 |
| Low | $a \quad a$ |  |

The glottal stop [?] occurs in a few interjections, such as [n?n] 'yes', and is occasionally used in elicited speech to mark morpheme boundaries (see section 2.4.2). A voiceless vowel [Ą] also occurs in at least one interjection, namely [ÅA] 'OK'. Since they do not distinguish between 'full' words, [?] and [â] have
not been included in Table 2-1, and do not figure in the following account of the phonology.

### 2.1.2 Phoneme contrasts

In this section, minimal or near minimal pairs are given in illustration of the phonemic oppositions between 'suspicious pairs' of phones only - that is, only for those pairs which are sufficiently alike phonetically to be potential allophones of a single phoneme. Each consonant contrast is illustrated for each environment in which it is maintained, word initially (where appropriate), intervocalically, and syllable finally, in that order. For the vowel contrasts I first give minimal pairs for the word medial position, then minimal pairs for the word final position.
[1] Apical contrasts
(a) Stops /d, rd/:

| /joodoo/ | /joordoo/ |
| :--- | :--- |
| 'straight' | 'dust' |
| /wad-/ | /ward-/ |
| 'turn around' | 'go, move' |

(b) Nasals $/ \mathrm{m}, \mathrm{m} /$ :

| /maningga/ | /marningga/ |
| :--- | :--- |
| night:time | sister-ERG |
| /ganbadi/ | /garnbag/ |
| 'centipede' | 'clapsticks' |

(c) Laterals $/ /$, $\mathrm{rl} /$ :

| /wila/ | /wirla/ |
| :--- | :--- |
| 'OK, finish' | 'back' |
| /bilnga/ | 'birlnga/ |
| 'osprey' (a type bird) | 'bark of tree' |

(d) Rhotics $/ \mathrm{r}$, dd/:

| /jaari/ | /jaddi/ |
| :--- | :--- |
| 'dry roots of grass' | 'if' |
| /bar-/ | /bananggadd-/ |
| 'climb up' | 'snatch off' |

(e) Others /d, dd/:

| /yaadi/ | /jaddi/ |
| :--- | :--- |
| 'we all' | 'if' |
| /wad-/ | /wadd-/ |
| 'turn around' | 'forget, leave' |

[2] Laminal contrasts
(a) Stops/th, j/

| /thila/ | /jila/ |
| :--- | :--- |
| 'back part of kangaroo' | 'sun' |
| /thoothooloo/ | /boojoo/ |
| 'wren' | 'finish' |
| fbaajathngarna/ | /baj-/ |
| [personal name] | 'get up and go' |

(b) Nasals /nh, ny/

| /nhinnhin-/ | /nyin-/ |
| :--- | :--- |
| 'poke about' | 'leave, forget' |
| /winhi/ | /wanbinyi/ |
| 'just' | 'eyebrow' |
| /minhmithi/ | /giyinyma/ |
| 'chicken hawk' | 'bat' |

[3] Apico-alveolar vs. lamino-dental contrasts
(a) Stops /d, th/:

| /dili/ | /thiligi/ |
| :--- | :--- |
| 'flame' | 'frogmouth' |
| /joodoo/ | /thoothooloo/ |
| 'straight' | 'wren' |
| /badjangga/ | /baajathngama/ |
| 'quickly' | [personal name] |

(b) Nasals $/ \mathrm{n}, \mathrm{nh} /$ :

| /nid-/ | /nhinnhin-/ |
| :--- | :--- |
| 'stick in' | 'poke about' |


| /yiniga/ | /winhi/ |
| :--- | :--- |
| 'how' | 'just' |
| /binybiny/ | /binhngoorloo/ |
| 'crimson chat' | 'golden whistler' |

## [4] Vowel contrasts

(a) Position $/ \mathrm{a}, \mathrm{i}, \mathrm{o} /$ :

| /baj-/ | bij-/ | /booj-/ |
| :--- | :--- | :--- |
| 'get up and go' | 'emerge' | 'finish up' |
| /goornda/ | /goorndi/ | /ngoorndoo/ |
| 'MBS' | 'MBD' | 'someone' |
| Lengt /a, aal: |  |  |
| /jabi/ | ljaabi/ |  |
| 'small' | 'back of neck' |  |
| hhadda/ | maddaa/ |  |
| 'dog' | 'sandhill country' |  |

### 2.1.3 Phoneme variation within monomorphemic words

Phoneme variation is very occasionally found within monomorphemic words, both across the range of speakers, and within the speech of single individuals.

I have already mentioned the fluctuation between /nh/ and /ny/ in the pronunciation of ginharndi 'you know the one' (see page 8). The opposition between $/ \mathrm{mh} /$ and $/ \mathrm{ny} /$ is perhaps the weakest in the language: it carries quite a low functional load, and is not consistently maintained in speech affected by alcohol. Some fluent speakers - namely those whose first language is Walmajarri - do not make the distinction at all, although most do appear to distinguish the corresponding stops $/ \mathrm{th} /$ and $/ \mathrm{j}$. (Neither opposition is phonemic in Walmajarri (Hudson 1978:4).)

The length distinction in the low vowel has a considerably higher functional load than does the $/ \mathrm{nh} / \mathrm{vs}$. /ny/ opposition (see section 2.2.5). However, /a/, /aa/ and/awa/ alternate in at least two words, the subsection terms jawangari and nawangari. The oldest Gooniyandi speaker nearly always used the forms with /awa/ - that is, /jawangari/ and /nawangari/. Occasionally, however, he said /jaangari/ and /naangari/; only on one occasion did I hear him use the form /jangari/, and I never heard him say /nangari/. The latter forms with the
short vowel were more popular with the younger speakers, who also used the long vowel variant, albeit less frequently. The form with four syllables was almost never heard from speakers under the age of fifty.

### 2.1.4 Feature description

In this section I suggest a possible feature description of Gooniyandi phonology. Two theoretical frameworks inform the description: systemic linguistics and Praguean phonology. For a more detailed discussion of the feature system, see McGregor (forthcoming-b).

The features, intentionally language specific, are chosen so as to:
(a) account for allophonic variation in a revealing way;
(b) enable general statements of phonotactic patterns; and
(c) permit economical and perspicuous statements of morphophonemic alternations.
Economy of features is not seen as a goal in itself. And it is not claimed that this is the only, or even the best, possible system.

The feature oppositions are all binary and may be classified as either equipollent or privative (Trubetzkoy 1969). No multilateral or gradual oppositions are required for the description of Gooniyandi phonology (cf. Dixon 1980:183). In a number of instances the decision to regard a particular opposition as equipollent or privative is based on less than fully convincing evidence. The principle I have followed is that oppositions are classified as privative whenever there is either evidence of relative markedness of one member of the opposition, or there is morphophonologically conditioned alternation that can be readily captured in rules using + and - values for features.
[1] Manner system. The manners of articulation are described in terms of feature oppositions shown in the 'system network' (see e.g. Halliday 1961/ 1976:54,67, Fawcett 1980:19) of Figure 2-1.

Figure 2-1: Manner features



The first contrast is between consonants and vowels, which are distinguished by the opposition of features [consonantal] vs. [vocalic]. I define these features phonotactically, and not in terms of manner of articulation. [consonantal] indentifies those segments that must occur in the margins of syllables; [vocalic] identifies segments occurring as syllable nuclei (see section 2.3). (The feature labels 'consonantal' and 'vocalic' have been retained in preference to the more cumbersome though more accurate terms 'syllable margin' and 'syllable nucleus' (respectively) used by Dixon 1980:190.) The glides $/ \mathrm{r} /$, $/ \mathrm{w} /$, and / $\mathrm{y} /$, which are phonetically very vowel-like are identified as [consonantal] by this definition. Furthermore, their localisation features belong to the [consonantal] system, and not to the [vocalic] system (see page 47 below). The opposition between [consonantal] and [vocalic] has been taken to be equipollent, as there is no evidence of marking of one with respect to the other.

Within the [consonantal] segments a primary division is set up between stops and nasals on the one hand and the remaining consonants on the other.
[ $\pm$ continuant] serves to distinguish these two classes. This feature refers to the continued and/or partially impeded passage of air through the oral cavity. Stops and nasals, which involve complete obstruction in the oral cavity, are distinguished as [-continuant]. Laterals and semivowels have partial obstruction, whilst for the tap/trill obstruction is instantaneous; these segments are thus positively specified as [+continuant]. This opposition is set up for morphophonological reasons: sandhi processes affect a consonant depending on whether it follows a [+continuant] or a [-continuant] (see section 2.4.2.3.1). There is evidence that the opposition is privative (cf. Dixon 1980:183): alternations between [+continuant] and [-continuant] consonants occur at certain morpheme boundaries - for examples see section 2.4.2.3.1. However, various pieces of evidence suggest the relative markedness of each member of the opposition with respect to the other.
[-continuant] consonants are either nasals or stops. There is some evidence that the opposition between these two is privative, with nasals marked with respect to stops. Firstly, stops become nasals when preceding nasals at reduplication boundaries (section 2.4.2.1); and secondly, nasal segments are occasionally (and inconsistently) reduced to stops following stops at enclitic boundaries (section 2.4.2.3.1). It seems reasonable to account for these alternations between stops and nasals with the feature opposition [ $\pm$ nasal]. That stops but not nasals regularly lenite to glides at certain boundaries when following continuants, is further evidence of the unmarkedness of stops vis a vis nasals.

In grammars of Australian languages the approximant/ $\mathrm{r} / \mathrm{and}$ the tap or trill /dd/ (normally writen /rr/) are commonly grouped together as rhotics, and distinguished by their place of articulation, post-alveolar vs. alveolar - see for instance Dixon 1977:32, 1980:144-145, Tsunoda 1981:23, Rumsey 1982b:1, Heath 1984:12, and Stokes 1982:14. This classification is not appropriate to Gooniyandi phonology. The opposition between $/ \mathrm{r} /$ and $/ \mathrm{dd} /$ is not parallel with the opposition between apico-post-alveolar and apico-alveolar articulation in stops, nasals and laterals. /r/ and /dd/ differ not only in terms of place of articulation, but also in terms of manner. No phonotactic patterns or sandhi processes group these two segments together; nor does this grouping serve in any useful phonological generalisation in Gooniyandi.
Only $/ \mathrm{r} /$, and not / dd/, occurs word initially, and only/dd/occurs syllable finally in root medial syllables. However, this does not constitute evidence that the distinction between these two phonemes is neutralised in these positions, any more than is the fact that $/ \mathrm{r} /$ and $/ \mathrm{y} /$ share these identical distributional patterns evidence for the neutralisation of the opposition between them.

For both phonetic and phonological reasons $/ \mathrm{t} /$ belongs with the glides /w/ and $/ \mathrm{y} /$. Phonetically, $/ \mathrm{r} /$, /w/ and $/ \mathrm{y} /$ differ from all other consonants in not involving contact between the two articulators (see next section). Phonotactically, $/ \pi /$ occurs in ranges of structural positions almost identical with those for /w/and $/ \mathrm{y} /$ (see section 2.2), and differs considerably from the tap /dd/ in terms of these ranges.

Phonotactically /dd/behaves very much like the laterals, occurring in a very similar range of consonant cluster types (see section 2.2.1). Accordingly they have been grouped together as liquids. In articulatory terms liquids involve partial or instantaneous contact between the articulators, and in this way are distinct from the glides, which involve no contact. Liquids appear to be marked with respect to glides: only the latter alternate with stops. They are distinguished by the opposition [ $\pm$ liquid]. As there are no examples of alternations or neutralisations of the [ $\pm$ liquid] opposition, evidence that it is privative is not particularly compelling.

Within the [ + liquid] segments, /dd/ is distinguished from the others by the equipollent opposition [lateral]/[tap]. I use the feature [tap] even though /dd/ has trill allophones, since these may be regarded as sequences of taps. The alternative feature [central], referring to the passage of air across the center of the tongue would be equally appropriate.
[2] Consonantal localisation system. It is convenient to describe the six places of articulation of the consonant phonemes in terms of feature oppositions, summarised in the system network of Figure 2-2.

Figure 2-2: Localisation features


In Gooniyandi, as in other Australian languages (see Dixon 1980), there are good reasons for grouping the six places of articulation into three pairs:
bilabial with dorsal, lamino-dental with lamino-palatal, and apico-alveolar with apico-postalveolar. Recognition of these higher order pairings allows phonotactic generalisations to be stated simply (see section 2.2): the members of each pair behave similarly phonotactically, and differ significantly from members of the other pairs.
It might seem reasonable to collapse together the three binary oppositions [labial]/[dorsal], [ $\pm$ dental], and [ $\pm$ retroflex], into a single opposition such as [thigh] or [tretracted]. However, there are good reasons why this should not be done. As Dixon (1980:185) points out, the oppositions are not parallel for peripherals, laminals, and apicals.
(i) The opposition between labials and dorsals is an equipollent one; there is no evidence that it is privative (cf. Dixon 1980:184). There are no examples of neutralisations between the two places of articulation, nor evidence that one is marked with respect to the other.
(ii) The apico-alveolars and apico-postalveolars are conveniently distinguished by the privative opposition [trectroflex], which refers to a feature of the tongue, whether the tip is raised, or in a neutral position (tip flat). The privative nature of this opposition is supported by the fact that the distinction is neutralised root initially (as has already been mentioned), where apico-alveolar articulation predominates. This suggests that 'tip raised' is the marked member of the opposition. In articulatory terms, 'tip raised' would also seem to be marked. There is evidence that the apical glide $/ \mathrm{r}$ / is positively specified [tretroflex] (see section 2.4.2.2.1), while the tap /dd/may be assumed to be unmarked for this feature.
(iii) The opposition between dental and palatal articulation for laminals appears to be privative, with palatal the unmarked member. There is statistical support for this view: palatals are by far the more frequent of the two. Secondly, there are a few instances of fluctuation between the lamino-palatal/ny/ and the lamino-dental $/ \mathrm{nh} /$, as mentioned in the previous section. In all such cases, it is the palatal member that replaces a dental, and never the reverse. And thirdly, palatal allophones of $/ \mathrm{y} /$ and $/ \mathrm{y} /$ predominate. $/ \mathrm{y} /$, at leash, belongs to the palatal series, on the evidence that it hardens to $/ \mathrm{j} /$, never to $/ \mathrm{th} /$.

The distinction between peripherals (articulated in the periphery of the oral cavity, the lips and the velum), laminals and apicals has been described in terms of two binary oppositions, $\lfloor \pm$ peripheral] and [ $\pm$ laminal], rather than a single ternary one, [peripheral/laminal/apical]. This is justified primarily by the evidence of phoneme distributions. This evidence supports the relative markedness of peripherals with respect to non-peripherals, and laminals with respect to apicals (as discussed in section 2.2.5). There is also a small piece of morphophonemic evidence suggesting the privative nature of the laminal vs. apical contrast: in the only circumstance in which an apical stop follows a laminal nasal at a morpheme boundary, the apical becomes a laminal (see section 2.4.2.2.1.1). Also in agreement with the proposed analyses is the fact
that the most marked manner feature, [ $\pm$ liquid], co-occurs with the unmarked places of articulation only. And then only for the least marked place is a secondary distinction available; for the relatively more marked [ $\pm$ laminal], the denta/palatal opposition appears to be neutralised.
[3] Vocalic system. Different features are proposed for the description of vowels. They are as shown in the system of Figure 2-3.

Figure 2-3: Vocalic features


The primary opposition in this system distinguishes $/ \mathrm{i} /$ and $/ 00 /$ from $/ \mathrm{a} /$ and /aa/ by the feature contrast [ $\pm$ high]. There are some cases of alternation between high vowels (especially $/ \mathrm{i}$ ) and the low short vowel at and across morpheme boundaries, which suggests that the opposition is privative. And secondly, the formulation of certain sandhi rules is made easier under the assumption of the privative nature of the opposition. However this may be and I do not regard the evidence as particularly strong - there is certainly no strong evidence that one member of the opposition is marked with respect to the other (see also below page 88).

But the two secondary oppositions, distinguishing fi/from/oo/ and /a/ from /aa/, are almost certainly privative, with the second member of each the marked one. This suggestion finds some support in the relative frequencies of vowel occurrence (see section 2.2.5). And, in the case of the /i/vs. $/ 00 /$ opposition, there is also support in the vowel harmony rules which operate across certain morpheme boundaries (see 2.4.2.3.2), and in the better than chance frequency of harmony between the high vowels in successive syllables within
roots (section 2.2.5).
It may be tempting to economise on features and describe the long/short opposition in the low vowel in terms of the feature [ $\pm$ back]. There is a certain
amount of evidence in amount of evidence in support of such a proposal - see section 2.1.6.4.
However, phonologically However, phonologically and phonotactically there is no support for the
'proportion $/$ al $/: / a a /=/ i / / / 00 /$, and so so distinct.

Dixon (1980:187) has suggested that vowels in Australian phonologies may be described "in terms of some of the same feature oppositions as consonants". In Gooniyandi at least there DO seem to be good reasons to use distinct feature oppositions for consonants and vowels. The reasons are both phonetic and phonological.

Vowels are normally articulated with the tongue tip down, in a relatively "neutral" position, corresponding to the position of rest of the organ. However, when they precede apico-postalveolars, vowels are $r$-coloured (see 2.1.6) - that is, the feature [+retroflex] is carried non-distinctively in the vowel. If /i/ were positively specified as [+laminal] (as per Dixon 1980:187), it could not at the same time carry the feature [+retroflex]. By keeping the two localisation systems distinct it is possible to provide a more accurate and revealing account of allophonic conditioning, and preserve the shape of the feature systems of Figures 2-1 and 2-2. (Vowels are assumed to be able to take on one consonantal feature at a time, although two conflicting features may be present over different parts of their duration.) The consonantal localisation features are simply not distinctive for vowels, nor are the vocalic localisation features distinctive for consonants. Rather, the features of one may be concomitant non-distinctive articulatory features of the other. That is, phonetically there is 'feature smear', whereby contiguous segments may share features.

There is an unmarked correlation between the vowels /i/ and/oo/ and the consonantal features [+laminal] and [+peripheral] respectively, such that the corresponding feature is typically taken on in the articulation of the vowel. However, in certain circumstances, notably in the sequences /igi/ and /ingi/, both occurrences of /i/ are realised by a centralised allophone [i], and the $/ \mathrm{g} /$ or $\mathrm{mg} /$ is fronted, so that the highest point of the tongue in the articulation of the vowel is in the pre-dorsum, the same part which contacts the hard palate for the consonant. That is, $/ i /$ is non-laminal. The use of different localisation features for vowels and consonants appears to provide the clearest description of these circumstances. That is, /i/ takes the feature [dorsal], making it a $\left[\begin{array}{c}\text { back } \\ \text { dorsal }\end{array}\right]$ vowel (which is a phonetically accurate description of the allophone [i]), and the velar consonant takes on the feature [-back], making it $\left[\begin{array}{l}\text {-back } \\ + \text { peripheral }\end{array}\right]$ (which is again phonetically accurate). (These phonetic facts could not be explained if a single feature system were used for both vowels and consonants: the specifications $\left[\begin{array}{l}+ \text { laminal } \\ + \text { peripheral }\end{array}\right]$ and $\left[\begin{array}{l}+ \text { laminal } \\ \text { dorsal }\end{array}\right]$ are contradictory.)

|  |  | $+$ | － |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ［8U0［7］ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $+$ | － |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ［Ypeq耳］ |
| $+$ | ＋ | － | － |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ［48147］ |
|  |  |  |  |  |  | ＋ | － |  | ＋ | － |  |  |  | ＋ | － |  |  |  |  | ＋ | － |  | ［xəцапәғ］ |
|  |  |  |  | － |  |  |  | $\mp$ |  |  |  | － | $+$ |  |  |  |  | － | $+$ |  |  |  | ［IEuəp耳］ |
|  |  |  |  | $+$ |  | － | － | ＋ | － | － |  |  | $+$ | $+$ | － | － |  |  | $+$ | ＋ | － | － | ［［EU！UETF］ |
|  |  |  |  |  | PI |  |  |  |  |  | p |  |  |  |  | I | p |  |  |  |  | I | ［［Esrop］／［｜ETqe］］ |
|  |  |  |  | － |  | － | － | － | － | － | ＋ | － | － | － | － | ＋ | $+$ | － | － | － | － | $+$ | ［［expyduod干］ |
|  |  |  |  |  |  |  | $\mathrm{I}$ | $\mathrm{T}$ | T | $\mathrm{T}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | － | － | － | $+$ |  | ＋ | $+$ |  |  |  |  |  |  |  |  |  |  |  |  | ［p！nb！̣！$\mp$ ］ |
|  |  |  |  |  |  |  |  |  |  |  | ＋ | ＋ | $+$ | ＋ | $+$ | $+$ | － | － | － | － | － | － | ［IESEUT］ |
|  |  |  |  | ＋ | ＋ | ＋ | $+$ | ＋ | $+$ | ＋ | － | － | － | － | － | － | － | － | － | － | － | － | ［］uenupuos干］ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ［J！¢e50n］ |
| $\Lambda$ | $\Lambda$ | $\Lambda$ | $\Lambda$ | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 3 | $\bigcirc$ | 0 | 0 | 0 | $\bigcirc$ | 0 | 0 | 0 | 0 | ／［iejuruosuos］ |
| 00 | 1 | wo | D | $\kappa$ | M | 1 | $P P$ | $K$ | $\mu$ | 1 | $8 u$ | Ku | yu | $u$ | $u$ | $m$ | 8 | $!$ | 41 | $p$ | $p$ | 9 |  |

A second reason why the consonantal localisation features are inappropriate for vocalic distinctions comes from markedness considerations．If the consonantal system were used to describe vowels，then $/ \mathrm{i} /$ would be marked （［＋laminal］）with respect to／a／（［－laminal］），and both would be marked with respect to $/ 00 /$ ．But this would appear to contradict the evidence．／i／and／a／are， as far as I can determine，about equally marked：they are approximately equally frequent（although／i／predominates textually－see 2．2．5），and each has allophones covering roughly equal areas of the vowel triangle（see Figure 2－4）． Furthermore，evidence can be adduced which suggests the relative markedness of each of these two vowels with respect to the other．That there is a length distinction for the low vowel only suggests the relative unmarkedness of $/ \mathrm{a} /$ ．On the other hand，the fact that consonant final nominal roots are sometimes pronounced with final $/ \mathrm{i} /$（never／a／），suggests that $/ \mathrm{i} /$ is unmarked．The feature oppositions proposed in Figure 2－3 account for these facts in a natural way．

The Gooniyandi phonemes are fully specified in Table 2－2（compare the systems of Figures 2－1，2－2 and 2－3）．

## Remarks on the table：

（i）$/ \mathrm{ly} /$ is shown as unmarked for the feature［dental］，whereas by contrast $/ \mathrm{y} /$ is positively specified as［－dental］．The reason for the latter specification is that when／y／hardens at certain morpheme boundaries，it is always to $/ \mathrm{j} /$ ，and never to／th／．
（ii）The opposition［labial］／［dorsal］is not taken to be neutralised for／w／．Rather， this phoneme is regarded as marked for both features［labial］and［dorsal］．My reasoning is that even though／ $\mathrm{w} /$ need not always show both features，it may readily take on either or both in any particular instance．

## 2．1．5 Realisation of consonant phonemes 2．1．5．1 Stops and nasals

Like the majority of Australian languages，Gooniyandi has a single stop series． Voiced and voiceless（with varying degrees of aspiration），as well as fortis and lenis allophones occur．As yet I have been unable to specify precisely the allophone conditioning factors．Some generalisations can，however，be made．

The only place where stops are consistently voiced is word internally following nasals and laterals．For example，gamba＇water＇is normally pronounced［＇kambu］，and yilba＇for ever，completely＇is usually pronounced ［＇ji．lbA］．Equally consistent voicelessness is found following the apical tap／dd／； for example，winyjiddgi $\rightarrow$［，win＇j3rki］＇top of back＇．

Word initial stops tend to be fortis and voiceless; voice onset tends to follow very shortly after their release (see page 57). In word initial stop-liquid clusters, stops tend to be voiced: briyandi $\rightarrow$ ['bıeiændi] 'in retaliation'. Sometimes, under heavy stress, an initial stop may be aspirated (e.g. ['k ${ }^{\mathrm{h}} \mathrm{amba}$ ] for gamba 'water').

Intervocalically both voiced and voiceless allophones occur, though the latter (in which voicing ceases on closure and resumes immediately on release) is the more common allophone. In some words intervocalic stops appear to be consistently voiceless (e.g. thigi 'short' is, to my knowledge, always pronounced ['diki]); in others they are consistently voiced (e.g. ngaboo 'father' seems to be invariably pronounced ['ja.bu]). On the other hand, there are some words in which voiced and voiceless pronunciations alternate (e.g. joogoo 'child' is usually pronounced [' $\operatorname{cog} \chi \chi]$, but ['J $\operatorname{Lg} \mathrm{L}$ ] is also heard. There is a tendency for voiced allophones to be found in the environment of phonetically lengthened vowels, and for voiceless allophones to occur when the surrounding vowels are phonetically short. (Lengthened vowels tend to be laxer than short vowels, and surrounding stops would appear to assimilate in tenseness/laxness. The latter opposition correlates well with voiceless/voiced.) For example, compare maadi ['ma:di] 'cold' with baga ['bake] 'burr'.

Syllable finally, unreleased allophones occur, and voicing from the preceding vowel typically extends somewhat into the period of occlusion. This effect is more pronounced for some points of articulation than others. For instance, syllable final apico-alveolar and lamino-dental stops tend to be completely voiceless, whereas for apico-postalveolar and lamino-palatal stops voicing typically extends throughout the occlusion. For the peripheral stops, the degree to which voicing extends into the occlusion depends on the phonetic environment. When followed by a voiced segment, voicing typically (though not invariably) extends through the duration of a peripheral stop. For example, ngabnga 'he ate it' is normally pronounced ['ŋab'øe], although ['ŋabp'ŋe] has been heard.

In word medial stop-stop clusters, the second member takes its voicing from the first. Thus it will normally be voiced when following an apicopostalveolar or a lamino-palatal, as in boordbara ['bodbain] 'hot' and yijgawoo ['i3gao] 'bad' respectively, and voiceless otherwise. In the latter case, onset of voice usually immediately follows the release of the second stop, which is normally fortis. For example, yaabja 'some' is normally pronounced ['ja:bce] or ['ja:bpce].

Spectrograms tend to show that voicing extends from a previous voiced segment (consonant or vowel) into the period of occlusion of a stop, and that the onset of voice follows shortly after (and not immediately at) its release, except when voiced throughout, as when following nasals and laterals.

Syllable finally $/ \mathrm{j} /$ tends to be lenis. When it is the first member of a stopstop cluster, complete closure is not always effected, and some friction may occur, or the segment may even be elided. For example, yijgawoo 'bad' may be pronounced ['izgao] or ['igao].

Corresponding to each stop consonant there is a nasal having the same point of articulation. Nasals are invariably voiced throughout their duration of oral occlusion.

## [1] Bilabials

These segments always involve bilabial occlusion. The lips are rounded preceding the maximally close lip rounded allophone [oo] of /oo/ (see section 2.1.6.2). Otherwise there is no detectable rounding.

## [2] Apico-alveolars

As the label suggests, these involve contact between the tip of the tongue and the front part of the alveolar ridge, just behind the base of the upper teeth. On the limited visual evidence available to me, it is never as retracted as the articulation illustrated in Figure 2 of Dixon (1980:136) - although in the absence of an X-ray study, this cannot be regarded as particularly reliable.

## [3] Apico-postalveolars

In the articulation of apico-postalveolars the tip of the tongue only (and not the underside - cf. Ladefoged 1971:39-40) contacts the roof of the mouth, at the back side of the alveolar ridge (when preceding the front vowel /i/), and at the forward part of the hard palate (when preceding the non-front vowels /a/ and $/ \mathrm{o} / /)$. The apex of the tongue points up, and is not tumed back.

## [4] Lamino-dentals

The active articulator for these phones is the front part of the blade of the tongue, which makes contact with the inner side of the upper teeth and the front of the alveolar ridge. On visual evidence, the actual contact is no more than about 1 centimetre on the front to back dimension. The tip, but not the blade, of the tongue may touch the upper part of the bottom teeth.

## [5] Lamino-palatals

Lamino-palatals involve contact between the blade of the tongue and the postalveolar region and a small part of the pre-palate. The part of the active articulator involved in the production of lamino-palatals lies behind (and may partly include) the part of the blade involved in lamino-dentals. Following vowels affect the place and area of contact of both articulators. Preceding $\mathrm{i} /$, contact is entirely within the pre-palatal region. Preceding /a/, there is normally a larger area of contact, which includes at least a part of the alveolar ridge, and may extend as far as the upper teeth, with the tip of the tongue resting behind the lower teeth.

For the lamino-palatals there is a much larger area of contact between the tongue and the roof of the mouth than is the case for lamino-dentals, both laterally and longitudinally. Consequently, assuming approximately equal quanta of energy to be involved in the production of each phoneme, there is a significant tendency for /th/ to be fortis and voiceless, and for $/ \mathrm{j} /$ to be lenis and voiced in most environments.

The release of the laminal stops and nasals is fairly slow, especially in the case of the lamino-palatals, which have such a large area of tongue-palate contact. As a result, there is often discernible turbulence following the release of the lamino-palatal stop, and somewhat less following the release of the laminodental stop. For the corresponding nasals, there is of course no such turbulence following the release of oral closure. But in the case of the lamino-palatal nasal there is frequently an audible $y$-glide into the following vowel, especially if it is a low one.

## [6] Dorso-velars

In the articulation of the dorso-velars the point of contact between the back of the tongue and the roof of the mouth lies within the velar region, and is determined by the phonetic environment. It is relatively far forward when followed by front vowel allophones, almost in the uvular region when followed by the back vowel allophones, and somewhere in between these extremes when followed by central vowel allophones.

### 2.1.5.2 Laterals

The laterals are always voiced, and involve no audible friction. The two laterals $\Lambda /$ and $/ r \mathrm{r} /$ appear to be articulated at the same places as the corresponding stops and nasals, from which they differ in respect of allowing the passage of air
around the sides of the tongue. The back of the tongue is apparently somewhat raised for $/ \mathrm{L}$, and low for $/ \mathrm{rl} /$, giving the former a characteristic dark resonance, and the latter a clear resonance.

The laminal lateral /ly/ appears to usually involve a relatively large area of contact between the tongue and the roof of the mouth compared with the area of contact involved in articulating the lamino-palatal stop and nasal. The place of contact may perhaps vary slightly more than is the case for stops and nasals. Front allophones occur following /a/, but usually contact does not extend as far as the teeth. I have been able to detect dental allophones (involving a similar area of contact as in lamino-dental stops and nasals) in one environment only. That is when /ly/ closes syllables whose vowel is /a/ (cf. section 1.8 above), as in wanggalymani $\rightarrow$ ['wangal,mani] 'skull', and galyba $\rightarrow$ ['kalbe] 'soft'.

### 2.1.5.3 Tap

Word medially /dd/ is normally realised as a voiced alveolar flap [ r ]. When preceding the apico-postalveolar glide $/ \mathrm{r} /$, it is normally a trill (sometimes a flap) in the postalveolar region (i.e. IPA [r] or [r] - see International Phonetic Association 1949:10,17). When preceding stops it is usually a partly devoiced tap [r]; when preceding nasals, it is a voiced tap. Word finally it is a voiced flap or, less frequently, a trill. The trill may be partly or fully devoiced, and if so, it is normally accompanied by friction. For example, bananggadd- 'snatch' may be pronounced ['pana0,gır], ['panaŋ,gar] or ['panap.gır].

### 2.1.5.4 Glides

The major allophones of $/ \mathrm{y} / \mathrm{/} / \mathrm{w} /$ and $/ \mathrm{r} /$ are voiced frictionless continuants.
For/w/ the back of the tongue is raised to approximately its position in the vowel [ $u$ ], which is somewhat closer than in the major allophone [ $\omega$ ] of $/ 00 /$. The lips are sometimes slightly protruded and rounded. In the sequence $/ \mathrm{wi} /, / \mathrm{w} /$ may be realised by a frictionless lip-rounded continuant, with the midpart of the tongue raised to about the position of [i]. That is, in the realisation of /iwi/ the tongue may remain fixed in position, with the lips rounding briefly. The only other place where $/ \mathrm{w}$ /regularly shows lip-rounding is preceding (rarely following) /oo/.
$/ y /$ involves the blade of the tongue as active articulator. The blade moves to a position similar to that of the high front [i], which is again closer than the unmarked allophone [t] of $\mathrm{f} /$. On at least one occasion friction was heard: yijgawoo 'bad' was pronounced (once in my hearing) as ['jizgsa].

For $/ \mathrm{r} /$ the apex of the tongue is usually raised and points towards, or to a point slightly behind the alveolar ridge, without touching it, and not normally close enough for friction; this is represented by [ J ], and [ I ] for the retracted variant in IPA (International Phonetic Association 1949:10, 17). As remarked above, $/ \mathrm{r} /$ is specified as [+retroflex] (see also CCR 3 and CCR 4 of section 2.4.2). However, it is rarely pronounced with the tongue tip as upright as it is in the apico-postalveolars /rd, $\mathrm{rm}, \mathrm{rl}$. Word initially it is sometimes realised by a vocoid [ $\boldsymbol{\imath}$ ] with slight lip protrusion, similar to the occasional idiolectal variant of word initial $r$ in English.

Word initial $/ \mathrm{y} /$ and $/ \mathrm{w} /$ are occasionally elided preceding /i/ and /oo/ respectively. This usually occurs only when the semivowel also shares a localisation feature with the following consonant - for example, yijgawoo 'bad' may be pronounced ['jifgno] or ['ijgao], etc.; woongooloo 'for fun' may be pronounced ['wదŋロlu] or ['uŋ@lu]. There is another possible variant in which the glottal stop replaces the semivowel; woongooloo 'for fun', for example, may be pronounced ['? D Dlu]. But elision has not always been observed in words satisfying this condition; to my knowledge, the avoidance word woomoorla 'no, not, nothing' is always pronounced with an initial [ $w$ ].
$/ \mathrm{w} /$ is sometimes lost between two /a/ vowels, resulting in a phonetically long low vowel (e.g. bagawaga, which refers to an unidentified type of tree, is pronounced either as ['pakı'wakı] or [pa'ka:kn]). It is also normally lost between two /oo/ vowels (see also below section 2.1.6.2). Similarly, /y/ is usually lost between /i/ vowels (see section 2.1.6.1). When either /w/ or $/ \mathrm{y} /$ occurs word finally, it may form a diphthong or half long vowel with the preceding vowel; for example, goorday $\rightarrow$ ['k@̣dei] 'grind'; moow $\rightarrow$ ['mu.] 'look for'. (For further details of realisations of vowel-semivowel sequences, see section 2.1.6.)

### 2.1.5.5 Acoustic characteristics

An attempt was made to characterise the articulatory 'places' acoustically, in terms of formant loci ${ }^{1}$. The tentative results are shown in Tables 2-3 and 2-4.

[^5]Depending on the surrounding environment, $\mathrm{F}_{2}$ and $\mathrm{F}_{3}$ values are within a range of about 300 cps of the values given in Table 2-3, more or less, depending on the consonant. But the loci of the dorso-velars showed a much wider range of variation, such that it was impossible to give any single figure representative of the range. Table 2-4 gives approximate values depending on the preceding vowel allophone: front to central allophones of /i/ and /a/ determine one set of loci, and back allophones of $/ \mathrm{a} /$ and $/ \mathrm{o} /$ determine the other set. The extreme range of variation in the loci of the dorso-velars is no doubt attributable to the wide range of points of contact possible for these consonants. Lamino-palatals and apicopostalveolars were the only consonants for which vowel formants consistently showed transitions extending towards and reaching the loci. For the other consonants the vowel formants usually bent only slightly in the direction of the locus, rarely reaching it. However, for each place of articulation there were at least a couple of Sonograms (usually of nasals) showing a formant within the range given in the table. The values given for the loci are reasonably comparable with those mentioned in Lehiste and Peterson (1961:270), Fant (1962:14), Bradley (1980:32).

Apico-postalveolars have very close $F_{2}$ and $F_{3}$ loci (cf. Fant 1962:14), which could be distinguished from one another only by the transitions of $F_{2}$ and $\mathrm{F}_{3}$ on the preceding vowel (see section 2.1.6), which tended towards one another, and a point somewhere in the range of 1600 cps . to 1800 cps . (Most spectrograms showed the two formants meeting.) $F_{1}$ and $F_{2}$ are very similar for the apico-alveolars and the apico-postalveolars, making $F_{3}$ the major distinguishing feature. No doubt this is related to the articulatory similarity in tongue position for the two series, whereby they differ only in terms of what happens to the tongue tip.
$\mathrm{F}_{2}$ and $\mathrm{F}_{3}$ are in most cases separate and readily distinguished in the case of the apical glide $/ \mathrm{r} /$, the centres of the bands being usually about 500 cps . apart. $F_{2}$ is usually around 1600 cps ., and $F_{3}$ around 2100 cps .. That the degree of separation of $F_{2}$ and $F_{3}$ for $/ r /$ is intermediate between that of the apico-alveolar and apico-postalveolar stops, nasals and laterals is presumably the acoustic correlate of the typical tongue position of $/ \mathrm{r} /$, that is, pointing towards the alveolar ridge itself (see section 2.1.5.1 above).
of the problem segments was possible, so that their identification was sometimes possible. This section is of course in the nature of a preliminary investigation, and the results reported here are not claimed to be reliable; a further investigation is planned for the future.

Table 2-3: Formant loci of the consonants

| Formant | Place of articulation |  |  |  |  |
| :--- | ---: | ---: | ---: | :--- | :--- |
|  | bilabial | lamino- <br> dental | lamino- <br> palatal | apico- <br> alveolar | apico- <br> post- <br> alveolar |
|  |  |  |  |  |  |
| $\mathrm{F}_{1}$ | 500 | 750 | 300 | 500 | 500 |
| $\mathrm{~F}_{2}$ | 1000 | 1600 | 2200 | 1750 | 1600 |
| $\mathrm{~F}_{3}$ | 2500 | 2500 | 3000 | 2750 | 1800 |

Table 2-4: Formant loci of dorso-velars

| Formant | Preceding vowel <br> front to mid | Preceding vowel <br> back |
| :---: | :---: | :---: |
| $\mathrm{F}_{1}$ | 700 | 200 |
| $\mathrm{~F}_{2}$ | 1500 | 750 |
| $\mathrm{~F}_{3}$ | 2000 | - |

The formant loci of the lamino-palatals closely approximate those of cardinal [i] (cf. Figure 2-6 below). The closest approximation occurs when the following vowel is fi/. Otherwise, the second formant may lower to about 2000 cps. preceding /a/ and / $\mathrm{oo} /$ (the other formants remaining constant).

Lamino-dentals and apico-alveolars are not readily distinguishable by formant loci: their ranges overlap quite considerably, as might be expected from the fact that both are articulated in the dental-alveolar region. However, the second formant of a lamino-dental does tend to be a little lower than the second formant of an apico-alveolar in the same phonetic environment.

It is possible to make certain other generalisations about the acoustic properties of consonants from the spectrograms available.
[1] At the release of a stop consonant there is a short burst of energy showing up as a spike on a spectrogram. Depending on its point of articulation, highest energy concentrations are found in different frequency ranges (cf. Halle, Hughes and Radley 1957:171):
/b/ has a strong burst of energy in the low frequencies, less than 700 cps ., and another, usually stronger burst, with a midpoint at about 2500 cps ., extending at least a few hundred cps. on either side.
/d/ has strongest energy in the higher frequencies, over 2500 cps ., and weaker energy in very low frequencies, below 500 cps .
/rd/ appears to have the highest energy concentrated slightly lower than / $\mathrm{d} /$, and around 2000 cps .
th/ has energy distributed fairly evenly over the whole frequency range (see also Evans 1985:499), although it does show highest intensities in the region below 1000 cps ., and above 2500 cps ., and slightly less energy in the region $1400-2000 \mathrm{cps}$.
/j/ has energy in the higher frequencies above 2000 cps ., and may also have a moderate amount of energy below 750 cps ..
/g/ usually has high energy in the range 1000 to 2500 cps., higher or lower depending on the neighbouring vowels, in a band 500 to 1000 cps . wide. There is little energy in the lower frequencies.
[2] Following the release of stop consonants there is a period of 'noise' of varying lengths depending on the place of articulation. For word initial stops the duration of noise was within the following ranges:

| /b/ | .01 | -.02 | sec. |
| :--- | :--- | :--- | :--- |
| $/ \mathrm{d}, \mathrm{rd} /$ | .01 | -.02 | sec. |
| $/ \mathrm{th} /$ | .02 | -.03 | sec. |
| $\mathrm{j} /$ | .05 | -.07 | sec. |
| $\mathrm{lg} /$ | $.02-.03$ | sec. |  |

Only in the case of $/ \mathrm{j} /$ was this noise perceptible to me.
During this period, /d/shows much more noise in the lower frequencies than does / $\mathrm{t} /$ /, and its duration is typically a half or less the duration of the later. For $/ \mathrm{th} /$ the noise is evenly distributed over the range of frequencies, being everywhere quite weak, though sometimes visible on spectrograms, especially in the higher frequencies ( 2000 cps . and above). This even distribution of energy for the lamino-dental stop corresponds to the articulatory impression of 'diffuseness' and 'flatness' of this consonant relative to $/ \mathrm{d} / \mathrm{/rd} /$ and $/ \mathrm{j} /$. The lamino-dental nasal /nh/ also possesses this acoustic quality.
[3] Nasals have a distinctive nasal formant centered around approximately 300 cps..

### 2.1.6 Realisation of the vowel phonemes

Figure 2-4 shows the approximate range of allophonic variation of the vowel phonemes. For comparison, Figure 2-5 plots the first two formants for a hundred or so of the clearest and most stable vocalic spectrograms available. No attempt has been made to indicate each instance: the circles give approximate centres for a number of points within a radius of 50 cps . for $F_{1}$ and 100 cps . for $\mathrm{F}_{2}$.

Figure 2-4: Vowel quadrilateral


Preceding, and often following apico-postalveolars, all vowels are $r$ coloured. In articulatory terms this corresponds to the raising of the apex of the tongue towards the postalveolar region during the articulation of the preceding vowel, and its lowering following articulation of the consonant. The following vowel is normally $r$-coloured only if it is not followed by a segment articulated with the front of the tongue. When followed by a segment of the latter type, the tip is rapidly lowered in anticipation of the following consonant. For example, compare the following:

$$
\begin{aligned}
& \text { /ngoorndoo/ } \rightarrow \text { ['Dథ̣nḍ̣̣] 'who' } \\
& \text { /ngoomdooyoo/ } \rightarrow \text { ['ฤ@nd } \oplus \text { ju] 'who for' } \\
& \text { /ngoomdooga/ } \rightarrow \text { ['ŋุ̣пdọks] 'who by' }
\end{aligned}
$$

$r$-colouring of a preceding vowel shows up clearly on spectrograms in the third formant, which starts around 1500 cps . (for all vowels), and falls to 1800 cps ., the $F_{3}$ locus of the apico-postalveolars.

Word final unstressed vowels tend to be short and lax. In the spectrograms this shows up in weak or indiscemible second and third formants.

### 2.1.6.1 /i/

As indicated in Figures 2-4 and 2-5, $1 \mathrm{i} /$ has a wide range of allophonic variation in terms of both height and backness. Most of the allophony is conditioned by the phonetic environment: by the neighbouring consonants, by stress, and also by the vowels of adjacent syllables and the number of syllables in the word. There is also a certain amount of free variation.

The unmarked or 'elsewhere' realisation of /i/ is somewhat lower than cardinal [i], and in the vicinity of [ı]. Allophonic variation conditioned by the neighbouring segments may, I suggest, be conveniently described in terms of a 'displacement vector', defined by the distance and direction of the highest point of the tongue from its position in the pronunciation of the elsewhere allophone, [1]. Following consonants affect the displacement vector more than preceding consonants do. A following consonant defines an articulatory 'target' for the vowel. This target is approached more or less closely, depending on the starting point of the tongue, which in turn is determined by the preceding consonant. Where the vowel is morpheme final, however, its quality may be significantly affected by the consonant preceding it.

Dorso-velars and apico-postalveolars condition a backward displacement of the high point of a preceding /i/ vowel towards the high central [i] range, except when following lamino-palatals. The latter condition close variants of following vowels, so restricting the retraction to about [ l ]. For example, following a nonpalatal:

| /digi/ | $\rightarrow$ | ['tiki] | 'boil' |
| :--- | :--- | :--- | :--- |
| /wigi/ | $\rightarrow$ | ['wiki] | 'frog' |
| /yaalingi/ | $\rightarrow$ | ['ja:lini] | 'all around' |
| /birdi/ | $\rightarrow$ | ['pitit | 'upper leg' |
| /gilimi/ | $\rightarrow$ | ['kllịnì $]$ | 'grass' |

Contrast the following:

| /jiginya/ | $\rightarrow$ | $[' \jmath 1 \mathrm{klna}]$ | 'little' |
| :--- | :--- | :--- | :--- |
| /jirigi/ | $\rightarrow$ | $[' c u i k i]$ | 'bird' |
| /jirliwa/ | $\rightarrow$ | $[' c!l i w e]$ | 'sinew' |

Contiguous laminals have a marked effect on the quality of the allophone. The effect varies depending on whether it is a dental or palatal laminal, whether it precedes or follows the vowel, and various other factors. The following is an approximate account of the allophony in the environment of laminals.

Figure 2-5: Plot of vowel formants $F_{1}$ against $F_{2}$
F2 (in cps.)


In the environment of lamino-dentals, the high point of the tongue is displaced towards the central region, and /i/ is realised by an allophone intermediate in height between [i] and [e], but usually slightly fronter than [ə]. That is, approximately the [ i ] of Figure 2-4. For example,

| /thithi/ | $\rightarrow$ ['titi] | 'going, moving' |
| :--- | :--- | :--- |
| /thila/ | $\rightarrow$ | ['tile] | 'mid-back of a kangaroo'


| /winhi/ | $\rightarrow$ | ['wini] | 'nothing' |
| :--- | :--- | :--- | :--- |
| /minhmithi/ | $\rightarrow$ | ['min_miti] | 'chicken hawk' |

In the immediate environment of lamino-palatals /i/ is always realised as a high front vowel, in the region of [i] to [l]. The maximally close [i] occurs:
(i) In open syllables, when followed by a lamino-palatal, as in:

| /niyajiya/ | $\rightarrow$ | ['niajie] |
| :--- | :--- | :--- | 'there';

except in the environment [+peripheral] $-\left\{\begin{array}{l}l y \\ n y\end{array}\right\}$, where [ l$]$ occurs. Thus:
/ngooddoobinyi/ $\rightarrow$ ['Dor $\omega, b / n t$ ] 'through there'
/milyilyi/ $\rightarrow$ ['mıKıKi] 'brain'
/ginyiddi/ $\rightarrow$ ['kıתıri] 'fight for women'
(ii) In closed syllables when followed by lamino-palatals. For example,

| /bijngarni/ | $\rightarrow$ | ['pi.jpani] | 'he emerged' |
| :--- | :--- | :--- | :--- |
| /binybiny/ | $\rightarrow$ | ['bin'bin] | 'crimson chat' |
| /dily/ | $\rightarrow$ | $[$ 'di $K]$ | 'flame' |

(iii) Following /y/ word initially, except when followed by a dorso velar. For example,

| /yilba/ | $\rightarrow$ | $[' j i . l b \Lambda]$ | 'forever' |
| :--- | :--- | :--- | :--- |
| lyimaddadda/ | $\rightarrow$ | $[$ 'jimafsfs] $]$ | 'leaf |
| /yiganyi/ | $\rightarrow$ | $[' j$ 'gani $]$ | 'uncertain' |

(iv) Following word initial /j/ or /ny/, in open syllables in bisyllabic words (see also below page 63). Examples are:

| /nyiddi/ | $\rightarrow$ | ['niri] | 'spinifex' |
| :--- | :--- | :--- | :--- |
| /jidib-/ | $\rightarrow$ | ['cidıp] | 'lift up' |

Morpheme finally, /i/ is usually realised by a lax version of the maximally high vowel, which I will write [i]. Examples:

```
/ngaddagi/ }->\mathrm{ ['oaragi] 'my'
mgaddaginhingi/ }->\mathrm{ ['naragi.nini]'from me'
/baabiddi/ }->\mathrm{ ['ba:buri] 'below'
```

There are, however, a certain number of systematic exceptions to this generalisation. When a sequence $/ \mathrm{iCi} /$ occurs word finally, there is a tendency for the consonantal features [+retroflex], [dorsal] and [+dental] (which as mentioned on page 59 condition a mid to central allophone of $/ \mathrm{i} /$, to smear in both directions, giving the second vowel an identical quality with the first. Since there is no following consonant to affect its quality, a marked preceding consonantal feature will be retained, there being no need for the tongue to rapidly change its shape in anticipation of a following segment. (It seems reasonable to assume that [dorsal] (as well as the two other features mentioned above) is marked as a lingual feature, as against the lingually neutral [labial], thus explaining why this feature is smeared.) For example,

$$
\begin{array}{lllll}
\text { [+retroflex]: } & \text { /wardbiri/ } & \rightarrow & \text { ['wadbịịị] } & \text { 'you'll go' } \\
\text { [dorsal]: } & \text { /gambanhingi/ } & \rightarrow & \text { ['kambe,nini] } & \text { 'from water' } \\
& \text { /digi/ } & \rightarrow & \text { ['tiki] } & \text { 'boil' }
\end{array}
$$

Note that/w/ must be treated as [dorsal] (see above page 49), since /riwi/ 'camp, place' is pronounced ['Jiwi] or ['əiwi]. (Lip protrusion does not extend over the /i/ vowels in this word.)

$$
\begin{array}{llll}
\text { [+dental]: } & \text { /thithi/ } & \rightarrow \text { ['titi] } & \text { 'going, motion' } \\
& \text { /winhi/ } & \rightarrow \text { ['wini] 'nothing' }
\end{array}
$$

During the articulation of the /i/ vowels in these examples the pre-blade of the tongue is still fronted, and the apex remains touching the back of the lower teeth. This effect sometimes occurs, although not as markedly, when a different vowel occurs in the preceding syllable, especially if the intervening consonant is [+retroflex]. For instance, /dijbari/ 'broken' is pronounced ['tijb,ayit]. Compare /ngaddagi/ (['paragi]) 'mine', for which the final vowel has never been heard centralised.

The vowel of the following syllable may also affect the height of the allophone of $/ \mathrm{i} /$. The effect of a following vowel is most pronounced on an $/ i /$ in the first syllable of a disyllabic word. An /a/ will lower the allophone to approximately the height of [e], whilst a following $/ \mathrm{i} /$ may condition the maximally close [i] (for conditions on this, see below). For example, compare:

| /min.ga/ | $\rightarrow$ | ['menga] |
| :--- | :--- | :--- |$\quad$ 'fat'

with the following:

| Middi/ | $\rightarrow$ | ['li.ri] | 'guts' |
| :--- | :--- | :--- | :--- |
| /middi/ | $\rightarrow$ | ['mi.ri] | 'sun' |

Length does not appear to be significant for the vowel/i/. However, phonetically lengthened varieties [i:] and [i.] do occur, and they arise from at least four different sources.
(i) An /i/ vowel in the first syllable of a disyllabic root is sometimes slightly longer than usual. Examples are /ngidi/ (['ni.di]) 'we restricted', /middi/ (['mi.ri]) 'sun', /jila/ (['ji.lı]) 'sun', and /yilba/ (['ji.lba]) 'forever, for a long time'. I analyse these as conditional variants of $/ \mathrm{i} /$ for the following reasons:
(a) Following or preceding lamino-palatals in bisyllabic words, /i/ is invariably realised as a half-lengthened [i.] (see examples above).
(b) Otherwise, [i.] occurs only in open initial syllables which are followed by syllables whose vowel is /i/. When /a/ follows, as mentioned above, a lower allophone occurs. However, this lengthened vowel normally occurs only if the intervening consonant is an apicoalveolar or a lamino-palatal (that is, a consonant that does not condition backing or centralisation of the vowel). Elsewhere occasional variants such as ['mi.gi] for migi 'ant', have been heard, but variants with the shorter retracted vowels predominate; ['migi] is the more frequent variant.
For all words showing phonetic lengthened [i.] under circumstances discussed in (b), variants have been heard with a short [l]. For example, both ['pldi] and ['mıri] have been heard in place of the long variants given above. The shorter variants predominate when unstressed monosyllabic morphemes such as postpositions are added. For example, /ngidingga/ 'we (restricted)-ERG' is usually pronounced ['pidinga]. Some speakers favour versions with the short [ t ], while others (including the oldest speaker) tend to favour the longer [i.] forms. When I asked speakers which pronunciation was 'correct', they seemed to show no particular preference for one over the other.
(ii) Elsewhere within morphemes a longer variant [i:] occurs, which I propose to treat as the realisation of an underlying sequence /iyi/. This is for the following reasons. Except when [i:] is followed by a lamino-palatal, any word having this long vowel has a variant with the diphthong [it] (but unlike the case dealt with under (i), such words do not have [ 1 ] variants). For example,

| /yiyili/ | $\rightarrow$ ['jitli] or ['illi] | (a place name) |
| :--- | :--- | :--- |
| /giyinyma/ | $\rightarrow[$ 'gi:nma] | 'bat' $^{\prime}$ |

The shape of this diphthong, which has the maximally high part first, is accounted for by (i) above. In any environment there may be a non-flat pitch contour over the vocalic segment, especially in careful speech. Secondly, it would be uneconomical to account for the phonetic long vowel as a second phoneme, long /ii/. This is because [ i :] does not contrast with [it] (or any other phonetically similar vowel), which, as has just been mentioned, can be accounted for as a realisation of /iyi/.

The sequence /iyi/ arises at certain morpheme boundaries, for instance, between verb stems and the following classifier complex, as in /bagi-yi/ (liche:went) 'he lay', for which there is evidence that $/ \mathrm{y} /$ is actually present (it contrasts with / $\mathrm{j} /$, depending on the nature of the preceding segment). In this circumstance, the sequence is realised as [ i :] if the syllable/yi/does not bear inherent stress (see sections 2.4 and 2.5), and [i'i] ~[i'ji] if it does. For example, contrast /bagiyi/ (['ba'gi:]) 'he lay' (where stress is assigned to the second syllable [i:] by a 'late' rule (see section 2.5.3)), with /bagiyiddi/ (['bagi'iri]) 'we lay' (where the third syllable bears inherent stress).

Within morphemes, /iyi/ is realised as either [i:] or [it], and if the second phonological syllable is the one which would normally carry stress, the stress shifts onto the phonetic syllable with the long vowel or diphthong. This is the case for example in the subsection term jambiyindi, which is pronounced as either ['jam'biundi] or ['yam'bi:ndi]. However, in complex roots, such as reduplications, this does not occur. Even if the reduplicated root is morphologically unanalysable, the boundary between the meaningless formatives behaves like a morpheme boundary. An example of this is /yidiyidi/ 'cicada', pronounced ['jidi'jidi] or ['jidi'idi], in which the meaningless formative yidi bears inherent stress on its initial syllable, like any root, and the boundary behaves like a morpheme boundary. [i'i] and [it] are thus conditioned variants at these boundaries.
(iii) At certain morpheme boundaries [i:] arises from a sequence $/ \mathrm{i}-\mathrm{i}$, which in turn derives from an underlying \{i-wi\} or (i-wu) (where the hyphen indicates a morpheme boundary), through elision of the $(w)$ (see section 2.4.2.3.1) As far as I am aware, this sequence has no diphthongal variant such as /iyi/ has. Otherwise, in general, the realisations of the two sequences are identical, except where a morpheme boundary falls between $/ \mathrm{i} /$ and stressed $/ \mathrm{yi} /$ (on which see (ii) above).
(iv) On at least one occasion, a lengthened [i:] was heard instead of the more usual [ l ], with a phonaesthetic effect, indicating extreme smallness. The word jiginya 'little, small', usually pronounced ['jugına], was on more than one
occasion heard pronounced ['ygi:תa], with the suggestion of a very small size (cf. below 2.1.6.3 on lengthening of $/ \mathrm{a} /$ ).

### 2.1.6.2 /00/

$/ 00 /$ has the smallest range of allophonic variation of any short vowel. Although in terms of height its range is comparable to that of $/ \mathrm{i} /$, all of its allophones are in the back third of the vowel quadrilateral. No central allophones occur. / $/ 00 /$ is lip rounded when followed by, and sometimes when preceded by, bilabials ( $/ b$, $\mathrm{m}, \mathrm{w} /$ ), but otherwise the lips are usually in a neutral position. (Where necessary, I will use a tilde under the vowel to indicate lip rounding; normally, the symbols for the back vowels will indicate tongue position only.) Examples are: /boowooddoo/ ['bü:rû] 'north', /nganyimoowa/ ['pani,me.A] 'only me', and /gooma/ ['kuma] 'mouthful'.

Word finally / oo/ tends to be realised by a maximally high lax and unrounded allophone, which will be transcribed [u]. For example, /goornboo/ ['k@rbu]] 'woman', and/ngaboo/ ['pa.bux] 'father'.

When followed by a consonant other than /w/, /oo/ (unlike /i/) shows no tendency to assimilate in height with the following vowel, but is generally realised by [ $\propto$ ], which is closer and tenser than the [ $\propto$ ] of English 'foot', except as otherwise specified below. Examples are:

| /moonga/ | $\rightarrow$ | ['m@ŋa] | 'dark' |
| :---: | :---: | :---: | :---: |
| /noorna/ | $\rightarrow$ | ['n@̣\|a] | 'greedy' |
| /doonggooloo/ | $\rightarrow$ | ['tongolux] | 'bereaved' |
| /thooroo/ | $\rightarrow$ | ['toriu] | 'windbreak' |
| /boolga/ | $\rightarrow$ | ['balgn] | 'old man' |

Neighbouring palatal consonants front and lower/00/somewhat, and to different degrees depending on the nature of the other neighbouring consonants. This effect is least noticeable when the other consonant is dorso-velar, in which case /oo/ is realised by a vowel between [ $\omega$ ] and [u]. This is illustrated in /joogoo/ ['cokul] or ['cukul] 'child'. Elsewhere, spectrograms confirm that the vowel is in the lower front of the range of /oo/ (see Figure 2-5). Examples:

| /joomoo/ | $\rightarrow$ | [comu] |
| :--- | :--- | :--- |$\quad$ 'soak water'

Tongue movement occurs within the vocalic articulation, giving it a characteristic $y$-colouring. The resulting diphthong is auditorily similar to the vocalic segment of fool in Standard Australian English.

Preceding the flap $/ \mathrm{dd} /$, /oo/ is normally realised by a mid-back vowel: /gooddgoo/ ['k orku] 'hole', and /moolooddja/ ['molorcn] (a place name).

When /oo/ is followed by a syllable closing /w/ the sequence /oow/ is realised by a maximally high and usually lip rounded and half long [u.]. Examples are /moowa/ ['mu.n] 'he searches', and /moownga/ ['mp.pa] 'he searched'. Otherwise, when followed by a/w/ opening the following syllable, the quality of /oo/depends on the following vowel. If the following vowel is /a/, it is lowered by varying degrees:

| /nganyimoowa/ | $\rightarrow$ | ['pani,mq.A] |  |
| :---: | :---: | :---: | :---: |
| owa/ | $\rightarrow$ | ['Io.A] | 'walkabout' |
| /yoowarni/ | $\rightarrow$ | ['jowạni] | 'one' |

Within a single phonological word, the sequence /oowoo/ is usually realised as a long [u:], less frequently as a lowering diphthong [uad. (In careful elicited speech, [uwa] and [ $u^{\prime}$ º] have been heard.) For example, /yoowooloo/ ['ju:lup] or ['jualux] 'man', and /boowooddoo/ ['bu:rux] or ['buaru]'north'. All instances of long [u:] can be accounted for as realisations of /oowoo/, for similar reasons to those discussed above for /iyi/.

### 2.1.6.3 /a/

/a/ has allophones within the low to mid height range, and all degrees of frontness and backness. As usual, allophony is conditioned more by following than preceding segments.

Dorso-velars tend to back the high point of the tongue; the effect is most marked on a preceding vowel. For example,

| /mangaddi/ | $\rightarrow$ | ['manari] | ${ }^{\prime}{ }^{\prime}{ }^{\prime}$ |
| :--- | :--- | :--- | :--- |
| /thangarndi/ | $\rightarrow$ | ['tıpandi] | 'mouth' |
| /baga/ | $\rightarrow$ | ['bakA] | 'burr' | in:


| /maddaa/ | $\rightarrow$ | ['mara:] |
| :--- | :--- | :--- |
| /baddangga/ | $\rightarrow$ | 'sandhill country' |
| Wharapge] | 'dry season' |  |

When / $w /$ follows /a/, a somewhat fronted allophone, somewhere between [ $\mathfrak{Z}$ ] and [a] occurs:

| /gawoo/ | $\rightarrow$ | $[k æ u]$ | 'lungs' |
| :--- | :--- | :--- | :--- |
| /gawi/ | $\rightarrow$ | $[$ 'kawi] | 'fish' |

/jawandi/ $\rightarrow$ ['Jawendi] (subsection term)
The sequence /awoo/ may be realised by a long [0:], if neither phonological syllable bears inherent stress. For example,

```
/hilmanggawoo/ -> ['tilmavgo:] 'quickly'
/boolibinawoo/ -> ['palo,pi:no:] 'he'll follow me'
```

In the environment of lamino-palatals, front and central allophones of varying heights are found. When followed by a lamino-palatal consonant, the articulation of /a/ is raised and/or fronted somewhat, by amounts depending on other features of the phonetic environment.
(i) When an /i/ vowel occurs in the following syllable, /a/ is realised by a vowel somewhere in the triangle defined by [e], [æ] and [ə]. If the following vowel is $/ \mathrm{a} / \mathrm{or} / \mathrm{oo} /$, then a vowel within the range of [ $\partial$ ] results. For example,

| /nganyi/ | $\rightarrow$ | ['ŋæゥі] | 'T' |
| :---: | :---: | :---: | :---: |
| /ngaja/ | $\rightarrow$ | ['סoja] | 'younger brother' |
| /manyi/ | $\rightarrow$ | ['mæni] | 'food' |
| /maja/ | $\rightarrow$ | ['majn] | 'boss, foreman' |

Within these ranges, the most fronted allophones occur following non-peripheral consonants. Some examples are:

| /naya/ | $\rightarrow$ | ['n | 'thunder' |
| :---: | :---: | :---: | :---: |
| /lajanga/ | $\rightarrow$ | ['Іæа'фи] | 'he rode it' |
| /moolooddjaya/ |  | ['molor,j | 'at Mulurrja' |

(ii) When the following laminal is a syllable opening / y /, the sequence /ay/ is normally realised by [e] when following a [-peripheral] consonant, provided that neither syllable straddled has inherent stress. For example,

| /wardbinayi/ | $\rightarrow$ | ['wad'binei] | 'he took them two' |
| :--- | :--- | :--- | :--- |
| /yawardayoo/ | $\rightarrow$ | ['jawe'delju] 'for a horse' |  |
| /yawardaya/ | $\rightarrow$ | ['jawe'deu] | 'on a horse' |

(In the last two examples the third syllable is stressed by a 'late' stress rule see section 2.5.3.) Contrast the above examples with the following, in which the preceding consonant is [+peripheral]: /biligaya/ [buli,kəis]'in the middle'. (Here too the third syllable does not bear inherent stress.)

A more accurate description may be given in terms of the lingual feature [+laminal]. The tongue begins to take on this feaure - that is, the blade begins to move into a position such that it is roughly parallel with the part of the roof
of the mouth it will eventually contact, given the vowel following the palatal (see 2.1.5) - during the articulation of the a vowel. The tongue moves relatively slowly into the consonantal articulation, exactly as for postalveolar consonants (in which it is the tip, rather than the blade which gradually moves into place), described in the introduction to this section. Spectrograms confirm this. When preceding palatals and retroflexes, /a/ shows continual transition; in the former case, none of the first three formants remain stable (for the retroflexes it is the third or retroflex formant that moves gradually). Transitions in other environments are more rapid, and except when /a/ is word final, a consonant position is usually maintained for just a short period of time.
(iii) Especially but not only when the following laminal is syllable closing, a diphthongal glide is heard. For example,

$$
\begin{array}{lll}
\text { /gajnga/ } & \rightarrow & \text { ['kauy'jn] } \\
\text { /joomanygadda/ } & \rightarrow & \text { 'he cut it' } \\
\text { ['carein,gers] } & \text { 'good' }
\end{array}
$$

If /y/ closes the syllable, /ay/ must be realised by [e] (cf. page 54 above), as in /goordaynga/ [kote,pA] 'he ground it'.

Exactly the same patterns are found in the respective conditions when a lamino-palatal precedes/a/, except that the effect is not normally as prominent. Examples are:

| /yambadda/ | $\rightarrow$ | ['jambara] | 'hair' |
| :--- | :--- | :--- | :--- |
| /yaliyali/ | $\rightarrow$ | ['jæli'æli] | (a type of bird) |
| /yaanya/ | $\rightarrow$ | ['jein^] | 'other' |
| /jaliji/ | $\rightarrow$ | ['calıji] | 'friend' |
| /wayandi/ | $\rightarrow$ | ['watjændi] | 'fire' |

A somewhat heightened allophone, in the vicinity of [ e$]$, is found in the environment of lamino-dentals. This is illustrated in /thathaddwani/ ['teterer'wani] 'he stopped'.

Elsewhere, in stressed syllables, / $/ 2$ /is realised by a vowel in the region between [a] and [a]. In unstressed syllables it is centralised to about [e], and word finally a lax allophone occurs, which tends to be in the mid to low back region, $[\mathrm{e}]$ or $[\mathrm{A}]$. (It is not to my knowledge centralised as far as [ a ].)
Examples:

$$
\begin{array}{lll}
\text { /moonga/ } & \rightarrow & \text { ['mona] } \\
\text { /balngama/ } & \rightarrow & \text { ['palgạnęp] }
\end{array} \text { 'outside' }
$$

### 2.1.6.4 /aa/

The long vowel/aa/ is invariably realised as the long low back vowel [ $\alpha$ :]. I can detect no significant allophony. For example, /yamaa/ ['jama:] 'foot' (avoidance style), /bilgaali/ [,bl'ga:li] 'midnight'. Very occasionally, and in elicited speech only, a slightly centralising diphthong occurs, which, however, remains within the [ $a$ :] region: /ngaandi/['0quandi] 'flesh'.

Phonetic long [a:] comes from a number of sources other than /aa/. At certain morpheme boundaries the 'underlying' sequence/awa/ is realised as [ $a$ :]. This is accounted for in section 2.4 by a sandhi process of $w$-elision. The long vowel is thus the realisation of a sequence of two /a/s at a less 'abstract' phonemic level. Some phonetic evidence can be adduced in support of this proposal: a glottal stop can be inserted to break up the long vowel deriving from /awa/, but it cannot occur within the long aa phoneme. Since long /aa/ and the sequence $/ \mathrm{a}-\mathrm{a} /$ are in complementary distribution, the former occurring only within morphemes, and the latter only across morpheme boundaries, both are represented unambiguously by $a$ a.

There are other morpheme boundaries at which /awa/ is realised either as [awa] (usually in more careful speech) or as [ $\alpha$ :] (in more natural speech). In these instances I take it that the $w$-elision rule does not apply, and the long vowel is accounted for by an optional phonetic rule. This alternation occurs, for example, at the boundary between an adverb and the stem forming suffix -wa (see section 3.12.3.1), as in /migawa/ ['mignwn], ['miga:] 'that way'. It has also been attested (once) in a root which is a reduplication of a meaningless formative: /bagawaga/ ['pıkı'wıkı], [pı'ka:kı] (a type of tree).

As I have already mentioned (see section 2.1.3), there is a single word, the subsection term jawangari, in which /awa/, /aa/ and /a/ all occur in free variation. But intra-morphemic /awa/ is not normally realised phonetically as [ $a$ :], and for this reason I take it that this word has three alternating phonological forms. No other occurrence of [a:] within a morpheme has been observed to alternate with [awa] (or with [awa]). Thus intra-morphemic long /aa/ must be a separate phoneme.

There are about a dozen or so monosyllables with [ $\alpha$ :], such as ['ma:] 'meat' (cf. Bunuba /milha), ['pa:] 'call out'. There are also a couple of monosyllabic interjections with the short [a], like [pa] 'come on, let's go'. It seems most natural to account for the long [a:] in ['ma:] 'meat' and ['pa:] 'call out' as a realisation of /aa/, and the short [a] in [pa] 'come on' as a realisation of la/.

There are a couple of words in which what is normally a short/a/ in the second syllable is sometimes lengthened [a:], suggesting size intensification (cf. page 65 above). For example, nyamani 'big' is usually pronounced ['תamani], but may be pronounced ['nama:ni], where the second vowel may be up to three or four times its usual length, indicating that the thing is very large. Similarly, /marnangooddoo/ 'far' may be pronounced with a long to extra-long [a:] in the second syllable to suggest a very great distance. (See also line 15 of Text 1.)

### 2.2 Phonotactics

### 2.2.1 Roots

Phonologically, all lexical roots in Gooniyandi begin with a consonant. Although word initial [i] and [u] do occur, as they do not contrast with initial [ji] and [wu] respectively, they are taken to be realisations of initial/yi/ and /woo/. There are just a couple of exceptions: some interjections are vowel initial - an example is [ A е́], meaning 'OK'. These irregular, 'non-linguistic' (see section 3.1.2) words are not accounted for in the following discussion.

Root initially the opposition between the two apical series is neutralised. Both the alveolars [ $\mathrm{d}, \mathrm{n}, \mathrm{l}$ ] and the postalveolars [ $\mathrm{d}, \mathrm{n}, \mathrm{l}$ ] occur word initially, but they do not contrast. In isolation, alveolar and postalveolar articulations are in 'free variation'. For example,

| /doowoo/ | ['tu:] or ['tu:] | 'cave' |
| :--- | :--- | :--- |
| /naaga/ | ['na:gn] or ['na:gA] | 'dress' |
| haaddi/ | ['la:ri] or ['la:ri] | 'bream' |

Since I experienced difficulty in distinguishing alveolar from postalveolar articulations, I visually checked about one hundred and fifty apical initial words, each pronounced by at least three different speakers and over a number of repetitions, both successively and on different occasions. (See section 1.10 above.) On the basis of the observations made, the following generalisations may be formulated:
(i) Alveolar articulation is overall the more frequent.
(ii) Postalveolar articulation is rare preceding /i/, but occurs about as frequently as alveolar articulation preceding /oo/ and /a/.
(iii) Root initial apicals tend to assimilate in place to following apicals. For example, in the pronunciation of diribbindi 'he entered', the apex of the tongue tends to point towards the postalveolar region throughout the articulation of the first two syllables, thus:
['tisip'pundi]. (It has, however, on other occasions been heard pronounced as ['tijip'pundi].) On the other hand, words like dili 'flame, light', tend to be pronounced ['ti.li].

For obvious reasons, the letters $d, n$ and $l$ are used to represent the three contrasting apical consonants in word initial position.

The following consonants occur contrastively root initially: /b, d, th, j, g, $\mathrm{m}, \mathrm{n}, \mathrm{nh}, \mathrm{ny}, \mathrm{ng}, \mathrm{l}, \mathrm{r}, \mathrm{w}$ and $\mathrm{y} /$. The tap /dd/ and the laminal lateral /ly/ do not occur root initially. (This prohibition on initial /dd/ and $/ \mathrm{y} /$ is found in many of the neighbouring languages, including Ungarinyin (Rumsey 1982b:14), Jaru (Tsunoda 1981:37) and Nyikina (Stokes 1982:23).) Only three consonant clusters occur root initially, and they are infrequent both textually and in the lexicon. They are:
(i) /br/ - e.g. /briyandi/ ['bíetændi] 'in exchange, in revenge';
(ii) /bl/ - e.g. /blanbidda/ ['planbira] 'on one's back'; and
(iii) $/ \mathrm{gr} /$ - e.g. /graa/ ['gIa:] 'near, close up'.

As initial consonant clusters are rare both in Gooniyandi and in nearby languages (see e.g. Capell and Coate 1984:10, Rumsey 1982b:14), it might be suggested that, in fact, they do not occur phonologically, and result from phonetic reduction of the vowel of the initial syllable. However, this seems unlikely in view of the fact that Gooniyandi roots normally bear stress on their initial syllables (see section 2.5 below).

Root finally, vowels predominate, though consonants do occur. Except for the lamino-dental nasal, all consonants are attested in this position. (It is, however, possible that $/ \mathrm{mh} /$ does occur in this position - I find it very difficult to identify lamino-dentals and to distinguish them from apico-alveolars. It is also likely that there are more lamino-dental stops word finally than I have been able to identify.)

A fairly large proportion of verbal roots end in consonants (section 2.2.5). There are significantly fewer consonant final roots belonging to other parts-ofspeech. For some nominals vowel final variants alternate with consonant final variants.
(i) There is a set of nominals, including mainly bird names, which are most frequently heard pronounced with a final consonant, but which have occasional variants with final [i]. For example, the word for 'galah' is usually pronounced ['kulin'glin], occasionally ['klin'gulini]. The [i] final versions occur only when the word is free-standing (that is, not followed by a bound morpheme), and then only occasionally. Therefore, it
seems most reasonable to assume that phonologically these words end in consonants, and that the vowel is optionally added by a phonetic rule.
(ii) Twenty or so nominals, all of which are usually found with final $/ \mathrm{i} /$, occur without this vowel when certain bisyllabic stem forming suffixes are added. Some examples are galjini 'fast', galjin.gali 'speedy one'; nyaanyi 'uncle (MB etc)', nyaanybadi 'your uncle'. The most reasonable way of accounting for these alternant forms would seem to be to postulate two distinct phonological forms for each such root. The choice of allomorph would depend on which morpheme is added.
Although the /i/ final variants predominate (and are the ones always found in the isolated root, and before most bound morphemes), they cannot be taken to be the basic forms. This is because it appears to be impossible to specify conditions for the elision of final $/ \mathrm{i} /$, which is not as a rule elided before the above mentioned suffixes -(g)ali 'good at' and -badi 'yours'. On the other hand, the assumption that there is a basic form ending in a consonant, together with a rule of vowel epenthesis - which would insert a vowel in almost all contexts the root occurred in - cannot work because these words cannot be systematically distinguished from words which behave as discussed under (i). Thus it is necessary to recognise allomorphy.
(iii) A fair number of nominals show alternations between final $/ \mathrm{n} /$ and final /ndi/; in one instance only there is an altemation between final /m/ and/rnrdi/. Some examples are:

| /jawandi/ | $\sim$ /jawan/ | (a subsection term) |
| :--- | :--- | :--- |
| /ngoombandi/ | $\sim$ Ingoomban/ | (the name of a mountain) |
| /gooniyandi/ | $\sim$ /gooniyan/ | (name of the language) |
| /jilngirnrdi/ | $\sim$ /jilngirn/ | 'dew' |

The shorter variants occur only when the root stands alone - the long forms occur before all enclitics and suffixes. For example, whilst ngoomban is the most frequently heard, indeed the only variant usually heard, the expected form ngoomban-ja 'at Ngoomban' does not occur; instead, the locative is invariably ngoombandiya. In a similar way the name of the language/people is invariably gooniyandi preceding the ergative postposition -ngga or the comitative -ngaddi. For this reason, it seems most natural to assume that the long variants are the 'basic' or 'underlying' forms, from which the short ones derive by an optional rule of -di or -rdi deletion. This assumption is in agreement with native speakers' intuitions to the effect that the -ndi and -rndi forms are 'full' or 'correct' see footnote 1 on page 1 .
-di deletion applies to only a small subset of words ending in -ndi, and this subset is not characterisable or distinguishable from its complement either formally or semantically; and as remarked above, only one known -rndi final word undergoes deletion of final -rdi. It is therefore necessary to mark with a diacritic those words which may optionally undergo the rule.
It is possible that the $-d i$ in -ndi is a relic of an old gender suffix (Alan Rumsey, pers.comm.). In Ungarinyin, $d i$ is an anaphoric element for $w$-class nominals which include words for languages, stone things and water (compare the list above). When used attributive, di (which is a free word in Ungarinyin) always follows the head noun of the phrase. Furthermore, the majority of Ungarinyin nouns with final $-n$ are of the $w$-class (Rumsey 1982b:37,40,41). Additional evidence suggesting an earlier morpheme boundary within these words is the existence of a number of close cognates in Jaru, which differ only in the absence of the final $-d i$ (and sometimes of final -doo). For example, the subsection called jawandi by the Gooniyandi is invariably jawan in Jaru (Tsunoda 1981:8); ${ }^{2}$ and the term for 'ashes' is kawun in Jaru (Tsunoda 1981:33), but gawoondoo (never gawoon) in Gooniyandi (see also Rumsey 1982b:41). (The form gawoondoo 'ashes' is easily accounted for in terms of vowel harmony.) It has been noticed that the variants with final -n are more frequent in the Yiyili community, which borders on Jaru territory. Indeed, Yiyili people have more contact in the direction of Halls Creek than with the Gooniyandi communities of Fitzroy Crossing. Variants with final -ndi are more frequent in Fitzroy Crossing, where, for example, I have never heard jawan in place of jawandi.

A few root final consonant clusters occur: /l-g, rl-g, rl-ng, dd-r, dd-g, and dd-b/. These occur in verbal roots only; all other roots may end in a single consonant only. In these clusters the first member is a liquid, and the second member a peripheral stop or nasal, $/ \mathrm{b}, \mathrm{g}$, or $\mathrm{ng} /$. There is a single exception, the sequence /dd- r , in which the second member is the apical glide $/ \mathrm{r} /$; this cluster is, however, very rare by comparison with the others.

Intervocalically, all consonant contrasts are maintained (see also Dixon 1980:159). A fair number of intervocalic consonant clusters occur, all of which - with a single exception - have just two members. The exception is the sequence / $\mathrm{rn}-\mathrm{g}-\mathrm{r} /$, which occurs uniquely in the word mirngriya 'dodge (e.g. a spear)'. Because there is just a single example of a single exceptional cluster, it will be ignored in the remainder of this section.

The attested clusters are shown in Table 2-5. Across morpheme boundaries there is a larger range of possibilities which are not indicated on this table (see

[^6]Table 2-5: Intervocalic consonant clusters
First member


Key: 1 one example of cluster only
X cluster attested more than once (usually at least three examples available)
section 2.2.3 below). Roots that are reduplications (of meaningless forms) or which are segmentable into formatives (see section 3.12) show clusters of the type found intermorphemically. For example, there is one instance of the cluster /th-ng/ within a root, a personal name. However, this was not a monomorphemic word, but apparently consisted of the suffix -ngarna 'inhabitant of, dweller of' added to a th-final form (which may or may not be meaningful) see line (2) of Text 3.

Of the 361 possible clusters, only 53 , or $15 \%$ of the total possible, are attested intramorphemically. It is likely that further research will uncover more combinations. There are, however, certain strong tendencies displayed in the clusters encountered so far, and a number of generalisations can be made with a fair degree of confidence.
[1] The only manner pairs that occur are: stop-stop, nasal-nasal, nasal-stop (homorganic and heterorganic), liquid-stop, liquid-nasal and liquid-glide. The manners of articulation can be ranged from least marked to most marked as follows: stops, nasals, glides, liquids (see Figure 2-1, section 2.1.4). All clusters satisfy two conditions: (a) the first consonant may not be less marked than the second; and (b) glides must be the second member of a cluster, liquids the first. (The latter qualification is needed in order to preclude liquid-liquid clusters.)
[2] If the members of the cluster are both apical or both laminal, they must be homorganic. For example, there are no clusters of the type $/ \mathrm{m}-\mathrm{d} /$, or $/ \mathrm{nh}-\mathrm{j} /$. However, both apico-alveolars and apico-postalveolars, as well as laminals, may precede a laminal consonant. For example, joonjoonanajgoo 'pardalote' (a type of bird), gamboornjoowa (a place name), and garnanganyja 'emu'.
[3] In non-homorganic clusters, if the second member is a non-continuant, it must be either peripheral or laminal; if it is a nasal, it must be peripheral. In terms of the markedness of the places of articulation, the second member of the cluster tends to be at least as marked as the first. (There is a single exception, the cluster $/ \mathrm{b}-\mathrm{j} /$.)
[4] If both members of a non-homorganic cluster are peripheral, they must have the same manner of articulation, and the dorso-velar must precede the bilabial.
[5] Examples of the homorganic lateral-stop clusters, $/ 1-\mathrm{d} /$ and $/ \mathrm{ly}-\mathrm{j} /$ are attested, and exemplified in booldoos- 'to burst', and milyjimilyji (a type of paperbark tree). These appear to be fewer in number than the non-homorganic lateral-stop clusters $/ n-j /$ and $/ r 1-j /$. The homorganic $/ r 1-\mathrm{rd} /$ is not attested, and $/ 1-\mathrm{d} /$ is atuested
once only; /ly-th/does not occur either.
The possibilities in first and second place in non-homorganic clusters are tabulated below, in Figure 2-6. It would seem likely that the absence of clusters with initial /th/ is an accidental gap.

Not all of the possibilities predicted by this table actually occur. But over $70 \%$ of them, given the constraints on manner combinations, are attested. It seems reasonable to assume that the gaps are either accidental, or will be filled in with further research. The first and second consonants of root initial and root final clusters are also drawn from the sets marked. They satisfy additional constraints, including the condition that the outermost member must be peripheral (but not $/ \mathrm{m} /$ ) and the innermost member must be an apical continuant (with the single exception of $/ \mathrm{dd}-\mathrm{r} /$, as mentioned previously).

Figure 2-6: First and second members of consonant clusters


A root may have more than one consonant cluster in it. However, it seems that if the clusters are in successive syllables of a non-reduplicated root they may not be both of the same type: both cannot be homorganic nasal-stop clusters, ${ }^{3}$ non-homorganic nasal-stop clusters, stop-stop clusters, nasal-nasal clusters, or

[^7]liquid initial clusters. But combinations of different types are possible, as illustrated in the following examples: winyjiddgi 'top of the back', linybarndi (a type of edible leaf), miljarndi 'fingernail', and blinymaddgi 'gland'. There are a few words in which there are two homorganic nasal-stop clusters, but in these words the clusters are separated by at least one syllable; examples are the subsection terms jambiyindi and nambiyindi.

Each vowel, including the long one, can occur in any syllable of a word. Although there is a definite tendency for vowels of successive syllables in a root to be identical (see section 2.2.5), to my knowledge no root has more than one long /aa/ in it.

### 2.2.2 Morphemes

Morphemes which are not lexical roots (that is, suffixes, enclitics, prefixes, etc.) differ phonotactically from roots. Most, but not all, begin with consonants and end in vowels. An initial consonant may, however, in certain contexts disappear as the result of a sandhi process (see 2.4 and next section). All consonants except /ly, rl, rd, th, and $\mathrm{n} /$ are attested morpheme initially. /dd/ may begin a bound morpheme, but not a root. Two homorganic nasal-stop clusters are attested initially in bound morphemes: /ngg/ and /nyj/. To these may be added $/ \mathrm{mb} /$, depending on the analysis adopted of one morpheme within the classifier complex in the verb (see below). Consonant clusters are rare within bound morphemes, and are limited to homorganic nasal-stop clusters, including /nyj, ngg, and mrd/.

Six classifiers (see section 3.9.3.2.1) are vowel initial. Five of these have initial /a/, the remaining one has initial /i/. Two more have vowel initial allomorphs.

Just a handful of morphemes, all of which are pronominal prefixes, end in a consonant, which must be one of $/ \mathrm{n}$, $\mathrm{ny}, \mathrm{m}$, or $\mathrm{dd} /$.

### 2.2.3 Intermorphemic phoneme sequences

Across morpheme boundaries there occur not only a large number of consonant clusters (considerably more than within morphemes), but also sequences of vowels. However, because of sandhi processes, not all of the logically possible sequences (given the possible initial and final segments of morphemes) actually occur. Moreover, different sequences are permissible at different types of morpheme boundary, across which different sandhi processes operate. For example, /y/ may follow any consonant within the verbal distributional word
(see section 3.1.2), but elsewhere, at other morpheme boundaries, follows only continuants.

Vowel sequences must be either /a-a/ or $/ \mathrm{i}-\mathrm{i} /$; /oo-00/ does not occur. Other sequences, such as $/ \mathrm{i}-\mathrm{a} /$ and $/ 00-\mathrm{i} /$, may exist in 'underlying' representations, but they are changed into the acceptable sequences $/ \mathrm{a}-\mathrm{a} /$ and $/ \mathrm{i}-\mathrm{i} /$ by sandhi rules.

Intermorphemic consonant clusters may have two or three members.
[1] Two member clusters. Two member clusters are numerous. With the exception of $/ \mathrm{nh} /$, all consonants have been attested as first member of some intermorphemic cluster. It is possible to rule out /th/, /ly/ and/dd/ as potential second members, since no known bound morpheme begins with/th/ or /ly/, and the only /dd/ initial bound morphemes are restricted to contexts such that they always follow vowels. Apicals are occasionally found as second members of intermorphemic consonant clusters. Examples are $/ 1 /$, which may follow any final consonant of a verbal root; / $d /$, which follows $/ \mathrm{n} /$ within the classifier complex; and $/ \mathrm{r} /$, which may follow /dd/, also within the classifier complex. (It is likely that following apico-postalveolars $/ 1 /$ assimilates to $/ \mathrm{rl} /$.)

Table 2-6 tabulates the clusters which have been observed at the boundaries between verbal stems and following morphemes; not included in this table are clusters found at boundaries between reduplications of roots. As the table shows, a number of cluster types occur across the boundary between roots and following (non-stem-forming) morphemes that are not found within morphemes; they are: stop-nasal, stop-lateral, stop-glide, nasal-lateral, nasal-glide, glide-nasal, glidelateral, and glide-glide clusters.

Geminate consonants of all manners except for the tap - that is, stops, nasals, laterals and glides - are also found, none of which occur intramorphemically. Geminates contrast with single consonants. Some minimal and near minimal pairs are given below:

| /warangi/ | 'I stood' | /warangngi/ | 'I sat' |
| :--- | :--- | :--- | :--- |
| /naaga/ | 'dress' | hnaagga/ | 'hit right place-wa' |
| /laba/ | 'cockatoo' | /ngabba/ | 'you'll eat it' |
| /ngooloodoo/ | (a vegetable type) | /ngoollooni/ | 'I punched him' |
| /moowa/ | 'he looks' | /moowwadda/ | 'we look' |

Phonetically, geminate stops are realised in the same way as other stopstop clusters. All geminates are phonetically distinct from the corresponding single consonants, involving longer articulation in the case of nasals, stops and laterals. For geminates of these manners, the articulation is initially weak (giving a lenis syllable final consonant), becoming stronger finally (where the

Table 2-6: Two member consonant clusters following verb stems
First member

|  | $b$ | d | $n d$ | $t h$ | i | 8 | $m$ | $n$ | $m$ | $n h$ | ny | ng | $l$ | H | ly | dt | $r$ | $w$ | $y$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $b$ | X | X | X | X | X | X | X | X | X |  | X | X | I | 1 | I | 1 | I | I | I |
| d | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| rd | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | , | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| th | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| j | X | X | X | X | X | X | X | X | X |  | X | X | 1 | 1 | I | 1 | 1 | I | I |
| 2 | X | X | X | X | X | X | X | X | X |  | X | X | I | 1 | 1 | 1 | 1 | I | 1 |
| m | X | X | X | E | X | X | E | E | E |  | X | X | E | E | E | E | E | E | E |
| $n$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| $m$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| $n h$ | X | X | X | E | X | X | X | X | X |  | X | X | X | X | E | X | E | E | E |
| $n \boldsymbol{r}$ | X | X | X | X | X | X | X | X | X |  | X | X | X | X | E | X | X | X | E |
| ng | X | X | X | E | X | X | X | X | X |  | X | X | X | X | E | X | X | X | X |
| 1 | X | X | X | X | X | X | X | X | X |  | X | X | X | X | X | X | X | x | X |
| $n$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| ly | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | $L$ | 1 | $L$ | 1 | 1 | 1 | 1 | 1 |
| d | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | $L$ | $L$ | 1 | 1 | 1 | 1 |
| $r$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| $w$ | 1 | 1 | I | 1 | I | 1 | I | 1 | 1 | 1 | 1 | 1 | X | X | X | X | X | X | X |
| $y$ | X | X | X | E | X | X | E | X | X |  | E | X | X | E | E | X | X | X | E |

Key: X Attested
I Impossible by sandhi rules
/ Impossible: the second consonant does not begin an appropriate morpheme
E Expected, but not attested
syllable initial articulation is fortis). The initial element of the geminate, being always lenis, is prone to considerable phonetic reduction, though it does not completely disappear, at least in the speech I have heard; the geminate always has a distinct phonetic realisation. For example, ngabba 'you'll eat it' has never been heard pronounced as ['pabx], which is the predicted phonetic realisation of (the non-occurring) ngaba. The glides are not phonetically geminate: and only the second one regularly shows up. Thus, moowa 'he looks' and moowwadda 'we look' have the phonetic realisations ['mu., A ] and ['mu.,wara] respectively.

Not all clusters occurring intramorphemically also occur intermorphemically, across the boundary between verbal stems and following morphemes. The notable gap is the absence of liquid-stop clusters, some of which do, however, occur across other morpheme boundaries. Sequences of liquids followed by stops which occur in some underlying morphophonemic representation are reduced by sandhi rules to liquid-glide clusters (see section 2.4.2.3, and examples in that section).

Within verbal stems at root-suffix boundaries, only a very small fraction of the clusters of Table 2-6 are attested, and there are couple more that are unique to this boundary: /ng-w/ and $/ 1-\mathrm{j} /$. (It is likely that $/ \mathrm{j} /$ may follow any continuant in this environment - cf. 2.4.2.1.)

Nominals are rarely consonant final, and consequently very few consonant clusters have been encountered between nominal roots and attached morphemes. No consonant clusters have been found between nominal roots or stems and following enclitics. But between nominals and stem forming suffixes at least the following occur: /n-g/, /g-b/, /ny-b/, and /ng-b/.

A few clusters are found between nominals and postpositions (see section 3.7). $/ \mathrm{nh} /$ may presumably follow any consonant (since it belongs to the same morpheme that follows verbal roots giving the $/ \mathrm{nh} /$ final clusters indicated in Table 2-6), though only a few of the possibilities are actually attested: /j-nh/, 1 $\mathrm{nh} /$ and $/ \mathrm{g}-\mathrm{nh} /$. This is, of course, because nominals are rarely consonant final. It appears that $/ \mathrm{y} /$ may follow any continuant, while $/ \mathrm{j} /$ may follow any noncontinuant (again on the evidence provided by the same morphemes when they follow verbal roots). Attested possibilities are: $/ 1-\mathrm{y} /, / \mathrm{j}-\mathrm{j} /, / \mathrm{n}-\mathrm{j} /, / \mathrm{d}-\mathrm{j} /$ and $/ \mathrm{g}-\mathrm{j} /$. Most of these are found only in nominals borrowed from English.
[2] Three member clusters. Intermorphemic clusters have at most three members. The rule of $/ \mathrm{gi} /$ insertion and the rule of deletion of $/ \mathrm{ng} /$, between a consonant and following /ngg/ (VR7 and VR8 - see section 2.4.2.3), have the effect of preventing four member clusters, as when a root final cluster is
followed by an initial nasal-stop cluster/ngg/ in the finite verb. These two rules also prevent a number of tri-consonantal clusters: a cluster of the type /C-ngg/, where '-' indicates a morpheme boundary, will not occur. For example, \{wardnggiddi\} /wardginggiddi/ 'you (pl) went', and \{bananggadd-nggimi\} /bananggaddgimi/ 'you snatched it'. Their effect is to allow only clusters of the type $L-C_{1}-C_{2}$, where $L$ is a liquid, $C_{1}$ occurs root finally, and $C_{2}$ is any stop, liquid, nasal or /y/ occurring initially in a classifier complex. Examples:

| (goonhthooddg-nggiddi) | $\rightarrow$ /goonhthooddgginggiddi/ 'you (pl) coughed' |  |
| :--- | :--- | :--- |
| (thoorlng-limi) | $\rightarrow$ /thoorlnglimi/ | 'I kicked it' |
| (widdb-bidda) | $\rightarrow$ /widdbbidda/ | 'they threw it' |
| (widdb-nga) | $\rightarrow$ /widdbngal | 'he threw it' |

Not all of the logically possible combinations have actually been observed.
Outside of the VP, the only three member clusters encountered involve the ergative postposition -ngga attached to English borrowings, usually personal names: for example, Dayib-ngga (<English 'Dave') 'by Dave'.

### 2.2.4 Reduplications

Reduplications are either of roots, to form stems, or of meaningless 'formatives' (or, rarely, roots) to form morphologically unanalysable roots - see section 3.12. There is no difference between the two types in terms of phonotactic patterns. Nominal and verbal reduplications differ in a number of ways, including the part of the root reduplicated (see sections 3.12.1.2 and 3.12.3.2) and the sandhi processes that affect consonants at reduplication boundaries (see section 2.4 below). Initial $/ \mathrm{b} / \mathrm{l} / \mathrm{j} /$ and $/ \mathrm{th} /$ (but not $/ \mathrm{g} /$ ) of nominal roots and formatives are frequently lenited $t / \mathrm{w} /$ and $/ \mathrm{y} /$ at reduplication boundaries, when following vowels or continuants. For examples, see 2.4.1.1 below. These processes do not normally affect verbal roots or formatives.

Attested consonant clusters at reduplication boundaries are shown in Table 2-7 (page 82). This is only a partial list; a full investigation remains to be undertaken.

The following observations must be made:
[1] Clusters at reduplication boundaries must be two-member. Where a verbal root with a final liquid-non-continuant cluster is reduplicated, the non-continuant may be deleted. For example, jilg- 'to spot' is reduplicated to jiljilg- 'to spot all over'. (There may be other ways of avoiding three member clusters.)
[2] The second member of a cluster may be any consonant permitted root

Table 2-7: Consonant clusters at reduplication boundaries
First member


Key: X Attested
/ Impossible: the second consonant does not begin a word.
initially, where the apical contrast is neutralised. There are two gaps in the table, for $/ \mathrm{th} /$ and for $/ \mathrm{n} /$; they are no doubt accidental.

It will be noticed that apical stops, nasals and laterals, which cannot be the second member of a consonant cluster within simple (i.e. non-reduplicated) roots, do occur in this position in roots and stems that are reduplications. An example is liblib- 'dance shake a leg', in which lib- appears to be a meaningless formative; another example is doogdoog- 'tap repeatedly', from doog- 'tap'. However, there does seem to be a tendency to avoid apicals as the second member of a cluster, often by omission of the preceding consonant. Examples are laj- '(footprint) lies' and lalbag- 'split', which reduplicate to lalaj- '(footprints) lie about' and lalbalalbag- 'split all over' respectively.
[3] Glides may occur as the first member of a cluster. For example, yaboonabarbar, the name for a particular type of snake said to habitually climb (bar-) in the yaboona tree, and yooddooryooddoor 'cuckoo shrike'. (As far as I know yooddoor- is a meaningless formative.) Within simple roots, glides must be the second member of a cluster.
[4] All consonants except for /nh/ occur root finally; the gaps in the table for $/ t h /, h 1 /$ and $/ w /$ are no doubt accidental and should be filled in when a more complete search has been undertaken. There is a potential example of $/ \mathrm{nh} /$ as first member of a cluster at a reduplication boundary involving a meaningless formative, minhmithi 'chicken hawk', which is probably a reduplication of mith(see [5] below).
[5] Stop-nasal clusters occur, but are often converted to nasal-nasal clusters (see section 2.4.2.1). For example, mird- 'tie up' reduplicates sometimes to mirdmird-, but more often to mirnmird- 'tie up repeatedly'. Regressive nasalisation does not occur at other morpheme boundaries.

### 2.2.5 Statistics

The probability of occurrence of each phoneme in root initial and root final position was calculated. The values are shown in Table 2-7. Initial probabilities are based on the approximately one thousand lexemes in the dictionary mentioned on page 351 above. Probabilities of final consonants were calculated for verbs only. Less than $3 \%$ of non-verbal roots, and about $19 \%$ of all roots in the dictionary end in a consonant; these are primarily names of birds. The figures for verbals are based on an extended corpus of about five hundred verbs. There was no significant difference in distributions of the phonemes between the
extended and the basic corpora. (Frequencies below 0.01 are given to the nearest thousandth, and enclosed in brackets; they are not to be regarded as reliable.)

Table 2-8: Phoneme frequencies


In terms of manner, the initial frequencies are almost identical with the initial frequencies of Jaru consonants (see Tsunoda 1981:41). The main differences from that language are in terms of the localisation features, the frequencies of which are, in Gooniyandi:

|  | Initial | Final |
| :--- | :--- | :--- |
| Peripheral | 0.58 | 0.28 |
| Laminal | 0.26 | 0.19 |
| Apical | 0.16 | 0.31 |

Compared to Jaru, Gooniyandi has relatively more initial apicals, about the same frequency of initial laminals, and relatively fewer initial peripherals (compare Tsunoda 1981:41).
Initial frequencies were calculated separately for the three major parts-of-speech, and were found to differ somewhat. Verbals show fewer initial nasals than do words of other parts-of-speech ( 0.18 as compared to 0.27 ), fewer initial peripherals ( 0.47 as compared to 0.64 ), and more initial apicals ( 0.25 as compared to 0.14 ). These differences were shown to have some significance on the $\chi^{2}$ test. The values of $\Sigma \chi^{2}$ for the associations were, respectively: 5.6, 13.9, and 15.8 , in systems with one degree of freedom. The first corresponds to a probability of about 0.025 that there is no association between the figures; and the second two values correspond to probabilities of less than 0.001 that the figures are not associated. Overall, the difference between initial frequencies in verbals and other parts-of-speech was found to be significant to beyond the 0.001 level. ( $\Sigma \chi^{2}=49$ in a system of 13 degrees of freedom.) That such differences exist is not surprising, in view of the other distinguishing phonological characteristics of verbal roots - see above page 71 and below page 90 . (Leaving verbal roots out of account, the relative frequencies of consonants approach those of Jaru consonants even more closely.)

Initial frequencies were also calculated for all bound closed-class morphemes, some of which are vowel initial.

| $b$ | 0.10 | 0.24 | nyj | 0.01 | $\} 0.05$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| d | 0.01 |  | ngg | 0.04 |  |
| j | 0.08 |  | 1 | 0.02 |  |
| 8 | 0.03 |  | dt | 0.01 |  |
| m | 0.07 | 0.30 | $r$ | 0.01 | \} 0.31 |
| $n$ | 0.02 |  | $w$ | 0.20 |  |
| $m$ | 0.01 |  | $y$ | 0.10 |  |
| ny | 0.03 |  | $i$ | 0.03 |  |
| $n h$ | 0.02 |  | $a$ | 0.08 | 0.12 |
| ng | 0.09 |  | oo | 0.01 |  |

Compared with roots, there are approximately twice as many glides, and half the number of stops. (This is no doubt partly an artefact of the analysis of 2.4 , but also see below.) There is almost exactly the same proportion of peripherals and laminals, but only half as many apicals as in roots.

A text count was also made of initial and final segments over five texts, spoken by three different speakers, and on different topics. These totalled about one thousand lexical items, including roots (about $70 \%$ ) and bound closed class items (see section 3.1.2). The frequencies were as shown in Table 2-9. The final column again gives the frequencies of final consonants in verbals only (only
about $2 \%$ of words from other parts-of-speech had final consonants).
Table 2-9: Textual frequencies of phonemes

|  | Root initial | Root final |
| :---: | :---: | :---: |
| $b$ | 0.05 | 0.05 |
| d | 0.02 | 0.04 |
| $n d$ | 0.29 | 0.17 0.40 |
| th | 0.02 | - 0.17 |
| $j$ | 0.08 | 0.18 |
| 8 | 0.12 | 0.01 |
| m | 0.09 | - |
| $n$ | 0.07 | 0.02 |
| $m$ | (0.006) 0.35 | $0.04\}_{0.18}$ |
| $n h$ | $0.04{ }^{\text {a }}$ | - $\}^{0.18}$ |
| ny | 0.03 | (0.005) |
| $n g$ | 0.10 | 0.12 |
| 1 | 0.06 | 0.01 |
| $r$ | - | - |
| $l y$ | - | (0.005) |
| $d t$ | - | 0.05 |
| $r$ | 0.01 | - |
| $w$ | $0.12\} 0.28$ | (0.005) |
| $y$ | 0.15 | - |
| ng8 | 0.03 | - |
| $a$ |  | 0.11 |
| $i$ |  | 0.07 0.30 |
| oo |  | 0.12 |

(Again, frequencies below 0.01 are given to the nearest one thousandth, and enclosed in brackets.)

In terms of 'place' features the distribution was:

|  | Initial | Final |
| :--- | :--- | :--- |
| Peripherals | 0.52 | 0.17 |
| Laminals | 0.32 | 0.19 |
| Apicals | 0.16 | 0.32 |

By both text and diclionary count initial stops and nasals are quite frequent.
(The frequency of initial stops in the text count would have been considerably higher had I counted the glides 'derived from' stops by sandhi processes as stops.) $/ \mathrm{nh} /$ shows the most striking difference in distribution, being ten times more frequent textually than in the dictionary. This difference can be accounted for by the oblique pronominals nhoowoo 'his, hers, its', and its bound form -nhi 'on him, her, it'.

In the first intervocalic position, single consonants make up $70 \%$ of occurrences in the 1000 word dictionary. Their relative distributions are:

| Manner |  | 'Place' |  |
| :--- | :--- | :--- | :--- |
| Stop | 0.17 | Peripheral | 0.31 |
| Nasal | 0.18 | Laminal | 0.12 |
| Lateral | 0.25 | Apical | 0.57 |
| Tap | 0.15 |  |  |
| Glide | 0.25 |  |  |

Continuants account for $65 \%$ of the medial consonants (as against $25 \%$ initially and $17 \%$ finally in verbals), and apicals a high $57 \%$ ( $16 \%$ initially, $31 \%$ finally); there are surprisingly few stops and nasals.

The three laminals $/ \mathrm{th} /$, /nh/ and $/ \mathrm{ly} /$ all have a very low frequency intervocalically, under $1 \%$ each. Over the two positions - root initial and initial in the second syllable - /nh/ and /hy/ have very marginal frequencies, both being only 0.004 . These frequencies are less than a tenth of the value they would have been had the consonants been randomly distributed. All other consonants are at least twice as frequent as these two.

Of the intervocalic consonant clusters in position following the first vowel, the most frequent are nasal-stop combinations, which are slightly more frequent ( 0.19 ) than plain stops and plain nasals (which account for 0.12 and 0.13 respectively of the intervocalic segments). Relative frequencies of the various types of consonant clusters were calculated over all intervocalic clusters in the dictionary. The results were:

| Nasal-stop | 0.64 |
| :--- | :--- |
| Liquid-non-liquid | 0.28 |
| Stop-stop | 0.04 |
| Nasal-nasal | 0.03 |

Somewhat over half of all of these clusters are homorganic: homorganic nasalstop clusters make up for $55 \%$ of all clusters, and $85 \%$ of nasal-stop clusters. Relative frequencies of these nasal-stop clusters were as follows:
$\left.\left.\left.\begin{array}{cc}m b & 0.20 \\ n g g & 0.28\end{array}\right\} 0.49 \quad \begin{array}{lll}n d & 0.15 \\ & n d & 0.22\end{array}\right\} \begin{array}{lll} & n h t h & 0.02 \\ & n y j & 0.12\end{array}\right\} 0.13$

Word finally the only clusters are of liquids and non-continuants. These account for only 0.03 of final segments in verbal roots.

The probabilities of the vowels in the first syllable of roots were:

$$
\begin{array}{cccccccc}
a & 0.45 ; & a & 0.02 ; & i & 0.30 ; & o o & 0.22
\end{array}
$$

The same relative distributions were found in second syllables. In bound morphemes the frequency of $/ \mathrm{i} /$ is somewhat higher, and of $/ 00 /$, somewhat lower. However, the vowels are distributed quite differently root finally. Their relative frequencies in this position are:
a 0.
(0.24)
as 0.0
i 0.4
6 (0.55);
oo 0.20
(0.14)
where the figures in brackets are for bound morphemes. In this position /i/ appears to be the unmarked vowel.

Textual counts also showed an overall predominance of $/ \mathrm{i} /$, and a particularly high frequency of this vowel word finally.

|  | Overall | Initially | Finally |
| :--- | :--- | :--- | :--- |
| $a$ | 0.40 | 0.40 | 0.34 |
| $a$ | $(0.004)$ | $(0.001)$ | - |
| $i$ | 0.43 | 0.39 | 0.52 |
| $o o$ | 0.17 | 0.20 | 0.14 |

Vowels are not distributed randomly over the syllables of a word. There is a very strong tendency for vowels in adjacent syllables to be the same, and almost as strong a tendency for the vowel of the final syllable of a root to be identical with the vowel in the initial syllable. Calculations showed that there is a probability of 0.6 that the second vowel will be identical with the first vowel, and a probability of 0.54 that the final vowel will be identical with the first. These probabilities are considerably above the value of 0.33 they would have had had they been distributed randomly. Table $2-10$ compares the observed frequencies of occurrence of vowel pairs from the first and second, and the first and final syllables of roots, with the frequencies that would be expected had there been no association between the vowels. (For example, there are only 0.6 as many words with /a/ in the first syllable and /oo/ in the second syllable, as would be expected from the independent frequencies of $/ a /$ in the first syllable and $/ 00 /$ in the second syllable.) The table shows that in each case there is a positive
association between identical vowels in both syllables, whereas the association in negative (or zero in one instance) between different vowels. Furthermore, the association is strongest for the high vowels. There is a very definite trend away from different [+high] vowels in first and second, and first and final syllables.

Table 2-10: Comparison of observed frequencies of vowel pairs from first, second and final syllables with expected frequencies

|  | Second vowel |  |  | Final vowel |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Initial vowel | $a$ | $i$ | $0 o$ |  | $a$ | $i$ |
| 00 |  |  |  |  |  |  |
| $a$ | 1.3 | 0.8 | 0.6 | 1.3 | 1.0 | 0.7 |
| $i$ | 0.9 | 1.9 | 0.1 | 0.7 | 1.6 | 0.4 |
| $o o$ | 0.6 | 0.3 | 3.0 |  | 0.9 | 0.4 |

The association is shown to be significant on the $\chi^{2}$ test. For the vowels of the first and second syllable, $\Sigma \chi^{2}$ is approximately 360 , and for vowels of the first and final syllable $\Sigma \chi^{2}$ is approximately 245 , in systems of four degrees of freedom. Both of these values correspond to chances of well above 0.999999 that the vowels are associated.

### 2.2.6 Markedness and phonotactics

Statistics presented in the preceding section show that relative frequencies of phonemes vary considerably depending on structural place within morphemes. There are a number of regularities which lend support to the feature description of 2.1.4, and the markedness values assigned there.
[1] Word initially, and syllable initially following consonants, the more marked consonants in terms of the primary localisation features [ $\pm$ peripheral] and [ $\pm$ laminal] are the most frequent. Intervocalically and syllable finally, the less marked consonants in terms of these two features predominate (cf. Dixon 1980:188). In each case the relative frequencies reflect the 'system' of Figure 2-2, rather than an absolute markedness value for each consonant separately. Thus, peripherals are more frequent than laminals intervocalically, but less frequent than non-peripherals as a whole. Secondary localisation features are not so distributed.
[2] Word initially and syllable initially following consonants, less marked consonants in terms of the manner features predominate. Intervocalically, consonants that are more marked in terms of these features predominate. Again
relative frequencies reflect the 'system' of Figure 2-1. Syllable finally, in word medial syllables, the same tendencies as for intervocalic consonants obtain, except that glides do not occur. In root final syllables things are not so clear, as the data on page 84 shows.

### 2.3 Syllabic structure of words and morphemes <br> 2.3.1 Simple roots

All roots, and most morphemes, consist of a whole number of syllables. Simple roots - that is, roots that cannot be analysed into formatives (see section 3.12 below) - consist of between one and six syllables. The majority have between two and four syllables: these comprise $90 \%$ of the thousand item dictionary. Relative frequencies of one to six syllable roots are shown in Table 2-11. As this tabulation demonstrates, verbal roots have consistently fewer syllables than do other roots.

Table 2-11: Frequencies of words of n syllables

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| Number of syllables | Verbal roots | Non-verbal roots | Total |
| 1 | 0.30 | 0.01 | 0.08 |
| 2 | 0.58 | 0.29 | 0.35 |
| 3 | 0.09 | 0.47 | 0.39 |
| 4 | 0.03 | 0.20 | 0.16 |
| 5 | - | 0.03 | 0.02 |
| 6 | - | $(0.001)$ | $(0.001)$ |

[1] Monosyllabic roots. With the exception of interjections and sound effects (see sections 3.10 and 3.11), all monosyllabic roots have the syllable structures $\mathrm{C}(\mathrm{C}) a a$ or $\operatorname{CVC}(\mathrm{C})$, where V is a short vowel. That is, all monosyllabic roots consist of two morae (see section 2.5 below).

There are very few monosyllables of the form Caa or CCaa. The following is a complete list of known examples: baa- 'call out', daa- 'give' (rare), yaa 'which one, what-cha-ma-call-it' (in some idiolects), maa 'meat', ngaa- 'mouth open', graa 'close up, near', and jaa- 'lie about (of water)'.

Verbals comprise nearly all of the CVC(C) monosyllables - the only exception I am aware of being the allomorph nyaany of nyaanyi 'uncle (MB etc.)' (see 2.2 .1 above). Some examples are gaj- 'cut', ward- 'go', barn- 'return', yarlg- 'glance back', and widdb- 'throw'. Monosyllabic verbal roots number
around one hundred or so, and, if interjections are also included in the count, there are considerably more than a hundred monosyllabic monomorphemic words —cf. Dixon (1980:167).
[2] Polysyllabic roots. In polysyllabic roots it seems reasonable to assign syllable boundaries so as to fall immediately before a word medial consonant that is followed by a vowel. This means that the syllable boundary will fall between a vowel and a following intervocalic consonant, and between the two consonants of a non-final consonant cluster. ${ }^{4}$ Using a dot to indicate syllable boundaries,

| /baga/ | $\rightarrow$ | /ba.ga/ | 'burr' |
| :--- | :--- | :--- | :--- |
| /ngaaddi/ | $\rightarrow$ | hgaa.ddi/ | 'stone' |
| fbalga/ | $\rightarrow$ | /bal.ga/ | 'bream' |
| /balngarna/ | $\rightarrow$ | /bal.nga.rna/ | 'outside' |

(It should of course also be assumed that syllable boundaries occur root initially and finally. However, I will not normally mark these.)

According to the above principle, syllables of the following shapes are exemplified in the corpus: CV, CVC, CCV and CVCC. The last two of these are restricted respectively to root initial, and to verbal root final position. It is for this reason, together with the fact that these are different sets of consonant clusters (to those found word medially), that consonant clusters word medially are assumed to be separated by a syllable boundary. There are different possibilities for the Cs of the first two types of syllable, depending on the position of the syllable within a word, and, if it is a medial syllable, on the final segment of the preceding syllable (see previous section).

It is necessary to distinguish between phonetic and phonological syllables. Phonetically, the glides $/ \mathrm{w} /$ and $/ \mathrm{y} /$ fuse with a preceding /a/ to form the diphthongs [au] and [ai] respectively (transcribed very broadly - for details, see above pages $66-68$ ), and with the high vowels $/ 00 /$ and $/ \mathrm{i} /$ to give the half long and close [ u. ] and [i.] respectively. This does not, however, happen for $/ \mathrm{iw} /$ or /ooy/, which are not realised by [ $\omega$ ] or [ $\omega$ ] (respectively). This indicates that a phonetic syllable boundary may follow an intervocalic/w/ or $/ \mathrm{y} /$ - as in /maya/ 'hard, energetically', pronounced ['mai.A]. And, as already mentioned,

[^8]the sequences /Coowoo/ and /Ciyi/ may be realised monosyllabically as consonant followed by long vowel. Phonologically, however, the /w/ and /y/ open the second syllable. This is clear from the phonotactic restriction on final glides in word medial syllables (see section 2.2.1).

The rule of syllable boundary placement will insert a boundary between the two members of a homorganic nasal-stop cluster; for example, barndanyi 'old woman' would be syllabified /barn.rda.nyi/. There are certain difficulties with this placement of the syllable boundary. Firstly, three stop consonants, namely /d, rd, and th/, occur ONLY following a homorganic nasal (or lateral, in one instance), and may follow no other consonant that may end a medial syllable. These restrictions would be exceptional and unpredictable under the assumption that the consonants belong to separate syllables. Secondly, the long vowel/aa/ occurs in CV syllables (in any position in the word), but does not appear to occur before consonant clusters other than homorganic nasal-stop clusters. An example is baarndi 'spider'. Thirdly, the rules of stress placement given in section 2.5 will give incorrect results if the nasal is assigned to the preceding syllable, and it will not be possible to formulate rules of stress placement of comparable simplicity. These difficulties may be overcome by assuming that the syllable boundary precedes the nasal. This finds further support in the fact that (as mentioned above - see also next section) bound morphemes may have these, but no other, clusters initially. It also allows the following generalisation to be made: the long vowel/aa/occurs only in open syllables.
The frequency of homorganic nasal-stop clusters intervocalically - they are at least as frequent as either nasals or stops taken separately (see page 87) - is also suggestive that phonologically it may be more appropriate to regard them as prenasalised stops, which, like /dd/and /y/do not occur word initially, rather than as clusters. On the other hand, the fact that the nasal dissimilation rule (rule R6) treats homorganic and non-homorganic nasal stop clusters in the same way, as the conditioning environment for dissimilation, lends support for a cluster analysis. I will not weigh up the pros and cons of these alternative analyses here (cf. Capell \& Coate 1984:17).

Syllable shapes in roots are now: $\mathrm{CV}(:), \mathrm{CV}(\mathrm{C}), \mathrm{CCV}$ and CVCC , where V is a short vowel, and C is a consonant or homorganic nasal-stop sequence, provided that the syllable is not-initial. I am aware of no case in which a word has an initial or final syllable with a consonant cluster and a long vowel.

### 2.3.2 Non-root morphemes

With the exception of some morphemes that make up the classifier complex in the VP (see section 3.9.3.2), all non-root morphemes may be assumed to
consist of between one and four whole syllables (although sandhi processes may affect them). Most consist of only one or two syllables; trisyllabics are few, and all but one are encliticised forms of (trisyllabic) free words. Only one, the suffix -waddawadda 'denizens of, has four syllables; this is evidently the reduplication of a meaningless form wadda.

Syllables are of the types: CV , where the possibilities for C are as for root medial CV syllables (although not all possibilities actually occur); CCV, where the cluster is homorganic nasal-stop; and CVC, where again the possibilities for the Cs are as in word medial/final syllables. CVC syllables occur only in monosyllabic morphemes.

The remaining morphemes (and allomorphs) are non-syllabic, with forms: $\mathrm{V}, \mathrm{VC}, \mathrm{VCV}$, and CC.

### 2.3.3 Polymorphemic words

The structure of most polymorphemic words (other than reduplications) is clearly agglutinative, and their syllabic structure is the same whether assigned independently to the constituent morphemes or to the word as a whole. This would not, however, have been the case had it been decided that homorganic nasal-stop clusters should be divided between the two syllables they bound. In the case of trisyllabic consonant clusters found at cerain morpheme boundaries, the rule of syllable placement (preceding a consonant that precedes a vowel) will put the boundary before the final consonant, again the same place as it would occur if the individual morphemes were independenty divided into syllables.

There is, however, a small residue of cases in which boundaries are assigned differently depending on whether the individual constituents or the whole word is syllabified.
[1] The classifier complex (see section 3.9.3.2), which is grammatically a word, consists entirely of non-root morphemes, a number of which have the irregular vowel initial structures described above. Through the operation of sandhi rules, and the way the constituent morphemes are distributed, the resulting word tums out to be syllabically regular - that is, it consists only of syllables of the form $\mathrm{CV}(\mathrm{C})$ (see examples in section 3.9.3.2 below) - at some level of morphophonemic representation.

However, under certain conditions, an initial /w/may be lost (see section 2.4.2.3.1). Where the preceding consonant is a continuant, phonetically the continuant still closes the preceding syllable (it has the same characteristics as if it were followed by a consonant - it is, for instance, lenis), at least in the
examples I have elicited. For example,

$$
\begin{aligned}
\text { \{bayal-wiri\} } & \rightarrow \text { /bayaliri/ 'he swims' } \\
& \rightarrow \text { ['paıælıut] (I have not heard ['patæ,lunt].) }
\end{aligned}
$$

In this case, the phonetic realisation shows that phonologically the syllable boundary must follow the consonant (ba.yal.i.ri/), as would also be true under the assumption that the verbal root and the classifier complex are independently syllabified.

When /w/ is lost intervocalically, the result is usually a phonetic long vowel. For example, \{mila-wila\} 'I see him', phonemically /milaala/, is pronounced [rm'la:la]. There seems to be no harm in assuming that phonemically there is a syllable boundary between the two /a/vowels, giving boundaries /mi.la.a.la/ in the above example (see also page 69 above, and page 128 below). Under this assumption the realisation as a long vowel and stress placement may be accounted for in a similar way as the phonetic realisations of /i'yi/ and /00'woo/ sequences - that is, ['(C)i:] and ['(C)oo:] respectively (cf. 2.1.6.1 and 2.1.6.2). It is therefore necessary to recognise syllables of the type V and VC, where V is either $i$ or $a$.

In words such as milaala 'I see him', speakers appear to perceive a morpheme boundary within the long /a:/. They use a variety of ways to indicate it, including the insertion of a glottal stop [?], diphthongisation, and shifting of stress from [,la:] to [la, 1 ], in the example above. Note however that these modifications are restricted to elicitation sessions, where their purpose is to indicate the existence of the morpheme boundary to the linguist. The long/aa/ phoneme is never modified in these ways (see above page 69).
[2] Elsewhere, there are a few more bound morphemes with initial /w/ which disappears under phonological conditions identical with the above. For example,

$$
\begin{aligned}
\text { \{yoowooloo-wanya }\} & \rightarrow \text { /yoowoolaanya/ 'other men' } \\
& \rightarrow \text { ['jua'la:лe] }
\end{aligned}
$$

As before, I will assume that a syllable boundary separates the two /a/vowels phonemically, each morpheme being assigned syllable boundarics separatcly, and that the two syllables are fused into one phonetically.

### 2.4 Sandhi

A considerable number of processes of sandhi modification affect the phonological shape of morphemes when they are bound together in a single distributional unit (see below section 3.1.2). But external sandhi - i.c. between
morphemes which are not distributionally bound to one another - does not occur. The aim of this section is to account for the alternant shapes of these morphemes by setting up, where possible, single morphophonemic representations for each, and by developing a set of sandhi rules which derive the alternants in the appropriate environments.

The sandhi processes employed are of four main types: assimilation, fusion, vowel harmony and epenthesis. These processes occur in certain well defined morphological environments; their effects are largely dependent on the phonological environment, although sometimes they are also governed by morphological factors (see e.g. rule CCR8 below). There are certain differences between the sandhi processes operating within the verb phrase (see section 3.9 below) and those operating elsewhere. For this reason, the discussion is divided into two sections, the first of which is concerned with non-verbal sandhi, the second with verbal sandhi.

This account of sandhi depends on the morphological analysis presented in chapter 3, and extensive reference will be made to that chapter.

For convenience, I will normally give - both in this section and the next chapter - examples consisting of a single word only. In the absence of context it is impossible to provide good English glosses, so where possible I gloss by category, rather than by sense. For example, verb phrases in the present tense will be translated by the English simple present, even though the ranges of senses do not coincide. Chapter 6 will provide a discussion of the meanings of the categories.

### 2.4.1 Non-verbal sandhi

Relatively few sandhi processes operate outside of the VP, and all but one are processes of assimilation, usually in terms of the manner of articulation. Depending on the morphological environment, two different sets of sandhi processes apply: one set applies in the context of stem formation, the other applies elsewhere. For the moment I will call the former 'stem internal' and the latter 'stem external'.

### 2.4.1.1 Stem internal sandhi

In the formation of nominal stems the following three consonant alternations occur: $/ b \sim w /, / j \sim y /$ and $/$ th $\sim y /$. These alternations are taken to be instances of underlying $/ \mathrm{b}, \mathrm{j}$ and th/, on the basis of evidence provided by reduplicated forms:

| boolgawoolga | 'old men' | $<$ | boolga |
| :--- | :--- | :--- | :--- |
| joolgooyoolgoo | 'round things' $<$ | joolgoo | 'round' |
| thigiyigi | 'litule pieces' $<$ | thigi | 'short' |

(It should be noted that not all initial [+laminal] and [labial] stops undergo these lenitions, and it may be necessary to mark those that do with a diacritic (see page 100 below).) There is one stem forming suffix showing the $/ \mathrm{b} \sim \mathrm{w} /$ alternation, but none showing the other alternations, and consequently the one showing the alternation may be seen as having initial /b/ underlyingly: ngaddanybadi 'your mother', ngaboowadi 'your father'.

The rules may be written as follows:

$$
\begin{aligned}
& \mathrm{R} 1 \quad b \rightarrow w / \$ \mathrm{YV}-\quad \mathrm{VZ} \$ \\
& \mathrm{R} 2 j \rightarrow y / \$ \mathrm{YV}-\quad \mathrm{VZ} \$ \\
& \mathrm{R} 3 \quad t h \rightarrow y / \$ \mathrm{YV}-\quad \mathrm{VZ} \$
\end{aligned}
$$

where $\$$ indicates a nominal stem boundary, $Y$ and $Z$ indicate remaining material irrelevant to the operation of the rule, and the dash indicates the morpheme boundary. Clearly these rules can be collapsed to something like


It will be assumed that $\left[\begin{array}{l}+ \text { continuant } \\ + \text { laminal }\end{array}\right]$ is sufficient to characterise /y/. More generally, it will be assumed that if a feature is not specified in a rule, and is not implied by other feature values chosen, the unmarked value is chosen. In this case, [ $\pm$ liquid] is not specified on the right, although it is a subcategory of [+continuant]; since the unmarked value is assumed, the features specify $/ \mathrm{y} /$, not /ly/.

### 2.4.1.2 Stem external sandhi

### 2.4.1.2.1 Consonant assimilation

Distinct processes of stem external sandhi must be recognised because /b/and /j/ fail to lenite outside of stem boundaries, while still within the boundaries of distributional words (see section 3.1.2):

| \{nganyi -jangi\} <br> I SEM |  |
| :--- | :--- | :--- |
| \{balyoowa -binyi <br> behind PER | $\rightarrow$ /balyoowabinyi/ 'from behind' |

External boundaries exist between postpositions and enclitics (see 3.7 and 3.8), and the words to which they are attached. The main alternation is $/ \mathrm{j} \sim \mathrm{y} /$, which occurs in seven of the twelve postpositions. Since (as mentioned above) /j/ does not lenite in this position, this can be accounted for as a hardening of [ $y$ 〕 in specifiable environments. A rule can be written as follows:

$$
\mathrm{R} 5 \mathrm{y} \rightarrow j \quad / \# \mathrm{X}\left[\begin{array}{l}
\text { consonantal } \\
\text {-continuant }
\end{array}\right]-\ldots \mathrm{Y} \#
$$

where \# indicates the boundary of a distributional word which is not at the same time a stem. For example,

$$
\begin{array}{llll}
\text { \{warlibiddi-ya) } & \rightarrow \text { /warlibiddiya/ (river-LOC) } & \text { 'at the river' } \\
\text { \{babligaj-ya) } & \rightarrow \text { /babligajja/ } & \text { (pub-LOC) } & \text { 'at the pub' }
\end{array}
$$

See also examples under 3.7 below.
Another alternation, $/ \mathrm{g} \sim \mathrm{w} /$, is attested only for one of the two $w$-initial postpositions (and for neither of the two $w$-initial enclitics). It is suggested that this is best accounted for as a strengthening of $w$. My reasons are the following: (i) the $/ \mathrm{j} \sim \mathrm{y} /$ alternation was accounted for by a rule of fortition, and by analogy, we might also expect a rule of fortition to account for the $/ \mathrm{g} \sim \mathrm{w} /$ alternation at the same boundary type; (ii) $g$ is unlikely to lenite in this context given that it does not lenite in stem formation; and (iii) under the assumption that there is a rule of fortition at work, no new rule is needed, whereas under the assumption that the process is one of lenition, an additional rule must be added to the set of page 96. The postposition undergoing this strengthening is the allomorph -woo of the dative postposition, which occurs with verbal roots. Rule VR6 (see below page 111) accounts for the alternants -woo and -goo.

It seems that we may assume that VR6 applies within the boundaries of all distributional units, not only verbals. In the environments in which the $w$-initial postpositions and enclitics have been encountered they behave as VR6 predicts, assuming that the disyllabics have initial stress. However, these $w$-initial forms have been encountered only following vowels, and it is not known whether the $\{\mathrm{w}\}$ strengthens to $/ \mathrm{g} /$ following non-continuants. (The Jaru cognate of one of them, -winyja 'for lack of, -wunyja in Jaru, does show the $/ \mathrm{w} \sim \mathrm{g} /$ alternation
— see Tsunoda 1981:226).
Admittedly the evidence for a fortition rule as an explanation of the $/ \mathrm{g} \sim \mathrm{w} /$ alternation is rather weaker than the evidence for a fortition rule in the case of the $/ \mathrm{j} \sim \mathrm{y} /$ alternation. As Patrick McConvell has pointed out to me (pers.comm.), evidence from nearby languages may be relevant, given the multilingual environment. This suggests that the dative may be underlyingly -goo rather than woo (the former is a pan-Australian dative marker). However, this evidence seems to me no stronger than my evidence for a fortition rule, and since my assumption does not require writing a new rule, I adopt the latter assumption.

### 2.4.1.2.2 Consonant dissimilation

Like many languages to the east of it, Gooniyandi has a rule of nasal dissimilation (see McConvell forthcoming). In Gooniyandi, the dissimilation rule deletes the nasal in a homorganic nasal-stop cluster when it immediately follows (i.e. is separated by a single vowel only) any nasal-stop cluster. This rule applies only to the ergative postposition -ngga (no others have initial nasalstop clusters). Examples:

| (goomboo-ngga) | $\rightarrow$ /goombooga/ (woman-ERG) 'by the woman' |
| :--- | :--- |
| (ngoomdoo-ngga) $\rightarrow$ /ngoomdooga/ (someone-ERG) 'by someone' |  |

This rule applies only when the two nasal-stop clusters occur in successive syllables. Thus it does not apply in words such as gambayingga 'by the boy', nor can it apply to the cluster of the postposition -winyja DEP, which will always be separated from any earlier cluster by an intervening syllable.

The rule may be formulated in very general terms as follows:
R6 $\left[\begin{array}{l}\text { consonantal } \\ - \text { continuant } \\ \text { +nasal }\end{array}\right] \rightarrow \emptyset / \# \mathrm{X}\left[\begin{array}{ll}\text { consonantal } & \text { consonantal } \\ \text {-continuant } & \text {-continuant } \\ \text { +nasal } & \text {-nasal }\end{array}\right]$
V - $\left[\begin{array}{l}\text { consonantal } \\ \text {-continuant } \\ \text {-nasal }\end{array}\right] \mathrm{Y} \#$
(It is in fact unlikely that the boundary type needs to be specified; it is probably an accident of morphology that no stem forming suffixes have initial nasal-stop clusters.) This rule has some phonological motivation: within a single morpheme, homorganic nasal-stop clusters do not follow one another in successive syllables (see section 2.2.1). (However, the rule does preclude sequences of non-homorganic nasal-stop followed in the next syllable by homorganic nasal-stop clusters, which sequences are permissible within
morphemes.)

### 2.4.1.2.3 Vowel assimilation

Two rules affect the quality of vowels, depending on the following segments:


Herc assimilation is regressive, whereas all of the sandhi rules discussed above affecting consonants were progressive. Examples are:
\{langgagooloo-ya\} $\rightarrow$ /langgagooliya/ (hollow:log-LOC) 'in a hollow log'
\{bagi-woo\} $\rightarrow /$ bagoowoo/ (lie-DAT) 'for lying'

### 2.4.1.2.4 Vowel epenthesis

The following rule inserts the unmarked vowel, $i$, between a stem final $n g$ and the initial $n g$ of the ergative postposition:

$$
\mathrm{R} 9 \emptyset \rightarrow i / n g-n g g
$$

For example,
[gaddanggaddang -ngga) $\rightarrow$ /gaddanggaddangingga/ 'by a diver bird' diver:bird ERG

However, few nominals are ng-final, and so this rule is very poorly attested, and it is not certain that it is obligatory.
It should be noted that epenthetic $i$ does not occur when the ergative postposition is attached to $g$-final nominals (all of which are English borrowings). For example, (jag-ngga\} (Jack-ERG) 'by Jack' is always (to the best of my knowledge) pronounced /jagngga/, never /jagingga/.

## 2,4.2 Verbal sandhi

Sandhi processes operating within the verbal distributional word are dependent on both the morphological and the phonological environment. A single segmental (morpho-)phoneme may be affected in quite different ways in the same phonological environment, depending on its morphological context.

The following account is divided into four parts. The first subsection (2.4.2.1) concerns processes applying within verbal stems (see below section 3.12.2); the second subsection (2.4.2.2) deals with sandhi processes operating within the classifier complex (CC) (described below in section 3.9.3.2); thirdly,
subsection 2.4.2.3 describes the processes that apply outside of the boundaries of these two grammatical units (the verbal stem and the CC), but still within a single distributional word; and finally, subsection 2.4.2.4 deals with the ordering of the rules. For the want of a better term, the third group of processes will be referred to by the term "external sandhi": it is external to the grammatical words (see section 3.1.2) constituting the verb, even though it remains within the distributional word.

### 2.4.2.1 Stem internal sandhi

Of the consonantal alternations found in the formation of nominal stems, the only one which also occurs in verbal stem formation is the alternation $/ \mathrm{b} \sim \mathrm{w} /$. This occurs with the two stem forming suffixes $/$-bi/ $\sim /$-wi/ IT (iterative), and /-ban/ ~/-wan/ CTV (continuative). Compare:
/wilaj -ban -giri/ 'it goes around and around'
around CTV it:goes
/dalyadd -wa -ngiri/ 'he slips along'
slip:over CTV he:gocs
The two morphemes could be written morphophonemically with initial $\mathrm{h} /$, with a slightly modified version of R 1 , as follows:

$$
\text { R1' } b \rightarrow w / \$ \mathrm{X}\left\{\begin{array}{l}
{\left[\begin{array}{l}
\text { vocalic }] \\
{\left[\begin{array}{l}
\text { consonantal } \\
+ \text { continuant }
\end{array}\right]}
\end{array}\right\}-\quad \mathrm{Z} \$ 1}
\end{array}\right.
$$

Unfortunately, however, this rule appears to be of limited productivity in verbal stems. It does not appear to apply in many reduplications: for example, bindilbindil- 'to shower out (of sparks)', balybaly- 'to pat flat (e.g. dough)' (sec 3.12.2.2 below). Perhaps the casiest way of handling the two instances of $/ \mathrm{b} \sim$ $\mathrm{w} /$ within this wider context is to assume the morphemes have initial /b/ and to mark them with a diacritic indicating that R1' applies. The other alternations, namely $/ \mathrm{j}$, th $\sim \mathrm{y} /$ do not occur within the boundaries of the verbal stem. For example, in bala-ji-la 'I sent them all over the place', the iterative $-j i$ IT does not lenite.

The only other process of sandhi modification operating within the verbal stem is a rule of regressive nasal assimilation, which nasalises a [-continuant] when it precedes a nasal:

$$
\text { VR1 }\left[\begin{array}{l}
\text {-nasal } \\
\text { consonantal } \\
\text {-continuant }
\end{array}\right] \rightarrow[+ \text { nasal }] / \$ \mathrm{X} \longrightarrow-\left[\begin{array}{l}
\text { +nasal } \\
\text { consonantal }
\end{array}\right] \mathrm{Z} \$
$$

Examples:
[mird
-mird
tie
tie
tie
expert $\rightarrow$ /mirnmirdgali/ 'policeman'

Although it is not attested for [+peripheral] consonants, this rule is stated in maximally general terms, since it would appear to be motivated by the phonotactic restriction on stop-nasal clusters within morphemes.

VR1 appears to be optional:
(mad -mad -nga) $\rightarrow$ /madmadnga/ or /manmadnga/ 'he poked around' poke poke he:did
And sometimes /mirdmird-/ 'tie repeatedly' and /majmaj-/ 'pat repeatedly' are heard instead of /mirnmird-/ and /manymaj-/ respectively.

### 2.4.2.2 CC internal sandhi

A considerable number of sandhi processes operate within the boundaries of the CC word, the net result of which obscures the morphological construction and segmentation of the forms. The morphemic segmentation I assume from 3.9 is not the only one possible, and so neither are the morphophonological rules proposed in this section. It is convenient to use a special symbol, + , to indicate the morpheme boundaries within the CC , to save complications in the formulation of environments of application of rules, and also as a reminder that the boundaries themselves are not as uncontentious as most morpheme boundaries. In cases where the processes do not strictly apply across morpheme boundaries, I will use $\$_{\mathrm{cc}}$ to indicate the boundary of the CC.

### 2.4.2.2.1 Consonant alternations

### 2.4.2.2.1.1 Assimilation

Consonant assimilations in the CC affect apicals only, and are both progressive (i.e. they assimilate to a preceding segment) and regressive (i.e. assimilating to a following segment). Both may apply in a single sequence. The rules are:

$$
\text { CCR1 } d d \rightarrow n / \_+m
$$

For example,
\{ngarag -bidd $\quad+m i\} \rightarrow$ /ngaragbinmi/ 'they made it'
make (3pl)N +MI

$$
\text { CCR2 } d \rightarrow j / n y+
$$

For example,
(ngang -nginy $\quad+$ di $\rightarrow$ /ngangnginyji/ 'I gave it to you'
give (1sg)N/(2sg)A +DI


CCR4 $n \rightarrow r n /\left[\begin{array}{c}\mathrm{V} \\ \text { +retroflex }\end{array}\right]$
CCR3 has the effect of assimilating /r/in place and manner to a preceding consonant ( $/ \mathrm{n} /$ is in fact the only consonant $/ \mathrm{r} /$ follows within the CC ). I have marked the feature of [+retroflex] on the following vowel since it does show up in one circumstance, namely the one indicated in the environment of CCR4: that is, when it can progressively 'attach' to a following consonant, provided that it is an apical. For example,

```
(gard -ngin +ri +bini) 'they hit me'
hit (1sg)A \(+(3 \mathrm{pl}) \mathrm{N}+\mathrm{BINI}\)
    \(\rightarrow\) \{gardngin+rooni\} [by CCR9 below]
    \(\rightarrow\) [gardngind \(\left[\begin{array}{c}\infty \\ \text { +retroflex }\end{array}\right]\) ni)
    \(\rightarrow\) /gardngoondoomi/
```

If the following consonant is not an apical, the feature [+retroflex] is inapplicable to it, and since it is non-distinctive for vowels also, the feature is lost. For example,

$$
\begin{array}{ccc}
\{\text { jangi } & \text {-ngin } & +\mathrm{ri} \\
\text { answer } & (1 \mathrm{sg}) \mathrm{A} & +(3 \mathrm{pl}) \mathrm{N}
\end{array}+\quad \text { +MI } \quad \text { they answered me' }
$$

### 2.4.2.2.1.2 Fusion and syncope

There are three rules that have the effect of either fusing consonants or eliding them (one could be treated in either way). These rules affect very few CC forms.

CCR5 $\quad d \rightarrow$ /[vocalic] + $\qquad$ [vocalic]

$$
\text { CCR6 } \quad d d+d \rightarrow d
$$

CCR5 and CCR6, like CCR2 affect the initial \{d\} of the classifier +DI only (see section 3.9.3.2.1); their effect is to preserve it only when it is 'supported by' a consonant. Examples are:

```
{ngang -li +di} -> {ngang-li+i} 'I gave it to him'
give (1sg)N +DI
                                    -> /ngangli/ [by CCR14]
[ngang -bidd +di] }->\mathrm{ /ngangbidi/ 'they gave it to him'
give (3pl)N +DI
```

Clearly CCR6 must follow CCR5.

$$
\text { CCR7 } \quad d d+b \rightarrow r
$$

## Examples:

```
\{gard -jidd +bini\} \(\rightarrow\) /gardjirini/ 'we hit him'
hit (1R)N +BINI
\{ngang -nggidd +bidd +di\} 'you (pl) gave it to them'
give \(\quad(2 \mathrm{pl}) \mathrm{N}+(3 \mathrm{pl}) \mathrm{A}+\mathrm{DI}\)
    \(\rightarrow\) \{ngang-nggiridi]
    \(\rightarrow\) /ngangginggiridi/ [by rule VR7']
```


### 2.4.2.2.1.3 Prenasalisation

The palatal stop $\{\mathrm{j}\}$ is prenasalised in the second person singular when it is preceded by a vowel in the CC :

```
\{ngab -wi \(+j i \quad+a\} \rightarrow\) (ngab-winyja) 'you eat it'
eat PRES \(+(2 \mathrm{sg}) \mathrm{N}+\mathrm{A}\)
    \(\rightarrow\) /ngabginyja/
```

This segment is not prenasalised elsewhere - e.g. it is not prenasalised in the first person plural prefixes jidd- and jadd-. The rule might be tentatively formulated as follows:


It is tempting to also seek an explanation for other second person forms in
terms of prenasalisation. The second person plural has an initial/ngg/, which is also found in an allomorph of the second person singular. This may well be a prenasalisation of the initial segment of the second person plural form gidi 'you plural'. Moreover, prenasalisation might explain the otherwise exceptional second person singular accusative form ngim-, which occurs only in combination with a third person plural nominative pronominal form.

$$
\begin{array}{clll}
\text { \{mila } & -n g i m & + \text { bidd } & +\mathrm{a}\} \\
\text { see } & (2 \mathrm{sg}) \mathrm{A} & +(3 \mathrm{pl}) \mathrm{N}+\mathrm{A}
\end{array}
$$

A hypothetical derivation for -ngimbidd + might go as follows. Let us assume that the regular allomorphs $-n g g i+$ and $-b i d d+$ of ( 2 sg )A and ( 3 pl )N respectively are chosen: this gives the form -nggi+bidd + . Then, if a prenasalisation rule like CCR8 were to apply to the $\{\mathrm{b}\}$, -nggimbidd + would be derived. Now a dissimilation rule may be applied to eliminate the succession of two prenasalised stops within a single word (in the manner of R7, except that it operates in the opposite direction, backwards instead of forwards). Then ngimbidd+ would result.

Although derivations such as these appear to be reasonable historical sources for the second person forms, they are not synchronically useful. They do not provide a more general description than does the plain statement of allomorphy. Consequently, I accept -nggi+, -nggim+, -nggidd+ and -nggin+ as base forms of the second person pronominal prefixes.

### 2.4.2.2.2 Syllable fusion

Four rules have the effect of reducing the number of syllables in the CC:

$$
\text { CCR9 } i+b\left[\begin{array}{c}
\text { vocalic } \\
+h i g h
\end{array}\right] \rightarrow o o
$$

For example,

$$
\begin{array}{cll}
\text { \{barn } & \text {-li } & \text { +bindi }\} \rightarrow \text { barnlundi/ }
\end{array} \quad \text { 'I returned' }
$$

For example,

$$
\left.\begin{array}{clll}
\{\text { mila } & -\mathrm{bi} & + \text { jidd } & +\mathrm{a}\} \\
\text { see } & \text { FUT }
\end{array} \rightarrow \text { (mila-bidda }\right\} \rightarrow / \text { (1R) } \rightarrow \begin{aligned}
& \text { + } \mathrm{A}
\end{aligned}
$$

## CCR11 $i+n g i \rightarrow i$

Example:
\{gilang -bi +ngin +addi] 'he'll knock me over' knock:over FUT +(1sg)A +ARRI
$\rightarrow$ /gilangbinaddi/
CCR12 $i+j a \rightarrow a$
For example:

```
\{bam -wi +jan +addi\} \(\rightarrow\) (barn-wanaddi\} 'he takes us back'
    return PRES +(1U)A +ARRI
    \(\rightarrow\) bamganaddi/
```

It is apparent that the above processes are in the nature of rules of fusion, not of syncope.

### 2.4.2.2.3 Vowel alternations

### 2.4.2.2.3.1 $\left\{\mathrm{a}_{1}\right\}$

The vowel morphophoneme $\left\{a_{1}\right\}$ is set up in order to explain the alternant forms of certain classifiers in non-past tenses (see section 3.9.3.2.4). $\left\{a_{1}\right\}$ harmonises with a preceding vowel except when it is followed by a $\{w\}$, or if there is no preceding vowel (within the CC), in which case it is realised by /a/. Examples of $\left\{a_{1}\right\}$ vowel harmony are:

```
\{ward -wi + bidd \(+\mathrm{a}_{1}\) \} \(\rightarrow\) \{ward-woodda \(a_{1}\) [by CCR9] 'they go'
    go \(\mathrm{FUT}+(3 \mathrm{pl}) \mathrm{N}+\)
        \(\rightarrow\) /wardgooddoo/
    \{ward -wi +jidd \(\left.+\mathrm{a}_{1}\right\} \rightarrow\) \{ward-widda \({ }_{1}\) \} [by CCR10] 'we go'
    go \(\quad\) FUT \(+(1 R) N+I\)
        \(\rightarrow\) /wardgiddi/
    \{ward -wi + jadd \(\left.\quad+\mathrm{a}_{1}\right\} \rightarrow\) \{ward-wadda \({ }_{1}\) [by CCR 12] 'we go'
    go \(\quad\) FUT \(+(1 U) N+I\)
        \(\rightarrow\) /wardgadda/
```

The following example shows that harmony does not occur when the following segment is a $\{w\}$ :

```
{ward -wi +bidd +a, -woo} 'they're going'
go FUT +(3pl)N +I DEF
```

$$
\begin{aligned}
& \rightarrow \text { ward-woodda }- \text {-woo [by CCR9] } \\
& \rightarrow \text { /wardgooddawoo }
\end{aligned}
$$

The "elsewhere" realisation of $\left\{a_{1}\right\}$ is /a/. For example,
[ngang -bi + da $_{1}$ \} $\rightarrow$ ngang-bida ${ }_{1}$ [by CCR3] 'you'll give him it' give FUT +DI

$$
\rightarrow \text { /ngangba/ }
$$

One way in which the rule of $\left\{a_{1}\right\}$ realisation may be formulated is as follows:

$$
\operatorname{CCR13} a_{l} \rightarrow\left\{\begin{array}{l}
\text { (i) } a / \ldots-w \\
\text { (ii) }\left[\begin{array}{l}
\text { vocalic } \\
\alpha h i g h \\
\beta \text { back }
\end{array}\right] / \$_{\mathrm{cc}} \times\left[\begin{array}{c}
\text { vocalic } \\
\alpha \text { high } \\
\beta \text { back }
\end{array}\right] \mathrm{C} \quad \text { (Z) } \$_{\mathrm{cc}}
\end{array}\right.
$$

where C is either a single consonant or a consonant cluster. For this rule to give the right realisations, the two parts must be disjunctively ordered, first (i) then (ii): that is, (ii) applies only if (i) has not already applied. It is to be understood that, in environments not mentioned by the rule, $\left\{a_{1}\right\}$ is realised by $/ a /$.

### 2.4.2.2.3.2 Vowel syncope

When two vowels come into contact at morpheme boundaries within the CC , the sequence is reduced to a single vowel. For example:

```
(bij -li \(\quad\) +ami \(\} \rightarrow\) /bijlarni/ 'I arrived'
emerge (lsg)N +ARNI
\{mila -ngi +iny \(+\mathbf{+ a}\) \} \(\rightarrow\) /milanginya/ 'I saw you'
sce \(\quad(1 \mathrm{sg}) \mathrm{N}+(2 \mathrm{sg}) \mathrm{A}+\mathrm{A}\)
```

These two examples suggest that there is a rule that deletes the first vowel in the sequence:

CCR14 $V_{1}+V_{2} \rightarrow V_{2}$
where $V_{1}$ must be \{i\}, and $V_{2}$ either \{a\}, $\left\{a_{1}\right\}$ or $\{i\}$. Thus CCR14 may be restated less generally as follows:

$$
\operatorname{CCR} 15 i \rightarrow \emptyset / \longrightarrow\left\{\begin{array}{l}
a \\
a_{1} \\
i
\end{array}\right\}
$$

### 2.4.2.2.3.3 Vowel harmony

Sometimes the vowel \{i\} harmonises with the /oo/ of a following syllable. This process affects the vowel of the tense prefixes $-w i+$ PRES and $-b i+$ FUT when the following vowel is /oo/:
\{ward $-\mathrm{wi}+\mathrm{li}+$ bin +a$\} \quad$ \} 1 bring them'
go FUT $+(1 \mathrm{sg}) \mathrm{N}+(3 \mathrm{sg}) \mathrm{A}+\mathrm{A}$

$\rightarrow$ \{ward-wiloona\} [by CCR9]

$\rightarrow$ /wardgooloona/

The rule of vowel harmony, it should be pointed out, appears to apply once only, so that only the immediately preceding vowel is affected:

```
{gard -ja -bi +nggin +ri +bini} 'they might hit you (pl)'
    hit SUBJ FUT +(2pl)A +(3pl)N +BINI
    {gard-ja-binggin+rooni} [by CCR9]
    {gard-ja-binggindoorni} [by CCR3 and CCR4]
    /gardjawinggoondoorni/
```

Furthermore, if the / $00 /$ arises as a result of the process of external sandhi, i.e. R8, a preceding [i] will not harmonise with it.

```
{gard -wi +ngin +bi -woo} 'he's hitting me!'
hit PRES +(1sg)A +BINI DEF
    {gard-winbi-woo}
    /gardginboowoo/
```

This process may be formalised as follows:

$$
\mathrm{CCR} 16 i \rightarrow o o / \$_{\mathrm{cc}} \mathrm{X} \ldots \mathrm{C} \text { oo }(\mathrm{Z}) \$_{\mathrm{cc}}
$$

where $C$ is any consonant or consonant cluster. Alternatively, using features instead of segments,


### 2.4.2.3 External sandhi

External sandhi occurs between the immediate constituents of the verbal distributional word, which are the initial lexical 'head', the CC , and the enclitic morphemes following these two units (see formula Fl of section 3.9.3). Some of these constituent morphemes and morpheme complexes have alternant forms
depending on the phonological environment in which they occur. Usually it is their initial consonant which varies, but sometimes it is the final vowel.

### 2.4.2.3.1 Consonant assimilations

There are three consonant alternations: $/ b \sim w /, / j \sim y /$ and $/ g \sim w \sim \emptyset /$. (In the last of these, under certain circumstances, the consonant disappears as a distinct segment, and the resulting contiguous vowels coalesce.) I will take these to be alternant realisations of the underlying $\{b\},\{j\}$ and $\{w\}$ respectively (cf. section 2.4.1.1). (i) The main reason for positing $\{b\}$ rather than $\{w\}$ as the basic form underlying the $/ \mathrm{b} \sim \mathrm{w} /$ alternation is that this assumption allows us to account for the shape of the bound oblique third person plural pronominal enclitic to the verb. As an independent word its shape is /biddangi/, which lenites to /widdangi/ when bound in the verb - e.g. /wardji-widdangi/ 'he went up to them'. (ii) $\{\mathrm{j}\}$ is taken as the base form in the $/ \mathrm{j} \sim \mathrm{y} /$ altemation since otherwise there would be an exceptional $\{y\}$ that does not harden to $/ \mathrm{j} /$ in the environments where the others do; this is the $/ \mathrm{y} /$ of the irrealis tense prefix - see 3.9.3.2.4. (iii) Finally, the choice of $\{\mathrm{w}\}$ over $\{\mathrm{g}\}$ for the third alternation is based on the fact that in exactly the same circumstances as \{b\} lenites to \{w\} (as just described) (g) remains invariant - e.g. /wardji-giddangi/ 'he went up to you (pl)'.

Realisation rules for $\{b\}$ and $\{j\}$ may be written as follows:


In these formulae it is to be understood that the only word boundary containing the morpheme boundary '-' within it is that of the full distributional verbal word. An example illustrating VR2 is:

| (nyoombool bidd | $+\mathrm{i}\} \rightarrow$ /nyoomboolwiddi/ 'they bathed' |
| :--- | :--- | :--- |
| bathe $(3 \mathrm{pl}) \mathrm{N}$ <br> +I  |  |

Examples showing the effect of VR3 are:

$$
\begin{array}{ll}
\text { \{nyoombool } & \text {-jidd } \\
\text { bathe } & \text { (IR) } \mathrm{N}+\mathrm{I}
\end{array} \rightarrow \text { /nyoombool.yiddi/ 'we bathed' }
$$

```
\{goorday -jidd \(\quad+\mathrm{a}\} \rightarrow\) /goordayyidda/ 'we ground it'
grind (1R)N +A
```

The realisation of $\{w\}$ is more complicated, and depends on the preceding segment as well as on whether or not the syllable is inherently stressed. When $\{w\}$ occurs in an inherently stressed syllable it is never lost; in syllables that are not inherently stressed, $\{w\}$ is normally lost, and the vowels which come together in this way coalesce. The resulting syllable may be stressed by later rules of stress assignment (see 2.5.3). It is convenient in a first formulation of the realisation rule to divide it into four parts, each corresponding to the main distinctive environments:

$$
\begin{aligned}
& \text { VR4 (i) } w \rightarrow g / \# \mathrm{X}[\text { consonantal }]-\ldots \mathrm{Z} \# \\
& \text { (ii) } w \rightarrow w / \# \mathrm{X} \text { \{[vocalic] } \mathrm{m}^{\prime} \text { '__ } \mathrm{V} \mathrm{Z} \# \\
& \text { (iii) } w \rightarrow \emptyset / \# \mathrm{X}\left\{\begin{array}{l}
{[\text { vocalic }]} \\
{\left[\begin{array}{l}
\text { consonantal } \\
+ \text { continuant }
\end{array}\right]}
\end{array}\right\}-\left\{\begin{array}{l}
a \\
i
\end{array}\right\} \mathrm{Z} \#
\end{aligned}
$$

oo Z \#

Here (ii) is disjunctively ordered with respect to (iii) and (iv): the former applies to stressed syllables only; the latter two, to unstressed syllables.
(i) $\{\mathrm{w}\}$ invariably appears as $/ \mathrm{g} /$ when the preceding segment is a non-continuant consonant. For example,

$$
\begin{aligned}
& \text { \{ward -wi }+ \text { li }+\mathrm{a}\} \rightarrow / \text { wardgila/ } \quad \text { I bring it' } \\
& \text { go } \quad \text { PRES }+(1 \mathrm{sg}) \mathrm{N}+\mathrm{A} \\
& \text { \{ward -wi } \quad+\text { 'bidd } \quad+\mathrm{a}_{1} \text { \} } \rightarrow \text { /wardgooddoo/ 'they walk' } \\
& \text { go PRES +(3pl)N +I }
\end{aligned}
$$

In the first of these examples the syllable \{wi\} is unstressed (until a late stress rule); in the second, $\{$ woo \} bears inherent stress, due to the coalescence of the second and third syllables, the third being inherently stressed (see section 2.5.3).
(ii) When \{ $w$ \} follows a vowel or continuant, and occurs in a stressed syllable it is realised as $/ \mathrm{w} /$. For example:

```
{mila -wi +'jadd +a} }->\mathrm{ (mila-'wadda} 'we see it'
see PRES +(IU)N +A
    /milawadda/
{bayal -wi +'jadd +a, } ) [bayal-'wadda 1] 'we swim'
swim PRES +(1U)N +I
                    |bayalwadda/
```

(iii) In unstressed syllables, following a vowel or a continuant, $\{w\}$ is deleted preceding /a/ and /i/. For example:

| (nyoombool | -wiri) | $\rightarrow /$ nyoombooliri/ | 'he bathes' |
| :---: | :---: | :---: | :---: |
| bathe | PRES/(3sg)N/I |  |  |
| $\rightarrow$ ['n | mbol'lut] |  |  |

\{bananggadd -wi +ngin +bi -woo\} 'he's snatching it from me!' snatch PRES $+(1 \mathrm{sg}) \mathrm{A}+\mathrm{BINI}$ DEF
$\rightarrow$ \{bananggadd-winboo-woo\} [by CCR11]
$\rightarrow$ /bananggaddinboowoo/
$\rightarrow$ ['panaŋgar'ınbu:]
When a vowel precedes underlying $\{\mathrm{w}$ \}, the latter is deleted and the two vowels coalesce. The resulting vowel is determined as follows: if one vowel is low, /aa/ results (that is, underlying (a-a\}, \{a-i\}, \{i-a\} and (00-a\} become/aa); otherwise, the sequence /ii/ results (that is, $\{\mathrm{i}-\mathrm{i}\}$ and (oo-i\} become /ii). Below are examples of each of these possibilities in order:

```
\(\left\{\begin{array}{ll}\text { mila }-w i \quad+a\}\end{array} \rightarrow\right.\) mila-wa \(\}\) 'he sees him'
see PRES +A
    \(\rightarrow\) /milaa/
\(\{\) mila -wi \(+\mathrm{li}+\mathrm{a}\} \rightarrow\) \{mila-wila\} 'I see him'
see PRES \(+(1 \mathrm{sg}) \mathrm{N}+\mathrm{A}\)
                                    \(\rightarrow\) /milaala/
\{danymili -wi \(\quad+\mathrm{a}\} \rightarrow\) \{danymili-wa\} \(\quad\) 'he hears him'
hear PRES +A
                    \(\rightarrow\) /danymilaa/
```

\{boolooboo -wi +a$\} \rightarrow$ \{boolooboo-wa\} 'he follows him'
follow PRES + A
$\rightarrow$ /booloobaa/

```
(ngang -ji -wi +li +a) }->\mathrm{ {ngangji-wila) 'I feed him'
give IT PRES +(1sg)N +A
    /ngangjiila/
{boolooboo-wi +li +a) -> (boolooboo-wila) 'I follow him'
follow PRES +(1sg)N +A
    /booloobiila/
```

The rule might be formulated as follows:

$$
\text { VR5 } \quad \mathrm{V}_{1} \mathrm{~V}_{2} \rightarrow\left\{\begin{array}{l}
/ \mathrm{aa} / / \mathrm{V}_{\mathrm{j}}=a \text { for some } \mathrm{j} \\
\text { /ii/ } / \mathrm{V}_{\mathrm{j}} \neq a \text { for any } \mathrm{j}
\end{array}\right.
$$

(iv) Finally, when $\{w\}$ precedes an unstressed $\{\infty\}$ (and follows a vowel or a continuant), it is unchanged. For example,

$$
\left.\begin{array}{llll}
\text { \{ngang } & - \text { wi } & + \text { ngin } & + \text { da }_{1}
\end{array}-\text {-woo }\right) \text { 'he's giving me it!' }
$$

We can now formalise the realisation of $\{\mathrm{w}\}$ more succinctly as VR6:
where the circle over the vowel indicates that it is unstressed.
A final process of consonant assimilation deserves brief mention. This occasionally affects the initial segment of the enclitic -nyali REP, denasalising it following non-nasal non-continuants:

$$
\left.\begin{array}{llll}
\{\mathrm{dij} & \text {-nyali } & -\mathrm{wi} & +\mathrm{a}
\end{array}\right\} \quad \text { 'he breaks it again' }
$$

This process has not been observed for other nasal initial enclitics (such as -ma IND).

### 2.4.2.3.2 Vowel assimilations

In addition to the three rules of consonant assimilation discussed above - VR2,

VR3, and VR6 - the two rules of vowel assimilation, R7 and R8, apply within the verbal distributional word. For example,

```
R7: \{boolooboo -ja -bi \(+\mathrm{li} \quad+\mathrm{a}\}\) 'I may follow you' follow SUBJ FUT \(+(1 \mathrm{sg}) \mathrm{N}+\mathrm{A}\)
\(\rightarrow\) \{boolooboo-ya-wila\}
\(\rightarrow\) /booloobiyawila/
```

R8: \{bij -wi +arni -woo\} $\rightarrow$ (bij-warni-woo\} 'he's arriving!' emerge PRES +ARNI DEF
$\rightarrow$ /bijgarnoowoo/
These two rules apply within phonological words (see section 2.5). They do not as a rule apply between phonological words, as the following example illustrates:
\{boolooboo -yadd + a\} $\rightarrow$ /booloobooyadda/ 'we followed him' follow (1U)N +A

### 2.4.2.3.3 Syllable insertion

Finally, there is a rule which inserts the syllable (gi) between a stem final noncontinuant and a following nasal-stop cluster (ngg), and one which deletes the initial nasal of ( ngg ) following a continuant:

VR7 Insert (gi) between a stop or nasal and a following (ngg).
VR8 Delete ( ng ) when ( ngg ) follows a continuant.
Some illustrative examples are:

```
(ward -ngg +i\} \(\rightarrow\) /wardkinggi/ 'you went'
go \(\quad(2 \mathrm{sg}) \mathrm{N}+\mathrm{I}\)
\{gard -nggidd +bini\} \(\rightarrow\) /gardginggirini/ 'you (pl) hit him'
hit (2pl)N +BINI
```

(manggadd -nggi +mi\} $\rightarrow$ /manggaddgimi/ 'he belted you'
belt $\quad(2 \mathrm{sg}) \mathrm{A}+\mathrm{MI}$

In less careful speech, VR8 applies when following a nasal segment. For example:

```
{barn -nggim +bidd +addi} 'they brought you back'
return (2sg)A +(3pl)N +ADDI
        /bamginggimbiddaddi/ (careful)
```

```
/barngimbiddaddi/ (less careful)
```

Again in less careful speech, if the stem final segment is a stop, VR7 may be bypassed and the initial nasal of $\{\mathrm{ngg}$ ) may assimilate in place of articulation with the stop. For example,

```
[ward -ngg +i) -> /wardginggi/, /wardmgi/ 'you went'
    go (2sg)N +I
```

Since the vowel of epenthetic \{gi\} assimilates to a following/oo/ (as per rule CCR16), it is useful to formulate VR7 and VR8 more precisely as follows:

$$
\begin{aligned}
& \text { VR7' } \emptyset \rightarrow g i /\left[\begin{array}{l}
\text { consonantal } \\
\text {-continuant }
\end{array}\right]-\$_{\mathrm{CC}} \ldots n g \mathrm{Y} \$ \mathrm{Cc} \\
& \text { VR8' }^{\prime} n g \rightarrow \emptyset /\left[\begin{array}{c}
\text { consonantal } \\
+ \text { continuant }
\end{array}\right]-\$_{\mathrm{cc}} \ldots g \mathrm{Y} \$_{\mathrm{cc}}
\end{aligned}
$$

According to VR7', epenthetic \{gi\} belongs to the CC, and so is available to undergo CCR16.

### 2.4.2.4 Rule ordering

For the reader's convenience a list of all of the rules introduced in the previous subsections of this section is provided below. In some instances two or more formulations of a single rule have been given; the list below includes only the most general formulation.

$$
\begin{aligned}
& \mathrm{R} 4\left[\begin{array}{c}
\text { consonantal } \\
\left.\begin{array}{c}
\text {-continuant } \\
\left\{\begin{array}{l}
\text { +labial } \\
\text { +laminal } \\
1
\end{array}\right\}
\end{array}\right] \rightarrow\left[\begin{array}{c}
\text { consonantal } \\
\text { +continuant } \\
\left\{\begin{array}{l}
\text { tlabial } \\
\text { +laminal }
\end{array}\right\} \\
1
\end{array}\right] / \$ \mathrm{Y}-\ldots \mathrm{V} \text { Z } \$ ~
\end{array}\right] \\
& \mathrm{R} 5 \mathrm{y} \rightarrow j \text { / \# X [consonantal }] \text {-_ Y \# }
\end{aligned}
$$



## SANDHI



It is necessary to order certain of these rules with respect to certain others. For example, as has already been mentioned, CCR3 must precede CCR4, and CCR5 must precede CCR6. It would seem reasonable to assume that external sandhi rules are ordered so as to follow the rules of internal sandhi. However, it turns out that to do this would necessitate the use of diacritics, in order to distinguish identical segments deriving from different sources - see page 118 below. It is possible to avoid their use by ordering some external sandhi rules before certain of the intemal sandhi rules, and so I have chosen this course.

The following diagram indicates in a lattice the ordering relations
applicable to the above rules. Rules that are ordered with respect to one another are joined by lines, the higher rule preceding the lower one; otherwise, is assumed that the rules apply at once, whenever their environments are met. This assumption obviates the need to mutually order rules such as VR2 and VR6, the former of which "feeds" the latter. It must be pointed out, however, that the order indicated is only one of a number of possible ways of accounting for the facts: it is partly determined by, and partly determines the exact formulation of the rules.

Figure 2-7: Rule ordering


Ordering of CCR3 before CCR4; CCR5 before CCR6; VR7' before CCR16; CCR 16 before R9; and VR6 before VR5 have already been dealt with. CCR8 and CCR10, CCR12 are disjunctively ordered, the latter two applying only if the former has not. (Clearly CCR10 and CCR12 could be formalised in such a way as to apply simultaneously with CCR8; both alternatives are equally simple.) It is not necessary to order any of these three rules (CCR8, CCR10, and CCR12) with respect to VR3, which also effects the consonant \{j\}, since their environments of application are completely disjoint.

It is necessary for CCR5 to precede CCR14, in order that the vowel sequence resulting from the application of CCR5 be reduced. CCR5 has been ordered before CCR13 in order to explain forms such as /ngangba/ 'you'll give him it' (see derivation on page 106 above). Unfortunately, this ordering leaves
forms such as /balawi/ 'he'll send it' (which ought to derive from (bala-wi+da ${ }_{1}$ )) unexplained and irregular; the reverse order would leave /ngangba/ irregular. However, it is most natural to order the rules with CCR13 following CCR5. This is because CCR 5 must precede CCR14, which in turn must precede CCR13 (see next paragraph).

The above ordering of CCR14, CCR11 and CCR13 is necessary in order to prevent the loss of $/ \mathrm{ng} /$ in the first person singular future of certain classifiers. For example,

```
(ward -bi +ng \(\quad+a_{1}\) \} \(\rightarrow\) (wardbinga \({ }_{1}\) \} 'I'll go'
go \(\quad\) FUT \(+(1 \mathrm{sg}) \mathrm{N}+\mathrm{I}\)
    \(\rightarrow\) \{ward-bingi\} [by CCR 13 - CCR 11
                                    can't apply]
    \(\rightarrow\) /wardbingi/
```

(Had CCR 13 been ordered before CCR 14, it would give the elsewhere realisation /a/ of $\left\{\mathrm{a}_{1}\right\}$, resulting in the non-occurring /wardbinga/.)

CCR9 must precede CCR 16 since (i) vowels assimilate to a following /oo/ which arises from CCR9; /gardjawinggoondoomi/ 'they might hit you (pl)' (see page 107) is an example of this. Since the \{i\} deriving from the sequence [i+ngi\} by CCR11 undergoes harmony with a following \{oo\}, whereas the \{i\} deriving from \{iji\} or \{ijoo) by CCR 10 does not, CCR11 has been ordered to precede CCR16, and CCR10 has been ordered to follow CCR16.

Of the rules resulting in syllable fusion, CCR9 and CCR12 precede the rule of external sandhi VR6, whilst CCR10 and CCR11 are not necessarily ordered with respect to it. This is for the following reasons:
(a) CCR9 and CCR12 need to precede VR6 because otherwise VR6 would have the unwanted effect of deleting the $\{w$ \} of the present tense \{wi\} (which bears no stress) in the forms \{mila-wi+bidd+a) 'they see him', and (mila-wi+jadd+a\} 'we see him'. /w/ is, however, present in the actual forms /milawoodda/ and /milawadda/. The following derivations show that the order given in the list gives the correct results:

```
[mila -wi +bidd +a} }->\mathrm{ {mila-woodda} [by CCR9] 'they see him'
see PRES +(3pl)N +A
                                    ->/milawoodda/[by VR6]
{mila -wi +'jadd +a) }->\mathrm{ (mila-'wadda} [by CCR12] 'we see him'
see PRES +(1U)N +A
                        /milawadda/
```

(b) That CCR11 does not need to be ordered with respect to VR6 follows from the fact that the sequence $\{i+n g i\}$ arises only from a tense prefix (see section 3.9.3.2.3) and a following first person pronominal prefix, neither of which bears stress.
(c) VR6 and CCR 10 may be assumed to apply simultaneously, both preceding VR5. The $j$ - $\left[\begin{array}{c}\text { vocalic } \\ + \text { high }\end{array}\right]$ affected by CCR10 must be a part of the nominative or accusative first person restricted (see section 3.6) pronominal prefix, and forms such as /nyoombooliddi/ 'we swim', deriving from (nyoombool-wi $+j i d d+a_{1}$ ) (swim-PRES+(1R)N+A) show that CCR10 cannot precede VR6 since, by VR6, $\{w\}$ would not be lost in the stressed syllable \{'wi\} arising by applying CCR 10 to [wi+'ji\}. (It is still possible for VR6 to be made to follow CCR10 (if, for example, it is decided that the rules of external sandhi should follow those of internal sandhi), by marking the $i$ arising from CCR10 by a diacritic such as " $\mathrm{f}($ ront $)$ ", indicating its derivational history.)
Since both forms of the first person restricted pronominal bear stress, VR5 cannot apply to vowel sequences arising from VR6 and CCR10 in examples such as

$$
\begin{aligned}
& \rightarrow \text { /danymiliidda/ } \\
& \rightarrow \text { ['tænmuli'rгs] or ['tænmi'li:ra] }
\end{aligned}
$$

The second alternative is the normal phonetic realisation of /danymiliidda/ 'we hear it', the first being the most careful pronunciation of elicitation sessions.

Sequences of unstressed-stressed vowels arising from $V-w i+j i(d d / n)$ are not dealt with in the rules of sections 2.4.2.2 and 2.4.2.3. As the preceding example indicates, / i -'i/ normally becomes a stressed long [ii], as does /oo- $\mathrm{i} /$ /:
\{boolooboo -wi + 'jidd +a$\} \rightarrow$ \{boolooboo-'idda\} 'we follow him'
follow
PRES
$+(1 \mathrm{R}) \mathrm{N}+\mathrm{A}$

$$
\begin{aligned}
& \rightarrow \text { /booloobiidda/ } \\
& \rightarrow[\text { ['pola'pi:זA] }
\end{aligned}
$$

The sequence $/ \mathrm{a}-\mathrm{i} \mathrm{i}$ appears to be normally realised as $\left[e^{\prime} \mathrm{i}\right]$
CCR16 cannot apply before VR6, since the form /milaaloona/ I see them' derives from (mila-wi+li+bin+a) (see-PRES $+(1 \mathrm{sg}) \mathrm{N}+(3 \mathrm{pl}) \mathrm{A}+\mathrm{A}$ ) by first applying CCR9 to get (mila-wiloona). However, there is no counter-evidence to the assumption that the two rules apply simultaneously on forms such as (milawiloona\} 'I see them', to delete the $\{w\}$, and harmonise the $\{i\}$ with the following \{oo\}.

The reason why VR5 has been ordered to precede CCR13 is that \{ $a_{1}$ \} will hamnonise with a long /aa/ vowel derived from the sequence / $\mathrm{a}-\mathrm{i} /$ by VR5:

| (ngang | goowa | - wi | +li | $+\mathrm{da}_{1}$ ) |
| :--- | :--- | :--- | :--- | :--- |
| give | PROG | PRES | $+(1 \mathrm{sg}) \mathrm{N}$ | +DI |$\quad$ I'm giving him it'

```
{nganggoowa-wila }
nganggoowa-ila } } [by VR6]
->{nganggoowaala}\mp@subsup{1}{1}{}}\mathrm{ [by VR5]
/nganggoowaala/
```

Finally, it is clear that VR3 must precede R8, from the derivation of /booloobiyawila/given on page 112 above.

### 2.5 Stress

The function of stress in Gooniyandi is purely delimitative, and not distinctive (Trubetzkoy 1969:27). No two roots are distinguished by placement of stress, which is always predictable. Stressed syllables tend to sound louder, and to have higher pitch than unstressed syllables; they are probably also uttered with greater pulmonic air pressure (there is however no instrumental evidence to back up this suggestion).

It is, however, necessary to distinguish stress from loudness and pitch. Although stressed syllables tend to be loud and to have relatively high pitch, the reverse does not hold: a syllable may be loud or may have high pitch without being stressed. For instance, the final (unstressed) syllable of a tone unit (see 5.3.1) may have quite high and rising pitch, sometimes even higher than the pitch on preceding stressed syllables. This phenomenon is not lexically significant, and appears to be conditioned by discourse considerations. It appears to suggest that the utterance is incomplete, either that there is more to follow, or a response (either verbal or non-verbal) is required of the hearer. Circumstances in which this final pitch rise occurs include, among others, the following three - see also sections 5.3.1, 5.6.2.1.2 and 5.6.2.1.3 below.
(i) The word final unstressed monosyllabic enclitics -rni SEQ, and -mi IND may have high, sometimes high rising pitch. Examples:

$$
\begin{array}{lll}
\text { nginyjigarni } & \rightarrow \text { ['ninfl.geni ] 'you-ERG-SEQ' } \\
\text { yoowooloomi } & \rightarrow \text { ['ju:lumi] } & \text { 'man-IND' } \\
\text { goornboomi } & \rightarrow \text { ['kọnbumi] } & \text { 'woman- } \mathrm{NND}^{\prime}
\end{array}
$$

The first example occurred in a text in which action was requested of the hearer (it means roughly "you do it now"). As the second and third examples illustrate, high pitch may occur on -mi IND (when final in a tone unit) in requests of confirmation (see also discussion of section 6.3.8).
(ii) In vocatives, and elsewhere for special emphasis, a final syllable may have high and rising pitch, and its vowel may be lengthened, though not stressed. For example, ngamoo 'before' has been heard pronounced /ngamoowi::/ 'long ago' (with high rising pitch); and, in the context of calling out to a person of the subsection jawandi, this term has been heard pronounced as /jawandi::/ (also with high rising pitch).
(iii) Unstressed final syllables of isolated, elicited words often have higher pitch than the preceding syllables, for example, the following pronunciations were elicited:

$$
\begin{aligned}
& \text { doomboo } \rightarrow \text { ['tombu] 'owl' } \\
& \text { doomoodoo } \rightarrow \text { ['tద̄} \overline{\mathrm{m}} \overline{\mathrm{tu}}] \text { 'chest' }
\end{aligned}
$$

### 2.5.1 Stress in simple roots

Simple (unreduplicated) roots, including most interjections and sound effects and monosyllables, have at least one stressed syllable. A variety of stress patterns occur in words of more than one syllable:
(1) Bisyllabic roots usually have an initial stressed syllable followed by an unstressed syllable:

| 'baga | 'burr' | 'goowaj- | 'call name' |
| :--- | :--- | :--- | :--- |
| 'boolga | 'old man' | 'loandi | 'up, above' |
| 'ngaaddi | 'stone' | 'dirib- | 'enter' |

There are two exceptions. One is the interjection igi 'no', which invariably has stress on its second syllable (this word is also phonotactically unusual in that it is vowel initial, and is never pronounced with an initial $y$ ). The other exception occurs when the bisyllabic word is phonetically monosyllabic; this happens in words of the form Ciyi, Coowoo, and sometimes Cawa, where C is any consonant. As expected, the entire phonetic syllable is stressed. For instance, niyi 'that' is normally pronounced as the stressed monosyllable ' $n i$ :.
(2) Trisyllabic words show the following stress patterns:
(i) The most frequent pattern is for an initial stressed syllable to be followed by two unstressed syllables (SUU):

| 'ngaddagi | 'my' | 'yiganyi |
| :--- | :--- | :--- |$\quad$ 'uncertain'

(ii) In addition to an initial stress, a trisyllabic word may have a stressed final
syllable (SUS). In this case, the final syllable usually bears primary stress, although it is sometimes the initial syllable that is the strongest stressed:

```
'goodda'nggool, goodda'nggool, or 'gooddanngool 'magpie'
'widdnga'loog-, widdnga'loog-, or 'widdnga,loog- 'to lengthen'
```

(iii) Sometimes the second syllable of a trisyllabic word bears stress, while the first syllable is unstressed (USU). Some examples are:

| bil'gaali | 'midnight' |
| :--- | :--- |
| ma'ndaadda | Leichhardt tree' |
| ga'rajbi | body' |

(iv) If the word is phonetically bisyllabic it will have the pattern SU. For example:
windoowoo $\rightarrow$ ['windu:] or ['windua] 'turkey'
(3) Roots with four syllables:
(i) The norm is for the first and third syllables to be stressed, with the primary stress typically falling on the third syllable. For example,

| ,baboo'ddoonggoo, 'baboo'ddoonggoo | 'to the bottom' |
| :--- | :--- |
| 'ngiddi'warndi | 'across' |
| ,ngadda'nggarni, 'ngadda,nggarni | 'dreamtime' |
| yima'ddadda, 'yima,ddadda | 'leaf' |
| ,tharlmi'nggidi,'tharlmi,nggidi | 'tree stump' |

(ii) The second and third syllables may become a single phonetic syllable (if the initial consonant of the third syllable is either $w$ or $y$ ); this syllable then usually bears stress, along with the initial syllable - i.e. the stress pattern SSU occurs. As a rule, as far as I have been able to distinguish, the two syllables appear to have equal degrees of stress. Examples:
$\begin{array}{lll}\text { gindayingi } & \rightarrow & \text { ['ki'ndeipi] }\end{array}$ 'upstream end'
(iii) A few words show the pattern SUUS. This is illustrated in the place name 'ngathadda'many, ngathadda'many.
(iv) Where the third and fourth syllables form a single phonetic syllable, the pattern SUS arises:

$$
\begin{aligned}
\text { waddiyayi } \rightarrow \text { ['wari'yei] "sugarleaf" } & \begin{array}{l}
\text { (a type of gum with crystalline } \\
\text { sugar (a lerp) on its leaf) }
\end{array}
\end{aligned}
$$

(4) Roots of five syllables show the pattem SUUSU, as the following examples illustrate:

| 'lawagi'mana | 'white' |
| :--- | :--- |
| 'nyalala'nggadda | (a type of crocodile) |

There is one exception, which has the pattern SSUSU, namely the word 'joon'joonoo'najgoo 'pardalote'. (I suspect, however, that this item should be properly regarded as not a simple root.) There are relatively few five syllable words, and none show phonetic reduction of syllables.
(5) There are only a couple of roots having six syllables, and they show the following two pattems:
(i) SUUSUU, as in the place-name 'ngawali'milija, ngawali'milija.
(ii) SUSUSU, as in 'wili'mooroo'mooroo, ,wili'mooroo'mooroo 'chicken hawk'. It seems likely, however, that this word is a complex root involving the partial reduplication of the formative wilimooroo (see section 3.12.1.2), showing stress according to the pattern of such reduplications, rather than of simple roots.

To account for the above patterns, I will distinguish the mora from the syllable, and make the following assumptions. A syllable will consist of one or more morae: open syllables of the form CV (where V is short) will be assumed to have a single mora, while closed syllables of the form CVC and open syllables with the long vowel $a a$ will be assumed to have two morae. Stress may be assigned to morae sequences as follows:

| 2 morae | SU |
| :--- | :--- |
| 3 morae | SUU |
| 4 morae | SUSU |
| 5 morae | SUUSU |

Beyond five morae it is not clear exactly how stress is assigned, there being too few examples. However, (5)(i) suggests that six morae sequences are assigned stress on their first and fourth members (SUUSUU), and there is no strong counter-evidence to this possibility.

Given the above sequences, syllable stress is assigned to phonological syllables as follows:

Sl A syllable is stressable if one of its morae is stressed.

S2 If two successive syllables are stressable, only one of them may receive stress, and it is usually the one with the most morae.

It will be convenient to define the phonological word as a sequence of syllables/morac over which the above rules of stress assignment apply.

These rules account for: (a) final stressed syllables in words of three and four syllables, where in all examples the final syllables are closed; and (b) stressed second syllables where the second syllable has a long vowel or is closed, in trisyllabic words. For examples, see (2)(iii); these may be contrasted with jambin'baroo (a type of fish). In addition, if "phonetic syllable" is read for "syllable" in S1 and S2, these rules would also explain forward stress movement when syllables coalesce, as discussed under (2)(iv), (3)(ii), and (3)(iv). (Note, however, that adjacent phonetic syllables may be stressed - point (3)(ii).)

### 2.5.2 Complex roots

The two most frequent types of reduplication are: (1) repetitions of the first two syllables (sometimes without the final consonant of the second syllable in the case of verbal roots), these being prefixed to the full form; and (2) repetition of the final two syllables, these being suffixed to the full form. Examples of each type are found both in reduplications of roots, and in the reduplication of meaningless formatives. The first type predominates in each instance.

The initial syllable of the prefixed or suffixed bisyllabic form bears stress, and the remaining "full form" is stressed as a simple root. Examples of the first type are: 'garnda'garndadi 'windpipe', which is the reduplication of the meaningless garndadi, and 'gamba'gambayi 'many young boys', which is a reduplication of gambayi 'young boy'. Examples of the second type are: 'jangala'ngala 'red ant', a reduplication of the (in this instance) meaningless jangala, and 'balngarna'ngarna 'wide', from balngarna 'outside'.

Reduplications of the first type (i.e. of the first two syllables) give rise to stress patterns atypical of simple roots, and thus consist of two phonological words whose boundary coincides with the reduplication boundary. Reduplications of the second type (i.e. of the final two syllables) show patterns typical of roots (assuming that six morae words are stressed as suggested above), and so may be regarded as single phonological words. But the patterns are equally typical of a pair of roots, and the reduplication boundary could be treated as the boundary of a phonological word.

In full reduplications (of words of three or more syllables), both forms are stressed independently as roots. For example, 'dagoorla'dagoorla 'rough (of
surfaces)' from dagoorla 'hole, depression'. That is, full reduplications consist of a pair of phonological words. This holds not only for bisyllabic and trisyllabic roots, but for monosyllabic ones also. When monosyllabic roots or formatives are reduplicated, they constitute, as predicted, two phonological words. The two successive syllables are stressed. Examples are 'biny'biny 'crimson chat', which is the reduplication of the meaningless biny, and 'la'laj- '(footprints) lie about', from laj- '(footprint) lies' (in each reduplication I have bcen unable to distinguish degrees of stress, so both are marked as primary, which is in keeping with the suggestion that two phonological words are involved). There are a few apparent exceptions, such as jaja 'mother's mother', for which the second syllable is never stressed. However, these are not, in fact, proper reduplications since the corresponding unreduplicated forms are of the form CV , where V is short, and these are phonotactically inadmissible for roots or formatives.

A less frequent pattern, and one which is limited to verbal roots (see section 3.12.2.2), involves the reduplication of a single CV or VC sequence only. Such reduplications appear to constitute single phonological words. Examples are: 'didi'rib- 'enter (e.g. of ants into a hole)' from dirib- 'enter', 'yoola'laj- 'pull off repeatedly' from yoolaj- 'pull off; 'goo'lool- 'try repeatedly' from gool- 'try'; and 'dooloo'loog 'come to the surface all around' from dooloog'come to the surface'.

### 2.5.3 Polymorphemic words

It is convenient to divide the account of stress in polymorphemic words into two parts, one dealing with words involving one or more suffixes, enclitics, or postpositions; the other concerned with the classifier complex (CC) in the finite verb.
[1] Suffixes, enclitics and postpositions
These morphemes consist of between one and four syllables. Most monosyllables are unstressed, whilst most polysyllables are stressed initially. Some examples are:

## Monosyllables:

| 'nganyi-ngga | 'I-ERG' |
| :--- | :--- |
| 'niyi-ya | 'that-LOC |
| 'marla'mi-ya | 'nothing-LOC' |

## Bisyllables:

| 'ngaddagi-nhingi | 'my-ABL' |
| :--- | :--- |
| 'ngooddoo-'nhingi | 'that-ABL' |
| 'birla-'binyi | 'yams-PER' |
| 'jinali-'ngaddi-ngga | 'spear-COMIT-ERG |
| ysyllables: |  |

Polysyllables:
'bijingarni-'ngiddangi 'he came up to us'
'boolga-wadda,wadda 'everyone associated with Bulka swamp'
As these examples show, the stressed syllable in a bound morpheme is frequently as heavily stressed as - indeed, it may be more heavily stressed than - the stressed syllable of the root to which it is attached.
(a) Monosyllabic non-root morphemes. It appears that there is only one stressed monosyllabic non-root morpheme, -nhi, the third person singular oblique pronominal enclitic; -nhi constitutes a phonological word. The remaining unstressed monosyllables are all 'cohering': that is, when added to a root, stress is assigned first to the root as an independent word, and then to the root plus morpheme as a single unit. In case this gives rise to a sequence of stressed syllables, the second syllable in the sequence loses its stress (cf. S2). When added to a monosyllable or bisyllable, these monosyllabic morphemes have no effect on the stress pattern - e.g. 'maa-yoo 'meat-DAT'; and 'nganyingga 'I-ERG'. When added to a root of three syllables (having the unmarked SUU pattern), stress falls on the final syllable of the root: 'ngadda'gi-ngga 'myERG'. (When the trisyllabic root has the SUS pattern, of course, the morpheme has no effect on it - e.g. 'gooroo'ngal-ya 'Christmas:Creek-LOC'.) When added to a word of four syllables the stress pattern of the root is unchanged. For example, 'warli'biddi-ya 'river-LOC'. This word has, of course, a stress pattern distinct from that of monomorphemic words of five syllables.

The same thing happens recursively when two (or more) monosyllabic morphemes are added to a word. For example, 'ngaboo-'wa-ngga (father-his-ERG) 'by his father', 'ngadda'nyoo-wa-ngga (mother-his-ERG) 'by his mother', and 'nganyi-'ngga-rni (I-ERG-SEQ) 'by me next'.
(b) Bisyllabic and polysyllabic morphemes. All but a couple of bisyllabic and polysyllabic morphemes bear initial stress, and constitute separate phonological words from the words to which they are attached.
In most of the examples given so far, the initial stress in suffixed bi- and polysyllabic morphemes may be accounted for under either the assumption that that
morpheme constitutes a distinct phonological word, and as a consequence is stressed initially, or that the full free word is stressed as a single phonological word. There is, however, evidence that the second assumption is untenable. Sequences of stressed syllables inadmissible within single phonological words arise when the bisyllabic postpositions are suffixed to monosyllabic verbal and nominal roots. For example, 'ward'nhingi (go-ABL) 'from walking', 'maa'nhingi (meat-ABL) 'from meat', etc.

There are just a few bisyllabic morphemes for which it is uscful to assume that they are not stressed; all have initial $\{w\}$ which is realised as per VR6. They include -wanya 'other', -wadda 'manner' (on which see section 5.5.1.3), -wilaFACT(ive mood), wanhi, which is an allomorph of the third person singular oblique pronominal enclitic, etc.. These morphemes appear to be 'cohering' as per the definition above. For example,

| \{goornboo -w woman oth | $\text { wanya\} } \rightarrow$ <br> other | /goombaanya/ | 'other women' |
| :---: | :---: | :---: | :---: |
| \{yoowooloo man | $\begin{aligned} & \text {-wanya }\} \\ & \text { other } \end{aligned} \rightarrow$ | /yoowoo'laanya/ | 'other men' |
| \{narta -wadda\} <br> cry MNR | $\begin{array}{ll} \text { a\} } \\ \mathrm{R} \end{array} \quad \rightarrow$ | /nardaadda/ 'cry | along' |

## [2] The classifier complex

The classifier complex usually consists of a single phonological word, distinct from the preceding one, which includes the verbal root or stem, and/or a verbal enclitic. In the majority of cases, these two entities (the verb stem and the classifier complex) are stressed independently, the root and enclitic as per 2.5.1 and 2.5 .2 above. Exceptions occur only when the present tense prefix -wi+ follows a vowel.

The CC is usually stressed as a single phonological word, the first syllable receiving stress. For example:

```
\{ward -bi +a \} \(\rightarrow\) /ward'ba/, /ward,ba/ 'you'll take it'
go FUT + A
\{ward -wi +li +a\} \(\rightarrow\) /ward'gila/, /wardggila/ 'I take it'
go FUT \(+(1 \mathrm{sg}) \mathrm{N}+\mathrm{A}\)
\{mila -bi +jadd +a\(\} \rightarrow\) /mila'wadda/ 'we'll see him'
sce FUT \(+(1 \mathrm{U}) \mathrm{N}+\mathrm{A}\)
\{mila -bi +ngim +bidd +a\} 'they'll see you'
see \(\mathrm{FUT}+(2 \mathrm{sg}) \mathrm{A}+(3 \mathrm{pl}) \mathrm{N}+\mathrm{A}\)
```

$\rightarrow$ /mila'wimbidda/


As these examples show, initial stress in the CC comes from two sources. (i) It may come from the inherent stress of a pronominal prefix (as in the third and finaI examples immediately above). The assumption that some pronominal prefixes bear inherent stress while others do not is made in order to explain the fact that the initial $\{w$ \} of the present tense is not lost in forms such as milawadda 'we all see him' (see derivation on page 110 above), whereas it is lost in forms such as milaanbidda (deriving from \{mila-wi+ngin+bidd+a) (seePRES+(1sg)A+(3pl)N+A) 'they see me'. There is, in fact, independent evidence which lends support to this assumption. This comes from the second person plural nominative and accusative pronominals nggidd- and nggin- which, unlike the other stressed pronominals, never coalesce with the preceding syllable. They are stressed whether or not they are initial in the CC. For example,

$$
\begin{array}{llllll}
\text { \{ward } & - \text { wi } & \text { +nggidd } & +\mathrm{i}\} & \rightarrow & \text { /wardgi'nggiddi/ }
\end{array} \text { 'you (pl) go' }
$$

It turns out that a single CC contains at most one inherently stressed pronominal prefix - this fact is accounted for by the allomorph choice (see section 3.9.3.2.2 below). This stressed prefix always precedes other pronominal prefixes, and must occur either initially in the CC, or following a tense prefix. It follows that the inherently stressed syllable is either the first or, rarely, the second syllable of the CC. It would seem that stress is subsequently assigned to following syllables in the CC as per the rules of pages 122-123 above, assuming that the initial stress identifies the boundary of the phonological word.
(ii) Otherwise, if no syllable bears inherent stress, it must be assumed that stress is assigned later, after the sandhi rules have applied and the CC has taken on its final phonological shape. In this case, it appears that the CC is stressed as per the rules just referred to. If it is monosyllabic, the CC usually receives weak
stress only, especially when it follows a stressed syllable. For example, wardji 'he went' usually has main stress on the initial syllable, with secondary or tertiary stress on the second syllable. Occasionally, however, the main stress is heard to fall on the second syllable.
Sequences of up to three consecutive stressed syllables have been heard: 'ward'ba'ngadda (go-FUT+A-(1sg)O) 'you'll bring it to me' and 'dij'nya'laa (snap-REP-PRES+A) 'he snaps it again'. However, it is usual in examples such as this for the stress on the second syllable to be reduced to a secondary or even tertiary оле.

It has been mentioned already that stress does not cross the boundary between the stem and the CC , when sequences such as $i$-yi occur (see page 64 above). However, when the $\{w\}$ of the present tense prefix $-w i+$ is lost following a vowel (but not when it is lost following a [+continuant]), the initial vowel of the CC and the final vowel of the verbal stem coalesce. In this case, it appears that the CC forms a single phonological word with the immediately preceding unit. For example,

(Note: Under the assumption that the second $a$ and the final $n$ of the second syllable in milaanbidda 'they see me' each contribute one mora (cf. page 122 above), this word has six morae. Stress should fall on the first and fourth morae by the rule of page 122 above; by the rule preventing successive stressed syllables, stress goes onto the second syllable, which includes the fourth mora.)

```
\{boolooboo -wi \(+\mathrm{li}+\mathrm{a}\} \rightarrow /\) booloo'biila/ I follow him'
follow PRES \(+(1 \mathrm{sg}) \mathrm{N}+\mathrm{A}\)
```


## CHAPTER 3

## THE WORD

### 3.1 Preliminary remarks

### 3.1.1 Grammatical outline

The primary notion which will be invoked in this book to explain the grammatical patterns in Gooniyandi is that of constituency. It will be assumed that constituents are linguistic signs; that is, they are characterised by both their form and their meaning. Consequently their identification is dependent not just on formal criteria, but also on concurrent identification of their meaning, where, by the 'meaning' of a constituent I refer to its function in the whole of which it is a part (cf. Haas 1954:80). For example, ngooddoo 'that' is a constituent of ngooddoo yoowooloo 'that man', and functions as the Deictic within the full phrase (see 4.1.2.1 below). This function must be distinguished from the lexical meaning of the word ngooddoo 'that'. This approach to constituency division contrasts sharply with immediate constituent analysis, in which cuts are generally assumed to be binary, and in which constituents need not fulfil functions in the whole of which they constitute a part (cf. Halliday 1985:22ff). It is a type of 'string constituent analysis' (Longacre 1960), in which the constituents are labeled by their function. In this section I will represent constituency in terms of trees, usually with unlabeled nodes. Later on, when the functional labels become important, I will also use Chinese box diagrams.

A general account of the shape of constituency trees in Gooniyandi is possible if a constituency hierarchy or 'rank scale' (Halliday 1961/1976:58) is recognised. The proposed rank scale for this language is shown in Figure 3-1.

The immediate constituents of a 'unit' (Halliday 1961/1976) of a given rank are typically units of the rank immediately below on the scale. A unit of one of the three highest ranks may be described as a syntagm of units of immediately lower rank. Clauses consist of phrases, and may be described as constructions of phrase-level units; phrases consist of words, and may be

Figure 3-1: Rank scale


Key: $\int_{\square}$ denotes is of immediately lower rank than'.
described as constructions of word-level units; and words consist of morphemes, and are describable as constructions of morphemic units. For example, the clause of (3-1) has the constituent structure shown in Figure 3-2.
(3-1) niyaji maa thoowoorndoo wabaari
this meat rotten it:smells 'This meat stinks.'

Figure 3-2: Constituency tree for example (3-1)
Clause
Phrase
Word
Morpheme

(Here, the unanalysed -ari 'he/she/it is' may be regarded as a word consisting of three morphemes, present tense, third person singular nominative, and the classifier +I , although it is not possible in this case to uniquely segment the form - see section 3.9.3.2.4 below.)

The intermediate ranks of phrase and word have been introduced in order to account for the possibility of branching: in Figure 3-2, in each case in which a
node is marked (except for the terminal nodes), there is either a branch, or branching is possible at that point. That is, the function that this constituent has is realised, or could be realised by a unit with internal structure. (Other changes - e.g. to the person/number "agreement" in the verbal complex may be necessary to preserve grammaticality.) For example, the word waba'smell' in (3-1) realises the function of Process in the phrase of which it is a constituent, and this may be realised by bimorphemic constructions such as gard-bi- (hit-IT) 'belt'.

There are, however, certain linguistic units that cannot be placed on the rank scale. This includes a number of words which may occur directly as constituents of clauses, and a number of morphemes which occur as phrasal constituents, without intervening phrase and word nodes respectively. This holds true for the word mangaddi 'not' in example (3-3), and the morphemes -yooddoo DU and -jidda ALL in (3-2), and -ngga ERG in (3-3), as is shown in the constituent analyses of figures 3-3 and 3-4.
$\begin{array}{lllllll}\text { (3-2) } & \text { ngidi } & \text {-yooddoo } & \text { garndiwiddi } & \text { ward } & \text {-jiddi } & \text { babligaj } \\ \text { we(R) } & \text {-jU } & \text { DU } & \text { two } & \text { go } & \text { we:did } & \text { pub }\end{array}$ ALL 'We two went to the pub.'

```
(3-3) mangaddi niyi -ngga dij -jingi
not that ERG snap he:did:it
'He didn't snap it.'
```

Figure 3-3: Constituency tree diagram for example (3-2)
Clause

Phrase

Word

Morpheme

ngidi -yooddoo garndiwiddi ward- -jidd- -I babligaj -jidda

Figure 3-4: Constituency tree diagram for example (3-3)


- Yooddoo DU and -jidda ALL in Figure 3-2, and -ngga ERG in Figures 3-3 and 3-4, have bypassed the word level, while mangaddi 'not' in Figure 3-3 has bypassed both phrase and word levels. This is because in these instances there is no possibility of branching between the morpheme level and the next one up: these morphemes do not enter into syntagms with other morphemes, to form grammatical words. Because of this, I do not refer to forms such as mangaddi 'not', even though they are free forms, as grammatical words (see also below section 3.1.2).

We have now identified two types of unit: ranking and non-ranking. It turns out that, in Gooniyandi, all form items (Matthews 1981:59) are nonranking, and conversely, the majority of non-ranking units are form items. The only exceptions are the adverbials, which are non-ranking units (section 3.2), but are not form items. With the exception of adverbials, all non-ranking units are form items, and must occur in construction with ranking units. The resulting syntagm is typically a unit of the same rank as the ranking unit (as is the case in the preceding two examples above) - although sometimes it does not constitute a unit at all (see below section 3.8).

One further qualification is necessary: certain clauses may consist only of a single morpheme, usually an interjection - e.g. yoowayi 'yes' (see below 3.10). Evidently these are "minor" clauses, and might reasonably be placed off the rank scale: they never have internal structure. In this case "clause" and "morpheme" coincide.

There are two main ways in which trees can become more complicated. Firstly, as Figures 3-3 and 3-4 show, embedding is possible. In these particular examples the embedded unit is of the same rank as the unit it is embedded in. However, rankshifting (Huddleston 1965:45) - which is a special type of
embedding in which the unit embedded is of higher rank than the unit in which it is embedded - is also possible, albeit rare and of limited productivity in Gooniyandi (see below 4.1.2.1 and 5.5). The maximum depth of embedding attested in my corpus is three, as in the following configuration:


Here $\mathrm{NP}_{1}$ cannot have another phrase embedded within it (see section 4.2). Furthermore, when the embedding also involves rankshifting, the maximum depth appears to be one: if a unit of higher rank is embedded under a unit of lower rank, then no unit can be embedded within the embedded unit.

The second complication is that units (typically of the same rank) may form syntagms that are not units of the next highest rank. For instance,
(3-4) garndiwiddi yoowooloo yoowarni goornboo
two man one woman
'two men and one woman'
consists of two phrases, [garndiwiddi yoowooloo] 'two men' and [yoowarni goornboo] 'one woman', each of which has the characteristic structure of an NP. The structure of the whole is clearly not that of an NP - it cannot be described in terms of the functions identified for the NP (see section 4.1.2.1), although its two constituents can be. Neither is it a clause. Constructions such as these will be referred to as complexes, following Huddleston (1965). There are, in Gooniyandi, word complexes, phrase complexes and clause complexes; in addition, certain complexes of words and phrases occur. (It is also possible that there are morpheme complexes.)

### 3.1.2 Types of word

It is necessary to distinguish four different types of word in Gooniyandi. Firstly there is the phonological word, which is as described in the previous chapter. A second type of word is the grammatical word - abbreviated g-word - which is a grammatical unit of word rank; that is, it is the smallest unit that can have constituency structure. This unit was introduced in the previous subsection.

It is necessary to distinguish the g-word from the lexical word, the third type of word, for which I will sometimes also use the term "lexeme". Lexemes are those items which are listed in the dictionary. I include here both morphemes of all types and certain larger, word-like units which are constructions of morphemes; but I will exclude idiomatic collocations. The larger unit may be either an inflectional form of one of the constituent morphemes, the root, or it may constitute a distinct lexical item, a stem. On the whole, Gooniyandi shows little inflection. Most of the inflection which does occur is found in the verbal classifier complex, discussed in section 3.9 .3 .2 below. A small amount of inflection is found elsewhere, in pronominals and some spatial adverbials. The various forms of these words are not readily analysable into constituent morphemes. For example, nginyji 'you (sg)' and ngaanggi 'yours (sg)' are two forms of the lexeme "second person singular", but neither is amenable to morphemic analysis (see section 3.6).

Fourthly, there are distributional words, abbreviated d-words, which are free forms having the property that they cannot be divided into units each of which is free. Any utterance consists of a whole number of d-words; these are the minimal forms that may be permuted, the permutations preserving grammaticality. Constituents of d-words are in general not permutable. Postpositions (see section 3.7) are the only exceptions: they may be attached to any $g$-word in a nominal phrase. For example, (3-5) consists of three d-words, all orders of which are possible:

| (3-5) nganyi | -ngga manyi uard -ja | -wila | -nganggi |
| :--- | :--- | :--- | :--- | :--- | :--- |
| I | ERG food go SUBJ l:will:do:it for:you |  |  |
| 'I'll bring you food.' |  |  |  |

But the parts of the words cannot be permuted either within, or amongst the separate words: -ngga ERG, for example, could not be attached to manyi 'food', nor could it occur anywhere in the verbal d-word.

D-words may be bounded by pauses, but it is only under exceptional circumstances that pauses occur within d-words. For example, at the end of my first field trip, having spent a full hour giving me person, number and tense forms of verbs, my teacher finally began to tire of the task, and pauses occurred between the verbal stem and the following classifier complex. However, during these pauses the articulatory organs did not go back to their rest position, but were held in place until the form was recalled and the d-word could be completed. When the pause became too long, or the articulators were not held in place, renewed attempts always started again at the beginning of the d-word. In these
sessions of intensive elicitation of the verbal paradigm I was never given just the paradigmatically significant piece, the classifier complex; I was always given the full form with the initial lexical item. In the entire body of texts I recorded there are no more than a handful of instances in which there is a perceptible pause within a d-word. Where they occur, these pauses always coincide with morpheme boundaries, and appear to usually occur when the speaker is suffering from a momentary lapse in memory or concentration.

Although single d-words could be elicited and discussed in isolation native speakers of Gooniyandi were willing to explain their meaning to me smaller items could not be. Smaller items such as bound morphemes did not seem to have psychological reality, and were not identified on the few occasions when, for one reason or another, I cited them in isolation. (They were, however, immediately identified in retrospect once I provided an example in a d-word.)

The four types of word we have identified do not always coincide in Gooniyandi. However, some correlations can be made between them. Every gword consists of one or more lexemes, but not every lexeme is a g-word. For example, mangaddi 'no, not' is a lexeme, but not a g-word (it is not a ranking item). And distinct $g$-words may be instantiations of a single lexeme. This is the case for pronominals, which show two distinct case forms. Every d-word consists of a whole number of phonological words and a whole number of lexemes; moreover it consists of either a whole number of, or zero $g$-words. A phonological word normally consists of a whole number of lexical words, and a whole number of, or zero $g$-words. Exceptions arise within the verbal d-word, where the two obligatory lexical g-words (the verbal stem and the classifier complex) which typically constitute separate phonological words, may become fused together in such a way that the boundary of the phonological word shifts forward (see section 2.5.3 above). In most of the remainder of this chapter, I will be referring to phonological words only in passing. The other three types arise more frequently, and are more easily confused; I will therefore normally use the more explicit labels to make the reference clear.

### 3.2 Parts-of-speech

In this section I suggest a classification of the parts-of-speech in Gooniyandi, embracing all words and morphemes. ${ }^{1}$ The entities I want to classify are the

[^9]lexical items themselves (see above), abstracted from all context; I do not aim to classify the g -words and morphemes, the units of the rank scale. A classification of the lexemes will provide more information than would a classification of the contextualised units, and it is mainly for this reason that I undertake the former enterprise.

The major difficulty in assigning Gooniyandi lexical words and morphemes to classes is their multifunctionality: most occur in a number of distinct syntagmatic environments. A form such as yoowooloo 'man', for example, occurs in at least the following five contexts:

| (3-6) | $\mathrm{NP}^{[n g i r n d a j i ~ y o o w o o l o o]_{N} \mathrm{P}}$ this man 'this man' |
| :---: | :---: |
| (3-7) | ${ }_{\mathrm{PP}}[\text { ngidi } \text {-yooddoo yoowooloo }]_{\mathrm{PP}}$ <br> we(R) DU man 'we two men' |
| (3-8) | $\mathrm{VP}^{[ }[\text {yoowooloo -windi }]_{\mathrm{VP}}$ man he:became 'He became a man.' |
| (3-9) | $\begin{aligned} & \mathbf{K}_{\mathbf{K}[\text { yoowooloo }]_{\mathbf{K}}} \\ & \text { man } \\ & \text { 'Man!' } \end{aligned}$ |
| (3-10) | ${ }_{\mathrm{N}}\left[\right.$ yoowooloo $-\mathrm{milil}_{\mathrm{N}}$ man CHAR 'man-crazy' |

But there are, however, a number of reasons which suggest that yoowooloo 'man' is a single lexeme uniquely assignable to the class nominal. Firstly, the commonalty of meaning through the examples suggests that there is a single morpheme yoowooloo 'man' throughout (3-6) to (3-10); what differences there are are fairly obviously attributable to the different grammatical environments. Secondly, a sizeable class of words, all of which are notionally nouns, appear to
convincing reason for this restriction, and since $I$ will be later making use of various more general labels for morphemes (labels such as nominal suffix), I have felt that a complete classification would be advantageous at this point to the reader, and that this small departure from tradition would thus be justified. It is also for this reason that I have eschewed the term 'word class', and used the more traditional label 'part-of-speech'.
be able to occur in most of the environments in which yoowooloo 'man' occurs, and certainly always in the first two. Restrictions are generally attributable to semantic and cultural factors. For example, many words that are notionally nouns have not been encountered in contexts like (3-9); the reason for this is obvious: people don't normally address ants, water, trees, etc.. But these are semantic (or pragmatic), and not grammatical restrictions, and it is easy to invent contexts in which addressing ants or trees would not seem too unnatural - in fact, I have a short piece of text in which the speaker addresses a particular tree of mythical significance. On the other hand, there are lexical roots that occur only in a subset of these environments, not including the first two, and yet other lexemes occurring in complementary environments. Thus, even though lexemes are multifunctional, it is possible to identify classes by occurrence in common ranges of syntagmatic environments.

In these respects Gooniyandi would appear to be intermediate between English and what is reportedly the norm for Australian languages. According to Dixon (1980:271), in the majority of Australian languages lexical roots belong to disjoint classes which are defined by occurrence in specified syntagmatic environments. In Gooniyandi, classes defined in this way overlap considerably: as in English, as we have seen, a single word-form can usually occur in a variety of syntagmatic contexts. But Gooniyandi is unlike English which has a large number of pairs like dog (noun) vs. dog (verb), bottle (noun) vs. bottle (verb), etc., where the meaning differences are not fully predictable, thus making it necessary for the dictionary maker to provide separate definitions for each distinct context of occurrence. In Gooniyandi the differences of meaning are as a rule completely predictable, and one dictionary definition will suffice.

This is not to deny the existence of homophony in Gooniyandi. As far as I have been able to determine, however, there are very few homophones. The only convincing examples I have been able to find are doowa 'store' and doowa 'he gets it'; and nginyji 'you', nginyji 'certainly, indeed' and -nginyji, a form of the classifier +DI which refers to the action of a first person singular agent on a second person singular patient (see below section 3.9.3.2).

Most examples which at first appear to be homophones turn out on closer examination to be single lexemes whose variant senses can be explained as contextualisations of a single basic meaning. Consider, for example, widdijwhich translates both 'dig (a hole)' and 'scratch'; yiniga which translates as both 'how, in what manner' and 'say or do something'; miga which translates 'that way' and 'tell, say, think'; and yiganyi which corresponds sometimes to 'maybe, perhaps' and sometimes to 'sneakingly'. For each of these four phonemic forms I
have given two or three approximate English glosses, based on the native speakers' glosses in various examples. Across a large number of examples (consisting of Gooniyandi-English translation "equivalents") the glosses given for the words fall into the two or three distinct English expressions as indicated above. It seems likely, however, that these senses are not as unrelated as the glosses would immediately suggest to the English speaker, and that each form is a single lexeme having a single basic meaning. Very approximately, widdijmeans 'scrape a surface with a relatively sharp or elongated instrument'; yiniga means 'what or some manner of action'; miga means 'this manner of action'; and yiganyi means 'uncertain, unsure' (where cultural factors determine what constitutes lack of assurance).

The major parts-of-speech in Gooniyandi are set out in Table 3-1 below. Each lexical word/morpheme can be uniquely assigned to a class.

Table 3-1: Gooniyandi word and morpheme classes

| Linguistic |  | Free | Bound |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Non-verbal |  | Verbal |
|  | Open classes | Nominals Adverbials |  | Verbals |
|  | Closed classes | Particles <br> Pronominals | Nominal stem forming suffixes <br> Postpositions Enclitics | Verbal stem forming suffixes <br> Infinitives Verbal enclitics Classifier Complex |
| "Para-linguistic" |  | Interjections <br> Sound effects |  |  |

The parts-of-speech are classified in the table according to four major contrasts: (a) free vs. bound; (b) non-verbal vs. verbal; (c) linguistic vs. para-
linguistic; and (d) open vs. closed classes. These oppositions are obviously insufficient to distinguish the classes from one another. They do, however, provide a useful framework for the discussion of the parts-of-speech and their interrelations. Individual lexemes are relatively easily assigned values with respect to these four oppositions - that is, it is relatively easy to assign them to one of the six major divisions of the table. However, determining their class from among the possibilities within a single box is not always so easy (except in the case of verbal items).

Gooniyandi shows a fundamental distinction between units of the verbal class versus units of all other classes, at each rank - morpheme, word, phrase, and perhaps also clause (see section 5.2 . 1 where situation and relational clauses are distinguished - situation clauses may be regarded as "verbal"). Verbal units (of rank below the clause) are more restricted in distribution than are non-verbal units, and occur only as constituents of finite verb phrases (VPs), or within nonfinite (embedded) clauses (see section 5.5 below). As has already been mentioned, non-verbal words and morphemes are less restricted in distribution, and need not occur in phrases of the same class. As Table 3-1 shows, no verbal lexical words have the property of independent occurrence; this distinguishes them from other open class lexemes. (If an open class lexeme is bound, it must be a verbal.)

Similarly, closed verbal classes are readily distinguished from other closed classes by the fact that they are restricted to occurring in VPs, and from one another by virtue of their position within the VP (see below, 3.9.3.2). The verbal stem-forming suffixes form a small set of morphemes which, when suffixed to verbal lexical roots form new verbal stems, which are also $g$-words. By contrast, the verbal enclitics do not form $g$-units with the forms to which they are attached. They can be subclassified according as to their position in the VP (see section 3.9.3). As the term suggests, the classifier complex (CC) can be analysed into constituent morphemes (as per section 3.9.3.2). However, it is a g-word, and it might reasonably be regarded as an inflectional form of the classifier. For this reason, the constituent morphemes (which occur nowhere else) have not been individually classified.

Non-verbal lexical items are either free or bound, and this opposition agrees fairly well with the distinction between open and closed classes. (The latter correlates better with the distinction between ranking and non-ranking units - see section 3.1.1.) The three classes of bound non-verbal morphemes are distinguished from one another by the nature of the unit they form with the constituent to which they are attached, specifically, whether it is: a g-word, in
which case the morpheme is a stem forming suffix; a g-phrase, in which case the morpheme is a postposition; or not a g-unit at all, in which case the morpheme is an enclitic. The term "enclitic" is used throughout this book when making reference to bound morphemes which do not form grammatical units with the forms to which they are attached: they retain their grammatical independence though they do not have distributional independence. The term "suffix" is reserved for those morphemes which form g-words with the forms to which they are attached.

The two classes, nominals and adverbials are not readily distinguished on morphological grounds. Most bound morphemes that can be attached to open class nominals can also be attached to lexemes that we would like to classify as adverbials. The only exceptions I am aware of are the two number marking postpositions, -yooddoo 'dual' and -yarndi 'plural', which appear to be distributionally restricted to nominals. Occurrence, or lack of occurrence with these two morphemes would not, however, seem to be a useful property on which to base the definition of a lexical class. But it does appear that this property correlates with more significant syntagmatic properties. In realising clausal functions, nominals must occur in NPs or PPs. Although adverbials may occur in NPs and PPs, when realising clausal roles, they typically do not, and for every adverbial there is some clausal role that it may realise alone. Thus, adverbials contrast with PPs in realising circumstantial roles. For adverbials such roles are not normally mediated through postpositions, as is necessarily the case for nominal units. The two classes, nominals and adverbials, can thus be distinguished by the ability or non-ability of their members to realise circumstantial roles. It follows that adverbials are non-ranking units.

It would appear that the three lexical classes can be ranged from most marked distributionally to least marked thus: verbal, nominal, adverbial. The following generalisation may now be made. Words of the less marked classes may occur as constituents of phrases of the more marked classes, but words of the more marked classes do not have this privilege with respect to the less marked phrasal classes (assuming that markedness corresponds in a natural way between the word and the phrase classes). Loosely, nominals can "function as" verbals, and adverbials can "function as" verbals or nominals; but these are the only possibilities. Open class lexical words can therefore be defined in terms of their function in the unit next above on the rank scale, as follows:

VERBALS are those lexemes which must realise the function of Process in a VP;
NOMINALS are those which must either realise a function in an NP, or
(less frequently) the Process in a VP; and
ADVERBIALS are those lexemes which may realise functions in clauses, NPs, PPs or VPs.

It is convenient to identify a distinct lexical class of pronominals, even though the members usually occur in NPs. There are three main reasons for this: (a) distinct forms of pronominals occur for singular vs. non-singular number (nominals do not inflect for number); (b) for each pronominal category there are at least three distinct phonological shapes, which may be regarded as alternate forms of the one pronominal lexeme (depending on the context of occurrence); and (c) the distribution of pronominals differ significantly from the distribution of nominals and other parts-of-speech - for instance, pronominals never occur as Processes in VPs. Recognition of the pronominals as a distinct class necessitates some fairly obvious and minor adjustments in the definitions of nominals and adverbials.

Particles constitute a small closed class of free "form" words which enter into syntagms with full clauses, modifying their propositional content.

Two classes have been set off from the others as paralinguistic. (Further research may well uncover more classes of this type.) Paralinguistic words often stand as utterances by themselves, constituting "minor" clauses: that is, clauses that can have one constituent only (cf. section 5.4 .2 below). As has been mentioned already (section 2.1.1), many of these words are phonologically some even phonetically - irregular.

### 3.3 Nominals

This class contains those words which usually occur as constituents of nominal phrases - although they are sometimes found elsewhere (e.g. as the lexical 'head' of the finite VP), and words of other classes are frequently found within nominal phrases. In the previous section I suggested that nominals may be characterised by the fact that they may occur in either of these two contexts: always as NP constituents, and potentially as lexical 'heads' of VPs. The class so defined is open, and has a very large number of members.

There seem to be no compelling reasons to identify distinct subclasses of adjectives and nouns. Certainly no such subclass can be distinguished on morphological grounds, such as the ability to combine with a distinct set of morphemes, or their occurrence with a distinct set of allomorphs of the nominal morphemes. Furthermore, the classes of words which may realise the NP roles of Classifier, Entity, or Qualifier (as defined in section 4.1.2.1 below) have
many members in common. Nearly all words which can realise the Entity role - excepting non-nominals such as pronouns - can also realise the role Qualifier (and may also be the lexical 'head' of a VP): in other words, words which can be referential can also be qualifying, and may indicate qualities or properties of things.

There are, however, a number of words which realise either of the roles, Classifier or Qualifier, but which have not yet been encountered in the Entity role. Examples include at least twenty words which, from the English speaker's point of view, would be good candidates for an adjective class. They include:
colours: gooroogooroo 'black', widdgali 'blue, green', lawagimana 'white'; mental attributes: ganybili 'ashamed', yoowa 'frightened, careful', binaddi 'knowledgeable', jagarndi 'awake', nurna 'greedy'; physical qualities: gawirla 'cold', gijali 'dead', balyadi 'flat', binyidi 'hard', jaddarndi 'sharp', damarda 'blunt', giddabingaddi 'long', yanoonggoo 'new', thoowoorndoo 'rotten';
value judgements: joornanygadda 'good', marooloo 'valuable'.
One reason why I hesitate to set these words off as a distinct class is because semantically similar words do occur in the Entity role, as well as in the Classifier and Qualifier roles, and so would not be adjectives by the above criterion. Examples include: thiwa 'red, white person (i.e. person of European descent)'; boordbara 'hot, heat'; nyamani 'big, boss'; thigi 'short, a bit'; mooyoo 'asleep, sleep'; and thithi 'moving, motion'. It seems to me that the differences of meaning associated with the different functions are predictable - in each of the above the first gloss is for the word as a Qualifier or Classifier, the second, for the word as an Entity, sometimes as a Classifier. Consequently each of the above forms is a single word, not a pair of homophones. Furthermore, the fact that the score or so of words listed above have not been encountered in the Entity function appears to be semantically motivated, and given the appropriate situation, I would expect that they could be used referentially. For example, given that boordbara 'hot' is attested in the role of Entity in a nominal phrase functioning as the Agent of a clause, one would expect that gawirla 'cold' could also function as the Entity in a nominal phrase in the Gooniyandi version of 'This cold is making me stiff'. At this stage of the investigation, it seems to me, it would be premature to set these words off as a distinct subclass. To do so would be to take the actually observed 'distribution' too seriously, to ignore the limitations of the data, and ultimately to deny an aspect of creativity in language.

It is, however, possible to distinguish some subclasses, nearly all of which have a limited number of members: determiners (3.3.1), kin-terms (3.3.2), subsection terms (3.3.3), number words (3.3.4) and proper nouns (3.3.5). These are semantically homogeneous subclasses, and they often have distinctive distributions within the NP, and/or with respect to certain stem-forming suffixes.

For the remainder of the nominal class I have been unable to identify subclasses showing distinctive formal and semantic properties. The class of nominals includes, in addition to the subclasses mentioned in the preceding paragraph: words for concrete objects such as flora (types of plants and trees), fauna (various animal species), humans (including sex and age specific terms), and their parts ('root', 'tail', 'feather', 'eye', etc.); features of the weather and the elements (including 'fire', 'water', 'rain', 'wind', etc.); topographical and environmental features (such as 'rock', 'creek', 'hill', 'limestone', etc.); and artefacts ('spear', 'boomerang', etc.). Also included are more abstract words for songs, rituals, colours, shapes, sizes, feelings ('shame', 'fear', 'anger', etc.), and just a few terms for the most common action types ('sleep', 'motion', 'travel' (or 'walkabout') and 'fight').

### 3.3.1 Determiners

Determiners constitute a small closed class of nominal words which normally realise the function Deictic in the NP (see 4.1.2 for a discussion of this term). To be precise, determiners may be defined as those words which may realise the NP roles of Deictic, Qualifier and Entity, but not the Quantifier or Classifier roles. This formulation of the definition is necessary in order to exclude from the class, words such as yoowarni 'one', garndiwangooddoo 'many', etc. which may also realise the role of Deictic (but which are not determiners semantically). Being closed, the class of determiners could be defined by listing its members; however, it is useful to have this independent 'distributional' justification which shows that it is not just an arbitrary collection, set up by the analyst in the absence of good reasons.

Determiners may be assigned to one of two categories: definite and indefinite.

### 3.3.1.1 Definite determiners

Definite determiners are of three types: (1) demonstratives, which point to something in the situational context of the utterance; (2) endophors, which refer
to entities mentioned in the linguistic context - usually in the preceding text, but sometimes in the following text; and (3) a non-demonstrative, nonendophoric determiner which identifies an entity which is, or need be in neither the linguistic nor the situational context.
[1] Demonstrative determiners distinguish two degrees of distance with respect to the speaker, proximal and distal:

| Proximal: | ngirndaji | 'this' |
| :--- | :--- | :--- |
| Distal: | ngooddoo | 'that' |

Both of these terms are used in reference to places as well as things (although not, it appears, in reference to times).

There is a third term, ngirnda, which also refers to an object in the proximity of the speech situation. But it is not clear precisely how this term differs in meaning and function from ngirndaji 'this'. In quite a number of examples ngirnda was used in reference to something closer to the speaker than to the hearer, particularly when the object was invisible to the hearer. For example, it was used in reference to an object concealed in the speaker's hand (which the hearer believed was elsewhere) (see example (6-57)); and in another instance it occurred in a direct quote in a text, the purpose of which was to draw the attention of the addressee to a dead body the speaker had found. To the best of my knowledge, there are no examples in which ngirnda is used in reference to something relatively closer to the hearer, and/or visible to the hearer and not the speaker. The functions of the determiner ngirnda require further investigation.
[2] There are two endophoric determiners which are usually used in anaphoric reference to a previously mentioned entity. They are:

$$
\begin{array}{ll}
\text { niyaji } & \text { 'this' } \\
\text { niyi } & \text { 'that' }
\end{array}
$$

(Niyi 'that' is homophonous with the third person singular pronoun, but can be distinguished from the latter on morphological, as well as functional grounds (see section 3.6). However, it is often difficult to be certain that a particular instance of niyi is the determiner or the pronoun.)

The difference in meaning between these two words is not perfectly clear, but seems to be roughly as follows. Niyaji is frequently used in reference to something which was mentioned in the immediately preceding text, often the immediately previous clause, and which is assumed to be in the forefront of the hearer's consciousness. It is frequently used in the "reprise" construction (see section 5.3.2), illustrated in example (3-12) below. Niyi, on the other hand,
often 'picks up' a referent established earlier in the text, but which has not been in the foreground for some time. For example, in a text about Pigeon (the so called "outlaw of the Leopolds" - see 1.6 above), reference is made to an Aboriginal police tracker by the phrase niyi-ngga yoowooloo-ngga Roebourne Mick-ngga (that-ERG man-ERG Roebourne Mick-ERG) 'by that man Roebourne Mick'. This person, who had been introduced ten clauses earlier, had played no significant role in the events described in the eight intermediate clauses. (See also line (42) of Text 1.) However niyi is sometimes used in reference to an entity foregrounded in a text, or one which may be assumed to be in the forefront of the hearer's consciousness. In this case it has an emphatic or contrastive effect - see for example (6-30) below, and line (81) of Text 1. The difference between the two terms thus seems likely to lie in the relative prominence they give to the referent item, rather than in the proximity of the anaphor within the text.

In addition to referring to previously mentioned things, the two determiners niyaji 'this' and niyi 'that' are used in making reference to portions of text of size larger than phrases - that is, to situations, and not just entities. For instance, in
(3-11) garingi ngangjayi niyaji wila
wife he:might:have:given:him this OK
'Had he given him (his daughter) as a wife, it would have been OK.'
niyaji 'this' refers to the whole clause garingi ngangjayi 'he might have given him a wife'. More accurately, it refers to a FACT (Halliday 1985:227), the situation referred to by the clause (see 5.2.1), rather than the actual wording of the clause. But the section of text may be larger than a clause. For example, niyinhingi (that-ABL) and niyaji-nhingi (this-ABL) are used as sentential connectives, with the approximate meaning 'then, after that', where the thing referred to is either a single event (referred to by a sentence), or an episode (referred to by a larger stretch of text. (There appear to be individual preferences, some speakers preferring and almost always using niyinhingi 'after that'; others prefer niyajinhingi 'after this'.) None of the other definite determiners may be used in this way: they always refer to material entities or places.
[3] The determiner ginharndi, which is normally glossed 'you know' or 'that one, you know' by speakers, refers to something which is neither in the immediate speech situation, nor mentioned in the surrounding text. It indicates that, in the speaker's estimation, the hearer is able to identify the entity being referred to, it being known to him or her. The fact that it is explicitly stated as being shared
knowledge is the only clue that is given to the hearer to help him/her identify it. (The neighbouring Jaru language also has a determiner jangu with a very similar meaning - Tsunoda 1981:63.)

The two most frequent uses of ginharndi in my corpus are (i) in reference to individuals with whom both my Gooniyandi teacher and I myself had shared some experience (e.g. a visit), and (ii) in reference to individuals spoken about in previous conversations. For example, (3-12) illustrates the first usage:
(3-12) ngooddoo -ngga ${ }_{\mathrm{NP}}[\mathrm{ginharndi} \text { goornboo }]_{\mathrm{NP}}$ wardgilayi that ERG you:know woman she:had:gone -ngangi moolooddja -yidda niyaji -ngga barnnginaddi with:us Mulurrja ALL this ERG she:returned:me gadduraroo
afternoon
'The woman who went to Mulurrja with us brought me back yesterday.'

It should be noted that ginharndi is not a definite article, and has a range of uses quite distinct from the English article the. Ginharndi marks the referent of an NP as identifiable, and so definite; but only a small subset of definite NPs may be so marked. As distinct from the English definite article, ginharndi indicates a specific characteristic by which the referent may be identified: it must belong to the register of entities known, but not present in the linguistic or nonlinguistic situation. (Compare Halliday and Hasan 1976:71.)

### 3.3.1.2 Indefinite determiners

There are three indefinite determiners, which indicate that the identity of the referent of the NP is not known to the speaker. They frequently carry the added nuance of requesting this information from the hearer: that is, they are often used with interrogative effect (cf. Dixon 1972:182ff). However, it is clear that this interrogative sense is not a part of the formal meaning of the words (section 6.1), but is engendered or suggested by the context of its occurrence (see also sections 5.4 and 5.3 .1 below). This follows from the fact that there are contexts of occurrence of these determiners (namely when they occur with the enclitics -ngaddaya 'also, too' (section 6.3.5) and -widdi 'identity unknown' (section 6.3.6)), which do not admit interrogative interpretations. The three indefinite determiners are:

| ngoorndoo | 'someone, who' |
| :--- | :--- |
| ngoonyoo | 'something, which' |
| jaji | 'something, what' |

Ngoorndoo is used only when the unknown entity is believed to be human (but see below page 148):
(3-13) ngoorndoo -ga dijjingi
someone ERG he:broke:it
'Someone broke it,' or 'Who broke it?'
The two other indefinite determiners are used when the unknown is expected to be non-human. They are sometimes also used when it is expected to be human, as in the following example:
(3-14) ngoonyoo ngaanggi jiginya
which your little
'Which is your child?'
Ngoonyoo is attested in two contexts. (i) It is used when there is a closed set of possibilities for the particular 'role'. This was the case for example (3-14), in which the hearer was requested to identify her child from within a group of children. (ii) The most frequent use of ngoonyoo is, however, as an indefinite/interrogative for places. In this use, ngoonyoo occurs (normally) as the only word-level constituent in a 'local' postpositional phrase, realising a spatial circumstance (see section 5.2.3.1). For example:
(3-15) ngoonyi -yidda ${ }^{2}$ wardginggiri
which ALL you:go
'You're going somewhere,' or 'Where are you going?'
(3-16) ngoonyoo -nhingi wardji
which ABL he:went
'He came from somewhere.' or 'Where did he come from?'
It is possible that these two senses of ngoonyoo are related as contextualisations of a single formal meaning. However, at present, it is not clear whether this involves the notion of place - examples such as (3-14) allow this interpretation in that the alternatives to be chosen from are as a rule present in the extralinguistic situation, and may be identified by their location. On the other hand, it may involve just the notion of choice from a constrained set of possibilities in the case of (ii), the set of possibilities is constrained by type: they are all

[^10]places. (Cf. in English there is a preference for 'which place' rather than 'what place' in examples like the free translations of (3-15) and (3-16).)

Jaji appears to be the least specific of the indefinite determiners, being used in all circumstances other than those covered by ngoorndoo 'someone, who' and ngoonyoo 'something/where, which'. It usually suggests that the unidentified entity is neither a place nor a person, although it does not explicitly exclude either of these possibilities. For example,
(3-17) jaji -yoo gardbini
something DAT he:hit:him
'He hit him for something,' or 'Why did he hit him?'
might elicit a reply such as ngaaddiyoo (stone-DAT) 'for money', or winhi woongooloo gardbini (nothing fun he:hit:him) 'He hit him just for fun.' Ngaddanyiyoo (mother-DAT) 'for (his) mother' (i.e. for the sake/benefit of his mother) is an equally direct reply. (Only the last of these could be used as a direct response to ngoorndooyoo gardbini (someone-DAT he:hit:him) 'He hit him for someone' or 'Who did he hit him for?'.)

### 3.3.1.3 What-cha-ma-call-it

In contrast with the three indefinites discussed in the preceding subsection, which may realise any of the three noun phrase roles Deictic, Entity or Qualifier, the hesitation word ngoorndoongoornoo 'what's it called' or 'what-cha-ma-call-it' occurs only as Entity (or so it appears on present evidence). It is always the sole constituent of an NP. In normal conversational speech the form is usually reduced to /ngoorndoornoo/. Ngoorndoongoornoo is quite transparently constructed from the "personal" indefinite ngoorndoo 'who' (which is also occasionally itself used as a hesitation word, usually in reference to a person). There are no forms based on the other indefinite words, and ngoorndoongoornoo serves as a hesitation word for all types of entities, human and non-human (including places). These facts suggest that ngoorndoo indicates an indefinite name or designation rather than an indefinite person. Examples are line (33) of Text 1 and:
(3-18) ngoorndoongoornoo mirigan gardiya
what-cha-ma-call-it American white:person
'What-cha-ma-call-it? Americans.'
(3-19) ngoorndoongoorni -ya mayibil dawoon -ja
what-cha-ma-call-it LOC Mable Downs LOC
'At what-cha-ma-call-it? At Mable Downs.'
Ngoorndoongoornoo 'what-cha-ma-call-it' does not occur particularly frequently in texts. [a:] is preferred as a hesitation marker. Some speakers use yaa as well as ngoorndoongoornoo, with apparently the same meaning.

### 3.3.2 Kin-terms

Kin-terms constitute a class with over twenty members all of which occur with the stem-forming suffixes -wa 'his/her', -badi 'yours' and -langi 'dual' (see 3.12.1.1). Kin-terms so defined also have a characteristic distribution: they normally realise only the Entity function in NPs, and appear never to be used non-referentially. (This characteristic could not however be taken to be a defining property of the class, since it holds true of other nominals such as proper nouns.) Included in this subclass are terms for relatives, such as ngaboo 'father', ngaddanyi 'mother', maddiyali 'wife's mother', etc. (see 1.4), and also a few which are not based on genealogy or imputed genealogy, such as jaliji 'peer, agemate' and narroogoo 'namesake'. (McGregor in preparation-a provides a detailed discussion of Gooniyandi kinship.)

### 3.3.3 Subsection terms

Subsection terms, which are sixteen in number - there are distinct terms for the male and the female members of each subsection (see 1.4) - may be defined by their occurrence with the morpheme -warnoo 'all members of the subsection'. For example, jagadda-warnoo refers to all the members of the jagadda subsection. -Warnoo appears not to occur with any other lexemes.

### 3.3.4 Number words

There are distinct terms for the first three numbers only: yoowarni 'one', garndiwiddi 'two' and ngarloodoo 'three, a few'. There are a couple more terms denoting larger, indefinite numbers, such as garndiwangooddoo ( $\sim$ garndiwa ~ garndiwangaddi) 'many', garawooloo 'very many', and waringaddi 'very many people'. Occasionally larger numbers are referred to by combinations of the terms for one and two. For example, five is sometimes referred to as garndiwiddi garndiwiddi yoowarni 'two two one'. (It is because ngarloodoo does not precisely designate 'three' (but indicates rather 'a few') that this three word expression is used instead of the apparently simpler two word expression garndiwiddi
ngarloodoo 'two three' or ngarloodoo garndiwiddi 'three two' - cf. Harris 1982:166ff.) Alternatively, five may be referred to by the NP (ngirndaji) marla '(this) hand'. On a couple of occasions the number words yoowarni 'one' and garndiwiddi 'two' have been heard in combination with marla 'hand' to indicate the numbers five and ten respectively. However, both of these modes of expression are used very infrequently, and I have not heard numbers above ten constructed by either of these means.

### 3.3.5 Proper nouns

Proper nouns are names of persons or places. They invariably realise the role of Entity in an NP; this NP may of course be embedded within another NP, usually to indicate the possessor of the thing referred to by the second NP. There are apparently restrictions on the realisations of other roles in phrases in which proper nouns occur: the only other role normally filled is that of the Classifier, as in:
(3-20) riwi ngathaddamany
place [placename]
'the place Ngathaddamany'
Place names are formally distinguishable by the fact that they may occur with both of the suffixes -wanggoo 'a person who is associated with the place' and -waddawadda 'everyone associated with the place'. These two suffixes do not occur in any other context. Ideally, the association between the person(s) and the place is that it is his/her/their dreaming or conception site: boolga-wanggoo refers (ideally) to a person whose conception site is boolga (i.e. Bulga Swamp). However, in actual usage the association may be less stringent. It may be an affiliation through residence, as when all of the residents of Gogo were referred to collectively in a text as bamathidi-waddawadda, with no implication that this place was the conception site of every individual in that community. Alternatively, it may be an affiliation through birth, or through the patriline (less regularly through the matriline). Thus a single individual may on different occasions be referred to as $x$-wanggoo for more than one place name $x$.

Personal names are used infrequently and cautiously, and one way of avoiding their use is to refer to the individual indirectly through his or her association with a place, usually his/her conception site or birthplace. An individual may be referred to in this way so frequently that it becomes a sort of nickname. This was the case for one old man, now deceased, who was usually referred to as Malawanggoo 'person associated with Mala, having Mala as his
conception site'. For other individuals this mode of reference was not frequently employed (at least in my presence), other modes of indirect reference being preferred.

Both place and personal names are normally unanalysable morphologically. The only exception that has come to my attention is the place name diyadiya bliddijgilayi '(the place where) the peewee went "bliddij"' .

### 3.4 Adverbials

Adverbials were distinguished above (see section 3.2) by their ability to realise clause rank roles of circumstance (including location, direction from, direction towards, etc.). On the one hand they are distinct from nominals, which may realise phrasal roles only, never clausal roles. On the other hand, they differ from particles, which, while they have the property of occurring as constituents of clauses (where they realise the role of Propositional Modifier - see section 5.4.1), do not realise circumstantial roles.

It has been suggested above that adverbials do not form phrasal units with one another. They do however form word complexes together. The two adverbials in clauses such as (3-21), for instance, might initially appear to form a phrase, with mayaaddayaadda 'hard' modifying galjini 'fast' (i.e. 'very fast'). However, such syntagms are very rare, and there is no convincing evidence that the relation is one of modification, rather than addition (on which see sections 4.3.1 and 5.6.2):


In fact, as the gloss indicates, it would seem that mayaaddayaadda is better glossed 'hard' than 'very'. (It does not occur as an intensifier of adverbials other than those relating to speed; and secondly, it may also occur alone (i.e. without another adverbial) in clauses of motion carrying the sense 'hard, energetically'. Thirdly, it is obviously the partial reduplication of mayaadda, which is segmentable into maya, an adverbial meaning 'hard, energetically' (where the verb is not one of motion) and the suffix -wadda (on which see 5.5.1.3 below).) For these reasons, and in the absence of evidence to the contrary, I assume that such syntagms are indeed word complexes, and not phrases. A more literal translation of (3-21) would thus be 'He ran hard and fast'.

Adverbials are as a rule mutually substitutable with PPs; but because they have quite different ranges of meanings the two are not in complementary
distribution, and are frequently found in apposition, each adding something to the meaning of the other. That is, adverbials and PPs form unit complexes together (see section 4.3.2 below).

There appear to be four main types of adverbial in Gooniyandi: adverb, temporal adverbial, spatial adverbial, and frequency adverbial. These will be discussed in order in the subsections below.

In addition, there are two very general adverbials yiniga in some manner, in what manner', and miga 'in this/that manner', which might perhaps be regarded as indefinite and definite "determiners" respectively for adverbials. They are not used in respect of concrete entities (for which the nominal determiners discussed in 3.3.1 are used), but rather for types of action, including speech, and other 'abstracts' such as qualities. For example,
(3-22) Q: yiniga ngawali ngaragginyja how woomera you:make:it
A: miga ngaragba like:this you:make:it
Q: 'How do you make a woomera?'
A: 'You make it like this.'
Here yiniga 'in some/what manner' and miga 'in this/that manner' refer to complex processes, which could only be described in speech in fairly long texts. (Incidentally, this probably explains why it was that "why" questions I constructed with jajiyoo (something-DAT) 'what for' were normally answered in terms of entities: unlike English 'what', the use of jaji 'what' seems to restrict attention to concrete entities.) The fact that the two words occur in contexts such as (3-22) justifies their classification as adverbials. (A nominal would have to occur in an ERG PP in an example like (3-22) where it modified the manner of action.)

Miga 'in this/that manner' can refer to at least the following:

- manners of action, as in (3-22) above and
(3-23) miga waraari
like:that he:stands
'He stands like that.';
- qualities or attributes of things:
(3-24) miga -jangi wardba
like:that SEM you:will:bring:it
'Bring one like this (i.e. one of this type, with these attributes).';
- spoken words and/or their semantic content:
(3-25) marlami miga jijagginggirawoo
nothing like:that you:talk!
'Don't talk like that.';
- directions, as in example (3-26):
(3-26) miga(wa) wardbiri
like:that you:will:go
'Go this way.' (usually accompanied by a gesture);
- times when, or conditions under which processes occurred or will occur, for example:
(3-27) middi laandiyawoondi miga -ya bijbarni sun it:should:get:high like:that LOC you:will:arrive 'Come when the sun is high.';
- quantity, including quantity of time:
$\begin{array}{cllll}\text { (3-28) gamba garndiwiddi garndiwiddi } & \text { yoowarni miga } & -y a \\ \text { water two } & \text { two } & \text { one } & \text { like:that } & \text { LO }\end{array}$ water two two one like:that LOC ngangbinbidi maa they:gave:them meat 'After five years have elapsed they give them meat.';
and anything conveyed by means of gestures (see example (3-26) above).
Like the three indefinite determiners ngoorndoo 'someone, who', ngoonyoo 'which' and jaji 'something, what' discussed in section 3.3.1.2, yiniga appears to occur in both the indefinite sense of 'in some manner' and the interrogative sense 'in what manner, how'. And, as well as referring to manners (as in (3-22)), yiniga 'in some/what manner' can refer to:
- content of speech, as in:
(3-29) yiniga jijagjawoominganggi
some:manner he:should:talk:to:you
'What will he say to you?'; and
- number:

> (3-30) yiniga mawoolyi gooddijgoonjoonaddi
> some:manner children you:hold:them
> 'How many children have you got?'

It is likely that further investigation will uncover additional uses of yiniga 'in some/which manner', perhaps matching with those of miga 'in this/that manner'.
Nominal determiners, as well as the two adverbials miga 'in this/that manner' and yiniga 'in some/what manner', occur in NPs referring to spoken words. (The first constituent of (3-29) above, for example, may be expanded into an NP yiniga thangarndi (in some/what manner word) 'which words'.) It seems that determiners are generally used when particular words, or groups of words (such as sentences or texts) are being referred to, and are treated as things. The adverbials are used when the content or meaning, rather than the actual wording of an utterance is being referred to.

The examples above show yiniga 'in some/what manner' and miga 'in this/that manner' in NPs as well as in clausal circumstantial roles. They also occur as lexical heads of VPs, yiniga carrying the meaning 'do/say something or what' and miga meaning 'say, speak, think'. (Examples are (5-324), (5-331) and (5-332) below.)

### 3.4.1 Adverbs

Adverbs qualify the process, indicating the manner in which it was done, or in which it occurred. For example,

| (3-31) barnbadda | wardji |
| :---: | :--- |
| slowly | he:went |

'He walked slowly.'
Adverbs are defined as those words which may realise the circumstance of Manner (see section 5.2.3.4); this role may also be realised by NPs and PPs. Included in the class are words denoting speed (e.g. barnbadda 'slowly', thilmangga 'rapidly', galjini 'quickly, fast'), force (e.g. maya 'hard, forcefully', janggoo 'lightly, a bit', thirili 'energetically'), human characteristics (e.g. doomagoomagoo 'slurringly', gabaaba 'clumsily', biyari 'sneakingly'), and material qualities (such as mooddoo 'backwards', ngaladda 'on one's back', blanbidda 'on one's front').

Adverbs may in addition realise phrasal roles within NPs and VPs:
(3-32) maya -adda -yaadda urad -gali
hard MNR MNR go CHAR 'a hard walker'
(3-33) waya thiddgirli -windi
wire straight it:got
'The wire got straight.'

### 3.4.2 Temporal adverbials

Temporal adverbials constitute a fairly small class, most of whose members refer to points of time, and are used to locate processes temporally; in addition there are just a few which indicate temporal duration. The first group includes: words for the seasons, ${ }^{3}$ baddangga 'dry season', moonggoowarla 'winter' and yidirla 'wet season'; words primarily referring to part of the day, maningga 'night time', bilgaali 'midnight', gaddwaroo 'afternoon, yesterday', gaddagaddwaroo 'late afternoon', lanygiya 'daytime, midday', moongaya 'morning', moongamoongaya 'tomorrow morning', etc.; and the three shifters (Jakobson 1957), yaningi 'today, now, then (at that point of time)', ngamoo 'before, already', and wamba 'later, still'. (These last three are also found in the role of Propositional Modifier see sections 5.4.1, 6.4.10, 6.4.11 and 6.4.13.) There are also words locating the event in the near or the distant past: jamoondoo 'the other day', ngaddanggarni 'long ago, in the dreamtime'. The second group includes yinggi 'for some time', yinggiyila 'for a short while', and yilba 'for good, forever'.

Some temporal adverbials can enter into syntagms with others. These syntagms are very restricted in nature, the first member usually being yaningi 'today' or jamoondoo 'other day', the second, a word signifying a part of the day. For example,
(3-34) yaningi gaddwaroo
today afternoon
'this aftemoon'
(3-35) jamoondoo maningga
other:day night
'the other night'
Very occasionally the word order is reversed, as in
(3-36) maningga yaningi
night today
'tonight'
These constructions will be regarded as word complexes, because the

[^11]second member expands on the first, making its reference more precise (see 5.6.2 below); in each example it is clear that neither word modifies or qualifies the other. Temporal adverbials are also found in apposition with PPs, forming complexes with them:
(3-37) ngamoo nganyi marlami -ya ngaragbidda boojabij
before me nothing LOC they:made:it post:office
'Before my time they built the old post office.'
Temporal adverbials of the locational type are sometimes found in PPs where they may fulfil the functions of Classifier (example (4-29)) and Entity, as in:
(3-38) yaanya -ya gadduaroo
other LOC afternoon
'the other afternoon'

### 3.4.3 Spatial adverbials

Gooniyandi has a rich set of spatial adverbials, which function to qualify the location, direction, orientation, extent, proximity, etc. of an event, process or entity with respect to some chosen point(s) of reference. As is the case with other adverbials, the spatial ones realise clausal roles of circumstance, and are generally mutually substitutable with PPs. Again they give information of quite a different type to that given by PPs, and it is quite common to find spatial adverbials and PPs in apposition (see section 4.3.2 below).

Two major subclasses may be identified on semantic grounds: cardinals and non-cardinals. Cardinals orientate entities or situations spatially with reference to an absolute reference system, determined by the world. By contrast, non-cardinals mediate through ephemeral 'co-ordinates', set up by the speaker, such as (the speaker's) location or direction or movement. In this sense, non-cardinals are inherently (i.e. in their lexical meaning) deictic. We will discuss the two types in order.

Cardinals orientate horizontally with respect to the points of the compass and the direction of flow of a river or creek, and vertically either upwards or downwards. In normal speech, cardinals are very frequent; clauses of motion nearly always specify direction through their use, often together with a PP (which might indicate, for example, the actual place to or from which motion was directed). They are usually employed in giving directions, for which the terms for left and right are almost never used. For instance, on one occasion
when I was driving through the bush in a four wheel drive vehicle with a group of Bayulu people, whenever they advised me to alter my course, it was with respect to the compass points. They used the 'direction to' forms (see Table 3-2), simply stating them as one word utterances: e.g. lilinggoo '(Veer more) towards the west'.

Cardinals are not, however, restricted to clauses of motion or rest, although they are less frequent elsewhere. A clause of directed action (section 5.2.1.3) may specify the direction in which the action was attempted; this is usually done only when there was no specific goal, or the goal was not reached. For example:
(3-39) thaanoonggoo milala
upwards I:saw:it
'I looked upwards.'
Four compass points or directions are distinguished: north, south, east and west; and for each of these there are four distinct forms distinguishing location, side/end, direction from, and direction towards. The forms are as shown below in Table 3-2.

Table 3-2: Compass points and directions

|  | North | South | East | West |
| :---: | :---: | :---: | :---: | :---: |
| Location | biddi, boowooddoo | $n g i y i$ | ngila | liya, liyaani |
| Side/End | booddoonggoowa | ngiwawoowa | ngilmi, <br> ngilanggoowa | lilingganyi, lilinggoowa |
| Direction from | boowooddoongoo | ngirnali | ngilmangi | liyarnali |
| Direction towards | booddoong800 | ngiwawoo | ngilanggoo | lilinggoo |

The location forms indicate that the location of a process or entity is to the north, south, east, or west of some reference point, which is normally the speech situation. For example:
(3-40) biddi warangbiddi
north they:sat
'They sat in the north (from here).'
I have been unable to detect any difference in meaning between the two location forms given for north and west.

The side/end forms refer to the north, south, east, or west side or end of a body, usually a topographic feature such as a mountain range or body of water. An example is
(3-41) girili waraani ngilanggoowa
tree itstands eastern:end
'The tree stands on the eastern end (of a row of trees).'
It is evident that the side/end forms are constructed from the direction towards forms by the addition of -wa. It may be that this -wa is the adverbialiser 'way' (discussed in section 3.12.3.1), which indicates here the 'mode' or 'aspect' towards the north, south, east or west of a particular body. Note that in all but the most careful speech /oowa/ is realised by /aa/ (cf. VR6 of section 2.4.2.3.1). Finally, it is not clear whether, and if so how, the forms ngilmi 'east side/end' and lilingganyi 'west side/end' differ from the regular -wa forms.

Direction from forms indicate that the process emanates from the north, south, east or west. The process is usually seen from the point of view of its completion, rather than as issuing from a source.
(3-42) bijngarni ngirnali
he:emerged from:the:south
'He arrived from the south.'
Direction towards forms indicate that the process is directed towards the north, south, east, or west. In contrast with direction from, the process is here viewed from the midst, not necessarily from an endpoint. For example,
(3-43) ngilanggoo wardjiddi
towards:the:east we:went
'We went east.'
Table 3-3 shows the terms for the vertical directions, for which there are again four distinct forms, making the same systemic distinctions as the compass point adverbials.

Table 3-3: Vertical directions

|  | Below (Down) | Above (Up) |
| :--- | :--- | :--- |
| Location | baabiddi | laandi |
| Side/End | babaabiddi | lanngaddi, lannyingi, lanjingi |
| Direction from | babirnali | landiwali |
| Direction towards | babooddoonggoo | thaanoonggoo |

Examples of usage are:
(3-44) waranggiri baabiddi ngaaddi -ya
he:sits below stone LOC
'He is sitting at the bottom of the hill.'
(3-45) yoodbidi babaabiddi
they:put:it in:side
'They put it inside (e.g. a bag).'
(3-46) babirnali mardoowodda -nhingi barwindi
from:below river ABL he:climbed
'He climbed up from the river.'
(3-47) wardngi babooddoonggoo
I:went down:wards
'I walked down.'
Note that side/end refers to an aspect of a material body, either the underside or the top-side - and in many circumstances babaabiddi translates into English as 'inside', and lanngaddi (etc.) as 'on top of'. (I am unable to distinguish differences in meaning among the three words in the "above side/end" box in Table 3-3.) As (3-44) indicates, the terms for 'up' and 'down' allow for horizontal displacement at the same time. Another illustration of this is that motion between Junjuwa village, which lies on a small hill bearing the same name, and the river is usually referred to in these terms, in preference to compass orientation, even though the height difference is quite small.

The forms for the two sets of cardinals are suppletive, and bear little resemblance to the shapes of the corresponding 'case-marking' postpositions. The main morphological regularities are as follows:
-nggoo in the direction towards forms;
-rnali ~-ngoo $\sim-n g i$ in the direction from forms; and
-wa in the side/end forms of the compass directions, which, as I suggested above, may be the adverbialiser -wa (see section 3.12.3.1).

The first two of these regularities, however, admit exceptions, and the forms to which the above are suffixed are not predictable. Thus it is probably not worth while attempting to segment the forms synchronically. It would appear that to derive the forms regularly from underlying forms would involve as many complications as are actually found in the paradigm.

Two further terms, gindiwa 'upstream' and jibiddi 'downstream', are used in indicating direction and location with respect to a river or creek. There are no distinct forms for location vs. direction.
(3-48) gindiwa waranggooddoo
upstream they:sit
'They live upstream.'
(3-49) jibiddi wardji
downstream he:went
'He went downstream.'
-Wa may be added to each term, giving the forms gindiwaa and jibiddaa (by rule VR6 of section 2.4.2.3.1) which, like the side/end forms of the compass point terms, indicate location on the upstream or downstream end of a body such as a line of trees beside a watercourse.

But the meaning of the two terms gindiwa 'upstream' and jibiddi 'downstream' is more general than suggested by the above. They can refer to movement in constricted mediums such as hollow logs, holes in the ground, caves, arteries and veins in the body, the choice apparently depending on the expected direction in which water would flow, and/or on whether it is towards or away from what is considered to be the source or 'upper' endpoint. Loosely, gindiwa suggests movement against the direction of flow and towards the source, while jibiddi suggests movement with the flow or grain, and away from the source. An example is (3-50), which describes putting food into a cave (see also line 13 of Text 2):

| (3-50) niyaji | -ngga | manyi | dagooddwaddinga |
| :--- | :---: | :--- | :--- | gindiwa

Since creeks and rivers are constricted within their banks, it is possible that
constriction is a crucial defining property of these two words.
Non-cardinals may be divided into at least four semantically distinguishable subtypes indicating: (a) relative distance; (b) location and orientation with respect to a chosen reference point; (c) direction of motion in terms of the chosen reference point; and (d) orientation with respect to other entities of the same type. These divisions are preliminary, and I do not mean to suggest that words must be uniquely one or the other subtype. However, there do turn out to be some formal correlates of this division into subtypes.
(a) There are two terms indicating distance, irrespective of direction: marnangooddoo 'far' and graa 'near, close up'. They apply equally to distances between objects (the speaker and the eater in (3-51)) and distances covered by motion:
(3-51) ngooddoo marnangooddoo ngabga
that far he:eats:it
'He's eating it there, far away.'
(3-52) marnangooddoo wardnga
far he:took:it
'(The willy willy) took it a long way away.'
These distance terms can also be used in qualifying within an NP, especially in indicating dimensions of entities which are not normally measured as long or short, such as holes, which are either marnangooddoo 'deep' or graa 'shallow':

| (3-53) | girlingiddi |
| :--- | :--- |
| hole | graa |
| near |  |
| 'shallow hole' |  |

(It may be that here the terms refer to the bottom of the hole with respect to the top - whereas most objects are measured from either end.) Marnangooddoo 'far' and graa 'near' are, however, more usually used in attributing a property of an NP (i.e. in a characterising clause - see section 5.2.1.1.1.2), than in qualifying in an NP.
(b) Terms indicating relative location include wilajga 'around', riddinggi 'side, to the side of', balngarna 'outside', biliga 'halfway, middle', balyjoowa 'behind', wilanggaya 'in front of, ngirndangaddingga 'this side', and ngooddoongaddingga 'that side'. Except for balngarna 'outside' and balyjoowa 'behind', these terms appear to be used exclusively in location, never in motion to or from. They frequently occur with LOC PPs which make explicit the
reference point (see 4.3.2). (Of course, ngirndangaddingga 'this side' and ngooddoongaddingga 'that side' involve two reference points, the location of the speaker and some other body, such as a river.)

Perhaps we should also include here yalambangoo 'same place', which seems to suggest that the entity will remain located at some particular spot. For example,
(3-54) mangaddi riddiggoowawingi yalambangoo warangngiri
not I:will:be:shifting same:place I:sit
'I'm not going to shift; I'll stay here in this same place.'
(c) Terms indicating direction include the following: minaloogoo 'this way, towards here', banyangi 'away from here', ngiddiwandi 'across (the field of vision)', thoolngooddoo 'through', ngirndangaddi 'this way' and ngooddoongaddi 'that way'. An example is:
(3-55) minaloogoo wardngina
this:way he:brought:me
'He brought me towards here.'
These terms normally occur in clauses referring to motion, where they usually take the speech situation as reference point. For this reason, they are less commonly found in syntagms with PPs than are the locationals discussed under (b) above. However, there may be reasons to express further information, such as indicating precisely who was involved (when speaking of previous events), or indicating the source of motion:
(3-56) ngidi -yooddoo minaloogoo wardjingangi
we DU this:way he:went:to:us:two
'He came up towards us.'
(3-57) wardngi boojabij -nhingi minaloogoo
I:went post:office ABL this:way
'I came from the post office this way.'
Except in direct speech, minaloogoo 'this way' does not seem to allow shifts of reference point, which are, however, possible for the other terms.

Sometimes these terms are found in clauses other than those referring to motion. For example,
(3-58) thoolngooddoo waraxri
through he:stands
'He is standing with his back turned (to me).'
(d) I distinguish the set of orientating adverbials from the locationals (type (b)) because they do not usually locate entities or situations with respect to fixed co-ordinates, but rather, indicate the spatial configuration or arrangement of (usually) moveable entities, as they are engaged in a situation. Included are: wilangi 'ahead', wilangajaddi 'leading, ahead', yalawa 'next to, beside', yiddmirnimirni 'level', wandamaddi 'side by side', wandaadda 'in a line, single file', and langarnimirnimirni 'into one another (as in run into one another)'. Balyoowa 'behind' is used both in location (as discussed under (b)) and orientation. Some examples of use of these terms follow:
(3-59) nganyi wilangajaddi wardngi niyi balyoowa wardji
I ahead I:went he behind he:went
I went ahead; he followed behind.'
(3-60) wandamaddi bagoowooddoo
side:by:side they:lie
'They are lying side by side.'
(3-61) yiddmirni giddagiddawiddiyi
level they:two:ran
'They two ran level.'
It is unclear at present exactly how wilangi 'ahead' and wilangajaddi 'ahead, leading' differ semantically. Yalawa 'next to, beside' can be distinguished from the semantically similar graa 'near', both of which were often translated 'close (up)'. Graa 'near' is a measure of distance. Yalawa 'next to, beside', on the other hand, does not invoke a measure of relative distance, but indicates the spatial arrangement of adjacency. Compare for example (3-62) with (3-63), which are typical of the distinct uses:
(3-62) graa wardbiddingadda
close they:went:to:me
'They came up close to me.'
(3-63) yalawa warangbiri
close you:will:sit
'Sit close (to me).'
Order of entities is expressed by spatial metaphor using the orientation types (d), rather than through a set of ordinal numbers. Thus, objects may be ordered wilangi 'leading, first', or balyjoowa 'following, non-first'. Time is also ordered in this way, previous time being referred to as wilangi 'ahead', and present and future time as baljoowa 'behind'. "Same time" also finds a similar mode of expression:
> (3-64) mirlimirli binjil giribbindi yiddmirnimirni giribnyaliwindi paper pencil it:finished level it:finished:again 'The pencil and paper ran out together.'

Spatial adverbials are found in roles other than clausal roles of circumstance: in NPs they may function as Qualifiers, and in VPs they may realise the role of Process. The cardinals of compass points and vertical directions are found in all three contexts. (3-65) and (3-66) show cardinal adverbials in the roles Qualifier and Process respectively.

> (3-65) raddin.giri ${ }_{\mathrm{NP}}[\text { midda babooddoonggoo }]_{\mathrm{NP}}$
> he:hangs head downwards '(Flying foxes) hand with heads down.'
(3-66) warlibiddi vp[baabiddiwani] $]_{\mathrm{Vp}}$
river it:fell:down
'The river went down.'

But the directional adverbials ngiddiwandi 'across' and thoolngooddoo 'through', and the locational adverbials balngarna 'outside', biliga 'middle' and balyjoowa 'behind' can function as circumstances and Qualifiers only, not as Processes. An example of one of the directional adverbials in the Qualifier role in an NP is:
(3-67) marnba thoolngooddoo
bum through
'back tumed'

### 3.4.4 Frequency adverbials

There are three frequency adverbials, perspicuously derived from the first three number words: yoowarningaddi 'once', garndiwiddja 'twice' and ngarlooddja 'thrice'. I have no corresponding form for 'many times', and the word for 'always, all the time', ngaddarni, is a particle, not an adverbial. An example of use of a frequency adverbial is:
(3-68) yoowarningaddi gardboowoo
once you:will:hit:him
'Hit him once.'
Frequency adverbials are also used in counting the number of days over which a process extends. For example,
(3-69) gaddiggoowawingirni ngarlooddja
I:might:be:away thrice
'I might be away three/a few days.'
(3-70) ngarlooddja bagiyiddi
thrice we:lay
'We camped (there) for three days.'
It is possible to be more explicit by using the nominal riwi 'camp, place' in the sense of 'day':
(3-71) yoowarningaddi riwi bagiyiddi
once camp we:lay
'We camped (there) one day.'

### 3.4.5 Concluding remarks

Gooniyandi adverbials form a rich system, even if the class itself has relatively few members. The description given above shows the broad outlines only. There remain a number of words whose status as adverbials remains doubtful. Joorloo 'together (normally as a pair)', moolba 'together (as a large group)' are almost certainly properly classified as adverbials; so also are mawirndi 'hold in a bear hug' and mirngriya 'dodge (out of the way of a missile)'. For some other words, such as briyandi 'in turn, in retaliation', and galanyi 'do first' it is, however, more difficult to be certain of their status as adverbials rather than particles.

### 3.5 Particles

Gooniyandi has a small class of a dozen or so particles, which are non-ranking dwords that enter into syntagmatic relations with clauses, which they contain within their 'scope' (see example (3-3)). As mentioned earlier, particles modify the propositional content of clauses (on which see also section 5.4 .1 below). Particles may be defined as those lexemes that are also d-words, and which contain clauses within their scope, but do not occur in other clausal roles. The last qualification is necessary because there are at least three temporal adverbials - namely ngamoo 'before', yaningi 'now' and wamba 'later' - which can, and fairly commonly do, function as propositional modifiers.

The following are the main particles:

| mangaddi | 'not, it is not the case that' |
| :--- | :--- |
| marlami | 'nothing, nowhere, never, no one' |
| briyandi | 'in turn, in retaliation' |
| thaaddi | 'it was mistakenly believed that' |
| yiganyi | 'uncertain' |
| winhi | 'only, just, nothing of importance' |
| wajanginyii | 'but really, in actual fact' |
| jinginyji | 'but really, in actual fact' |
| moorda | 'completely, certainly' |
| minyidda | 'true' |
| birli | 'maybe, perhaps' |
| woomoorla | 'not' (avoidance style) |
| ngaddarni | 'always' |
| ngambiddi | 'again, next time' |
| wambawoo | 'almost, nearly' |
| yaniyaningi | 'already' |

The glosses given here are to be taken with a grain of salt; for a detailed discussion of the semantics of the particles, see section 6.4.

Unlike nominals and adverbials, particles do not enter into syntagmatic relations with one another to form complexes, or, as is the case for nominals, phrase-like constructions. If a clause contains two particles, each realises a different propositional modifying role; they never go together as a single unit realising a role of this type. One of them is always contained within the scope of the other, and constitutes a part of the clause within the scope of the second (see below page 387).

Some particles do occur elsewhere, as constituents of NPs. For example, the 'subjective' particles thaaddi 'mistakenly believed' and yiganyi 'uncertain' can be "nominalised". This involves a shift from the speaker's subjectivity to the subjectivity of the actor in the referent situation, thus: thaaddi '(actor) believed mistakenly' and yiganyi '(actor) was uncertain in the manner in which s/he did the action'. In this circumstance, the particle yiganyi 'uncertain' (but not thaaddi 'mistakenly believed') occurs as the sole lexical constituent in an NP or ERG PP (depending on whether the clause is intransitive or not) realising a circumstance of Manner (section 5.2.3.4). The particle marlami 'nothing, without' also occurs within NPs, usually as a Qualifier or Entity (see examples (6-117) and (6-127), whilst mangaddi 'not, no' occasionally contains just a single word (or phrase) within its scope (see example (6-113)).

### 3.6 Pronominals

The category of person is realised in a number of different places and ways in the grammar of Gooniyandi. Within the VP it is realised by bound morphemes, which occur either as prefixes to the classifier complex, or as enclitics to the entire verb phrase (see section 3.9.3.6). Elsewhere, it is realised by free words, and in a set of two possessive suffixes to kin-terms (see section 3.12.2.1). With two minor exceptions (see pages 225 and 234 below) the system is constant throughout, distinguishing three persons (first, second and third), two numbers (singular and non-singular) and what I will refer to as a restricted/unrestricted opposition in the first person non-singular.

The restricted category in the first person non-singular encompasses the traditional categories of first person dual inclusive, dual exclusive, and plural exclusive, whilst the unrestricted category corresponds to the first person plural inclusive. In other words, the inclusive/exclusive distinction is maintained only in the plural; it disappears in the dual. The unrestricted category always includes the speaker, the hearer, and at least one other person; the restricted category excludes one of the non-speakers. Using the symbolism $\mathrm{S}=$ speaker, $\mathrm{H}=$ hearer, and $\mathrm{O}=$ other(s), and assuming that S and H can refer to a single individual only, while $O$ may refer to any number of others, the restricted and unrestricted categories may be distinguished as follows:

|  | S | H | O |
| :--- | :--- | :--- | :--- |
| Restricted | + | $\alpha$ | $-\alpha$ |
| Unrestricted | + | + | + |

where $\alpha$ can be either + or,$--\alpha$ having the reverse polarity. Equivalently, we could describe the restricted category as $S \&(H \vee O)$, where ' $v$ ' signifies disjunctive or; and the unrestricted category as $\mathrm{S} \& \mathrm{H} \& \mathrm{O}$.
To the best of my knowledge, pronominal systems resembling the Gooniyandi one have not been reported in any other language, from Australia or elsewhere. Among the neighbouring languages, those from the Pama-Nyungan family which includes Walmajarri (Hudson 1978:85), Jaru (Tsunoda 1981:64ff), and Wangkajunga (my own fieldnotes) - and the Worrorran family - e.g. Ungarinyin (Rumsey 1982b:31) - make the usual inclusive/exclusive distinction in the first person non-singular. In the Jarrakan languages Kija (my fieldnotes) and Miriwoong (Kofod 1978:47), this distinction is at least optional. However, all of the languages of the Nyulnyulan family (traditionally located to the west of Gooniyandi and Bunuba) show a quite different system, which distinguishes four persons $1,1 / 2,2$, and 3 , and, depending on the language, two or three numbers, minimal, augmented and, where three numbers are distinguished, unit augmented (Stokes 1982:151ff).

If the additional feature [ $\pm$ singular] is invoked, it is possible to distinguish and characterise all of the pronominal categories, as shown in Table 3-4, which cites the nominative forms.

Table 3-4: Feature specification of Gooniyandi pronominals

|  | nganyi | ngidi | yaadi | nginyji | gidi | niyi | bidi |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | + | + | + | - | - | - | - |
| H | - | $\alpha$ | + | + | + | - | - |
| O | - | $-\alpha$ | + | - | + | + | + |
| sg | $(+)$ | $(-)$ | $(-)$ | $(+)$ | $(-)$ | + | - |

The bracketed symbols of the bottom line indicate that number specification is redundant for the non-third person categories. However, that number is relevant to, or inherent in, these categories is evident from the fact that when the nonsingulars occur in the Entity role in NPs, it can be, but need not necessarily be marked more precisely by number words, or by the postpositions -yooddoo DU and -yarndi PL.

The feature analysis of Table 3-4 specifies each pronoun in such a way as to distinguish it from every other pronoun, and associates with each an underlying meaning specified in terms of features. This neatly encapsulates the referential meaning of the two non-singular first person pronouns ngidi and yaadi, providing a formal statement of the verbal description given earlier. However, it should be noted that this does no more than provide a formal summary of the earlier verbal statement. We must raise the question as to whether the proposed analysis has any independent linguistic validity, and/or whether any linguistic evidence might be invoked in support of it. The answer to this would seem to be almost certainly NO: it is difficult to see how any linguistic evidence might be relevant to the analysis. A more important problem with the analysis, however, relates to the fact that the proposed features are purely referential, and so cannot account for the avoidance usage of yaadi, in place of ngidi, in reference to the speaker-hearer dyad, and of bidi' 'they' in place of niyi 'he, she, it', in reference to a single individual (see section 1.5 above).

As an alternative means of description, we might attempt to arrange the Gooniyandi pronouns in a two dimensional paradigmatic set of the usual sort. Something of this sort has already been implied by my reference to yaadi and ngidi as first person categories in opposition to one another, the former being
labeled unrestricted, and the latter, restricted. This implies an arrangement of the pronominals as follows:

|  | sg | non-sg |
| :--- | :--- | :--- |
| 1 | nganyi | R ngidi |
|  |  | U yoadi |
| 2 | nginyji | gidi |
| 3 | niyi | bidi |

An alternative analysis might not take the + values for $S$ in Table 3-4 as defining the category of first person, but instead distinguish yaadi from all other pronominals by virtue of the fact that it alone has a + value for each of $\mathrm{S}, \mathrm{H}$ and O. The pronominals could then be arranged as follows:

|  | sg | non-sg |
| :--- | :--- | :--- |
| 1 | nganyi | ngidi |
| 2 | nginyji | gidi |
| 3 | niyi | bidi |
| $1 / 2 / 3$ |  | yaadi |

The advantage of the paradigmatic approach is that it does not use strictly referential features, and so does not suffer from the problems in avoidance usage, inherent in the earlier analysis. However, there seem to be no strong arguments for one paradigmatic arrangement over the other (see also McGregor forth-coming-c), and I have arbitrarily chosen to view yaadi as a first person form.

It will be clear that at least three individuals must be included in the referent set of yaadi 'we unrestricted'. I have heard only the plural marker -yarndi in construction with yaadi 'we unrestricted' in natural and elicited Gooniyandi speech. However, when I constructed the d-word yaadi-yooddoo (first person unrestricted-DU), it was not rejected outright, but speakers suggested that it might refer to just three of us, the speaker, the hearer, and one other person. (Alan Rumsey elicited a similar response to the corresponding constructed form in Bunuba (pers.comm.).) This might be taken to suggest that -yooddoo marks 'plus one' or unit augmented (McKay 1978) rather than 'dual', were it not for the fact that speakers themselves frequently use yaadi-yarndi (first person unrestricted-PL) in reference to this particular group of three.

I have already mentioned (section 1.5 and immediately above) shifts in the pronominal categories in avoidance contexts, whereby non-singular forms are used in reference to and in addressing a single avoidance kinsman. Reference to the speaker and a single hearer (where the two are in an avoidance relation to one
another) is by means of the unrestricted yaadi, instead of the usual and predicted restricted ngidi. One might predict that in such circumstances the dual postposition could be used to mark the number: i.e. yaadi-yooddoo (we unrestricted-DU) in reference to an S and a H in an avoidance relation. There are, however, no supporting examples for this possibility.

Corresponding to each person-number combination distinguished in the language, there are three distinct free-standing pronouns, which I will regard as alternate forms of a single lexeme. I will refer to the forms as nominative, oblique and emphatic; they are tabulated in Table 3-5.

Table 3-5: Gooniyandi pronominals

|  |  | singular |  | non-singular <br> unrestricted |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
| 1 |  | NOM | nganyi | restricted |  |

The reader will observe that there are a number of striking regularities in the forms shown in the table above.

The emphatic forms are obviously based on the corresponding oblique forms: a segment -jinga is added to a truncated version of the oblique pronominal. For the non-singulars, the final vowel is deleted; for the singulars, the final vowel and preceding consonant are deleted; and for the third person singular, the velar nasal is inserted preceding -jinga.

Secondly, the non-singulars show $d$ in the second syllable of the

[^12]nominative forms, and $d d$ in the corresponding position in the oblique forms. This $d \sim d d$ could be identified as a plural marker. This suggests that we might identify the following non-singular 'roots':

| $(1 \mathrm{R})$ | $n g i-$ |
| ---: | :--- |
| $(1 \mathrm{U})$ | yafa) |
| (2non-sg) | $g i-$ |
| (3non-sg) | $b i-$ |

(See also below page 212.) The final $i$ in the nominative forms might be regarded as epenthetic (as mentioned in section 2.2.5 above, $i$ is the unmarked vowel word finally), inserted so as to give the word an acceptable phonological shape (see page 90 above). The oblique pronominal involves in each case -angi following the number marker. In view of the shape of the corresponding emphatic pronominals, this might be segmented into an oblique suffix -ang and an epenthetic $i$ (which functions to give the word a normal phonological shape). The construction of the singular pronouns is not so regular, and it is not possible to segment the nominative and oblique pronouns into recurrent forms. The segmentation of the non-singular forms is suggested more as a possible historical derivation of the forms than as a synchronic morphemic analysis. Two of the recurrent forms ( $d \sim d d$ and -ang(i)) are phonotactically unusual for morphemes (these phonotactic patterns are otherwise restricted to a few verbal morphemes), and the forms themselves do not occur outside of the pronominal paradigm.

The choice between nominative and oblique forms depends on the environment in which the word occurs. The forms are in complementary distribution. The nominative is the form that occurs in the role of Entity in NPs (see section 4.1.2), except when it (i.e. the nominative form) would be directly followed by a case-marking postposition other than -ngga ERG (see next section). The oblique form is found in all other contexts within NPs. It typically realises either the Deictic or Qualifier (see section 4.1.2), in which case it indicates possession, both alienable (including 'temporary access' possession, as in (3-74)) and inalienable:
(3-72) ngaddagi ngaddanyi
my mother
'my mother'
(3-73) riwi ngiddangi
country our ( R )
'our country'
(3-74) ngaddagi yawcrda
my horse
'my horse'
Otherwise, the oblique is the form found preceding case-marking postpositions other than -ngga ERG, no matter what role it bears in the phrase.
(3-75) wardbiddi ngaddagi -yidda
they:came my ALL
'They came up to me.'
(3-76) binaddi ngaddagi -yoo
knowledgeable my DAT
'He/she knows me.'
The expected forms nganyi-yidda (I-ALL) and nganyi-yoo (I-DAT) do not occur. However, this is the only context in which the oblique form may realise the Entity function. If there is an intervening morpheme, such as a number marking postposition, the nominative form occurs:
(3-77) ngidi -yooddoo -yoo gamba binabinawangiddangiyi we(R) DU DAT water he:will:show:it:to:us:two 'He'll show it to us two.'

Finally, the oblique form is found in what would appear to be a type of circumstance, indicating that the Actor did the process alone, or by him/herself. The clause may be transitive, intransitive, or reflexive/reciprocal.
(3-78) ngaddagi -moowa ngoorloogla
my ON I:drank:it
'I drank it alone (i.e. by myself).'
(3-79) nhoowoo jijagji
his he:spoke
'He was talking to himself.'
(3-80) ngarloodoo -ngga biddangi -nyali riddwiddarniddi
three ERG them REP they:pulled:themselves
thaanoonggoo
up
'They pulled themselves up by themselves.'
If the pronominals in (3-78) and (3-80) were NP constituents it would be expected that they might occur in construction with postpositions, indicating their role in the clause. However, they never do (in the available examples), and moreover they contrast with PPs such as yoowarni-ngga (one-ERG) 'by one' in (3-81). Contrast this with (3-78) above.
$\begin{array}{cc}\text { (3-81) yoowarni } & \text {-ngga } \\ \text { one ERGoorloogla } \\ \text { I ERG I:drank:it } \\ \text { 'I drank it alone.' }\end{array}$
In this respect the oblique forms resemble adverbials, and an alternative (perhaps equally valid) parts-of-speech classification might place the nominative pronominals in the class on nominals, and the oblique and emphatic pronominals in the adverbial class.

The forms I have labeled emphatic are used very similarly to the 'adverbial' function of the oblique just discussed, but seem to be somewhat stronger, indicating that not only did the Actor act alone, or as a unified group, but he/she/they did so for his/her/their own benefit:
$\begin{array}{clll}\text { (3-82) } \text { biddangjinga } & \text { boorlooboowoodda } & \text { biddangi } & \text { mayaroo } \\ \text { their:EMP } & \text { they:follow:it } & \text { their } & \text { house }\end{array}$
'They go their own way (i.e. are not directed by others).'

### 3.7 Postpositions

3.7.1 Preliminary remarks

The postpositions form a small class of non-ranking form units which enter into constituency with noun phrases, forming postpositional phrases. They are bound, phrase-level morphemes which typically occur one per phrase, and attached to any word in the phrase, regardless of its position or role (see section 4.2 below).

Gooniyandi has fourteen postpositions. These may be divided initially into two groups, as shown below:

Case marking

| -ngga | ERG(ative) |
| :--- | :--- |
| $-y o o \sim-w o o$ | DAT(ive) |
| -ya | LOC(ative) |
| - nhingi | ABL(ative) ${ }_{1}$ |
| -yangga | ABL(ative) |
| -yidda | ALL(ative) |
| -yayi | ALL(ative) |
| - |  |
| -yayoo | ALL(ative) |
| -yawoo | ALL(ative) |
| -binyi | PER(lative) |
| -ngaddi | COMTT(ative) |
| -winyja | DEP(rivative) |

Number marking
-yooddoo ~ yiddi DU(al)
-yarndi
PL(ural)

This classification is primarily semantic, although there is at least one formal correlate: the number markers appear to be distributionally restricted to nominals, whilst the case markers may also occur on adverbials (see page 140 above). The two members of the second column indicate a property of the nominal phrase to which they are attached, namely its number - and hence their label "number marking" postpositions. The postpositions in the first column, on the other hand, do not indicate any property of quality of the referent of the nominal phrase to which they are attached. Rather, they relate that referent to something else. I have labeled these as "case marking" postpositions because they express a range of functions that are covered by case-suffixes in many Australian languages (we will be returning to this point shortly, and later again in section 4.2).

Most Australian languages have a set of suffixes comparable with those laid out above for Gooniyandi (see Dixon 1980:293-301, 322-326). Most grammars, however, classify the suffixes quite differently. It is customary to distinguish between case suffixes and derivational suffixes. The former are inflectional, and give rise to different forms of a single word appropriate to different syntactic environments, while the latter are non-inflectional, and produce new lexemes from other lexical items to which they are attached (Dixon 1980:293, 323; see also Huddleston 1984:25). In section 4.2 it is shown that none of the morphemes listed above are inflections; it can also be demonstrated that none are derivational suffixes.

Grammars of Australian languages usually treat the comitative, and the number markers as derivational suffixes (Dixon 1980:324-325). It is easy to
show that the number markers are not derivational: they indicate the number of the whole phrase, not the word to which they are attached (see page 278 below). The comitative postposition is not a derivational morpheme, since it regularly attaches to a full NP (as in example (4-80)), and there is no evidence that the constituent that it attaches to becomes a new lexical item. These same reasons, show that none of the remaining postpositions are derivational suffixes.

The comitative, though not the dual and plural markers, do, it is true, occasionally have derivational uses. But this occasional use stands in contrast with the productive uses of this morpheme as a case marking postposition (see section 3.7.2.9 below). It might also be noted on the one hand that the morphemes which I have classified as stem forming suffixes ALWAYS functional derivationally, and on the other, that -nhingi $A B L_{1}$, as well as possibly -ngga ERG and -binyi PER also on occasions form new lexical items from the one to which they are attached.

I refer to the morphemes in the left hand column above as case marking postpositions because they fulfil functions which are associated with case inflections in many languages, including many Australian languages - they indicate the function of the phrase in the unit of which it is a constituent (cf. Dixon 1980:292). However, this should not obscure the important difference that in Gooniyandi the case markers do not form inflectional variants of a lexeme (see section 4.2 for further discussion of this issue).

One important consequence of this difference is that, unlike most Australianist grammarians, I do not identify a zero-marked absolutive case, which contrasts with the ergative. There are a number of reasons for this descriptive strategy. Firstly, it would imply a postposition which had an invariant zero form. Whilst it is possible to maintain such a notion, there is simply no evidence in the language which lends support to it. (To argue this would be tantamount to arguing that subject NPs in English were in fact prepositional phrases with a zero preposition.) Indeed, what evidence there is leads us to reject the idea: to maintain that there were a zero postposition would imply that the zero marked unit were an exocentric construction; this is in fact false. Secondly, zero marking does not signal anything in itself, but the absence of other meanings. Thirdly, no significant semantic or syntactic generalisation arises under the zero postposition hypothesis.

All but four of these postpositions show phonologically conditioned allomorphic alternations, as follows:
(i) -ngga ERG. This postposition is affected by two sandhi rules. One is rule R9, by which -ngga dissimilates to -ga following a vowel that is preceded by a
nasal-stop sequence (see examples on page 98 above). The other is rule R9, which inserts an epenthetic /i/when the root ends with the velar nasal. For example, gooddanggooddang-ingga (diverbird-ERG) 'by the diverbird'.
(ii) $\{y\}$ initial postpositions. Nine of the postpositions have an initial $\{y$ \}. In accordance with rule R6 of section 2.4.2.3.1, this initial segment hardens to $/ \mathrm{j} /$ following non-continuant consonants. Few Gooniyandi nominals end in consonants, and in most cases the form of the postposition with initial /j/ is attested only when the nominal is a borrowing from English, or when the postposition is attached to a verbal root with a final stop or nasal (see below). Examples illustrating the hardening process are: Jag-joo (Jack-DAT) 'for Jack', babligaj-ja/janggal-jiddal-jayil-jayoo/-jawoo (pub-LOC/ABL $/$ ALL $_{1} /$ ALL $_{2} / \mathrm{ALL}_{3} /$ $\mathrm{ALL}_{4}$ ) 'at/from/to the pub', goorij-jangga (hold-ABL 2 ) 'from holding', and Dayib-jooddool-jarndi (Dave-DU/PL) 'a pair/group including Dave'.
(iii) -woo DAT. The verb specific allomorph -woo of the dative postposition is subject to VR6, the effect of which is to harden the initial $\{\mathrm{w}\}$ to $/ \mathrm{g} /$ when following a non-continuant, as for instance in gaj-goo (cut-DAT) 'for cutting' and ngarag-goo (make-DAT) 'for making'.

The -yooddoo ~-yiddi allomorphy is not phonologically conditioned. The choice seems to be a matter of speaker's preference: some speakers use the former, while others prefer the latter. (Today at least, the two forms do not appear to be dialectal variants associated with distinct regions.)

In addition to occurring in constituency with NPs, some postpositions also occur in constituency with PPs, adverbials and/or non-finite clauses. The first possibility gives rise to sequences of postpositions, since the postpositions from each PP are typically attached to the same d-word. Only a small subset of the sequences that COULD occur actually DO occur. The first member of any postposition sequence must be one of -nhingi $\mathrm{ABL}_{1}$, -ngaddi COMIT, -binyi PER, -yooddoo DU, or -yarndi PL. Of these, the number markers -yooddoo DU and -yarndi PL can be followed by any other postposition (note also that they are always first in a postposition sequence). The remaining three, the case markers, may be followed by the ergative -ngga only.
Postposition sequences may also arise when a PP is embedded as a constituent of an NP which is itself embedded in a PP. No new sequences arise in this way.

The ergative, locative, both ablative, and all allative postpositions at least are attested in construction with adverbials. It is not clear whether the remaining case marking postpositions may not occur with adverbials; but it is fairly certain
that the observed absence of number markers with adverbials is not just an accidental gap in the corpus.

At least six postpositions occur in syntagms with non-finite clauses (see sections 4.2 and 5.5 ), in which constructions they are invariably attached to the verbal stem, that is, to the non-finite verb phrase of the non-finite clause. The postpositions occurring in this context are: -ngga ERG, -ya LOC, -nhingi $\mathrm{ABL}_{1},-y a n g g a \mathrm{ABL}_{2}$, and -ngaddi COMIT. Where the dative -yoo is expected, instead the form -woo is found. And since -woo occurs in complementary distribution with $-y o o$ it is taken to be an allomorph of the DAT which occurs only on verbal stems.

### 3.7.2 Functions of the postpositions

The major meanings and functions of each postposition are set out in the remainder of this section. No attempt is made to separate those uses which correspond to significant functions within the language (such as Agent, Means, Manner, etc.) from those which are identified merely on intuitive grounds, and correspond to no systematic distinction made in the language (such as the possessor relationship). Although it is my belief that ultimately the meanings/functions of each postposition will be accountable for as contextualisations of a single core or formal meaning (see section 6.1), the task of specifying these formal meanings is beyond the scope of the present analysis, and I do not attempt it here. In order to reduce repetition, the information is given in abbreviated form, making reference to discussion and examples from later sections.

### 3.7.2.1 -ngga ERGative

This postposition marks clausal constituents in the following roles:
(a) the Agent, regardless of its person or number, in a clause of 'directed action' - i.e. a transitive, middle or reflexive/reciprocal clause (see section 5.2.1.3 and examples therein).
(b) the Instrument in all clause types (section 5.2.2.3), regardless of whether it is a body part or non-body part Instrument. (However, it should be noted that body part Instruments are far more frequent than non-body part Instruments - non-body parts are more often Means than Instruments; see page 343 below.)
I reject the view proposed in many grammars of Australian languages that the instrumental as a distinct CASE from the ergative (see for instance, Tsunoda

1981:55, Dixon 1980:306-307, and cf. Dixon 1980:299). In my view, the evidence they cite demonstrates that there are two distinct clausal roles, Agent and Instrument, not that there are distinct cases. Thus I do not distinguish, as do many Australianist linguists, between syntactic and semantic, or core and peripheral CASES (or case marking postpositions); I see these contrasts as relevant only to clause level roles (see chapter 5 below, where I make similar, though not identical, distinctions).
(c) nominal expressions (NPs and PPs) realising circumstantial roles of Means (section 5.2.3.3), Manner (section 5.2.3.4), Cause (section 5.2.3.6) and a subset of the Accompaniment roles (see section 5.2.3.5) in clauses of directed action.
(d) nominal expressions functioning as Attributes of Agents (section 5.2.4).
(e) non-finite VPs in the circumstantial role of Manner in clauses of directed action, as in example (5-332); and in non-finite VPs functioning as Attributes of the Actor (not necessarily an Agent) in any clause type - see examples (5-278) and (5-279).

When it marks the Agent, the ergative postposition is optional except when the Agent is inanimate, in which case it is obligatory (see page 319 below for further discussion). In the other circumstances of its occurrence, its presence is usually obligatory - there are just a handful of instances in which, on repetition of the utterance, the ergative postposition was dropped from a circumstantial expression involving -binyi PER - see section 3.7.2.8 below.

Not only does the ergative postposition sometimes not occur where expected - that is, it fails to mark an Agent - but occasionally also it occurs where it is not expected, in an intransitive clause. The second use of -ngga ERG mentioned under (e) is one instance of this type. There are also examples in which the Actor of an intransitive clause is marked with -ngga ERG. One such example is
(3-83) yoowarni -ngga/ yoowarni -ngga gardiya/ Cherrabun Bore/ one ERG one ERG white:man warangji/ gamba / bambimnga -widdangi booloomani -yoo / he:sat water he:pumped:it for:them cattle DAT
'There was a white man at Cherrabun Bore, who was pumping water for cattle.'
Exactly how such examples as this should be accounted for is not yet clear. What seems to be a recurrent feature is that the following clause is transitive. This suggests that the ERG postposition occurs in anticipation of the following
transitive clause, or alternatively, perhaps that the intransitive clause is an interpolation. (Some other Australian languages display this phenomenon in similar circumstances - see Haviland 1979:155 on Guugu Yimidhirr and McGregor 1979:119 on Ngaanyatjara.) Useful as this explanation may be, it does not account for the occurrence of the ergative on non-finite VPs in intransitive clauses (as in example (5-278)).

Finally, let us remark on the shapes of the two locational terms ngirndangaddingga 'this side (usually of a body of water)' and ngooddoongaddingga 'that side (usually of a body of water)'. These are evidently constructed from the determiners ngirnda 'this' and ngooddoo 'that', with the addition of -ngaddingga, which might plausibly be analysed as the sequence -ngaddi-ngga COMIT+ERG. If this is the case, at least as an historical derivation of the above forms, this may (partly) account for the formal identity of the Gooniyandi ergative postposition with one of the allomorphs of the locative found in many Pama-Nyungan languages, and suggest an origin for the former in a locative marker. (That the locative and ergative morphemes coincide in some Australian languages (for instance, Mparntwe Arrernte - Wilkins in preparation) attests to the plausibility of historical derivation such as this.)

### 3.7.2.2 -yoo ~ -woo DATive

The dative postposition -yoo ~ -woo marks units in both clause rank roles ((c), (d) and (f) below), and phrase rank roles ((a), (b) and (e) below).
(a) Possessors, both alienable and inalienable - see example (4-11) below - are marked by the dative, provided that the possessor is realised by a nominal expression. Where the possessor is referred to by a pronominal, a distinct oblique case form of that pronoun is used instead - see examples (3-72) to (3-74) above.
(b) Attached to an oblique pronominal, -yoo DAT indicates that the referent of the pronoun is someone or something who is not necessarily in possession of an item, but has some access to it, to use it in certain ways, when that item is for the benefit of the person or thing. Example:


This is also a possible sense of the dative when attached to a nominal expression, but the difference is formally apparent only when the dative is attached to a pronominal.
It should be noted that the sense I am alluding to here is independent of ownership: it could be that in some sense the speaker and his group do own the place referred to in (3-84). But this possession is irrelevant. The contrast here is not one of temporary vs. permanent ownership, or of present vs. future or imminent ownership.
(c) A nominal expression realising the Goal participant in a middle clause (see section 5.2.1.3 and example (5-66)), or the Affected participant in a clause of another transitivity type (see 5.2.2.1) is marked by -yoo DAT.
(d) Nominal expressions and non-finite clauses fulfilling the circumstantial roles of Purpose (sections 5.2.3.7 and 5.5.2.4) and Matter (sections 5.2.3.8 and 5.5.2.4) are marked by the dative postposition.
(e) Within an NP also, the dative postposition may mark a qualifying expression (either a nominal expression or a non-finite clause) which indicates the purpose of the referent thing, or a respect in which some attribute holds of it - see example (5-299).
(f) -Yoo DAT frequently, although not always, marks nominal and adverbial expressions referring to future time (see below section 5.2.3.2).

As was the case with the ergative postposition, the dative postposition is occasionally absent where its presence is expected. This occurs in circumstance (b), where it marks the Goal or Affected participant. An example is (3-85) - see also example (5-70).

| (3-85) maningga | wardnginhi:: | ri | ? maja / | George Rundin |
| :---: | :--- | :--- | :--- | :--- | :--- |
| night | I:went:up:to:him |  | boss | [name] |

migaliminhi /
I:told:him
'That night I went to the boss, and told him, George Rundin.'
What is common across the circumstances pertaining to the omission of both the ERG and the DAT is that the postposition is omissible if and only if the phrase is also cross-referenced in the verb. This certainly suggests that the presence of the postposition may have something to do with disambiguation; however, it will be shown below (pages 319-320) that there are insurmountable problems with this hypothesis, and that it must be rejected.

### 3.7.2.3 -ya LOCative

The postposition -ya LOC indicates:
(a) location in space 'at', 'in', 'on', 'near', 'into' (as in 'pour water into a bucket'), and so on. It may be either the whole event or process that is located (see below page 316 and section 5.2.3.1), or one entity in that event or process (see page 332). In either case, the LOC marked phrase usually fulfils a clausal role; examples like (4-80) in which it fulfils a qualifying role in another phrase are decidedly rare.

When the place is referred to by its name, the LOC marker is frequently omitted. This seems to be invariably true when that name ends in the syllable $y a$, as in the place name Goobardiya. Although there are tens, if not hundreds of instances of this place as a location in my corpus, not once does the form Goobardiya-ya 'at Goobardiya' occur.
(b) time 'at' or time 'in' - section 5.2.3.2 below.
(c) accompaniment 'with', where the accompanying thing is a human see section 5.2.3.5 below.
(d) something to be avoided or something feared - see section 5.2.3.9.
(e) location in something other than a place, that is, a circumstance, especially one which enables the process to occur - that is, a type of contemporaneous cause. Examples are 'see in torchlight', and
(3-86) booloomani gamoo boordbara -ya gambawindi bullock milk hot LOC it:became:water 'The butter melted in the heat.'
(f) a body part at which a violent action connects with the patient. For example:
(3-87) midda -ya gardlooni head LOC I:hit:him 'I hit him in the head.'
More usually a body part of the patient is treated as a Range (section 5.2.2.2), and realised by an NP - see McGregor (1985) for further details and an explanation of the meaning contrast.
(g) a process going on at the same time as the main process. This sense occurs only when -ya LOC is attached to a non-finite verb (/clause). However, this construction is quite infrequent.

### 3.7.2.4-nhingi ABLative ${ }_{1}$

This postposition indicates:
(a) the place from which the process or action - normally one which involves or implies the movement of some entity - started; see section 5.2.3.1.
(b) time, circumstance, or event after which the process occurred - see section 5.2.3.2 and 5.5.2.1.
(c) the cause of a situation - see sections 5.2.3.6 and 5.5.2.1.
(d) the initial state of an entity when it first becomes involved in a process - see page 359.

As has already been mentioned, -nhingi phrases may, in addition to fulfilling clausal roles, fulfil NP roles, usually those of Classifier and Qualifier (see section 4.1.2.1). In these cases, the referent Entity itself, rather than the process, is claimed to originate from a source. The major functions of -nhingi $\mathrm{ABL}_{1}$ in this context are to indicate:
(e) the animate source of a bodily product, e.g. gambinyi jirigi-nhingi (egg bird-ABL ${ }_{1}$ ) 'a bird's egg'. (Animate beings are never treated as 'owners' of bodily products, and referred to by DAT PPs or oblique pronominals.)
(f) the originator of words, stories, songs, etc., as in ngaboo-nhingi thangarndi (father-ABL ${ }_{1}$ word) 'god's word/story'.
(g) a temporal or spatial origin of an individual or thing, as in balyoowanhingi yoowooloo (behind- $\mathrm{ABL}_{1}$ man) 'today's people', and gaddwaroo-nhingi wayandi (afternoon-ABL ${ }_{1}$ fire) 'the fire from yesterday (i.e. the fire which was started yesterday)'.

Very rarely -nhingi $\mathrm{ABL}_{1}$ functions to derive a new lexical stem. One example is provided by the nickname wayandi-nhingi (fire- $\mathrm{ABL}_{1}$ ) which was applied to a man who, as a child, had rolled into a fire.

### 3.7.2.5-yangga ABLative ${ }_{2}$

Like -nhingi $\mathrm{ABL}_{1}$, this postposition also indicates a source or origin. The difference from -nhingi $\mathrm{ABL}_{1}$ seems to be one of viewpoint: -yangga $\mathrm{ABL}_{2}$ occurs when the situation is being viewed as emanating from its source or origin; -nhingi $\mathrm{ABL}_{1}$ by contrast is used when the situation is viewed from the perspective of a subsequent time or place - after the connection with the source has been severed. Thus -yangga $\mathrm{ABL}_{2}$ frequently translates into English as 'away from':

## (3-88) wardji jilji -yangga

he:went sandhill $\mathrm{ABL}_{2}$
'He walked away from the sandhill' or 'He was walking away from the sandhill.'

By contrast, the use of a -nhingi $\mathrm{ABL}_{1}$ PP here could have the effect of referring to the movement at a later stage, e.g. when the source was no longer visible. There is of course no real-world cut off point, such that if the thing moved beyond it, a speaker would be forced to use -nhingi $\mathrm{ABL}_{1}$ : this is why I have referred to the choice as one of viewpoint.

In clauses which describe situations in which something issues forth or emerges from a source, that source will be referred to by a-yangga $\mathrm{ABL}_{2} \mathrm{PP}$, and not by a -nhingi ABL $L_{1}$ PP. Examples include the issuing of water from a pipe or from the mouth (as in example (3-89) below), emergence of a person from a cave, emergence of a bodily product from the body, launching of an object from a car, removal of something (e.g. a thorn) from a place (e.g. a leg), and so on. Perhaps by extension, processes such as looking may emanate from a source, the location of the sensate being (example (3-90)). (Note that the source of such processes never seems to be a body part, as might be expected in parallel to (3-89); such body parts seem to be always treated as Agents.)
(3-89) gamba boodladdi nganyi -ngga thangarndi -yangga
water I:sprayed:it I ERG mouth $\mathrm{ABL}_{2}$
'I sprayed water from my mouth.'
(3-90) banyangi -yangga / yamadi -yangga milanginbidda
outside $\mathrm{ABL}_{2}$ / car $\mathrm{ABL}_{2}$ they:saw:me
'They looked at me from afar / from the car.'
There is a single example available in which a -yangga $\mathrm{ABL}_{2} \mathrm{PP}$ indicates a cause: that is example (5-269) of section 5.2.3.6 below. Significantly, the situation referred to in this example is a happening (see pages 326-327), occurring at the same time that the process of the embedded clause took place: contrast the -nhingi $\mathrm{ABL}_{1}$ cause, where the cause always temporally precedes the effect.

Another use of the postposition -yangga $\mathrm{ABL}_{2}$ is illustrated in the following examples:
(3-91) nyawa -yangga riddwa tail $\mathrm{ABL}_{2}$ you:will:pull:it 'Pull it by the tail.'
(3-92) jabiddi -yangga rooddoobmi jinali point $\mathrm{ABL}_{2}$ he:pulled:it:out spear 'He pulled out the spear by the end.'
Here the -yangga $\mathrm{ABL}_{2} \mathrm{PP}$ refers to a part of a Goal at which the action always one of induced motion - is effected.

Especially in this use it is tempting to analyse -yangga $\mathrm{ABL}_{2}$ into -ya LOC plus -ngga ERG. However, even if this is historically valid, it is impossible as a synchronic analysis. For, in all of the uses discussed above, this postposition is regularly stressed on its initial syllable; it is not stressed as a sequence of postpositions.

Unlike -nhingi $\mathrm{ABL}_{1}$, -yangga $\mathrm{ABL}_{2}$ is never used atributively, or to form a new lexical stem. This is consistent, I believe, with the semantic analysis proposed in this and the previous section: an entity is not likely to be characterised by the fact that it is breaking contact with something else, although it is likely to be characterised by a prior association with another thing.

### 3.7.2.6 -yidda ALLative ${ }_{1}$

This postposition occurs attached to nominals, oblique pronominals and adverbials, but not to verbals. It marks:
(a) a final terminus (place, position, or thing) to which the process extends and actually reaches. In clauses involving motion of some entity, this is the final place that that entity reaches (see section 5.2.3.1); where there is no motion, it is an endpoint of a body (see section 5.2.1.2.1).
(b) a terminal state or condition of an entity - see examples and discussion in section 5.2 .4 below.

### 3.7.2.7-yayi ALLative , - yayoo Allative $_{3}$ and -yawoo ALLative ${ }_{4}$

These three postpositions, which appear to be used only in 'local', and with one exception, spatial senses, indicate the direction towards which the action proceeded. Unlike -yidda $\mathrm{ALL}_{1}$, they do not indicate the final destination: they indicate only that the action proceeded in the direction of a certain place or thing. No indication is given as to whether or not this place or thing was ever reached, or was at any stage an intended destination. I have been unable to discern any semantic differences between the three forms.

The exception referred to in the previous paragraph concerns -yawoo $\mathrm{ALL}_{4}$. This postposition is sometimes used in the sense of 'time until', when attached to a nominal such as dina 'dinner', or manyi 'vegetable food'.

All three postpositions are apparently built on $-y a \mathrm{LOC}$. In two cases the increment is identical with a form of the dative postposition, either -yoo or -woo (see above). And the remaining form could easily have arisen from -yayoo $\mathrm{ALL}_{3}$ by a vocalic change (see section 2.2.5). However, all three are synchronically unanalysable, being stressed as a single form. The above is, however, a possible historical source of the forms: in a number of Australian languages the allative is either built on, or is identical with the dative or the locative. In the neighbouring Jaru, for example, the allative is, according to Tsunoda (1981:55), built on the locative, with the addition of $-w u$, which is an allomorph of the dative.

We can summarise the system of "lative" postpositions as shown in Table 3-6.

Table 3-6: System of lative postpositions

|  | Focus on the terminus | Focus on the motion |
| :--- | :--- | :--- |
| Motion towards | -yidda | -yayi, -yayoo, -yawoo |
| Motion from | -yangga | -nhingi |

That the three allative postpositions -yayi $\mathrm{ALL}_{2},-$ yayoo $^{2} \mathrm{ALL}_{3}$, and -yawoo $\mathrm{ALL}_{4}$ are restricted to occurring on nominals would seem to be consistent with this analysis. For their presence on adverbials would be semantically redundant: spatial adverbials either have distinct 'direction towards' forms, or this is a possible sense of the adverbial in a clause of motion. When -yidda $\mathrm{ALL}_{1}$ occurs on a spatial adverbial, the relationship it encapsulates becomes concretised as a separate entity, which may be the destination of a process of motion. Thus, the adverbial banyangi 'outside' may occur in a clause of motion with the postposition -yidda ALL $_{1}$ attached. Alternatively, it may occur unmarked by a postposition in the same clause type. There is a difference in meaning: in the latter case the motion is represented as directed towards the outside of some containing medium, whereas in the former case it is represented as actually reaching some place which forms the outside of some reference place.

### 3.7.2.8 -binyi PERlative

This postposition may be attached to nominal and adverbial words, but not to verbals or (it appears) to pronominals. -Binyi PER indicates:
(a) direction or orientation of motion with respect to a non-terminal point along a path, covering the senses 'through', 'along', 'beside', 'around', 'past', 'via', etc. - see examples (5-123) and (5-124) of section 5.2.3.1. As the following examples show, the process need not necessarily be one of motion:
(3-93) biliga -binyi danggalmi
middle PER he:chopped:it
'He chopped (the carcass) through the middle.'
(3-94) yoowarni -binyi bagingi
one PER I:lay
T lay on/along one (side) (of the camp).'
(b) foodstuffs sought after, in clauses referring to hunting and gathering activities. For example,
(3-95) birla -binyi widdij̈awila
yam PER I:might:dig:it
'I want to go digging for yams.'

-Binyi PER contrasts with -yoo DAT which can also mark a thing sought after. The dative treats it as a type of 'purpose'. On the other hand, when -binyi PER occurs, there is never a specific entity in mind as the ultimate goal of the action. (Consequently, something sought after is never cross-referenced by an oblique bound pronominal in the VP - see (3-96) above; in most other contexts moow- 'look for, seek' cross-references the thing sought.) There is no certainty that the desired foodstuff will even be encountered. Within narrative texts, clauses with this type of -binyi PER phrase are normally 'topical': that is, they introduce the subject matter of the narrative in the most general way, as concemed with a particular type of hunting. Following sentences normally describe the details, the type of action undertaken in order to obtain the food. When -yoo DAT occurs, there is invariably a specific (though not necessarily definite) entity in a specific location, which is to be obtained as a result of the action described in the clause - see examples in section 5.2.3.7.
(c) the handedness of a person, as in waroogoo-binyi (left-PER) 'left handed'; in this use, -binyi would appear to fulfil a stem forming function.

On one occasion only, -binyi PER was followed by the ERG postposition - on repetition of the example, the ERG was omitted. The example was:
(3-97) balyoowa -binyi -ngga gilbawidi thinga
behind PER ERG they:found:him foot
'They found his footprints from behind.'
An explanation for this phenomenon remains unclear.

### 3.7.2.9 -ngaddi COMITative

-ngaddi COMIT marks:
(a) nominal phrases fulfilling the clausal role of Means - see section 5.2.3.3. (In transitive and reflexive/reciprocal clauses, as we have already seem, -ngaddi COMIT is followed by -ngga ERG.
(b) nominal phrases in the Accompaniment role, when the accompanying and the accompanied entities are of unequal status - see section 5.2.3.5.
(c) something in close association with an entity, such as a possession. The possession may be either alienable (example (4-78)) or inalienable (example (3-98)).
(3-98) ngaragnga goornboo gamoo -ngaddi
he:made:it woman breast COMIT
'He painted a woman with breasts.'
As examples (4-78) and (3-98) demonstrate, this sense arises when the -ngaddi PP fulfils a role in a phrase. It also occurs when the comitative PP functions as Attribute in a characterising clause - see section 5.2.1.1.1.2. There is, however, as has already been mentioned, no reason to regard nominals marked with -ngaddi COMIT as derived adjectives (cf. Dixon 1980:324-325).

Finally, there are a few apparently irregular uses of -ngaddi COMIT, in which this postposition seems to function as a stem forming suffix: yoowarningaddi (one-COMIT) 'once', ngirndangaddi (this-COMIT) 'this way', ngirndangaddingga (this-COMIT-ERG) 'this side', ngooddoongaddingga (that-COMIT-ERG) 'that side', yinigangaddi (somehow-COMIT) 'by some means, by what means'. There are also half a dozen or so mother-in-law avoidance nominals, including bin.gidi-ngaddi (feather-COMIT) 'bird' and wanya-ngaddi (emu feather-COMIT) 'emu', which are analysable as ordinary nominal plus the
comitative postposition.

### 3.7.2.10 -winyja DEPrivative

The postposition-winyja DEP is quite infrequent in occurrence, and seems to be used in only one function. That is, to indicate something - always a thing, never a process - the lack of which causes an event to occur; see section 5.2.3.6 and examples (5-159) and (5-160).

It should be noted that Gooniyandi has no bound morpheme, either suffix or postposition, that functions as a regular privative marker. Instead, to express this meaning, the negative particle marlami 'nothing, without' is used following (usually) the nominal referring to the thing lacked. The contrast between these two expressions, NP-winyja, and [ N marlami], is that the former has the additional semantic component, absent from the latter, that the lack of the thing is the cause of the process. In keeping with this, only the latter occurs in relational clauses expressing ' $x$ has no $y$ '.

### 3.7.2.11 -yooddoo ~ -yiddi DUal and -yarndi PLural

These two postpositions, -yooddoo ~-yiddi DU and -yarndi PL, optionally mark the number of an NP as either dual or plural (three or more) respectively. As yet it is not clear what factors motivate the occurrence or non-occurrence of these morphemes on non-singular NPs. (A likely hypothesis is that they are used: (i) in initial specification of number, and otherwise (ii) to help keep reference clear, for instance when a text involves two (or more) groups of items which would be referred to by the same nominal, but which consist of different numbers of these items. But this hypothesis has not been tested by extensive textual investigation.) Examples of usage include (4-77), (4-86), (4-95), (4-96), and lines (5), (21) and (61) of Text 1 , and line (6) of Text 2.

### 3.8 Enclitics

Unlike postpositions and stem forming suffixes, enclitics do not form, together with the units to which they are attached, other grammatical units of the same rank as those to which they are attached. Therefore, enclitics do not allow for recursive embedding, such as is possible to a limited extent with postpositions and stem forming suffixes.

The following are the main enclitics:

| -moowa | 'only' (ON) |
| :--- | :--- |
| -nyooloo | 'etcetera' (ETC) |
| -ngaddaya | 'else, too' (TOO) |
| -widdi | 'identity unknown' (UNKN) |
| -jangi | 'like' (SEM) |
| - rni | 'next, now' (SEQ) |
| -mi ~-ma | 'indefinite, question' (IND) |
| -nyali | 'repetition, again' (REP) |
| -woo | 'definite' (DEF) |

The glosses given above should not be taken seriously; they are meant to be no more than suggestive. For a detailed discussion of the meanings of these morphemes, see section 6.3 below.
The enclitic -jangi SEM is exceptional in that it sometimes forms a g-unit with the constituent to which it is attached - see for instance, examples (6-95) and (6-96) below. The fact that it does not ALWAYS form such a unit justifies its classification as an enclitic. This does, however, necessitate a slight modification to the definition given in the first paragraph of this section: enclitics are morphemes which do not necessarily form g-units with the units to which they are attached. (Postpositions and stem forming suffixes always do.)

The enclitics show very little allomorphy - which is partly because none of the initial consonants are affected by rules discussed in section 2.4. The indefinite enclitic is the only one showing alternant forms. Its allomorphs -ma and $-m i$ are chosen depending on the class of the item to which they are attached: - $m a$ if it is verbal, $-m i$ otherwise.

Two subsets may be distinguished: the first, consisting of the six morphemes -moowa ON, -nyooloo ETC, -ngaddaya TOO, -widdi UNKN, -jangi SEM and $-r n i$ SEQ from the list above, may be attached to non-verbal units only, while the remaining three occur with all classes of units, verbal and nonverbal. When attached to non-verbal items, enclitics typically occur in final position, following all other bound morphemes. But in the VP, $-m a$ IND and -nyali REP occur medially, in order class (3), labeled Mood in formula F1 on page 192 below; that is, it follows the first grammatical word of the VP. -Woo DEF, by contrast, follows the CC word and occurs in position (5), labeled Mode in F1. Placement of the enclitics is not arbitrary, but correlates with the 'scope' and 'focus' of the enclitic (see section 6.3).

Sequences of enclitics do occur, though too infrequently to permit firm generalisations to be made at this stage; I suspect (but cannot demonstrate) that their order is meaningful. The only sequence that is at all common is
-jangi-nyali SEM-REP 'just/exactly like', as in minyawoo-jangi-nyali (cat-SEMREP) 'just like a cat'.

### 3.9 The verb phrase

In this section I discuss the structure of the 'verb' - that distributional word and grammatical phrase which realises the clausal role of Process.

### 3.9.1 Verbals

Verbals have already been defined as those lexical (open-class) words which are bound; all other lexical words have the privilege of free occurrence. Verbals have just two contexts of occurrence: they occur either as constituents of finite VPs, or as non-finite verbs. Although words of other classes may occur in the first context, only verbal lexemes occur in the second. Furthermore, every verbal may occur within a non-finite 'purposive' clause, in which construction it is followed by the -woo allomorph of the dative postposition (see page 174 above) - e.g. ward-goo (go-DAT) 'for going', bayal-woo (swim-DAT) 'for swimming'. Another distinctive property of verbals is, as we have already seen, that, as a class, they show phonotactic differences from the words of other lexical classes: final consonants are permitted and frequent (section 2.2.5); there are statistically significant differences in distribution of initial consonants in verbals compared with other classes (section 2.2.5); and there is a high frequency of (closed) monosyllables (section 2.3.1).

I have been unable to distinguish subclasses within the class of verbals. In particular, it is not possible to distinguish disjoint classes of transitive and intransitive verbals (cf. Dixon 1980:378). Whereas in many Australian languages transitivity may be regarded as a lexical feature of verbs (Dixon 1980:278), in Gooniyandi transitivity has a clausal locus, and a single verbal lexeme may occur in clauses of more than one transitivity type. Choice of classifier may go some way towards distinguishing the transitivity of a VP for example, ward-ji (go-PAST/(3sg)N+1) 'he went' vs. ward-nga (goPAST/(3sg)N+A) 'he took it'. However, it proves equally impossible to distinguish transitivity classes at phrase level as at word level (see sections 5.2.1.3 and 6.5.5 below).

Verbals in Gooniyandi constitute a large open class of lexemes which refer to all sorts of processes, including: states (e.g. wara- 'stand', bagi- 'lie'); changes of state (e.g. nang- 'die'); motion, including induced motion (e.g. ward- 'go, walk, bring'); violent actions (such as gard- 'hit, fell', bananggadd- 'snatch');
perception and mental processes (e.g. danymili- 'hear, listen', mila- 'see, look'); communication (for example jangi- 'answer', jag- 'tell'); and so on.

### 3.9.2 The non-finite verb

Within non-finite clauses, which are always embedded in some other unit (section 5.5), there occurs a semantically impoverished verbal construction which consists of either a bare verbal stem, or of a verbal stem followed by an infinitive, either -bari (section 5.5.3.1) or -mawoo (section 5.5.3.2). As a constituent of a clause, the non-finite verbal construction ought to be of phrase level. However, since the only way in which a verbal root may be expanded is by the addition of a (verbal) stem forming suffix (see section 3.12.2.1), or by the addition of an infinitive, there seems to be little independent reason to regard the construction as a phrase, and as a consequence, I do not make this assumption. In contrast with the finite VP, the non-finite verb carries very litule information about the process: no reference is made to the participants involved in it, temporal and modal distinctions are not made, and the semantic type of the process is not indicated.

When there is no infinitive, the verbal stem, being a bound form, must be followed by another morpheme, either a postposition or a nominal stem forming suffix (see 3.12.1.1 below), depending on whether the non-finite clause is embedded under a PP node or under a word node. (Postpositions and stem forming suffixes, as distinct from infinitives, are not constituents of the nonfinite verb, as will be shown below, in section 5.5.) Infinitival constructions are usually found in non-finite clauses attributing on participant roles (section 5.2) in the finite clauses in which they (the non-finite clauses) are embedded. In the present data, -ngga ERG is the only postposition that ever follows an infinitive. (Further fieldwork may uncover other combinations.)

### 3.9.3 The finite verb phrase

Finite VPs occur in non-embedded "situation" type clauses (see section 5.2.1), in which they realise the role of Process. A finite VP consists of two obligatory constituents, a lexical 'head' referring to the process, and a classifier complex (CC), which indicates the person and number of the main participants in the process (see 5.2.1.3 below), tense, and the type of process it is (in terms of the features described in section 6.5 .5 below). In addition to these two obligatory constituents there are a number of optional elements carrying aspectual, modal and other qualification of the process. A schematic representation of the VP is
given in the following formula:
F1 Process-(Aspect)-(Mood)-CC-(Mode)-(Oblique pronominal)-(Number)
(1)
(2)
(3)
(4)
(5)
(6)
where brackets enclose optional elements.
As was claimed earlier, this unit is a single d-word of phrasal rank; it is not an inflectional form of the Process lexeme. Its two obligatory constituents are g-words. The remaining, optional constituents are enclitics to these words. That is, these optional constituents do not form g-words with the obligatory constituents. There is no evidence, for example, that Process plus Aspect is an inflectional form of the lexical root filling the role of Process, or that the two together form a distinct stem. In the absence of such evidence, I make the weakest assumption, that the aspect markers etc. are constituents of the verb phrase.

A finite VP may consist of between two and four (perhaps five at the most) phonological words (as defined in section 2.5.1). The two grammatical words, the item realising the role of Process, and the CC, are usually distinct phonological words; but, as mentioned earlier (see pages 128 and 135), the boundary of the phonological word may move forwards, and so not coincide with the grammatical boundary. Monosyllabic enclitics are, with one exception, unstressed and cohere with the preceding phonological word. The exception is the bound oblique pronominal enclitic -nhi 'to him/her/it', which takes stress. Enclitic morphemes of two or more syllables are usually phonological words, and are stressed on their initial syllable. There are just a few exceptions without initial stress, all of which have an initial ( $w$ \}, which is affected by VR6: (wila) FACT (see below 3.9.3.4); the allomorph (wanhi) of the third person singular oblique pronominal enclitic (see section 3.9.3.6); and the allomorph (waddi] of the paucal number enclitic (see section 3.9.3.7).

It appears that (3) (Mood) and (5) (Mode) in F1 are in complementary distribution; otherwise there are examples displaying choices from all other combinations of categories. Some examples (written phonemically) are:
(2)
(4)
(5)


'They might speak to me.'
(1)
(4)
(5)
(6)
(3-102) ward - bingi - rni - nganggi go I:will:go POT (2sg)O
'I could come to you.'
There are, however, mutual dependencies and co-occurrence restrictions among the individual morphemes realising the functional categories of F1. These are mentioned as they arise in the description in the following subsections.

### 3.9.3.1 Process

The first immediate constituent of the VP refers to the Process, and is typically a verbal root (see 3.9.1 above), or a stem (3.12.2 below). However, it may alternatively be a word from another part of speech - a nominal (example (3-8)) or adverbial (example (3-66)). In a few cases the process appears to be realised by a phrasal unit, presumably rankshifted to word level. In (3-103) the phrase ${ }_{\text {pp }}[\text { moordoo-ngaddi }]_{\mathrm{pp}}$ is a d-word:

| (3-103) moordoo | -ngaddi | -loondi |
| :--- | :--- | :--- |
| pimple COMIT | I:got |  |
|  | II became pimpled.' |  |

There is at least one example in which the phrase is not a d-word:

| (3-104) | ngaddagi jaja | marlami | -loondi |
| :---: | :--- | :--- | :--- |
| my mother's:mother | nothing | I:got |  |
| 'I lost my grandmother.' |  |  |  |

It would appear that the most likely interpretation of this example is that the full NP [ngaddagi jaja marlami] (my mother's:mother nothing) is in constituency with the CC -loondi 'I got', the NP being taken as an attribute of the speaker. Contrast (3-104) with the following sentence in which it is the
speaker's grandmother (jaja) (and not the speaker) about which the property is attributed:
(3-105) jaja marlami -windi
mother's:mother nothing it:got
on:me
'My grandmother died on me.'

### 3.9.3.2 The classifier complex

As remarked above, the CC carries information about the person and number of certain actants in the situation referred to, tense, and the type of process. It is possible to analyse the CC into constituent morphemes which carry these types of information. To do so, however, requires the setting up of morphophonemic units and realisation rules of a rather abstract nature by comparison with those required elsewhere in the morphology of d-words (see section 2.4). This enterprise is justified by the more general and principled account that it provides of the CC, by comparison with the unanalysed paradigm. However, it should be noted that in most cases there are at least a couple of equally plausible ways of segmenting the occurring forms into morphemes. I present only one of the possibilities here. Unfortunately, there still remain a number of irregularities: it is impossible to set up unique forms for many of the pronominals, and their allomorphs are conditioned by non-phonological factors such as the other morphemes they occur with. Some forms are so irregular that they are best seen as exceptional; rules could of course be written to derive them from regular underlying forms, but these would be restricted to unique contexts of application, and have little or no phonological plausibility.

The CC may be described as follows:


That is, it consists of an obligatory tense marker, an obligatory pronominal configuration, and an obligatory classifier. As the term suggests, the pronominal configuration is amenable to further analysis; but because it is impossible to give a simple encompassing description covering all combinations of person and number, I have not attempted to show its
construction here. (For a detailed description, see section 3.9.3.2.2 below.) I do not, however, mean to suggest that this configuration is an immediate constituent of the CC; it is identified for descriptive convenience and ease only. The classifier may be regarded as the lexical root of the CC (for reasons that will become clear subsequently); the tense and pronominal morphemes are then prefixes to this root. They are in fact the only prefixes found in Gooniyandi.

The analysis proposed in F2 has, I believe, theoretical validity; I do not assert that it has any psychological validity for the speaker, however. It is possible that for the native speaker the CC is a portmanteau unanalysable form; or, more likely, it is only partly analysed.

### 3.9.3.2.1 The classifier

Gooniyandi has twelve classifiers, most of which have a unique underlying morphophonemic shape. They are listed in Table 3-7, together with some basic combinatorial and semantic information.

Table 3-7: The Gooniyandi classifiers

|  | Form | Valence | Semantic characteristics |
| :--- | :--- | :--- | :--- |
| (1) | +A | 1,2 | Extendible; 'extend' |
| $(2)$ | +ADDI | 2 | Accomplishment; 'put' |
| $(3)$ | +DI | 1,2 | Accomplishment; 'catch' |
| (4) | +MI | 1,2 | Accomplishment; 'effect' |
| $(5)$ | +BINI | 1,2 | Accomplishment; 'hit' |
| $(6)$ | +I | 1 | Extendible; 'go, be' |
| (7) | +BINDI | 1 | Accomplishment; 'get, become' |
| (8) | +ANI | 1 | Accomplishment; 'fall' |
| (9) | +ARNI | 1,2 | Accomplishment; 'emerge' |
| $(10)$ | +BIRLI | 1,2 | Accomplishment; 'consume' |
| $(11)$ | +ARNI | 1 | Extendible; Reflexive/Reciprocal |
| $(12)$ | +MARNI | 1 | Accomplishment; Reflexive/Reciprocal |

For each of the eight classifiers $+\mathrm{A},+\mathrm{ADDI},+\mathrm{BINDI},+\mathrm{ANI},+\mathrm{ARNI}_{1}$, + BIRLI, $+\mathrm{ARNI}_{2}$ and +MARNI there is no non-phonologically conditioned allomorphy. Their ultimate phonemic shapes are, however, affected by the following sandhi rules:
(1) Rule CCR9: $i+b o o \rightarrow o o$. This affects +BINDI and +BIRLI, in case they are prefixed by a tense or pronominal prefix. Examples are:

| [bam return | $\begin{aligned} & -\mathrm{ji} \\ & (2 \mathrm{sg}) \mathrm{N} \end{aligned}$ | $\begin{aligned} & \text { +bindi\} } \\ & \text { +BINDI } \end{aligned}$ | $\rightarrow$ /barnjoondi/ | you returned' |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { \{ngab } \\ & \text { eat } \end{aligned}$ | $\stackrel{-1 \mathrm{i}}{(1 \mathrm{sg}) \mathrm{N}}$ | $\begin{aligned} & + \text { birli\} } \\ & \text { +BIRLI } \end{aligned}$ | $\rightarrow /$ /ngabloorli/ | 'I ate it up' |

(2) Rule R8: $i \rightarrow 00 /$ - woo. This rule affects all final $i$ 's, when followed by -woo DEF. Example,

(The gloss given here is very approximate, and does not carry any of the flavour of the Gooniyandi word. This is because it is impossible to give the word a suitable English gloss out of context - see section 6.5.3.3.)
(3) Rule VR2: $b \rightarrow w / \# \mathrm{X}\left\{\begin{array}{l}{[\text { vocalic }]} \\ {\left[\begin{array}{l}\text { consonantal } \\ + \text { continuant }\end{array}\right]}\end{array}\right\}-\quad \mathrm{Z}$ \#, which again affects + BINDI and + BIRLI. Example:

| \{nyamani $-\phi$ | +bindi\} |  |
| :---: | :---: | :---: |
| big | $(3 s g) N$ | + /nyamaniwindi/ 'he grew big' |

Three of the remaining classifiers, namely $+\mathrm{DI},+\mathrm{MI}$ and +I , each have two allomorphs:

$$
\begin{array}{ll}
\text { +DI : } & \left\{\mathrm{ti} \sim \mathrm{ta}_{1}\right\} \\
\text { +MI: } & \left\{\mathrm{mi} \sim \mathrm{ma}_{1}\right\} \\
\text { +I: } & \left\{\mathrm{i} \sim \mathrm{a}_{1}\right\}
\end{array}
$$

In each instance the choice of allomorph depends on tense: the first variant occurs in past and irrealis tenses; the second in the present and future.

With two exceptions the first allomorph of each classifier is invariant in ultimate phonological realisation. Both exceptions involve (di). Firstly, by rule CCR2 \{d\} assimilates in place of articulation to a preceding palatal, as in ngangnginyji 'I gave you it' (see derivation on page 102 above). Secondly, with the person/number combinations ( 1 sg ) $\rightarrow$ ( 3 sg ) (i.e. first person singular acting on third person singular), (2sg) $\rightarrow(3 \mathrm{sg})$, ( 3 sg ) $\rightarrow(2 \mathrm{sg})$, and $(3 \mathrm{sg}) \rightarrow(3 \mathrm{sg})$, the classifier appears to have no phonological realisation in any tense. For example,
instead of the expected nganglidi 'I gave him it' (from ngang- 'give', -li+ (1sg)N, and $+d i$ 'catch'), $n g a n g l i$ occurs; and instead of ngangbinggidi 'he'll give you it' (ngang- 'give', -bi+ FUT, $+n g g i+(2 \mathrm{sg}) \mathrm{A},+d i$ 'catch'), $n g a n g b i n g g i$ occurs. One way of accounting for these forms is by a rule deleting $d$ unless it is preceded by a consonant. This is the motivation for rule CCR5. Evidence in support of this proposal (over the alternative that in these particular person/number combinations the classifier has a zero allomorph) comes from the progressive present of verbs such as ngang- 'give' (which habitually collocate with +DI 'catch'). The forms found have the vowel $a$, the expected shape given that +DI 'catch' has the allomorph $\left\{-\mathrm{da}_{1}\right\}$ in the non-past. The ( 1 sg ) $\rightarrow$ ( 3 sg ) form would derive as follows:

| \{ngang give | -goowa <br> PROG | -wi PRES | $\stackrel{+1 \mathrm{i}}{(1 \mathrm{sg}) \mathrm{N}}$ | $\begin{aligned} & \left.+\mathrm{da}_{1}\right\} \\ & +\mathrm{DI} \end{aligned}$ | 'I'm giving him it' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\rightarrow$ \{nganggoowa-wi+li+ $\mathrm{a}_{1}$ \} (by $d$-deletion) |  |  |  |  |  |
| $\rightarrow$ \{nganggoowa-wila ${ }_{1}$ (VR9) |  |  |  |  |  |
| $\rightarrow /$ nganggoowaala/ (VR6 and CCR13) |  |  |  |  |  |

This indicates the presence of the classifier in underlying form, and so I adopt this solution: otherwise the final $a$ is inexplicable.
A disadvantage of this solution is that it requires us to posit -bidd + as an allomorph of the third person plural accusative pronominal prefix, in morpheme configurations where $-r i+$ and $-b i+$ (but not -bidd + ) are attested for other classifiers.

The phonological realisations of the second allomorphs are determined by rule CCR13, and of course by the two rules just discussed.
$\left\{a_{1}\right\}$ is realised by /a/ when followed by /w/. This occurs in three circumstances: firstly, when the DEF enclitic -woo follows the CC, as exemplified in

secondly, when followed by the -waddi allomorph of the paucal number marker (see below 3.9.3.7), as in

| \{ngang <br> give | -bi <br> FUT | $\underset{(1 \mathrm{R}) \mathrm{A}}{+\mathrm{jin}}$ | $\begin{aligned} & +\mathrm{da}_{1} \\ & +\mathrm{DI} \end{aligned}$ | -waddi) pa | 'he'll give it to us' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \rightarrow \text { \{ngangbinda-waddi\} (CCR10) } \\ & \rightarrow \text { /ngangbindaaddi/; } \end{aligned}$ |  |  |  |  |  |
|  |  |  |  |  |  |

and thirdly, when followed by the -wanhi allomorph of the third person singular oblique pronominal enclitic:
\{jijag -wi + jidd $+\mathrm{a}_{1}$-wanhi\} 'we talk to him'
speak PRES (1R)N +I (3sg)O
$\rightarrow$ /jijaggiddaanhi/ (by CCR10, VR6 and CCR13).
Otherwise $\left\{a_{1}\right\}$ harmonises with the vowel in the preceding syllable of the CC , if there is one. Examples:
\{ngang -bi +jadd $+\mathrm{da}_{1}$ \} 'we'll give him it'
give FUT (1U)N +DI
$\rightarrow$ \{ngangbadd+da ${ }_{1}$ (by CCR12)
$\rightarrow /$ ngangbada/ (by CCR6)
(jangi -ja -bi +jidd +iny +bidd +bi $+\mathrm{ma}_{1}$ )
ask SUBJ FUT (1R)N (2sg)A (3pl)N (3pl)A +MI
$\rightarrow$ /jangiyawiddinybirimi/ (by CCR10, CCR7, VR2, VR3, and CCR13) 'we might ask you (pl)'
\{ward -wi +bidd $+\mathrm{a}_{1}$ \} 'they're going'
go FUT (3pl)N +I
$\rightarrow$ \{ward-woodda ${ }_{1}$ \} (by CCR9)
$\rightarrow$ /wardgooddoo/ (by VR6 and CCR13)
Finally, if $\left\{\mathrm{a}_{1}\right\}$ is in the initial syllable of the CC it is realised by $/ \mathrm{a} /$. For example:


The second series of allomorphs, $\left\{\mathrm{ta}_{1}\right\},\left\{\mathrm{ma}_{1}\right\}$, and $\left\{\mathrm{a}_{1}\right\}$, account for the shape of the classifiers in nearly all person/number combinations in the present and future tenses. The only exceptions are in the $(3 \mathrm{sg}) \rightarrow(3 \mathrm{sg})$ form of the future of + DI and +I , where the shape of the CC in each case is /bi/, instead of the predicted / $\mathrm{ba} /$, from underlying $\left\{\mathrm{bi}+(\mathrm{d}) \mathrm{a}_{1}\right\}$, which becomes $\left\{\mathrm{ba}_{1}\right\}$, ultimately /ba/. The same thing happens in the same person/number combination in the present tense of +MI , where the form is an invariant $/ \mathrm{mi} /$. The only way I can account for these forms is to assume that, exceptionally, they instantiate the first allomorph of the respective classifiers.

The remaining classifier, +BINI, presents a more complicated and less
regular pattern. There are three main allomorphs, \{bini\}, \{boo\} and [oo\}, the choice among which is morphologically conditioned. [bini] occurs in the past ${ }^{5}$ and irrealis tenses, and in progressive and subjunctive futures; (boo) and ( o ) occur almost everywhere in the plain future, present, and present definite tenses.
Since the latter are strongly orientated to the speech situation, and are the categories used most frequently in proposals (Halliday 1985:86), it may be worth speculating that the (boo) allomorph derives from an earlier imperative form of the classifier which has now generalised to cover the corresponding indicative categories. (See also footnote at bottom to this page.) This is almost certainly how the zero second person singular pronominals in ( 2 sg ) $\rightarrow(3 \mathrm{sg}$ ) futures of other classifiers arose: that is, by generalisation of an imperative.
(bini) can be affected drastically by the following rules:
(1) VR2: $b \rightarrow w / \# \mathrm{X}\left\{\begin{array}{l}{\left[\begin{array}{l}\text { vocalic }] \\ \text { consonantal } \\ + \text { continuant }\end{array}\right]}\end{array}\right\}$-_Z $\#$. This rule applies only in case [bini] is the sole constituent of the CC; this occurs only in the past tense for (3sg) $\rightarrow$ (3sg), following a root final vowel or continuant:

| ¢bilgoodd | -ø | -bini) | 'he cracked him on the skull' |
| :---: | :---: | :---: | :---: |
| crack |  | +BINI |  |
| $\rightarrow / \mathrm{b}$ | go |  |  |

(2) CCR7: $d d b \rightarrow r$. This rule applies where \{bini\} follows the $d d$ of nominative plural pronominal prefixes (see next section). For example:

$$
\begin{array}{lll}
\text { (nyag } & \text {-jidd } & + \text { bini }\} \\
\text { pierce } & (1 R) \mathrm{N} & +\mathrm{BINI}
\end{array}
$$

(3) Rule CCR4: $n \rightarrow r n /\left[\begin{array}{l}\text { vocalic } \\ + \text { retroflex }\end{array}\right]$ _. This rule applies when (bini\}
follows the $+r i+$ allomorph of the third person plural nominative, and when this morpheme follows a [-continuant] consonant. Example:

$$
\begin{aligned}
& \text { [gard -ngin +ri +bini\} 'they hit me' } \\
& \text { hit (1sg)A (3pl)N +BINI } \\
& \rightarrow \text { [gard-ngin+rooni] (by CCR9) }
\end{aligned}
$$

[^13]$\rightarrow$ \{gardngind $\left[\begin{array}{c}\text { oo } \\ + \text { retroflex }\end{array}\right]^{\text {ni }\} ~(b y ~ C C R 3) ~}$
$\rightarrow$ /gardngoondoorni/ (by CCR4 and CCR16)
(4) Rule CCR9: $i+b i \rightarrow o o$. Only the singular pronominals have final vowels, so this rule applies only in the case of two singular actants (and then with the exception of the cases in which ( 1 sg ) is Goal, since the ( 1 sg )A pronominal has a final consonant). Examples:

| (gard | $-l i$ | +bini) $\rightarrow /$ gardlooni/ |
| :--- | :--- | :--- |
| hit | (1sg)N hit him' |  |
| +BINI |  |  |



Construction of the CC with the (boo) and \{oo\} allomorphs is somewhat irregular in terms of the construction of the pronominal configuration, which also varies according to whether it occurs with the present or future tense prefix. The ( 00 \} allomorph usually occurs following the $d d$ of nominative plurals (cf. CCR7) and (boo) elsewhere. For example,

| $\begin{aligned} & \text { [gard } \\ & \text { hit } \end{aligned}$ | -wi PRES | $\begin{aligned} & +\mathrm{ng} \\ & (1 \mathrm{sg}) \mathrm{N} \end{aligned}$ | $\begin{aligned} & +i n y \\ & (2 \mathrm{sg}) \mathrm{A} \end{aligned}$ | $\begin{aligned} & \text { +boo } \\ & +\mathrm{BINI} \end{aligned}$ | $\begin{gathered} \text {-woo) } \\ \text { DEF } \end{gathered}$ | ) I hit you' |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\rightarrow$ /gardginyboowoo/ |  |  |  |  |  |  |
| $\begin{aligned} & \text { [gard } \\ & \text { hit } \end{aligned}$ | $\begin{aligned} & -\mathbf{b i} \\ & \text { FUT } \end{aligned}$ | $\begin{aligned} & \text { +jidd } \\ & (1 R) N \end{aligned}$ | $\begin{aligned} & \text { Hoo } \rightarrow / g \\ & \text { BINI } \end{aligned}$ | ardbiddo |  | 'we'll hit him' |

There are, however, irregularities in the distribution of the allomorphs. [boo\} is restricted to the three categories mentioned above, but in just a few instances \{bini\} replaces the expected \{boo). These appear to be irregularities, and I do not attempt to explain them. Instead, the occurring forms are tabulated below, in section 3.9.3.2.3. In some cases [bini\} and \{boo) both seem to occur, apparently in free variation. For example,

| 〔gard | -bi | +nggidd | +ri | +boo) | 'you (pl) will hit them' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| hit | FUT | (2pl)N | (3pl)A | +BINI |  |
| $\rightarrow$ [gard-binggiddroo) |  |  |  |  |  |
| $\rightarrow$ /gardbinggooddroo/ |  |  |  |  |  |

and

| lgard | -bi | +nggidd | +bi |
| :--- | :--- | ---: | :--- |
| hit | FUT | +bini ) | $(2 \mathrm{pl}) \mathrm{N}$ |
| $(3 \mathrm{pl}) \mathrm{A}$ | +BINI |  |  |$\quad$ you (pl) will hit them'

```
-> {gard-binggidd+booni}
->/gardbinggoorooni/
```

appear to be mutually replaceable. I do not know whether these are dialectal variants, but there is no evidence at all that they differ in representational (experiential) meaning.

Only one of the rules mentioned above, namely (4), CCR9, also applies to (boo\}, and it does so in similar grammatical environments. (2) (i.e. CCR7) is prevented from applying by the choice of the oo allomorph following $d d$; (3) (i.e. CCR4) can apply only to (bini); and (1) (VR2) cannot apply since there is always at least an intervening tense morpheme between [boo) and the verb root. The following example illustrates the operation of rule CCR9 in conditions as specified for (4) above:

| [gard | -wi | +nggi | +boo | -woo) | 'he's hitting you' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| hit | PRES | (2sg)A | +BINI | DEF |  |
| $\rightarrow$ /gardginggoowoo/ |  |  |  |  |  |

The function of the classifiers is to indicate the type of process that is referred to. They classify the lexical words (which realise the VP role Process in F1) with which they occur, thereby modifying their significance. Classifiers do not divide the set of verbal lexemes into disjoint subsets. Most verbal lexemes collocate with more than one classifier, and the choice between these classifiers distinguishes among various process types that may be referred to by the same lexical item. The processes differ in terms of the meaning features set out in the second and third columns of Table 3-7 (see also section 6.5.5).

The classifiers numbered (1) to (5), (9) and (10) may occur with pronominal prefix configurations referring to two actants in the referent situation. However, all of them except (apparently) for +ADDI may occur with a single pronominal prefix, which makes reference to a single actant. On the other hand, those classifiers numbered (6) to (8), (11) and (12) may occur with only one pronominal prefix. I will refer to them as monovalent rather than intransitive, since they can occur in some clauses of 'directed action' (see section 5.2.1.3).

At the least 'delicate' level, classifiers may be divided into two groups: (a) those which classify the process as an ACCOMPLISHMENT; and (b) those which classify it as EXTENDIBLE. +I is the only exception: it usually indicates extendibles, but in certain well defined circumstances it can refer to accomplishments, as will be mentioned below. As I use the term here, 'accomplishment' refers to any process for which there is an inherent point at
which it is actualised, before which it has not yet occurred, and after which it has occurred, and is completed. Examples are processes such as 'hit', 'arrive', 'die', etc.. Accomplishments often have 'trains' of circumstances leading up to their point of actualisation, such as for example the nearing of the destination in the process 'arrive'. But, until the point of actualisation is reached, the process cannot truthfully be said to have occurred. After the point has been reached, the process in usually completed, and may then be truthfully described in a clause in the past tense. By 'extendible' I mean processes without such points of completion: once started, they can (at least in principle) continue on indefinitely. Examples include processes such as 'walk', 'sit', 'see', 'carry', etc.. There is no inherent point of accomplishment for processes like these.

Other meanings, very roughly glossed in the final column of Table 3-7 can be attributed to the individual classifiers. These will be discussed in more detail in section 6.5.5. A few further remarks may be in order here, for the reader's orientation.

Many more subdivisions are made within accomplishments than extendibles, of which there are only three subtypes, which very broadly correspond to the trichotomy transitive ( +A ), intransitive ( +I ) and reflexive/reciprocal ( $+\mathrm{ARNI}_{2}$ ). However, the importance of the major division accomplishment/extendible can be seen from the fact that all distinctions other than this one are neutralised in the reflexive/reciprocal.

It is tempting to analyse the $-r n i$ in HRNI $_{2}$ and +MARNI as a reflexive/reciprocal suffix to the two classifiers +A and +MI . However, $+\mathrm{ARNI}_{2}$ chooses different allomorphs of the first person singular to +A , and has an irregular third person singular. And +MARNI cannot be regarded as consisting of the $\left(\mathrm{ma}_{1}\right.$ ) allomorph of +MI , since (i) the first vowel of +MARNI does not harmonise with the vowel of the preceding syllable, and (ii) rule CCR 13 cannot be modified to give/a/ as the realisation of \{ $a_{1}$ \} preceding $r n$, since this does not occur when the $/ \mathrm{rn} /$ belongs to the potential mode -rni (see below section 3.9.3.5). A special allomorph (ma), occurring only before the reflexive/reciprocal $-r n i$ would need to be proposed in order to account for the occurring forms. The same problem would arise for the suggestion that $+\mathrm{ARNI}_{2}$ should be segmented into $+\mathrm{I}+r n i$. For all of these reasons, I regard $+\mathrm{ARNI}_{2}$ and +MARNI as distinct classifiers.

+ BINDI is much more restricted in behaviour than the other classifiers. It occurs only with pronominal prefixes of singular number; the corresponding plurals occur with the classifier +I. For example, nyamaniloondi (from (nyamani-li+bindi\} (big-(1sg)N+BINDl)) 'I grew big', but nyamaniwiddi (from
(nyamani-bidd+i] (big-(3pl)N+I)) 'they grew big', or 'they are big'. Furthermore, + BINDI explicitly refers to the point of accomplishment of the process, and so is never found with the progressive aspect. Reference to the train of events leading up to the accomplishment must be made through use of the classifier $\boldsymbol{+}$, as in nyamaniwangi (from (nyamani-wa-ng+i\} (big-PROG+(1sg)N+1)) 'I was getting big'. It is probably also for this reason that +BINDI is almost never found in commands, or other uses of language aimed at modifying the behaviour of the hearer, in all of which cases +I is again favoured. (This is presumably because the focus of commands is no engagement in the process over its completion.) Example:

| (3-106) mangaddi | dirib | -wi | +nggira | -woo |
| :--- | :--- | :--- | :--- | :--- |
| not | enter | PRES | (2sg)N/PRES/I | DEF |
|  |  |  |  |  |

Compare diribjoondi (from \{dirib-ji+bindi\} (enter-(2sg)N+BINDI)) 'you entered'.

### 3.9.3.2.2 The pronominal configuration

First we will deal with the classifiers which occur with one pronominal prefix only; these are: $+\mathrm{I},+\mathrm{BINDI},+\mathrm{ANI},+\mathrm{ARNI}_{2}$, and +MARNI . Table $3-8$ shows the forms of the pronominal prefixes in the CC.

Table 3-8: Pronominal prefixes to single-valent classifiers

|  | sg | nsg |  |
| :---: | :---: | :---: | :---: |
|  |  | $\mathbf{R}$ | U |
| 1 | $+n g+(\operatorname{set} 1)$ | $+j i d d+$ | +jadd+ |
|  | $+l i+(\operatorname{set} 2)$ |  |  |
| 2 | +ngg+(set 1) | +nggidd+ |  |
|  | $+j i+(\operatorname{set} 2)$ |  |  |
| 3 | $\emptyset$ |  |  |

As this table shows, the first and second person singulars have two allomorphs, one which is designated as occurring with set 1 classifiers, which include $+\mathbf{I}$, + ANI and + ARNI 2 , the other with set 2 classifiers, + BINDI and MARNI. There is a phonological correlate: the set 1 classifiers are vowel initial, while the set 2 classifiers are consonant initial. Examples:

Set 1:

| $\begin{aligned} & \text { [ward } \\ & \text { go } \end{aligned}$ | $\begin{aligned} & -\mathrm{ng} \\ & (1 \mathrm{sg}) \mathrm{N} \end{aligned}$ | $\begin{aligned} & +\mathrm{I}\} \rightarrow / \text { wardngi/ } \\ & +\mathrm{I} \end{aligned}$ | 'I went' |
| :---: | :---: | :---: | :---: |
| [ward | -ngg | +I] $\rightarrow$ /wardginggi/ | 'you went' |
| go | (2sg)N | +I |  |

(See VR7' for $g i$ insertion.)
Set 2:

| (bam return | -li <br> (1sg)N | +bindi\} $\rightarrow$ /barnloondi/ <br> +BINDI | 'I got back' |
| :---: | :---: | :---: | :---: |
| \{barn return | -ji <br> (2sg)N | $\begin{aligned} & \text { +bindi) } \rightarrow \text { /barnjoondi/ } \\ & \text { +BINDI } \end{aligned}$ | 'you got back' |

(See rule CCR9.)
The only irregularity is that in the future tense the second person pronominal is deleted in the case of classifiers +I and +BINDI . The set 1 prefix $+n g g+$ of the second person does not occur in wardbiri 'you'll go'. (Note that it is a quite common phenomenon across a broad spectrum of languages for imperative forms to have no second person pronominal (and Gooniyandi does not distinguish imperative from the future).)

The table shows third person singular as having zero realisation. This is clear in examples such as the following with set 2 classifiers:

| \{barn $-\varnothing$ +bindi $\} \rightarrow / b a r n b i n d i /$ | 'he returned' |  |
| :--- | :--- | :--- |
| return | $(3 \mathrm{sg}) \mathrm{N}$ | +BINDI |

However, for set 1 classifiers matters are not quite as simple. Firstly, there is an irregular form bilagini in the third person singular of $+\mathrm{ARNI}_{2}$, as in widdij-bilagini (scratch-he:did:to:himself) 'he scratched himself. This form is prefixed by the appropriate tense markers in a regular manner. It is so irregular that I do not attempt to analyse it further or explain it. Secondly, for the remaining two set 1 classifiers the actual forms in the past tense involve initial consonants, as in e.g. ward-ji (go-he:was) 'he went', wara-yi (stand-he:was) 'he stood', ngang-bani (die-he:fell) 'he died', bagi-wani (lie-he:fell) 'he lay down', etc.. One reasonable way of accounting for this would be by a rule which inserts a consonant before a CC with an initial vowel in underlying form. (The final
qualification "in underlying form" is necessary because in certain cases the loss of underlying ( $w$ ) gives rise to a long vowel, and the CC has no initial consonant in its phonemic realisation.) The consonant inserted in each case is unexceptional: $\{\mathrm{j}$ \} preceding (i) and (b) preceding (a). These lenite to $y$ and $w$ respectively following vowels or [+continuants]. If this solution is adopted, there is no problem in the present and future tenses, since they involve the prefixes $w i+$ and $b i+$, and so consonant insertion is not required. There is one exception, in the unexpected form -boowani in the future of the classifier +ANI (e.g. gardboowani (fall-FUT+ANI) 'it will fall'), which has an inserted w. It seems reasonable to suggest that the $w$ is inserted because of pressure to keep the past and the future forms distinct. The rules would otherwise derive from underlying (gard-bi+ani) (fall-FUT+ANI) the form gardbani, which is homophonous with the past tense form. This irregularity may be seen as further evidence for the proposed rule of consonant insertion, rather than as counterevidence - consonant insertion occurs to avoid homophony. I tentatively adopt this solution in the present context. A further advantage of this solution is that it saves positing exceptional third person singular allomorphs [j] and \{b], which would need to be deleted in the present and future tenses.

There is complete regularity in the case of non-singular pronominals. The rules involved in deriving the phonological forms are the following:
(1) VR3 $j \rightarrow y / \# X\left\{\begin{array}{l}{[\text { vocalic }]} \\ \left.\left[\begin{array}{l}\text { consonantal } \\ \text { +continuant }\end{array}\right]\right\}-\ldots Z \#\end{array}\right.$

Example: (wara -jidd +I ] $\rightarrow$ /warayiddi/ 'we stood'
(2) VR2 $b \rightarrow w /$ \# X $\left.\left\{\begin{array}{l}{[\text { vocalic }]} \\ {\left[\begin{array}{l}\text { consonantal } \\ \text { +continuant }\end{array}\right]}\end{array}\right]\right\}-\quad \mathrm{Z}$ \#

Example: (wara -bidd +I \} $\rightarrow$ /warawiddi/ 'they stood' stand (3pl)N +I
(3) VR7' $\phi \rightarrow g i /\left[\begin{array}{l}\text { consonantal } \\ \text {-continuant }\end{array}\right]-\$ \mathrm{cc} \ldots n g \mathrm{Y} \$ \$_{\mathrm{cc}}$

Example: \{warang -nggidd +I$\} \rightarrow$ warangginggiddi/ 'you (pl) sat' sit (2pl)N +I
(4) CCR1 $d d \rightarrow n / \ldots+m$

Example: \{mird -bidd +marni\} 'they tied each other up'.
tie:up (3pl)N +MARNI
$\rightarrow$ /mirdbinmarni/
Of the seven remaining classifiers, six are potentially bivalent - viz. +A , $+\mathrm{DI},+\mathrm{MI},+\mathrm{BINI},+\mathrm{ARNI}_{1}$ and +BIRLI - and one - +ADDI - is invariably bivalent. In the following three tables, Tables 3-9A to 3-9C, I set out the underlying forms for the two member pronominal configurations, which occur regularly throughout the paradigm of each classifier, with the exception of a small part of the future and present forms of +BINI (cf. page 199 above), which show a number of irregularities. The exceptional present and future tense pronominal paradigm for +BINI is explicitly left out of the following account; it is described below in section 3.9.3.2.3. When monovalent, these classifiers occur with pronominal prefixes containing a single member; the forms are identical with the corresponding forms from the following tables with third person singular Goal. (See section 5.2.1.3 for the terms Agent and Goal.)

Table 3-9A: Two member pronominal configurations: first person Agent

| Agent Goal | (1sg) | (1R) | (1U) |
| :---: | :---: | :---: | :---: |
| (2sg) | +nginy+ | +jiddiny+ |  |
| (2pl) | +nggiddiny+ | $\begin{aligned} & \text { +jiddinybiddri+ } \\ & \text { (+A, +ARNI },+ \text { ADDI) } \\ & \text { +jiddinybiri+ } \\ & \text { (+DI, +MI, + BINI) } \end{aligned}$ |  |
| (3sg) | $+l i+$ | +jüdd+ | +jadd+ |
| (3pl) | +loon+ | +jiddri+ | +jaddri+ |
|  |  | $\begin{aligned} & \text { (+A, +ADDI, +ARNI }, \\ & +\mathrm{MI}) \end{aligned}$ | $\begin{aligned} & \text { (+A, +ADDI, } \\ & \left.+ \text { ARNI }_{1},+\mathrm{MI}\right) \end{aligned}$ |
|  |  | $\begin{aligned} & +j i r i+ \\ & (+\mathrm{DI},+\mathrm{BINI}) \end{aligned}$ | $\begin{aligned} & + \text { jari }+ \\ & (+\mathrm{DI},+\mathrm{BINI}) \end{aligned}$ |

Table 3-9B: Two member pronominal configurations: second person Agent

| Agent <br> Goal | (2sg) | (2pl) |
| :---: | :---: | :---: |
| (1sg) | +ngin+ | $\begin{aligned} & \text { +nginbidd }+\left(+\mathrm{A},+\mathrm{DI},+\mathrm{ARNI}_{1},+\mathrm{ADDI}\right) \\ & +n g i n d i+(+\mathrm{MI},+\mathrm{BINI}) \end{aligned}$ |
| (1R) | +jin + | $\begin{aligned} & +j \text { inbidd }+\left(+\mathrm{A},+\mathrm{DI},+\mathrm{ARNI}_{1},+\mathrm{ADDI}\right) \\ & +j \text { indi }+(+\mathrm{MI},+\mathrm{BINI}) \end{aligned}$ |
| (3sg) | $+j i+$ | +nggidd+ |
| (3pl) | +joon+ | $\begin{aligned} & \text { +nggiddr }+\left(+\mathrm{A},+\mathrm{MI},+\mathrm{ARNI}_{1},+\mathrm{ADDI}\right) \\ & +n g g i r i+(+\mathrm{DI},+\mathrm{BIND}) \end{aligned}$ |

Table 3-9C: Two member pronominal configurations: third person Agent

| Agent Goal | (3sg) | (3pl) |
| :---: | :---: | :---: |
| (1sg) | +ngin+ | $\begin{aligned} & \text { +nginbidd }+\left(+\mathrm{A},+\mathrm{DI},+\mathrm{ARNI}_{1},+\mathrm{ADDI}\right) \\ & +n g i n d i+(+\mathrm{MI},+\mathrm{BINI}) \end{aligned}$ |
| (1R) | +jin+ | $\begin{aligned} & +j i n b i d d+\left(+\mathrm{A},+\mathrm{DI},+\mathrm{ARNI}_{1},+\mathrm{ADDI}\right) \\ & +j i n d i+(+\mathrm{MI},+\mathrm{BINI}) \end{aligned}$ |
| (1U) | +jan+ | $\begin{aligned} & +j a n b a d d+\left(+\mathrm{A},+\mathrm{DI},+\mathrm{ARNI}_{1},+\mathrm{ADDI}\right) \\ & +j a n d i+(+\mathrm{MI},+\mathrm{BINI}) \end{aligned}$ |
| (2sg) | +nggi+ | +ngimbidd+ |
| (2pl) | +nggin+ | $\begin{aligned} & +n g g i n b i d d+\left(+\mathrm{A},+\mathrm{DI},+\mathrm{ARNI}_{1},+\mathrm{ADDI}\right) \\ & +n g g i n d i+(+\mathrm{MI},+\mathrm{BINI}) \end{aligned}$ |
| (3sg) | $\emptyset$ | +bidd + |
| (3pl) | +bin+ | $\begin{aligned} & + \text { binbidd }+\left(+\mathrm{A},+\mathrm{DI},+\mathrm{ARNI}_{1},+\mathrm{ADDI}\right) \\ & + \text { bindi }+(+\mathrm{MI},+\mathrm{BINI}) \end{aligned}$ |

The forms given in the above tables are posited on the basis of the shapes of the CC in the past tense, which is realised by a zero prefix; in the other tenses, initial $n g$, $j$, and $b$ are lost by the sandhi rules as per 2.4.2.2. Secondly, sandhi processes operating between the pronominal prefix configuration and the following classifier may affect the shape of the final consonant of the pronominal configuration, its vowel(s), or the initial consonant and the vowel(s) of the classifier. Thus the underlying forms are obscured by sandhi processes, and the segmentation proposed here is not the only one possible - though it
does appear to be among the most economical. For example, in case the classifier has an initial consonant, no posited final $d d$ in any pronominal configuration actually shows up in the phonemic representation. Conceivably these forms might be treated as having no underlying $d d$. However, the assumption that they do allows for a more general account involving less allomorphy, and it also allows for an explanation of the phonological shapes by fairly natural sandhi rules, which are required elsewhere, in any case.

There are two irregularities, in which the predicted forms do not occur.
(a) The first occurs when the second person singular acts on the third person singular in the future tense, in which case the expected pronominal $-j i$ never occurs. An explanation for this is probably to be found in the general cross-linguistic phenomenon mentioned earlier, whereby the second person singular tends not to have overt realisations in imperatives.
(b) The second irregularity occurs in the case of third person singular acting on third person singular in the past tense of certain classifiers. Again the problem seems to arise from the same source as the similar problem in the case of the monovalent classifiers - that is, where (in underlying form) the CC is predicted to be vowel initial. The predicted forms of (3sg) acting on (3sg) in the past tense of the three vowel initial classifiers are identical with the classifier itself, i.e. $a$, $a d d i$, and $a r n i$. But the forms that actually occur are $-n g a($ for +A ); -baddi (for +ADDI), and -ngarni (for +ARNI). Again it seems reasonable to regard the initial consonant as inserted for phonotactic reasons. [b] is expected, as per above; but it is not clear why \{ng\} is inserted in the other two cases. Furthermore, the sandhi rules predict that the $(3 \mathrm{sg}) \rightarrow(3 \mathrm{sg})$ form of the classifier + DI should be -i. Instead, the irregular form -jingi occurs. What is notable is that these irregularities, however they are to be accounted for, occur in just those cases in which the CC is vowel initial in some underlying form.

It is obvious that further analysis of the forms is possible. I suggest here one possible analysis, but do not attempt to justify it, or to show that it is the best one possible.

The majority ( $75 \%$ ) of the forms can be accounted for in terms of a sequence on two pronominals, one referring to the Agent, the other referring to the Goal. Each pronominal comes in two case-forms: a NOM(inative), which refers to the Agent; and an ACC(usative), which refers to the Goal. Some of the case-forms have allomorphs. Table 3-10 sets out the forms, which account for all bar the combinations involving a first and a second person actant.

Table 3-10: Pronominal prefixes

|  | NOM | ACC |
| :--- | :--- | :--- |
| $(1 \mathrm{sg})$ | $+l i+$ | $+n g i n+$ |
| $(1 \mathrm{R})$ | $+j i d d+$ | $+j i n+$ |
| $(1 \mathrm{U})$ | $+j a d d+$ | $+j a n+$ |
| $(2 \mathrm{sg})$ | $+j i+$ | $+n g g i+\sim+n g i m+$ |
| $(2 \mathrm{pl})$ | $+n g g i d d+$ | $+n g g i n+$ |
| $(3 \mathrm{sg})$ | $\emptyset$ | $\emptyset$ |
| $(3 \mathrm{pl})$ | + bidd $+\sim+r i+$ | + bin $+\sim+r i+\sim+b i+\sim+$ bidd + |

The non-singular nominative pronominals are strikingly similar in shape to the free forms:

| $+j i d d+$ | ngidi, ngiddangi |
| :--- | :--- |
| $+j a d d+$ | yaadi, yaddangi |
| $+n g g i d d+$ | gidi, giddangi |
| + bidd + | bidi, biddangi |

Thus it is tempting to segment the non-singulars into invariant person markers followed by number/case markers, $d d$ for the NOM, and the corresponding nasal $n$ for the ACC (cf. page 171 above).

Where there is allomorphy, the choice is governed by the other pronominal which the particular pronominal occurs with, and also by the classifier. The first allomorph shown in Table 3-10 is the 'elsewhere' or unmarked form which occurs most frequently throughout the paradigms. The second and third, where given, are chosen as follows:
(i) + ngim + , the allomorph of second person singular ACC occurs with all classifiers when the other pronoun is third person plural, and in no other circumstances.
(ii) The allomorph $+r i+$ of (3pl)NOM occurs with the classifiers +MI and +BINI whenever the other pronominal is first person or plural (any person); + bidd + occurs elsewhere. From Table 3-9 it would appear that this allomorph has an invariant shape $d i$; however, that it is underlyingly $r i$ is evident from the fact that when circumstances permit, the retroflection of its initial consonant modifies an initial apical consonant in the following syllable, as per rules CCR3 and CCR4. Example:

| [gard hit | -bin |  | i) |
| :---: | :---: | :---: | :---: |
|  | (3pl)A | (3pl)N | +BINI |
| $\rightarrow$ [gard-bin+rooni\} (by CCR9) |  |  |  |
|  | [gard | doomi) | (by CCR3 and CCR |
|  | ara | d | (by CCR16) |

(iii) For the third person plural accusative, the choice of allomorph is as follows:
$+r i+$, if the other pronoun is first or second person plural, and for +A , +ADDI, +ARNI 1 and +MI classifiers;
$+b i+$ in the same circumstances, for + BINI;
$+b i d d+$, in the same circumstances for +DI - the postulated final $d d$ never shows up phonemically: it 'supports' the initial consonant of the classifier, preventing its elision; and
$+b i n+$ otherwise.
Not only is the choice of allomorph conditioned by neighbouring morphemes, but the order of the two pronominal prefixes is conditioned by their relative status on a nominal hierarchy (cf. Silverstein 1976b, Heath 1976). Two hierarchies explain the order of these pronominals:

## H1 first > second $>$ third <br> H2 $\quad \mathrm{ACC}>\mathrm{NOM}$

Here the symbol ' $>$ ' indicates 'is ranked higher than', and in the present context indicates also morpheme order - i.e. > may also be interpreted as 'precedes'. The second hierarchy, H 2 , of course, applies only if the first fails to order the pronominals - which happens when both are third person.

Eight forms from Tables 3-9A and 3-9C still remain to be accounted for; these have both a first and a second person actant.

Four of these can be dealt with fairly easily under the assumption of a person-neutralising rule which has the effect of neutralising the person of the lower ranking pronominal on H 1 in case it is also outranked on H 2 . In other words, if $x$ acts on $y$ and $x$ is outranked by $y$ in terms of person, only the number of $x$ is indicated, by the appropriate third person pronominal. This is really only a complicated way of saying that, when second person acts on first person, the number only of the second person is indicated by the corresponding third person form. (In case the Agent is third person, neutralisation has, of course, no effect.)

The four remaining forms have a first person Agent acting on a second person Goal. By analogy with the foregoing, the following segmentation is suggested:
(a) (1sg) $\rightarrow$ (2sg): $+n g+i n y+$
(b) (1sg) $\rightarrow$ (2pl): $\quad+n g+n g g i d d+i n y+$
(c) (1R) $\rightarrow$ (2sg): $\quad+j i d d+i n y+$
(d) ( 1 R$) \rightarrow(2 \mathrm{pl}): \quad+j i d d+i n y+b i d d+r i b i(d d)$

This proposal involves the identification of allomorphs $+n g+$ of the first person singular NOM and $+i n y+$ of the second person singular ACC (the latter involves a final nasal of the same point of articulation as the (initial) consonant of the corresponding NOM pronominal prefix). It would seem reasonable to assume that the posited underlying geminate $n g-n g$ of (b) would be reduced to the single $n g$ (geminate nasals do occur in the language, but not preceding stops).

However, (b) poses a second problem in that the ACC form of the second plural does not occur; instead, there is the sequence of the second plural NOM $+n g g i d d+$ followed by the second singular ACC $+i n y+$. A similar problem arises in relation to (d), where instead of the (2pl)A prefix, there occurs the (2sg)A, the number being discontinuously marked by a (3pl)A form in final position. But note that the choice of allomorphs of (3pl)A - +ri+ vs. +bidd+ - differs slightly from the choice elsewhere: $+r i+$ occurs with $+\mathrm{A},+$ ADDI and $+\mathrm{ARNI}_{1} ;+b i+$ with +MI and +BINI ; and $+b i d d+$ with +DI . I do not attempt to explain the two exceptional forms (b) and (d); the proposed segmentation does, however, appear to be reasonable.

Comparison of Table 3-8 with Table 3-10 shows that there is a good deal of similarity between the pronominals that occur in monovalent complexes and the NOM form of the pronominals occurring in bivalent complexes. The only difference is that the second person singular set 1 form $+n g g+$ of Table 3-8 does not appear in Table 3-10; its closest relative on the latter table is the accusative form $+n g g i+$. (Note: the first person singular $+n g+$ is not shown in Table 3-10, but it has been subsequently discussed.) The evidence seems to justify regarding the forms shown in Table 3-7 as NOM forms of the pronominal prefixes. For convenience, all postulated forms are tabulated below in Table 3-11.

Table 3-11: The pronominal prefixes

|  | NOM | ACC |
| :---: | :---: | :---: |
| (1sg) | $+l i+\sim+n g+$ | +ngin+ |
| (1R) | $+\ddot{j} d d+$ | +jin+ |
| (1U) | +jadd + | +jan+ |
| (2sg) | $+j i+\sim+n g g+$ | +nggi+ $\sim+$ ngim $+\sim+$ iny + |
| (2pl) | +nggidd + | +nggin+ |
| (3sg) | $\emptyset$ | $\emptyset$ |
| (3pl) | +bidd $+\sim+r i+$ | +bin $+\sim+b i d d+\sim+r i+\sim+b i+$ |

### 3.9.3.2.3 Irregularities in +BINI

In the following three tables I set out the paradigm of the CC for + BINI in the future, future subjunctive, present, and present definite (omitting the tense marker, since the tenses are formed regularly as per 3.9.3.2.4 and the sandhi rules of section 2.4.2). (What is shown is not necessarily the complete paradigm.)

## Remarks on the tables:

(1) As mentioned earlier, there seems to be little regularity governing the choice between the major allomorphs $+b i n i$ and $+b o o$. In some cases (such as $(1 \mathrm{sg}) \rightarrow(2 \mathrm{sg}))+b i n i$ occurs in the subjunctive and potential future, but not in the unmodalised future or present. For example, the subjunctive future for ( 1 sg ) $\rightarrow(2 \mathrm{sg})$ with the verb gard- 'hit' is gardjawinybini 'I might hit you', but the plain future is gardbinyboo 'I'll hit you'. The places where this is the conditioning factor for the allomorph choice are indicated in the tables by (SUBJ) next to the form. In other places (e.g. (1sg) $\rightarrow(3 \mathrm{sg})$ ) + bini occurs with the future tense (irrespective of mood), while $+b o o$ occurs with the present. For example, compare nyag(ja)woolooni 'I'll spear him', or 'I might spear him' with nyaggoowaaloo 'I'm spearing you'. Elsewhere there appears to be no allomorphy. There appears to be no regularity in the distribution of these three possibilities.
(2) The vast majority of the pronominal configurations are formed regularly, though different allomorphs are chosen depending on tense, mood, and on the form of the classifier. Where + bini occurs, the pronominal allomorphs are those

Table 3-12A: Future and present of + BINI, first person Agent

| Agent Goal | (1sg) | (1R) | (1U) |
| :---: | :---: | :---: | :---: |
| (2sg) | $\begin{aligned} & \text { +nginybini (SUBJ) } \\ & (+n g+i n y+b i n i) \\ & +n g i n y b o o \\ & (+n g+i n y+b o o) \end{aligned}$ | +jiddinybini (SUBJ) <br> (+jidd + iny + bini) <br> +jiddinyboo <br> (+j̈dd + iny $+b o o$ ) |  |
| (2pl) | +nggiddinybini (SUBJ) <br> (+nggidd+iny+bini) <br> $+n g g i d d i n y b o o$ <br> (+nggidd+iny+boo) | $+j i d d i n y b i r i n i$ $(+j i d d+i n y+b i+r i+i n i)$ |  |
| (3sg) | $\begin{aligned} & +l o o n o o \text { (FUT) } \\ & (+l i+b i n o o) \\ & +l o o \text { (PRES) } \\ & (+l i+b o o) \end{aligned}$ | $+j i d d i n i(S U B J)$ <br> ( $+j i d d+i n i$ ) <br> $+j i d d o o$ <br> ( $+j i d d+\infty$ ) | +jaddoo <br> ( + jadd $+\infty$ ) |
| (3pl) | $\begin{aligned} & +l o o n b o o n o o \text { (FUT) } \\ & (+l i+b i n+b i n i) \\ & +l o o n b o o \text { (PRES) } \\ & (+l i+b i n+b o o) \end{aligned}$ | $+j i r i n i$ (SUBJ) <br> (+jidd+bini) <br> +jiddoori <br> $(+j i d d+\infty+r i)$ | +jaddaroo <br> ( $+j a d d+a+r i+b o o$ ) |

Table 3-12B: Future and present of +BINI , second person Agent
Agent (2sg) (2pl)
Goal

| (1sg) | +nginboo (+ngin+boo) | +nginbooddoo ( + ngin+bidd $+o o$ ) (FUT) <br> $+n g o o n d o o r n i(+n g i n+r i+b i n i)$ (PRES) |
| :---: | :---: | :---: |
| (1R) | +jinboo ( + jin + boo $)$ | $+j i n b o o d d o o(+j i n+b i d d+o o)$ (FUT) $+j i n d o o r n i$ ( $+j i n+r i+b i n i$ ) (PRES) |
| (3sg) | $\begin{aligned} & \text { +jooni }(+j i+b i n i) \text { (SUBJ) } \\ & \text { +boo (+boo) (FUT) } \\ & \text { +joo }(+j i+b o o) \text { (PRES) } \end{aligned}$ | +nggooddoo (nggidd + oo) |
| (3pl) | $+b i n b o o$ ( + bin $+b o o$ ) (FUT) <br> $+j o o n b o o(+j i+b i n+b o o)(\mathbf{P}$ | $\begin{aligned} & \text { +nggooddroo (+nggidd }+r i+b o o) \\ & \text { 2ES) } \end{aligned}$ |

## Table 3-12C: Future and present of +BINI , third person Agent

Agent (3sg)
Goal

| (1sg) | $\begin{aligned} & \text { +nginbini }(+n g i n+b i n i) \\ & \text { (SUBJ) } \end{aligned}$ | $\begin{aligned} & \text { +ngoondoo(rni) ( }+n g i n+r i+b i(n i)) \\ & \text { (SUBJ) } \end{aligned}$ |
| :---: | :---: | :---: |
|  | +nginboo (+ngin + boo) |  |
| (1R) | $\begin{aligned} & +j i n b i n i(+j i n+b i n i) \\ & \text { (SUBJ) } \end{aligned}$ | $\begin{aligned} & +j i n b i n i(+j i n+b i n i) \\ & \quad(\mathrm{SUBJ}) \end{aligned}$ |
|  | +jinboo ( + jin + boo ) | +jindoorni (+jin+ri+bini) |
| (1U) | $+j a n b i n i(+j a n+b i n i)$ <br> +janboo ( $+j a n+b o o$ ) | +janbani (SUBJ) |
| (2sg) | $\begin{aligned} & \text { +nggooni }(+n g g i+b i n i) \\ & \text { (SUBJ) } \end{aligned}$ | $\begin{aligned} & \text { +ngimbiddini }(+n g i m+b i d d+i n i) \\ & \text { (SUBJ) } \end{aligned}$ |
|  | +nggoo (+nggi+boo) | +ngimbiddoo ( + ngim + bidd $+o o$ ) |
| (2pl) | $\begin{aligned} & \text { +ngginbini }(+n g g i n+b i n i) \\ & \text { (SUBJ) } \end{aligned}$ | $\begin{aligned} & \text { +nggoondoorni }(+n g g i n+r i+b i n i) \\ & \quad \text { (SUBJ) } \end{aligned}$ |
|  | +ngginboo (+nggin + boo ) |  |
| (3sg) | $+b i n i(+\phi+b i n i)($ FUT) | +biddini (bidd + ini) |
|  | +boo ( $+\phi+b o o$ (PRES) |  |
| (3pl) | $+b i n b i n i(+b i n+b i n i)$ (FUT) | +boondoorni (bin+ri+bini) (FUT) |
|  | +binboo ( + bin + boo) (PRES) |  |

which go with $+b i n i$ elsewhere (i.e. in the past tense, etc.); for boo $\sim o o$, the allomorphs are those which occur elsewhere, for +A, +ADDI, +ARNI, and +DI. (There may be one exception, the combination of (3pl)N with (1sg)A, in which +ngoondoo and +ngoondoorni alternate.)
(3) The major irregularities occur with the two first person plural categories in combination with the third person plural. The form +jiddoori for $(1 \mathrm{R}) \rightarrow(3 \mathrm{pl})$ appears to involve $+j i d d+(1 \mathrm{R}) \mathrm{N},+o o+(\sim+b i n i)$, and $+r i(3 \mathrm{pl}) \mathrm{A}$, in an unusual order, and $+j$ addaroo for $(1 \mathrm{U}) \rightarrow(3 \mathrm{pl})$ is probably analysable as regular $+j a d d+r i+b o o$, with an epenthetic vowel. In the two forms with first person nonsingular Goal, $+j i n b i n i$ and $+j a n b a n i$ there is no (3pl)N prefix. The former is indistinguishable from the corresponding form for third person singular Agent, whilst the second differs from the corresponding (3sg) $\rightarrow$ ( 1 U ) in the (irregular)
shape of its second vowel. Finally, in the subjunctive of (1R) $\rightarrow$ (3pl) the (3pl)A prefix does not occur (but the form remains distinct from that of (1R) $\rightarrow$ ( 3 sg ) by (4) below).
(4) To explain the forms of (1R) $\rightarrow$ (2pl), (3sg) $\rightarrow(2 \mathrm{sg})$ and (3pl) $\rightarrow(2 \mathrm{sg})$ it was necessary to posit a further allomorph $+i n i$ of + BINI.

### 3.9.3.2.4 Tense

The tenses, of which there are four - past, present, future and irrealis (i.e. no time) - are formed on the whole quite regularly by prefixes, sometimes together with a distinctive form of the classifier. In this section I discuss the formation only of the tense categories, leaving discussion of their semantics to section 6.5.1.
[1] Past. Past tense has zero prefixal realisation. As has already been discussed, this can lead to the situation in which a CC is without an initial consonant. This occurs when the pronominal is also zero and the classifier has an initial vowel or \{d\}; the first condition arises when the third person singular is the only pronominal category in the CC. I have suggested that the irregularities in this part of the paradigm of the CC, whereby it has an irregular initial consonant, may be accounted for by a rule of consonant insertion. In any case, these initial consonants serve as markers both of past tense and third person singular, or of past tense and third person singular acting on third person singular; this is the only qualification to the initial generalisation of the paragraph.
[2] Future. The majority of future forms are constructed with the prefix $-b i+$, which regularly lenites to /wi/following vowels and continuants, together with the appropriate form of the classifiers $+\mathrm{DI},+\mathrm{MI},+\mathrm{I}$ and +BINI . The main irregularities in the construction of the future lie in the pronominal prefixes; and, in the case of + BINI, with the choice of the allomorph of the classifier.

The second person singular NOM pronominal occurs in the formation of the future tense of two classifiers only, +ANI and $+\mathrm{ARNI}_{2}$. These are two of the three which choose the $+n g g+$ allomorph of the second person singular (see Table 3-11 above):

| (doomoo | -bi | +ngg | +ani] | 'you'll clench (your fist)' |
| :---: | :---: | :---: | :---: | :---: |
| close | FUT | (2sg) N | +ANI |  |
| $\rightarrow /$ | noow | ggarni/ |  |  |

$$
\begin{array}{cccc}
\left\{\begin{array}{lll}
\text { mila } & \text { bi } & + \text { ngg } \\
\text { see } & \text { FUT } & + \text { +arni }\} \\
\rightarrow / \text { (2sgilawinggarni/ }
\end{array}\right. & \begin{array}{ll}
\text { +ARNI }
\end{array} & \text { 'you'll look at yourself' }
\end{array}
$$

Elsewhere, with a single exception, the second person singular NOM pronominal is deleted. Examples:

```
(ward -bi \(\quad+\mathrm{a}\) ] \(\rightarrow /\) wardba/ 'you'll bring it'
    go FUT +A
\{ngang -bi +bin \(+\mathrm{da}_{1}\) \} 'you'll give them it'
    give FUT (3pl)A +DI
        \(\rightarrow\) \{ngang-boonda \({ }_{1}\) \}
        \(\rightarrow\) /ngangboondoo/
```

    \{gard -bi +bin +boo\} 'you'll hit them'
    hit FUT (3pl)A +BINI
        \(\rightarrow\) /gardboonboo/
    It would still be possible to claim that these forms involve the pronominal $+j i+$, which has disappeared through the operation of rule CCR10. However, in that case, the strengthening rule CCR8 would have to be presumed to apply only in the present tense, following -wi+. There is nothing to be gained by this approach, and it has little intuitive appeal - whereas on the other hand, the fact that pronominal deletion occurs in imperatives in many languages lends credence to the analysis proposed here. The deletion hypothesis is also supported by the fact that for +I and +MI the irregular forms cannot be analysed as having the pronominal prefix: wardbiri 'you'll go', and milama 'you'll look'. (It is for this reason that I have suggested that these futures may have arisen from an earlier imperative category.)

The exception referred to in the preceding paragraph occurs in the subjunctive future of + BINI, where, as distinct from the 'plain' future, the (2sg)A prefix $+j i+$ occurs, as is shown by:

| (gard | -ja | -bi | +ji | +bini) |
| :--- | :--- | :--- | :--- | :--- |
| hit | SUBJ | FUT | (2sg)N | +BINI |
| $\rightarrow$ | /gardjawinyjooni/ (by CCR8, VR2, and CCR9) |  |  |  |

(Compare gardboo 'you'll hit him'.)
The two irregular futures of +I and +MI (in the second person singular) given in the next but last paragraph above are the only futures which cannot be synchronically analysed as having the prefix $-b i+$. (Even here it would be
possible to analyse $+b i r i$ as $+b i+r+a_{1}$, where the epenthetic $r$ serves to keep this category distinct from the (3sg) future.)

A number of morphophonemic sandhi rules affect the ultimate shape of $-b i+$ and the following syllable, sometimes coalescing them into a single syllable. And the initial consonant (being initial to the CC) is affected only by rule VR2 as mentioned above.
(a) When followed by a vowel, which must be the first vowel of a vowel initial classifier, rule CCR 14 applies, to replace (i) by the following vowel. Example:
\{bagi -bi $\quad$ +ani\} $\rightarrow /$ bagiwani/ 'he'll lie down'
lie FUT +ANI
(b) Four rules collapse $-b i+$ with the following syllable, which must be either (bini $\sim$ boo\} (the allomorphs of + BINI), a first person or third person plural pronominal prefix (see the forms in Table 3-10 above), or the exceptional allomorphs \{i\} of +I and (di\} of +DI in the third person singular (as mentioned on page 198 above). They are:
(1) Rule CCR9: $i+b i \rightarrow o o$, exemplified in the examples given on page 216 above;
(2) Rule CCR 10: $i+j i \rightarrow i$, as in
$\left.\begin{array}{llll}\text { (mila } & \text {-bi } & +j i d d & +\mathrm{a}\end{array}\right) \rightarrow$ /milawidda/ 'we'll see it';
(3) Rule CCR 11: $i+n g i \rightarrow i$, as in
$\begin{array}{cccc}\text { \{gard } & \text {-bi } & \text { +ngin } & + \text { boo }\} \\ \text { hit } & \text { FUT } & \text { (1sg)A } & + \text { BINI }\end{array}$
(4) Rule CCR12: $i+j a \rightarrow a$, as in

$$
\begin{array}{cccc}
(\text { mila } & \text {-bi } & \text { +jadd } & +a
\end{array} \rightarrow / \text { milawadda/ 'we'll see it'. }
$$

Forms such as wardbingi 'I will go' may at first appear to be counterexamples to (3). However, this form derives from (ward-bi+ng+a ${ }_{1}$ ) and since CCR13 is unordered with respect to, and hence simultaneous with CCR11 (see page 116), only the former applies. Thus:

$$
\begin{aligned}
\{\text { ward } & -\mathrm{bi} & +\mathrm{ng} & \left.+\mathrm{a}_{1}\right\}
\end{aligned} \rightarrow\{\text { wardbinga }\} \quad \text { 'I will go' }
$$

Once having applied, CCR13 cannot be followed by CCR11.
(c) Finally there is a rule of vowel harmony, R9, which changes (i) to / $00 /$ when the following syllable has a \{oo\} in it. Examples:

[3] Present. The formation of the present tense category in the CC is by and large regular: it is realised by the prefix -wi+ in conjunction with marked allomorphs of certain classifiers (and occasionally of the pronominal prefixes).
+1 has irregular present tenses for the singulars of each person; these involve the infix $+(i) r+$ between the pronominal and the classifier. For the second and third persons the forms are the expected ones with the $-w i+$ present prefix, but for the first person, $\varnothing$ occurs. The forms of the CC are then:
(1sg) -ngiri, e.g. wardngiri 'I walk';
(2sg) -winggiri, e.g. wardginggiri 'you walk';
(3sg) -wiri, e.g. wardgiri 'he walks'.
However, for the non-singular numbers, the construction of the present of $+I$ is regular.
The reason I analyse the above forms as having an infix $+(i) r+$ rather than the more immediately obvious analysis involving a suffix $+r i$ is that the final $i$ must derive from underlying $\left\{\mathrm{a}_{1}\right.$ \}, since the present definite forms are -ngirawoo (for ( 1 sg ) N ), etc.. In fact, the epenthetic $+(i) r+$ appears to occur in order to preserve the distinction between the past and present (at least in the case of ( 1 sg ) and (2sg) actants).

The irregularity whereby the present tense prefix does not occur with the first person singular (as in -ngiri above) is present in the paradigms of the three classifiers $+\mathrm{I},+\mathrm{ANI}$, and $+\mathrm{ARNI}_{2}$, all of which choose the set 1 allomorph ( ng ) of the first person singular:

$$
\begin{array}{lll}
{\left[\begin{array}{lll}
\text { mila } & -n g & +a r n i
\end{array}\right] \rightarrow / \text { milangarni/ }} & \text { 'I see myself' } \\
\text { see } & (1 \mathrm{sg}) \mathrm{N} & +\mathrm{ARNI}_{2}
\end{array}
$$

and

| (gard | -ng | + ani | - woo $\}$ |
| :---: | :---: | :---: | :---: |
| fall | $(\mathrm{lsg}) \mathrm{N}$ | +ANI | DEF |

However, there is no infix/-ir/ to distinguish the present from the past in the first person singular of +ANI and $+\mathrm{ARNI}_{2}$ : milangarni (above) can mean either 'I see myself' or 'I saw myself'.

The realisations of $-w i+$ are affected first by changes to the vowel through the influence of following elements in the CC, and secondly by the rules of realisation of $\{w\}$ which depend on both the preceding segment and the shape of the vowel following it. Changes to the vowel occur under the same conditions as changes to the vowel of the future prefix, and so I will not repeat the details here. Instead, I will examine the ultimate realisations of ( $\mathbf{w}$ \}.
(i) Following occlusive consonants, as rule VR6 indicates, $\{\mathrm{w}$ ) is realised by /g/. Examples:
(ward - wi $\quad$ +bidd $+\mathrm{a}_{1}$ \} $\quad$ they walk'
go PRES $\quad(3 \mathrm{pl}) \mathrm{N}+\mathrm{I}$
$\rightarrow$ /wardgooddoo/ (by CCR9, VR6, and CCR13)

| (gard | -wi | +ji | +boo |
| :---: | :---: | :---: | :---: |
| go | PRoo) 'you'll hit him' |  |  |
| $\rightarrow$ PRES | $(2 \mathrm{sg}) \mathrm{N}$ | + +BINI | DEF |

(ii) Elsewhere, $\{w\}$ is realised by $/ w /$ or $\varnothing$. The former occurs if the following vowel is /oo/ or an inherently stressed/a/ or /i/. For example,

| \{bayal | - wira $\left._{1}\right\}$ |
| :--- | :--- |
| swim | PRES/(3sg)N/I |$\rightarrow /$ bayaliri/ 'he swims'

\{bayal -wi $\quad+$ bidd $\left.\quad+a_{1}\right\} \rightarrow / b a y a l w o o d d o o / ~ ' t h e y ~ s w i m ' ~$ swim PRES (3pl)N +I
$\{$ mila - wi $\quad$ jadd + a $\rightarrow /$ milawadda/ 'we see it' see PRES (1U) +A

Contrast the last of these with:

$$
\begin{array}{ccll}
\{\text { mila } & - \text { wi } & \text { +jan } & +\mathrm{a}\} \\
\text { see } & \text { PRES } & \text { (IU)N } & +\mathrm{A}
\end{array}
$$

A following / 0 / normally arises from underlying (ibi], in the third person plural category (as in the second example above), and stressed /a/ arises from the first person unrestricted nominative prefix $+j a d d+$. (In this grammatical environment, $\{w\}$ is never followed by a stressed $i$.)
[4] Irrealis. Irrealis has allomorphs \{-yi+ ~-wi+\}. The second of these is homophonous with the present tense prefix; and indeed, the irrealis forms of
some CCs are indistinguishable from the present forms. This is especially the case in the unreal subjunctive (see section 6.5.4.1 below), which by and large falls in with the present subjunctive. (Elsewhere, the potential -rni serves to disambiguate the non-future potential from the present tense.)
[yi] occurs immediately preceding the third person pronominal prefixes, $\varnothing$, $+b i n+$ and $+b i d d+$, the first person restricted $+j i d d+$ and $+j i n+$, and sporadically (under conditions I cannot specify completely and precisely) before the first person unrestricted $+j a d d+$ and $+j a n+$. The initial $\{y$ ) shows no sandhi alternations at morpheme boundaries: it invariably appears as $/ \mathrm{y} /$ following both vowels and consonants. The only processes affecting the eventual shape of (yi) are thus those that affect the vowel. The vowel is affected in the same way, and under precisely the same circumstances, as have already been detailed for the future tense prefix -bi+. For example (for explanations of the meanings, see sections 6.5.3.2 and 6.5.4.1):

| $\begin{gathered} \text { \{gard -yi +bidd +bini } \\ \text { hit IRR (3pl)N +BINI } \\ \rightarrow / \text { gardyoorinimi/ } \end{gathered}$ | -mi) 'they could have/almost hit him' POT |
| :---: | :---: |
| $\begin{array}{cccc}\text { [gard } & \text {-ja } & \text {-yi } & \text { +bini) } \\ \text { hit } & \text { SUBJ } & \text { IRR } & + \text { +BINI } \\ \rightarrow & \text { /gardjayooni/ }\end{array}$ | 'he might have hit him' |
| \{dalyadd -yi +jidd +ani slip IRR (IR)N +ANI <br> $\rightarrow$ /dalyaddyiddanimi/ | -mi] 'we could have/almost slipped' POT |

(wi) occurs elsewhere, that is, preceding the first person singular, occasionally preceding the first person unrestricted, and the second person, both singular and plural. It shows precisely the same allomorphy as the present tense prefix with which it is homophonous. A few examples are:

$$
\begin{aligned}
& \text { [gilang -ja -wi +li +addi] 'I might have knocked him' } \\
& \text { knock SUBJ IRR (1sg)N +ADDI } \\
& \rightarrow \text { /gilangjaaladdi/ } \\
& \text { (gand -wi +jadd +ani -mi) 'we could have fallen' } \\
& \text { fall IRR (IU)N +ANI POT } \\
& \rightarrow \text { /gardgaddanimi/ }
\end{aligned}
$$

```
\{ward -ja -wi +ji +a\} 'you might have brought it'
    go SUBJ IRR (2sg)N +A
        \(\rightarrow /\) wardjaanyja/
```

As was remarked above, the four classifiers + BINI, $+\mathrm{DI},+\mathrm{MI}$ and +I , which show tense-governed allomorphy, occur in their unmarked, or past tense forms in the irrealis. These forms differ from their shapes in the present tense. This fact alone serves to prevent a large amount of homophony between the present and the irrealis. Examples:

| \{ward | -wi | +jadd | +i | -rni) | 'we could have gone' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| go | IRR | (1U)N | +I | POT |  |
|  | $\rightarrow$ /wardgaddirni/ |  |  |  |  |

## (Cf. /wardgadda/ 'we go'.)

$$
\begin{array}{cccc}
\{\text { ward } & -\mathrm{yi} & +\mathrm{i} & -\mathrm{mi}\} \\
\text { go } & \text { IRR } & +\mathrm{I} & \text { POT }
\end{array}
$$

## (Cf. /wardgiri/ 'he goes'.)

In just those circumstances in which the present tense (wi) does not show up, i.e. where the $/ \mathrm{ng} /$ allomorph of the first person singular occurs with monovalent classifiers ( $+\mathrm{I},+\mathrm{ANI}$, and $+\mathrm{ARNI}_{2}$ ), it does not show up in the irrealis either. Examples:

| (ward -ng +i $-\mathrm{mi}\}$$\rightarrow /$ wardngirni/ | I could have gone' |  |  |
| :--- | :--- | :--- | :--- |
| go | $(1 \mathrm{sg}) \mathrm{N}$ | +I | POT |

(Cf. /wardngiri/ 'I go'.)

| [gard | -ng | +ani | -min |
| :---: | :--- | :--- | :--- |$\rightarrow /$ /gardnganimi/ $\quad$ 'I could have fallen'

### 3.9.3.3 Aspect

One morpheme only occurs in the second order class in the VP, the marker of progressive aspect. This morpheme refers to the train of circumstances leading up to the point of actualisation of an accomplishment, or to the subsequent train of events following this point of actualisation. That is, it views an accomplishment from some point of time before or after the actual culmination of the process, at which time the process is in progress. (For a more detailed discussion of the meaning and functions of the progressive, see section 6.5.2 below.) The progressive occurs only with accomplishment classifiers, and with
+I in those circumstances in which +I replaces + BINDI (see pages 202-203).
The progressive has three allomorphs, /goowa $\sim$ wa $\sim a /$, which are distributed as follows:
(i) /goowa/ occurs following non-continuant consonants other than /b/. For instance, /bijgoowangarni/ (emerge-PROG-(3sg)N+ARNI ${ }_{1}$ ) it was arriving'.
(ii) /a/ occurs following [+continuant] consonants, and the bilabial stop /b/. (It is not known whether this allomorph also occurs following an $/ \mathrm{m} /$.) For example, /dagooddawani/ (insert-PROG-(3sg)N+ANI) 'it was going inside', /diribangi/ (enter-PROG-(1sg)N+I) 'I was entering'.
(iii) /wa/ occurs following vowels. For example /balawayingi/ (send-PROG( 3 sg ) $\mathrm{N} /(3 \mathrm{sg}) \mathrm{A} /+\mathrm{DI}$ ) 'he was sending it away'.
The shape of the allomorph following continuant consonants can be accounted for by VR6, under the assumption that it is underlyingly (wa). However, the allomorph /a/following /b/ is quite irregular, and cannot be derived from an underlying (wa).

### 3.9.3.4 Mood

Four morphemes occur in the position immediately following Aspect, three of which in some way modify the proposition expressed by the clause, rather than qualify the process referred to. They indicate the speaker's attitude towards, or the speaker's qualification of the proposition expressed with respect to his/her - or his/her understanding of the hearer's - presuppositions or presumptions. Their meaning is thus of the interpersonal type (Halliday 1970:143), and for this reason I have labeled the position "mood". The fourth member of this order class, -nyali- REP, would appear to carry a distinct, though fairly clearly related type of meaning within the VP.

Two of the morphemes, namely -nyali- REP and -ma-, the allomorph of the IND which occurs in VPs, are enclitics which are not restricted to occurring in this position in finite VPs. Examples of their use in the VP are: baginyaliri (lie-REP-PRES/(3sg)N/I) 'he's lying down again' and wardmawiri (go-IND-FUT/(2sg)N/I) 'you'll go?'. (See section 3.8 above and sections 6.3.2 and 6.3.8 for discussions of the meanings of these morphemes.)

The two other morphemes are:
[1] \{-ja-\} subjunctive mood (SUBJ). This mood indicates the status of the proposition as a non-fact (see 6.5.4.1 for detailed discussion). As rule VR3
predicts, it is realised by $/ \mathrm{j} /$ following non-continuant consonants, and by $/ \mathrm{ya} /$ elsewhere. For example, ngabjawila (eat-SUBJ-FUT+(1sg)N+A) 'I want to eat (it)', and milayawila (see-SUBJ-FUT+(1sg)N+A) 'I want to see it'.
[2] \{-wila-\} factive mood (FACT). This morpheme indicates the evaluated status of the proposition as a fact (see section 6.5.4.2). -Wila-is unstressed (until the application of late stress placement rules), and its initial consonant undergoes the sandhi processes as set out in VR4. [ w ] either hardens to $/ \mathrm{g} /$ following non-continuant consonants, or otherwise is deleted; VR5 gives rules of realisation of sequences of vowels that may result. I will not give examples of all possible realisations here, since they are exactly as detailed for the present tense $-w i+$ (see page 219 above).

### 3.9.3.5 Mode

Three morphemes occur in the order-class immediately following the CC, and are encliticised to it. They indicate the speaker's attitude towards the process, or, rather, the situation referred to by the whole clause, and the fact of its occurrence. In this respect they contrast with the Mood elements discussed in the preceding section, which qualify the proposition expressed. The three morphemes are:

| $-n y j i$ | Desiderative (DESID) |
| :---: | :--- |
| $-r n i$ | Potential (POT) |
| $-w o o$ | Definite (DEF) |

The labels given are approximate; the significance of these morphemes will be discussed in some detail in section 6.5.3.

These three morphemes are invariant in phonological shape. However, in one circumstance the shape of a preceding morpheme may be affected by the addition of an enclitic. By rule CCR13, an [ $a_{1}$ ] preceding the definite mode enclitic is realised by /a/ - compare /wardngirawoo/ (go-PRES/(1sg)N/I-DEF) 'I'm going!' with /wardngiri/ (go-PRES/(1sg)N/I) 'I go'. Like the majority of monosyllabic enclitics, $-n y j i,-r n i$, and -woo cohere with the CC, constituting a single phonological word with it.

Whereas -nyji and -rni occur only within finite VPs in order-class (5) (see F1 on page 192 above), $-w o o$ is found also on nominals, and since the meaning in each case appears to be conditioned by the constituent to which it is attached, a single morpheme (an enclitic) is identified. (It should be noted that there is another -woo, an allomorph of the dative postposition, which is homophonous
with the DEF, and must not be confused with it.) All that needs to be added here is that there are certain co-occurrence restrictions between these three morphemes and the tense morphemes in the CC: -rni occurs only with the 'unreal' tenses (irrealis and future); -nyji occurs with future only; and -woo, in the available examples, occurs only with past, present and future, never with the irrealis.

### 3.9.3.6 Oblique bound pronominals

The oblique bound pronominals are encliticised forms of the oblique 'case' forms of the personal pronominals (discussed in section 3.6 above). They refer to Affected participants in most clause types, and to the Goal in Middle clauses (see section 5.2.1.3 for details and examples). These pronominals are obligatory in VPs in all Middle clauses, and in all clauses with Affected participants. They are given in Table 3-13 (compare Table 3-6).

Table 3-13: Oblique bound pronominals

| sg |  | non-sg |  |
| :--- | :--- | :--- | :--- |
|  | Restricted | Unrestricted |  |
| 1 | -ngadda(gi) | -ngiddangi | -yaddangi |
| 2 | -nganggi | -giddangi |  |
| 3 | -nhi $\sim$-wanhi | -widdangi |  |

## Remarks on Table 3-13:

(i) As an inspection of this table will reveal, the final syllable of the first person singular form may (optionally) be elided: both wardbiringaddagi and wardbiringadda (go-FUT/(2sg)N/l-(1sg)O) 'come to me' occur, apparently in frce variation.
(ii) The third person non-singular has the invariant form /widdangi/. Since this enclitic always follows a vowel, and bears initial stress, it could be written morphophonemically as either (widdangi) or (biddangi), the latter being the phonological form of the corresponding free pronominal. I will, however, represent it here in the least abstract way, as (widdangi).
(iii) The third person singular enclitic shows slightly more divergence than do the other enclitics from its corresponding free form pronominal, nhoowoo. In addition to the monosyllabic (nhi), I have postulated a second (and unusual) allomorph, [wanhi]. The reason for this is to explain a range of forms involving the classifiers $+\mathrm{I},+\mathrm{DI}$ and +MI in the non-past tenses, where the allomorphs
$\left\{\mathrm{a}_{1}\right\}$, $\left\{\mathrm{da}_{1}\right\}$, and $\left\{\mathrm{ma}_{1}\right\}$ occur. Consider forms such as the following: /wardbiraanhi/ (go-FUT/(2sg)N/I-(3sg)O) 'go up to him' and /jagjawilimaanhi/ (speak-SUBJ-FUT+(1sg)N+MI-(3sg)O) 'I'll speak to him'. Preceding the other oblique pronominals, the final vowel of the CC is the expected one, namely /i/ - cf. /wardbiriwiddangi/ (go-FUT/(2sg)N/I-(3pl)O) 'go up to them', and /jagjawilimiwiddangi/ (speak-SUBJ-FUT+(1sg)N+MI-(3pl)O) 'I'll speak to them'. The easiest way of accounting for these alternations would seem to be to assume that the third person singular pronominal has the allomorph (wanhi) when it follows $\left\{\mathrm{a}_{1}\right.$ \}; then the long vowel/aa/ (as in the examples above) would be derived by VR5.

There is a further, exceptional, pronominal enclitic, -ngangi, not shown in the table. This pronominal is infrequently used in reference to the speaker-hearer dyad - i.e. it is a dual inclusive form of the first person - in either an Affected or Goal function (regardless of clause type). When referring to the Goal in a transitive clause -ngangi further qualifies the reference of the Accusative pronominal in the CC (see above 3.9.3.2.2), much in the manner of a number enclitic. For example, in /milayinangangi/ (see-(1R)N+A-(1dI)O) 'he saw me and you', the Goal is referred to in the CC by the ACC prefix $+j i n+$ (IR)A, and by ngangi in addition. The latter restricts the possible reference of the former to just the speaker and the hearer. Here, -ngangi is in complementary distribution with the dual number enclitic, which may refer only to a first person dual exclusive participant (see next section). Elsewhere -ngangi occurs in place of -ngiddangi. These two morphemes are not, however, in complementary distribution; they occur in contrastive variation. Both wardjingangi (go-(3sg)N+I-(1d))O) 'he came up to me and you' and wardjingiddangi (go-(3sg)N+I-(1R)O) 'he came up to us $(\mathrm{R})^{\prime}$ occur, and the former is more explicit in its reference than the latter.
-Ngangi has not been encountered followed by a number enclitic, nor in sequence with one of the oblique pronominals, so it is not perfectly clear to which order-class it belongs (or whether an additional one should be set up).

### 3.9.3.7 Number enclitics

A single number marking enclitic, specifying either 'dual' (indicating two), or 'paucal' (indicating a few), can optionally occur in final position of any VP in which at least one bound pronominal (either a prefix to the CC or an oblique enclitic) is of non-singular number. This pronominal can modify ANY ONE of the up to three non-singular pronominals that may occur in a finite VP. In case there is more than one such non-singular category, the question immediately
arises as to which one the number enclitic applies to. I am unable to provide a categorical answer to this question. Moreover, I doubt seriously whether there is one: it seems likely that an answer will only be possible if discourse factors are taken into account.

The general statement made in the previous paragraph requires some qualification. Non-singular categories of the second and third person may be modified by either the dual or the paucal enclitic. But in the first person nonsingular things are a little more complicated. As might be expected, the dual will not (normally) apply to the unrestricted category (and there are no such examples), to which only the paucal can apply. Both the dual and the paucal may modify the first person restricted category, but the dual is used only in reference to a pair one of which is the speaker, and the other is a third person (and never the hearer). If the restricted category refers to the speaker and hearer pair, it cannot be modified by the dual enclitic. That is, a form such as milayiddayi (see-(1R)N+A-du) can only mean 'we two (exclusive of the hearer) saw him'; it cannot mean 'we two (including the hearer) saw him'. (As mentioned in the previous section, the irregular form -ngangi 'we two inclusive' could be used in place of $-y i$, and refer to the speaker and hearer pair; but this only when they fill the roles of Goal or Affected. -Ngangi may not be used in a VP with a meaning such as 'we two inclusive saw him'.)

The number enclitics have the following allomorphs:

$$
\begin{aligned}
-y i \sim-y o o & \text { 'dual' (du) } \\
-d d i \sim-d d o o \sim-w a d d i & \text { 'paucal' (pa) }
\end{aligned}
$$

The first allomorph in each case seems to be the most frequent variant, occurring following /i/ or /a/, while the second allomorph usually follows $/ \mathrm{oo} /$. Some examples are: ward-biddi-yi (go-(3pl)N+I-du) 'they went', ward-gooddooyoo (go-PRES+(3pl)N+A-du) 'they (two) go', ngab-jidda-yi (eat-(1R)N+A-du) 'we two (exclusive) ate', mila-winbidda-ddi (see-FUT+(1sg)N+(3pl)A+A-pa) 'they (few) will see me', miga-limi-widdangi-yi (say-(1sg)N+MI-(3pl)O-du) 'I told them two', miga-winmi-ngaddagi-yi (say-(3pl)N+MI-(1sg)O-du)'they two told me'.

The third allomorph of the paucal number enclitic, -waddi, occurs in exactly the same circumstances as does the allomorph -wanhi of the third person singular oblique bound pronominal, namely in the environment of non-past tense forms of the classifiers $+\mathrm{I},+\mathrm{DI}$ and +MI - i.e. following \{ $\mathrm{a}_{1}$ \}. Examples:

| [ward | - wi | + bidd | $+\mathrm{a}_{1}$ | -waddi) |
| :---: | :--- | :--- | :--- | :--- |
| go | PRES | $(3 \mathrm{pl}) \mathrm{N}$ | +I | pa |

$\rightarrow$ \{ward-woodda ${ }_{1}$-waddi\} (by CCR9)
$\rightarrow /$ wardgooddaaddi/ (by VR6 and CCR 13)


### 3.9.3.8 Summary: an interpretation of the finite verb phrase

The structure of the VP may be summarised in the following terms. The VP consists of two obligatory grammatical words, which are mutually bound to, and modify, one another, and which occur in a fixed order. This order reflects a progression from specific to general, in terms of the lexical content, and at the same time, somewhat paradoxically, a progression from the item that is least specific and individuating in terms of pinning down the process to the referent world, to the most specific and individuating, the item which refers to the actual occurrence of the process. The position of enclitics in the VP is now explicable. Aspect and Mood are ways of viewing the Process or predicate itself, as a whole; they are not concerned with the actual fact of the occurrence of the Process. For example, the progressive is concerned with the occurrence of a train of events leading up to the culmination of the process, rather than to a process emerging into instantiation; repetition (realised by -nyali REP) refers to repetition of a Process, with or without the same participants, not to the repetition of an instantiation of a process. On the other hand, the categories labelled Mode concern the occurrence and actualisation of a process; it is the enactment of the process that is seen as desirable, definite, or potential. Enclitics attach to the gwords on which their primary focus falls: the lexical stem in the case of Aspectual and Mood markers, and the CC in case of Mode, pronominal and number markers.

### 3.10 Interjections

Interjections are words which stand outside of major clauses, and do not fulfil any role within them, or enter into syntagmatic relations with their constituents. Within an utterance they typically occur on their own intonation contour, and precede the remainder of the utterance. For this reason I have suggested that they constitute minor clauses (see section 5.4.2). Interjections can be distinguished as a class by the fact that they do not occur as constituents of other clauses. Words from other parts-of-speech may also occur in minor clauses, functioning like
interjections. For example, yoowooloo! 'man!' can be used as a complete utterance to attract someone's attention. But these words also (in their normal and more frequent usage) occur in major clauses.

The class of interjections includes:

| ba | 'come on, let's go' |
| :---: | :---: |
| nya | 'here you are (take this)' |
| gay | 'go on' |
| gaj | 'OK, you can go' |
| ngay, yay | 'hey!' (attracting attention) |
| bay | 'eh?' |
| [ AN ] | 'OK' |
|  | 'yes, that's right, you're correct' |
| yoowoo, yoowayi | 'yes' |
| warawoo | 'youtch' (an exclamation of pain) |
| waddiwaddi | 'sorry', usually uttered on hearing a dead person's name; sometimes as an expression of shame at hearing other inappropriate words, such as sexual innuendo. |
| wila | 'finished, complete', may be used to conclude a story or an episode within a story (e.g. line (15) of Text 2). |
| wilawoo | 'goodbye' (=wila-woo (DEF)) |

Except for the items in the last group, these words are not phonologically regular. The first group is phonotactically irregular: elsewhere, there are no free closed monosyllables, and open monosyllables have long vowels. The second group involves some phones not found elsewhere: [ $\mathbf{n}$ ] and [ ${ }^{?}$ ] do not distinguish 'linguistic' (as per Table 3-1) words/morphemes.

### 3.11 Sound effects

The term "sound effects" refers to onomatopoeic words imitative of noises; these words seem to be used mainly for stylistic effect, giving the text some of the flavour of the reality referred to.

Gooniyandi has a very large and rich subclass of bird and animal calls, most of which are phonologically regular, but which are typically uttered in a distinctive, higher voice register. Some examples are:
/diyadiya/ ['dindin] (peewee's noise)

| /gigig/ | ['k'kk]](neigh of a horse) |
| :--- | :--- |
| /gligglig/ | ['klk'kluk] (noise of an eagle) |

These animal mimic words may occur as citations within a clause, as in
(3-107) woodwood doomboo jijagji
owl he:said
'The owl hooted "woodwood".'
Even in constructions such as this, the cited noise may be uttered in the istinct voice register. In addition, most (all?) mimicked calls may be normalised honetically (and uttered in a normal voice register), and realise linguistic unctions, typically the process of a VP.

| (3-108) garnbidda | gligglig | -giri |
| :--- | :--- | :--- |
| eagle | he:goes |  |

(3-109) diyadiya bliddij -gila -yi
peewee FACT he:went
'(Place where) the peewee went "bliddij".'
Furthermore, as (3-109) shows, some of the calls have been lexicalised as he name of the bird that makes the call. (Diyadiya is the usual call of the seewee.)

Other sound effects mimic other natural noises, and they are not always honologically regular. One such example is [ns:::], which is imitative of the ound of someone falling from a great height. It probably makes sense to nclude within the class of sound effects words such as widdiwiddiwiddiwiddi, which suggests someone or something tumbling down head over heels (e.g. out of a tree). Although it is not directly imitative of the sound involved, this word s suggestive of the movement (see McGregor forthcoming-d). No doubt the lass is much more extensive than this; but as yet I have not undertaken a ystematic investigation of it.

## .12 Word formation

There are two main processes whereby new lexical stems may be formed from oots: suffixation and reduplication. There are also some regularities in the tructure of (morphologically unanalysable) lexical roots. Many of these egularities may be accounted for in terms of the same two processes, suffixation ind reduplication. These processes are, however, far less productive here than
they are in stern formation.
Furthermore, in the case of root formation, the units undergoing the processes of reduplication or suffixation have no independent morphemic status, and the resulting roots are morphologically unanalysable. I will refer to the units involved in root-formation as FORMATIVES. As has already been mentioned (see page 81 above), the 'base' formatives (i.e. those which undergo one of the two root-forming processes) are indistinguishable from roots phonologically and phonotactically. 'Inherent' reduplications (i.e. where a root is the reduplication of a formative) frequently, but not invariably, show semantic characteristics associated with productive stem-forming reduplication. And, in cases where suffixes are clearly added to a meaningless formative, the suffixes usually carry their normal meanings. For example, the form giddabingaddi 'long, tall' clearly involves the suffix -ngaddi COMIT, although in this particular case it is not morphologically segmentable, and giddabi does not appear to occur elsewhere. Thus giddabingaddi must be regarded as a root, whose meaning is built up partly by -ngaddi COMIT. In this section I will be mainly concerned with stem formation, but mention will also be made, where appropriate, of root formation.

### 3.12.1 Nominal word formation

### 3.12.1.1 Nominal stem forming suffixes

These suffixes are usually attached to roots to form stems belonging to the nominal class. They may, however, on occasion be attached to phrases or even clauses. For example,

| (3-110) | ngirnda |
| :--- | :---: |
| this | -ngrna riwi |
| this camp |  |
| 'inhabitant of this country' |  |

(3-111) goornboo moorniny -mili woman fuck CHAR 'one who is promiscuous with women'
I analyse such examples as instances of embeddings, with rankshifts from phrase/clause to word (see pages 132-133 above). Thus (3-110) and (3-111) have the following structures respectively:
(3-112)

(3-113)


Note that in (3-112) the stem forming suffix -ngarna DW is attached to the first word of the embedded NP, rather than to the final word. This is precisely the most likely place for a postposition to occur.

Some evidence for these constituent analyses is that the resulting construction, here labeled N , may realise a role within the structure of the NP , and cannot (unlike PPs which they closely resemble) realise a clausal role. (To put it loosely, there is always an intervening NP node between the construction and a dominating clausal node.)

I discuss the nominal stem forming suffixes in the remainder of this section.
[1] -ngarna. This suffix normally occurs on nominal roots, and has the meaning 'inhabitant or dweller of'. For example,
(3-114) ngirndaji walwaddangga gamba -ngarna this crocodile water DW
'This (species of) crocodile is a water-dweller.'
(3-115) yaanya gamba -ngarna -nyali giwili other water DW REP water:goanna 'Another water creature is the water goanna.'
-Ngarna can be used with place-names, though this is not frequent. An example is Fitzroy-ngarna 'denizen of Fitzroy Crossing'. But by far the most frequent construction has -ngarna attached to 'common nouns' referring to ecological niches, such as water (as in (3-114) and (3-115) above), limestone ranges (giliwoorloo-ngarna 'dweller of limestone ranges'), and so on. There are a couple of instances of the suffix attached to adverbials (and to phrases example (3-110) above). For example,
(3-116) yalawa -ngarna -ngga giribbidi
nearby DW ERG they:finished:it
'The nearby people finished it up.'
One example suggests that a reappraisal of the significance of -ngarna may be necessary. In one text a group of avengers (designated "soldiers" in the narrator's English explanation) is referred to by the term garladi-ngarna (yellow:ochre-DW). It was customary for the avenging party to paint themselves with ochre before going out to effect their revenge; there was no suggestion that the avengers were from a place noted for its ochre. A more general gloss for -ngarna, which encapsulates both of the meanings isolated here may be, as suggested by Alan Rumsey (pers.comm.) 'characterised by a circumstantial association with'.
[2] -mili. -Mili can be attached to nominal and verbal roots (as well as to clauses - see example (3-111)), to form nominal stems. It may be glossed roughly as '(one who is) characterised by, or is in regular association with'. This association is always through active (never passive or patientive) involvement with the entity or process. For example, gamba-mili (water-CHAR) 'a drinker, drunkard', yoowooloo-mili (man-CHAR) 'a (woman) who habitually associates with men'.
-Mili is often attached to 'abstract nouns' referring to mental states or to processes an individual may be actively engaged in, e.g. mooyoo-mili (slecpCHAR) 'lazy', thiddi-mili (fight-CHAR) 'angry'.

Attached to verbal roots or stems, -mili indicates 'one who typically does':
(3-117) niyaji goornboo jijag -mili
this woman speak CHAR
This woman is a real talker.'
(3-118) goornboo moorniny -mili jagmingadda
woman fuck CHAR she:said:to:me
'The promiscuous woman told me.'
(Contrast (3-118) with (3-111) above, in which goornboo 'woman' belongs to an embedded clause. Note also that goornboo 'woman' is Goal in (3-111), but Agent in (3-118).) I have said "roots or stems" above because -mili CHAR may follow verbal stem-forming suffixes such as $-j i \mathrm{IT}$ - e.g. ngang-ji-mili (give-IT-CHAR) 'a giver'. Further examples may be found in section 5.5.1.1.
[3] -gali ~ -wali ~ -yali ~ -ali. This suffix may be added to nominals, adverbials and verbals. It characterises someone or something as 'good at doing something in respect of; it is agentive like -mili. Some examples are:

| (3-119) | ngaddagi | galjin | -gali |
| :---: | :---: | :---: | :--- |
| my | fast | GD | horse |
|  | 'my racehorse' |  |  |

(3-120) ngaddagi thadda maa -ali
my dog meat GD
'My dog is a good hunter.'
The allomorph -gali occurs following non-continuant consonants, as in galjin-gali 'speedy' (example (3-119)), woob-gali (cook-GD) 'a good cook'. The allomorph -ali occurs following $a$, as in maa-ali (meat-GD) 'good hunter' (example (3-120)).

Following words with final $i$ or $o o$, the phonetic realisation is ['ali]: ['kawi'ali] (fish-GD) 'good fisherman', ['tepandi'ali] mouth-GD) 'good talker', ['t3ru'ali] (kangaroo-GD) 'good kangaroo hunter'. Since the sequences /ia/ and /ua/ do not otherwise occur, and since these forms may be accounted for as realisations of /gawiyali/, /thangarndiyali/ and /thiddoowali/ respectively, by the realisation rules of 2.1 , I will assume that the allomorphs are /yali/ and /wali/ following the vowels /i/ and / $\mathrm{u} /$ respectively.

Alternatively, it might be proposed that the morpheme has underlying shape [wali), and does not bear inherent stress. VR4 would then account for the hardening to $/ \mathrm{g} /$ following non-continuant consonants, and the loss of ( w ) elsewhere. However, in this case it would be necessary to assume that, exceptionally, VR5 does not apply to the resulting vowel sequence. Furthermore, stress placement, whereby the /a/ vowel is invariably stressed, contradicts the assumption that this morpheme does not bear inherent stress.
[4]-wa. This is one of the three suffixes I mentioned above (section 3.3.2) as
occurring on kin-terms only; it must be distinguished from the homophonous -wa discussed in section 3.12.3.1 below. Added to a kin-term, -wa has the meaning 'his/her/their relation', where usually the "possessor", but sometimes the "possessed", has been established earlier in the discourse. Examples: ngaboowa (father-GEN) 'his father', ngaddanyoo-wa (mother-GEN) 'his mother', and garingi-wa-yooddoo (wife-GEN-du) 'his two wives'. I have mentioned that terms such as jaliji 'peer, agemate' and naddoogoo 'namesake' are also treated as kinterms. In (3-121) jaliji is extended to the animal world:
$\begin{array}{cc}\text { (3-121) minyawoo thadda jalijoo -wa } \\ \text { cat } & \text { dog mate GEN }\end{array}$
'The cat and dog are "mates" (i.e. two of a kind).'
This -wa is probably also the source of -wa in girlinggoowa 'male of an animal species', girlinggi being the term for 'penis'. However, I would hesitate to analyse the term synchronically in this way.
[5] -badi. When attached to a kin-term, -badi ~-wadi indicates 'your (singular or non-singular) relative': ngaddany-badi (mother-your) 'your mother', ngaboo-wadi (father-your) 'your father', garingi-wadi-yooddoo (wife-your-DU) 'your two wives', etc.. Note that there are no suffixes indicating first person "possessor"; often the use of the plain kin-term itself suggests that it is the speaker's relative - e.g. garingi is frequently used in the sense of 'my wife'.

As the examples of the previous paragraph show, (b) lenites to $/ \mathrm{w} /$, as per rule R1. However, the free forms of words that are followed by -badi invariably have a final vowel, which is always [+high], and almost always [+front]. As was suggested above (page 72) the consonant final forms of these kin-terms may be taken to be allomorphs conditioned by the presence of -badi.
[6] -langi. Reference can be made to a pair of individuals by suffixing -langi to the kin-term describing the relationship between them (and the propositus, in the case of triangular terms - see page 13). Examples are: ngaboo-langi (father-DY) 'father and son (or daughter)', marna-langi (older:brother-DY) 'brothers', nyanyilangi (uncle-DY) 'a pair in the uncle-nephew relation', etc..

In cases where non-reciprocal terms would be used between the two individuals, a choice must be made between which of the two terms to use. It is beyond the scope of the present investigation to determine the factors motivating the choice (but see e.g. McConvell 1982 and Merlan 1982). I simply note here that more often than not it is the term that the junior partner would use to the senior partner that is chosen, as the three examples cited in the previous
paragraph illustrate. But note that garingi-langi (wife-DY) is the normal term for a husband-wife pair, while ngoombarna-langi (husband-DY) does not occur. Instead there is the irregular ngoombarnaadda, which is almost certainly a borrowing from the Pama-Nyungan languages to the south. (Ngoombarna (ngumparna) is the term for 'husband' in Walmajarri (Hudson 1978:100) and Jaru (Tsunoda 1981:13), and (-ra)dda (-(ra)rra) is the regular kin-dyad marker in Wangkajunga (my own field notes), and Ngaanyatjara (see Glass and Hackett 1970:66).) Against these most frequent choices, the marked options usually also occur; for example, ngaloowinyi-langi (offspring:of:a:male-DY) is sometimes heard in place of ngaboolangi (father-DY).

It seems that-langi may refer to more than two individuals. Garingi-langi (wife-DY) 'man and wife' does not seem to explicitly refer to a pair: the evidence suggests that it may refer to a man and his wives, in case he has more than one.
[7] -warnoo 'all the members of a subsection', [8] -wanggoo 'person associated with the place' and [9] -waddawadda 'everyone associated with the place, have already been discussed in sections 3.3.3 and 3.3.5.
[10] -wanyi ~-wanya. This is a relatively infrequently occurring form, for which, for consistency, the morphophonemic form (wanyi ~ wanya) is posited. (I am unable to account for the alternation in the final vowel.) The initial syllable of this morpheme does not bear inherent stress, and it is assumed that VR6 applies, deleting the initial ( w \}. (In all available examples, this morpheme follows a vowel.) VR5 then applies to convert the resulting sequence of vowels into a long /aa/. For example,

```
(yoowooloo -wanyi) }->\mathrm{ /yoowoolaanyi/ 'a different man
man DIF
{riwi -wanyi} }->\mathrm{ /riwaanyi/ 'other place(s)
camp DIF
```

-Wanyi may be attached to nominals only, and indicates that reference is being made to a different instance of the type referred to by the nominal. For example,
(3-122) ngirndaji yoowooloo yoowoola -anyi
this man man DIF
'This man is a different type of man (e.g. he's from a different country).'
(3-123) ngoonyi -ya garndiwidda -anyi goornboo -yooddoo
which LOC two DIF woman DU
ngooni -ya gadjoonbini
which LOC you:left:them
'Where did you leave the other two women?'
And in (3-124) -wanya is followed by a postposition:
(3-124) riwa -anyi -ya warangngi
camp DIF LOC I:sat
'I sat at another place.'
In reference to action which is done with respect to a variety of instantiations of a single entity or place, a common mode of expression is by reduplication of a nominal suffixed with -wanyi. For example,

```
(3-125) riwa -anyi riwa -anyi bagiwiddi camp DIF camp DIF they:lay 'They lay scattered all over the place.'
```

There is a single example which does not seem to fit the description proposed here:
(3-126) yaddangi thaanoonggoo marlami biliga -anyi marla I:reached:up up nothing middle DIF hand bagingi
I:lay
'I reached up but couldn't get it; my hand went only half-way.'
The reader will note the striking similarity in both form and meaning with yaanya 'other' (on which see 6.2 below); it could almost be regarded as an enclitic form of the latter word.
[11]-yila. There is another very infrequently occurring suffix, attested in no more than a dozen instances, which indicates a kind of negation, and usually translates into English as 'un-' or '-less'. It has the invariant form -yila. Some illustrative examples of its use are: binaddi-yila (know-yila) 'unknowing, knowing nothing', yinggi-yila (for:some:duration:of:time-yila) 'for a short while', and moodiga-yila (car-yila) 'lacking a car'.
Lacking definite evidence as to its status, I provisionally classify -yila as a suffix, since it has only been observed in constituency with single words.

### 3.12.1.2 Nominal reduplication

Reduplication is a fairly productive means of forming nominal stems and roots in Gooniyandi. There are two main types of reduplication of roots to form nominal stems: total reduplication and partial reduplication. As yet it is not clear whether, and in what respect, these types differ semantically, and what other factors condition the type employed in particular instances.
It proved impossible to systematically elicit stem forming reduplication: although its semantic effect as described in this section is clearly experiential (see section 5.1, and Halliday 1985:101-102), it also carries a high connotative load. In general there are segmental means of expressing the same experiential content more neutrally, and this is what usually happened when I attempted to elicit reduplications (cf. Silverstein 1976a:49-50). When reduplicated forms arose in elicitation sessions, it was always spontaneously. This section describes broad trends only; detailed characterisation awaits future, text-orientated investigation.

Partial reduplication involves repetition of two syllables only of the reduplicated root, and so is distinguishable from total reduplication only when the root has three or more syllables. (However, neither type of reduplication is attested for roots of more than four syllables - which are in any event quite rare.)

In partial reduplication it is normally the first two syllables that are repeated; they are prefixed to the full form of the root. For example, gambagambayi 'young boys' from gambayi 'young boy'; garigaringi 'wives' from garingi 'wife'; nyamanyamani 'many big ones' from nyamani 'big'. In one instance a partial reduplication included a part of the third (phonological) syllable, a nasal homorganic with the following stop, as a syllable closing nasal in the prefix: jaddanjaddandi 'twigs' from jaddandi 'twig'. This harks back to the question of the status of final ndi sequences (see above pages 72-73), perhaps suggesting that (at least here) the final di is epenthetic.

Occasionally it is the final two syllables that are reduplicated, as in jiginyaginya 'very little' from jiginya 'little'.

Some roots occur in both partial and total reduplication, with unclear semantic difference: barndanyi 'old woman' reduplicates to barndawarndanyi and barndanyibarndanyi, both of which translate into English as 'old women'.

Reduplication normally indicates plurality. Nominals in Gooniyandi are not marked for number, and an unreduplicated root may refer to any number of entities. When so desired, plurality may be indicated (optionally) by a number word (see section 3.3.4), number postposition (section 3.7), or, in the case of human and higher animate 'participants' (see page 293 below), by non-singular pronominals and number enclitics in the VP (section 3.9.3). It is not certain
precisely how reduplication differs from these less marked means of indicating plurality. What can be said, however, is that reduplications normally seem to suggest vagueness, generality or distributiveness of reference, that the reduplicated stem refers to the whole as a single entity, ignoring the individuality of the entities making it up. For example, reduplications of 'human reference' terms as in boolgawoolga 'old men' from boolga 'old man', and barndanyibarndanyi 'old women', are normally used generically - see for instance lines (1) and (8) of Text 2. And the term gambagambayi 'young boys' (cited above) occurred in a text describing initiation, and might be glossed 'all the young boys' in this context. Reduplications of other nominals show a similar pattern. For example: dagoorla 'depression, hole' reduplicates to dagoorladagoorla 'covered in depressions', which was used to describe a rough dirt road; similarly jaddinggi 'sharp, a point' reduplicates to jaddinggijaddinggi 'covered with sharp points, spiky', which was used to describe a limestone range. In keeping with these remarks, number words do not normally modify reduplicated nominals.

In some cases reduplication seems to have an effect of intensification, especially where the nominal is used as a modifier (cf. below 3.12.3.2 for adverbials). For example, jiginyaginya 'very little' (cited above), and widdgawiddgarli 'blue (of the sky)', from widdgarli, a colour term covering the range from green to blue.

There are a fair number of independent nominal roots which are analysable as reduplications of meaningless formatives. In fact, a large proportion of roots of more than four syllables are of this type. Except when the formative is monosyllabic, the reduplication always involves two syllables of the formative, usually the first two, which are then prefixed to the formative. For example, gooroogooroo 'black', binyjawinyja 'shell pendant', garndagarndadi 'oesophagus'. (Contrast Walmajarri karntarrkarntarr 'interior of throat' - Hudson 1978:97.) If the formative is monosyllabic, of course, that single syllable is reduplicated, as in binybiny 'crimson chat'. As has already been mentioned, formatives are phonotactically regular - for example they are always at least two morae in length, and are treated, for the purposes of stress, as independent words, each having an initial stressed syllable. They also show /b ~ w/ lenition (third example above), which occurs in stem-forming reduplication, and the consonant clusters which may occur at formative boundaries appear to be as for stem forming reduplication (cf. page 81).

There is at least one example in which the final two syllables are repeated and suffixed: jangalangala 'red ant'. As mentioned earlier, such words show stress
patterns of simple roots - or equally of complex words involving bisyllabic suffixes.

Bird names, and to a lesser extent animal and plant names, account for most examples of formative reduplication. The process is iconic to the extent that the formatives involved frequently form a part of the accepted renderings of the calls of the birds. For example, diyadiya 'peewee', one of whose calls is ['dis'dis ${ }^{\text {P }}{ }^{d i s}$ 'dis ] (uttered in a high voice register - page 228 above).

Morphologically unanalysable roots may be - or may involve - obvious reduplications of independent verbal roots, which signify a characteristic activity (rather than a call) of the species. An example of this is yaboonabarbar, the name of a species of snake that habitually climbs (bar-means 'climb') in the yaboona tree. Another example is perhaps giddagiddayi, in which the root gidda'run' is reduplicated (the final syllable, -yi, looks suspiciously like the third person singular past tense form of the classifier +I ), which refers to a water bird belonging to the plover family which habitually runs along the edge of the water.

### 3.12.2 Verbal word formation

### 3.12.2.1 Verbal stem forming suffixes

There are just a few suffixes ${ }^{6}$ which form verbal stems from verbal roots; the resulting stems invariably differ in meaning from the roots from which they are constructed in terms of their 'aspectual character' or inherent aspectual type (Lyons 1977:706). There are two main reasons why these suffixes are identified as stem forming: the root plus suffix behaves as a unit in the choice of classifier, which means that a root and a derived stem normally collocate with different classifiers; and secondly, this unit may realise the lexical head of a nonfinite VP, as in ${ }_{\mathrm{N}}\left[\mathrm{vp}\left[\mathrm{v}[\text { wird-bili }]_{\mathrm{y}}\right]_{\mathrm{Vp}}-\text { mili }\right]_{\mathrm{N}}$ (bite-IT-CHAR) 'a real biter (e.g. a mosquito)'.
[1] -bi- ~ -bili- ~-ji- ~-mi-. These four forms appear to be allomorphs of a single morpheme. This morpheme indicates that the referent situation involves a number of repetitions of an individual sub-process; it will be glossed iterative (IT). Translation into English often involves the use of a different lexeme, one

[^14]which is not cognate with the lexical item that normally translates the underived root - see next cited example. The derived stem always collocates with the extendible classifier + A.

The choice of allomorph is governed by the lexeme to which the morpheme is attached, and the classifier that lexeme usually occurs with:
$-B i$ - occurs with lexical items such as gard- 'hit' and nyag- 'pierce, spear', which usually occu with the classifier +BINI: gardbila (hit-IT-(1sg)N+A) 'I belted him'. The normal realisation of -bi- is /bi/, because most roots to which it is attached end in non-continuant consonants. When attached to a vowel- or continuant-final root, the initial/b/lenites to / w/, as per VR2:

| (wanyal | -bi | -ja | -bi | +li |
| :---: | :---: | :---: | :---: | :---: |
| pick:up | IT | SUBJ | +FUT | (1sg)N <br>  <br> $\rightarrow /$ /wanyalwiyawila/ |
| 'I'll pick up all around' (avoidance style) |  |  |  |  |

There is one exception: the verb wird- 'bite', which usually collocates with +BINI , but selects the iterative allomorph -bili-. E.g. wird-bili-mili (bite-ITCHAR) 'a biter'. In fact, wird- 'bite' appears to be the only verbal lexeme that collocates with -bili-.
$-J i$ - IT occurs with lexical roots which elsewhere collocate with the classifiers +ADDI, +DI, and +MI. Examples: ngang-ji-la (give-IT-(1sg)N+A) 'I fed him', galgal-ji-ngina (laugh-IT-(1sg)A+A) 'he laughed at me'. The initial palatal stop of $-j i$ - IT does not lenite to $/ \mathrm{y} /$ when preceded by a continuant or vowel: bala-ji-la (send-IT-(1sg)N+A) 'I sent it away'. Further evidence that the choice of this allomorph is dependent on the normally co-occurring classifier is the following. The avoidance lexeme widdwal-, which corresponds to gard- 'hit' of the everyday style, collocates with + DI rather than + BINI, the classifier which occurs with gard-. And instead of occurring with -bi- (as does gard-), it occurs with the -ji- allomorph: widdwal-ji-la (hit (avoidance style)-IT-(1sg)N+A) 'I belted him'.

I am not sure precisely what conditions the choice of -mi-; however, the lexical roots appear to usually collocate with +MI. Examples are: binaddig-minginbidda (teach-IT-(1sg)A+(3pl)N+A) 'they taught me' and malab-mi-la (do-IT( 1 sg ) $\mathrm{N}+\mathrm{A}$ ) 'I made it'. The first of these was used to refer to the repeated task of teaching me Gooniyandi; by contrast, the plain stem binaddig- refers to a single event, such as teaching someone a single fact.
[2] -ban-. This morpheme is not very frequent, so it is not possible to be fully certain of its significance. It seems to be suffixed to roots referring to nonextendible processes (which therefore occur with a classifier from that subgroup)
to form stems which refer to a continuous flow of such events. In contrast to -bi- IT discussed in [1], the individual subprocesses constituting the process referred to flow into one another, and they cannot really be seen as discrete. I will refer to this morpheme as the continuative (CTV). The new stem appears to always occur with the classifier +I . Some examples are: bood-ban-giri (spill-CTV-PRES/(3sg)N/I) 'it spills out' (e.g. as in water spilling out of a (full) bucket continuously while it is being carried along), and nird-ban-giri (stick-CTV-PRES/(3sg)N/I) 'it's stuck (there) (e.g. of a bone in someone's throat)'. Contrast respectively bood-bani (spill-(3sg)N+ANI) 'it spilt out', and nird-bani (stick-(3sg)N+ANI) 'it got stuck'. One speaker described the meandering Fitzroy River as wilaj-ban-ngadda, where the final morpheme is presumably an instance of -ngaddi COMIT. The verbal lexeme wilaj- means 'go around', and is a nonextendible process. The derived stem wilaj-ban-is usually used in the sense of going around and around, as for example in reference to the circling of an eagle or kite:
(3-127) booloogoo wilaj -ban -giri
hawk around CTV PRES/(3sg)N/I
The hawk is circling around.'

Rule R1 applies to -ban-, leniting the initial \{b\} to a/w/ in the specified circumstances - for example, dalyadd-wan-giri (slip-CTV-PRES/(3sg)N/1) 'he's slipping along'.
[3] -gi-. Again -gi- is very infrequent, occurring on only half a dozen or so lexical roots in my database. In fact, it is not certain that $-g i$ is not an aspect marker (like -goowa $\sim w a \sim a$ PROG). In the absence of evidence to the contrary, I have rather arbitrarily taken it to be a stem forming suffix.

It is difficult to provide a good English gloss for -gi-. 'Inceptive' (INC) conveys something of the meaning, and will do for present purposes. Roughly, this morpheme indicates that an accomplishment process with a definite starting point (see below page 561) has started to occur, but has not yet ceased. For example, consider the lexeme barn- 'return'. This process is treated as an accomplishment, and is classified by + BINDI (singular Actor) or +I (nonsingular Actor). It refers to a return to the point from which the actor started out, which is the point of accomplishment. The inceptive makes reference to the starting point of the act of returning: barn-gi-ngi (return-INC-(1sg)N+I) 'I started back'. Contrast barn-goowa-ngi (return-PROG-(1sg)N+I) 'I was going back'. Presumably both INC and PROG may be used in reference to the same event, with only a difference of perspective: the INC suggests a time near to the
starting point of the process, whilst the PROG usually suggests a time close to the final point of completion.

Another clear example is provided by baj- 'get up and go, set off': baj-gi$n g i$ (set:off-INC-(1sg)N+I) 'I got up and went, I started off'. This may be contrasted with baj-goowa-ngi (set:off-PROG-(1sg)N+1) 'I was getting ready to go, I was just about ready to go'. (Here, of course, the starting point and the point of completion are identical). Other verbals -gi- has been found with include: thood- 'descend' - thood-gi- 'start descending'; and raddiny- 'hang' -raddiny-gi- 'start hanging down'.

It is not surprising that many examples of -gi- refer to imminent processes, which the participants of the speech situation expect to shortly engage in. For example, thood-gi-widdani (descend-INC-FUT+(1R)N+ANI) '(Let's) descend (the rope)' was elicited as an appropriate utterance to be made immediately prior to the event.
[4] -waddi- ~ warni.. Here too it is by no means certain that -waddi- ~ -warni- is a stem forming suffix; I have assumed that it is largely for convenience of exposition, and because the initial ( w \} does not harden to $/ \mathrm{g}$ / following non-continuant consonants, as would otherwise be expected by the application of VR6. Like the iterative suffix, this morpheme indicates that the process referred to is constituted of a number of repetitions. That this is not an allomorph of -bi- IT is clear, since the two may occur in sequence (see third example cited below). However, at this stage I am unable to pin-point the meaning difference with any degree of surety or precision. I will refer to -waddi-$\sim$-warni- as $\mathrm{IT}_{1}$.

The choice between the allomorphs -waddi- and -warni- appears to be governed by the lexical root, accomplishments choosing the former, and extendibles choosing the latter. For example, doowwanaa (get-IT - PRES+A) he picks up (things) all around'. (Doow- is an extendible which always occurs with the classifier +A.) And gilangwaddiwiddaddi from (gilang-waddi-widd+addi) (knock:over-IT $\mathrm{r}^{-}$(3pl)N+A-pa) 'they kicked (rocks as they went along)'. (Gilang'knock' is an accomplishment which usually occurs with +ADDI.)

In at least one instance a repeated process was referred to by a combination of IT and $\mathrm{IT}_{1}$ : bij-bi-wani-la (emerge-IT-IT 1 -(1sg) $\mathrm{N}+\mathrm{A}$ ) 'I frequently come here'. And the form ['furn'ja:'ra:] 'he is brushing away (flies)' probably consists of -ji- IT followed by -waddi-, with the sequence iwa reducing to /aa/ (as per VR5 and VR6): (joodda-ji-waddi-wi+a) (chase-IT-IT $1_{1}$-PRES+A).

### 3.12.2.2 Verbal reduplication

Reduplication of verbal roots generally suggests that a process was repeated a number of times. For example,

| gaj- 'cut' | gajgaj- 'cut up, chop up' |
| :--- | :--- |
| lingi- 'think of' | lingilingi- 'think about for a while' <br> maj- 'touch, feel' |
| majmaj- or manymaj- 'feel about' |  |
| loonggoo- 'throb' | loongooloong- 'throb repeatedly, or for a while' |

It may be that the process was attempted, unsuccessfully, a number of times. For example, rooddoobrooddoob-, the reduplication of rooddob- 'pull out' (which is usually an accomplishment) was used to describe a number of attempts made at removing a splinter. Alternatively, the repetitions may (successfully) affect some entity a number of times: lalbag- 'split' reduplicates to lalbalalbag'split all over'.

The process may be repeated by a single actor, as in the above examples, or it may be done once (or more) by a number of different individuals, whose separate identity is not important. For example, waroong- 'fly' was reduplicated to waroongwaroong- to describe the flight of a number of birds overhead, at a particular point in time; laj- 'lie on the ground (of footprints)' reduplicates to lalaj- 'lie all about (as of a number of footprints of different people)'; gid- 'catch in (as of burr in socks)' reduplicates to gidgid- 'catch in all over (as of a large number of burrs in socks)'.

Sometimes reduplication suggests that an action was done continuously over a long period of time, and this extended action may or may not consist of repetitions. For example, booroobooroo-, from booroo- 'hide', was used to describe the lengthy period of time an initiand spent in the bush away from everyone; woolwool- 'pain, ache (as of tooth) for some time' from wool- 'ache'; ngarangarag- 'work on for some time' from ngarag- 'make, work on'. The reduplicated form may, in addition, suggest that the process was enacted energetically, as in nayiddnayidd- 'breathe heavily, as after hard exercise', from nayidd- 'breathe, take a breath'.

It is not clear as yet precisely how reduplication differs semantically from the stem forming suffixes such as the two iteratives $-b i-\sim-m i-\sim-b i l i-\sim-j i$ and -waddi- ~-warni-, which also indicate repetitions. And both modes occur in gardbigardbi- 'belt all over' from gardbi- 'belt' (hit-IT-).

Verbal reduplication differs formally from nominal reduplication in a number of respects. All available examples of verbal reduplication are of monosyllabic or bisyllabic roots (which account for the majority of simple
verbals - see page 90).
Most reduplications of monosyllables (which are invariably of the shape $\operatorname{CVC}(\mathrm{C})$ ) are full reduplications. There are just a few exceptions: (1) the final consonant is occasionally lost (in the first syllable), as in lalaj- '(footprints) lie about' from laj- '(footprint) lies' (see above); wawab- 'smell, sniff at a number of times' from wab- 'smell, sniff; and jiljilg- 'spotted' from jilg- 'spot, put spots on' (see page 81 above). (2) Occasionally an initial dorso-velar is lost in the second syllable when preceded by $11 /$ and followed by $/ 00 /$. For example, goolool- 'try out repeatedly' from gool- 'try out, test'; and, as well as woolwool'ache (as of tooth)' (see above) there is the alternant form woolool- with apparently the same meaning, both being reduplications of wool- 'pain, ache'.

In the few instances available, reduplications of bisyllabic roots which are vowel final are normally full reduplications. E.g. gidda- 'run' reduplicates to giddagidda- 'run along'. But when a bisyllabic root is consonant final, it may be either fully or partly reduplicated, the two patterns being approximately equally frequent. Examples of full reduplication are: yoowooddyoowoodd- 'run along' from yoowoodd- 'run', and nyoonoongnyoonoong- 'move along (e.g. of snake in the grass) from nyoonoong- 'move'.

Partial reduplications may involve the elision of the final consonant in the first instance of the root. For example, wilaj- 'go around' reduplicates to wilawilaj- 'go round and round' or 'many go round'; ngalag- 'headache' reduplicates to ngalangalag- 'ache continuously in the head'.

There is another common pattern of partial reduplication, in which only the first mora of one syllable of the root is repeated. This is most frequently from the second syllable in two syllable words. More explicitly, the initial consonant and the vowel of the second syllable is repeated, and infixed immediately before the final consonant of the root. For example, birlaj- 'follow' reduplicates to pirlarlaj- 'keep following along'; doorloog- 'come up to surface (of water)' has the reduplicated variant doorloorloog- 'come up to surface (of water) all around'. I know of one case only in which the first, instead of the second syllable was repeated: didirib- 'go in repeatedly (as of ants entering a hole)' from dirib- 'enter'.

Sometimes both full and partial reduplications of a root occur. For example, ngarag- 'make, work on' is reduplicated to ngarangarag- or ngaragngarag- 'work on continually'. It is not clear what, if any, meaning difference exists. Nor is it understood what factors condition the type(s) of reduplication that a root will show.

There are also a number of verbal roots which are reduplicated meaningless
formatives. Most of them are complete reduplications of monosyllabic and disyllabic forms. For example, liblib- 'dance shake a leg' (lib-does not occur independently as a root); bindilbindil- 'shower out (of sparks)' (bindil- is not an independent root); nyamnyam- 'whisper' (nyam- does not occur independently); booloobooloo- 'be too smart for, outsmart' (booloo-is meaningless). As these examples illustrate, there is a tendency for the process referred to by such roots to be made up of a number of repetitions of component processes, which are seen collectively, each without individuating characteristics.

### 3.12.3 Adverbial word formation

### 3.12.3.1 Adverbial stem forming suffixes

There are two suffixed morphemes which appear to form stems of the adverbial class. They are:
[1]-wa. This suffix, which must be distinguished from the nominal stem forming suffix -wa 'his' (see page 234), is found attached to nominals, adverbials, and, most frequently, verbals. When suffixed to words of the latter category, the initial [ w ] is subject to VR6 (and subsequently to VR5, if applicable). That is, -wa MD is realised by /ga/ following non-continuant consonants, as in e.g. barnga- (return-MD), and by /a/following vowels, in which case VR5 applies to convert the resulting sequence of vowels to long /aa/, as in waraa- (stand-MD - wara- 'stand'), bagaa- (lie-MD - bagi- 'lie'). (There are no examples available of -wa following a continuant consonant.) When suffixed to nominals and adverbials (vowel final in all available examples), -wa is realised as either $/ \mathrm{wa} /$ or becomes $/ \mathrm{aa} /$ with the preceding vowel. For example, both /migawa/ and /migaa/ 'that way, that direction' (from miga 'that mode') occur. The /wa/form usually occurs in careful speech only.

The meaning and uses of this suffix are not understood well, but it appears to describe a 'way' or 'mode' of being or action - hence the gloss MD (mode). Some examples of -wa have already been given (in section 3.4.3) in the side/end forms of the cardinal adverbials, where it was suggested that forms such as booddoonggoowa 'on the north side or end of might be understood as 'the mode or aspect to the north (of a body)'. Similarly, the adverbials wilajga 'around' and maddajga 'past' are obviously adverbialisations of the verbals wilaj- 'go around' (giving 'mode of being around') and maddaj- 'pass' (giving 'mode of being past').

Other examples include: migawa 'that way, in that direction' (see page 153 above and example (3-26)); thiddgirliwa (from thiddgirli 'straight') which indicates, as shown in (3-128), a straight mode of 'being' for the words in the
speaker's brain; and giningiwa (from giningi 'breath, life force') which indicates, in (3-129), the 'way' of dying, i.e. by exhaustion.
(3-128) garndiwangooddoo thangarndi thiddgirli -wa milyilyi -ngga many word straight MD brain ERG doowwilanyji
I:want:to:get:it
'I want to get the words straight in my brain.'
(3-129) gamba -yoo giningi -wa nanggoowawooddani
water DAT breath MD they:are:dying
'They (the bullocks) are dying of thirst.'
For a discussion of the combination of -wa with verbal roots, see section 5.5.1.3.
[2] wadda. The initial [ $w$ ] of this morpheme, like the initial segment of -wa MD , is realised by $/ \mathrm{g} /$ following non-continuant consonants, as in widdinygadda (whistle-MNR), and by zero elsewhere - i.e. following vowels and continuants - irrespective of the class of the word to which it is suffixed. Examples are nardaadda (cry-MNR) and galgaladda (laugh-MNR). These alternant shapes can be accounted for under the assumption that -wadda does not bear inherent stress, and is subject to VR6. It must also be assumed that VR5 applies to convert the sequences $/ \mathrm{i}-\mathrm{a} /$ and $/ \mathrm{u}-\mathrm{a} /$ to $/ \mathrm{aa}$, as in bagaadda (lie-MNR - bagi- 'lie').

The exact meaning of this morpheme - which may be attached to nominals, adverbials and verbals, though most frequently to the latter (see section 5.5.1.4 for a discussion of this combination) - remains unclear. The most that I am able to say with any degree of confidence is that -wadda appears to indicate a manner of action characteristic of the actor's performance throughout the process; this is an 'active' manner, by contrast with the type of 'mode' or 'way' of being or action expressed by -wa - see particularly examples (3-128) and (3-129) above. Examples of -wadda MNR are (3-21) above, in which -wadda is attached to an adverb, and

| (3-130) wangmadda adda wardji |  |
| :---: | :---: |
| mad | MNR he:went |
| 'He walked along madly.' |  |

in which -wadda MNR is attached to a nominal.
The facts of allomorphy and of meaning suggest the segmentation of -wadda into the -wa morpheme discussed immediately above, followed by -dda. However, -dda does not occur elsewhere, and I regard -wadda as a single distinct morpheme in the
present-day language.
A morpheme -karra (-gadda) or -warra (-wadda) with a similar meaning is found in Jaru (Tsunoda 1981:241-242), Gurindji (Tsunoda 1981:241-242), and Walmajarri (Hudson 1978:35). There is some evidence that -wadda is a stem formative in Gooniyandi, as is -karra in Jaru, according to Tsunoda (1981:241242). This evidence consists of the fact that mayaadda (hard-wadda) is partially reduplicated in the word mayaaddayaadda 'hard, energetically' (see above page 154), which suggests that the former is a stem, and secondly from the fact that -wadda may be followed by the ERG postposition - see example (5-266) below. (By way of contrast, Hudson 1978:35) regards the corresponding Walmajarri morpheme as a case suffix.)

There are a couple of adverbials which, although apparently synchronically unanalysable roots, appear to involve -wadda MNR as a formative. An example is wandaadda 'single file'. To the best of my knowledge, wanda does not occur as a root; however, this form does also occur (with a clearly related meaning) in wandamaddi 'side by side' (-maddi is not a morpheme). It is possible that the adverb barnbadda 'quickly' contains -wadda in the form /adda/ (or even /badda/ in Jaru -parra is an allomorph of -karra (Tsunoda 1981:241)).

### 3.12.3.2 Adverbial reduplication

There are only a few examples of reduplication available from each of the three subtypes of the adverbials, and these examples suggest that reduplication of adverbials normally indicates some sort of intensification. Most reduplication is partial, and both types - that is, reduplication of the first two syllables, and reduplication of the final two syllables - are equally represented in the corpus.

For each of the temporal adverbials moongaya 'morning', yaningi 'today, now' and gaddwaroo 'afternoon', reduplication is partial, involving the first two syllables. The effect of the reduplication is to suggest 'at precisely the prototypical time referred to by the root': moongamoongaya 'very early in the morning', yaniyaningi 'right now, this instant', and gaddagaddwaroo 'late afternoon'. With the bisyllabic ngamoo 'before', reduplication is total, and the resulting ngamoongamoo suggests, predictably, 'a very long time ago'. In each of these instances the semantic effect is intensification, though this falls into two distinct types, qualitative and quantitative.

Reduplication of spatial adverbials occurs very infrequently, and appears to be limited to those adverbials which indicate either location with respect to a chosen reference point or orientation with respect to other entities of the same type - that is, types (2) and (4) of section 3.4.3. (Reduplication of the cardinal adverbials does not occur.) As a rule, reduplication of these adverbials indicates that a multiplicity of entities are located or orientated in the particular
configuration. For example, wilajga 'around' reduplicates to wilawilajga 'all around', which is used in describing a number of entities scattered around. Other examples are yiddmirnimirni 'level, side-by-side', used to describe the configuration of a large number of individuals e.g. running level or side-by-side (cf. the unreduplicated yiddmirni 'level', used of two individuals in example (3-61)), and langarnimirnimirni 'into one another', as in 'run into one another (of a group of people)'. An exception is the spatial adverbial balngarna 'outside', which reduplicates to balngarnangarna 'right outside', which involves intensification.

With manner adverbials the effect of reduplication is clearly intensification -e.g. mayaaddayaadda 'very quickly' (see above).

### 3.13 Word complexes

Free lexical words can go together to form word complexes, which are syntagms that are structurally distinct from phrases. In all of the available examples the relation between the words is that of conjunction or addition - that is, the logical relationship 'and'. Some illustrative examples are:
(3-131) wiliddiwiliddi wc[goon.goornoo ranggardi]we stripe black white 'black and white stripes'
(3-132) wc[wambi]wc -yooddoo wc[biddidbiya]wc
[name] DU [name]
'Wampy and Amee'
where $\mathrm{WC}=$ word complex. Note that in (3-131) the word complex realises the Qualifier role in the NP, while in (3-132) it fulfils the Entity role (see section 4.4.1.2.1 for definitions of the terms Qualifier and Entity).

It will probably be necessary to distinguish word complexes from compound words. Yoowooloo-goornboo (man-woman) would seem to be an example of the latter type. It has a meaning similar to that of reduplications such as boolgawoolga 'old men'; it means 'people'.

## CHAPTER 4

## THE PHRASE

The rank of phrase was introduced in section 3.1.1 in order to account for the grammatical patterns that words enter into. The largest structural unit, the clause, cannot be adequately, or revealingly, described in terms of combinations of words: words enter into syntagms, and it is these syntagms that are the basic units in terms of which clauses show distinctive patterns of syntactic organisation.

Phrases may be classified by their internal structure: that is, in terms of their constituents which, as mentioned in 3.1.1, are labelled by the function or role they fulfil in the phrase. Three distinct phrase types (or 'classes') are identifiable on these grounds in Gooniyandi: noun phrases (NPs), verb phrases (VPs), and postpositional phrases (PPs). It is possible that there is also a distinct type of adverbial phrase (see page 288 below). The first two phrase types correspond to the two largest open lexical classes, nominals and verbals respectively (above, section 3.2.1), and usually contain a constituent of that class; the PP contains an obligatory constituent of the class postposition, in a syntagm with at least one lexical item (open or closed class). In this chapter we describe NPs (section 4.1), PPs (section 4.2) and complexes involving these units (section 4.3). The VP, which constitutes a single distributional word, was described in section 3.9 above.

### 4.1 The noun phrase <br> 4.1.1 General characteristics: the NP as a syntagm of words

The NP is realised by a syntagm of words (including rankshifted clauses and phrases). Common linguistic practice is to describe the NP solely in terms of the classes (and subclasses) these words belong to, each constituent of the phrase being labelled by its class - see e.g. Lyons (1968:216ff), Chomsky (1957:26ff, 111), and, in the Australianist field, Dixon (1972:60-64, 1977:247-252), Tsunoda (1981:92-95), and Haviland (1979:102-105). In this section I set the stage for a functional analysis (presented in section 4.1 .2 below) by first
describing the NP in this way. We begin with the simple NP, whose ICs (immediate constituents) are all of word rank; we then work through some complications, including embedding and (briefly) discontinuity.

Lexemes in NPs are normally from the nominal and pronominal classes, although adverbials also occur. Being bound morphemes which must occur in VPs (either finite or non-finite), verbals cannot occur as immediate constituents of NPs. The word marlami 'nothing, no' is the only particle for which the evidence is clear that it may occur in an NP (other particles enter into close syntagmatic relations with nominals, but it is not certain that the resulting syntagms are phrases). The order of words of the various classes is not rigidly fixed. Determiners, number words, and adverbs precede or follow (open class) nominals. Some illustrative examples are:

| (4-1) | yoowarni <br> one | goornboo <br> woman |
| :--- | :--- | :--- | :--- | :--- |
|  | one woman' |  |

Modifying nominals are found both preceding (as in example (4-6)) and following (as in example (4-3)) the nominal modified.
(4-б) labawoo jiga
white flower
'white flower'
There are, however, some definite word ordering tendencies:
(1) In pronominal NPs (roughly those whose 'head' is a pronoun, as in
(4-2)), pronominals tend to occur initially, followed by modifying nominals, especially number words.
(2) In non-pronominal NPs, determiners and number words normally precede the open-class nominals. In a count of 140 examples, these orders were favoured over the reverse orders in the ratios $9: 1$ and $7: 2$ respectively.
(3) Modifying nominals (other than determiners and number words) follow the modified nominal twice as often as they precede it (in a count of 120 examples).
(4) The particle marlami 'nothing' almost always follows the noun it "modifies".
NPs in texts tend to be highly elliptical, with one word NPs being by no means rare. NPs with more than two words are textually very infrequent: a sample of fifty handwritten pages of text contained over fifty times as many NPs with one or two words as NPs with three or more words. Any nominal or pronominal can be the sole member of an elliptical NP - for example, garndiwiddi 'two', ngooddoo 'that' and nyamani 'big' may all occur as the sole lexical item in an NP. Furthermore, when the NP consists of two or more nominals or pronominals there appear to be no restrictions on the acceptable combinations of classes and subclasses. For example, (4-7) and (4-8) show a determiner and number word, and a determiner and qualifying type nominal, respectively:
(4-7) niyaji garndiwiddi
this two
'these two'
(4-8) ngooddoo nyamani
that big
'that big one'
Noun phrases may have other phrases (NPs, PPs, and VPs) or non-finite clauses embedded within them, but the maximum attested depth of embedding is just two (cf. section 3.1.1). Examples are:


| hat <br> $\left.{ }_{\mathrm{N}}[\text { thadda }]_{\mathrm{N}}\right]_{\mathrm{NP1}}$ | DAT man |  |
| :---: | :---: | :---: |
|  | dog |  |
| 'that man's dog' |  |  |
|  | widdigawool $_{\text {N22 }}$ | $\left.\left.\mathrm{v}^{[n g a n g}-\mathrm{ji}\right]_{\mathrm{v}}\right]_{\mathrm{K}}$ |
| eye | bung | give IT |
| $\left.-\mathrm{mili}]_{\mathrm{N}}\right]_{\mathrm{NP1}}$ |  |  |

CHAR
'bung-eye giver'
Again the constituents of embedded phrases (when there is more than one constituent, as in (4-9)) are not bound to occur in any particular order, although they are as a rule contiguous. Corresponding to English examples such as 'that man's dog's bone', which involve deeper embedding, are complexes of juxtaposed phrases resembling 'that man's dog, its bone' in Gooniyandi - see examples in section 4.3.1.

In NPs expressing both alienable and inalienable possession, the possession is referred to either by an embedded dative PP (as in (4-12)), or by an oblique case-form of the free pronominal (as in example (4-11).
(4-11) ngaddagi marla / thadda
my hand dog
'my hand / dog'
(4-12) ngooddoo -yoo goornboo marla / thadda
that DAT woman hand dog
'that woman's hand/dog'
There is one other possessive construction, which applies only to kinterms. This involves one of the stem forming suffixes -wa 'his, her, their' and -badi 'yours', attached to the appropriate kin-term. For examples see section 3.12.1.1 above. The regular possessive constructions may always be used in place of these suffixes. For example,
(4-13) ngaanggi / ngaddagi garingi
your my wife
'your / my wife'
There are two circumstances in which inalienable possession may at first blush appear to be realised by simple juxtaposition of the possessor and the possessed,
as is the case in a number of Australian languages (Dixon 1980:293). Consider for instance:
(4-14) thiddoo nyawa
kangaroo tail
'kangaroo tail'
(4-15) nganyi midda ngarlagngiri
I head I:ache
'I have a headache.'
It will be demonstrated below that (4-14) is not a possessive phrase, but, like the English translation, involves 'classification' of the tail as of the type kangaroo. On the other hand, in (4-15), nganyi midda does not constitute an NP, but is in fact a pair of phrases, [nganyi] and [midda] (see McGregor 1985:216).

As example (4-9) illustrates, NPs need not always be continuous; in (4-9) the embedded NP (i.e. $\mathrm{NP}_{2}$ ) is split by the postposition -yoo. Indeed, the pieces may be split by full words, and thus be more distantly separated:
(4-16) $\mathrm{NP1}^{[\text {[gooroogooroo }]_{N P 1}{ }_{\text {VP }}[\text { dajgila }]_{\mathrm{YP}} \mathrm{NP1}[\text { jalandi }]_{\mathrm{NP1}}}$ black I:wearit belt
'I'm wearing a black belt.'
It seems that the separation of NP constituents, as in (4-16), serves a discourse function (see section 4.3.1 below and McGregor 1989).

### 4.1.2 Structure of the NP <br> 4.1.2.1 Functions and their realisations

In the previous section I described the NP as a string of words of various parts of speech, which may occur in any order and which show at best a few rather weak ordering preferences. In this section I will show that a much more satisfactory and enlightening description is possible by taking into account the function of the immediate constituents within the phrase. (This description is inspired by Halliday's (1985:160-165) description of the English nominal group; there are of course many differences - as well as some interesting similarities - in detail between the languages. See also Evans (1985) and Dench (1987) for similar descriptions of the Kayardild (Mornington Island, North Queensland) and Martuthunira (Pilbara, Western Australia) NPs respectively.)

The NP may be described as a sequence of one or more constituents, with associated functions as shown in formula (4-17):
(4-17) (DEICTIC) $)^{\wedge}(\text { QUANTIFIER })^{\wedge}(\text { CLASSIFIER })^{\wedge}{ }^{\wedge}$ ENTTTY $^{\wedge}($ QUALIFIER)
where $\wedge$ indicates strict linear ordering, and brackets enclose optional functions: functions that need not be realised in an NP. As this formula indicates, the only
role which is necessarily selected is the Entity; in addition to this role, a phrase may have constituents realising any of the other roles, in any combination, provided that they occur in the order indicated. Some examples are given in Table 4-1.

Table 4-1: Examples of NPs

| Deictic | Quantifier | Classifier | Entity | Qualifier |
| :---: | :---: | :---: | :---: | :---: |
| ngaddagi | garndiwiddi |  | thadda |  |
| my | two |  | dog |  |
| 'my two dogs' |  |  |  |  |
|  | garndiwiddi |  | gardiya | goornboo |
|  | two |  | white:person | woman |
| 'two white women' |  |  |  |  |
| ngooddoo | garndiwiddi |  | yoowooloo | gimangarna |
|  | two |  | man | bush:dweller |
| 'those two bushmen' |  |  |  |  |
| ngaddagi |  |  | thadda | maaali |
| 'my good hunting dog' |  |  |  |  |
|  |  |  |  |  |
|  |  | gamba | yiwindi |  |
|  |  | - water | rain |  |
| 'rain' |  |  |  |  |
|  |  |  | yoowooloo man | garndiwa many |
| 'many people' |  |  |  |  |

Inspection of the texts and example sentences included in this book will reveal a significant number of NPs lacking an Entity nominal. I claim that all such examples may be accounted for as elliptic NPs. Examination of the context in which such NPs (i.e. NPs without Entity nominals) occur reveals that there is usually explicit mention of the Entity nominal in the preceding text (this is the case, for instance, in examples (5-3) and (5-14), and is part of the reason why it is not necessary to identify a distinct class of adjectival phrases in Gooniyandi -cf. discussion of pages 141-142); alternatively, the relevant lexical nominal is clear from the context of situation. In other words, an Entity nominal may be
omitted on the condition that it is given: that is, (roughly) that it's referent is recoverable (see section 5.3.1). This holds also for the following utterance, elicited in response to 'A new teacher has arrived': cf. my remarks on page 34 regarding givenness of entities established in the English prompts. ${ }^{1}$
(4-18)

$$
\begin{array}{ll}
\text { yanoonggoo bïngarni } \\
\text { new } & \text { he:emerged } \\
\text { 'A new (teacher) has arrived.' }
\end{array}
$$

The situation just described for the Entity nominal is quite different from the situation for the other roles. Absence of a constituent realising Deictic, Quantifier, Classifier or Qualifier does not always correlate with prior mention of a relevant constituent, or presence in the context of situation. For instance, the first NP in Table 4-1 does not presume either a Classifier or a Qualifier: such modifiers are simply absent, and not selected; no indication is given, or understood, as to the type of dog referred to, or any quality of this referent. This is not to say, however, that constituents realising roles other than the Entity may not be ellipsed, only that they may be absent simply because they have not been selected.

In contrast with the 'free' order of lexical words and their classes in the NP (as mentioned in 4.1.1 above), the functions occur, I have suggested, in a strict sequence relative to one another. A consequence of this is that the correlation between lexical classes and the function they realise in the phrase is not biunique: number words may for instance function as either Deictics, Quantifiers or Qualifiers, whilst in addition to number words a few open class nominals, including nyamani 'big, large quantity', may function as Quantifiers. In addition, many open class nominals double as Entities and Qualifiers, and not infrequently also as Classifiers (cf. page 256 below).

There are, however, certain restrictions on the functions that lexical items from particular parts-of-speech and subclasses thereof may realise. The most important associations between lexical class and NP function are shown in Table $4-2$, where the functions are given in order of the frequency with which they are fulfilled by the particular lexical class.

[^15]Table 4-2: Associations between lexical class and function

| Lexical class | NP roles that may be realised |
| :--- | :--- |
| Determiner | Deictic, Qualifier, Entity |
| Number words | Quantifier, Qualifier, Deictic |
| Proper nouns | Entity |
| Kin-terms | Entity |
| Subsection terms | Entity, Classifier, Qualifier |
| Open class nominals | Entity, Qualifier, Classifier, Quantifier |
| Nominative pronominal | Entity |
| Oblique pronominal | Deictic, Qualifier, Entity |

## Notes on Table 4-2:

[1] Definite determiners function as Entities only when they refer to circumstances of place and time.
[2] Pronominal Entities use the nominative form of the pronominal, except when the phrase is embedded in a PP (other than one with an ERG postposition) - see page 171.
[3] The associations indicated, particularly the preferred ones, show clear semantic motivation. The more individuating lexemes - those denoting the least accidental characteristics - are most strongly associated with the Entity; those denoting qualities tend to be associated with pre- and post-Entity roles.
[4] Perhaps the majority of open class nominals have the potential of occurring in each of the three roles Classifier, Entity, and Qualifier. However, fewer occur as Classifiers than as Entities, and none are restricted to the Classifier. The Entity and Qualifier functions are frequently realised by words corresponding to notional nouns and adjectives respectively, and there are some nominals which (in the present corpus) are restricted to one or the other of these two roles: for instance, mayaroo 'house' seems to always function as an Entity, and has not been encountered in the Qualifier role; on the other hand, joodoo 'straight' seems to be always a Qualifier, never an Entity. However, as I have argued above (section 3.3), these differences do not warrant setting up distinct subclasses of noun and adjective.

It follows as a consequence of the preceding remarks that a given NP may be multiply ambiguous - or at least amenable to more than one different interpretation - depending on the function that the lexical words are understood
to realise. When context is taken into account this ambiguity normally disappears. For example, migi-yoo (ant-DAT) 'for/of ants' in (4-19) would normally be understood to classify the nest as one of the type made by ants (see below page 263). However, it could potentially also be used as a Deictic, identifying the actual nest (rather than its type). Had yoowooloo-yoo (man-DAT) 'for/of a man' occurred instead, the unmarked interpretation would be the latter, i.e. that yoowoolooyoo 'for/of a man' realised the Deictic.

$$
\begin{array}{ccc}
\text { (4-19) migi } & \text {-yoo riwi } \\
\text { ant } & \text { DAT camp } \\
\text { 'ant's nest' }
\end{array}
$$

The fact that any elliptical NP will be formally identical with some nonelliptical NP - the difference being that the unrepresented role in the first case is ellipsed, the identity of the role-filler being "understood", whereas in the second case nothing at all fills the role - is another source of ambiguity, resolvable only by taking context into account.

In the remainder of this section I will discuss the functions of (4-17) in turn, from left to right. Then in the following section I will return to a more careful consideration of word order, showing that it is free only to the extent that all orders are grammatically acceptable. Variant word orders differ in meaning, and the differences of meaning encoded add supporting evidence to the functions proposed in this section.
[1] Deictic. The function of the Deictic element is to contextualise the phrase, relating it to the linguistic or extralinguistic context, thus facilitating the identification of its referent. The following items may function as Deictics:
(i) Determiners. These are the most natural, as well as the most frequent elements found in this function. They specify the referent as either definite, by reference to proximity to the speaker in space (demonstrative determiner) or in the text (endophoric determiner), or because it is (asserted as) known to the hearer (shared knowledge determiner), or indefinite (indefinite determiner). See section 3.3.1 for discussion of these items and examples of their use.
(ii) Oblique forms of the personal pronominals and dative PPs. Another quite frequent way of identifying the referent is through its being the property of some (usually also identifiable) individual. Thus the Deictic is often realised by an oblique form of a personal pronoun, or by a dative PP referring to the possessor - see examples (4-11) to (4-13).
(iii) Ablative PPs. The postposition -nhingi $\mathrm{ABL}_{1}$ marks source or origin, including (as we have seen in section 3.7 ) the animate source of bodily products,
the utterer of words, and the spatial or temporal origin of an entity. Such information may be used to identify the referent. For instance, ngaddagi-nhingi thangarndi (my-ABL ${ }_{1}$ story) identifies the story as the one I told, and assumes that this story is known to the hearer as having been told by the speaker - cf. ngaddagi thangarndi (my mouth/word/language/etc.), which could refer to my mouth, my language, or a story I have ownership rights to.

As a rule $\mathrm{ABL}_{1}$ PPs preceding the Entity function as Deictics only when they have specific, individual reference. Thus the lexical item (there is most often only one) in the PP is usually a pronominal or definite determiner, although open class nominals are also possible in appropriate circumstances (most often, however, such PPs function instead as Classifiers). It is possible also for the lexeme within the PP to be an adverbial, as in balyoowa-nhingi yawarda (behind-ABL ${ }_{1}$ horse), which identifies the horse as the one in final position. However, this only happens when the adverbial is used determinatively, to select items from a group within a particular context of situation, as in this example; as a rule, adverbials are not used in this way, and pre-Entity $\mathrm{ABL}_{1}$ PPs containing them most often classify the referent (see below under [3] Classifier).
(iv) Number words. Number words, of course, usually function as Quantifiers, and indicate quantity. However, they occasionally function as nonspecific Deictics. There are three possibilities, two of which seem to be restricted to yoowarni 'one'. (a) Number words may function comparatively, indicating that reference is being made to precisely the same one, two, etc. entities already established (as in one interpretation of (4-20)), or to each member of the previously established set of entities, in which case the normal English translation involves words like 'both' and 'all'. Here the number word is normally followed by the Enclitic -nyali REP (see section 6.3.2).
(4-20) yoowarni -nyali mayaroo
one REP house
'the same house'
(b) Yoowarni 'one' occurs not infrequently in circumstances which suggest that it is being used as an indefinite determiner, much like the English words one, or a certain. For instance, one narrative concerning a white man who got lost in the desert begins yoowarni-ngga gardiya (one-ERG white:person) 'by a certain white man'. Perhaps an even clearer example is provided by a mythical text concerning the exploits of two young men, in which the NP yoowarni 'one' was used selectively, to choose an unspecified one of the two (this NP is elliptical, with
an ellipsed Entity yoowooloo 'man'); most frequently, however, the indefinite nominal yaanya 'other(s)' is used instead of yoowarni 'one' (see (e) below). (c) Finally, the number word yoowarni 'one' may function non-comparatively, to indicate 'one and the same': (4-20) has a second possible interpretation, in which the identity of the house has not been established. Again, in (c), the number word is usually followed by the enclitic -nyali REP.
(v) Indefinite nominals. The indefinite nominals yaanya 'other(s)', yaabja 'some' and wajaddanyi 'different' may function comparatively - see section 6.2 for discussion of the meaning of these nominals. Example:
(4-21) yaanya birdi
other leg
'the other leg'
The two words, yaanya 'other(s)' and yaabja 'some' are also used noncomparatively in the senses of 'some (one)', or perhaps more accurately, 'a certain', and 'some (more than one)', respectively. The term boojoo 'the lot, all (finish)' may perhaps best be dealt with here, as a non-comparative indefinite nominal.

As indicated above, a Deictic is not necessary in a Gooniyandi NP. Absence of a Deictic element does not imply that one has been ellipsed (cf. Halliday 1985:162); the speaker may simply have decided not to provide the hearer with this type of information. An NP without a Deictic may, accordingly, be either definite or indefinite.

A NP usually has a single Deictic element, although on occasion more than one may occur. Most commonly the second one is one of the indefinite nominals, yaanya 'other(s)' or yaabja 'some':

> (4-22) niyi yaanya yoowooloo
> that other man
> 'that other man'
[2] Quantifier. The Quantifier indicates quantity, usually the number of entities of the specified type. This function is typically realised by number words (discussed in section 3.3.4 above). ${ }^{2}$ Other words that may occur here are

2 Although as mentioned in section 3.3.4 larger numbers such as five and ten may be referred to by expressions such as yoowarni marla, literally 'one hand', these expressions are restricted in terms of their occurrence. They appear not to occur as Quantifiers: there are no instances of such expressions occurring within NPs with explicitly mentioned Entity nominals, and they are always spoken on their own
such generic terms as garawooloo 'very many, much' and waringaddi 'very many (in reference to people only)' and the open-class nominal nyamani 'big', which in this context has the sense 'a large quantity of', in reference to masses. For example,
(4-23) nyamani gamba
big water
'a lot of water'
Nyamani 'big' may also be used to qualify garndiwangooddoo 'many', to indicate 'very many', in which case the two words constitute, I would argue, a single complex constituent, realising the Quantifier role. Jiginya 'small, little' seems to contrast with nyamani in phrases like (4-23), and has the sense 'a little bit/small quantity of.

Lexical nominals in Gooniyandi are not distinguished according to count vs. mass; however, this distinction can be made at the level of the NP, through the choice of a number word (in the case of countable phrases) vs. nyamani 'big', jiginya 'small', etc. (in the case of non-countable phrases). For example gamba 'water' can occur in a phrase such as (4-23) in reference to a mass, or in a phrase such as (4-24) in reference to a countable entity such as a glass of water:

## (4-24) yoowarni gamba

'one (glass of) water'
(Yoowarni gamba 'one water' is also used in the sense of 'one year' - the year is measured from one wet season to the next (cf. yoowarni jaalinyi 'one moon', which is usually interpreted as 'one month').) Note however that the mass/count distinction in the Gooniyandi NP does not coincide exaclly with the mass/count distinction in English. It seems, for instance, that if particles can be visually identified, the substance may be considered to be countable. Thus:
(4-25) garndiwangooddoo banda
many earth
'a lot of dirt'
[3] Classifier. The Classifier indicates the type of thing referred to by the phrase, specifying that it is a member of a particular subset of the items denoted by the Entity nominal. It is important to stress from the outset that what is classified is the referent thing, not the lexical nominal denoting it (see below).

[^16]The Classifier is usually an open-class nominal, rarely an adverbial; it is never a pronominal or a closed-class nominal. A large number of subtypes may be distinguished depending on the mode of classification. These subtypes are not, however, necessarily linguistically significant; they are presented below in order to give an idea of the semantic range covered. The following list is not claimed to be complete, nor are the subtypes necessarily mutually exclusive.
(i) The Classifier may indicate the generic type of which the Entity is a specific example:
$(4-26){ }_{\mathrm{NP}}[\mathrm{gamba} \text { yiwindi }]_{\mathrm{NP}}$ jigjigii
water rain itspotted
'Rain spotted the ground.'
(ii) Conversely, the Classifier may distinguish the specific type of a more general Entity:
(4-27) $\mathrm{NP}^{[y i w i n d i}$ gamba $]_{\mathrm{NP}}$ bagiri rain water it:lies
'Rain water is lying about.'
Note the contrast between (4-26) and (4-27) - the thing referred to in the first example is 'rain', whereas it is 'water' in the second example.
(iii) The Classifier may indicate the whole of which the Entity is a part.
(4-28) jinali jalgoodoo
spear shaft
'shaft of a spear'
This is the usual way of indicating the part-whole relation for inanimates, such as tools, topographical features, etc., and also parts of plants. On the other hand, for animals, the part is usually treated as a possession; only in special circumstances is a part of an animal classified by the whole. An example is (4-14), which treats the animal as food - this phrase occurred in the context of speaking about cooking.
(iv) A person may be classified by his or her "race", or cultural group:
(4-29) gardiya Colin
white:person
'the white man Colin'
(v) An entity may be classified by its characteristic size:
(4-30) jiginya marla
little hand
'finger'
(4-31) lambardi jadil
little saddle
'little saddle', i.e. 'racing saddle'
In these examples the size is used as a means of indicating the type of thing referred to: it is a prototypical characteristic of things of the particular type. It does not indicate a quality of the thing, and it is impossible to intensify the size. For instance, (4-30) does not suggest that the hand (or finger) is small; but being small is a characteristic of fingers vis a vis other referents of the term marla 'hand'. Similarly, racing saddles are characteristically smaller than other saddles, although particular ones may be larger than particular riding saddles.
(vi) A thing may be classified by its typical location in space or time:
(4-32) gaddwaroo warda
afternoon star
'evening star, Venus'
(vii) A thing may be classified by a physical trait such as colour. For instance, people are classified into "races" according to what is perceived as the characteristic colour of their skin (which is not to say that is an accurate description of the actual colour of a particular individual's skin):

## (4-33) thiwa goornboo <br> red woman <br> 'white woman'

(viii) The classification may be by the purpose or use of the object. The paradigm example of this would seem to be edibility: maa 'meat' distinguishes edible animals, and manyi 'vegetable food' distinguishes edible plants. For example,
> (4-34) maa thiddoo
> meat kangaroo
> 'the edible animal kangaroo'

Another example of classification in terms of purpose is provided by (4-35), which classifies a horse by its function in human society: it is used for racing.
(4-35) galyjin.gali yawarda fast:good:at horse 'race horse'
(ix) Yet another way of classifying something is by its owner or maker. This is however, quite rare, and restricted to circumstances in which there is a very close connection between the two entities. Typically the thing owned/made must also be the normal residence of the owner/maker, as in example (4-19).

It would appear that things are classifiable by any trait they display as a general characteristic of things of that particular type; this means that a given entity is not uniquely classifiable, and that the set of lexical words that can realise the Classifier role - and hence the set of possible means of classifying an entity - is not closed. Indeed, the Classifier may even be realised by a phrase, as in

| $(4-36)$ | $\mathrm{NP}^{[ }[$gambinyi | marlami $]_{\mathrm{NP}}$ |
| :---: | :--- | :--- |
| egg | bija |  |
| 'empty nest' |  | nothing |
| nest |  |  |

These properties show that nominal classification in Gooniyandi is a phenomenon of quite a different type to noun class marking found in the languages to the north (including e.g. Ungarinyin, Wunambal and Worrorra) and north-east (e.g. Kija), where each lexical nominal (with no more than a few exceptions) belongs to a single class, and the set of classes is closed and small. (Compare Dixon 1982, Part D, especially chapter 8.) In functional terms the difference is that the Gooniyandi Classifiers distinguish subtypes within the set of items denoted by a particular nominal, whereas the classes of the northern and north-eastern languages group lexical nominals together into sets. Gooniyandi classification partitions the set of things denoted by a lexeme; northern class marking partitions the nominal lexicon (cf. Silverstein 1986:501).

The preceding discussion may be summarised as follows. The Classifier usually selects, from the set of entities referred to by the lexical word in the Entity function, a "natural" subset which displays, as a whole, the property referred to by the lexical Classifier. It does not select the subset of individuals which themselves have the particular property referred to by the lexical Classifier (see e.g. the discussion of example (4-30) above). In other words, the Classifier indicates a paradigm quality of the "natural" subset, which distinguishes it from its complement.
In fact, this "natural" subset need not be identified by a paradigm quality. It may be no more than a typical association of the things of the natural set; this is the
case in example (4-32) above, in which gaddwaroo 'aftemoon' indicates a typical temporal association of Venus, not a quality of that planet (cf. English criminal lawyer). The Classifier indicates the type of thing by means of something which is seen as a characteristic of that type of thing; this may have only a tenuous connection with any quality of particular referents.
[4] Entity. The constituent realising this function designates the thing, or set of things referred to. This is usually a material object (real or imaginary), but may also be an intangible and/or abstract "thing" such as joonba 'song', thiddi 'fight', roowa 'walkabout', etc.. The Entity role may be realised by lexemes of any part-of-speech that can occur in the NP: pronominals, nominals and, infrequently, adverbials. Nominals belonging to all of the closed classes identified in section 3.3 may occur in this function, with the possible exception of number words.
If it is indeed the case that number words are precluded from being Entities, I suspect that this is more likely to be a semantic restriction than a grammatical one: mathematics is not a normal topic of conversation. If mathematics were to be taught in Gooniyandi, I would expect that number words could be used referentially, in expressions of the type Two is a number, or Two and two is four (granted a concomitant expansion of the Gooniyandi lexicon).

As mentioned earlier (section 3.3), all open class nominals appear to have the potential of occurring in this position, and Gooniyandi does not distinguish a lexical class of adjectives in opposition to (common) nouns. Nominals in the Entity function make reference to things which have the property or quality of being a man, being a tree, being a little (thing), and so on. For example, the most frequent use of the nominal jiginya is as an attributive, referring to the quality of being small; but it may also be used referentially, as an Entity, as in (4-37) to refer to things which are small - children in particular. (Note that (4-37) is not elliptical.)

## (4-37) niyaji jiginya <br> this little

'this child'
In addition to single words, word complexes (section 3.13) may realise the Entity function.
$\begin{array}{lll}\text { (4-38) garndiwangooddoo yoowooloo } & \text { goornboo } \\ \text { many } & \text { man } & \text { woman }\end{array}$
many man woman
'lots of men and women'
[5] Qualifier. It is possible to recognise (informally) an even larger range of semantic subtypes in final position than for the Classifier (which subtypes again
need not have linguistic significance). They are all instances of the relationship of qualification: the narrowing down of the potential set of referents of the Entity-nominal by a property or quality it exhibits. The Qualifier usually indicates a physical quality of a thing, including the following:

- dimension:
(4-39) yoowooloo nyamani
man big
'a big man';
- shape:
(4-40) ngaaddi joolgoo
stone round
'a round stone';
- colour:
(4-41) jalandi gooroogooroo
belt black
'a black belt';
- appearance:
(4-42) midda birndiddi
head plain
'a bald head';
- age:
(4-43) thadda ngamoonhingi
dog before:ABL
'an old dog';
- texture:
(4-44) manyi binyirdi
vegetable:food hard 'hard food';
- number:
(4-45) yoowooloo garndiwa
man many
'many people'
- sex and other human or animal characteristics:
(4-46) ngidi yoowooloo
we(R) men
'we men';
and so on.
Less frequently, Qualifiers indicate non-physical qualities such as, among others:
- value:
(4-47) gamba yijgawoo water bad 'bad water';
- ownership/possession:
(4-48) mayaroo gardiya -yoo
house white:person DAT
'the white person's house';
- human propensity:
(4-49) niyaji yoowooloo maroowa
this man murderer 'the murderer'.

In addition to open-class nominals - all of which, it seems, have the potential of occurring in the final slot - many closed-class nominals can also be Qualifiers. They include determiners (e.g. (4-4)), number words (e.g. (4-2), (4-45)), and perhaps also subsection terms; however, it appears that kin-terms and proper nouns are excluded. Of the pronominals, only the oblique forms are attested as Qualifiers, where they indicate ownership:

```
(4-50) thadda ngaddagi
    dog my
    'my dog'
```

As well as lexical words, the Qualifier may be realised by word complexes, as in example (4-51), and phrases, as in example (4-52).

$$
\begin{array}{cll}
\text { (4-51) } & \text { girili } & \text { ngamoonhingi } \\
\text { stick before:ABL } & \text { mindirdi } \\
\text { 'an old dry stick' } &
\end{array}
$$

(4-52) yoowooloo garayili giddaabingaddi man much long 'a very tall man'

### 4.1.2 2 Illustrations of the significance of word order

Bolinger (1967) makes a useful distinction between reference modification and referent modification in the English noun phrase. In reference modification, the modifying element modifies the reference of the head nominal, the thing in Halliday's terminology (Halliday 1985:159); it "applies to the semantic range of the word [i.e. the head nominal] as a word" (Bolinger 1967:20). On the other hand, a referent modifier indicates a quality or property of the referent of the NP, which quality or property is, or may be, independent of the nominal denoting the entity: the NP drowsy policeman, for example, does not mean 'drowsy qua policeman' (Bolinger 1967:21) - a quality of the referent is indicated, independent of the way in which it is designated. The paradigm example of reference modification is the relationship 'kind of' (Bolinger 1967:17); but, more generally, it is a selective relationship, whereby a (definite or indefinite/nonspecific) subset of the potential referents of the Entity nominal is chosen. On the other hand, reference modification is a type of predication (Bolinger 1967:21). (As will be shown below - see page 276 - the distinction between reference and referent modification does not coincide with the more familiar distinction between restrictive and non-restrictive modification.)

This distinction between referent and reference modification accurately captures the contrast in function of pre- and post-Entity elements. Pre-Entity constituents modify the reference of the Entity-nominal (i.e. the nominal which realises the function Entity), whilst post-Entity constituents modify its referent, the thing itself. Roughly, the Deictic modifies the reference by tying the Entitynominal to its context; the Quantifier does so by indicating the quantity or number; and the Classifier does so by more precisely specifying the type of thing. They modify by virtue of the fact that the thing is referred to by a certain designation, as an object of a particular type. The post-Entity Qualifier modifies the referent of the NP: it indicates a property of the thing itself, qua thing, and only indirectly through its designation.

It is important to note that the two types of modification are linguistic categories, i.e. signs, and are not functions establishable by inspection of the details of particular instances, independent of linguistic expression. Many - in fact the majority of - pre-Entity constituents do in fact indicate qualities or

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properties of the referent thing itself, and post-Entity constituents may help to pin down the reference of the phrase, as the examples from the previous section and below show. But this is beside the point: in the former case the quality of the referent serves to subclassify the lexical head word of the phrase, while in the latter case it does not. If the post-Entity material helps to pin down reference, it does so in a different way from pre-Entity material, and not by subclassification. On the whole, both referent and reference modification are served best by qualities or properties (including deictic ones and quantity), but these are used to different ends.

As has already been mentioned, the classes of lexemes realising the three pre-Entity functions overlap little, although number words occasionally function as Deictics, and a handful of open class nominals may discharge the Quantifier role. However, approximately the same range of properties or qualities occur in post-Entity position as in pre-Entity position, that is, in both referent and reference modification. Consequently, it is possible to set up quite a large number of minimal and near minimal pairs for each pre-Entity role and the postEntity role. In this section I will examine a number of these minimal and nearminimal pairs, beginning with determiners, then going on to oblique pronominals, number words, and finally open class nominals. This excursus will upturn evidence supporting the functional analysis proposed in the preceding section, and at the same time allow us to identify more accurately the meaning of the functions themselves.
[1] Determiners. When a determiner occurs initially, as the Deictic, it provides information to help the hearer identify the intended referent of the Entity-nominal - that is, it modifies its reference - by indicating its relative proximity to the speech situation, or some deictic reference point (see Lyons 1977:646ff). By contrast, when a determiner is in the final Qualifier position, it frequently serves a 'pointing' or directive, indexical function. That is, it points to some thing in the context, singling it out to the hearer's attention, identifying it as the intended referent. For example, (4-53) singled out the intended referent, and was accompanied by lip-pointing at the actual object:

$$
\begin{array}{clll}
(4-53) \mathrm{NP}^{[ }[\text {ngoonyjoo } & \text { ngirndaji }]_{\mathrm{NP}} & \text { waranggila dina } & - \text { yawoo } \\
\text { tobacco } & \text { this } & \text { I:hold:it dinner } & \text { ALL }
\end{array}
$$

'I keep this tobacco until dinner-time.'
Another example is:
(4-54) Q: gamba warangginyja
water you:hold:it
A: yoowoo [gamba ngirndaji] ngoorloogba yes water this you:will:drink:it
Q: 'Have you got any water?'
A: 'Yes, you can drink this water.'
These examples clearly involve a type of qualification of the Entity nominal by the determiner: attention is narrowed down to the intended referent by attributing of it a location relative to the speech situation, and this is independent of the choice of Entity nominal (cf. Bolinger 1967:17).

If the above is true, we should expect that in narrative texts determiners should usually precede their Entity nominal, since narration does not normally concern things from within the context of narration. This prediction is bome out in a study of about 2000 lines of text. In the majority of instances the endophoric determiners niyi 'that' and niyaji 'this' and the exophoric determiners ngirndaji 'this' and ngirnda 'this' do indeed precede the Entity nominal in phrases with this role explicit. The actual figures are 65 instances of the determiner preceding, vs. 21 of the determiner following the Entity nominal (the proportions for each determiner differed somewhat). About a fifth of the cases of final determiner occurred in quoted speech, and could be accounted for as per above; see line (8) of Text 3 for an example. Nor are the other instances exceptional: rather than point to something in the context of the speech event, they point to something in the register of participants established in the text. They select, in other words, one of the established participants of a text, by indicating its endophoric location: whether it is recently mentioned, or mentioned earlier. An example is (4-55), which singles out the place just established, indicating that it was this place, and no other where they looked (for some murderers):
(4-55) mayaroo milawayinmi George Rundin place mayaroo maja house we:were:looking house boss wajbali yoowooloo -nhingi yingi landooddoo riwi white:person Aboriginal ABL name [name] place niyaji
this
'We looked at George Rundin's homestead, the white man George
Rundin, whose Aboriginal name is Landooddoo, this place.'
When an entity is introduced for the first time in a narrative it is not

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normal to use a demonstrative (unless this entity is present in the context of narration); subsequent mentions may employ a demonstrative, and this usually comes before the lexical head noun if there is one - see, for instance, lines (5), (7) and (11) of Text 3. It is only when there is special focus on such a previously established referent that the demonstrative occurs finally. As should be expected from this, given that it is more likely for the speaker to single out in this way an entity that has been mentioned some time ago, a higher proportion of occurrences of the distal endophoric determiner niyi 'that' are final than of the proximal determiner niyaji 'this'.
[2] Oblique pronominals. These occur with approximately the same frequency initially as finally in NPs. When initial, the referent is assumed by the speaker to be known to, and readily identifiable by the hearer, through its being someone's possession - that is, the reference of the Entity nominal is modified. On the other hand, the main reason why an oblique pronominal occurs finally is because the fact that the thing is someone's possession is insufficient to identify it (there may be other reasons and circumstances). For example, in (4-56), ngaanggi 'yours' does not identify the dogs since the hearer has more than two dogs, any of which could be the intended referents of the NP.
(4-56) milala garndiwiddi thadda ngaanggi
I:saw:it two dog yours
'I saw two dogs of yours.' or 'I saw two of your dogs.'
But ngaanggi 'your(s)' does serve to narrow down the reference of the NP somewhat, and it indicates an attribute of the referent - being a possession of the hearer's is as much an attribute of the dogs as their being black is). What is important is that this attribute does not select a specific set of dogs, as would have been the case had ngaanggi 'your(s)' occurred initially in the NP.
[3] Number words. Number words occur either before or after the Entity nominal. In the former case they either simply indicate: (i) the number of things referred to (as in examples such as (4-1) and (4-24)); (ii) that reference is being made to an indefinite Entity; (iii) if followed by the enclitic -nyali REP, identity with previously established referents. That is, in pre-Entity position they may function as Deictics ((ii) and (iii)) or Quantifiers (i)), and thus contribute to the establishment of the identity of the referent of the phrase. In final position number words still of course indicate the number of things referred to, but with a slightly different nuance of meaning. Whereas a syntagm of the form number $w^{\circ} \operatorname{cd}^{\wedge} \mathrm{N}$ (where N is a lexeme realising the Entity role) may be paraphrased in

English as ' $x$ things of the type $N^{\prime}$, a syntagm of the type $\mathrm{N}^{\wedge}$ number word is more accurately paraphrased 'the entities referred to of type N are $x$ in number'. The first involves the selection of a set consisting of certain number of things. The second does not; the selection has already been made. This distinction is brought out clearly in NPs with pronominals as Entities. In such NPs, unlike NPs with nominals as Entity, number words usually occur finally (see section 4.1.1). Contrast an example of the normal order (for instance (4-2)) with (4-57), in which the initial number word selects two members from the set of possible referents of ngidi 'we restricted', namely the three referred to by the bound pronominal $+j i d d+(1 R) N$ :


By contrast, in (4-2) the number word does not select two individuals (from the set of potential referents) - instead it qualifies the pronominal, making more explicit the number of individuals concerned, and treats this number as an attribute of the referent. The difference of meaning is brought out clearly in the glosses 'we two' for (4-2) and 'two of us' for (4-57).

It should be carefully noted that the type of selection involved in NPs with number words preceding pronominals is quite different from the type of selection involved in NPs with number words preceding nominals. The latter case, involves simple pluralisation: a certain number things, each being of type N , are selected. In the former case, a selection is made from a previously established set of referents of the pronominal; simple pluralisation is impossible for personal pronominals - see Benveniste (1946/1971:201-202). This difference, I believe, explains the different norm orders for number words in NPs with pronominal vs. nominal Entities.
As we have seen, for NPs with nominal Entities the norm is for the number word to precede the nominal, selecting so many entities of the designated type. If, however, the referent is already established, and the number of entities included in the set of referents is known, that number can be taken as a property or quality of the referent. Compare for example the following two phrases:
(4-59) ngaddagi ngaloowinyi garndiwiddi
my son two
'the two of my sons, b.oth of my sons'
The second phrase occurred in a context in which the referent thing was given, and known to be two in number; this explains the glosses 'the two of my sons, both of my sons'. (4-58) is a neutral version, simply indicating the number of the speaker's sons presently under consideration.
[4] Open class nominals. Finally I want to compare the significance of prevs. post-Entity nominals. Below are some near minimal pairs that clearly indicate that a meaning distinction is carried by order:

| (4-60) | Classifier <br> thiwa <br> red <br> 'a white w | Entity <br> goorn <br> woma <br> nan' |  |
| :---: | :---: | :---: | :---: |
| (4-61) | 'a red flowe | Entity <br> jiga <br> flower | Qualifier thiwa red |
| (4-62) | Classifier <br> jiginya <br> little <br> 'a finger' | Entity marla hand |  |
| (4-63) |  | Entity marla hand | Qualifier jiginya little |
| 'little hand' |  |  |  |
| (4-64) | Classifier doomoo clenched 'a clenched | Entity <br> marla <br> hand <br> and' |  |
| (4-65) | 'a fist' | Entity marla hand | Qualifier doomoo clenched |

An open class nominal in pre-Entity position indicates a property characteristic of the referent set as a whole. The set of things of type N , where $\mathbf{N}$ is the lexical nominal realising the Entity role, is partitioned into natural subsets by a pre-Entity nominal. For example, marla 'hand, part of the hand' is classified by jiginya in (4-62) to indicate the little part of the hand, the finger, contrasting with e.g. nambooddoo marla (thumb/big:toe hand) 'thumb'. It is also classified - in (4-64) - by shape, doomoo 'clenched' here referring to hands of the type clenched; this phrase was in fact used in reference to a hand that was permanently clenched from leprosy. In final position, the nominal indicates a property of the individual thing referred to qua individual: an individual having the quality Q , where Q is the nominal in final position. A final nominal does not normally distinguish 'natural subclasses'; for example, (5-63) does not distinguish a particular type of marla 'hand' as does (4-62). Pre-Entity nominals, in contrast with post-Entity ones indicate a characteristic property of the thing concerned, which is relatively constant, both across the natural class defined by the type, and individually, in the sense that once a thing is classified as being of a particular type, it always belongs to that class. Clearly here the reference of the Entity nominal is being modified (see also above).

Byrne (1984:209-211) has suggested that phrases like (4-60) and (4-62) are examples of lexical compounding. However, I have misgivings about this analysis. In true compounding the combination becomes lexicalised, and in so doing, may acquire a specific meaning which is not the sum of the component meanings. There is no evidence that either of these conditions obtains for the Gooniyandi examples. The fact that finger is a lexical item in English, for instance, does not imply that it should also be a lexical item in Gooniyandi. In fact, the word marla, which I gloss 'hand', does not exactly correspond in sense to the English word 'hand', but like the corresponding word in many Kimberley languages refers equally to the hand or to the fingers. Lacking crucial evidence that the combinations have become lexicalised, and granted that the meaning of the combination is predictable, it seems that nothing is gained by regarding such combinations as compound. Byrne (1984:211) points out another piece of evidence relevant to the issue: whether the Entity nominal can be omitted ellipsed, or replaced by a substitute (such as 'one'). In true compounding, it cannot. Whether or not this is the case for the Gooniyandi examples referred to above, I doubt whether this test does in fact distinguish lexical compounding from lexical combination. For, as words such as jiginya 'little' in (4-62) are functioning as reference modifiers, modifying the reference of the Entity nominal, it is usually the case that in such circumstances, the Entity nominal
carries new information, so will not be ellipsed.
I regard the generic^${ }^{\wedge}$ specific syntagm as an instance of Classifier ${ }^{\wedge}$ Entity. At first glance it would appear that a generic term would only redundantly and trivially classify a specific term. But this is not the case; the presence of a generic term contrasts with its absence. Kangaroos and other animals may be classified by the generic term maa 'meat' when they are being considered as food, but not, for example when personified in myths. The generic maa 'meat' signifies that the animal is being considered as edible meat. As another example, consider yiwindi 'rain', which may be preceded by the generic gamba 'water', as in (4-26), but not in (4-66).

## (4-66) yiwindi bijgoowaarni rain it:is:emerging 'Rain is coming up.'

In (4-26) the rain is regarded as water: it is rain as droplets of water that spot the ground. Compare also (4-27), in which it is water of the type derived from rain (in contrast with e.g. soak water, etc.) - and not the rain itself that is lying around. The generic/specific opposition may be identified as a cryptotype. For, whereas reversal of word order in (4-60) to (4-65) above causes a concomitant change in function of the modifying nominal, reversal of the word order in the generic^${ }^{\wedge}$ specific type does not. Rather, the specific term becomes a Classifier of the generic Entity (cf. above page 261).
There is another cryptotype that may be given the label 'associative'. Here the Classifier indicates something typically associated with the Entity, rather than some quality (or former quality) of it (see example (4-32) above). In this case, reversal of word order is not possible - warda gaddwaroo (star afternoon) does not occur. Gaddwaroo 'afternoon' in this context provides a clear example of a reference modifier that cannot be a referent modifier.

We can conclude from the discussion of this section that, although word order is free in the sense that permutation preserves grammaticality, it is never-the-less meaningful. Moreover, generalisations can be made about the differences of meaning associated with different word orders; it is not the case that the variant orders have meanings randomly associated with them. I have been at pains to detail minute meaning differences in particular instances: there are clear differences in detail for each of [1] to [4]. I have also tried to show that each of the particular meaning instantiation is either a case of referent modification or reference modification. It matters nothing that final determiners are usually indexical, whereas final oblique pronominals are not; this is predictable from their lexical meanings.

### 4.1.3 Concluding remarks

In this section I have endeavoured to show that, despite appearances - the lack of overt morphological marking within Gooniyandi NPs - and despite the fact that the individual words in an NP may be permuted in virtually any way, the NP is strongly structured, and is not just a random collection of words; nor indeed is it just a set of words in apposition. This lends further support to my claim that there is, in Gooniyandi, a rank of phrase, intermediate between clause and word.

What we have been describing is two aspects of, in Hallidayan terms, the ideational structure of the Gooniyandi NP (see page 291 below). In section 4.1.2.1 we proposed a description of the Gooniyandi NP, in terms of five functions, only one of which was obligatory, or, rather, inherent. This mode of description clearly falls into the experiential component of ideational meaning. Then in section 4.1.2.2 we attempted to justify the analysis, and in the process proposed two other functions: reference modification and referent modification. Implicit to this description is a dependency view of the NP structure: the NP consists of a head, always the Entity, together with two different sorts of modifiers to the head: referent modifiers and reference modifiers. The common term 'modifier' is justified in that both are dependents on, and modify the Entity. The dependent status of the non-Entity material follows from its optionality: as we have already seen, the Entity role always occurs in an NP, whether or not its realising linguistic expression has been ellipsed. Modification refers to the logical relationship (see Halliday 1985:170) of subclassification - the difference between referent and reference modification lies in what is subclassified: the lexical nominal, or the class of potential referents of the Entity nominal. This mode of description falls into what Halliday refers to as the logical function the second aspect of the ideational metafunction (Halliday 1985:170).

The discussion of this section has, in fact, only just scratched the surface of the incredibly rich structure of Gooniyandi NPs, which also shows structure along at least one other functional dimension: the textual metafunction. Research into this aspect of NP structure in still very much in progress. For the sake of completeness, however, I will make some brief and tentative remarks.

It is generally the case that one syllable of an NP is more phonetically prominent or salient than the others. This syllable is normally one of the stressed syllables of one of the lexemes of the phrase, which is given extra stress. My tentative claim is that this prominent syllable falls within the most important and newsworthy word in the phrase - the information focus of the

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phrase (see section 5.3.1 for discussion of the term 'focus'). As we will see in the next section, this lexeme is also the one to which a postposition will be attached in a postpositional phrase. On the other hand, lexemes which do not contain the salient syllable may or may not contain new information (see pages 367ff. below).

My hypothesis is that when the focus falls on a modifier, whether it be a referent or a reference modifier, that modifier functions restrictively, to distinguish one among several possible referents (see Jespersen 1924:108, and cf. Byrne 1984:207). Otherwise, the modifier has nonrestrictive function. A good illustration is afforded by examples (4-53) and (4-54), in each of which the determiner ngirndaji 'this' is salient, and clearly functions restrictively. (It should be noted that the restrictive/non-restrictive contrast is quite different from the referent modifier/reference modifier contrast, and all four combinations of features are possible. The former relates to whether or not selection is made within a referent set; the latter, to different types of subclassification.)

### 4.2 The postpositional phrase

Postpositions have been defined (see section 3.7 above) as morphemes which enter into syntagmatic relations with phrases (less frequently with clauses or words) to form units of phrase rank, postpositional phrases (PPs). The main types of PP are, schematically:
(i)

(iii)

(ii)

(iv)


NPs and PPs differ structurally. The former are, as we have already seen, endocentric, with the Entity identifiable as the head; the latter are exocentric that is, they cannot be substituted for, or replaced by a single item of the unit next below on the rank scale, the word. In fact, it might be argued that the NP, PP, ADV, and $K_{\text {nf }}$ are complements of the postposition in (i) to (iv). We discuss the four types of PP below, in order.
(i) NP-P. Postpositions are phrase-level encliticised morphemes, which occur usually one per phrase. They enter into constituency relationships with phrases,
and not words (as do suffixes - see above section 3.12). The postposition may be attached to any word of an NP. There are, however, statistical tendencies in postposition placement. Postpositions are attached to nominals in the following roles in decreasing order of preference: Deictic, Quantifier, Qualifier, Entity, Classifier. Some illustrative examples are:


Word level suffixes, by contrast, are attached to the word which they are in constituency with, and/or whose meaning they modify, regardless of its function in the phrase. For example, in
(4-72) yoowooloo giliwooloo -ngarna
man limestone DW
'a man who lives in limestone country'
-ngarna DW cannot be attached to yoowooloo 'man', and preserve the sense. For this reason, the number morphemes -yooddoo DU and -yarndi PL, which correspond to the stem forming suffixes of the majority of Australian languages (Dixon 1980:323), must be treated as postpositions in Gooniyandi. They occur
on any phrasal constituent, with the same preferences as other postpositions (cf. Rumsey 1982b:58). For example, both of the following occur:
(4-73) ngooddoo -yarndi yoowooloo
that PL man
'those men'
(4-74) ngooddoo yoowooloo -yarndi
that man PL
'those men'
In each of these examples, the word order may be reversed (with consequent meaning changes as per section 4.1.2.2). As for the 'case-marking' postpositions, the most common place for the number-marker to occur is on ngooddoo 'that', whether it realises Deictic or Qualifier. Another manifestation of this distinction between postposition and suffix shows up at word level. Postpositions always follow suffixes: garingi-wadi-yooddoo (wife-your-DU) 'your two wives' (cf. section 3.12).

At least two alternative analyses of the above phrases might be suggested.
(a) Since (i) clearly requires the recognition of discontinuous constituents, it might instead be suggested that the immediate constituents of the PP are the lexical words: including both the stems and the postpositions. This approach would analyse (4-71) as follows:


The problem with this proposal is that it does not capture the obvious generalisation that the words niyi 'that', yoowooloo 'man' and gimangarna 'bushman' together form an NP whose structure is as outlined in section 4.1.2, and which can reduce to a single word, any one of the three free lexemes. On the other hand, (4-71) may contract to niyi-ngga 'by that', yoowooloo-ngga 'by a man' or gimangarna-ngga 'by a bushman'; but it may not contract to a single stem minus the postposition -ngga ERG. The analysis proposed in (4-75) does not account for these facts.
(b) Secondly, in order to keep the description of the Gooniyandi phenomenon consistent with the majority of treatments of related phenomena in

Australian languages, it might be suggested that -ngga ERG, -yoo DAT, -ya LOC, etc. are case suffixes, and that d-words such as niyingga 'by that' are inflectional forms of the nominals. An analysis of (4-71) in this way would be:


There is, however, no evidence for such a proposal. It suffers from the same problems as mentioned for (a) above; and furthermore, there is simply no evidence that niyingga 'by that' is an inflectional form of the root niyi 'that' (see above section 3.7). No generalisations of the type 'the ergative form of the lexeme occurs in context ...' (cf. Goddard 1982:169), or 'the constituent nominals of an NP agree in case', are possible. The only possible generalisations concem the full phrase. It is the full phrase, and not the nominal word, that is the locus at which the system of nominal postpositions is 'entered'. It is mainly for this reason that I have avoided use of the term "case", which properly refers to nominal word level systems (Jespersen 1924).
Of course, one could still make analysis (b) work, by proposing a rule of casemarker deletion, whereby all instances of the case marking inflection or suffix but one are deleted; and this might, for instance, be treated as a type of ellipsis. It is difficult to argue against a proposal such as this. But even more difficult would be the task of arguing the case FOR it. Aside from the dubious advantage of accounting for the Gooniyandi phenomenon in terms of a universalistic type description, there is nothing to gain in terms of descriptive simplicity - in fact, if anything, the description would become more complicated - and I know of no language internal evidence which lends support for the hypothesis. On the other hand, there are advantages to the description I have proposed, which are briefly commented on on page 282 below, and dealt with in some detail in McGregor (1989).

It might also be observed in rounding off this discussion that the "casemarking" morphemes in Gooniyandi, unlike those in languages for which the case analysis works best, show virtually no allomorphic variation. There is no allomorphy determined by the nominal stem, and very little allomorphy conditioned by the phonological environment.

The constituent of an NP to which a postposition is attached is not
necessarily a single word, but may be a word complex or another phrase. In the former case, the postposition normally occurs on the first word only:

$$
\begin{array}{clc}
(4-77))_{\mathrm{PP}}\left[\mathrm{NP}^{[\mathrm{WC}}[\mathrm{wambi}]_{\mathrm{WC}}\right]_{\mathrm{NP}} & - \text { yooddoo } & \left.\left.\mathrm{NP}^{[\mathrm{WC}}[\text { biddidbiya }]_{\mathrm{Wc}}\right]_{\mathrm{NP}}\right]_{\mathrm{PP}} \\
{[\text { name }]} & \mathrm{DU} & {[\text { name }]} \\
\text { Wampi and Amee' } & &
\end{array}
$$

When an NP dominated by a PP has a phrase embedded within it, the postposition may be attached to the embedded phrase. In such cases it is probable that the preferences remarked on above for placement of the postposition on constituents realising certain roles in the NP still obtain. However, there are insufficient examples to be certain of this, as nearly all embedded phrases consist of just a single distributional word. For example,


The only available example in which the embedded phrase has more than one word in it is $(4-79)$ below:

$$
\begin{aligned}
& \text { (4-79) }{ }_{\mathrm{pP}}\left[_{\mathrm{NP} 1}\left[\text { goornboo } \mathrm{NP}_{2}[\text { ngoombarna marlami }]_{\mathrm{NP2}}\right]_{\mathrm{NP1}}-n g g a\right]_{\mathrm{PP}} \\
& \text { woman husband nothing ERG } \\
& \text { milangina } \\
& \text { she:saw:me } \\
& \text { 'The woman without a husband saw me.' }
\end{aligned}
$$

(4-78) illustrates the preference for attaching the postposition to the Qualifier ${ }_{\mathrm{pp}}[\text { jinalingaddi }]_{\mathrm{pp}}$; however, this preference is occasionally overridden, for instance when the resulting sequence of postpositions is inadmissible, as in (4-80).

| $(4-80)$ | ${ }_{\mathrm{NP}}[$ boolba | -ngaddi wirla - -ya $]_{\mathrm{NP}}$ | giddagiddaari |
| :---: | :---: | :---: | :---: |
| things COMIT back LOC | he:runs |  |  |
| 'He runs with a pack on his back.' |  |  |  |

The PP has constituency structure as follows:

| (4 | ${ }_{\text {PP1 }}\left[{ }_{N P}[b o o l b a\right.$ things | ${ }_{P P_{2}}\left[{ }_{N P}[\text { wirla }]_{N P}\right.$ back | $\begin{aligned} & \left.-y a]_{\mathrm{PP} 2}\right]_{\mathrm{NP}} \\ & \mathrm{LOC} \end{aligned}$ | $<-n g a d d i>]_{\text {PP1 }}$ <br> COMIT |
| :---: | :---: | :---: | :---: | :---: |

There is further, negative evidence in support of the claim made in the
preceding paragraph. Where a 'possessive' phrase such as ${ }_{\mathrm{pp}}\left[{ }_{\mathrm{NP}}\right.$ [ngooddoo yoowooloo $\left.]_{\mathrm{NP}}<-y 00>\right]_{\mathrm{PP}}$ (that man DAT) 'that man's' in (4-75) below is embedded in an NP as in $\mathrm{NP}\left[\mathrm{PP}[\text { [ngooddoo-yoo yoowooloo }]_{\mathrm{PP}} \text { thadda }\right]_{\mathrm{NP}}$ (that-DAT man dog) 'that man's dog' which is to play the role of Agent in a clause (page 323), the ergative postposition would be expected (by the above) to occur on ngooddoo-yoo (that-DAT) 'by that'. However, -yoo-ngga (DAT-ERG) is an inadmissible postposition sequence. Instead of placing the postposition elsewhere in the phrase, on a less preferred constituent (for reasons that will soon become clear), a "topicalisation" pattern is employed, as shown in (4-82) (see also section 4.3.2 below).

| (4-82) | ${ }_{\mathrm{NP}}$ [ngooddoo that | $-y o o$ DAT | yoowooloo man | $\begin{aligned} & o \text { thadda }_{\mathbf{N}} \\ & \text { dog } \end{aligned}$ | $\begin{aligned} & \text { nganyi } \\ & \text { I } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | pp [nhoowoo | -ngga | $t^{\text {thadda }}{ }_{\text {pp }}$ | wirdnginbini |  |
|  | his | ERG | dog | it:bit:me |  |
|  | 'That man's | dog bit |  |  |  |

Although as a rule only a single postposition occurs with what is in notional terms a single nominal 'phrase', sometimes more than one postposition occurs. This happens in four main circumstances:
(a) If the PP is discontinuous, each continuous segment usually occurs in syntagm with an instance of the postposition. For example,
(4-83) wayandi -ga wida jooddami wan.gi -ga fire ERG bee it:chased:it smoke ERG 'The smoke of the fire chased the bees away.'
(b) Where a PP is embedded within an NP, every word of the PP that might be misconstrued as belonging to the 'higher' phrase (the NP) is explicitly marked as belonging to the PP: either by its distinctive oblique form, in the case of pronominals, or by an instance of the postposition otherwise. Quantifiers and Qualifiers are especially prone to misconstrual, and are usually followed by a postposition:

$$
\begin{array}{llll}
\text { (4-84) } & \text { ngiddangi } & \text { garndiwiddi } & \text {-yoo thadda } \\
\text { our } & \text { two } & \text { DAT dogs } \\
\text { 'our dog; the dog belonging to us two' }
\end{array}
$$

Contrast [ngiddangi garndiwiddi thadda] (our two dog) which has the normal interpretation 'our two dogs'. On the other hand, non-pronominal Entities, such as yoowooloo 'man' in the first NP of (4-82), are quite unlikely to be misconstrued: it is not likely that this phrase would be interpreted as 'that

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(individual)'s man and dog', or 'that (individual)'s man-type dog' (on the model of (4-38) and (4-33) above respectively).
(c) Occasionally two (sometimes more) instances of a postposition are found within what appears to be a single continuous (and non-embedded) PP, as in the following example:
(4-85) yoowooloo -ngga ngooddoo - -ngga ngaaddi yiganyi
doowngangadda
he:took:it:on:me
'Maybe that's the man who took my money.'
As the English gloss provided suggests, the phrase yoowooloo ngooddoo (man that) 'that man' seems to be split up by the two postpositions, giving a construction roughly equivalent in meaning to the English cleft and pseudo-cleft (see section 5.3.1 and McGregor forthcoming-e for further details and discussion). Elsewhere (see McGregor 1989 and forthcoming-e), I have referred to this phenomenon as phrase fracturing. In phrase fracturing, what is in experiential terms a single phrase constitutes a pair of juxtaposed phrases textually (see section 5.1 and Halliday 1985).
(d) Sometimes both members of a word complex (between which there is a relation of addition - see page 248 below) are followed by postpositions, as in
(4-86) moowngawiddangi yoowooloo -yarndi -yoo he:looked:for:them man PL DAT goornboo -yarndi -yoo
woman PL DAT
'He looked for the men and the women.'
It seems that the main reason why a phrase of this type is split is to give equal status or salience to each member of a conjunction (see also line (8) of Text 2). Types (c) and (d) amount to phrase fracturing which gives rise to 'phrase complexes', in which the relationship between the constituents is as set out in 4.3.1 below. Experientially they still constitute a single phrase, and it is this property that gives the effect similar to that of the English 'cleft' (see section 5.3.2 and McGregor forthcoming-e).

The foregoing discussion may be summarised as follows. Postpositions are attached to (and mark) the information focus of an NP, the constituent that carries the most important element of news-value in the phrase. This element is the one which could replace the whole phrase in the particular textual
environment in which it occurs. And, consistent with the remarks of section 4.1.3 above, this constituent is also the one which bears the most salient syllable of the phrase, typically the syllable with the strongest stress.
(ii) PP-P. It has already been mentioned that there are restrictions on the embedding of PPs within PPs: the depth of embedding can be at most two that is, figure (ii) of page 276 above shows the maximum attested depth (see also section 4.1.1). This occurs only when the 'highest' PP is a clausal constituent. Otherwise, (e.g. if the PP is an NP constituent), embedding is not possible. As predicted by my earlier remarks, the outermost postposition is normally attached to, and follows the innermost; the two postpositions are not usually attached to different words (compare example (4-80) above). For example:

## (4-87) ${ }_{\text {Pp1 }}\left[\text { PP2 }[\text { ngaddagi }-n g a d d i]_{p P 2}-n g g a \quad{ }_{\text {pp2 }}[j i n a l i]_{\mathrm{PP2}}\right]_{\mathrm{PP1}}$ nyaglooni <br> my COMIT ERG spear I:speared:it <br> 'I speared it with my spear.'

The small number of possible sequences of postpositions (as discussed in section 3.7) severely restricts the range of permissible embeddings.
(iii) ADV-P. There is litle to say about the third type of postpositional phrase, since only two constituents are involved, a postposition and an adverbial. Example:
(4-88) [banyangi -yidda] bijbiwarninyji
outside ALL he:wants:to:emerge
'He wants to go outside.'
In constructions such as this the adverbial may appear to be nominalised, and to be a referential expression - banyangi 'outside' in (4-88) might be seen as referring to a location outside of something. The main reason why I have not adopted this point of view, and inserted an NP node between the adverbial and the PP nodes (in figure (iii) of page 276), is that there is no evidence that this putative NP node can branch. (In all other situations in which I have claimed that adverbials realise NP roles, the NP node may branch, and the adverbial is not usually the sole constituent of the phrase.
(iv) $\mathbf{K}_{\mathrm{n} \boldsymbol{r}} \mathbf{P}$. Only non-finite clauses - that is, clauses which have non-finite VPs (see section 3.9.2 above) - may be embedded under NP nodes. Since verbal roots do not have the privilege of free occurrence, postpositions are always attached to the non-finite verb. For examples see section 5.5 .2 below,
and sentence (4-89).
$\begin{array}{ccccl}(4-89) & \text { pp }[\text { Knif }[\text { hangarndi } & \text { ngaa } & - \text { mawoo }]_{\mathrm{Knf}} & -n g g a]_{\mathrm{PP}} \\ \text { mouth } & \text { open } & \text { ngFanynga } \\ \text { mo } & \text { ERG } & \text { he:sang }\end{array}$
'He sang with open mouth.'
The postposition may, in addition, be attached to another word in the embedded clause (provided that this word is not already followed by a postposition marking its role in the embedded clause):
(4-90) marndi thiddi -yoo gardboo -woo fighting:boomerang fight DAT belt DAT 'The marndi boomerang is for fighting.'
1 take such examples to be instances of constituent fracturing (as discussed under (i) above, and in McGregor forthcoming-e), giving rise to a pair of juxtaposed phrases (see also below section 5.5.2).

It should be noted that not all postpositions have been observed in constituency with non-finite clauses. Those attested are: -ngga ERG, -ya LOC, -nhingi $\mathrm{ABL}_{1},-$ yangga $\mathrm{ABL}_{2}$, -ngaddi COMIT and the allomorph -woo of DAT (see section 3.7). Of these, all but the ERG may be, and usually are, directly attached to the verb root. The ERG postposition, however, must follow an infinitive or stem forming suffix (section 5.5.3).

For exactly the same reason as discussed under (iii) above, I have not put an NP node between the two nodes $\mathrm{K}_{\mathrm{nf}}$ and PP. However, semantically, the referent situation of the non-finite clause appears to be 'objectified', treated like an entity, and it is possible that an NP node should immediately dominate it. This is an issue for further investigation.

### 4.3 Phrase complexes

### 4.3.1 Juxtaposed phrases

Phrase complexes in Gooniyandi are formed only by the juxtaposition of phrases one to another, the juxtaposed phrases usually falling into different tone or intonation units (see section 5.3.1 below). Phrase complexes differ in terms of their internal structure from NPs and PPs as described in the preceding sections. As a consequence, phrase complexes must also be distinguished from phrases with other phrases embedded within them, in which case the embedded phrase fulfils some function within the full phrase.

The phrases of a phrase complex may be related in one of a number of ways, none of which are formally distinguished in the language - there are no
morphemes signalling the type of logical relationship involved (such as 'and' and 'or' in English), and the only possible formal distinctions must lie in intonation (which possibility has not, however, been investigated in detail). The following list of types is therefore not necessarily complete; nor are the types listed necessarily linguistically significant.
[1] Conjunction. NPs and PPs are conjoined by juxtaposition, without the use of a morpheme meaning 'and'. Examples are (4-86) and

| (4-91) $\mathrm{NP}^{[ }[$garndiwiddi | yoowooloo $]_{\mathrm{NP1}}$ | $\mathrm{NP}_{2}[$ yoowarni | goornboo $]_{\mathrm{NP} 2}$ |
| :---: | :--- | :---: | :--- |
| two | man | one | woman |
| 'two men and one woman' |  |  |  |

As a rule the two conjoined NPs fall into two different tone units (see above). In addition, there is usually a rise in pitch on the final syllable of the first conjunct, and a fall throughout the second conjunct - see for example line (2) of Text 3.

As has already been mentioned, the number markers -yooddoo 'dual' and -yarndi 'plural' have the phrase as their "domain". They indicate the number of individuals referred to by the phrase, and may be used somewhat in the manner of word-level conjunctions within a phrase, as illustrated in (4-77). It should be noted that they cannot be used to conjoin phrases, and indicate the number of a phrase complex.

There is some evidence that conjoined phrases form a single clausal constituent. Bound pronominals in the VP agree in number and person with the conjunction of the phrases, not separately with one of the conjuncts (example (4-91) could be followed by wardbiddiddi (go-(3pl)N+I-pa) 'they few went', but not by wardji (go-(3sg)N/I) 'he went' or wardbiddiyi (go-(3pl)N+I-du) 'they two went'.

It is possible that the following clause also exemplifies a type of conjunction:
(4-92) yooddoo ngaraggimi girili -ya girili -ya web he:makes:it tree LOC tree LOC
'(The spider) makes a web from tree to tree.'
[2] Disjunction. There is nothing resembling the disjunctive phrase complex of English with its connective particle 'or'. In order to express a type of open disjunction Gooniyandi uses the indefinite enclitic $-m i$ IND, as in (4-93) (for further discussion, see section 6.3 .8 below):

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(4-93) dawoonggoowaangginmiyi jaji maa -mi ngaaddi -mi you:two:like:it what meat IND stone IND 'Do you two want meat or money?'
The final two d-words in this example appear to be juxtaposed phrases, which together form a complex unit. There is no evidence that together they form a nominal phrase, or even a constituent of the clause.
[3] Elaboration. Following Halliday (1985:196) I use the term 'elaboration' in reference to the logical relation of equals: the relation whereby one unit provides a restatement of the other, further specifying it, or commenting on it (see also section 5.6 .2 below). The following subtypes are distinguishable:
(i) Identification. In identification the second phrase supplies an alternative designation of an entity, in order to facilitate its identification (this is the relation of identity or equality). For example,

| (4-94) yaanya gardiya welfare | ngaddagi jaliji | Fitzroy -ngarna |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| other white:man | my | mate | DW |

'Another Welfare person, my mate from Fitzroy Crossing.'
A special case of this relation is LISTING, in which an NP or PP is followed by one or more conjoined NPs or PPs which give a total or partial listing of the entities referred to by the first phrase. For example,
you(pl) PL father-in-law your
$\left.\mathrm{NP}_{3}[\text { garingi } \quad \text { ngaanggi }]_{\mathrm{NP3}} \quad{ }_{\mathrm{NP} 4}[\text { nginyji }]_{\mathrm{NP4}}\right]_{\mathrm{PC}}$ wife your you
'You lot: your father-in-law, your wife, and you.'
Here, the initial phrase $\mathrm{NP}_{1}$ forms a complex, not with a single other phrase, but with a phrase complex (PC), of type [1]. Sentence (4-96) exemplifies a variant in which the members of the list are referred to in a phrase which is constituted by a word complex, rather than by a phrase complex.

$$
\begin{aligned}
& \text { (4-96) }{ }_{\mathrm{NP} 1}[\text { ngidi }]_{\mathrm{NP} 1} \quad \mathrm{NP}_{2}\left[\mathrm{wC}[\text { David -jooddoo }]_{\mathrm{WC}}\right]_{\mathrm{NP} 2} \\
& \text { we(R) } \\
& \text { DU } \\
& \text { 'we two, including David' }
\end{aligned}
$$

(In this example, the second phrase is elliptical, with nganyi 'I' omitted from the Entity function (realised by a word complex).)
(ii) Clarification. Here the second NP specifies the first more precisely, to
make its reference clearer. This is the 'that is' relation:

| (4-97) maja | babligaj | -joo maja |  |
| ---: | :--- | :--- | :--- |
| boss | hotel | DAT | boss |

'the boss, the publican'
See also example (4-57). As these examples show, the second phrase is usually reference modified. This distinguishes clarification from attribution (discussed next) in which the second phrase is normally referent modified.
(iii) Attribution. This is a third type of 'is' relation, in which one unit (invariably the second) indicates either a quality of an entity (referred to by the first NP or PP), or a circumstance in which it is found, such as a location, association, etc. (cf. section 5.2.1.1.1.2 below). (4-98) is an example of the first of these subtypes, quality.

[name] water deep billabong
nyamani $]_{\text {NP3 }}$
big
'Joonabaabara, a deep waterhole, a big billabong.'
There is no strong evidence that juxtaposed phrases of type [3] constitute together single clausal constituents. (Where necessary, I will represent this type of juxtaposition by an equals sign between the units, without indicating a higher node.)

### 4.3.2 Constructions of adverbials and PPs

It was pointed out in section 3.4 that in general adverbials are mutually substitutable with PPs. The two classes of unit are not, however, in complementary distribution, and it is not unusual for a clause to have both an adverbial and a PP from similar semantic 'domains' (e.g. spatial, temporal, etc.), apparently entering into a close syntagmatic, as well as a close semantic relation with one another. Examples are (3-50) and

## (4-99) babligaj -nhingi jibiddi wardji <br> hotel ABL downstream he:went <br> 'He went downstream from the hotel.'

It seems reasonable to suggest that the adverbial and the PP in examples such as these are juxtaposed, and together form a unit complex of adverbial and PP. If this is indeed the case, what is the relationship between the units of the
complex? The most obvious candidate would seem to be the relationship of enhancement: that is, one unit expands on the other by embellishing around it, qualifying it with a circumstance of place, time, etc. (see Halliday 1985:196197, and pages $427-428$ below). (Alternatively, it might be argued that the relationship is no more than conjunction: each adds something to the other, giving further information of a different nature (PPs and spatial adverbials enter into different paradigmatic sets of oppositions). At present I am unable to decide between these two possibilities.)
Adverbials and PPs showing these same semantic inter-relationships do not always occur next to one another. I have argued elsewhere (McGregor 1989) that there is a difference in meaning between continuous and discontinuous adverbialPP complexes, and that this difference is identical with the semantic contrast between phrase complex continuity and discontinuity.

In examples (3-50) and (4-99) either the adverbial or the PP can be omitted from the clause with no loss of grammaticality, only a reduction in specificity. However, examples such as the following suggest a special case, a construction in which there is a closer connection between the two units.
(4-100) wayandi -ya wilajga waranggooddoo
fire LOC around they:sit
'They are sitting around the fire.'
riddinggi gamba -ya wardji
'He went along the side of the water.'
Here it would seem that one unit does more than just embellish the other, or add something new to it (by indicating a point of origin, or a destination, or whatever, as in the earlier examples). As before, the PP may be omitted from these sentences. But if so, it appears that the location is understood: riddinggi 'side' presupposes the side of something. If no location is mentioned, that is, one would seem to be implied anyway. The other relational type adverbials of location (discussed on pages 161-162 above) together with lanngaddi 'on top of' and babaabiddi 'inside' appear to form constructions of this close-knit type.
To put things in a slightly different way, given riddinggi 'side', something must be presumed as the 'focus' of this relationship, whether stated or not. The adverbial would seem to be inherently relational; by contrast, jibiddi 'downstream' (cf. example (4-99)) is orientative, but does not require a focus.

In the close-knit type it seems that the PP complements the adverbial, and the two together constitute a single clausal constituent - one which realises a
single role in the clause (see section 5.2). By contrast, I suggest that in the earlier examples the adverbial and the PP independently realise clausal roles, and do not together form a single constituent. However, this suggestion remains tentative, and requires further exploration.

Occasionally the two adverbials, lanngaddi 'on top of, above' and babaabiddi 'inside' occur in syntagms with NPs, instead of PPs, as in example (4-102).
(4-102) lanngaddi ngaaloo yoodjidi
on:top:of shade we:put:it
'We put (spinifex) on top of the boughshade.'
In such examples, the case for analysis as a single constituent with the NP complementing the adverbial is perhaps even stronger. In (4-102), without lanngaddi 'on top of', ngaaloo 'shade' would of necessity occur in the locative PP ngaaloo-ya (shade-LOC) 'in the shade'.

## CHAPTER 5

## THE CLAUSE

### 5.1 Introductory remarks

This chapter investigates the structure and semantics of the Gooniyandi clause, which as mentioned in section 3.1.1, is the highest ranking grammatical unit in the language.

The internal constituency structure of the clause is analysed in sections 5.2 to 5.4. Clauses are realised as syntagms of units which may be of phrase rank (that is, units of the types identified in the preceding chapters, NPs, PPs and VPs); or by non-ranking morphemes, adverbials and particles (section 3.1.2); or complexes of ranking and non-ranking units (as described in 4.3.1 and 4.3.2 above). However, as is the case for NPs (see section 4.1.1 and 4.1.2.1), a description of clauses in terms of the classes of the constituent units and their linear sequences does not take us very far. It is impossible to provide a general description of the clause in these terms alone; the functions of the units within the units of which they are immediate constituents (in this case clauses) must be taken into account (cf. page 253 above).

As argued in section 3.1.1, constituents are linguistic signs, and to each constituent form is associated a function, its role in the unit of which it is an immediate constituent. It seems that, as Halliday has suggested is the case in English (cf. e.g. Halliday 1970 and 1985), there are in Gooniyandi three primary types of function that a clausal constituent may bear, each of which contributes a distinct constituency structure to the clause. These primary functions, or metafunctions, are the ideational, textual and interpersonal (Halliday 1985:xiii).
(a) The IDEATIONAL meaning of a linguistic element is its expression of "content". This type of meaning is of two types. One relates to the representation of the world of experience, including phenomena in it; this is EXPERIENTIAL meaning. The other concerns the 'logical' relations that are imputed to lie between these referent phenomena, or the propositions, or parts of propositions, that express them; this is LOGICAL meaning. Experiential meaning of the clause is discussed in section 5.2.
(b) The TEXTUAL meaning of a linguistic element concerns its function in the structure of the message, how it provides links with, and relates that element to the text of which it is a part, and its extralinguistic context of occurrence. This aspect of the meaning and structure of the clause is discussed in section 5.3.
(c) INTERPERSONAL meaning concerns the organisation of a linguistic element in its role as an interactive event involving the interlocutors of the speech situation. A preliminary investigation of some aspects of the interpersonal meaning of Gooniyandi clauses is undertaken in section 5.4.

Having described the internal structure of the clause, attention is then turned, in sections 5.5 and 5.6 , to constructions involving combinations of clauses. There are two main possibilities (cf. Huddleston 1965 and pages 132133 above):
(i) The clause may be embedded in, and come to function as a constituent of another clause or of a phrase in another clause; rarely, a clause is embedded in a word. Embedding is not in itself a type of structure, and does not give rise to new structures; it is a property of constituents which enter into existing structures of a particular type, either clauses or phrases. Embedding is discussed in section 5.5.
(ii) Clauses may be juxtaposed to form complexes - that is, clause complexes or complex sentences. These are univariate structures, as distinct from the clause and phrase units themselves, which are multivariate structures (Halliday 1965/1981). In section 5.6 a preliminary attempt is made at identifying the range of logical type relations that occur between the clauses of clause complexes.

### 5.2 The clause as representation

We begin by describing some of the main aspects of the way in which the clause in Gooniyandi is organised in its function of encoding and describing the world.

### 5.2.1 Clause types

From the ideational point of view a clause may: (1) refer to a situation or occurrence of some type involving at least one participating entity or actant; or (2) assert a logical type relationship such as identity, attribution or existence. Correspondingly, two primary clause types may be distinguished; these are grammatically, as well as logically distinct:
(a) SITUATION CLAUSES, which have an inherent ${ }^{1}$ role of Process (realised by a VP), together with at least one actant, referred to by an NP or PP, and simultaneously cross-referenced by a bound pronominal form in the VP. I will refer to such actants as PARTICIPANTS. In other words, participants are those actants which are obligatorily referred to by bound pronominals in the VP, and by NP or PP constituents in the clause in addition.
(b) RELATIONAL CLAUSES, which make reference to entities, and sometimes qualities, but not to situations. There are three main types, which are again grammatically distinct from one another: (i) EXISTENTIAL clauses, which have a single inherent role realised by an NP , the referent of which is asserted as existing; (ii) IDENTIFYING clauses which have two inherent roles, each of which refers to an entity (but by a different designation), the referent entities being equated; and (iii) CHARACTERISING clauses which have two inherent roles, one referring to an entity, the other to a property or quality, which the entity is asserted as displaying.

Corresponding to the majority of clauses of types (b)(i) and (b)(iii) there are situation clauses which have in addition an inherent VP. The VP is typically a verb of stance - i.e. one of the verbs for 'lie', 'sit' or 'stand'.

This section is organised into three parts. The first concerns relational clauses (i.e. type (b)); the second concerns situation clauses in which the situation is one of 'being' or 'existence'; and the third concerns the remainder of the situation clause types - that is, clauses which refer to more 'active' processes, such as hitting, raining, seeing, behaving, etc..

### 5.2.1.1 Relational clauses

As has just been mentioned, relational clauses are verbless clauses which assert the logical relations existence, attribution (subclass membership in logical terminology) and identity (logical equality). The clauses themselves refer to ENTITIES, not to situations, and either present them to the hearer's attention

[^17](existential clauses), characterise them in terms of a quality or property they exhibit (characterising clauses), or equate them with something else (identifying clauses).

Identifying and characterising clauses have two inherent constituents, one of which is an NP, the other an NP, PP or adverbial. These constituents are simply juxtaposed, without the use of a copula. They are thus in a sense complexes of phrasal units, or of a phrase and an adverbial. The difference is that, in addition, they have a propositional nexus at the constituent boundary. Of the phrase complex types identified in section 4.3.1, only the elaborating type is consistent with the simultaneous presence of a propositional nexus; this gives the two types of "is" relationship, equative and ascriptive (Lyons 1977:469), expressed by identifying and characterising clauses respectively.

Existential clauses have a single inherent constituent, which is always realised by an NP. There is no propositional nexus, and as a consequence, propositional modifiers do not occur in this clause type.

### 5.2.1.1.1 Identifying clauses

In identifying clauses an equation is set up between two (distinct) nominal expressions. Three subtypes may be identified, depending on the exact nature of the relationship of equality involved: (1) intensive; (2) exemplifying; and (3) naming. There are also grammatical differences supporting the distinctiveness of the subtypes.
[1] Intensive identifying clauses. In intensive identifying clauses a relation of identity is set up between the referents of two different nominal phrases, as a means of identifying one of them.

$$
\begin{array}{cl}
\mathrm{NP} 1[\text { ngaddagi } & \text { thangarndi }]_{\mathrm{NP} 1} \mathrm{NP} 2[\text { Gooniyandi }]_{\mathrm{N} 2}  \tag{5-1}\\
\text { my } & \text { mouth } \\
\text { 'My language is Gooniyandi.' }
\end{array}
$$

This clause asserts that ngaddagi thangarndi 'my language' and Gooniyandi are identical, that the phrases are coreferential, and provide alternative designations of a single entity.

In this example, Gooniyandi identifies the speaker's language: knowing that I was learning the language, he identified his own language by a designation he could safely assume I would know the referent of. Clearly he was not (in this situation) using the clause to identify the language Gooniyandi as the one he spoke - since he could not have expected me to know what his language was.

Thus, Identifying clauses have the functions, IDENTIFIED and IDENTIFIER. (These terms are used following Halliday 1970/1976:167 and 1985:113.) In (5-1), ngaddagi thangarndi 'my language' is the Identified, and Gooniyandi the Identifier. It should be noted, however, that the same clause could also be used to identify the language Gooniyandi: had I been a newcomer requesting information about the language, the speaker could have identified it as his language - this would have narrowed down the field of potential referents.

As has been mentioned already, the two NPs provide alternate designations of a single entity. Where they differ is in their 'mode' of referring: one NP specifies the form - how the item is to be recognised; the other specifies the function - how the item is valued (cf. Halliday 1985:115). For example, (5-1) identifies the speaker's language (function) by name (form) thereby indicating how it is to be recognised. Following Halliday (1985:115) I use the terms TOKEN and VALUE respectively, for the two different modes of referring, form and function. Unlike the functional roles Identifier and Identified, Token and Value are uniquely assigned to the constituents of an Identifying clause. The Token usually corresponds to the nominal constituent which is most lexically specific; the Value corresponds with the nominal constituent which is least lexically specific. In terms of our example above, Gooniyandi is more specific than thangarndi 'language', so Gooniyandi is the Token (form), and thangarndi 'language' the Value (function).

The NPs in an identifying clause simultaneously realise one of the roles Identifier/Identified, and one of the roles Token/Value. The choices are independent, thus giving rise to two distinct types of identifying clause: DECODING identifying clause, in which the Identified is associated with the Value, Identifier with the Token; and ENCODING, in which the Identified is associated with the Token, the Identifier with the Value (Halliday 1968:202). Each of the four feature combinations may occur initially - i.e. each may realise the textual function of Theme (see section 5.3.2). The possibilities are set out below, with examples:

| Identified/Value | Identifier/Token |  |
| :--- | :--- | :--- |
| ngaddagi | thangarndi $\quad$ Gooniyandi |  |
| my | language |  |
| 'My language is Gooniyandi.' |  |  |

Identified/Token
ngirndaji riwi
this camp
'This place is ours.'
Identifier/Value

| ngoorndoo | niyaji |
| :--- | :--- |
| someone | this |

'Who is this man?'
Identifier/Token

Identifier/Value
ngiddangi
ours

Identified/Token yoowooloo
man

Identified/Value
jiginya
which your child
'Which (one) is your child?'
The first two orders, in which the Identified is initial, are the most frequent (cf. Kuno and Wongkhomthong 1981:79-80). The reverse order occurs mainly in examples such as the two shown above, in which the Identifier is an indefinite determiner which is being used interrogatively.
There is an unmarked association between the role of Identifier and the textual role of New (see Halliday 1967:226, 1985:117, and section 5.3.1 below). However, the association is not perfect (compare Halliday 1967:227). Partly for this reason, and partly because, while an identifying clause need not contain a Given NP, it always contains an Identified, the distinct experiential roles of Identifier and Identified must be set up and distinguished from the textual roles of New and Given.

In Gooniyandi, unlike English (see Halliday 1985:114), there is no need to distinguish a subtype of possessive identifying clauses which identify an item as someone's possession. Clauses corresponding to English possessive identifying clauses are in fact intensive (cf. Fawcett 1987): the two NPs provide alternative designations for a single entity, the possession; they do not relate the entity and its owner by the relationship of possession. Consider for example, clause (5-3), which is elliptical, with the Entity nominal ellipsed from the second NP, being given: ngiddangi 'our' realises the Deictic role in $\mathrm{NP}_{2}$. Compare what happens when the NPs occur in the reverse order. There are two possibilities:

'Our place is this (one).'

[2] Exemplifying identifying clauses. Exemplifying clauses establish a particular entity or class of entities as an instance or subset of a generic type.

They are characterised by an initial Identified/Value referring to a generic or indefinite class of entities of which the Identifier/Token is a member. There are no examples available of the reverse order. Examples are:
(5-8) [yaanya gawi] [gooloomangaddi]
other fish catfish
'Another fish is the catfish.'
(5-9) [yaanya gambangarna -nyali] [diwiwi]
other waterdweller REP short:necked:turtle
'Yet another water dweller is the short-necked turtle.'
Exemplifying clauses differ from intensive clauses in that (i) they have indefinite Identifieds, whereas intensive identifying clauses always have definite Identifieds, and (ii) the order of the roles is fixed. These grammatical differences might suggest that exemplifying clauses should be treated as a subtype of characterising clauses (see page 299 below). However, there is a crucial difference: if they were characterising clauses the order of roles would be invariably Attribute^Carrier, as against the otherwise predominant Carrier^Attribute order. Furthermore, the way in which these clauses were used in the texts in which they occurred was to give further examples of particular categories. In this sense they are "identifying" - they pick out certain items from a larger class of (potential) referents, as do decoding intensive identifying clauses.
[3] Naming identifying clauses. I use the term "naming" because one of the NPs provides a name for the other. Such clauses always involve the association of Identified and Token, and Identifier and Value. I encountered clauses of this type a number of times in learning Gooniyandi, especially when my teachers pointed out things to me in picture books or in the environment and named them. Some examples are:

| (5-10) | ngirndaji labawoo jiga |  |
| :--- | :--- | :--- |
| this | white | flower |

It seems certain, however, that naming identifying clauses are not restricted to circumstances of teaching non-speakers the names of objects. They are also
used in identifying personal names and relationship terms to be used between individuals, as in:

| (5-12) | nganyi | nyibaddi |
| :---: | :--- | :--- |
|  | I | [name] |
|  | I'm Nyibaddi.' |  |

I distinguish these clauses initially on intuitive-functional grounds. What they do is establish associations between non-linguistic referent entities and their linguistic designations. They do not establish associations between alternative designations for an object, as do intensive identifying clauses, in which both NPs are (presumed) cognitively significant to the hearer, and so capable of being understood to refer to something. In other words, the second NP in naming Identifying clauses, the name, is used as a representative of itself; it has no "mental referent" (Fawcett 1980:90). However, there is evidence that they are grammatically distinct in Gooniyandi. The evidence comes from two main sources. Firstly, the order of the phrases appears to be fixed; the clauses are always encoding. Secondly, alone among identifying clauses naming clauses have situation clause agnates, in which there is an inherent Identifier and an inherent Identified. This agnate clause involves the verbal lexeme goowaj- 'call (by) name':

| (5-13) nginyji | goowajgingga | ngoombarna |
| :---: | :--- | :--- |
| you I:call:you | husband |  |
| 'I call you husband.' |  |  |

It should be noted that naming clauses have alternative interpretations as intensive identifying clauses in which both phrases are used referentially (cf. Kuno and Wongkhomthong 1981:89). For example, (5-12) might be used to identify the speaker as the individual whose name is mentioned.

### 5.2.1.1.2 Characterising clauses

Whereas identifying clauses identify an entity in terms of an alternative designation, characterising clauses 'characterise' an entity in terms of some property, quality, location, use, etc.. That is, they add something new to the characterisation of a thing. For example, ( $5-14$ ) characterises the meat referred to by $\mathrm{NP}_{1}$ as rotten $\left(\mathrm{NP}_{2}\right)$.
(5-14) $\mathrm{NP}^{[ }[\text {ngirndaji maa }]_{\mathrm{NP} 1} \mathrm{NP}^{[t h o o w o o r n d o o]_{\mathrm{NP} 2}}$
this meat rotten
'This meat is rotten.'

This clause does not identify the meat; rather, it indicates a quality or characteristic of the meat. Characterising clauses thus consist of two inherent roles, an Attribute and a Carrier of that Attribute (I use these terms following Halliday 1985), and the Attribute is asserted as characterising the Carrier.

There are a number of grammatical differences between identifying and characterising clauses in Gooniyandi; they are not just logically distinguishable types. Firstly, the Attribute is invariably realised by an NP WTTH A QUALIFIER and an optional Entity, but no pre-Entity roles, or by a PP. On the other hand, both the Identifier and the Identified are always realised by NPs with overt Entity or pre-Entity roles, but NO post-Entity Qualifier; nor may they be realised by PPs. This difference in form justifies distinguishing the Attribute from the Identifier and Identified (cf. Halliday 1985:xx, Fawcett 1987:178, Martin 1987:18), and as a result the contrast between identifying and characterising clauses.

A second, derivative difference is that constituent order in intensive identifying clauses is free, and the Identifier may precede or follow the Identified, whereas in characterising clauses constituent order is relatively rigid. The Carrier usually comes first, making it Theme (section 5.3.2). In the few examples of the reverse order, the Carrier and the Attribute NPs come on distinct intonation contours, typically with a pause between them, and a rise on the first contour. This is a tagging construction (see page 376), and the Carrier is still Theme. An example is:
(5-15) joodoo / ngaddagi garingi /
straight my wife
'My wife is straight (i.e. of the correct subsection) for me?'
These facts can be explained as follows (cf. Halliday 1985:114): intensive identifying clauses make reference to two entities, either of which is a potential Theme. By contrast, characterising clauses refer to a single entity, the Carrier. Because of the preference in Gooniyandi for thematising entities over qualities or processes (see below page 378), the Carrier is the natural choice of theme. (Note that this also explains why exemplifying and naming identifying clauses (see above) are irreversible.)

Thirdly, only (some) characterising clauses, but NO identifying clauses, have situation clause agnates with an inherent Process referring to the mode of 'being' of the Carrier (see section 5.2.1.2.1). And fourthly, as we will see, the two types have distinct, non-parallel subtypes.

The Carrier is as a rule realised by an NP making reference to some entity - a person, animal or topographic feature (tree, river, hill, etc.). However, in a
number of instances (under circumstances which are not as yet clear), a place is treated as a Location for the Attribute, and the Carrier is realised by the Nominal riwi 'country, place'. This construction is invariably used in saying that a place is hot or cold:
(5-16) yiyili -ya riwi boordbara
LOC country hot
'It is hot at Yiyili', or 'Yiyili is hot.'
No instances of the type yiyili boordbara 'Yiyili is hot' occur in the corpus. However, the Carrier riwi 'country, place' may be omitted, and clauses such as yiyiliya boordbara 'It is hot at Yiyili' do occur. I regard such clauses as elliptical, rather than having a Locative PP as Carrier, since riwi 'country, place' may always be added.
However, I do not suggest this explanation as valid for the following example, which described a flower with a red centre.
(5-17) biliga thiwa middle red 'The middle is red.'
This is for two reasons. Firstly, I know of no word which could be used to refer to the place, the centre of a flower, in the same way as riwi 'country, place' refers to the place in (5-16). And secondly, spatial adverbials are attested in NP roles, and it is not unreasonable to assume that biliga 'middle' is fulfilling the role of Entity in the first NP of (5-17).

The construction exemplified by (5-16) is sometimes used to indicate that a place is 'good'; alternatively, the place itself may be the Carrier. The latter seems to normally occur in the sense of 'good for some purpose' - see example (5-299) below - rather than 'good in appearance'.

There are three main types of characterising clauses: [1] intensive, in which the Attribute indicates a property or quality of the Carrier ( $x$ is a $y$ ); [2] circumstantial, in which a location, origin, purpose, etc. is attributed of the Carrier; and [3] possessive, in which a possession is attributed to the Carrier.
[1] Intensive. Examples of intensive characterising clauses include (5-14) and (5-15) above. The Attribute is normally realised by an NP which consists of a Qualifier only; sometimes the NP has an Entity, but pre-Entity roles appear never to be realised (as mentioned previously). It follows that corresponding to each characterising clause there is usually a single NP consisting of the same words in the same order, in which the Qualifier of the NP corresponds to the Attribute of the clause. For example, to (5-14) there corresponds the NP [ngirndaji maa thoowoorndoo] 'this rotten meat'. Intensive characterising clause
might thus be regarded as fractured NPs (see section 4.2 above).
The lack of contrast between phrase and clause at the level of form has led some linguists to suggest that verbless clauses in other Australian languages resembling Gooniyandi consist of just single NPs - see e.g. (Dixon 1972:71). There are a number of reasons against this hypothesis as regards Gooniyandi. Firstly, propositional modifiers (which include markers of negation, probability, and so on - see section 5.4.1) mark the nexus between the two constituents by their position:
(5-18) ngirndaji gili mangaddi binyidi
this same not hard
'This is not hard (ground).'
Secondly, reversal of the order of the two joined constituents does not have a semantic effect identical with that of reordering the constituents of the corresponding NP. And thirdly, only the Attribute, and not the whole characterising clause may realise the function of Process in a clause.

A large number of different relations of attribution may be distinguished on intuitive grounds, including size, shape, colour, appearance, age, value, texture, sex etc.. This range is almost identical with the range of relations found between the Entity and its Qualifier in the NP. The most significant difference is that determiners and number words, which often function as Qualifiers in NPs, do not occur as Attributes in characterising clauses.

Sometimes an intensive Attribute (but not a circumstantial or possessive Attribute) may take a circumstance as a type of complement. There appear to be two main possibilities. (a) It may be a circumstance of Matter (on which see section 5.2.3.8), as illustrated in:
(5-19) NP1 $^{[n g a n y i]_{\mathrm{NP} 1} \quad{ }_{\mathrm{NP} 2}[\text { binaddi }]_{\mathrm{NP} 2} \quad{ }_{\mathrm{pp}}[\text { niyaji }- \text {-yoo }]_{\mathrm{PP}}}$
I knowledgeable this DAT
'I know that.' (Literally, 'I'm knowledgeable in respect of that.')
(b) Alternatively, it may be a circumstance of Cause (see section 5.2.3.6). For example,

| (5-20) bidi -yarndi | thiddi -mili gamba -nhingi |
| :--- | :--- | :--- | :--- |
| they PL wild CHAR water ABL |  |
| 'They're argumentative from grog.' |  |

[2] Circumstantial. A circumstantial attribute provides an extrinsic qualification of a thing in terms of its relationship to other things or places in the world, rather than describe a property of quality inherent to the thing. There are two main differences between intensive and circumstantial characterising clauses. Firstly, in circumstantial clauses the Attribute is conflated with a
circumstantial role, and so is realised by PPs or Adverbials, not NPs as in intensive clauses. Secondly, only for intensive circumstantial clauses are there agnate situation clauses in which the Process takes the form of the Attribute.
It should be noted that there is considerable formal overlap between the expression classes that realise circumstantial and intensive Attributes, and there is potential ambiguity in many clause-forms. For instance,
(5-21) niyaji goornboo jiginya -ngaddi this woman child COMIT
is ambiguous between the senses 'This woman is with child (i.e. is pregnant)' (intensive), and 'This woman has a child' (circumstantial). The first, intensive reading arises if jiginyangaddi 'with (a) child' realises the Qualifier role in the NP realising the Attribute, in which case it belongs to an expression class which includes badiji 'pregnant', nyamani 'big', etc.. The second, circumstantial reading arises when the PP jiginya-ngaddi 'child-COMIT' directly realises the clausal role of Attribute, when it belongs to an expression class which includes thadda-ngaddi 'dog-COMIT" 'with a dog', etc..

Five types of circumstantial characterising clause are distinguishable by the postposition that occurs on the NP functioning as Attribute; the circumstantial roles correspond with those found in other clause types (see section 5.2.3). We deal with the five types in order.
(a) Locational. In this clause type a location is attributed of an entity; the clause asserts that the entity is at a particular location. The Attribute may be realised by a LOC PP, by a locational adverbial, or by a complex the two. Examples of the three possibilities in order are:

| (5-22) | ngaddagi thodda | ngirndaji | -ya |
| :---: | :--- | :--- | :--- |
| my dog | this | LOC |  |
| 'My dog is here.' |  |  |  |

(5-23) garndiwiddi girli warlibiddi baabiddi
two same river below
'The two rivers are below (the surface of the billabong).'
(5-24) ngaddagi ngaaddi gilirni -ya babaabiddi my stone grass LOC inside
'My money is in the grass.'
Locational characterising clauses are fairly rare; the preferred pattern is for locations to be attributed of entities within situation clauses. This presumably correlates with the rarity of locative expressions as Qualifiers in NPs.
(b) Purpose. This type attributes of an entity another entity or process with
which it is implicated as a purpose, function, or beneficiary. Purposive Attributes are realised by DAT PPs:
(5-25) thangarla moonyjoo -yoo ligidd -woo
toothbrush tooth DAT clean DAT
'A toothbrush is for cleaning teeth.'
Unlike locational Attributes, purposive Attributes always occur in characterising clauses, and purposive expressions (DAT PPs) are often found as Qualifiers in NPs. Purposive Attributes are sometimes formally indistinguishable from possessive Attributes. But the distinction always shows up when the beneficiary/possessor is a personal pronoun. The pronoun (in oblique form) must be followed by the DAT Postposition in purposive Attributes, as shown in (5-26), but not in possessive Attributes.
(5-26) riwi mangaddi ngaddagi -yoo -miya yaddangi
boojoo -yoo -nyali
finish DAT REP
'This place is not only mine, it belongs to all of us.'
(c) Associative. The associative Attribute ascribes to an entity an association with another entity, and is realised by a COMIT PP. An example is the second sense of (5-21) above. Clauses with an associative Attribute generally translate into English as ' $x$ has $y$ ', or ' $x$ is with $y$ '.
(d) Comparative. Here the attributive relation takes the form of a comparison, and the Attribute is realised by a phrase in constituency with the enclitic -jangi SEM. For example,
(5-27) goornboo ngooddoo yoowooloo -jangi
woman that man SEM
'That woman is like a man.'
(5-28) [charlie -yoo manili] [[bill -yoo] -jangi]
DAT nose DAT SEM
'Charlie's nose is like Bill's.'
(Note that in (5-28) the PP Bill-yoo 'in respect of Bill' realises a Deictic role in an NP whose Entity (manili 'nose') has been ellipsed.)
(e) Source. The source Attribute ascribes an origin to an entity, and is realised by an ABL ${ }_{1}$ PP. Even when a "direction from" spatial adverbial (e.g. babirnali
'from the bottom') is used, it invariably occurs in an $\mathrm{ABL}_{1} \mathrm{PP}$, as (5-29) illustrates. Examples are:
(5-29) nganyi liyarnali -nhingi
I from:west ABL
'I'm from the west.'
(5-30) niyaji yoowooloo moolooddja
this mangi
this man [place] ABL
'This man is from Mulurrja.'
[3] Possessive. In possessive characterising clauses an item is characterised by the property that it is someone's possession. The Attribute is realised by an NP with a Qualifier realised by an oblique pronoun, or by a DAT PP. An example is:

$$
\begin{array}{ll}
\text { (5-31) } \text { butcher ngaloowinyi lanis -joo } \\
\text { [name] son } & \text { [name] DAT } \\
\text { 'Butcher is Lanis's son/a son of Lanis.' }
\end{array}
$$

Granted that is no need to distinguish a class of possessive identifying clauses in Gooniyandi, it may seem surprising that I should set up a distinct class of possessive characterising clauses. My reason for doing so is that possessive characterising clauses contrast with intensive and circumstantial characterising clauses in terms of the expression class of the Attribute: whereas in intensive clauses the Qualifier in the Attribute NP is always a nominal, in possessive clauses it is frequently a pronominal; and whereas in circumstantial clauses the Attribute is realised by a PP or Adverbial, in possessive clauses it is realised by an NP.

### 5.2.1.1.3 Existential clauses

Existential clauses constitute a relatively infrequent clause type which draws attention to the existence of an entity, usually in a particular spatial location. An example is:
(5-32) biliga gamba -ya / yoonggoo nyamani giddaabingaddi / middle water LOC scrub big long 'In the middle of the water there is some big scrub.'
This clause was uttered freely by a speaker of Gooniyandi on being shown a photograph which he interpreted as representing an island in the midst of a large body of water. The purpose of his utterance was to draw attention to the
existence, or presence, of the island, rather than to attribute a location of an island whose existence was assumed.
The claim of the previous paragraph is supported by the following observations. Had he intended to attribute a location of the island, the speaker would most likely have referred to it with a definite NP having the determiner ngirndaji 'this': except where their existence is being asserted, items which stand out as figures against the ground constituted by the context of situation are referred to by definite NPs having determiners. Secondly, it is highly unlikely that the speaker would both modify the referent of the nominal yoonggoo 'scrub' with a quality, and attribute a location of it. Finally, it would have been more natural for the speaker, if he intended to attribute a location of the island, to have given the main stress to a syllable of biliga gambaya 'in the middle of the water', rather than (as he did) to the first syllable of giddaabingaddi 'long'. The fact that the second tone unit of (5-32) is not secondary argues that the Theme is biliga gambaya 'in the middle of the water' (see section 5.3.2 below), and not yoonggoo nyamani giddaabingaddi 'big scrub', as would be expected if the clause was intended to attribute a location of the island. In fact, biliga gambaya 'middle of the water' is a starting point Theme for the clause - consistent with the fact that the water constitutes the ground in the photograph.

As example (5-32) suggests, existential clauses typically consist of two roles: a Spatial Location, realised by a LOC PP or a locational adverbial, or a complex of Locative PP and locational adverbial (as in (5-32)); and an Existent, realised by an NP. Only the Existent role is inherent. The Location, though frequently present, is not inherent, as shown by (5-57) and
(5-33) nya / girlala ngaanggi / here! tobacco yours 'Here! (This is) tobacco for you'
An existential clause sometimes has in addition to a Spatial Location, a Temporal Location. However, it seems that there can never be just a Temporal Location and an Existent. In the few examples available which consist of just these two elements, there is evidence that a verbal complex has also been ellipsed, being Given.

The Location and Existent phrases may come in any order, and the two possible orders are approximately equally frequent in the examples available. However, when the locational constituent occurs first, the two phrases always (in the examples available) occur in different tone units. There is always a hiatus at their boundary, and a slight rise in pitch on the final syllable of that phrase. The phrase referring to the Existent then has falling pitch, with the final stressed syllable the most salient. But when the Existent precedes the Location, the clause frequently consists of only one tone unit. As far as I can ascertain, this
unit always has a falling tone, with the greatest phonological salience going to the final stressed syllable of the unit. The two phrases may, however, constitute distinct tone units; if so, each will have falling tone. Furthermore, the second tone unit will normally have lower pitch than the first. Typical examples of each possibility are, respectively, the following clauses:
(5-34) laandi giriliya / garndiwangooddoo jirigi /
up in:tree many
'In the tree there are many birds.'
(5-35) nalija ngirndajawu /
tea here!
There's tea here!'

(5-36) | garndiwangooddoo |
| :--- |
| many |
| miyindi / | doowooya

'There are lots of bats in the cave.'

We may conclude from the preceding discussion that whenever the Location is thematic, it must constitute a separate information unit; a thematic Existent need not. This suggests that the Location is the marked choice of Theme; the Existent, the unmarked choice. Indeed, it would appear that the Location is thematic only in circumstances in which it is clearly the ground against which the existent stands as figure. The two possible choices of Theme, Existent and Location, correspond in a natural way to two distinct types of Theme: one is Theme as what the clause is about - most naturally the item claimed to exist, which will be a figure; the other is Theme as starting point of the clause - most naturally something which is given, the ground.

Despite the fact that both verbless existential clauses and locational characterising clauses typically consist of phrasal constituents of the same class, there is reason to distinguish them as grammatically distinct types. Firstly, an Existent always carries new information, and the denoting NP may never be omitted, whereas a phrase referring to an entity of which a location is attributed may be ellipsed, in case it conveys given information. The NP realising Existent may not have a deictic element since the presence of a deictic indicates that the NP is definite, and is compatible only with presumed existence of the entity. Secondly, the Location is inherent to locational characterising clauses, but (as we have seen) not to existential clauses. Thirdly, the order of the Location and Existent is more variable than is the order of Location and Carrier (in characterising clauses). In characterising clauses, because the entity is
normally given, and hence likely to be both what the clause is about and the starting point of the utterance, the Location occurs clause initially very infrequently. The greater variability in existential clauses may be attributed to the conflict between the Existent as what the clause is about, and the Location as the natural choice of starting point Theme. Fourthly, although both clause types have situation clause agnates, the contrast between the relational and the situation clauses contextualises in different ways in each. And finally, as a consequence of the way in which the contrast contextualises, locational characterising clauses are far rarer than their situation clause agnates; this statistical tendency does not hold for existential clauses.

As we can see from the examples given in this section, Gooniyandi verbless existential clauses frequently translate into 'there is' clauses of English. But there are occasions where this translation is inappropriate, as example (5-33) illustrates. The difference is that existential clauses in Gooniyandi, unlike their counterparts in English, as a rule function to draw attention to an entity, or present it into the hearer's consciousness. They are not used merely or exclusively to assert existence in the abstract, outside of the context of a particular speech situation or referent situation.

### 5.2.1.2 Situation clauses (a): modes of being

### 5.2.1.2.1 Attributive modes

There is a class of situation clauses which have an inherent Attribute, in addition to a single inherent participant and an inherent Process. These I will refer to as clauses (or situations) of being, for reasons that will become apparent shortly. The inherent participant is an Actor/Medium (see below page 323), and this participant is usually the Carrier, the thing which bears the Atribute, as in the following example.

| Carrier: | Attribute: | Process: |  |
| :--- | :--- | :--- | :--- |
| (5-37)ngaddagi <br> ngaboo | gambi | bagiri |  |
| my father | sick | he:lies |  |
|  | My father is sick.' |  |  |

The Attribute may of course be ellipsed in case it is given or understood. But if it does not occur, and is not given, then a clause such as ngaddagi ngaboo bagiri must mean 'My father is lying down'. In the absence of cues to the contrary, it will normally be presumed that he is lying asleep.

However, it is sometimes the case that the Carrier role is conflated with a non-participant Medium, the Range (see section 5.2.2.2 below). (5-38), for
instance, which has an ellipsed Actor/Medium (the speaker), has as well a nonparticipant Medium, the hand, and it is the latter entity which is located.

$$
(5-38)
$$

Attribute: Carrier: Process:
biliganyi marla bagingi
middle hand I:lay
'My hand only went halfway (i.e. when I reached up to the
cupboard).'

Unlike other situation clauses, constituent order in being clauses is relatively fixed: the Carrier almost always precedes the Attribute, which almost always precedes the Process, as the examples in this section demonstrate.

Three main verbs fill the Process role in clauses of being: bagi- 'lie', warang- 'sit', and wara- 'stand'. These verbals carry significant semantic content in being clauses, which are, furthermore, grammatically distinct from verbless characterising clauses. The two types are NOT synonymous, and the VP is NOT an optional place-marking copula. In brief, the verbal type makes reference to a situation, which is a mode of being or existence of the Medium/Carrier, concomitant with its carrying the Attribute; in the verbless type the Carrier is characterised by its possession of the Atribute (see McGregor forthcoming-f for further elaboration on this point). Evidence for my claims is set out below.

Firstly, the choice between verbal and non-verbal clause is significant. Verbal clauses describe a situation in which the Attribute holds; verbless clauses characterise the Carrier by its possession of the Attribute. This distinction between characterisation and engagement in a situation approximates, but does not coincide with at least two other oppositions that might be evoked to characterise the difference between verbal and verbless clauses which attribute qualities of things. They are: (i) the difference between permanent and temporary possession of the Attribute; and (ii) the difference between present and past possession of the Attribute (the relevant times may be with respect to either the speech situation or the referent events).

In many instances verbal clauses do show temporary, and/or past Attributes. For example,
(5-39) ngamoo bagingi
before I:lay
'I used to be (a good hunter).'
and (5-45). Most Attributes referring to mental states also, predictably, usually occur in verbal clauses (see examples (5-76) and (5-113)). The choice of verbal
clauses in circumstances such as these is, I suggest, determined by the fact that the Carrier cannot be characterised by the Attribute unless the Attribute holds at the time of speech or the time established in the text, and has been held continuously for some time.

Test cases arise when the Carrier CAN be characterised by the Attribute, but is not. To illuminate this distinction, consider the following three examples:
(5-40) gilbali dijbari bagiyi
I:found:it broken it:lay
'I found it (i.e. a knife) broken.'
(5-41) manyi goolyingi langa yijgawoo
food I:tasted:it salty bad
'I tasted the food; it was salty, and no good.'
(5-42) yoolajlimi thiddgirli -rni bagiyi
I:pulled:it:out straight SEQ it:lay
'Then I pulled (the wire) out straight.'
The temporal relation of the condition of the knife to the process of finding in ( $5-40$ ) is parallel to the condition of the food in $(5-41)$ when it was tasted. The difference is that in the first example the knife was found in a condition, and in the second, the food was tasted, and found to be salty: it was not tasted in its mode of being. In (5-40) the Attribute of the knife, its being broken, is a permanent as any of the Attributes illustrated in section 5.2.1.1.2 above. What (5-40) does is describe a situation, a mode of being of the knife when it was found. In other words, whereas (5-40) describes the circumstances, treating the condition of the knife as a situation, (5-41) adds a characterisation of the food and its mode of being is irrelevant. The point is that the situation described in (5-40) could equally well be described in the verbless clause nayoo dijbari 'the knife is/was broken'. If this mode of expression were employed, the full utterance of (5-40) would be better rendered into English as 'He found the knife; it was broken' (compare (5-41)). Similarly, in (5-42) the verbal Attributive clause makes reference to the SITUATION the wire was in as a result of the action.

To summarise, the speaker may (in certain cases) choose to treat an Attribute as a characteristic of the Carrier, or alternatively as an aspect of its mode of being. This is a real choice, determined by the way in which the speaker decides to represent the referent reality. In a sense, the choice of a characterising clause allows a narrator to move out of his role of recounting events, and to
place his own - or by implication, an agent's - interpretation or comments on them. Another way of putting it is that characterising clauses assert LOGICAL type relationships between entities and qualities, whereas attributive clauses of being express EXPERIENTIAL meaning (see section 5.1 above). This is in keeping with the fact that the former type resembles phrase complexes, the constituents of which are logically related. It is noteworthy that a similar semantic contrast underlies the opposition between verbal and verbless existential clauses: verbal existential clauses refer to situations of existence; verbless existential clauses indicate or point to an existent.

Consideration of one final example demonstrates these points clearly. As might be expected, the nominal mooyoo 'sleep' normally occurs in verbal attributive clauses of being, with the verb bagi- 'lie', in reference to the act of sleeping. There is, however, a single example in the corpus in which this word occurs in a non-situation clause:
(5-43) wardjwiddangi bidiyooddoo mooyoo
he:went:up:to:them they:two sleep
'He went up to them; they were asleep.
In keeping with my earlier remarks, the second clause of this example seems to be added as an afterthought, reminding the hearer of the fact that the two men were asleep (a fact which had been previously mentioned in the text).

Secondly, the choice of verbal is meaningful. If the Carrier remains in a particular posture throughout the duration of the time it has the Attribute, the choice between the verbs of stance depends on the following (cf. Goddard 1985:38, Simpson 1983:402):
bagi- 'lie' occurs if the entity adopts a reclining or horizontal position, or has significantly greater extent horizontally than vertically.
warang- 'sit' occurs if the posture is a sitting one, or where the body as a whole
adopts neither a horizontal nor a vertical orientation, and has roughly comparable horizontal and vertical extents.
wara- 'stand' occurs when the position is vertical, that is, when there is
significantly greater vertical than horizontal extent, or where a significant
part of the entity has vertical orientation.
Of the three verbs, bagi- 'lie' appears to be the least marked one semantically, and is used when the entity adopts no particular posture, and is completely inactive in an abstract situation of being. For example,
(5-44) jirigi yingi -ngaddi bagiri bird name COMIT it:lies 'The birds (all) have names.'
(5-45) bili marnawa bagiwiddi
Bill his:brother they:lay
'He and Bill were brothers.'
Bagi- 'lie', that is, appears to have a general existential sense - i.e. existence in anything but an upright or sitting (rounded) posture. Bagi- 'lie' covers senses such as 'remain' (as in 'I ate them and only one remained'), 'exist as a result of a change' (as in 'A tadpole changes and a frog results'), 'live' (see section 5.2.1.2.3 below), and 'exist' (see section 5.2.1.2.2).
Perhaps this helps to explain the facts concerning 'mental qualities': the least active and most abstract (e.g. mooyoo 'sleep' and binaddi 'know, knowledgeable') typically occur with bagi- 'lie'. On the other hand, the less abstract mental qualities tend to occur with one of the other verbs of posture. Thus, damarda 'blunt' and wangmadda 'mad' occur with the verb warang- 'sit', with the senses 'be deaf' (i.e. have blunt ears) and 'be mad' respectively.

Thirdly, the expression class which realises the role of Attribute differs somewhat depending on whether the clause is verbal or verbless. There are principled tendencies relating the type of attribute to one or the other clause type as the most common mode of expression. In general, the more 'concrete' and 'alienable' an Attribute is, the more it can be construed as an aspect of the mode of being of the Carrier, and the more likely it is that the attributing clause will be verbal. For example, locative and associative circumstantial Attributes, are quite concrete and alienable, and they usually occur in situation clauses. On the other hand, if the quality is so inherent as to be inseparable from an entity, it is unlikely to contribute to the mode of being of the entity. Thus qualities such as colour, size, and shape are infrequent as Attributes in situation clauses (they occur only when there has been a change in that quality). Likewise when the Attribute is another entity which is related to the Carrier either as a more abstract type of 'circumstance', such as purpose, source/origin, comparison, or possession - clearly such Attributes cannot affect the mode of being of the Carrier in any significant way, and are never (to the best of my knowledge) found in Attributive being clauses. In between these limits there are a number of descriptive Attributes of qualities which are neither inalienable, nor extrinsic to the object. These are the ones which commonly occur in both situation and relational clauses. If, on the other hand, we consider Attributes in terms of their characterising potential, exactly the same pattern emerges: locational, extent, and
associative circumstances characterise an entity least, while inner defining qualities and extrinsic uses, likenesses, etc. characterise an entity most, leaving the same residue of more accidental alienable qualities.

These criteria justify my claim that the verbs of stance do not function as mere copulas, but as Processes in a distinct clause type, which refers to a mode of being.

It is possible to distinguish the following types of clauses of being:
(1) intensive
(2) circumstantial
(a) locative
(b) extent
(c) associative

All of these have an inherent Attribute and an inherent Carrier. As has already been mentioned, there are no processes of being corresponding to identifying clauses. These types will be dealt with in order below. We will now describe the five subtypes of Attributive being clauses.
[1] Intensive. All that needs to be added regarding this type is that it allows two other verbal lexemes to realise the Process in addition to the three verbs of posture (and this adds further support to my claim that the verb carries significant semantic content). The verb ward- 'go' may occur when motion is the typical characteristic of the Carrier associated with its possession of the Attribute. For example, stockmen typically move about in the course of their work:
$\begin{array}{rlll}\text { (5-46) stockman } & \begin{array}{l}\text {-loondi now niyaji -nhingi } \\ \text { I:became then this ABL } \\ \text { I }\end{array}\end{array}$
stockman wardngi
I went
'I became a stockman then; after that I was a stockman.'
The other verb that may occur in being clauses is waba- 'smell, stink'. Particularly in attributing the quality of rottenness of meat, this verb - and never one of the stance verbs - appears to be always used.
(5-47) ngirndaji maa thoowoorndoo wabaari this meat rotten it:stinks 'This meat is rotten.'
[2] Circumstantial. There do not exist Attributive circumstantial clauses of
being corresponding to each type of circumstantial characterising clauses, and there is an additional type that occurs in the former but not the latter. We deal briefly with the three occurring types below.
(a) Locative. An example is B's reply in the following exchange:

(b) Extent. In this type, the Attribute indicates the extent of the Carrier. It is typically realised by an ALL PP or an adverbial. For example,

$$
\begin{array}{lll}
\text { (5-49) (baali) } & \text { danggi } & \text {-yidda bagiri } \\
\text { (road) Geikie:Gorge ALL it:lies } \\
\text { '(This road) goes to Geikie Gorge.' }
\end{array}
$$

(c) Associative. An example is (5-44) above, in which the birds are claimed to be in a condition of having names.

### 5.2.1.2.2 Existential modes of being

Existential situation clauses assert the existence of an entity in some mode of being. Like verbless existential clauses, they have an inherent role of Existent, whose denoting NP cannot be ellipsed. As a rule, there is also a temporal and/or spatial locational element present; however, the presence of the former is not dependent on the presence of the latter, as it is in verbless existential clauses. In addition, there is an inherent Process, which refers to a state of rest or being and is realised by a verbal complex, the lexical 'head' of which is one of the three verbs of stance, bagi- 'lie', warang- 'sit', and wara- 'stand'. Choice between the three depends on factors already adduced (see previous section), primarily characteristic posture and degree of activity. The following two examples illustrate the three verbals.
(5-50) ngamoo yoowooloo -moowa warangbiddi before man ON they:sat 'Before there were only Aborigines.'
(5-51) goobardiya marlami mayaroo warayi / yard -moowa [placename] no house it:stood ON
bagiyi /
it:lay
'At Goobardiya there was no house; there was only a yard.'
Sometimes posture is irrelevant or secondary - for instance, when the Existent is abstract and intangible, or when it is tangible but has no particular or invariant posture. In such cases, one of the two verbs warang- 'sit' and bagi- 'lie' occurs. Warang- 'sit' is normally used of things that are typically relatively active, especially people (see example (5-50).) (It should be noted that there is no suggestion here that people used to do nothing but sit around.) On the other hand, bagi- 'lie' is used where the thing is quite inactive. Examples (5-52) and (5-53) illustrate this:
(5-52) ngaddagi thiddi nyamani bagiri -ngadda
my fight big it:lies on:me
'There's a big fight waiting for me.'
(5-53) babirnali ngalwiri $-y a$ / thangarndi
from:underneath (head:of:crayfish?) LOC mouth
bagiri /
it:lies
'On the underneath of the crayfish is a mouth.'

Verbal existential clauses do not always assert that an entity not previously known about exists. They also occur in circumstances where the existence of an entity is taken for granted, but some facet of its existence is new, the result of a situation, or of a process of change. The two examples I have available involve the only two logical possibilities: change in an essential quality, and change in number, respectively:
(5-54) giljiddijgi -nhingi goornagjawani woogoo bagiyawi
tadpole ABL it:would:turn frog it:would:lie
'From a tadpole it would turn into a frog.'
(5-55) yaniyaningi giribaala ngarloodoo bagiringadda
right:now I:am:finishing:it three it:lies:on:me
'I'm nearly finished (my cassettes), there are three left.'
Natural translations of these examples would involve 'there results' and 'there remains', rather than 'there is' or 'there exists'.

Two strong generalisations may be made regarding the order of constituents. The strongest is that the verbal complex almost always comes
finally, as an examination of the examples of this section will reveal. Only slightly weaker is the tendency, demonstrated by nearly all examples in this section, for the phrase referring to the Location to precede the phrase referring to the Existent. The following is one of the relatively few instances of the order Existent ${ }^{\wedge}$ Location.
(5-56) gamba joomoo laandi bagiri /
water soak up it:lies
'There's soak water up there.'
The semantic difference between the two types of existential clauses is as follows. As mentioned in section 5.2.1.2.1 the non-situational existential clause draws attention to, or establishes the Existent. This is a possible means of introducing a primary participant into a narrative text - for example, one text concerning a particular young man began:
(5-57) yoowarni boolga / marlami boolga / yanoonggoo -nyali
one old:man not old:man young REP
yoowooloo /
man
'There was an old man, not really an old man, he was still young.'

By contrast, existential situation clauses do not assert or establish an Existent, or draw attention to one. They typically describe backgrounded situations within the text. For example, (5-51) described the place Goobardiya, and the situation referred to was not central to the unfolding of the narrative, and neither was the house or yard an important participant - neither is mentioned subsequently. Thus we see again the contrast between situation clauses and their relational clause agnates, the former describing some phenomenon of experience, the latter asserting a logical relationship. If identification corresponds to the logical "equals" (=), and characterisation to predication with a single variable ( $\mathrm{P}(\mathrm{x})$ ), then the existential relation in non-situation clauses corresponds to the logical operator "there exists" ( $\exists$ ).
Existential clauses must be distinguished from two other types of verbal clauses which share overlapping classes of realisations. They are locational attributive clauses (section 5.2.1.2.1), and clauses of inhabitation (section 5.2.1.2.3). The former attribute a location of an entity; the latter indicate a niche which it inhabits. The three types typically consist of an NP referring to an entity, a locational element referring to a place, and a verbal complex with one of the three verbs of stance. Not only do these types differ in terms of their extra-linguistic logical or referential meaning, but there are grammatical differences between them. (i) The existential type involves only two inherent roles, the Existent and the

Situation, whereas the other two types each have three inherent roles: Entity, Location and Situation for locational attributive clauses; and Inhabitant, Niche, and Situation for inhabitation clauses. (ii) NPs realising Existent may never be ellipsed, but NPs realising Entity or Inhabitant may. (iii) In existential clauses, the locational element may give either spatial or temporal Location; in the other two types, the Location must be spatial. (iv) Unlike the other two types, clauses of inhabitation have no relational (i.e. verbless) clause agnates.

### 5.2.1.2.3 Modes of inhabitation

One final being type to be discussed is that of inhabitation of a niche. Clauses referring to situations of this type have three inherent roles: an Inhabitant, a Process, and a Location. The Process is realised by one of the two least marked verbs of stance, bagi- 'lie' and warang- 'sit', in the available examples. The choice between the two verbals does seem to be semantically significant, the contrast being the same as that motivating the choice between these verbs in the two other types of being clauses. (Indeed, it is likely that if it is culturally appropriate to speak of trees inhabiting a place, we would expect that the other stance verb, wara- 'stand' would occur. There are no examples of this type, however.)

Again, bagi- 'lie' appears to be the unmarked member of the set, carrying least specification of the process of being, and suggesting less activity than warang- 'sit'. In reference to fish, whose characteristic posture is horizontal, bagi- 'lie' is used. An example from a text about water-dwelling creatures is:
(5-58) gamba -ya baabiddi bagiri
water LOC below it:lies
'(Fish) live below the surface of the water.'
For human beings and birds, whose characteristic posture is normally taken to be sitting rather than standing, warang- 'sit' is the unmarked choice.
(5-59) junjuwa -ya warangjiddi
Junjuwa LOC we:sit
'We live at Junjuwa.'
But contrast the following clause in which the characteristic mode of living in a house is taken to be that of rest:
(5-60) yoowarni -ya mayaroo bagoowooddooyoo
one LOC house they:two:lie
'The two of them live in the one house.'
It is clear that these clauses differ from both attributive and existential
situation clauses: for one thing, there are no agnate non-situation clauses. Furthermore, existence of the Inhabitant is clearly not being asserted, nor is the location an attribute of the Inhabitant. In addition, they differ from situations of action (see next section) in that they have inherent Locations. When bagi- 'lie' and warang- 'sit' refer to the processes of lying and sitting, Locations are optional.

### 5.2.1.3 Situation clauses (b): Modes of action

We now turn to clauses which refer to situations other than those of being. As was mentioned earlier, such clauses have one inherent role which will be referred to as Process, and which is realised by a VP, together with one or more inherent participant roles. Occasionally there is also another inherent role type, such as an Attribute, Identifier, or Circumstance.

Participant roles are defined as those roles which are always realised by NPs and PPs, and which, in addition, are obligatorily referred to by bound pronominals in the VP - either by pronominal prefixes to the CC, or by oblique pronominal enclitics. Not all PP types may realise participant roles, and those which can, pair with a unique case form of the cross-referencing pronominal. ${ }^{2} \mathrm{NPs}$, however, pair with each cross-referencing pronominal case form. Figure 5-1 shows the major possibilities.
Figure 5-1: Pairing of phrase types and cross-referencing bound pronominals


Participant roles may be either inherent or non-inherent in a clause. An initial classification of clause types may be made in terms of the realisations of

[^18]the inherent participant roles. A clause may have either one or two inherent participant roles; the third participant that may occur in some clauses is always non-inherent. Four clause types may be identified formally in terms of the phrasal realisation of the inherent participants. They are:


It follows from Figure 5-1 that in the above clause types, the inherent ERG PP must be paired with a cross-referencing NOM pronominal prefix, and the inherent DAT PP must be paired with the oblique pronominal enclitic. In intransitive clauses the inherent NP (which has no postposition) is paired with the NOM pronominal prefix. However, in transitive clauses it is usually paired with the ACC prefix, and very occasionally with an OBL pronominal enclitic. (An NP is paired with the NOM prefix in transitive clauses only in those cases in which the ERG postposition is omitted - see remark (2) below.) The alignments are summarised below:

Intransitive: NP NOM

Reflexive/Reciprocal:
ERG PP NOM
Transitive:
(a) ERG PP NOM

NP ACC
(b) ERG PP NOM

NP OBL

## Middle:

## ERG PP NOM <br> DAT PP OBL

## Remarks:

(1) The reflexive/reciprocal construction in Gooniyandi is typologically unusual: in most ergative languages in which the reflexive/reciprocal is verbally encoded the one obligatory constituent is an unmarked or 'absolutive' one (Edmonson 1978:646-647). It is normally only in those ergative languages in which it is not verbally encoded that the inherent constituent is an ergatively marked one. And in keeping with Edmonson's typology, in the Pama-Nyungan languages to the south of Gooniyandi, Walmajarri (Hudson 1978:66), Wangkajunga (my fieldnotes), Nyangumarta (Nash 1980:205), which also have the obligatory constituent in the ergative, the reflexive/reciprocal is realised by an enclitic pronominal, and is not a feature of the verb.
(2) Unlike a number of so called "ergative" languages, ergative marking in Gooniyandi occurs on all phrase types, irrespective of person (cf. Dixon 1979). However it is optional: in each of the clause types marked above as having an ERG PP, the ERG postposition may be omitted, and the participant role may be realised by an NP instead. There is however a strong correlation between inanimacy and the realisation by an ERG PP. An inanimate in the appropriate role is almost invariably realised by an ERG PP.
The exact significance of the presence vs. absence of the postposition remains unclear. It might be remarked, however, that its main function is not simply to distinguish between the "subject" and the "object" (to use these terms loosely, with the obvious senses), as has been claimed with respect to a number of 'optionally ergative' languages, such as Dalabon (Capell 1962:111), Murrinhpatha (Walsh 1976:405), Motu, etc. (cf. Dixon 1979:71). That this is the case should be clear from the following observations: In two of the clause types in which ERG PPs occur, reflexive/reciprocal and middle, it is clear that the ERG is not needed to distinguish between any roles. Secondly, there are many instances
of occurrence of an ERG PP in a transitive clause in which there could be no possibility of confusion as to the identity of the "subject" and "object". Furthermore, realisation of this participant role by an ERG PP is much more frequent in texts than in formally elicited material (where its use is comparatively rare). A preliminary investigation of half a dozen texts (all narratives in the first and third persons) showed that the relevant participant role was realised by an ERG PP in fifty cases, and by an NP in ten cases, in transitive, middle and reflexive/reciprocal clauses. (The small number of cases is due to the fact that the participant role was normally ellipsed - see remark (3) below.) In only a handful of the fifty cases of PP realisation could there have been any reasonable possibility of ambiguity had an NP occurred instead.

These facts strongly suggest that the presence of the postposition plays some role in the text, possibly giving some sort of salience to the constituent to which it is added, and may have something to do with foregrounding of the whole clause in which it occurs within the text. It has been suggested by Hopper and Thompson (1980:294-295) that foregrounding is associated with high transitivity, backgrounding with low transitivity. It may be reasonable to see the clausal variants in which realisation by an NP occurs as "less transitive" than those in which realisation by an ERG PP occurs. For the moment, however, this remains only a possible issue for future research. I think it likely that there are a number of factors pertinent to the occurrence or not of the postposition. I propose to ignore this complication in the remainder of the discussion. The option ERG PP or NP will be assumed to lie outside the system of clausal transitivity: i.e. the NP and PP will be assumed to be alternate realisations of a single role.
(3) Quite frequently phrasal reference to the participant does not occur: within continuous texts, it is not unusual for clauses to consist of a VP only, or of a VP together with phrases and words which refer to non-participant entities, qualities, etc. (see section 5.3.1 below). Even in "isolation" it is common for the clause to occur without phrasal reference to its participants. This is especially true for first and second person participants. Speakers do not normally refer to them by free pronominal forms (which, referentially, are redundant in such clauses) in elicited sentences, and seem to regard their use in this context as pedantic.

A VP on its own, that is, constitutes in general a fully 'grammatical' clause capable of independent occurrence. (It will generally translate into an English sentence involving pronominals; occasionally they are not quite this specific.) I assume that these clauses, though 'grammatical', are incomplete, and that their inherent participant roles have not been ellipsed. ${ }^{3}$ The alternative to this, that the participant roles are not clausal but phrasal (i.e. VP) roles runs

[^19]into a number of difficulties. These relate to the fact that it is the morphological shapes of the phrases referring to the participants that define the significant 'transitivity' features of the Gooniyandi clause. The forms and combinations of forms of the pronominal prefixes and enclitics do not do this. This will become clear shortly. Furthermore, the absence of the major inherent participant roles may be accounted for under the assumption that they have been ellipsed (see section 5.3.1).
(4) Occasionally another bi-valent clause type occurs in which the inherent roles are realised by an ERG PP and a LOC PP, the latter being paired with the oblique pronominal enclitic. E.g.:

$\begin{array}{ccccc}\text { (5-61) } & \text { nganyi } & -n g g a & \text { thadda } & -y a \quad \text { yoowangiraa } \quad-n h i \\ \text { I } & \text { ERG dog } & \text { LOC I:exercise:caution of:it } \\ \text { 'I'm afraid of the dog.' (i.e. I act cautiously with respect to it) }\end{array}$
(5-62) ngaaddi jirigi -ya ngiddlimi -nhi
stone bird LOC I:threw:it at:it
'I threw a stone at the bird.'
In all such cases there exists an agnate clause in which a DAT PP occurs instead of the LOC: thadda-yoo (dog-DAT) 'for the dog' and jirigi-yoo (bird-DAT) 'for the bird' could have occurred instead of thadda-ya (dog-LOC) 'at the dog' and jirigi-ya (bird-LOC) 'at the bird' in (5-61) and (5-62) respectively. The exact meaning contrast between the two modes of expression remains unclear, and would appear to lie in the way the situation is viewed, rather than (necessarily) in differences in the extra-linguistic reality referred to.

The four clause types identified above may be referred to as the transitivity types in Gooniyandi: the distinctions are concerned with the "direction" of the action. This is a highly abstract system of meaning, the features of which contextualise in different ways depending on the 'semantic type' of the clause (see page 326 below).
Transitivity has traditionally been regarded as a feature of verbal lexemes. It has been claimed that in most Australian languages every verbal root is specifically categorised as either transitive or intransitive, and changes in transitivity must be marked by the presence of a derivational affix (Dixon 1980:278). This is not the case in Gooniyandi. Many, if not most verbal roots occur in more than one of the four transitivity types. For example, the verb mila- 'see, look at' occurs in each of them:
(5-63) nganyi milangiri
I I:see
'I am looking.'

| (5-64) | nganyi | -ngga |
| :---: | :---: | :---: |
| I milangarni |  |  |
| I |  |  |
| I | ERG | I:saw:myself |


| (5-65) nganyi -ngga yoowooloo milala |  |
| :---: | :--- | :--- |
| I ERG ERG | I:saw:him |
| II saw the man.' |  |

(5-66) nganyi -ngga mawoolyi
I -yoo milalimi
I
ERG children
II glanced at the children.'

In these cases it is clear that the choice of classifier serves to distinguish between the four transitivity types. The classifiers cannot, however, be regarded as 'derivational' affixes, marking the change in transitivity value of the root. And neither the classifier itself nor the VP as a whole can be (as a rule) specified as to transitivity type.

Firstly, with a single exception, every classifier which can occur with two pronominal prefixes may occur in both transitive and intransitive constructions (see sections 3.9.3.2.2 and 6.5.5). (The exception, +ADDI, does however sometimes occur in middle clauses.) For example, compare (5-65) with
(5-67) middi milaa
sun it:sees:it
'The sun is shining.'
(5-68) middi -ngga milaa
sun ERG it:sees:it
'The sun is shining on it (making it hot, etc.).'
Conversely, the classifier +I which occurs with one pronominal prefix only may occur in both intransitive and middle clauses (see for example, (3-21), (3-43), (5-59), (5-61) and so on). There are four exceptions: + ARNI $_{2}$ and + MARNI occur in reflexive/reciprocal clauses only, while + ANI and + BINDI appear to occur in intransitive clauses only. Secondly, the presence of the oblique pronominal enclitic does not automatically mark the clause as middle, as shown by type (b) transitive clauses, and various other clauses in which it cross-references a noninherent participant. It is clear from these observations that even given the combination of classifier and the lexical verbal element, it is not always possible to predict the transitivity value of the clause. However this may be, the VP may be regarded as, in a sense, a minor replica of the clause, which makes reference to the 'nucleus' of the situation, including the participants (in pronominalised form), and there is a reasonable, but imperfect correlation between the transitivity of the clause and its VP type.

There is clearly a bifurcation between the intransitive and the three other transitivity types: the former alone may not occur with a participant referred to by an ERG PP. Semantically, this corresponds to the opposition between NONDIRECTED and DIRECTED actions. In intransitive clauses, the sole inherent participant is simply engaged in a process, of and by him/herself. There is no 'transfer' of action to or from any other entity. (Ultimately, of course, this depends upon the speaker's perspective: there may well be an external cause or
goal to the process, which the speaker does not opt to mention.) This sole inherent participant of an intransitive clause will be referred to as the MEDIUM: ${ }^{4}$ it is the entity through which the process is actualised, and comes into existence.

In the other three types, there is some 'direction' involved in the process: there is an inherent participant, referred to by the ERG PP, who is engaged in some sort of directed activity. The action extends from this participant, which will be referred to as the Agent, towards something. The Agent is the means by which, or through which the process takes effect, and is directed. It is in a sense the 'source' of the directed activity, which emanates from it.
By 'directed' action I do not mean that the process need necessarily be in the control of an intentionally directing agency. This may by true of the paradigm cases where there is human agency, such as gard- 'hit, kill, fell' and gaj- 'cut', etc., but even in these cases the action may be accidental. In any event, the process clearly still emanates from some individual, the Agent. Similarly, directed processes may emanate from inanimates. Consider for example the following rather unusual clause:
> (5-69) waya -ngga mirdmarni wire ERG it:tied:itself 'The wire is tangled up.'

What this clause refers to is not just any type of tangled mess of wire, but one that arose (or is considered to have arisen) out of the agency of the wire itself, and not through human intervention. Tangled messes of long items such as fishing lines and wire may be referred to in two ways: either by a clause such as (5-69), which is typically used in case the material is wire or fishing line, which materials have the property of recoil. ( $(5-69)$ described what happened when a long length of fencing wire was kicked.) In other cases, where the tangling is of something which has no such property of recoil, a non-reflexive construction is used, recognising an external agency - cf. example (5-170).

Finally, this interpretation applies also to cognitive processes and processes of perception. It is clear that in Gooniyandi such processes are seen as active, directed from the experiencer or perceiver (through the agency of his/her organs of perception); they are not seen as impinging on him/her from the outside (see examples of mila- 'see' above), even if $s /$ he is relatively passive. The notion of 'direction' is thus an abstract one removed from all connotations of intention. But in general it is obvious which role in the process itself is the Agent, and source of the directed action, even if in the real world (as it is currently perceived by Western science) s/he is not the real or ultimate cause.

4 I use the term "Medium" following Halliday (1985). Although I have defined this term in the same way as Halliday defines it for English, it does not have precisely the same designation or significance in the two languages, primarily because of the differences in the way the two languages organise the clause semantically.

There are two main possibilities: the action may be directed out from the Agent to some (conceptually) distinct entity, or it may be directed back on itself, from the Agent back to the same entity. In the latter instance, there are two further possibilities: either the activity is directed from each single entity constituting the (set of) Agent(s) back on to itself (giving the reflexive sense), or it is directed among the entities constituting the (set of Agent(s) if this has more than one member. Only one inherent participant role is involved in this process type, the Agent himself/herself, and the Process (realised by the VP) is explicitly marked as directed back on itself by the choice of one of the two classifiers $+\mathrm{ARNI}_{2}$ and + MARNI.

In case the action is directed from the Agent to a conceptually distinct Goal, there are two possibilities: the clause may be transitive or middle. The difference between these two modes concerns the relation that the Goal bears to the process. In transitive clauses the Goal is an essential feature in the actualisation of the process, and the action must extend to and reach it, in order to be effected. Of course I do not mean to suggest that there must be some actual physical connection between the Agent and the Goal. What I am saying is that the 'transfer' of action must be completed. This transfer is clear enough in processes such as gard- 'hit', galiny- 'carry', gaj- 'cut', gajgaj- 'chop', and other such "material" processes, which are clearly actualised through the Goal. (If the Goal is missed, the process goes unactualised.) But the same also holds for processes of perception and cognition, such as mila- 'see, look at', danymili'hear, listen to', lingi- 'think about', etc.: the Goal must be actually perceived in order for the transitive process to be actualised.

On the other hand, middle clauses refer to processes in which the Goal need not be reached in order for the process to be achieved. Typical middle clauses include such processes as nyimij- 'wink at', jijag- talk to, miga- 'tell to', nyamnyam- 'whisper to', yiniga- 'do something to', moow- 'search for', etc.. In all of these cases the Goal need not be reached in order for the process to be effected: the person winked at, spoken to, etc. need not receive the communication; the person sought after need not be found, and so on.

The differences between the two possibilities may be more accurately described in the following terms. In the transitive mode the Goal is a MEDIUM - that is, as above, it is something through which the process is actualised and enacted. In the middle mode, the Goal is instead implicated or involved in the process, as something towards which the action is directed, but not something through which the process must be actualised. In a few cases there are minimal pairs for this distinction. (5-65) and (5-66) are examples involving mila- 'see',
which in the transitive mode requires that the process be actualised through the thing perceived, but which in the middle mode does not require actualisation.

Other minimal pairs can be found, and more particularly, every type (b) transitive clause (see page 319 above) is agnate with a middle clause. The Medium/Goal of the former corresponds with the non-Medium/Goal of the latter:
(5-70) nganyi -ngga boolja / thadda thoolnglimi -nhi
I ERG ball / dog I:kicked atit 'I kicked the ball/dog.'
(5-71) yaanya -ngga ngaddagi -yoo / -ya thoolngmi -ngadda other ERG my DAT / LOC he:kicked at:me 'The other (man) kicked at me.'
The contrast in all such examples seems to be exactly the one proposed here that is, whether the process is actualised through the Goal, or need not be actualised through the Goal. (5-71), but not (5-70) allows that the process may not have been effective, that the kick may not have connected.

The four transitivity types may now be described in terms of their inherent transitivity roles as follows:

| Intransitive | MED |
| :--- | :--- |
| Reflexive/Reciprocal | AG/GL |
| Transitive | AG + MED/GL |
| Middle | AG + AFF/GL |

Moving away from the transitivity labels, the following system of voice may be tentatively proposed for Gooniyandi clauses (cf. McGregor 1985):

Figure 5-2: System of clause transitivity


It is clear that the situations of being discussed in the previous subsections are also describable in terms of this voice system. They are invariably nondirected processes, having a Medium which is the Carrier of the Attribute, the Existent, or the Inhabitant, in the respective modes of being.

Figure 5-3: Transitivity and semantic type


The four transitivity types are not distributed evenly across the semantic range of situation types in Gooniyandi, as Figure 5-3 indicates. These semantic types are admittedly based on less than perfect understanding of this aspect of the grammar; they are intended to be significant semantic types, and not to be
merely intuitive groupings. Below I attempt to provide some linguistic evidence for the semantic classification. However, it should be borne in mind that these suggestions are tentative, and in need of further, intensive investigation.

This figure distinguishes four primary semantic types, behavioural, active, receptive, and being situations (cf. Halliday 1967, 1970). The latter, which were discussed in section 5.2.1.2 are defined by the presence of a verb of posture, together with one inherent participant role (Carrier, or Existent), and one inherent non-participant role (except in existential clauses). Receptive situations are those in which the Medium is an Undergoer semantically, and the Agent (if one occurs) is a Causer. They include situations of becoming, in which the process is realised by a nominal (see examples (5-72) and (5-73)), happenings (exemplified in (5-74) and (5-75)), and induced motion (example (6-155)).
(5-72) nganyi nyamaniloondi
I I:got:big
'I got big.'
(5-73) nganyi -ngga jiginya binaddigmiila
I ERG child I:taught:it
'I am teaching the child.'
Undergoer: NP
nayoo dijbindi
knife it:snapped
'The knife broke.'
Undergoer: NP
(5-75)

| nayoo | dijjingi $\quad$ ngoorndoo | -ga |
| :--- | :--- | :--- |
| knife | he:snapped:it someone | ERG |

'Someone broke the knife.'
As indicated in Figure 5-3, receptive situations occur only in intransitive and transitive clauses. Indeed, it appears that to every transitive receptive clause there corresponds an agnate intransitive clause, in which there is no Agent/Causer participant.
It might be remarked that the choice of treating a particular circumstance as a process of becoming rather than of being may carry connotations other than the opposition between entering and being in a condition. Since the Carrier in the becoming process, but not in the being process, is an Undergoer, the choice of this clause type may suggest that the Carrier is more strongly affected by the process. Compare, for example, the following two clauses.
(5-76) ngiddinyjila warangjiddi hungry we:sat 'We were hungry (last night).'
(5-77) $\begin{array}{ll}\text { nganyi } & \text { ngiddinyjilangiri } \\ \text { I } & \text { I:am:hungry }\end{array}$ "I'm stinking hungry." (speaker's gloss)
The remaining non-being situations have one participant which enacts or does the action, rather than undergoes it. This participant, the Actor, is the Medium in intransitive clauses and the Agent in other clauses. These clauses always have an Actor, and may have a Goal in addition (if the Actor is an Agent). A distinction has been made between behavioural and active situations, although it is not yet certain where exactly the dividing line between the two should be placed. One way in which it may perhaps be drawn is as follows. Behaviourals have primarily an intransitive voice, and to each clause of another transitivity type there corresponds an intransitive agnate. It follows that a behavioural Actor (typically an animate) can always be a Medium. If $s / h e$ extends his action towards a Goal, that Goal need not in general be reached: the Goal need not be a Medium. That is, there will be an agnate clause in which the Goal is not a Medium. Behavioural clauses thus have two primary transitivity values, intransitive and middle, the Medium of the former corresponding to the Agent of the latter. (This correspondence defines the Actor role.) Sometimes behavioural clauses have in addition a transitive agnate. These include processes such as yoowa- 'fear, exercise caution with respect to', thoolng- 'kick', nyimij'wink', etc.. But for the majority of clauses of this type there is no transitive agnate. This holds for communicative situations (having verbals jag- 'say, tell', jijag- 'speak', nyamnyam- 'whisper', etc.), seeking (with the verbal moow- 'look for'), and motion (with verbals ward- 'go', gidda- 'run', etc.). Where there is no transitive agnate, in inwardly directed action only the reciprocal interpretation is allowed. In particular, this voice is available only when the Agent is nonsingular. Thus,
(5-78) jijagjiddi (ngidi)
we:spoke (we)
'We spoke.'
(5-79) jijagjiddi -nhi
we:spoke to:him
'We spoke to him.'

## (5-80) jijagïddarni

we:spoke:together
'We spoke together.'
But for a singular Actor only the first two options are available: for example, jijagji 'he/she spoke', and jijagjinhi 'he/she spoke to him/her'. To express the idea 'he/she spoke to him/herself', an intransitive clause is used with an oblique or emphatic pronominal indicating that the individual acted alone - see example (3-79).

Active situations constitute the remainder of the non-being situations. Here the primary clause type is transitive, and to each transitive clause there corresponds a reflexive/reciprocal clause (both interpretations being always allowed). In addition, there may be an agnate middle or intransitive clause - see examples (5-63) to (5-66) above.
Clauses of motion have been included as a subset of the behaviourals since there may be a middle agnate. For example, compare
(5-81) boolga -ngga wardjiwiddangi gooloowadi -yooddoo -yoo old:man ERG he:went:to:them initiands dual DAT 'The old man went up to the two initiands.'
with boolga wardji 'The old man went'. (Transitive agnates of clauses referring to motion are all receptive clauses of induced motion, in which the Medium is an undergoer, not an Actor.)

### 5.2.2 Inner roles

Up to now I have considered only those roles inherent in clause structure. These inherent roles define minimal clauses, which have been classified by the types of inherent roles and their combinations. 'Minimal' clauses may be fleshed out with other, non-inherent roles. These fall into three main types: INNER ROLES, ATTRIBUTES, and CIRCUMSTANCES.

By inner roles I refer to roles which are in a sense central to the situation, but which do not take part in its 'direction': they stand outside of the transitivity structure of the clause. There are three inner roles. One of them, the role of affected, is a non-inherent participant role. Participants in this role are crossreferenced by the oblique pronominal enclitic (recall that participant roles are defined as those which are cross-referenced somewhere in the VP). The two other inner roles are non-participant ones. Both have corresponding inherent participant roles, either the Medium or the Agent, in some agnate clause. Inner roles are discussed in order in the subsections below. Circumstances will be discussed in section 5.2.3 and attributes in section 5.2.4.

### 5.2.2.1 The Affected participant

We have seen that some clause types have an inherent participant role, the nonMedium Goal, which is realised by a DAT PP and is in addition cross-referenced by an oblique pronominal enclitic to the VP. But the oblique enclitic also crossreferences non-inherent roles in the clause. I define an AFFECTED participant role to be a non-inherent role which is realised by a PP and which is simultaneously cross-referenced by an oblique pronominal enclitic to the VP. (The reason for this definition will be made clear below.) This role stands outside of the system of clause transitivity, and has nothing to do with the 'direction' of the process. An Affected participant may occur in clauses of all transitivity types bar middle - i.e. intransitive, transitive, and reflexive/reciprocal. (Only rarely, however, does one occur in reflexive/reciprocal clauses; I have located only a couple of examples in the corpus.)

The Affected is usually realised by a LOC, DAT, ABL, or ALL PP (never by an ERG, COMIT, or PER PP in the corpus). Some examples are:
(5-82) moordoo yoodgoodoo -widdangi niyaji -yooddoo -yoo cicatrice they:put:it on:them this DU DAT 'They put cicatrices on the two.'
(5-83) mirdlimi -nhi thiddoo -yoo
I:tied:it for:him kangaroo DAT
'I tied (a noose) for the kangaroo (i.e. to catch it).'
(5-84) ngoonyoo -nhingi doowya -nhi
which ABL you:got:it from:him
'Which (person) did you get it from?'
(5-85) wardgoodda-widdangi malngaddi -yidda
they:take:it to:them white:person ALL
'They take it to the white man.'
Affected participants are typically (but not necessarily) animates - and usually humans - that are 'affected' in some way by the situation. Compare, for example, (5-85), with (3-2) in which the Destination is an edifice, unaffected by the presence of the person, and compare also (5-84) with
(5-86) ngoonyoo -nhingi doowya
which ABL you:got:it
'Where did you get it from?'

DAT, LOC, ABL and ALL PPs with human referents are not obligatorily crossreferenced by oblique pronominals. It is only when the human (or animate) is affected in some way by the situation that a cross-referencing oblique pronominal enclitic occurs. Compare for example the following minimal pair:
(5-87) lajanga -ngadda ngaddagi dimana
he:rode:it on:me my horse
'He rode my horse for me.'
(5-88) ngaddagi dimana lajanga my horse he:rode:it
'He rode my horse.'
The first of these described a situation in which a jockey rode the speaker's horse for him in a race, and here the owner of the horse was affected as a type of beneficiary, on whose behalf the action was done. (5-88), on the other hand, is a plain statement that someone (probably not a jockey) rode the speaker's horse, and this did not benefit or disadvantage the latter in any way.

There are a large number of ways in which a human or animal may be affected by a process. I will just briefly outline a few of the more obvious and predominant ones. The most concrete is that his/her appearance may be changed, as in (5-82). Other possibilities include that: s/he may benefit in some way from the situation, as in (5-85); s/he may be disadvantaged by it, as in (5-83); the process may have been enacted on his/her behalf, as in (5-87); or s/he may be encumbered by it, as in
(5-89) robin -ja wardnginhi / warangnginhi
LOC I:went:on:her I:sat:on:her
'I went with/sat with Robin.'
More generally, s/he may experience strong emotions towards the situation, which may in turn influence his/her subsequent behaviour. In the following example, the speaker ought to experience a strong sense of shame towards his mother-in-law; further, her presence should affect him to the extent that he will take some sort of avoidance action.
(5-90) thaddboorda wardgiri -ngadda
wife's:mother she:goes on:me
'My mother-in-law is going along (in my vicinity).'
Other such abstract senses of affect are illustrated in:
(5-91) booloobooloori -widdangi he:is:clever for:them
'He's too clever for them (e.g. to catch).'
(5-92) maddayali -yoo ganybilngiraa -nhi
wife's:mother DAT I:am:shamed on:her
'I experience shame towards my mother-in-law.'
It is clear from the above that 'affected' covers both what is potentially, and what is actually affected by a situation.

Relatively rarely an inanimate may be an Affected participant. Examples are:
(5-93) waddawoodoo -ya dinbidi -nhi
road LOC they:blocked on:it
'They blocked the road.'
(5-94) labirdladdi -nhi mirlimirli bagi -ya
I:put:it on:it paper bag LOC
'I put (a stamp) on the envelope.'
(5-95) wayandi -ya gamba -ngaddi -ngga boodladdi -nhi fire LOC water COM ERG I:poured:it on:it 'I poured the fire with water.'
As examples (5-93) to (5-95) illustrate, inanimates filling the role of Affected are in some way affected or changed by the situation. Inanimates cannot be affected in the variety of ways in which human beings can be - they have no feelings, etc. - and it is only when they are changed in appearance (as in (5-94)), state (as in (5-95)), and other such concrete ways that inanimates are ever referred to by an oblique pronominal enclitic.

The Affected and non-Medium Goal are in complementary distribution with respect to the clause types they occur in. The difference between them would appear to lie entirely in the fact that the latter partakes in the 'direction' of the situation, whereas the former does not. There is a clear common core of meaning (see section 6.1); the non-Medium Goal is at least potentially affected by the process. (Nevertheless, it is convenient to retain the distinctive terms.)

### 5.2.2.2 The Range

Two of the four transitivity types of Gooniyandi clauses demand a Medium: the intransitive and the transitive. A Medium can occur in each of the other two
transitivity types as well, only then it is a non-participant, which does not take part in the 'direction' of the process. This non-participant role will be referred to as the RANGE (following Halliday 1985:134-137), in order to maintain a terminological distinction from the participant Medium. An example is thangarndi 'words' in thangarndi jijagji (words he:spoke) 'he spoke words'. Ranges are usually optional in these clause types. Furthermore, a transitive or intransitive clause may have a Range (as a second Medium), again usually optional, which stands outside of the system of 'direction'.

The Range is by definition something through which the process is actualised and comes into being, but which is not central to the situation. Like the Medium participant role, the non-participant Range is realised by an NP, but is of course not cross-referenced in the VP.

The following are the major possibilities.
(a) The most significant class of non-participant Ranges are body-part Ranges. As a general rule, in Gooniyandi body-parts are treated as participants only in those cases in which the owner of the part is not seen as a participant in the situation (see McGregor 1985). That is, in general, whole individuals are considered as involved in the 'direction' of processes, and their respective parts are seen as specifying more precisely the 'extent' of the individual's involvement. Body-part Ranges arise when the situation is actualised through the body-part, but the owner of the part is seen as the one involved in the 'direction' of the activity.

Body-part Ranges occur in clauses of all transitivity types except apparently for middle clauses. In intransitive and transitive clauses, the body-part is a part of the Medium:
(5-96) (nganyi) marla diribloondi
I hand I:entered
'I put my hand in.'
(5-97) moorloo nyimijji
eye he:winked
'He winked his eye.'
(5-98) moowooloo gardnginbini
face he:hit:me
'He hit me in the face.'
In reflexive/reciprocal clauses, of course, the body-part must belong to the only inherent participant, the Agent, and represents the part of that entity through
which the process was actualised:
(5-99) marla wirdbilingarni
hand I:bit:myself
'I bit my fingernails.'
$(5-100)$ jaji -yoo marla ngarloogïngarni
what DAT hand you're:repeatedly:clenching:yourself
'Why are you clenching and unclenching your fist?'

It should be noted that the fact that the body-parts in these examples are NPs realising distinct roles from those borne by the owners follows from the fact that in all cases this NP may be made more explicit by the addition of an oblique pronominal referring to the owner of the part, and the participant (owner) may be realised by a distinct NP. (That is, sequences such as nganyi marla (I hand) do not constitute NPs - cf. page 253 above, Hale 1981 and McGregor 1985.)

For a detailed discussion of body-parts in Gooniyandi clauses, see McGregor (1985).
(b) Instead of being actualised through a body-part, the process may be actualised through a (culturally determined) representation of an entity. In Gooniyandi, representations include names, footprints, shadows, and reflections. Exactly the same possibilities arise as discussed under (a). For example: ,
Intransitive -
(5-101) nganyi lawagingiri gooroodoo gamba -ya I I:am:white shadow water LOC 'My reflection is white in the water.'

Transitive -
(5-102) yingi nyinnginymi
name I:lost:you
'I forgot your name.'
Reflexive/Reciprocal -
(5-103) thinga wayagbilagini
foot he:obliterated:himself
'He obliterated his footprints.'
(c) The verb ngang- 'give' takes an inherent Range, the gift given. The recipient of the gift is always a Goal/Medium, and is cross-referenced by the ACC pronominal prefix in the VP. For example,

| Agent: |  | Goal: | Range: | Process: |
| :---: | :---: | :--- | :--- | :--- |
| (5-104) | nganyi | -ngga | yoowooloo | manyi |
| I | ngangli |  |  |  |
| I | ERG | man | food | I:gave:him |

(Cf. Rumsey 1982b:144.)
(d) Some reflexive/reciprocal clauses may have a 'patientive' Medium, other than a body-part. For example,

| Agent | Range: | Process: |
| :--- | :--- | :--- |
| (5-105) | nganyi | -ngga |
| I magarda | yoodjawilimarni |  |
| I ERG hat | I:will:put:on:myself |  |
| 'I'll put on my hat.' |  |  |

(It would appear that, as distinct from the case in which the Range is a body-part ((a) above), the Range is inherent in (5-105).)

The Range of (5-105) clearly corresponds to the participant Goal/Medium of

| Agent: | Medium: | Process: |  |
| :---: | :--- | :--- | :--- |
| (5-106) nganyi | -ngga | magarda | yoodli |
| I $\quad$ ERG | hat | I.put:it |  |
| 'I put the hat down.' |  |  |  |

The hat fulfils the same role throughout as patient, the thing that is placed. However, whereas in (5-106) the action is conceived of as directed towards the hat, in (5-105) it is directed towards the Agent himself, and the hat is treated as a Medium through which this self-directed action is actualised. The speaker might, alternatively, have opted to treat the hat as the Goal and himself as Affected:
(5-107) boondiwarli yoodli -ngadda
headband I:put:it on:me
'I put on the headband.'
(e) The Medium need not be a definite entity as in (a) to (d); instead it might refer to something inherent to and inseparable from the process (i.e. which has no independent existence) - cf. McGregor (1985:230). For example:
(5-108) thangarndi jagmi -ngadda
word he:told to:me
'He told me words.'
(5-109) nayiddwiddi giningi
you:will:breathe breath
'Take a breath', or 'Take a spell.'
(5-110) ngooddoo -ngga yoowooloo garingi gardbinga that ERG man wife he:belted:her thiddi
fight
'That man belted his wife.'
Such Mediums are the so-called 'cognate objects' of traditional grammar except that in Gooniyandi none of the nominals are cognate with the corresponding verbals. It must be noted, however, that it is not only nonparticipant Mediums that make reference to something which has no real existence outside of the situation. (5-111) and (5-112) show such 'cognate' Mediums as participants in intransitive and transitive clauses respectively.
(5-111) yiwindi yilijbani
rain it:rained
'It rained.'
(5-112) yoowooloo -ngga joonba ngalanynga
man ERG song he:sang:it
'The man sang a song.'
It is not always easy to distinguish Ranges from Attributes. It seems that in some cases, as exemplified in (5-113) below, the NP might be either a Range or an Attribute:
(5-113) mooyoo bagiyi
sleep he:lay
'He lay asleep'; 'He was asleep'; or 'He had a sleep.'
The Range interpretation is the only one possible in
(5-114) mooyoo nyamani bagingi
sleep big I:lay
'I had a big sleep (last night).'
In conclusion, I remark that middle clauses almost never occur with Mediums of any sort, participant or non-participant - cf. page 324 above. The only exception I am aware of concerns processes of vocal communication, in which thangarndi 'word' may occur as a Medium.

### 5.2.2.3 The Instrument

In addition to the Agent participant role that is inherent to three of the Gooniyandi transitivity types, there is a non-inherent non-participant Agent role which may, like the Range, occur in any of the four transitivity types. This role, which I will refer to as the INSTRUMENT in order to distinguish it terminologically from the participant Agent, is always realised by an ERG PP. (By contrast, the participant Agent may by realised by either an NP or a PP cf. page 319 ff . above.) The Instrument is not the ultimate source of the action, but is, rather, a secondary entity through which the action is effected or directed. It is in a sense an extension of the Agent, just as some types of Range especially body-parts - are extensions of the Medium.

Instruments are normally found in clauses of 'directed' action, and they are often body-parts of the Agent. Examples are:
(5-115) marla -ngga widdijngarni
hand ERG I:scratched:myself
'I scratched myself with my hand.'
(5-116) marla -ngga mabanjindi
hand ERG he:farewelledus
'He farewelled us with his hand (i.e. by waving).'
(5-117) moorloo -ngga nyimijnyimijjingadda
eye ERG he:winked:at:me
'He winked his eye at me.'
As remarked above (page 333), body-parts are rarely treated as participants. In general, directed action is seen as stemming from the individual himself/herself for a small class of exceptions, see below page 429.

I mentioned above that Instruments may occur in all transitivity types. However, they only very rarely occur in intransitive clauses, and then they are almost always body-parts of the Medium. The following pair of examples (5-118) and (5-119) are typical; the body-part is used in a marked way, and particular effort is required throughout the (undirected) process in order to maintain it. In (5-118), particular effort must be directed through the ankles in order to walk on tip-toes. This may be contrasted with the more neutral thinga wardngi (foot I:went) 'I went on foot' (see example (5-132)), in which thinga 'foot' is presumably a Range through which the walking is actualised. No additional or unusual effort is involved over that required to keep the motion
going.
(5-118) thinga doomoordoo -ngga wardngi foot chest ERG I:went 'I walked on tip-toes (i.e. on the chest of my feet).'
Similarly, crouching on the haunches requires more effort than just sitting:
(5-119) gimani -ngga warangngiri
knee ERG I:sit
'I'm crouching on my haunches.'
Less frequently, the Instrument is a non-body-part. It is only when the thing could be an Agent in the situation type referred to that it may be treated as an Instrument (cf. above page 329). An example in which this condition obtains is:
(5-120) jinali -ngga nyagbini
spear ERG he:speared:him
This clause has two interpretations: 'He speared him with a spear', and 'The spear speared/pierced him'. Otherwise, if it cannot be seen as an Agent in an agnate clause, the thing must be treated as a Means (on which see below section 5.2.3.3).

### 5.2.3 Circumstances

The following are the main types of circumstantial elements which I have so far identified in Gooniyandi: Spatial, Temporal, Means, Manner, Accompaniment, Cause, Purpose, Matter, and Apprehension. (There are in addition a number of relatively minor types which I will not discuss here - but see the discussions of the meanings of the postpositions in 3.7 above.) Circumstances are realised primarily by adverbials and PPs (ergative, dative, locative, allative, ablative, and perlative), and occasionally by NPs.

### 5.2.3.1 Spatial circumstances

The main types of Spatial circumstance are (a) Location, (b) Direction and (c) Extent.
(a) Location is expressed by -ya LOC PPs or spatial adverbials of the locational type (e.g. locative forms of the cardinal adverbials, etc.). Any type of situation can be located in space: processes of rest and being (for example, line (1) of Text 1), processes of motion (example (5-121)), processes of violence
(example (3-87)), and so on.
(5-121) walyadda -ya wardngi
sand LOC I:went
'I walked on the sand.'

As discussed in section 4.3.2, PPs and adverbials may be juxtaposed to form complex units together. In this way it is possible to make more precise the spatial relation of the situation with respect to the reference location - whether it is inside, on, behind, around, or whatever. (See examples (4-100) and (4-101) above.)
(b) In the circumstance of Direction there is a distinction between direction towards and direction away from. The former is realised by ALL PPs (see pages 184-185) and direction to forms of the cardinal and vertical spatial adverbials (pages 157-159); the latter by ABL PPs (pages 182-184) and direction from forms of the same adverbials. In addition both may be realised by the directional adverbials (including mirnaloogoo 'towards here', etc. - see page 162), gindiwa 'upstream' and jibiddi 'downstream' (page 160), and the general migawa 'that way' (usually accompanied by a gesture indicating the way - page 153)), and by complexes of adverbials and PPs.
Some adverbials such as balngarna and banyangi, which both translate as 'outside', may occur in clauses of motion, indicating direction towards or direction away from, with or without an appropriate postposition, -yidda $\mathrm{ALL}_{1}$ or -nhingi $\mathrm{ABL}_{1}$ respectively.
(5-122) wardji banyangi (-yidda) he:went outside ALL 'He went outside.'
(I am unable to specify the meaning difference - cf. page 283.)
There is one other way in which direction may be specified: that is, in terms of the intermediate path taken between the termini. This is realised by a -binyi PER PP, which refers to a salient feature on the path. For example:
(5-123) booladi -binyi wardji
dry PER he:went
'He went along the dry (path, beside the muddy road).'
(5-124) nganyi riddinggi wardngi badig -binyi
I side I:went paddock PER
'I went by the side of the paddock (i.e. by the fence).'
The postposition -binyi PER may be attached to a spatial adverbial such as ngilmi 'east side', giving ngilmibinyi 'via the eastern edge of.'

Direction does not imply motion, and a circumstance of Direction may be specified for situations which do not involve movement of one of the participants. (3-90), (3-93) and (3-94) are some examples.
(c) Extent is normally expressed by one of the spatial adverbials graa 'short distance, near', or marnangooddoo 'far, a long way away' (see page 161). In at least one instance a nominal, thigi 'short', was used in specifying distance covered:
(5-125) thigi thithi thayadloonayi
short going I:walked:them:two
I walked the two (horses) a little way.'
In requests for information concerning extent, the enclitic -mi IND is normally added to one of these two adverbials - e.g. marnangooddoomi (farIND) 'it is far?'. In one instance the form ngoonyiyajangi (which-LOC-SEM), literally 'like at which place', was used in requesting the distance to the river.
There are (to the best of my knowledge) no exact units of spatial measurement native to the Gooniyandi. (Terms such as "mile" have been borrowed from English, but do not retain their original senses as units of measurement.) On a number of occasions Gooniyandi speakers responded to my attempts to determine distance more accurately by comparison with distances between known reference points. Unfortunately there are no full Gooniyandi utterances expressing such comparisons available.

PPs are also used in expressing EXTENT. These are either ALL $_{1}$ (-yidda) or $\mathrm{ABL}_{1}$ (-nhingi) phrases, depending on which endpoint is taken to be the origin. Examples are (5-49) above and

> (5-126) babooddoonggoo gamba -yidda gardbani
> down water ALL $_{1}$ it:falls
> 'The (cliff) extends down to the water.'

### 5.2.3.2 Temporal circumstances

Temporal circumstances are of two types (i) Temporal Location, and (ii) Temporal Extent. These roles are typically realised by the temporal adverbials discussed in section 3.4.2, and less frequently by PPs. There is very little overlap between the expression classes that realise Temporal and Spatial circumstances. As far as I am aware, temporal adverbials never realise Spatial circumstances, nor do spatial adverbials realise Temporal circumstances. ${ }^{5}$ The

[^20]only common members are a few LOC and ABL PPs such as middiya (sunLOC), which normally means 'at dawn', but may also mean 'in the sun (i.e. in the light/heat of the sun)'.
(i) Temporal Location may be realised by a variety of adverbials, as discussed in 3.4.2 above. In particular, these include the indefinite yaningimi (now/then-IND) 'at some time, when', and an expression will realise the role of Temporal Location if it provides a (natural) response to a clause with this word in it.

There are two main types of Temporal Location: location at a particular time, and location after a particular time. In the first case the usual realisation is by one of the temporal adverbials, and/or by a LOC ( -ya ) or DAT ( $-y o o$ ) PP, depending on whether the time referred to is past of future. Examples are (3-37) and
(5-127) middi -ya bijngarni
sun LOC he:emerged
'He arrived at dawn.'
(5-128) moongaya -yoo nganyi migangiringanggi barnbiri
morning DAT I I:am:telling:you you:will:return 'T'm telling you to return tomorrow.'

Location after a certain time is by contrast never realised by a temporal adverbial, but is invariably realised by an $\mathrm{ABL}_{1}(-n$ hingi) PP . Furthermore, the reference point (with respect to which the time is located as 'after') is not normally an explicit time referred to by an adverbial - that is, the $\mathrm{ABL}_{1} \mathrm{PP}$ does not normally consist of a temporal adverbial. Indeed, situations are normally located after other situations, or conditional states of entities. Thus, for example, the determiners niyi 'that' and niyaji 'this' (see page 144) may refer to previous situations (which are typically established in paragraph size extents of text), and the d-words niyinhingi 'after that' and niyajinhingi 'after this' frequently occur in texts to locate situations with respect to the situations previously described. (See lines (30), (49), and (79) of Text 1.) Alternatively, the PP may make reference to some thing in which the Actor (usually) was recently involved, or a recent condition or state of the Actor. This might be a process that is readily nominalised (as in (5-129)), or a thing which represents the

[^21]process (such as manyi 'food' in (5-130), which represents the process of eating).
(5-129) niyi -nhingi nardawooddarni thiddi -nhingi -ngga that ABL they:cried:together fight ABL ERG 'Then they cried together after fighting.'
(5-130) yiganyi wardjawinbidda manyi -nhingi -ngga uncertain they:might:take:you food ABL ERG 'They could take you after (they have eaten) food.'
(5-130) occurred in a situation in which I had been wondering when I would be able to get a lift back into Fitzroy Crossing from Bayulu. The speaker was indicating a time at which I could expect to return, in response to my inquiry. Thus manyinhingingga 'after food' belongs to an expression class including yaningimi 'when'.
(ii) Temporal Extent may be realised by temporal adverbials such as yinggi 'for some time' and yinggiyila 'for a short while', yilba 'forever', etc. (see 3.4.2 above). It may also be realised by an NP with an Entity such as the English borrowing wig 'week', gamba 'year' (from 'water'), jaalinyi 'month', etc., or by the adverbial thoolngooddoo 'through' in combination with a time word.
(5-131) niyaji -ya warangii yoowarni wig this LOC he:sat one week 'He stayed there for one week.'
(5-132) lanis thinga wardji lanygiya thoolngooddoo [name] foot he:went day through Lanis was walking all day.'

At the present stage of the analysis, there is no evidence that there is a systematic, linguistically significant distinction between 'temporal extent' and 'time since', or 'time until'. The latter two senses occur only with ABL, ALL, or DAT PPs, which also, however, allow the former interpretation.
(5-133) gaddwaroo -nhingi wayandi mooddoobga
aftemoon ABL fire it:burns
'The fire is burning from/since yesterday.'
(5-134) ngoonyjoo ngirndaji waranggila dina -yawoo
tobacco this I:hold:it dinner ALL
'I keep this tobacco until dinnertime.'
'Time since' can, however, be distinguished from 'time after' which is a type of
temporal location. In the latter case, but not the former, the ABL(-ERG) belongs to an expression class which includes the temporal adverbials wamba 'later', yaningi 'now', etc.. (Similarly, 'time until' differs from 'time at' in reference to future time, although both may be realised identically by DAT PPs.)

### 5.2.3.3 Means

The Means refers to something by means of which an action is effected. It is realised by a -ngaddi COMIT PP or by a -ngaddingga COMIT-ERG PP in clauses of undirected and directed action respectively. Examples are:

| (5-135) rope |  | -ngaddi thoodngani |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | COMIT he: | descended |  |  |
| 'He climbed down with a rope.' |  |  |  |  |  |
| (5-136) | woob | oowinayi | garooroo | -ngaddi | -ngga |
|  | he:c | oked:them:two | hot:coals | COMIT | ERG |
|  | 'He cooked the two men in coals.' |  |  |  |  |

There is a contrast between the roles of Means and Instrument on one hand, and Accompaniment on the other. Minimal pairs exist such as (5-120) and (5-137) in which the spear may be treated as either an Instrument (and realised by an -ngga ERG PP), or by a Means (realised by a -ngaddingga PP).
(5-137) jinali -ngaddi -ngga nyagbini
spear COMIT ERG he:speared:it
'He speared it with a spear.'
However, I would claim that the two expressions are not in free variation. The Instrument is generally an extension of the Agent (or Actor), which is either a body-part or used as a tool. Means are not so much extensions of an Agent (or Actor) as intermediaries through which the action comes about. A Means need not be actively used as a tool, and is rarely a body-part. In clauses of undirected action, Means are not used agentively; little effort is as a rule required on the part of the actor to use them. In using rope for climbing (example (5-135)), horses for riding, legs for standing, etc., the Actor does not direct his/her efforts through these Means, which do no more than assist him/her in the process. Use of the Instrument, as mentioned above (page 337), typically requires effort, and does not assist in the accomplishment of the action. In clauses of directed action, body-parts are typically Instruments: consistent with my claim that action is directed through an Instrument. (Note that this does not mean that it is intentionally directed. More accurately, the direction of the action is extended
through the part.) Non-body-parts are typically Means.
It is only in a few situation types that there is a choice between treating something as a Means vs. treating it as an Instrument. It follows from my earlier remarks (see page 329) that in clauses of directed action the choice is only available when that thing could be Agent in a situation of the same type. This holds for processes of impact and violence, gard- 'hit', nyag- 'spear, pierce' (example (5-120) above), bilgoodd- 'crack on the skull', etc.. For other directed action types, including for instance all types of throwing, cooking carrying, tying, etc., which do not involve impact, a non-body-part cannot be referred to by an -ngga PP - either as an Instrument or as an Agent. The significance of the choice between Means and Instrument, in those cases where it is available, is not yet clear. Mel uk (pers.comm.) has suggested that the difference may be between whether the thing is hand-held or not, and this is consistent with my remarks above that the Instrument is an extension of the Agent.

Accompaniment is also expressed by -ngaddi (COMIT) and -ngaddingga (COMIT-ERG) PPs (see section 5.2.3.5 below). That there is a distinction between Means and Accompaniment is shown by two main facts. Firstly, Means may be questioned by either yinigangaddi (somehow-COMIT) 'how, by what/some means' or jajingaddi(ngga) (something-COMIT-(ERG)) 'with what/something.'
(5-138) A: yiniga -ngaddi nyagboowoo
how COMIT you:will:spear:it
B: jinali -ngaddi -ngga nyagboowoo
spear COMIT ERG you:will:spear:it
A: 'How do you spear it?'
B: 'You spear it with a spear.'
Accompaniment may be questioned by jajingaddi(ngga) 'with what/something', but not by yinigangaddi 'how'. Secondly, Accompaniment in clauses of directed action need not be something in the company of the Actor (see below section 5.2.3.5). Means must be used by the Actor (not by the patient or undergoer). For Accompaniment PPs, but not for Means, there are agnate clauses in which the PP realises a phrasal role, usually Qualifier (cf. Rumsey 1980:670).

### 5.2.3.4 Manner

Circumstances of Manner either: (a) indicate a quality of the situation, characterising the way it was done, or (b) make a comparison with the quality of action by another individual. The adverbial miga 'in that manner' is substitutable
for Manner circumstantials:
(5-139) miga mirdba
in:that:manner you:will:tie:it
'Tie it up this way.'
(5-140) miga waranggiri barndi -yooddoo
in:that:manner he:sits arm DU
dalwooddooyoo
they:two:are:extended
'(The diver bird) sits with his wings extended.'
(a) Quality is expressed either by an adverb (see sections 3.4.1 and 3.12.3.1 above), or by a nominal phrase, either an NP or an ERG PP. An example of the former is:
(5-141) ngaaddi wajladdi thiddgirli wajgiladdirni stone I:threw:it straight I:might:have:thrown:it 'I threw the stone; I tried to throw it straight.'
(See also examples in section 3.4.1 above.)
The choice between an NP or an ERG PP depends on the transitivity of the clause: the former occurs in intransitive clauses, the latter, elsewhere. (Unlike the participant role of Agent, but like the non-participant roles of Means and Instrument, Quality in a clause of directed action is never realised by an NP i.e. the ERG postposition may not be omitted.) Some examples are:
(5-142) jimandi -nyali barwindi mangaddi dagooddawani good REP he:climbed not he:was:falling 'He climbed up well all the way; he didn't fall.'
(5-143) wangmadda wardji
mad he:went
'He walked madly.'
(5-144) gardlooni wangmadda -ngga
I:hit:him mad ERG
'I hit him crazily.'
As can be seen from the last two examples above, the nominal phrase potentially refers to a concomitant quality of the Actor, and the phrases have other interpretations as Attributes (on which see section 5.2.4).

We might recognise, in the following example, another type of Quality,
that is, Quantity. This indicates the size or amount; in other words, the extent to which the situation has progressed.
(5-145) wamba ngaddja nyamaniyawoondi
later little he:will:grow:big
'When he has grown up a little.'
(b) Comparison is indicated by the semblative enclitic -jangi SEM, which occurs encliticised to the NP referring to the entity with which the comparison is being made. In clauses of directed action, -jangi is followed by the postposition -ngga ERG. For example,
(5-146) goornboo thiddi gardboowoona yoowooloo -jangi -ngga woman fight she:belts:them man SEM ERG 'The woman fights like a man.'

### 5.2.3.5 Accompaniment

Two main types of Accompaniment are distinguished: (a) Comitative, and (b) Privative. In other words, the participant is either accompanied or alone, that is, without something.
(a) Comitative is expressed by PPs with either of the postpositions -ya LOC or -ngaddi COMIT. In the second case only, when the thing accompanies an Agent, the PP is embedded in an -ngga ERG PP. The choice between LOC and COMIT appears to depend on the relative status of the accompanying entity on an 'animacy' hierarchy (such as that of Silverstein 1976b:122): -ngaddi COMIT occurs when the accompanying thing is of lower status than the thing accompanied; -ya LOC occurs otherwise. When the accompanying entity is an adult human being, $s /$ he is normally referred to in a LOC PP. For example,
(5-147) wardngi kevin -ja
I:went LOC
'I went with Kevin.'
(5-148) ngaddagi -ya warangbiri
my LOC you:will:sit
'Sit with me.'
In examples such as these, the accompanied participant is normally less 'potent' in the process than is the accompanying person, who is typically the leader, or the driver of a vehicle.

It is normally only when an accompanying human is a child that $s / h e$ is
referred to in a COMIT PP. For example, clauses such as (5-149) are frequent, but there are no such examples in which the -ngaddi PP refers to an adult, or even to an entity referred to by a free pronominal.
(5-149) joogoo -ngaddi wardjiddi
child COMIT we:went
'We went with the children.'
Likewise, accompanying inanimates and lower order animates (for example dogs) are invariably referred to in -ngaddi COMIT PPs, and never -ya LOC PPs. Examples are:
(5-150) manyi -ngaddi wardngi
food COMIT I:went
'I went with food.'
(5-151) shanghai $-n g a d d i \quad-n g g a \quad$ marimaringa
COMIT ERG he:snuck:up:on:it
'He snuck up on it with a shanghai.'
As a rule, both entities are inanimates only when they are acted on by humans, and then the entity towards which the action is primarily directed is treated as the Medium/Goal, the other as an Accompaniment circumstance. For example, it is primarily the tobacco that is chewed in (5-152), and the onions that are mixed around in (5-153).
(5-152) ngoonyjoo ngabginyja gawoondoo -ngaddi
tobacco you:eat:it ashes COMIT
'You eat tobacco with ashes.'
(5-153) birla -ngaddi gininybaddi nyaadi
yam COMIT he:mixed:it onion
'He mixed onions with potatoes.'
When the role is realised by a -ya LOC PP the two entities may be grouped together as a single participant set in an agnate clause. (5-147) could be alternatively expressed as (ngidi) wardjiddiyi 'we two went'. The adverbials moolba 'as a group' and jooloo 'together' may be used in such clauses, usually when entities that have been regarded as distinct participants (in the preceding text, or in the context of speech) are combined together as a single participant. (5-148), for example, might be followed by jooloo warangbiddi 'we'll sit together'.
Note that (5-148) is ambiguous between locational and accompanying
interpretations. In the latter sense only, there is a corresponding clause with jooloo 'together'. Conversely, in the locational sense, spatial adverbials such as yalawa 'nearby' could co-occur with ngaddagiya. (5-147) is of course not really ambiguous (but cf. (5-121)).

Grouping of the two entities into a single participant set is not normally possible when the accompanying thing is referred to in a -ngaddi PP. I have never heard sentences such as wardjiddi 'we two went' grouping together a person and food as 'we', in a clause corresponding to (5-150). In this case, however, there may be a possibility of treating the accompanying entity as a Goal. Instead of (5-150), the speaker could have said manyi wardla (food I:brought:it) 'I brought food'. Thus (5-149) would seem to correspond more closely to joogoo wardjidda (child we:brought:them) 'we brought the children' than moolba wardjiddi (together we:went) 'we went together (i.e. with the children)'.
(b) Only one of the possibilities distinguished for the Comitative occurs in the Privative. When the accompanying entity is of a lower status (see above) than the accompanied, it is referred to in an NP with the particle marlami 'nothing' (see section 6.4.2).
(5-154) wardngi manyi marlami I:went food nothing 'I came without food.'
This mode of expression appears not to be used when the two entities are of equal status; there are no examples with pronominals or personal names in the privative sense. When the entities are of the same status, instead of expressing the notion 'without $x$ ', the notion of 'alone', 'without anyone else' invariably occurs. There are a variety of modes of expression for the latter, including the oblique and emphatic pronominals (see examples (3-78) to (3-80) and (3-82) in section 3.6 above), and adverbials such as doojgoo 'alone, by the self' (which normally occur with the oblique pronominal). Sometimes these expressions are followed by privative expressions such as liwaya marlami 'friendless' (the meaning of liwaya is not known). For example,

| (5-155) | nhoowoo doojgoo ngoorloognga | liwaya | marlami |
| :--- | :--- | :--- | :--- | :--- |
| his self he:drank:it | $? ?$ | without |  |
| 'He drank it alone, friendless.' |  |  |  |

Such adverbial expressions are not used where the entities are of unequal status.

### 5.2.3.6 Cause

Circumstances of Cause indicate the cause of a situation, and comprise a two
term system: Resultative and Deprivative.
(a) Something is a RESULTATIVE Cause of a situation if that situation occurs as a result of that thing. It is normally realised by a -nhingi $\mathrm{ABL}_{1} \mathrm{PP}$. For example,
(5-156) banda nanggananggayi yiwindi -nhingi
ground itwas:spotted rain $\mathrm{ABL}_{1}$
'The ground was spotted from the rain.'
(5-157) gamba -nhingi wangmaddaadda wardji
water $\mathrm{ABL}_{1}$ madly he:went
'He went along madly from grog.'
It is difficult to pinpoint precisely the semantic nature of a Resultative Cause. In general it is something that the Medium in a non-directed action clause was closely associated with at an earlier time, the effects of which pertain at the time of the situation referred to by the clause. This excludes, for example, "factitive" causers (cf. below section 5.6.1.1).

Although the Resultative Cause and the Direction from spatial circumstance are both realised by an ABL PP, they are distinguishable on at least two grounds. Firstly, the expression class which realises Direction from circumstances differs from that which realises Resultative Cause: the former includes spatial adverbials such as babirnali 'from the bottom', etc., and a large number of PPs in which the embedded NP makes reference to a place (e.g. by its name). These are not found in realisations of Resultative Causes. Secondly, the indefinite corresponding to the Resultative Cause is jajinhingi (something$\mathrm{ABL}_{1}$ ) 'from something, what from', whereas ngoonyoonhingi (which- $\mathrm{ABL}_{1}$ ) 'from which (place)' is the corresponding indefinite for the Direction from circumstance.

Directed action clauses may also have Resultative Causes, and such causes are typically engagements of the Agent in some other situation with something potent, such as alcohol:
(5-158) thithi -ngga rooddijbiddarniddi gamba -nhingi -ngga going ERG they:fought:together water $\mathrm{ABL}_{1}$ ERG 'They fought together from/as a result of grog.'
As in the case of 'time after' (see above section 5.2.3.2), -nhingi is followed by -ngga ERG in clauses of directed action. Again, although the mode of expression of the two falls together, the difference is linguistically significant in that in one case but not the other, the PP is replaceable by a temporal adverbial.

Occasionally a -yangga $\mathrm{ABL}_{2} \mathrm{PP}$ realises this role. The only examples of this type have a clause embedded in the PP - see below section 5.5.2.2.
(b) Where the occurrence of the situation is due to the lack of something, I refer to the Cause as DEPRIVATIVE. The Deprivative Cause is invariably realised by a PP with the postposition -winyja DEP. For example,

$$
\begin{array}{ccc}
\text { (5-159) gamba } & \text {-winyja } & \text { riminyloondi } \\
\text { water DEP } & \text { I:got:thirsty } \\
\text { 'I got thirsty for lack of water.' }
\end{array}
$$

(5-160) man.ga wangmaddawindi gamba -winyja
ear he:went:mad water DEP
'He went mad from thirst.'

### 5.2.3.7 Purpose

A clause may occur with a circumstance of Purpose, indicating the intention of the action. The Purpose is usually an entity which is not involved in an 'inner' role, or in a participant role in the situation in which it occurs, but which is intended to be involved as an inner role or participant role in a subsequent situation, which is enabled by the present situation (cf. Dixon 1977:260). In this case the role is realised by a -yoo DAT PP referring to the entity. For example,

> (5-161) girili gajba ngalinya -yoo
> tree you:will:cut:it honey DAT
> 'Cut the tree for honey.'
(5-162) garla thangarndi -yoo -moowa ngangiiloona
tobacco mouth DAT ON I:gave:them
'I gave them tobacco only for words.'
In (5-161) cutting the tree is a necessary preliminary to the ultimate goal of getting and eating the honey; and in (5-162), giving the tobacco is a preliminary to the goal of eliciting words. However, these entities (i.e. honey and words) are not affected (cf. above section 5.2.2.1) by the processes of cutting the tree and giving the tobacco respectively.

That the Purposive role of DAT PPs is linguistically distinct from the role of Affected, and from the circumstance of Matter (discussed in the next section), follows from the fact that only in the first sense does the PP belong to an expression class that includes adverbials such as woongooloo 'for fun' (example (6-172)), ginyiddi 'for/over women' (as in 'fight for/over women'), and perhaps
briyandi 'in revenge'. Furthermore, a Purpose (but never an Affected) is sometimes another situation, in which case it is realised by a DAT PP (with DAT allomorph -woo - see section 3.7.2.2) with an embedded non-finite clause - see section 5.5.2.4 for a discussion. We have also seen that the Affected is formally distinct from the Purpose in that it is cross-referenced by an oblique pronominal enclitic to the VP.

As shown on page 186 above, a -binyi PER PP may indicate an ultimate purpose or goal at least in clauses referring to hunting and gathering activities. As was explained there, when -binyi PER is used the thing sought after is a generic type, never a specific individual.

### 5.2.3.8 Matter

The circumstance of Matter indicates something in respect of which a particular situation, quality, or property obtains. It is typically realised by a DAT PP. The fact that circumstances of Matter frequently occur circumstantially in characterising clauses - in which they indicate in what respect the Attribute holds of the Carrier - sets this role off from other circumstantial roles, which do not as a rule occur circumstantially in characterising clauses. (These latter normally occur as Atributes - see section 5.2.1.1.2.)

The main types of quality that are extended by Matter circumstances include those of value (e.g. good for something - example (5-296) below), knowledge and ignorance (example (5-165)), etc.. Furthermore, a Matter circumstance may occur in an NP, applying to the Classifier or Qualifier, and embedded under that node, in which case it does not realise a role in the NP itself - see example (5-299).

Situation clauses that may have circumstances of Matter include:

- clauses of experiences such as thirst:

> (5-163) gamba -yoo riminygoowangiri water DAT I:am:getting:thirsty I'm getting thirsty for water.'
(Contrast example (5-159).);

- clauses of communication, e.g.
(5-164) yan.ginngindi warawoodoo -yoo / ngaaddi -yoo he:asked:me road DAT stone DAT 'He asked me about/concerning the road/for money.';
- clauses referring to processes of thought, such as:
(5-165) migalimi ngoomooddoo -yoo ranbindi
I:thought cloud DAT it:went:away
'I thought about the clouds that they would go away.'
(see also (5-294) below);
Clauses referring to situations of getting someone to do something, in which typical verbals are bala- 'send', ngimbidd- 'hurry up', and janyadd- 'cry out to someone for something, to "humbug"'; example:

| (5-166) | balajila wayandi | yoo | gaj | goo |
| :--- | :--- | :--- | :--- | :--- |
| I:sent:him fire | DAT | cut | cit |  |
| I sent him to cut firewood.; |  |  |  |  |

- and other clauses, such as those referring to trying:
(5-167) goolooljinga thangarndi -yoo jijag -goo he:tried:repeatedly mouth DAT speak DAT '(The child) tried repeatedly to talk.';
and so on.
As mentioned in the preceding section, what distinguishes these from circumstances of Purpose, which are also realised by DAT PPs, is that the adverbials woongooloo 'fun', etc. belong to the expression class of the latter, not the former. The dividing line between Purpose and Matter circumstances is not sharp, and is not determined solely by the clause type the DAT PP occurs in. In (5-164), the PP ngaaddiyoo (stone-DAT) might be either a Purpose or a Matter.

Finally, it should be noted that circumstances of Matter may refer to situations as well as to entities, in which case there will be a clause embedded within the DAT PP. Examples are given in section 5.5.2.4 below.

### 5.2.3.9 Apprehension

The circumstance of Apprehension indicates something feared, or something about which there is concern that it might undertake an undesirable course of action. It is always realised by a LOC PP. Examples are:
(5-168) thadda -ya yoowangiraa -nhi
dog LOC I:exercise:caution of:it
'I'm afraid of the dog (that it might do something to me).'
(5-169) maa yoodjingi thadda -ya thadda -ngga ngabgawoo meat he:put:it dog LOC dog ERG he:eats:it! 'He put the meat away from the dog lest the dog eat it.'
(5-170) waya -ngaddi -ngga mirdjinmi nyiddi gin.gali -ya wire COMIT ERG we:tiedit spinifex wind LOC gin.gali -ngga wajgaddoowoo nyiddi wind ERG it:throws:it! spinifex 'We tied the spinifex down with wire lest the wind blow it away.'

### 5.2.4 Attributes

Attributes may occur in situation clauses other than those of being; however, they are normally optional in these other clause types. In contrast with circumstantials, attributes do not modify the whole situation, and as a consequence they are not realised by adverbs. Rather, they qualify participating entities within the situation, in ways that are closely tied up with the situation. In other words, I am excluding from consideration those types in which, as in line (8) of Text 3 , the second of a pair of juxtaposed NPs attributes on the first in a way which is quite independent of the situation (cf. Halliday 1967:62, Nichols 1978:114). (This is what Nichols (1978) refers to as secondary predication.) As in situation clauses of being, only non-inherent, and typically temporary qualities may be atributes of this type. Inherent qualities cannot be closely related to the situation (just as they cannot be seen as modes of existence of an entity - see page 311 above).

As a rule, attributes modify participants, usually Agents and Mediums. (There are no examples available of attributes modifying nominals functioning in Affected participant roles, but there would appear to be no reason why this could not occur.) They may however, modify non-participant Ranges, especially where the Range is a body-part of a participating entity. For example:
(5-171) marla balngarna bagingi
hand outside I:lay
'I had my hand open.'
As was the case in characterising clauses and in attributive modes of being clauses, the attribute almost always follows, not necessarily immediately, the participant it modifies, as can be seen from an inspection of the examples cited in this section.

Both qualities and circumstances may be attributed of an entity in nonbeing situation clauses. These correspond respectively to ascriptive and circumstantial attribution identified above.
[1] Ascriptive attributes. Here, the attribute, and the associated roles are
normally optional in the clause. An Ascriptive attribute is inherent only in the few clause types which have an Agent which establishes the relationship through his/her actions. (Inherent identification also occurs, but only with the verb goowaj- 'call by name', as in example (5-13) above. Here there is an inherent Identifier (the name), Identified (the thing named, and Goal), and Agent/Designator, which establishes the naming relationship.) Inherent attribution occurs with the verb yood- 'put', which in this context translates 'make':
(5-172) yoodbidi maja
they:put:him boss
'They made him boss.'

Here there are two inherent participant roles, Carrier/Goal and Attributor/Agent, whose nominal expressions have been ellipsed, and an inherent Attribute.

There are four main types of Ascriptive attribute. These are distinguished on the basis of the way in which the Carrier and Attribute are related via the situation. The four types indicate: (a) a quality or state of an entity as it is involved in the situation; (b) a quality of an entity resulting from the situation; (c) a condition that an entity is in as it is involved in, or when it becomes involved in the situation; and (d) a capacity in which a participant is involved in the situation.
(a) Descriptive attributes. These may be predicated either of Agents or of Mediums, both participant and non-participant. When predicated of an Agent, a Descriptive attribute indicates a state or quality of the Agent when s/he was performing the act. In this case, the attribute is realised by an ERG PP. The expression class of Descriptive attributes of Agents overlaps considerably with that of Manner circumstances (in transitive clauses), also realised by ERG PPs. However, that the two are distinct follows from the fact that the expression class of the latter, but not of the former, includes adverbials (which do not, of course, occur in ERG PPs in transitive clauses). In addition, there is at least one example available in which the ERG PP can refer only to a Descriptive attribute:
(5-173) galjini -ngga wajgaddi joordoo
quick ERG it:throws:it dust
'(Going) quickly (the car) throws up dust.'
In this clause galjini-ngga (quick-ERG) 'quickly' could refer only to the quality of motion of the vehicle; there is no immediate suggestion that the cloud of dust
is being thrown up quickly. The latter sense would be realised by the adverb galjini 'quick'. Similarly, when predicated of Actor/Mediums, the expression class of Descriptive attributes overlaps with, but does not coincide with the expression class of Manner circumstances - see example (5-143) above. (When attributing on other roles, of course, there is no possibility of ambiguity with Manners.)

Descriptive attributes may indicate any quality that is not inherent to the entity, including:

- size:
(5-174) joordoo wardgiri nyamani
dust it:goes big
'A dust (storm) is coming up big.'
- social status:
(5-175) joonggooloo -ngaddi goonggoo wardgiri bereaved COMIT taboo he:goes 'He goes under a meat taboo.'
- mental qualities:
(5-176) thadda -ngga giddanginbini yoowa
dog ERG he:ran:me fear 'The dog chased me frightened.'
- state of health:
(5-177) gambi -nyali milala mangaddi binyidiwindi
sick REP I:saw:him not he:got:hard 'I saw him still sick; he wasn't better.'
- and other physical qualities of various types, such as:
(5-178) gamba -ga yilijbinaddi jilngirndi -ngaddi
water ERG it:rained:on:them wet COMIT
'The rain wet them through.'
(5-179) boolba -ngaddi -nyali mooyoo bagiri
things COMIT REP sleep he:lies
'He sleeps still dressed.'
It may also indicate the number of things included in the entity set referred to. In this case, the phrase realising the attribute may consist of a number
nominal, indicating the senses 'alone', 'together', 'as a triplet', etc.. For example,
(5-180) yoowarni wardngi
one I:went
'I went alone.'
(5-181) thoodgoowiddani roob -ja garndiwiddi -nyali
they:started:sliding rope LOC two REP
'They started sliding down the rope together.'
(b) Resultative attribute. The Resultative attribute refers to a quality, condition, or state is acquired by the entity as a result of the situation in which it is involved. It is, not surprisingly, normally a quality (etc.) of the Goal in situations of directed action, and of the Undergoer in situations of undirected action (that is, in happenings - see section 5.2.1.3). For example:
(5-182) gooddoomba gajgajla boorna
paper I:cut:it piece
'I chopped the paper to bits.'
(5-183) galooddgbani wayandi boornboornoo
it:fell firewood pieces
'(The tree) fell to pieces.'
However, in one example, the Resultative attribute applies to a Range:
(5-184) thaawoori gajngarni jabiyabi
beard I:cut:myself short 'I cut my beard short.'

As these examples show, the Resultative attribute normally follows the VP.
Resultative attributes may be realised by NPs (as in examples (5-182) to (5-184) above), or by -yidda ALL PPs (but not by the other types of ALL PPs). Examples are:
(5-185) doogdoognga galyba -yidda
he:tapped:it soft ALL
'He tapped (the apple) soft.'
(5-186) booddooloongarni booladi -yidda
I:rubbed:myself dry ALL
'I rubbed myself dry.'
(I am not aware of the latter type (i.e. those realised by -yidda ALL PPs) being attributed of Undergoers in intransitive clauses, where only the former type is
attested - as in example (5-183) above.)
The distinction in meaning between the two possibilities - realisation by an NP and realisation by an ALL PP - appears to be as follows. An ALL PP indicates a resulting state of an entity, which could then be referred to by an NP with this state as Qualifier. For example, the apple in (5-185) could be referred to by the NP [manyi galyba] (food soft) 'soft food'. On the other hand, when the Resultative attribute is realised by an NP, that NP does not designate a quality that could apply to the original entity. Rather, it suggests that that entity has been changed so radically and fundamentally as to require a new referring nominal. The nominal lexeme in the Entity function in the NP referring to the participant is no longer appropriate to that transformed thing. For example, in ( $5-183$ ), the resulting thing is no longer a tree; in (5-184), it is no longer a beard; and in (5-182) it is no longer functionally suitable as paper. Compare:
(5-187) gajajila lambalambardi -yidda
I:cut:it little:pieces ALL
'I cut it into little pieces.'
Here the resulting stuff might be referred to as [gooddoomba lambalambardi] (paper little) 'little pieces of paper'. The suggestion is that the paper is not cut up as completely in (5-187) as it is in (5-182).

A correlate of this distinction is that Resultative attributes realised by PPs are normally approached by degrees. Those realised by NPs are often achieved relatively instantaneously - compare also
(5-188) baddili yaddajlimi boornboornoo yilba
bottle I:smashed:it pieces for:good
'I completely smashed the bottle to bits.'
When, however, the Resultative attribute is realised by an NP, as in (5-184) above, the quality is not approximated to. (The beard in this example is not cut successively shorter, but all at once.)

Resultative attributes occur only in situations in which the Goal or Medium is effected by the process; that is, semantically it is an undergoer or patient. These attributes do not occur with other situation types, such as those of behaviour or being.

What distinguishes Resultative from Descriptive attributes is that only the former have agnates in which the attribute is realised by an ALL PP, and agnate biclausal modes of expression in which the attribute appears in a being clause. The remaining two types are distinguished on informal grounds, and I am at
present unable to cite supporting formal evidence.
(c) Conditional attribute. In this third type, the attribute is least involved in the situation. It indicates a condition of the entity when the situation took place; no other connection is suggested between the quality and the situation. It is not always easy to distinguish this third type from type (a) above. The difference is that the attribute is more intimately involved in the situation for (a) than for (c), where it is as it were an accidental concomitant condition.

Almost any non-inherent quality can be a Conditional attribute: size, value, health, etc.. Some examples are:
(5-189) thigi gadlooni
short I:leftit
'I left it short (i.e. half done).'
(5-190) bïngarni jimandi
he:emerged good
'He arrived well.'
(5-191) barngiyiddi maroowa
we:returned murderer
'We returned murderers.'
For human beings, it is frequently a social or age status:
$\begin{array}{ll}\text { (5-192) nganyi } & \text { gooloowadi ngooddoo yoodnginbidi } \\ \text { I initiand that } & \text { they:put:me }\end{array}$
(5-193) goornboo galintha nangbani
woman young:woman she:died
'The woman died young.'
In addition to being predicated of Mediums, as in ((5-189) to (5-193)), a Conditional attribute may be predicated of an Agent. This happens in (5-194), where thithi 'motion, going' is a concomitant 'quality' of the Agents as they are arguing:
(5-194) thithi -ngga rooddijbiddarni
going ERG they:argued:together
'They argued together going along.'
(It is clear that thithi-ngga (going-ERG) is not a Manner circumstance.)
Constituent order appears to be meaningful. Where the attribute precedes
the VP, the situation obtained when (perhaps as a consequence of) the quality was attained. In the reverse order, the quality was evident when the situation occurred. ((5-189) is only apparently a counterexample. The immediately preceding clause was mangaddi gilbaali (not I:finished:it) 'I didn't finish it' thus the meaning intended was that I left it when it was in the condition of being half done, not that when I left it it was (evidently) half done.)

Instead of indicating a quality obtaining throughout a situation, a Conditional attribute may indicate an initial quality or state which obtained when the situation first took place, but which no longer holds. In this case, the attribute is realised by an ABL PP. For example,
(5-195) giljiddijgi -nhingi goornagjawani woogoo bagiyawi tadpole ABL it:will:turn frog it:will:lie 'From a tadpole it will turn into a frog.'
With extendible processes (see page 195 above), the suggestion is that the situation holds for all subsequent states or qualities of the entity. Thus:
(5-196) mawoolyi -nhingi -ngga waddgoomjawoodda children ABL ERG they:want:to:work 'They want to work from children.'
(5-197) mawoolyi ngirndaji binaddigmiwiddra lambalambardi -nhingi children this we:will:teach:them little:ones ABL 'We want to teach these children from little ones.'
(d) Capacity attributes. These indicate the role of the participant as $\mathrm{s} / \mathrm{he}$ enacts the situation; these are illustrated in the following examples:
(5-198) ngooddoo waddgoomgiri doogman
that he:works stockman 'That man works as a stockman.'
(5-199) ngoolyoongoolyoo -ngga gajlimi "cutter" ERG I:cuthim 'As a circumcisor I cut him.'
(5-200) niyaji -yooddoo gambayi jimaddi -langi this DU boy friend : DY nyamaniwawooddooyoo
they:two:were:getting:big
'These two boys were growing up as friends together.'
[2] Circumstantial attributes. In situation clauses other than clauses of being, the only circumstantial attributes are Locational. These ascribe a location to the Medium (typically a Goal) as it is involved in the situation; they do not locate the entire situation. Locational attributes usually occur in clauses of transfer and holding. For example,
(5-201) gamba galinyjawila bagad -ja
water I:will:carry:it bucket LOC 'r'll carry the water in a bucket.'
(5-202) goorijgila marla -ya
I:hold:it hand LOC
'I'm holding it in my hand.'
(5-203) manyi midda -ya thiddangga
food head LOC she:carries:it:on:her:head
'She carries the food on her head.'
In examples such as these, the LOC PP locates the Medium/Goal only, not the whole situation. The PP always refers to a relatively small object at, in or on which the Medium/Goal is located.

The locational phrase that occurs with the verb yood- 'put' in (5-204) would also seem to be an attribute:
(5-204) ngaaddi yoodjingi gilirni -ya
rock he:put:it grass LOC
'He put the money in the grass.'

This verb also occurs with a locational expression that locates the full process of putting, such as birndiddi-ya (plain-LOC) 'on the plain', which would appear to be a Locational circumstance.

### 5.3 Some aspects of the textual organisation of the Gooniyandi clause

### 5.3.1 Information

Two major aspects of the textual organisation of Gooniyandi utterances are distinguished, following Halliday's suggestions for English. They are: (i) INFORMATION, which is concerned with the given/new opposition; and (ii) THEMATISATION, which is concerned with the theme/rheme (or topic/comment) opposition (Halliday 1967, 1970, and 1985). Information and thematisation impose distinct and independent structures on utterances. As in English,
information structure in Gooniyandi is expressed primarily prosodically, by intonation features, and the thematic structure is realised through constituent order. This section is concerned with information; thematisation is discussed in the following section.

As has already been remarked, Gooniyandi discourse is highly elliptical. As a rule, given or retrievable information is ellipsed. There are few restrictions on either the word/morpheme class of elements that may be ellipsed, or on their experiential role in the clause. The only exceptions are propositional modifiers such as mangaddi 'no, not', yiganyi 'uncertain', thaddi 'mistakenly believed'; these particles are never ellipsed. There are, however, some striking differences in the types of constituent that tend to be ellipsed depending on the generic type of the text. In narrative texts of the type investigated for the purpose of this description (see section 1.10), ellipsis of nominal expressions is rife, but verbal complexes are almost never ellipsed. Expressions referring to the main participants in a clause are particularly prone to being ellipsed, since they are cross-referenced by bound pronominals in the verb - cross-referencing often provides sufficient information about the participant to allow it to be identified. A count over the fifteen texts investigated revealed that only about one in five clauses had its full quota of inherent phrases. At the same time there were only three or four cases in which a verb had been ellipsed; and in each of them, the ellipsed verb belonged to the second clause of a 'correlative' construction the first verb of which was lexically identical with it (see example (5-264) below).

On the other hand, in everyday conversation there is a greater tendency for given verbal complexes to be ellipsed. (5-205) is a typical conversational exchange.
(5-205) A: gardlooni
B: ngoorndooga
by:someone
A: nganyingga
by:me
A: I hit him.'
B: 'Who did?' (B was rather deaf)
A: 'I did.'
Gooniyandi texts are spoken as sequences of TONE UNITS, which carry distinctive intonation contours. They are delimited in example sentences and the texts by slashes. Tone units are typically bounded on each side by short pauses.

Not every pause signifies the end of a tone unit, however. There may be pauses in which the speaker is collecting his/her thoughts, which are followed by material identified as being from the same tone unit, on the grounds that pitch is relatively constant before and after the pause. Occasionally, too, two tone units will occur in succession, with no intervening pause. For examples of tone units see the texts in Appendix 1.

The tone units into which a text is divided typically do not correspond to grammatical divisions into clauses or sentences. Quite often a single NP is uttered in isolation, in a tone unit of its own, separate from the other constituents of the clause to which it belongs. And the remaining constituents, which need not correspond to any grammatical division of the clause, may fall into a single tone unit. However, tone units are not distributed randomly across the clauses of a text. As a rule, a clause consists of an integral number usually between one and five - of tone units, each of which contains an integral number of clausal ICs. Tone units do not normally consist of parts of two clauses, or parts of two phrases (unless they are discontinuous). Most frequently, a clause will fall into either one or two tone units as illustrated in example (5-206). Although maximal division as in (5-207) is possible, it is rare.

'Ned Colins, he rode my horse for me.'
(5-207) garndiwiddi ngidi yoowooloo -yooddoo / barajiddayi /
two we man DU
thinga / we:followed:it
foot
We two men followed the footprints.'

Rarely, a single tone unit consists of two full clauses.
This raises the question: If tone units don't correspond to grammatical units, what do they represent? The answer proposed here is that tone units represent the INFORMATION UNITS into which the speaker opts to divide his or her utterance. Precisely this suggestion has been made by Halliday (1970) for English, and subsequently by Kilham (1977) and Heath (1984) for the (unrelated) Australian languages Wik Munkan and Nunggubuyu respectively. (See also Grimes 1975.)

I am suggesting that tone units delimit information units into which the speaker packages his message, each tone unit corresponding to a unit of
information, the amount of information s/he thinks the hearer can take in at one time. Thus, Gooniyandi texts consist of sequences of units each of which carries one "piece" or quantum of information. This raises the important but often ignored question: What is information? Halliday (1985) has suggested that "information ... is a process of interaction between what is already known or predictable and what is new or unpredictable". There are two problems with this formulation. The first is that information units sometimes relate things which are both new; the second is that it is not explained what types of things may be associated together in this way.

A rather different view of the nature of information is held by writers such as Fronek (1983), who claim that information can be presented only through propositional structures, which means that information is a nexus between a predicate and its arguments. Both Halliday and Fronek agree on one thing: that information involves some sort of nexus. It appears that this nexus may be of one of the following three types:
(a) A propositional nexus, that is, the connection between a full predicate and its arguments, expressed in a clause.
(b) An association between two entities, or an entity and an attribute. (5-208) illustrates this:
(5-208) gamba joomoo laandi bagiri / ngaddanggarninhingi
water soak up it:lies from:dreamtime
gamba/
water
There's a soak up there, one with dreamtime associations.'

In the second information unit of this example, only a part of the nexus finds linguistic expression; the other part occurs in the preceding unit. This information COULD have been expressed clausally in a single tone unit - but there is no reason to believe that the second information unit of this example is an (elliptical) clause.
(c) An association between a linguistic constituent or its referent, and a clausal or phrasal role. For instance, in (5-206), the first information unit associated the person Ned Collins with the role of Agent, the rider of the horse. Altematively, and/or concurrently, the associated role may be the textual one of theme.

The rate of injection of information in a text depends mainly on the speaker's evaluation of how quickly the hearer can take it in - which is presumably based on considerations of presumed familiarity with the subject
matter, degree of interest in the subject matter, intelligence, etc. - and is controlled by its division into information units (see Grimes 1975:297). It is inversely proportional to the number of information units into which the text is divided. (5-207) shows a very slow rate of information injection; it is much quicker in (5-209), where the speaker is presenting an affectively loaded part of the discourse, the point at which he finds a lost man.
> (5-209) nganyi joodoo -nyali wardngi niyi gilbali /
> I straight REP I:went him I:found:him
> 'I went straight up and found him.'

The rate of information delivery can be slowed right down by dividing a particular message into two clauses and two information units. The first unit will state the matter in its starkest terms, and this will be elaborated on in the following unit. In this way, not only is the rate of information flow controlled, but each aspect can be made prominent in a 'natural' way - that is, may be made the unmarked Focus of information (see below) - without overloading any message unit.
(5-210) niyaji ralwiddayi / boonbooloo ralwiddayi /
this they:two:plucked:it feather they:two:plucked:it
'They plucked it; they plucked its feathers.'

When a given clause consists of two or more tone/information units, it is typically the case that one of the units can be identified as more central or PRIMARY than the other unit(s), which will be referred to as SECONDARY unit(s). The primary unit has a more prominent salient syllable, and an intonation contour characterised by greater pitch movement. On the other hand, a secondary unit normally has a slight rise in pitch on its final syllable when it precedes the primary unit, but a low falling pitch contour (i.e. with a low initial pitch) when it follows the primary. No matter what its position, the primary unit does not have the slight rise of the type associated with an initial secondary. I have attempted to show these features in examples (5-211) and (5-212) (=(5-208).

'After that, one bull went for water.'
(5-212) $\overline{\text { gamba }} \overline{\text { joomoo laandi }} \overline{\text { bagiri / }} \overline{\text { ngaddanggarni }}$
water shingi
$\overline{\text { gamba }}$ /
water
'There's a soak up there, one with dreamtime associations.'

As these two examples (and others elsewhere in the paper) illustrate, the primary unit normally contains the propositional nexus - the verbal complex in clauses with verbs. Secondary units as a rule consist of a single clausal IC, an NP, PP, or adverbial, the other member of the nexus being implicit.

It seems likely that this discussion is not restricted to tone units which together constitute clauses. I suspect that it applies also to units of clause size which go together to form larger sentence-like constructions. In particular, clauses which on other grounds can be identified as subordinate occur on secondary tone units: they have the characteristic slight rise on their final syllable when preceding the main clause, and the low falling contour when following the main clause.

We may, on the basis of the foregoing, hypothesise the existence of a TONIC SENTENCE, consisting of one obligatory primary unit, together with one or more optional secondary units. In information terms, this would correspond to a number of information units which together convey closely related information. The secondary units provide additional information, useful in the interpretation of the primary unit.

Within each tone unit, one (or at most two) of the stressed syllables is particularly prominent. It is usually the most strongly stressed syllable of the unit, and there is often discernible pitch movement within that syllable. The significant intonation contour of the unit typically starts on this salient syllable. In the examples provided in this section, I have used underlining to indicate salient syllables.
There are different degrees of salience. Some salient syllables are especially heavily stressed - this is particularly the case for corrections: the initial stressed syllable of a word which corrects a preceding word uttered by mistake is typically more strongly stressed than the stressed syllable of the item it corrects. For example, the initial stressed syllable of ngajangi his younger brother' in (5-234) below is more salient than the stressed syllable of marnawa his older brother' which it corrects. Other salient syllables - particularly in secondary tone units (which will be discussed below) - are only more slightly stressed than nearby stressed syllables. This complication may be safely ignored here.

It is suggested that the salient syllable marks the FOCUS of the
information unit. The Focus is the item which the speaker presents as the most newsworthy, and not recoverable from the preceding discourse; it is always NEW, in terms of the given/new opposition. In using the term 'new' I do not mean to suggest that the item must not have been mentioned in the (immediately) preceding text, or that it may not be present in the extralinguistic situation, as some writers such as Fronek (1983) have suggested. Rather, as Halliday has pointed out in many places, new properly applies to items that are evaluated as not predictable in the circumstances of their occurrence. Thus, for instance, an entity that the speaker may be sure is identifiable by the hearer, or even present in his consciousness at the time, may be assigned the value of focal or new, if it fulfils an unpredictable role in the clause, or if, unpredictably, it plays a role in the clause at all. This fact has been recognised by Daneš (1974:111); Chafe, by contrast, has defined GIVEN as that which is presumed present in the consciousness of the hearer (1976:30).

In the view proposed here, given and new are LINGUISTIC categories, and the speaker has available the CHOICE of treating a piece of information as one or the other. S/he is neither constrained nor forced by extralinguistic factors to make any particular choice. In other words, the categories given and new are not pregrammatical or prelinguistic, as has been suggested by writers such as Heath (1984:606); and furthermore, it is not possible to say on the basis of an inspection of the linguistic and extralinguistic context that a particular item is either given or new. There is at best a correlation between the linguistic categories and the extralinguistic ones, whereby they agree in the majority of cases. Viewing given and new as pre- or extra-linguistic, linguists have been forced to conclude that they have no fixed realisation in grammar. By taking the view advocated in systemic functional grammar, it is clear that there is a direct relationship between form and meaning - although not between form and reference. To exemplify this discussion, consider an extract from Text 1 (line (5)), repeated here as example (5-213).
(5-213) moongaya / milawawinmi bidi -yooddoo -ngga /
moming they:were:looking they dual ERG
In the morning, they two were looking (at the fishing lines).'

Given the textual context of its occurrence, it would be natural for the speaker to presume that the hearer is able to identify the two individuals referred to by bidiyooddoongga 'by they two', and even that they were in the forefront of the hearer's consciousness. But to claim that this phrase is therefore given is to miss the point; there is no reason for a hearer to suppose that only the two individuals
other than the speaker went to look at the fishing lines in the moming. This is the reason why the speaker chose to represent bidiyooddoongga 'by they two' as new and focal information. Thus, only by maintaining the distinction between linguistic meaning and reference (or core and contextual meaning) can significant generalisations be made.

The salient syllable most frequently falls on one of the stressed syllables of the final clausal IC (phrase, adverbial or particle) in the tone unit. An exception to this generalisation concerns the group of clauses which I have referred to as situations of being (see section 5.2.1.2). These are clauses which have one of the three stance verbs bagi- 'lie', warang- 'sit' and wara- 'stand', and assert either the existence of an entity, an attribute of an entity, or a niche the entity inhabits. In these clauses, the VP always comes finally in the tone unit to which it belongs, and is never salient. Any stressed syllable within the salient phrase may have the main stress, although there may be a tendency for the main stress to fall on the main lexical item in the IC. Salience placement is probably semantically conditioned: apparently in NPs it identifies phrase level focus, that is, the item evaluated as the most newsworthy item of the phrase.

It follows from the preceding paragraph that the information Focus usually falls on the final IC in an information unit. This is, however, a tendency, and not a grammatical rule. Any distributional word in the information unit, regardless of its position, may be focal. It is hypothesised that the UNMARKED place for information Focus is on the final IC in the information unit. This placement is unmarked in respect that the preceding material in the information unit may be either given or new. An information unit with final Focus may thus occur in any of the three logically possible circumstances, where the preceding material is given, new, or some given and some new. The Focus is MARKED when it occurs on a non-final constituent. Here again, the preceding material may be either given, new, or some given and some new. But the material following the Focus is positively specified as given or retrievable. That is, the Focus falls on a non-final constituent only under the condition that the material following it is given. Conversely, placement of given information following new information may be presumed to be a marked order.

A number of observations support this claim.
(1) Contrastive focus normally falls on a non-final constituent. For example,

| (5-214) nginyji lililoowa wardbiri / nganyi | ngirndangaddi |  |
| :---: | :---: | :--- | :--- | :--- |
| you west:side | you'll:go I | this:way |

> wardjawingi /
> Ill:go
> 'You go the west way, I'll go this way.'
> (5-215) ngidi gadjinmarni / nganyi babooddoonggoo wardngi / we we:lefteach:other I downwards I:went
> niyi thaanoonggoo wardji /
> he up he:went
> 'We split up; I went down, he went $u p$.'

As is well known (see for example Chafe 1976:33-34), a contrastive clause normally involves a presupposition that the situation obtained for someone, something, or in certain circumstances, or that a certain individual (or time, place, etc.) was involved in some situation or other. (5-214) is a direct quote and comes from a text in which a head police tracker is giving instructions to another tracker. It is reasonable to assume that there is a presupposition that each would go in some direction.
(5-214) and (5-215) show that the presupposed material (or a linguistic expression representing it in whole or part) follows the Focus. What is presupposed is of course given, and is explicitly marked as such by its placement after the Focus. On the other hand, being given, presupposed material is likely to be ellipsed, resulting in a construction with unmarked Focus - see line (41) of Text 1.
(2) The placement of the propositional modifiers mangaddi 'no, not', yiganyi 'uncertain', thaddi 'mistakenly believed', etc., confirm the above pattern. Immediately following non-final foci are contrastive. Consider example (5-216), which comes from a text concerning a man who got lost in the desert. The immediately preceding text had described him starting on his way back home. Thus it is presupposed that he was returning home, and the material following the Focus, wardji riwiyidda 'he went to his camp', constitutes given information. The adverbial thiddgirli 'straight' is thus a point of contrastive focus, contrasting with the Focus of the following information unit, ngilayani ngiwayinyali 'east and south again'.

| (5-216) mangaddi | thiddgirli wardji riwiyidda / ngiwayi wardji |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| not | straight he:went to:camp south he:went |  |  |  |
| ngilayani | ngiwayi | nyali wardji / |  |  |
| east | south again he:went |  |  |  |

'He didn't go straight to his camp; he went south, east, then south again.'
(3) Gooniyandi does not distinguish declarative from interrogative moods, either formally by morphology or syntax, or, as far as I can tell, prosodically. Information requests are made indirectly by statements offering some information, but leaving something indefinite (cf. Eades 1982). In this way, the speaker may hope to elicit a response filling in the indefinite blank. Information requests use the indefinite determiners jaji 'something', ngoorndoo 'someone' and ngoonyoo 'something', as well as the adverbials yiniga 'somehow' and yaningimi (morphologically 'now-indefinite) 'sometime'. These indefinite words are always the information Focus in information requests - but not all utterances in which they are focal are questions, or construed as questions. The reason for this is obvious: the speaker would quite naturally single out and draw attention to the indefinite or unknown part of his utterance, the part s/he seeks elaboration of or comment on, as the most newsworthy. In addition, the indefinite word is typically non-final (unless it is the only element in the unit), and a marked information Focus. (5-217) is an example:
(5-217) ngoorndoo -ngga ngaadd widdbginyja /
someone ERG stone you:throw:it
'Who are you throwing stones.'

The explanation for the fact that the indefinite word is a marked Focus is that questions are pragmatically marked (see Goody 1978), and typically involve a presupposition that the predication holds true for at least one entity, place, time, etc.. And this presupposition may be treated as given information. For (5-217), the action was of course situationally obvious.
I remark that in "rhetorical questions" - that is, utterances which look like questions but which are not used to elicit information, and for which straight linguistic responses would be judged inadequate - the indefinite word is not normally focal. The Focus is unmarked, and falls on the VP in (5-218), which is a quoted utterance of a white head stockman to his Aboriginal workers questioning their action of cutting a bullock skin which he had explicitly instructed them not to do. Presumably he was not merely seeking information.

$$
\begin{gathered}
\text { (5-218) jaji } \quad \text {-yoo gajgilanggidda / } \\
\text { something DAT you:plural:have:cut:it } \\
\text { 'Why have you cut it?' }
\end{gathered}
$$

In a similar way, when the indefinite word is followed by either -widdi UNKN or -ngaddaya TOO, there is not usually any presupposition involved. And the indefinite word, or the distributional word it forms a part of, does not normally constitute a marked Focus. These observations are exemplified in (5-219), which shows that the resulting utterance closely approximates clauses with indefinites in English:
(5-219) ngoorndoo -ga -widdi moownga -ngangsi /
someone ERG UNKN he:looked for:you
'Someone was looking for you.'

The main deviation from the pattern described here concerns the indefinite yiniga 'somehow', when it realises the role of Process in a VP (in which case it has the sense 'do something'). In about a quarter of the available examples, all of which are elicited, the verbal complex occurs finally and is focal. The problem here is that the presupposition that something happened is realised linguistically by the same item that realises the information Focus. The presupposition therefore can't be set off as given information. What happens in most cases is that the focal verbal complex is followed by an NP or PP. This phrase represents given information, the connection between its referent and its experiential role in the clause. This is the closest possible linguistic approximation to the presupposition. (5-220) is a typical example.

| (5-220) yinigawinmi yoowooloo | garndiwangooddoo / |
| :---: | :--- |
| they:did:something man | many |
| 'What did all those men do?' |  |

This discussion of information requests may be generalised to questions in general. In Gooniyandi, requests of confirmation or disconfirmation (polar yes/no questions) are expressed by the assertion of a proposition, with the intention and expectation that the hearer's agreement or disagreement will be elicited. One part of the proposition, namely the part about which the speaker is least certain, is selected as the information Focus. The enclitic -mi ~-ma IND, which indicates roughly the same type of indefiniteness as the indefinite determiners and adverbs, is usually added to the word on which information Focus falls. Not unusually, especially when it falls on a non-verbal constituent, the information Focus is marked and there is a presupposition that the process did occur for at least some entity, place, time, or whatever. A's initial utterance in (5-221), for example, presupposes that the person in question did arrive sometime.

| (5-221) A: | gaddwaroo <br> afternoon <br> bijngarni / <br> he:emerged |  |
| ---: | :--- | :--- |
| B: marlami / jamoondoo | bijngarni / |  |
|  | nothing | otherday he:emerged |

A: 'Did he come yesterday?'
B: 'No, he came the other day.'
It may be thought that an interrogative mood might be defined by the placement
of information Focus on the indefinite word in the case of information requests, and on the word to which -mi $\sim-m a$ IND is attached in the case of requests of confirmation. However, this will not work since the Focus can fall on these items without any suggestion that information or confirmation is being sought - see line (12) of Text 2, for example.

To summarise, Gooniyandi discourse is spoken as a sequence of tone units, which define information units, each of which carries a single unit of information. Information units always contain a Focus, which carries the most newsworthy item. It may optionally have material preceding the Focus, which may be either given or new or some given and some new; and it may optionally have material following the Focus, which is given. The information unit thus has the structure shown below:
(5-222) (unmarked given/new) ${ }^{\wedge}$ Focus $^{\wedge}$ (+given)
As we have seen, the final [+given] material represents a presupposed proposition, either in whole or in part.

### 5.3.2 Thematisation

The other major component in the textual metafunction, thematisation, has the clause or clause complex (see sections 5.6.2.1.3 and 5.6.2.2 below) as its domain. The THEME in Gooniyandi, as in English, is indicated by position: it occurs first in the clause. From this perspective, the clause has the structure Theme^Rheme. Since the Theme is frequently chosen from the register of given information (cf. Halliday 1970:162, Danes 1974:114ff), it is prone to ellipsis. There are thus a number of apparent exceptions to the ordering generalisation. I will return to this point below. In the meantime, attention will be restricted to clauses with explicit Themes.

The term 'theme' as it is commonly employed in both Praguean and systemic theories has two main senses. It can mean (i) the starting point or the point of departure of what the speaker has to say, and (ii) the subject matter, what the speaker is talking about (cf. Halliday 1967:212, and Danes 1974:113). These two senses sometimes coincide, and sometimes do not. For instance, the first clause in the reply of B in $(5-223)$ below has Theme jamoondoo 'other day', which serves as a convenient "peg" on which to pin the clause - and indeed the whole of the reply. The speaker was not, however, talking about the other day.
(5-223) A: niyaji gawi ngoorndoo -ga ngangginggi this fish someone ERG he:gave:it:to:you

B: jamoondoo milayidda wardji gawi -binyi other.day we:saw:him he:went fish PER goornboo wardji niyaji -ngga ngangngindi woman he:went this ERG he:gave:it:to:me
A: 'Who gave you this fish?'
B: 'The woman who we saw the other day going fishing gave it to me.'

The Theme of the third clause of B's reply, goornboo 'woman', is thematic in the second sense: it is what the clause - in fact the whole utterance - is about. Another type of Theme found in Gooniyandi is illustrated in
(5-224) goornboo manili thigi
The woman has a short nose.'
(5-225) yoowooloo yingi jawalyi
man name [subsection term]
'The man is of the jawalyi subsection.'
These clauses consist of three NPs, each one word in length. (The first two words do not constitute an NP together - see page 253 above.) The second and third words (also phrases) together constitute characterising clauses, the second word (/phrase) being characterised by the third. The first word (/phrase) however bears no experiential role in the clause. But rather it establishes a starting point, a 'frame' within which the main predication holds (cf. Chafe 1976:50). I will refer to Themes of this type as Topics, following Chafe (1976). It is the second word (/phrase) in each case that the clause is really 'about'; this constituent constitutes a second Theme for the clause.

Topics typically establish an owner or possessor of a thing bearing some experiential role in the clause. Where the possession is alienable, as in (5-226) a possessive pronominal referring to the owner is required in the NP referring to the possessed entity.

| (5-220) | ngaddagi | ngaddanyi / ngaja nhoowoo / |
| :--- | :--- | :--- |
| my | mother | brother his |
| ngaddagi | nyaanyi / |  |
| my | uncle |  |

'My mother's brother is my uncle.'
topicalisation is also used to establish a location, with respect to which a second location is established. For example,

| (5-227) mayaroo | Quanbun / niyi | -nhingi | -ngga | lilinggaa |
| :--- | :--- | :--- | :--- | :--- |
| house | that ABL | ERG | west |  |
| birndiddi | $-y a$ | gardbini / |  |  |
| plane LOC he:hithim |  |  |  |  |

'To the west of Quanbun homestead, on the plain, he killed him.'
Topicalisation is frequently used where embedding would be used in English. In examples such as (5-226) either embedding or topicalisation may be used in Gooniyandi, although the latter predominates. But where the depth of embedding is greater, topicalisation only can be used (see above page 281.)

The Topic is a particular type of Theme, one which bears no experiential role in the clause in which it occurs. Instead, it has some experiential role in a phrasal IC of the clause; that is, in some experiential role within the clause. This phrase is typically (as in examples (5-226) and (5-227) above) thematic in the clause, in the sense that is is what the clause is about. Thus, in the topicalisation pattern there are two distinct types of Theme, the Topic and the Theme proper. The former invariably precedes the latter. The second Theme, or the Theme proper, is enabled by, or is established by the Topic.
It seems that Topics do not necessarily enable or establish Themes, although they normally do. In

| (5-228)ngooddoo -yoo <br> thatDAT moowooloogaringi | ngirndaji <br> wife |
| :--- | :--- | :--- | :--- |
| this |  |

the Topic ngooddooyoo yoowooloo garingi 'that man's wife' enables the Rheme, nhoowoo thadda 'her dog'. Compare also (4-82) above - in this example the enabled PP may, however, be interpreted as a second Theme (see below pages 378379).

One of the reasons for employing the topicalisation pattern is that it assigns more 'weight', or greater thematic prominence to the possessor than it does to the possession. In general, the possessor is thematic over a stretch of discourse larger in size than a single clause, whereas an enabled possession is typically a LOCAL Theme of a single clause. See, for example, line (7) of Text 2, where the name, once established, is no longer of interest. Secondly, the Topical Theme may be a starting point which, although not experientially relevant to the situation, is most easily anchored in the context. It is typically a prominent land-mark, as is the case in (5-227), and line (75) of Text 1. From it, something experientially relevant to the present clause may be established.

Themes are often set off in separate information units. Such Themes occur
on separate secondary intonation contours which are characterised by a slight rise in pitch on the final syllable (cf. Kilham 1977:83). This serves to give some degree of prominence to the Theme, and usually happens only when the Theme conveys new information. An example, from the beginning of a text, is

| (5-229) yoowarni | -ngga | / yoowarni | -ngga | gardiya / |
| :--- | :--- | :--- | :--- | :--- | :--- |
| one | ERG | one | ERG | white:person |
| cherrabun bore / | warangji / gamba | / bambimnga |  |  |
| [place name] | he:sat water | he:pumped:it |  |  |
| -widdangi | boorloomani | -yoo / |  |  |
| for:them bullocks | DAT |  |  |  |

'There was a white man at Cherrabun Bore pumping water for the catte.'

Another example is (5-195) above - Ned Colins was introduced for the first time in this clause.

Topical Themes are very frequently segmented (i.e. occur on their own information unit) - on the whole more frequently than is the case for other Themes. See sentences (5-226) and (5-227) above, and line (7) of Text 2. (The fact that the constituent immediately following the Topic can also be set in its own information unit adds support to the claim above that this constituent is a second Theme.)
On rare occasions a Theme set off on its own information unit is unmarked for its experiential role in the clause of which it appears to be a part:
(5-230) ngaddagi yawarda / jadil yoodli
my
my
hy
My horse
saddle

The phrase [ngaddagi yawarda] 'my horse' ought to be in a syntagm with a DAT postposition.

The intonation contour of a segmented Theme is, on rare occasions, falling, as it is on the adverbial ngamoo 'before' in
(5-231) maja migami -ngadda / ngamoo / joondoowawinmi
boss he:told to:me before they:were:making:camp
garndiwangooddoo -ngga babiddi / racescourse
many ERG below
migami -ngadda /
he:told to:me
'The boss told me "Already they're camping down at the racecourse".'

The significance of the contrast between rising and falling contours is unclear. However, the falling intonation seems to be associated with a Theme that is not initial in the sentence, as is the case in (5-231) - cf. Kilham (1977:89).

Qualifying material may be interpolated (on its own intonation contour) between a segmented Theme and the remainder of the clause. Such interpolated material always occurs on a secondary and falling tone unit. An example is
(5-232) maja / bablizaj -joo maja / a alex scott / boss pub DAT boss ah
migami -ngadda /
he:told to:me
The boss, the publican, Alex Scott, he told me.'
Following Grimes (1975) I will use the term REPRISE in reference to the pattern in which a Theme is segmented and placed in its own information unit, and, which in addition, is referred to (usually) by one of the endophoric determiners niyaji 'this' and niyi 'that'. In this construction, the endophoric determiner always occurs initially in the second primary information unit. For example,
(5-233) wajaddi -nhingi mawoolyi jirliwa -jangi / niyaji
boab ABL little:bits sinew SEM this
widgoodda birdi -ya /
they:rub:it leg LOC
'The fibres from the boab tree they rub on their legs (to make
twine).'

As this example shows, reprise is normally used when the Theme is longer than usual (NPs of three words are rare). Compare


## niyaji -ngga rooddoob- / <br> this ERG pull

'Ah, who was it? Shit, another one, Brouda's older ... younger brother, the jawalyi man who died at what's it called, at Mable Downs. He pull ... .'

In fact, thematic reprise most frequently occurs in order to summarise full clauses, as in line (75) of Text 1. (See section 5.6.2.2.2 below for further discussion.)

Occasionally the usual Theme^Rheme order appears to be reversed, with what would appear to be the Rheme followed by what would appear to be the Theme. In these circumstances, the apparent Theme always occurs on its own information unit, as in the following examples:
(5-235) booroowanbiddi laandi / yaddbanyi yoowooloo /
they:were:hiding up initiate man
'They were hiding up, the initiates.'
(5-236) widdijidda -nhi banda wila / garndiwangooddoo -ngga / we:dug:it on:him ground finish many ERG stockmen joorloo /
too
'We dug a hole for him, everyone, the stockmen too.'
I will refer to this construction as TAGGING, following Grimes (1975). Tagging normally serves the function of reminding the hearer of the identity of the Theme or of making its identity explicit, in case there is a chance of ambiguity. In either case, the tagged phrase typically refers to something already mentioned in the text, or present in the extralinguistic context. This is the case for the two immediately preceding examples. The tagged unit serves a function of clarification or explication.

The tagging construction does not, I claim, contradict the "theme first" principle. It can be reasonably assumed that the Theme has been ellipsed, being treated as given. Tagging it indicates that the speaker has changed his/her mind at this point in the production of the text. The speaker now decides to treat the information as not given, or at least as requiring some form of elaboration. (Note that tagged constituents occur on secondary tone units with falling pitch; this is characteristic of qualifying information units, as in (5-194) above.)

In the examples so far the Theme has usually been a simple clausal constituent, either a nominal phrase (NP or PP), or an adverbial. In one
example, namely (5-227), the Theme was a complex of such units. Word complexes and phrase complexes of all types (see section 4.3 above) can be thematic. However, it is not clear that the Theme must always be realised by a grammatical unit or a complex of grammatical units. Consider, for example, (5-237):

| (5-237) yingi | ... number | six / gardiya | -ngga |
| :--- | :--- | :--- | :--- |
| name | white:people | ERG |  |

'(The spot) called six furlongs - what white people call it is six furlongs - from there they started off, all the horses.'
The second clause in this example is divided into two information units, the first of which has the rising pitch associated with segmented Themes, and consists of an ERG PP and a VP. As the translation suggests, this clause has a natural interpretation as a WH-cleft. These two facts suggest that the sequence gardiyangga goowajgoodda 'white people call it' is a good candidate for Theme.

The constituent realising the Theme of a clause usually realises at the same time some other role in the clause (or part thereof), experiential or interpersonal. There is one exception to this, in which the thematic element has an entirely textual role. The d-words niyinhingi (that-ABL) 'after that, from there', niyajinhingi (this-ABL) 'after this', and migaya (thus-LOC) 'at that time' are frequently used as conjunctive elements. The first two are sentential conjunctions (see for instance lines (49) and (79) of Text 1 , and line (3) of Text 3 ); the third normally conjoins clauses within a single sentence. These connecting words are almost always thematic, providing a 'starting point' for the clause/sentence.

The interpersonal role Propositional Modifier, which is realised by particles and temporal adverbials (see next section), frequently combines with the textual role of Theme. For examples see ( $5-216$ ) above and next section. Some Particles such as mangaddi 'no, not' are invariably thematic; others, including yiganyi 'uncertain' need not be, although they usually are. If not thematic, they are typically focal.

The experiential role of Actor (see section 5.2.1.3 above) is statistically the most frequent choice of Theme in situation clauses. In non-situation clauses it is the thing characterised or identified that is the preferred choice of Theme.

But all other participant and circumstantial roles appear to have the potential of being thematic. As yet I am unable to distinguish among the possibilities as to their relative markedness as Theme choices.

The major unresolved problem is whether the VP, which frequently occurs clause initially, may be thematic, and if so, in what sense. When a VP occurs initially, it is always the case (at least in the texts investigated to date) that there is an established (and therefore given) participant in the register of the text which is a candidate for ellipsed Theme. A typical example is the second clause in line (8) of Text 2: here the Agent participants have been established in the preceding text. A second circumstance in which VPs frequently occur initially is in constructions of the type mentioned earlier (page 364) in which a clause amplifies or elaborates the preceding one. One use of this construction is to allow unmarked focus to fall (in successive clauses) on each item of news. For example,

| (5-238) niyaji -ya / gamba -ga gardbinbini / |  |  |
| :--- | :--- | :--- | :--- |
| this LOC water ERG it:hit:them |  |  |
| gardbinbini gamba | -ngga / yoowarni | giddami / |
| it:hit:them water ERG one | he:ran |  |

There it rained on them; they were rained on, and one of them ran away.'
The reverse order seems to never occur: the VP^NP/PP clause never precedes the NP/PP^VP one. There are, then, no examples in which a VP initial clause occurs in a context in which some participant is not given, and consequently the VP is a good candidate for (ellipsed) Theme of the clause. It is possible that initial VPs in clauses such as (5-235) and (5-236) above are thematic in the other sense - i.e. they are starting point Themes.
VPs do sometimes occur in circumstances such as:
(5-239) bagiyi niyaji -ya / bagiyi middi bijngarni
he:lay this LoC he:lay sun
'He camped there. He lay until dawn.'

Here bagiyi 'he lay' serves as a thematic conjunction. It is suggested that rather than the VP bagiyi 'he lay' being a conjunction in the clause middi bijngarninhi 'the sun rose on him', the VP is the sole constituent of an elliptical clause which is thematic in a clause complex (formed by the constituents in the second tone unit). See sections 5.6.2.1.3 and 5.6.2.2 below.

A clause may have more than one Theme. It seems that there will always be at least one experiential role which is thematic in a clause. In addition, there may be optionally a thematic conjunctive element or Propositional Modifier, or
a Topic. There are certain ordering tendencies: textual Themes - i.e. conjunctions - invariably precede other types of Theme; Topics precede other types of Theme, except for textual ones; and experiential Themes tend to be the final theme. However, Propositional Modifiers may occupy any position in the thematic sequence, the placement being semantically significant (cf. section 5.4.1).

It appears to be possible for a clause to have more than one independently thematic experiential role. Line (61) of Text 1 is a convincing example. The first tone unit, which consists of two nominal phrases, has the slight rise in pitch associated with segmented Themes. The clause would appear to be "about" both the speaker and the kangaroo. It is possible that clauses such as the second one in example ( $5-229$ ) above also have two experiential Themes - an ellipsed one, yoowarni gardiya 'one white person' (which is mentioned in the preceding clause), and an explicit one, gamba 'water'. Multiple experiential Themes also appear to occur quite frequently when one of them is a temporal or spatial circumstance. These are normally starting point Themes, and the co-occurring Theme is as a rule a participant role, which the clause is 'about'. Starting-point Themes tend to be initial, like textual Themes - see for example line (7) of Text 2.

I have already discussed Theme in relation to information packaging. To conclude this section I turn briefly to Theme in relation to given and new. As I have already remarked, the Theme is most frequently chosen from the register of what is given. However, this is not always the case, and Themes not infrequently convey new information, especially if there is nothing given - cf. Halliday (1967:212). Indeed, information Focus can fall on the Theme. Such a Focus will of course be marked, and everything other than the Theme will be given. That is, it will be presupposed that a situation occurred, or a relationship of identity or attribution obtains with respect to the Theme. Examples include the first clause of (5-234), and
(5-240) jaji -wami ngabbiddayi ginharndi -yiddi -ngga /
something IND they:two:ate:it you:know DU ERG
'What is it that that pair have eaten?'
(5-241) gardiya gardlooni nganyi -ngga / white:man I:hit:him I ERG
'It was the white man that I hil.'
(5-240) presupposes that they ate something; (5-241) that the speaker hit someone. Sentences such as these are naturally translated into English as it-
clefts. The difference is that the Theme in the English it-cleft is an unmarked focus, whereas it is marked in the Gooniyandi versions.

A focal Theme may be singled out and made more prominent by use of a deictic expression such as ngirndajiya (this-LOC) 'here'. For example:
(5-242) ngirndaji -ya ngirndaji -wami ngabgoodda /
this LOC this IND they:eat:it
'Here, maybe this is what they eat.'
This example is a direct quote which comes from a narrative. The speaker was one of a pair of young men looking around the campsite of another group of people for the food they had been gathering. The effect of the initial deictic is to single out the referent, drawing it to the addressee's attention.

But Gooniyandi does have a means of making a Theme into the unmarked Focus. This is effected by employing a pair of phrases to refer to the Thematic item. One expression occurs initially, as Theme; the other, the information Focus, occurs finally also in its unmarked position. For example, yoowooloo 'man' and boolgawoolga 'old men' in line (1) of Text 2 both refer to the same entity. The first phrase is the Theme, the second is the unmarked Focus. Another example is
(5-243) wanyijddi ngaddagi
river.roo my y
jamadda /
male:kangaroo
'A river kangaroo my son killed, a male one.'

A special case of this construction occurs when the discontinuous pieces constitute together a single phrase experientially - see, for example, (4-16) above and line (61) of Text 1. In general, the two parts of any discontinuous phrase occur initially and finally, as Theme and unmarked Focus. It seems that the main function of discontinuity in Gooniyandi is to enable a single experiential role to fulfil more than one textual role. This construction is also functionally different from the English it-cleft, which likewise has the effect of making the Theme the unmarked Focus. This is because the material between the Theme and the Focus in the Gooniyandi construction is unmarked for the values given/new (see page 371 above). But the Theme must be new (since it is at the same time focal), and it follows that everything following the Theme
must also be new. ${ }^{6}$ This means that the clause involves no presupposition. This is the case in the examples cited. By contrast, it-clefts in English involve presuppositions. For further discussion of this pattern, see McGregor (1989).

Instead of occurring at different ends of a clause, a pair of phrases referring to the same thematic item may be juxtaposed, to form a type of complex Theme. Presumably the juxtaposed phrases may be logically related in any one of the ways mentioned in section 4.3.1. Of particular interest is the case in which the relationship is one of identification, whereby one phrase, usually the first, identifies the second (cf. also section 5.2.1.1.1 above). The identifying phrase is typically the information Focus of the clause, and following material is of course given. That is, it is given (and presupposed) that the situation obtained for a certain entity (time, place, or whatever), and that that entity (or whatever) is identified by a different designation. Reference to the entity in the given part of the communication is frequently by means of a determiner. In this case, the construction is roughly equivalent to the English ' $x$ is the one that did/is $y^{\prime}$; and the determiner in the Gooniyandi version does roughly the job of the indefinite 'one' in the English version. Examples are line (12) of Text 2, and
(5-244) ngooddoo -ngga niyaji -ngga doownga
that ERG this ERG he:took:it
'That is the one who took it.'
The following is a possible example of the opposite order, the Identifier following the Identified:
(5-245) niyi -ngga gardbini ngirndaji-ngga / ngooddoo that ERG he:hit:him this ERG that yaanya gijali / other dead The one who killed the other dead person is this one.'
Note that here the two coreferential phrases are not juxtaposed; in contrast to the pattern discussed above for discontinuity in the preceding paragraph, the Theme here is given.

Reference to the entity within the given part of the clause need not always be by means of a determiner, as line (1) of Text 1 illustrates. Here the determiner is the Identifier, and is focal. In this case, the closest English equivalent is a clause such as 'This is the $x$ that did/is $y$ '.

[^22]
### 5.4 Remarks on the interpersonal organisation of the clause <br> 5.4.1 Propositional modification

A third aspect of the organisation of the clause is its organisation as an interactive event, involving the interlocutors in the speech situation. In an interactive event a clause may be used either: (a) to exchange information, or (b) exchange 'goods and services' (Halliday 1985:68). (This is something of an oversimplification, although it is useful as an initial hypothesis - see McGregor 1988c.) Gooniyandi does not distinguish formally between these two types of act. There is no distinct imperative or any other such related category, either within the verb phrase or within the clause: e.g. a clause in the future tense may be used in either way, to exchange information, or to exchange 'goods and services' (see section 6.5.1 below, and cf. Halliday 1985:68).

Simultaneously, the clause may be used in: (i) giving or offering, and (ii) requesting or demanding. Again these are not distinguished formally in Gooniyandi. For example, there is no grammatically distinct class of questions (as has been mentioned already - see section 5.3.1). Exactly the same forms are used in eliciting information as in giving information. As we have seen, the enclitic -mi ~ -ma (see section 6.3.8) which is frequently found in requests of confirmation (i.e. 'yes' or 'no'), and the words ngoonyoo 'something (from a closed set of options', ngoorndoo 'something', etc. (see 3.3.1.2) frequently found in information requests (where they mean, respectively 'which' and 'who'), really mark indefiniteness (cf. Dixon 1977:182ff).

That aspect of the meaning of a clause which remains constant across all of these functions will be referred to as the PROPOSITIONAL CONTENT of the clause.

In its role in the exchange of information, the propositional content of a clause is ASSERTED by the speaker. In the case of requests of information (i.e. corresponding to WH-questions in English) the propositional content involves an indefinite in the place of the information requested (cf. pages 369-370 above). That is, the propositional content of the information request ( $5-240$ ) above, jajiwami ngabbiddayi ginharndiyiddingga 'What is it that that pair have eaten?' is 'That pair have eaten something.'

In the case of requests of confirmation, as has already been suggested, the speaker makes an assertion in the hope that the hearer will respond to it, either confirming or denying it. (This may be a reflex of the culturally appropriate mode of information seeking - including confirmation seeking - which involves at least the pretence of offering something for comment, elaboration, etc., rather than direct probing - cf. Eades 1982, McGregor 1988c.) The
propositional content of the clause may include the element 'indefinite'. Thus, ward-ma-wiri (go-IND-you:will:go) has a propositional content 'You are going (or doing something else)'. This assertion invites a response from the hearer. It is for this reason that I refer to clauses used in the function of exchange of information as ASSERTIONS.
It should be noted carefully that I am not suggesting that Gooniyandi people do not ask questions. This is quite false (for further discussion of this point, see McGregor 1988c). What I am saying is that grammatically there is no distinct category of questions; the same forms that are used in making statements are also used in asking questions. This fact itself may lend some support to Eades' suggestions as to the differences in the way in which Aboriginal and European cultures exchange (and view) information. The lack of a distinct category means that it is always possible for either the speaker or the hearer to use the hedge that the utterance was in fact a statement pure and simple.

A corresponding term for clauses used in the second major function of exchange of goods and services is the term PROPOSAL, following Halliday (1985:71). Here the speaker proposes, rather than asserts, the propositional content of the clause. This proposal amounts to a suggestion that the propositional content should be true, thereby offering his assurance that it will be true (i.e. the speaker proposes to effect the necessary actions), or requests/demands that the addressee make the propositional content true (by effecting the necessary actions).

There is another 'speech-act' type in which the clause is used neither to convey information nor to exchange goods and services: EXCLAMATIONS. Again, they have no distinctive formal properties, although, as for "questions", there is an enclitic, namely -woo DEF which means roughly 'definitely, exactly', which frequently occurs in this speech act type. For examples, see section 6.3.9 and section 6.5.3.3.

All situation and non-situation clauses may be used in the exchange of information, i.e. in assertions. A proper subset of these may also be used in proposals. For example, characterising and identifying relational (non-situation) clauses do not occur as proposals, although existential clauses may - see example (5-33) above; nor, at least in the present corpus, do situation clauses whose VPs are in the past tense.

From the point of view of its propositional content, a major clause consists of an obligatory Proposition, and an optional Propositional Modifier. The 'simple' Proposition is realised by a clause consisting of the following types of unit: NP, PP, VP, and/or ADV. (That is, the 'simple' Proposition is that part of the clause which in experiential terms refers to a situation or a
relationship.) Thus, for example, a 'simple' clause such as

| (5-246) | nganyi | -ngga manyi wardla |
| :--- | :--- | :--- |
| I | ERG food I:brought:it |  |
| 'I brought food.' |  |  |

consists of the Proposition nganyingga manyi wardla 'I brought food'. A Propositional Modifier may be realised by a particle or an adverbial. A clause such as
(5-247) mangaddi gilbawidi banda
not they:found:it dirt
'They didn't find (any) dirt.'
has constituency structure

| Propositional Modifier | Proposition |
| :--- | :--- |
| [mangaddi] | [gilbawidi banda] |
| not | they:found:it dirt |

In the identification of the two constituents, the Proposition and the Propositional Modifier, the clause is being viewed from the perspective of its role as an interactive event in the speech situation. That is, the Proposition and the Propositional Modifier are interpersonal roles in the clause. This follows from the fact that the propositional content of the clause is that which contextualises as an assertion, a proposal, or an exclamation, within the speech situation it occurs in. It is that aspect of the meaning of the clause exchanged between the speaker and the hearer. The role of Propositional Modifier is thus a modal one, indicating some sort of qualification of the Proposition.

There appear to be three main ways in which the proposition expressed by a clause may be modified: (a) objective, in which the 'logical' status of the proposition is modified; (b) subjective, in which the speaker's attitude towards the logical status of the proposition is indicated; and (c) expectation modification, in which the proposition is placed within the expectations of the interlocutors. Table 5-1 sets out the main lexemes functioning in these three types of propositional modification.

Table 5-1: Propositional Modifiers

| Objective | Polarity: | mangaddi 'no', marlami 'nothing', woomoorla 'no' <br> (avoidance style) |
| :--- | :--- | :--- |
|  | Probability: birli 'maybe' |  |

(Note: the glosses given in the table are very approximate, and suitable to the context in which the words are used as Propositional Modifiers. These words may have other apparently quite distinct meanings in other contexts. See section 6.4 for a detailed discussion of the significance of the terms.)

Clearly most of the words in Table 5-1 do not have modal-type meanings. Rather, what is being claimed is that they may play modal roles in the clauses in which they occur.

The lexemes under Expectation require some comment. Scalar is used following McConvell (1983a) in reference to the situation in which the expected is ranked with respect to the asserted. For example, in

> (5-248) winhi danymiliyidda mangaddi milayidda just we:heard:it not 'We only heard it, we didn't see it.' we:saw:it
the asserted proposition, that we heard it, is ranked lower than the expectation that we should have seen it. (For further discussion see below sections 6.3.3, 6.3.5, 6.4.7, and 6.4.8.)

The temporal adverbials are not only used in locating processes in time although this might be seen as their unmarked function - but they are also used in modifying propositions with respect to expectations. For example, ngamoo 'before' normally occurs in contrast with other time expressions such as gaddwaroo 'afternoon, yesterday', e.g. in "frames" such as:
(5-249)

'(The rain) finished before/yesterday/the other day.'
Such sentences constitute plain responses to information requests such as yaningimi gaddigmi 'When did it finish?' (='It finished sometime'). It is presupposed that 'the rain stopped sometime'. However, ngamoo 'before' may also occur in a contrasting set with mangaddi 'no, not', yiganyi 'uncertain', etc.:
(5-250) \(\left\{\begin{array}{l}ngamoo <br>
before <br>
mangaddi <br>
not <br>
yiganyi <br>

uncertain\end{array}\right\} \quad\)| gaddigmi |
| :--- |
| it:finished |

'(The rain) has already/not/perhaps finished.'
In this case, these sentences are not plain responses to information requests (i.e. 'When did it happen?'). Rather, they are appropriate to a context in which the status of the Proposition expressed by gaddigmi - '(the rain) has finished' - is called to question for some reason. The clause ngamoo gaddigmi (example (5-250)) occurred in such a situation. The speaker had asserted his belief that the rain would stop sometime later on in the day. However, on going outside, he found that it had already stopped raining, upon which he uttered the clause. The point of the utterance was not to indicate WHEN the rain had stopped, but rather that it had ALREADY stopped. The first embodies a presupposition that the rain had already stopped, which was certainly not the case when this clause was uttered. The presupposition was the negation of this, that the rain had not (yet) ceased.

The remaining lexeme (see Table 5-1), which I have labeled as a frequency adverbial, occurs when there is some expectation to the contrary, i.e. an expectation that the situation does not always occur. Otherwise, in the absence of such expectations, it would not be used; instead, a more neutral mode of expression (involving present tense in the VP) would be used - see below section 6.5.1.2.

Temporal adverbials are not the only lexemes which may realise both an experiential role (of temporal location) and an interpersonal role (of Propositional Modifier). The same holds true of the lexemes listed under subjective modification: each of these may realise an interpersonal role, indicating the speaker's attitude towards the proposition, and an experiential role of Manner, indicating the Actor's subjective state as s/he engages in the action (e.g. 'think mistakenly', 'go uncertainly', 'think/talk correctly or truly' - see discussion of these terms in section 6.4).

The lexeme that realises the role of Propositional Modifier enters into a syntagmatic relation with a full clause: it has a single full clause and no more (and no less) in its scope. It is not surprising then that a Propositional Modifier may have within its scope a 'complex' (or non-simple) Proposition - that is, one which is itself a modified Proposition. For example,

| (5-251) | ngaddarni always | mangaddi not | bijbiyaniila goomboorna I:come early |
| :---: | :---: | :---: | :---: |
|  | Propositional Modifier | Propositional <br> Modifier | Proposition |
|  |  |  | Proposition |

'I never come (here) early.'
(5-252)
\(\left.$$
\begin{array}{|ll|l|l|}\hline \begin{array}{l}\text { wamba } \\
\text { still }\end{array} \text { Ryali }\end{array}
$$ $$
\begin{array}{l}\text { mangaddi } \\
\text { not }\end{array}
$$ \quad \begin{array}{l}bijgoowarni <br>

it:is:emerging\end{array}\right]\)| Propositional <br> Modifier | Propositional <br> Modifier | Proposition |
| :--- | :--- | :--- |
|  | Proposition |  |

'(The sand) is still not coming out (of the receding flood-
waters).'
The order of Propositional Modifiers is significant. The first always includes the second within its scope, as is the case for all other such 'form' markers, postpositions and enclitics. Thus, in (5-251) and (5-252) it is the negated proposition that is asserted as always holding, and still holding true. These lexemes never form syntagms together.

As elsewhere, the maximum observed depth of embedding is two, and no clause in the corpus contains more than two Propositional Modifiers. Of the lexical items that can independently realise the role of Propositional Modifier, only a very few have actually been observed in combination. In all available examples, the innermost Propositional Modifier role is realised by mangaddi 'no, not' (cf. below section 6.4.1).

The position of the Propositional Modifier in the clause is not fixed. It is largely dependent on interpersonal and textual considerations - principally the presuppositions of the interlocutors, and thematisation. Before discussing these, I briefly mention two general tendencies in placement of Propositional Modifiers. (The following examples all involve the particle mangaddi 'no, not', the most frequently occurring Propositional Modifier. Similar examples can be found for other Propositional Modifiers.)

In relational clauses (see section 5.2.1.1.1) the Propositional Modifier precedes, usually immediately, the Attribute or the Identifier. In situation clauses it invariably precedes the VP, again frequently immediately, except in attributive being situations. In the latter class of clauses, the Propositional Modifier precedes, usually immediately, the Attribute, unless the Attribute follows the VP. Some illustrative examples are:
(5-253) mangaddi gilbawidi banda
not they:found:it dirt
'They didn't find (any) dirt.'
(5-254) nganyi mangaddi ngaanggi ngoombarna
I not yours husband
'I'm not your husband.'
(5-255) nganyi -ngga nyamani ngabla bidi -yooddoo -ngga
I ERG big I:ate:it they DU ERG
mangaddi ngabbidda
not they:ate:it
I ate a lot, (but) they didn't eat much. ${ }^{7}$
Propositional Modifiers rarely occur clause finally. Some, such as mangaddi 'no, not', thaddi 'mistakenly believed', and woomoorla 'no, not' (in the avoidance style) never occur finally. Others, including yiganyi 'uncertain' and some of the temporal adverbs occasionally do occur finally. Most usually when

[^23]one of the latter lexemes occurs finally in an utterance, it is added as an afterthought, and occurs on a separate intonation contour of its own. (It perhaps constitutes a minor clause of the 'modifying' type - see below section 5.4.2.) For example,
(5-256) mooyoo bagi -ma -yi / yiganyi /
sleep lie IND he:was uncertain
'He could have slept there.'
It is suggested that Propositional Modifiers are as a rule thematic - the exceptions being the few occasions in which the Propositional Modifier occurs clause finally. Since they express the speaker's angle on the proposition, they are natural points of departure for the utterance (cf. Halliday 1985:49-50). That is, for example, mangaddi 'no, not' is thematic in (5-254) and the second clause of (5-255) even though it is not clause initial. As suggested above (section 5.3.2), in clauses having a thematic interpersonal role, one or more of the experiential roles will also be thematic. Moreover, the order of the two Themes was claimed to be semantically significant. It is suggested that greater prominence is accorded to the first Theme in a sequence. This appears to be the case in
(5-257) mangaddi yangbala -ngga goornboo doownga / not young:man ERG woman he:got:him 'Young men didn't take wives.'
It is clear that, in the text in which (5-257) occurred, which concerned the differences between marriage practises of pre-contact days and today, the main Theme is the negation, not the Agents and Goals. Compare on the other hand correlative constructions such as

| (5-258)ngooddoo milawa <br> that you:will:see:him I ngany mangaddi milaanawoo |  |  |  |
| :--- | :--- | :--- | :--- |
| not | you:sec:me |  |  |
| 'Look at him, not at me.' |  |  |  |

Here it would seem that the speaker is the most prominent Theme, and Focus of contrast, in the second clause.

I have already discussed (page 368) the circumstances in which the Propositional Modifier is immediately followed by a focal constituent. If this constituent is a marked Focus, the material following it embodies a presupposition that some situation occurred, which usually differs in a single respect - in terms of the participants, inner roles, attributes or circumstances involved, or in terms of the process - from the situation claimed not to occur.

Examples are (5-212) above and the following:
(5-259) mangaddi nganyi -ngga gardlooni yoowooloo -ngga
not I ERG I:hit:him man ERG
gardbiddini
they:hit:him
'I didn't hit him, the men did.'
(5-260) mangaddi ngooddi -ya yoodli ngirndaji -ya not that LOC I:put:it this LOC yoodli
I:put:it
I didn't put it down there, I put it down here.'
(5-261) mangaddi niyaji yoowooloo giddabingaddi
not this man tall
garingiwa giddabingaddi
his:wife tall
'It's not this man who is tall, but his wife.'
(5-259) involves a presupposition that someone hit the person under consideration; (5-260) involves a presupposition that the speaker put the object somewhere; and (5-261) presupposes that someone is tall.

The above characterisation of presupposition is too constrained: there is a greater degree of freedom in its relation to the asserted proposition. This may be seen in the following example:
(5-262) mangaddi niyi -ngga dijjingi marla -ya
not that ERG he:snapped:it hand LOC
moorda dijbindi -nhi goodij -jangga
certainly it:snapped on:him hold $\mathrm{ABL}_{2}$
'He didn't break it; it really broke in his hand as he held it.'
(5-262) presupposes only that the knife broke (a given in the context of occurrence of this clause). The presupposition, that is, may be a somewhat weaker proposition than that which is asserted.
A second possibility is that the correlated clause may involve a rather more specific process, one which more precisely characterises the process as it applies to the new circumstance, manner, or whatever. Thus, in (5-263), although it is presupposed that the dead are put somewhere (a process which could be described with the verbal lexeme yood- 'put'), in the correlated clause a more specific lexeme is chosen, to refer to the placement of something within a cavity:
(5-263) mangaddi ganarna -ya yoodgoodoo banda -ya not platform LOC they:put:him ground LOC diriggoodoo
they:enter:him
They don't put a dead person on a burial platform; they bury him in the ground.'
Next to the correlative constructions such as (5-261) and (5-262) there is an alternative construction, which appears to be roughly synonymous:
(5-264) mangaddi thirirli / janggoo goorijgoodda / not hand soft they:hold:it 'Not hard, soft they hold it.'
(5-265) A: jaji -yoo wardja
something DAT you:took:it
B: mangaddi nganyi -ngga ngooddoo yaanya -ngga
not I ERG that other ERG
yoowooloo wardnga
man he:took:it
A: 'Why did you take it?'
B: 'I didn't, that other man took it.'
Probably the most reasonable way of accounting for (5-264) and (5-265) is to assume that mangaddi thirirli 'not hard' and mangaddi nganyingga 'not by me' respectively are elliptical clauses. These sentences would be regarded as 'reduced' correlative constructions of the type exemplified in (5-260) to (5-262) above.
Sometimes mangaddix (not $x$ ) follows the positive clause (instead of preceding it), in which case it seems to be added as a type of afterthought:
(5:266) yaningi -nyali wardbangadda I mangaddi today REP you:will:bring:it:for:me not moongaya /
tomorrow
'Bring it today, not tomorrow.'
(5-267) ngaddagi -moowa ngoorloogla / mangaddi yaabja /
I ON I:drank:it not others
'I drank it alone, no one else.'

### 5.4.2 Minor clauses

A class of MINOR clauses may be identified, which have no independent propositional content. Minor clauses cannot be used as assertions. As opposed to major clauses (with the single exception of existential relational clauses),
minor clauses may be characterised as those without a nexus. Evidently for a clause to have propositional content, and to be used as a vehicle for the independent communication of information it must involve a nexus (of course one of the elements of this nexus may be ellipsed).

Although minor clauses cannot be used in making assertions, they may be used in proposals and exclamations. The prototypical minor clause consists of an interjection. Some, like $b a$ 'come on, let's go', nya 'here you are', and bay 'eh?' are used as proposals. (The last of these is used in the elicitation of a linguistic response and so is a proposal.) Others, like ngay, yay 'hey!', warawoo 'youtch', etc. are used in exclamations only.

Words from all classes except for verbals may realise minor clauses of these two types; nominals are quite frequently used in this function. In a minor clause a nominal may be used as a vocative - e.g. yoowooloo! 'Man!'; and the subsection terms are frequently used as vocatives, e.g. jawandi!, in calling to a person of the jawandi subsection. Since their aim is to at least gain the addressee's attention, vocatives could be considered to be proposals.

Less frequently, nominals are used in exclamations. For example, girlinggi 'penis' and nyaninyi 'vagina' are used at least these days as rough equivalents to 'prick' and 'cunt' respectively. Other than use in swearing, a nominal minor clause may be used e.g. to draw attention to something, such as a snake, or alcohol: barlanyi! 'snake!', gamba! 'water, grog'.

Another function that a minor clause may serve is to modify the propositional content of a (usually) preceding clause. The interjections yoowayi, yoowoo 'yes', and particles such as marlami 'nothing', mangaddi 'not, no', etc. may realise such roles.

### 5.5 Non-finite clauses

Non-finite clauses constitute a class of impoverished clauses which consist of an obligatory non-finite verb, sometimes together with an NP, PP, or adverbial. The non-finite verb $\left(\mathrm{V}_{\mathrm{nf}}\right)$ distinguishes none of the person, number, tense, or modal categories of the finite VP. It consists of a verbal root or stem, optionally followed by an infinitive (see section 5.5 .3 ), or by the progressive aspect marker.
That there is no classifier means that there is less specificity in referring to the Process. For example, the verbal root ngarag- can mean either 'work on', or 'make, complete', depending on the choice of classifier. This distinction cannot be made in the non-finite verb.

The non-finite verb is, as has just been mentioned, the only obligatory constituent of a non-finite clause, and any bound morpheme which forms a syntagm with the clause must be attached to it . This bound morpheme may be:
(a) a stem-forming suffix, deriving either nominals - e.g. -mili CHAR or -gali GD (see section 3.12.1.1) - or adverbials - e.g. -wa MD, or -wadda MNR (see section 3.12.3.1); or
(b) a postposition, one of -ngga ERG, -nhingi $\mathrm{ABL}_{1},-y$ angga $\mathrm{ABL}_{2},-y a$ LOC, -ngaddi COMIT, or -woo DAT.

Stem-forming suffixes and most postpositions may be added to a verbal stem. However, -ngga ERG must always follow an infinitive or a stem-forming suffix; and the locative postposition -ya usually follows the progressive aspect marker.

The $\mathrm{V}_{\mathrm{nf}}$ normally occurs without another constituent that can be identified as its clausal sister (in the putative non-finite clause); and indeed in the case of -wa MD and -ya LOC there are no examples at all which show such a sister constituent. However, I assume throughout that $\mathrm{V}_{\mathrm{nf}}$ is dominated by a $\mathrm{K}_{\mathrm{nf}}$ (nonfinite clause) node, since there are examples of expanded clauses - which usually consist of just two words - for each of the other non-finite constructions, and it is not clear that there are any absolute restrictions on expansion in any case.

Non-finite clauses do not normally occur in isolation. They are usually found in circumstances which make it clear that they are realising some role in a finite clause or in an NP. For example,

Entity: Qualifier:
(5-268) [thinga ward -nhingi] bagiri -ngadda banda -ya foot go ABL it:lies on:me ground LOC 'My footprint lies on the ground.'

Carrier: Attribute:
(5-269) NP1 $[\text { ngiddinyi }]_{\text {NP1 }}$ NP2 N Knf $[$ moorloo widdigawoo
fly eye bung
ngang $-j i]_{\mathrm{Knf}}-$ mili $_{\mathrm{N}} \mathrm{NP}$
give IT CHAR
'The fly is a bung-eye giver.'
Thus, non-finite clauses may be embedded under word nodes, where they are functionally equivalent to (and interchangeable with) roots, or under phrase (PP) nodes, where they are functionally equivalent to (and interchangeable with) NPs.

They may also realise clausal functions without intervening 'class' nodes (see below section 5.5.3).

Non-finite clauses frequently occur in the functions of Qualifier, sometimes Entity (infrequently classifier) in NPs and as clausal Attributes. They do not occupy 'marginal' positions with respect to the finite clauses they occur in: they are not normally uttered on distinct intonation contours, and may freely occur between constituents of the main clause (cf. Hale 1976:78).

### 5.5.1 Nominalisations and adverbialisations

### 5.5.1.1 -mili CHAR

Example (5-269) shows -mili CHAR in syntagm with a (part of a) non-finite clause. The whole construction of $\mathrm{K}_{\mathrm{nf}}$ mili is functionally a nominal word. In (5-269) this word is the sole constituent of an NP realising the Attribute in a relational clause, which characterises an individual (the fly) by its habitual engagement in a process. In (5-270) the derived -mili CHAR nominal is a Qualifier in an NP with an overt Entity.

Entity: Qualifier:
(5-270) ${ }_{\mathrm{NP}}[\text { goornboo moorniny -mili }]_{\mathrm{NP}}$
woman fuck jagmingadda
The promiscuous woman told me ...'
The thing qualified or attributed on, as in examples (5-269) and (5-270), is usually the Actor in the non-finite clause, as might be expected from the fact that the morpheme -mili CHAR indicates something in active association with an entity (see above page 232). However, in all available examples, the Actor phrase has been ellipsed. But there are examples in which Mediums and Manners have not been ellipsed:

$$
\begin{array}{cccc}
(5-271) & {[\text { boolga }]} & \mathrm{N}^{[\mathrm{Knf}}[\text { mawoolyi } & \text { ngab }]_{\mathrm{Knf}} \\
\text { old:mili }]_{\mathrm{N}} \\
\text { oldan } & \text { children eat } & \text { CHAR } \\
\text { 'The old man was a child-eater.' }
\end{array}
$$



There is one problematical example, the analysis and interpretation of which remains uncertain:
(5-273) goorlinyi -ngga wird -bili -mili maningga
mosquito ERG bite IT CHAR night mosquito ERG bite IT CHAR night
This was given freely in response to the prompt 'Mosquitoes always bite at night'. However, similar examples which I constructed myself involving ERG PPs were rejected by native speakers of Gooniyandi.

If the 'single mother' condition (Sampson 1975) is rejected, (5-273) might be analysed as follows:


Alternatively, it could be claimed that the Carrier in the relational clause is ellipsed, being coreferential with the Agent of the embedded clause.
There are other possibilities: in particular, it is possible that the above interpretation of ( $5-273$ ) is mistaken. It could perhaps mean 'mosquito biting time is night time' - or, more literally, 'mosquito biting is a characteristic of nighttime'. Should this interpretation prove justified the claim made above for coreferentiality of the Carrier and the Actor must be rejected. In any event, (5-274) provides further evidence of the clausal status of the unit -mili CHAR enters into constituency with.

### 5.5.1.2 -gali~ $\sim(w) a l i \sim$-yali GD

There are too few instances of this morpheme in syntagm with a clause to permit a general description. It may be presumed that it has similar properties and functions as -mili CHAR. An example is:

Carrier: NP Attribute: NP
(5-275)
$\begin{array}{lc}\text { goornboo } & \mathrm{NP}_{\mathrm{N}}[\text { woob } \\ \text { woman } & \left.\text { cooli }]_{\mathrm{N}}\right]_{\mathrm{NP}} \\ \text { cook } & \text { GD }\end{array}$
Woman cook GD
'The woman is a cook.'

### 5.5.1.3 -wa MD

In all available examples (which number over one hundred) -wa MD constructions consist of a single constituent, a verbal stem, in syntagm with -wa MD. So it is not clear whether a full clause or just a verbal is in syntagm with this morpheme. For convenience and consistency I will assume the former, that is, that -wa MD does form a syntagm with a full (albeit elliptical) clause. As was suggested above (page 245), -wa MD indicates a 'way' or mode of being or action. And thus -wa MD clauses normally indicate situations in which an entity is involved, concomitant with or as a result of its engagement in the main situation (referred to by the finite clause). For example:

> (5-276) barn -ga wajladdi -nhi return MD I:threw:it to:him 'I threw it back to him.'

When the entity is an Agent in the finite clause, -wa MD is followed by -ngga ERG:
(5-277) ward - -ga
go
goga thiddi rooddijbiddarni
They argued going along.'
However, when this entity is an Actor/Medium either -wadda MNR (see next section) is used instead of -wa MD, or else -wa MD is followed by the postposition -ngga ERG. The choice depends on whether the non-finite clause indicates a manner of action, in which case -wadda MNR occurs, or an attribute, in which case -wa-ngga MD-ERG occurs:
> (5-278) warang -ga -ngga bagiri sit MD ERG he:lies 'He's sleeping sitting up.'
> (5-279) mangaddi wara a -ngga jijagginggiddawoo not stand MD ERG you:are:talking 'Don't stand talking.'

-wa-ngga MD-ERG clauses, of which (5-277) to (5-279) are typical examples, indicate secondary processes in which the Agent/Actor is involved while $s /$ he is engaged in the main process. The secondary processes are thus normally extendible; and furthermore, they usually require effort on the part of the Agent/Actor in order to be maintained. They are never happenings.

However, the Goal attributes, such as (5-276), are typically resultative; they normally indicate a resulting condition of the Goal subsequent to the main process. -wa MD clauses also attribute on Ranges, where they are again typically resultative. For example,

```
(5-280) bawn -ga ngangjawinyji
    return MD I:will:give:it:to:you
    'I'll give it back to you.'
```


### 5.5.1.4 -wadda MNR

I have suggested (page 246) that this suffix forms adverbials from words of other classes, which indicate the Manner in which an action was done. As a rule, nonfinite -wadda MNR clauses occur in intransitive clauses, normally clauses of motion:
(5-281) galgal -adda wardji
laugh MNR he:went
'He went along laughing.'
(5-282) narda -adda wardji
cry MNR he:went
'He went along crying.'
There is a single example in which the -wadda MNR clause occurs in a main clause of directed action:

| (5-283) | birdi | bandaddang | -gadda | -ngga | thoolnglimi |
| :--- | :--- | :--- | :--- | :--- | :--- |
| -nhi |  |  |  |  |  |
| leg stiff | MNR | ERG | l:kicked | on:him |  |
| 'I kicked him stiff-legged.' |  |  |  |  |  |

(Compare the attributes in examples (5-277) to (5-279). Note also that example (5-283) shows a nominal birdi 'leg', in constituency with the non-finite verb bandaddang- '(be) stiff', providing some evidence in favour of the view that it is a full clause that is embedded under the word node in examples (5-281) to (5-283).)

### 5.5.2 Non-finite clauses in postpositional phrases

### 5.5.2.1 -nhingi $\mathrm{ABL}_{1}$

The ablative postposition -nhingi, when forming a syntagm with a non-finite clause, usually indicates that that process is a cause of the main process (the one referred to by the finite clause). For example,
(5-284) $\left.\mathrm{pp}_{\mathrm{PP}}\left[\mathrm{Knf}^{[g a m b a} \text { ngoorloog }\right]_{\mathrm{Knf}}-n h i n g i\right]_{\mathrm{Pp}}$ yalijlimi water drink ABL I:got:sick 'I got sick from drinking grog.'
(5-285) marnba jayali $\quad{ }_{\mathrm{pP}}[\text { warang -nhingi }]_{\mathrm{PP}}$ bum I:got:sore sit ABL 'My bum is sore from sitting.'
However, embedded -nhingi $\mathrm{ABL}_{1}$ clauses do not cover the entire range of causal relations. It seems that the main process must be a result of the engagement of the Actor in the non-finite process, and this participant must be a Medium in the finite clause (cf. section 5.2.3.6 above).
In (5-268) the Entity (the footprint), may be regarded as (coming into existence as) a consequence of the process of walking. Note however that the Entity thinga 'footprint' is not a participant in the process of walking; but this does not prevent it from being qualified by the process.

### 5.5.2.2 -yangga $\mathrm{ABL}_{2}$

There is a single example in which the postposition -yangga $\mathrm{ABL}_{2}$ is attached to a verbal root, and presumably, to the clause to which this root belongs. That is ( $5-262$ ) above. The relevant part is repeated here:

| (5-280) marla | -ya moorda dijbindinhi | goorij | -jangga |
| :--- | :--- | :--- | :--- | :--- |
| hand LOC really it:broke:on:him hold | ABL $_{2}$ |  |  |
| '(The knife) broke in his hand from holding (it).' |  |  |  |

The difference between -yangga $\mathrm{ABL}_{2}$ and -nhingi $\mathrm{ABL}_{1}$ would appear to be as described in section 3.7.2.5. See also section 5.2.3.6.

### 5.5.2.3 -ngaddi COMIT

There is only one potential example in the corpus of -ngaddi COMIT attached to a verbal stem, and so presumably also to a clause,

| (5-287) | ${ }_{\mathrm{NP}}[\text { warlibiddi }]_{\mathrm{N} P}$ river | pp $[$ Knf[y[wilaj around | $\left.-b a n]_{V}\right]_{\mathrm{Krf}}$ <br> CTV | $-n g a d d i]_{\mathrm{PP}}$ COMIT |
| :---: | :---: | :---: | :---: | :---: |
|  | 'The river is win |  |  |  |

(See above page 241.)
In Ungarinyin (Rumsey 1982b:146ff) the cognate morpheme -ngaddi is a regular marker of relative clauses, and is attached to a finite form of the verb.

### 5.5.2.4 -woo DAT

-Woo, the allomorph of the dative postposition that occurs with verbal lexemes, forms a rather impoverished type of embedded clause, which is frequently a purposive:
(5-288) thangarndi walmajaddi jijag -goo wardjawooddoo word speak DAT they:are:going 'They're going (somewhere) to talk Walmajarri.'
(5-289) giningi ngardgimarni gamba -ya nyoomboolwani breath he:breathes water LOC he:dives:in marnangooddoo doorloog -goo far come:up DAT
'He takes a deep breath as he dives into the water, to come up far away.'
(5-290) gamba -ya nyoombool -woo malabmingarni water LOC swim DAT I:did:myself:up 'I did up my hair for a swim in the water.'
(5-291) diwinyi wayandi jard -goo tinder fire light DAT 'Tinder is for lighting fires.'

These examples demonstrate fairly conclusively the clausal status of the constituent which -woo DAT enters into syntagmatic relations with. However, it must be noted that the clause is in many ways reduced. Most usually there is no constituent other than the verbal stem. And only a subset of the possible clause functions (as described in section 5.2) have actually been encountered in a -woo DAT clause. For example, there are no examples of ERG or ABL PPs although there are examples of most other PP types, adverbials and particles.

The -woo DAT clause has three major functions: (i) to attribute a purpose or use of an entity; (ii) to indicate the purpose or reason of an action; and (iii) to indicate a circumstance of Matter, with respect to which a quality holds of an entity, or the respect in which an action was done (cf. section 5.2.3.8).
(i) Examples of -woo DAT clauses as Attributes in characterising clauses are (5-21) above and
(5-292) biddi [[yood] -woo [gooddoomba -ya]]
charcoal put DAT paper LOC
'A pencil is for writing on paper.'

Such clauses indicate the function or use of an entity. Attributes also occur in at least one other clause type. (5-293) shows a -woo DAT clause attributing on the Existent in an existential clause.
(5-293) nginyji -ga baamangaddagi manyi
you ERG you:will:call:out:to:me food
ngirndaji -ya ngab -goo
this LOC eat DAT
'You'll call out to me "There's food here to eat".'
(Contrast ngirndaji manyi ngabgoo (this food eat-DAT) 'this food is to eat'.) However, I have no evidence that this non-finite clause type can attribute on a participant (or anything else in a situation clause. (See also (ii) below.)
(ii) Clauses (5-288) to (5-290) are examples of the second type of -woo DAT clause, which indicates the purpose or reason for the occurrence of the main process.
(iii) Circumstances of Matter indicate something with respect to which the action of the main clause was done, or with respect to which a quality obtains of an entity. Examples of the first type typically involve mental process types, in which the -woo DAT clause indicates a situation perceived or thought about.

| (5-294) | ngirndaji -ya | dawoonggoowaalimi | warang | -goo |
| :--- | :--- | :--- | :--- | :--- |
| here LOC I:like:it | sit | DAT |  |  |
| 'I like to swim.' |  |  |  |  |

(5-295) nganyi dawoonggoowaalimi bayal -woo I I:like:it swim DAT 'I like to swim.'
(5-296) to (5-298) exemplify Matter circumstances in characterising clauses.

| (5-296) mangaddi jimandi | ngab | -goo |  |  |
| :--- | :--- | :--- | :--- | :--- |
| not | good | eat DAT |  |  |
| It's not good to eat.' |  |  |  |  |
| (5-297) | gamba bayal -woo yijgawoo |  |  |  |
| water swim DAT bad |  |  |  |  |
| 'The water is no good for swimming.' |  |  |  |  |
| (5-298) nganyi mangaddi binaddi | garli | -yoo |  |  |
| I | not | knowledgeable boomerang | DAT |  |

ngarag -goo
make DAT
I don't know how to make a boomerang.'
And in the following example the circumstance occurs in an NP:
Classifier: Entity: Qualifier ${ }_{1}$ :
(5-299) gilbayingi np [joornanygadda riwi $\mathrm{Pp}[\text { joorndoo -yoo }]_{\mathrm{PP}}$
he:found:it good place line DAT Qualifier ${ }_{2}$ :
... $\left.\quad{ }_{\mathrm{PP}}[\text { widdb } \quad-g o o]_{\mathrm{PP}}\right]_{\mathrm{NP}}$ throw DAT
'He found a good fishing spot.'
-Woo DAT clauses may be fractured (see page 282 above, and McGregor 1989, forthcoming-e). For example,
(5-300) bunk bagoo -woo mooyoo -yoo
lie DAT sleep DAT
'A bed is for sleeping in.'
(5-301) marndi thiddi -yoo gardboo -yoo
fighting:boomerang fight DAT belt DAT
'The fighting boomerang is for fighting.'
(5-302) balajila wayandi -yoo gaj -goo
I:sent:him fire DAT cut DAT
'I sent him to cut firewood.'
(5-303) niyi -ngga wardjawina riwi -yoo binabina -woo
he ERG he:will:take:us camp DAT show DAT
'He'll take us to see the country.'
My analysis of such examples is that there is a pair of juxtaposed PPs ([bagoowoo] 'for lying' and [mooyoo-yoo] 'for sleeping' in (5-300)) within the main clause, parts of which still constitute a non-finite clause. That is, I reject the 'single mother' condition (Sampson 1975); this obviates the need for transformations, and allows all of the structure to be shown in a single tree. Mooyoo 'sleep' is related both to bagoo- 'lie' as an Attribute, and to bunk of the main clause through the intermediate PP (which is an Attribute), and this is shown in the present analysis, which is summarised in the following tree:
(5-304)


By fracturing, a nominal constituent of the embedded clause is made prominent in the main clause, through its being set off as an attribute or circumstance beside the process itself. For this to be possible, the constituent fractured must be a potential filler of the role in the main clause. The juxtaposed PPs elaborate on one another. These circumstances normally arise when the constituent fractured realises an Attribute or Goal in the embedded clause as well, as in the examples above (i.e. (5-300) to (5-303)). However, Ranges and Spatial circumstances, if they are realised by adverbials, may also be fractured.

It should be clear from the examples given so far that there are no constraints on coreference of major participant roles between the -woo DAT clause and the main clause. In Attributive clauses the thing attributed on always (logically) plays some role in the -woo DAT clause. This may be: Instrument, as in (5-292); Goal, as in (5-296); or Location, as in (5-304), at least. In the situation clauses so far there is also some entity in common between the two clauses. This entity is (in the examples above) an Actor in the -woo clause, and either an Actor or Goal in the main clause (respectively examples (5-294) and (5302).)

However, matters are more complicated than this. In (5-305) the natural interpretation is that the Actors of the process of speech are both the speaker and a third person, respectively Agent and Goal of the main clause.

| (5-305) | ngimbiddjila jijag -goo thangarndi -yoo |  |
| :--- | :--- | :--- | :--- |
| I:hurried:him:up speak DAT | word | DAT |
| I hurried him up for a talk.' |  |  |

Surely it is not a monologue by the third person that is being referred to, even though it was used to describe a language elicitation session with a Gooniyandi
speaker. If such a strict interpretation is insisted upon, the following example is sufficient to prove that the Actor of the -woo DAT clause need have no role in the main clause. It also refers to my going to a language session, and was given to me as an utterance appropriate to the circumstance of visiting a potential collaborator.

| (5-306) | wardngi thangarndi | -yoo | jijag | -goo |
| :--- | :--- | :--- | :--- | :--- |
| I:went word | DAT | speak | DAT |  |
|  | I came for a talk.' |  |  |  |

(No one would have imagined that I would have intended to monologue!)
The natural interpretation of both $(5-305)$ and $(5-306)$ is that the speaker/Actor of the main clause is one of the interactants in the speech act referred to by the embedded clause. Strictly speaking there are no coreferential nominal phrases between the two clauses in these two examples. Indeed, it is not even certain that there must be some shared entity between the two clauses. In (5-307), for example, there is some evidence that the embedded clause has Actor dimana 'horse'.
(5-307) galyjini -yoo giddagidda -woo dimana ngamoo
fast DAT run DAT horse before
marooddawoonmarni
they:gathered:together
They are already meeting for the horse races.'

The fact that galjini 'fast', but not dimana 'horse' has been fractured from the embedded clause suggests that the purpose of the meeting was the race ("speed"), rather than to race the horses. The latter sense would be conveyed more naturally by fracturing dimana 'horse' (see page 401 above). (Furthermore, the verb giddagidda 'run' is not, to my knowledge, used in the context of directed action, 'to race something'.)

There are a number of instances in which a -woo DAT clause appears at first to be independent. For example,
(5-308) mangaddi barnbarn -goo / yilba wardgiri / not return DAT for:good he:goes 'He can't return; he goes on forever.'
(5-309) mangaddi ngambiddi gijgij -goo / yilba gardbiddini/ not again get:up DAT for:good they:hit:him 'He can't get up again; they killed him.'

In these two examples the non-finite clause is clearly not a circumstance of the finite clause; furthermore, there is an intonation break which does not occur in the embedded -woo DAT clauses above. In constructions of this type, the -woo DAT verb preceded by the negative particle indicates a strong degree of unlikeliness or impossibility. It may be because of a social constraint (as in (5-308), referring to the fact that he will not return to the scene of the murder), or a physically determined disability (as in (5-309)).

A clue to the interpretation of this construction is afforded by the following example, in which the occurrence of the DAT postposition on thiddi 'fight' suggests that the -woo clause is indeed embedded. (It appears that thiddi 'fight' has been fractured from the -woo DAT clause.)

| (5-310) marlami / jiginya | -girli / mangaddi | thiddi | -yoo |
| :--- | :--- | :--- | :--- | :--- | :--- |
| nothing little really not | fight | DAT |  |

This suggests that the initial clauses of (5-308) and (5-309), set off by intonation, are relational characterising clauses perhaps with the Carriers ellipsed. (5-309) might then be analysed as follows:
$\begin{array}{ccll}(5-311) & \text { mangaddi } & & { }^{\text {PP }}\left[\mathrm{Knff}^{[n g a m b i d d i}\right. \\ \text { not } & \text { gijgij }]_{\mathrm{Kff}} & -g o o]_{\mathrm{PP}} \\ \text { not } & \text { again } & \text { get:up } & \text { DAT }\end{array}$
'He can't get up again.'
(Compare example (5-273).)
The ellipsed Carrier might therefore be assumed to be the Actor of the nonfinite clause. More appropriate paraphrases for (5-308) and (5-309) might be then, 'he is not to return ...', and 'he was not to get up again'. Unfortunately, there is no independent evidence for this proposal: there are no examples in which the Carrier role (in the main clause) is expressed linguistically by an NP which also fulfils the role of Actor in the non-finite clause. There are, however, a couple of examples which appear to have a Carrier NP (not coreferential with the Actor of the non-finite clause):

| (5-312) barnloondi yilba niyaji mangaddi ngambiddi |  |  |
| :--- | :--- | :--- | :--- |
| I:returned for:good this not again |  |  |
| barnbarn -goo |  |  |
| return DAT |  |  |
| 'I came back for good; I can't go back (there) again.' |  |  |

A possible interpretation for this is that niyaji 'this' is here functioning much like it in English - i.e. 'it is not (possible for me) to return' (see above pages 144-145 for a discussion of niyaji 'this'). A second possible example is

```
(5-313) mangaddi diddib -goo riwi biliga
    not camp DAT place middle
    "We won't make camp half-way." (speaker's gloss)
```

It is possible that riwi biliga 'half-way place' constitutes an NP and that (5-313) means, more literally, 'a half-way place is not the right (place) to camp'. (5-314) provides evidence of a different type: the initial relational clause is reworded in the form of a situation clause:
(5-314) nyamani warang -goo ngirndaji -ya garndiwangooddoo
big sit DAT this LOC many
winhi waranggiddi ngirndaji -ya
nothing we:sit this LOC
'We're too many for this place; too many of us live here.'

Rather than disprove the suggestion above that the Actor of the non-finite clause is the Carrier in the main clause, the last few remarks indicate that there are other possibilities for the Carrier role. And it could be that the Actor is the unmarked choice, understood unless another NP occurs instead. The strong negative sense of examples $(5-308)$ to $(5-310)$ may be due to the fact that the clause is characterising, and states a permanent association between the two major constituents.

### 5.5.2.5 -ya LOC and -goowaya PROG-LOC

There are only a few examples of the locative postposition -ya directly following a verbal stem. In all of them it indicates a concomitant process that the Agent or Actor (depending on the clause type) is engaged in. For example,
(5-315) jijaggooddarni joodoog -ja
they:are:talking:together straight LOC
'They're talking together straightening words.'
(5-316) warangngi waddgoom -ja
I:sat work LOC
'I sat working/at work.'
Far more frequent is the verbal stem followed by -goowaya, which would appear to be segmentable into the verbal morpheme -goowa PROG followed by
the postposition -ya LOC - note, however, that the evidence is not fully convincing on this point. For example,

## (5-317) danymiliyiddra jijag -goowaya we:hear:them talk PROG-LOC 'We hear them talking.'

In finite VPs the progressive aspect -goowa normally refers to the 'train' of events leading up to or following the point of accomplishment of a process, depending on the type of process (see section 6.5.2). It usually occurs with accomplishment classifiers (see section 6.5.5), and verbal lexemes that occur with them. It does not usually - in finite VPs - refer to the continuation of an extendible process (although there are a few examples). However, it may reasonably be argued that the progressive does not usually occur with nonaccomplishment classifiers because the information it carries is already carried by the obligatory classifier, NOT because it is incompatible with these classifiers.

Non-finite -goowaya PROG-LOC and -ya LOC clauses are 'conditional' attributes (see section 5.2.4); they indicate qualities (involvement in a process) that are 'incidental' to the involvement of the entity in the process. The -goowaya PROG-LOC clause indicates a process that is temporally contiguous with the main clause, and which is homogeneous throughout. Moreover, it attributes a 'quality' (i.e. engagement in a process) of an entity, which obtains throughout the duration of the main process. Similarly, the (plain) -ya locative clauses of (5-315) and (5-316) are Agent/Actor attributes.

The carrier of the Attribute may, apparently, fulfil any major transitivity role, at least in the main clause, but it is always (in the available examples) the Agent or intransitive Medium in the non-finite clause. Some examples are:

- Attributing on an Agent
(5-318) ngooddab -goowaya thiddi -ngga jagarndinginbidi shout PROG-LOC fight ERG they:woke:me:up 'They woke me up yelling and arguing.'
- Attributing on a Goal
(5-319) middag -goowaya
lie (avoidance style)
PROG-LOC below I I:found:him
I noticed her (i.e. my mother-in-law) lying below.'
(It is generally the Goal of a clause of perception that is attributed on by a -goowaya clause.)
- Attributing on a Medium/Actor - see example (5-316) and

```
    (5-320) waranggooddoo jijag -goowaya
    they:sit talk PROG-LOC
    'They're sitting talking.'
```

- Attributing on an Affected participant

| (5-321) middi -moowa bijngarniwiddangi boorij -goowaya | -nyali |
| :--- | :--- | :--- | :--- |
| sun ON it:emerged:on:them dance PROG-LOC | REP |
| 'When the sun came up they were still dancing.' |  |

Finally I remark that in no example is there a sister constituent for the nonfinite VP. It is not clear, then, whether the examples in this section properly involve embedded/non-finite clauses, or just non-finite VPs.

### 5.5.3 Infinitives

### 5.5.3.1 -bari $\mathrm{INF}_{1}$

The infinitive -bari occurs with happening type processes (see page 327), and indicates that the Medium/Undergoer has undergone a process, which is accomplished and completed. Although the -bari $\mathrm{INF}_{1}$ happening is temporally prior to the main process referred to in the finite clause, the resulting state of the Medium still obtains. The -bari $\mathrm{INF}_{1}$ clause indicates a quality of its Medium, as it fills a role in some other unit, either phrase or clause. Examples are:

(5-323) nayoo gilbali dij -bani bagiyi
knife I:found:it break $\mathrm{INF}_{1}$ it:lay 'I found the knife broken.'
(5-324) girili lalbag -bari waraari
tree split $\mathrm{INF}_{1}$ it:stands 'The tree stands split.'

The Causer (see 5.2.13) is optional in this clause type, and may or may not be suggested in any particular instance. Example (5-322) suggests the Medium is a Goal, while in (5-324) the Medium is most naturally not a Goal; (5-323) is equally open to either interpretation.

### 5.5.3.2 -mawoo $\mathrm{INF}_{2}$

The infinitive -mawoo occurs with active process types (see above page 326), indicating that the process is completed. Some examples are:
(5-325) lawoodd - mawoo warangngiri
hug $\mathrm{INF}_{2}$ I:sit
'I sit hugging myself.'

| (5-326) yoowooloo ngirndaji | wandaj | -mawoo |
| :--- | :--- | :--- |
| man | this | carry:on:shoulders |
| $\mathrm{INF}_{2}$ |  |  |

The types of process occurring with the infinitive -mawoo $\mathrm{INF}_{2}$ are accomplishments, of a type that leave some resulting effect or state that forms a homogeneous sequence with the accomplishment. Examples above illustrate this: lawoodd- 'hug' is an accomplishment, but it is possible for the resulting state to be held after the accomplishment; wandaj- 'carry on the shoulders' is an accomplishment (it is accomplished when the thing is lifted onto the shoulders), the result of which may be a state of having something resting on the shoulders; and so on. The resulting 'states' are characterised by the fact that they are readily maintained (by a small amount of effort) after their accomplishment. And effort, in the form of another process, is necessary to undo this state. For instance, the hug of (5-325) must be released by another action; it does not simply cease. (-Mawoo $\mathrm{NF}_{2}$ processes contrast with -wadda and -wangga processes which are not accomplishments, and require continual effort to be maintained - they are easily 'stopped' by the actor simply ceasing to put effort into them.)

But there is another possibility: the state of affairs resulting from this process may involve the Goal of the process, instead of the Actor. This possibility is illustrated in examples (5-327), (5-328), and possibly also (5-329). Unlike hugging, carrying on the shoulders, etc., tying up and putting spots on something leave the Goal in a state that will continue with little or no effort until another process (involving effort) occurs that will take the entity out of that state.

| (5-327) | jiljilg | -mawoo |
| :---: | :---: | :--- |
| nyawa |  |  |
| spot | $\mathrm{INF}_{2}$ | tail |
| 'a spotted tail' |  |  |

(5-328) yaanya mird -mawoo -nyali bagiri
other tie $\mathrm{INF}_{2}$ REP it:lies
'The other (shoe lace) is still tied up.'
Thus, depending on the type of process, the thing qualified by the -mawoo $\mathrm{INF}_{2}$ clause will be either an Agent or a Goal in the non-finite clause.
It follows from the above that the two non-finite clause types - i.e. -bari $\mathrm{INF}_{1}$ and -mawoo $\mathrm{NFF}_{2}$ - together provide contradictory evidence on what is sometimes called the "syntactic orientation" of a language. In the formal grammatical terminology of Dixon (1972:128), the -bari $\mathbb{N F}_{1}$ construction identifies the $S$ and the $O$ of the embedded clause (they are always coreferential with a main clause constituent, usually an $S$ ), while the -mawoo $\mathbb{N F}_{2}$ clause identifies the $A$ and $O$ of the embedded clause (they are coreferential with a main clause constituent, usually an $S$ or an A ). This "identification" of A and O in -mawoo $\mathrm{NNF}_{2}$ clauses may be surprising from a formal point of view (cf. Dixon 1979), but it is readily understood semantically; depending on the process type, either the $A$ or the $O$ has changed state.

In the majority of cases the -mawoo $\mathrm{INF}_{2}$ marked VP is the only constituent of the embedded clause. There are, however, a set of examples in which other constituents of the clause are present. They are body-parts, whose state is affected by the process. For example,
(5-329) barndi dal -mawoo wilajga jaddgbanji
arm extend $\mathrm{INF}_{2}$ around he:was:jumping
'(The brolga) was dancing around with its wings out.'
(5-330) marla good -mawoo waraari
hand shut:up $\mathbb{N N F}_{2}$ he:stands
'He's standing hands folded.'
I suggest that barndi 'arm' in (5-329) is a Goal of the embedded clause, whose Agent is the brolga, and that the non-finite clause realises a Manner circumstance in the main clause, thus:


Rejecting the single mother condition, at the same time as it constitutes a clause, barndi dalmawoo 'outstretched arm or wing' may be regarded as an NP with entity barndi 'arm', and Qualifier dalmawoo 'extended'.
It might be suggested that barndi 'arm' is, instead, a non-Goal Medium in the nonfinite clause. The only argument I have against this is theoretical: we would be forced to reject the view that -mawoo $\mathrm{NF}_{2}$ marks accomplished accomplishments. Since there is no independent reason for rejecting this view, it is more reasonable to assume the interpretations of $(5-329)$ and $(5-330)$ that are consistent with the theory.

In clauses of directed action, of course, the -mawoo $\mathrm{NFF}_{2}$ clause occurs in syntagm with an ERG postposition.


The distinction made above between actions and happenings is clausal: it does not divide the class of lexical verbals into disjoint sets, and a number of lexemes can occur in clauses referring to either type of situation. That is, a number of verbals may occur with both -bari $\mathrm{INF}_{1}$ and -mawoo $\mathrm{INF}_{2}$. The following pair shows this.

| (5-334) | bilanggidi | ngaloog | - mawoo | bagiri |
| :--- | :--- | :--- | :--- | :--- |
| blanket | fold | $\mathrm{NF}_{2}$ | it:lies |  |

## (5-335) marla ngaloog bari -ngga ngoollooni yoowooloo hand fold $\mathrm{INF}_{1}$ ERG I:punched:him man

 'I punched the man with my clenched fist.'Whereas blankets require an external human agency in order to be folded, hands do not - they are normally clenched by the individual himself, although they may also clench involuntarily, or through disease. As a rule -mawoo $\mathrm{INF}_{2}$ clauses are active concomitants of the main action, whereas for -bari $\mathrm{INF}_{1}$ processes the resulting state of affairs is a completely inactive condition obtaining at the same time as the main process.

### 5.6 Clause complexes

We have seen in the preceding section that non-finite clauses are invariably embedded as phrase- or word-level constituents of finite independent clauses. It appears that, on the other hand, finite clauses may not be embedded as constituents of words or phrases in other clauses. There is no evidence that finite clauses function as constituents realising roles in (parts of) other finite clauses. They always occupy 'marginal' positions with respect to other finite clauses (see Hale 1976). Evidence for this claim comes from three main sources:
(i) Finite clauses do not as a rule occur 'within' other finite clauses - that is, a finite clause is not normally bounded on each side by constituents of another clause. They are continuous and discrete; boundaries are normally readily identified. (If finite clauses could be embedded, they should be able to occur within other clauses, since in general all permutations of clausal constituents are permissible.)
(ii) Finite clauses do not occur in syntagms with postpositions or nominal stem forming suffixes, as do embedded non-finite clauses. There is one possible exception to this generalisation. This phenomenon sometimes occurs when, in a pair of juxtaposed clauses, the first clause is intransitive and the second is transitive, middle, or reflexive/reciprocal, and the Medium of the first is the Agent of the second. In these circumstances, it occasionally happens that this shared participant is referred to initially in the clause complex by an ERG PP:

| (5-336) | ngarloodoo -ngga ngidi warangjiddi | gamba |
| :--- | :--- | :--- | :--- |
| three ERG we we:sat water |  |  |
| ngoorlooggiddaaddi |  |  |
| we:drank:it |  |  |
| 'The three of us sat drinking.' |  |  |

This phenomenon, attested in other languages which show ergative marking on nominals, including Gugu Yimidhirr (Haviland 1979:154ff) and Ngaanyatjarra (McGregor 1979:118-119), may be referred to as "ergative hopping", following Haviland (1979:154). It is possible - but by no means certain - that in examples such as (5-336) the ERG postposition is in constituency with the first finite clause, rather than just the first word. (It might be noted in this connection that the initial clause in such examples typically indicates a secondary action concomitant with the main action, which is referred to by the second clause.)
(iii) As a rule, a finite clause is uttered on its own tone unit, or tone units. Rarely are two finite clauses included in the one tone unit. A short pause normally occurs at the boundary between the clauses.

The only constructions involving finite clauses are of the 'complex' type. Here, the clauses are juxtaposed, normally without the use of connecting morphemes. The construction may be either PARATACTIC, in which the clauses each have equal status, or HYPOTACTIC, in which one clause is subordinate to the other (Huddleston 1965, and Halliday 1985). The clauses of a clause complex are not in any significant respect structurally distinct from independent clauses (but cf. page 429 below), and they almost always have the potential for independent occurrence. It is thus often difficult to determine the tactic relationship between a pair of contiguous clauses.

It is convenient, following Halliday (1985:196) to recognise two primary logical relations between the clauses in a complex: (a) PROJECTION, in which one clause represents or stands for a linguistic expression, a spoken utterance or a thought. This clause is projected by a clause referring to the process of speech or thought. And (b) EXPANSION, in which one clause expands on the other by extending, elaborating, or enhancing it. In Gooniyandi these relations are identifiable on 'logical' grounds. They are not distinguished segmentally, and it is unlikely that they correspond to overt distinctions made in the language. More likely, they are distinguished, if at all, COVERTLY (Whorf 1945/1972: 104) as was the case for nominal phrase complexes (see section 4.3.1 above). This section is organised around these relations, in an attempt to indicate the range of semantic relations existing between the clauses in clause complexes. Unless it is specifically stated to the contrary, there is no suggestion that the relationships identified here correspond to grammatically distinct structures, although they may. Further investigation is necessary before these issues may be resolved.

Narrative texts typically consist of strings of clauses, one after the other, with minimal use of connectives. It is thus frequently difficult (if not impossible) to identify sentence units, at least in the absence of a detailed
description of intonation.

### 5.6.1 Projection

There are two main types of projection: (i) projection of speech, and (ii) projection of thoughts or ideas.

### 5.6.1.1 Projection of speech

Speech is normally reported in the form of a 'direct quote', which provides a possible wording for the spoken utterance. That is, it represents an utterance concerning the world as it might have been, or might be spoken; it does not directly refer to a situation or relation of the world. The deictic categories of tense, person, spatial deixis, etc. are all shifted to the reference point of the speech situation referred to. Quoted speech clauses are usually projected by clauses referring to the situation in which the speech was uttered. They may, however, occur independently. A text count showed that about a third of quoted speech clauses occur in isolation, the remaining two-thirds being projected. (See the texts of Appendix 1 ; examples of independent quotations occur in lines (33) and (52) of Text 1 , line (12) of Text 2, and lines (8) and (12) of Text 3.) When a clause is not projected by a clause of speech, the fact that it is a representation of what was said (rather than of what happened, or will happen) may be signalled by a change in voice quality.

Both orders, projecting preceding projected, and projected preceding projecting, occur. The former predominates in elicited responses to prompts of the type " $x$ told $y$ to '..."'; however, a textual count showed approximately the same frequency of each order. Examples are, respectively, (5-337), and line (38) of Text 1 .

| (5-337) migami -ngadda | ngaraggila dillybag gardiya |  |
| :--- | :--- | :--- |
| she:told to:me | I:make:it | white:people |
| ngangjawili |  |  |
| I:will:give:him |  |  |
| 'She told me "I make dillybags to sell to white people".' |  |  |

Sometimes the quoted clause is discontinuous, flanking the projecting clause on both sides - see for example line (51) of Text 1, and (5-342) below.

The relationship between the projected and the projecting clause appears to be paratactic: there is no convincing evidence that the projected quotation is subordinate to the clause of communication. (There is certainly no evidence that
the directly quoted clause is embedded: in particular, the quotation clearly does not fulfil a similar role to thangarndi 'word' in thangarndi jijagji (word he:said) 'he spoke words'.)

There are two main types of clause that project direct quotations.
(a) Projecting clauses are predominantly clauses of speech or verbal communication. The main lexical verbs referring to such processes are:

| miga- | 'say, tell, do' |
| :--- | :--- |
| jag- | 'say, tell' |
| jijag- | 'say, speak' |
| yan.gin- | 'request, ask' |
| goowaj- | 'call by name, tell' |
| baa- | 'shout out' |
| jangi- | 'answer, reply' |
| rooddij- | 'argue, swear' |
| gamalg- | 'speak, say, tell' (avoidance style lexeme) |

This classification of speech act types is quite different from the classification I have proposed in section 5.4.1. It does not distinguish assertions from proposals, both of which (in all their subtypes) occur in quotes with each of the verbs listed, except perhaps for rooddij- 'argue, swear', which normally occurs only in reference to exclamations and proposals. Yan.gin- 'ask, request', for example, indicates either a request for information (a question), as in (5-338), or a request for action, as in (5-339):
(5-338) David -joo yan.ginli yoowooloo garndiwangooddoo DAT I:asked:him man many
thiddi gardbiwiddarni danymilimayoona
fight they:fought:together you:heard:them? 'I asked David "Did you hear them fighting?".'
(5-339) yan.ginngindi maa winhi ngangbindi he:asked:me meat maybe you:will:give:me 'He requested of me "Will you give me some meat?".'
It might be expected that clauses referring to bodily processes such as nyimij'wink', nyamnyam- 'whisper', could project direct quotes. However, the only potential example available is
(5-340) midda -ngga nginnginmi marlami head ERG he:shook:it nothing 'He shook with his head "Nothing".'

There are certain differences between the clauses which project assertions
from those which project proposals (see section 5.4.1 above for discussion of these terms). Proposals appear to always occur with projecting clauses of 'directed action' types (i.e. in either transitive, middle, or reflexive/reciprocal clauses), in which there is always an addressee. Assertions need not necessarily occur with 'directed action' projecting clauses. The verbs miga- 'say, do', jag'say', baa- 'shout out', and gamalg- 'say' (avoidance style) occur in intransitive projecting clauses. For example:
(5-341) migawiddiyi ngarlooddja wardgiddi barnjawiddiyi they:said thrice we:will:go we:will:return
janoonggoo migayi
[name] he:said
They said "Butcher said "We'll be away for three days"".
Another difference is that in clauses projecting proposals, the lexical verb is normally classified as an accomplishment (see section 6.5 .5 below). The only exception occurs when the present speech act is being referred to by one of the four verbs just discussed. As

| (5-342) moongayayoo nganyi migangiri | -nganggi | barnbini |  |
| :--- | :--- | :--- | :--- |
| tomorrow I I | I:tell | to:you | you:will:return |
| 'I'm telling you "Come back tomorrow".' |  |  |  |

shows, the process is classified by +I , which marks extendible processes. Assertions, on the other hand, regularly occur with either accomplishments or extendibles.
(b) Projecting clauses may refer to 'factitive' actions which modify the behaviour of others. There are only a few verbs occurring in this type of clause, including bala- 'send', ngimbidd- 'hurry (someone) up', and gilij- 'block/prevent someone from doing something'. The projected clause represents an utterance that was, might have been, or might be, made in getting the person to do the action. That is, projected quotes of these verbs are always proposals, never assertions. Some examples are:

water.'
(5-345) gilijbidi -ngaddagi mangaddi wardginggirawoo
they:blocked:it on:me not you:are:going!
'They blocked me "Don't go!"', or 'They blocked me from going.'
The quote in such constructions may be replaced by an embedded -woo purposive clause - contrast (5-343) with (5-302), and (5-344) with (5-305) above. (It appears that the same may hold true for proposals projected by clauses of communication. There is, however, only one example available; and this involves the verb jijag- 'speak'.)

Note that there is no general factitive verb meaning 'make' in Gooniyandi: the process must be more narrowly specified, either by a verb of communication or by one of the above few factitive verbs. On the other hand, these lexemes differ from factitives in that they do not explicitly indicate that the projected action was in fact done. (This can only be indicated explicitly in a clause referring independently to this action.)

Projected quotes give possible linguistic representations of the sense of the utterance referred to. There is no suggestion of equivalence of wording between the representation and the actual utterance. For example, there are numerous instances of texts in which the speech of policemen and other white people is quoted by means of Gooniyandi clauses, with no suggestion that they spoke the language (and it is highly unlikely that any did). Consider also (5-346), in which the thing demanded is referred to in the projecting (and not in the projected) clause, which is not to say that it was not mentioned in the actual utterance.
(5-346) ngooddoo -ngga yoowooloo jagmi -ngaddagi
that ERG man
ne:told to:me
ngaddi -yoo ngangbindi nganyi
stone DAT you:will:give:me me
'That man demanded money of me: "Give me some!".'

Gooniyandi direct quotation thus corresponds to both direct and indirect quotation in English. Each of the examples ( $5-336$ ) to ( $5-342$ ) above has an alternative translation as indirect speech in English. For example, (5-346) could be rendered into English as 'that man demanded that I give him money'.

Speech may also be reported INDIRECTLY, although this is far less frequent than direct report, at least where the projecting clause is one of speech. The second clause of ( $5-347$ ) and the first clause of ( $5-348$ ), for example, represent indirectly - the content of the communicative event. This is so whether or not
the two clauses together constitute a single clause complex (or sentence). ${ }^{8}$
(5-347) yan.ginba ngoonyi -yidda wardgiri
you:will:ask:him where ALL he:goes
'Ask him where he is going.'
(5-348) nginyji yinigama migama -ngaddagi
you you:will:do:something you:will:tell to:me
'Tell me what you'll do.'
Clauses of indirect speech represent the sense of the utterance from the perspective of the present speech situation. That is, the ongoing speech situation, and not the one referred to, is the reference point for the deictic categories of person, tense, and spatial deixis. And it is from this viewpoint that the 'validity' of the utterance is measured. The distinction between direct and indirect speech in Gooniyandi, then, does not coincide with the direct/indirect speech opposition in English. In English the two types contrast in that direct speech represents the wording of the utterance, and indirect speech represents the sense (Halliday 1985:230). In Gooniyandi, on the other hand, direct speech represents the sense of the utterance from the viewpoint of the speech act referred to, and, as mentioned above, makes no claims about its wording. Gooniyandi indirect speech represents the sense of the utterance from the viewpoint of the present speech situation.

Projected indirect quote clauses as a rule follow the projecting clause. There are only a couple of instances of the reverse order, and in these cases the projecting clause seems to be added as a type of afterthought. For example, the final clause in
(5-349) ngirndaji -ya wanyanbiddini / migami -ngiddangi /
this LOC they:left:him he:told to:us
They left him here, he told us.'
was added after a pause, and on a different intonation contour, apparently as a qualification of the status of the first clause as based on report rather than on direct observation. (Note in addition that the reference point for spatial deixis has been shifted in the first clause of $(5-349)$ to the speech situation referred to. It is

[^24]not known whether such shifts normally occur.)
Another respect in which indirect quotes differ from direct quotes is that the former are never discontinuous; constituents of the indirect quote always occur on the one side of the projecting clause (cf. page 413 above).

I have already mentioned that reported speech is more frequently represented by direct quotation than by indirect quotation. But there are certain circumstances in which indirect quotation is the preferred (perhaps even obligatory) mode of expression. The main circumstances are the following:
(a) Where there is a conflict between the pronominal categories of the reported speech situation and the present one such that an interlocutor of the latter is a third person in the former, indirect quotation tends to be used. That is, there is a tendency for the speaker to refer to himself and his addressee by a 'personal' - i.e. first or second person form - in preference to a third person pronominal and/or by name. For example,
(5-350) migawinmi balanginbidi gilbanginyji mooyoo
they:told:me they:sent:me I:found:you sleep
baginggi
you:slept
'They told me that I would find you asleep.'
(On the other hand, non-interlocutors in the present speech situation are freely referred to by first and second person pronominals in direct quotes.)
(b) Indirect speech frequently occurs where the projected clause takes the form of a request for information, which the present speaker wishes to be communicated to himself or herself. That is, the information that the present speaker requests is information requested by, or communicated to someone else, who is the (present) addressee, in the examples available. Examples are (5-347) and

| (5-351) ngooddoo | -ngga yoowooloo yinigami | -nganggi |
| :--- | :--- | :--- | :--- |
| that | ERG man | he:did:something to:you |

Although there is a direct quote corresponding to (5-347) which presumably differs in the respect that the present speaker is not, directly at least, requesting the information that will be conveyed to the hearer, there is no corresponding direct quote for ( $5-351$ ). The reported speech in this case cannot be represented
from the viewpoint of the speech situation referred to. (5-348) is a special case, in which, however, the speaker and the hearer are still the interlocutors and a different 'turn' of the conversation is being referred to, in which their roles are reversed. Again, there is no corresponding direct quote for (5-348).
(c) Where the projecting clause is a 'command' which the present speaker wishes relayed to someone, usually with the addressee acting as an intermediary, indirect quotation predominates over direct quotation. Examples are:
(5-352) lanis -ngga migami -ngadda nginyji -ga
[name] ERG he:said to:me you ERG
migami -nhi Martin -joo niyi -ngga doowyawina
he:said to:him $\quad$ DAT that ERG he:will:get:me
nganyi gindiwa moondooddwinanyji moolooddja -nhingi
I upstream he:will:get:me [place name] ABL.
Lanis told me "Tell Martin to come up and get me and take me
from Moolooddja".'
(5-353) jagma -nhi wardjawi niyaji balawa you:will:tell to:him he:will:go this you:will:send:him 'Tell him to go; send him away.'
As for (b), the utterance does not just report on, and refer to another utterance in which case direct quotation is the norm. Rather, the (linguistic and nonlinguistic) response to the second utterance is of concern to the present speaker, who is the ultimate source of the command, or of the request for information.
(d) The avoidance style lexeme gamalg- 'say, tell' projects both direct and indirect quotes. Direct quotation typically occurs when the individual to be avoided is a participant in the speech situation referred to, whilst indirect quotation typically occurs when the avoidance-category kinsman is an interlocutor in the present speech act. By making use of indirect speech in this circumstance, the utterance reported on is presented from the present perspective, and so is lexicalised with avoidance-style items. This is as might be expected, granted that more circumspection is necessary in face-to-face contact with an avoidance-kinsmen than in reference him/her (cf. section 1.5). For example,
(5-354) gamalgma -nhi giddbiwi -ngadda yilgawina
you:will:tell to:him he:will:come to:me he:will:see:me
Tell him to come and see me.' (speaker to WMB)
(5-355) ngaanggi ngaliganyi gamalgmi -ngadda moongamoongaya your son he:told to:me tomorrow
yilgawingga ngaligany -badi -ngga
he:will:see:you son your ERG
'Your son told me he'd see you tomorrow.' (speaker to WM(B),
etc.)

Note that the choice of indirect speech in these two utterances may also be motivated by factor (a); however, this additional motivation is not always present.

To summarise, indirect speech represents the utterance from the viewpoint of the present speech situation. It is normally chosen to highlight an aspect of the relevance of the reported speech act to the present speech situation. Direct speech represents the spoken word from the viewpoint of the situation in which it occurred, and relationships to the present speech act are played down. In general, direct and indirect quotations occur in distinct linguistic environments. There appear to be relatively few contexts in which the speaker makes a meaningful choice between the two.

### 5.6.1.2 Projection of thoughts

As distinct from speech, thoughts are more frequently reported indirectly, as they stand with respect to the present frame of reference, rather than directly, as possible wordings for the thought as it actually occurred (cf. Halliday 1985:230231). It seems that projected thoughts are always assertions, and never proposals. (Contrast verbs such as bala- 'send', which seem to always project proposals - see page 415 above.) The generic verb miga-projects thoughts, and means 'think' in this context; lingi- 'think about (someone)' also, rarely, projects thoughts. But projected thoughts involving these verbs would appear to be far less frequent in Gooniyandi speech than they are in English. This is partly because Gooniyandi has the propositional modifying particles thaddi '(it was) mistakenly believed/thought that' and yiganyi '(it is) uncertain that', which indicate subjective attitudes towards the proposition, and the verbal category of subjunctive mood (see section 6.5.4.1). One of the functions of the latter is to indicate the status of the proposition as a supposition, belief, or wish, etc.. Corresponding to the English biclausal constructions involving the verbs want, etc. are single clauses in the subjunctive mood in Gooniyandi.

In directly quoted thoughts, as in direct speech, deictic categories are shifted to the reference point of the situation of the thought referred to. Thus the first person refers to the person who did the thinking (the Actor/Agent of the projecting clause). Everyone else is referred to in the third person. As might be
expected there are no examples in which second person, or first person unresuicted pronominals occur in the quotation. Some examples are
(5-356) niyi migami thaddi yiganyi wardla
that he:thought mistakenly uncertain I:took:it
'He thought mistakenly "I took it sneakingly"', or 'He mistakenly
thought he'd taken it sneakingly.'
(5-357) nganyi migalimi thaddi ngooddoo -ngga
I I:thought mistakenly that ERG
yoowooloo gardbini
man he:hit:him
'I mistakenly thought "that man hit him"', or 'I mistakenly
thought that that man hit him.'
(That the thought of (5-357) is directly quoted follows from the observation that (i) thaddi 'mistakenly believe' must belong to the projecting clause, and (ii) the final clause does not then represent the thought from the viewpoint of the present.)

Indirect quotation, of course, represents the thought from the present viewpoint. The predominance of indirectly reported thoughts over directly reported ones presumably ties in with the fact that, as a rule, the import of a reported thought is to compare and contrast the prior thought with the present reality. Indirect quotation does this explicitly. For example,
(5-358) migalimi -nganggi thaddi banyangi wardginggi
I:thought of:you mistakenly outside you:went
I mistakenly though you'd gone outside.'

A corollary of this observation is that as a rule a projecting clause of thought occurs only if there is some conflict between the thought and reality - otherwise the speaker normally presents the thought as a non-projected, non-propositionally-modified fact. Sentences such as (5-359) are decidedly rare:
(5-359) migalimi ngoomooddoo -yoo ranbindi
I:thought cloud DAT it:went:away
I thought the cloud would go (and it did).'
The conflict here with the present situation lay not in the status of the proposition ranbindi 'it went away', but in the status of the thought: the speaker is asserting his earlier correct appraisal of the situation.

In addition to these verbs referring to mental processes, verbs referring to perceptual processes, especially of sight (mila- 'see'), can also project thoughts. In this case, the projected clause represents a thought that was perceived, or
which was based on perceptual evidence; it does not refer to an actual real world situation that was perceived. This construction frequently translates into English as a that-clause complement of the verb see. Examples of mila- 'see' projecting direct quotes are:
(5-360) yoowooloo
manga
man
-nggali milawinbidda boolgawoolga
ERG REP they:saw:them old:men
ERG ah before same he:is:getting:old wife
ngangbada
we:will:give:him
The old men would see "he's getting old, we'll give him a wife".'
(5-361) milawiddayi ngirndaji -ya ngirndaji -wami ngabgoodda they:saw:it this LOC this IND they:eat:it 'They saw "Here, maybe this is what they eat".'
As is the case for the verbs of thought, it may be difficult if not impossible to distinguish a directly from an indirectly quoted thought. In fact, I have been unable to find any examples which admit the latter interpretation only. Furthermore, examples admitting both of these interpretations normally also allow the interpretation that the 'perceived' clause directly refers to a realworld situation. For example,
(5-362) ngabbina milaloona
it:burnt:them I:saw:them
meant 'I saw that (the fire) had burnt them (up)', or 'I saw "the fire burnt them (up)"' in the text in which it occurred (since the perceiver was not present at the time at which the bodies were burnt). It could also mean 'I saw the fire burning them'. That there is a covert distinction between projected and non-projected perceptual 'complements' follows from the fact that for the former only do there (sometimes) exist formally distinct variants like (5-360) and (5-361).

### 5.6.2 Expansion

Two primary relationships of expansion are identifiable: (a) CLAUSAL EXPANSION, in which one clause expands on the meaning of another by extending, elaborating, or enhancing its meaning; and (b) CONSTITUENT EXPANSION, in which one clause expands on a constituent of another clause, again by extending, elaborating, or enhancing its meaning. These possibilities are not, as I have said, distinguished morphologically, and many sentence forms
are amenable to either interpretation. For example, (5-363) allows at least the two interpretations shown, respectively clausal and constituent expansion.
(5-363) thangarndi garndiwangooddos gooddoomba -ya yoodjidi
word many paper LOC we:put:it
thangarndi binaddigmiloona
word I:taught:them
'We put lots of words down on paper, and I taught them the
words'; or 'I taught them the words we had put on paper'.

The ambiguity of yoodjidi 'we put it' allows the 'we' to be interpreted as referring to either the speaker and hearer together, or to the speaker plus one or more persons other than the hearer (see section 3.6 above). The first of these possibilities suggests the constituent interpretation, whereby the words in question are specified; the second suggests the clausal interpretation, the two situations occurred at the same time.

Although many example sentences allow both interpretations, not all do. There are numerous examples which allow only the constituent expansion sense; however, none seem to allow only the clausal expansion interpretation.

Both clausal expansion and constituent expansion are realised by clause complexes in which the clauses are PARATACTICALLY or HYPOTACTICALLY related. Embedding of finite clauses does not occur.

In the following two major subsections (5.6.2.1 and 5.6.2.2) I will outline the range of relations of clausal expansion identifiable on intuitive/logical grounds (following the lead of Halliday 1985); this will be followed by a similar treatment of constituent expansion. I will then turn, in section 5.6.2.3, briefly to the question of the linguistic status of the types.

### 5.6.2.1 Clausal expansion

### 5.6.2.1.1 Extension

One clause may extend on another by either: [1] adding something new to it ADDITION; or [2] replacing it with something new - REPLACEMENT. Alternation, the offering of alternatives, does not exist as a distinct type: it is expressed by the addition of each altemative, expressed as a possibility - i.e. possibly $a$, and possibly $b$, and possibly $c, \ldots$. For example,

| (5-364) yiganyi mangaddi gardgoowaani yiganyi gaddawooloo |  |
| :--- | :--- |
| uncertain not | it:was:falling uncertain leg |


| dijbindi | mangaddi | milala |
| :--- | :--- | :--- |
| it:broke not | I:saw:it |  |

it:broke not I:saw:it
'I'm not sure it didn't fall, I'm not sure it broke its leg; I didn't see.'; or 'Maybe it didn't fall, maybe it broke its leg; I didn't see.'

However, it is clear that the relationship between the first two clauses is NOT one of alternation.
[1] Addition. In addition, one situation is simply added to another, with no indication of the relationship between the two, temporal, causal, or otherwise. Examples are:
(5-365) nganyi joodoo -nyali wardngi niyi gilbali
I straight REP I:went him I:found:him 'I went straight up and found him.'
(5-366) nginyji lililoowa wardbiri nganyi ngirndangaddi
you west you:will:go I this:way wardjawingi
I:will:go
'You go the west way, and I'll go this way.'
(5-367) gamba -ya girili loombaddanyga jilwidi tharidi yilba water LOC tree it:floats coolibah heavy for:good
dagooddwani
it:sinks
'Some trees float on the water, but the coolibah is heavy, and sinks.'
(5-368) yilijjana marla ngarloodi -ya yaningi ranbindi
it:rained:on:us hand three LOC today it:went:away
gamba
water
'It rained on us fifteen days, and stopped today.'
As (5-365) and (5-366) illustrate, the situations referred to may well be related temporally either as successive or as simultaneous respectively. In the former instance, clause order (among clauses related by addition) almost always reflects temporal order of the referent situations. Otherwise the most important situation is mentioned first. It would seem reasonable to suppose that the second clause always extends on the first, and is in some sense less primary. Note that,
for example, when the relation is of simultaneity, as in (5-366), it is the most important situation that is mentioned first - in this example, the main intention of the communication is to get the other individual to do something.

There is, furthermore, no connecting morpheme with the adversative or 'contrary to expectation' sense. This relation either goes unmarked (example (5-369)), or is occasionally indicated by the particle moorda 'certainly' (as in (5-370)):
(5-369) gamba -yoo moowwiddanhiyi gilirni -ya mangaddi water DAT they:sought:for:it grass LOC not gilbawiddi
they:found:it
'They looked for grog in the grass, but didn't find any.'
(5-370) mangaddi ngaaddi -yoo moowlanhi moorda gilbali not rock DAT I:looked:forit certainly I:found:it 'I wasn't looking for money, but I certainly found some.'

Additively connected clauses are juxtaposed to one another, and each is as a rule continuous. In particular, nominal phrases are usually contiguous with the VP of their own clause. As a rule, if there are shared participants, they are referred to in the initial clause, and ellipsed in the subsequent one(s).
[2] Replacement. In replacement, one situation is offered instead of another non-occurring situation. The replaced clause typically precedes the replacing one:
(5-371) mangaddi nyamnyamginggira -woo thiddirli jagma not you:whisper DEF loud you:will:speak 'Don't whisper; speak loudly.'
(5-372) thaddi nganyi -ngga gardlooni ngooddoo -ngga mistakenly:believed I ERG I:hit:him that ERG yaanya -ngga gardbini other ERG he:hit:him
I thought I'd hit him, but really it was that other man who hit him.'
(5-373) madiga -ya wardngirni thinga wardngi
car LOC I:could:go foot I:went
'I wanted to go by car, but I went by foot.'
As (5-371) shows, negative commands are frequently followed by positive ones indicating what should be done instead.

The replacing clause need not contrast directly with the replaced. It may indicate something that happened, which was a reason why the latter did not occur. This translates into English as 'except that', as in
(5-374) wambawoo gardgiloonirni thiddoo niyi thiddoo
almost I:might:have:hit:it kangaroo that kangaroo
bajgiwindi
it:got:up:and:went
'I nearly hit the kangaroo, except that it got up and went.'
Finally I remark that the situation of the replaced clause need not necessarily be asserted as not occurring:
(5-375) yiganyi wardbingirni ngirndaji -ya
uncertain I:might:go this winhi
warangbingirni
I:might:sit
'I'm not sure I'll go, instead I could just sit there.'

### 5.6.2.1.2 Elaboration

Elaboration is the relationship whereby one clause provides further description or specification of the meaning of another clause. Rather than add something new, the elaborating clause provides further information on something already present, either [1] restating it - EXPOSITION; [2] filling in the details - COMPLETION; or [3] clarifying it - CLARIFICATION. The elaborating clause always follows the elaborated clause.
[1] Exposition. In exposition the second clause restates the meaning of the first in other words, or from a different point of view. For example,

(5-376) niyi -ngga yoowooloo -ngga jagmi | -ngaddagi |
| :--- |
| that ERG man ERG he:spoke to:me |
| thangarndi goowajngina |

word he:told:me
That man spoke to me; he told me words.'
(5-377) balawa thadda niyi jooddama
you:will:send:it dog that you:will:chase:it
'Send the dog away, chase it.'
[2] Completion. Here the second clause restates the first, adding important details omitted from the first. The verb is normally the same in the two clauses.

An example is:
(5-378) niyaji ralwiddayi boonbooloo ralwiddayi
this they:two:plucked:it feather they:two:plucked:it "They plucked it; they plucked out the feathers.'

It seems that the effect of this construction is to slow down the rate of delivery of new information, and/or to allow each piece of news to be introduced as an unmarked focus (see page 367 above).
[3] Clarification. Here the second clause clarifies the meaning of the first by providing some additional information by way of explanation. For example,
(5-379) ngidi -ngga gadjinmarni nganyi babooddoonggoo wardngi we(R) ERG we:separated I down I:went niyi thaanoonggoo wardji
he up he:went
'We separated; I went up, he went down.'
(5-380) gamba -moowa ngoorloogla manyi marlami ngabla water ON I:drank:it food nothing I:ate:it 'I drank only water; I didn't eat food.'

In example (5-177) above, the second clause is a clarification of a part of the first, of the descriptive attribute, namely the attribution of sickness to the person concemed.

There are no morphological markers of the relations of elaboration. As a rule the clauses occur in distinct tone units, the first being characterised by a fall in pitch on the salient syllable, together with a step rise on the final syllable. The second tone unit has the fall on the salient syllable, but no rise on the final syllable. For example, (5-378) had the following intonation pattern:


### 5.6.2.1.3 Enhancement

In enhancement, one clause extends the meaning of another by adding to it a new situation circumstantial to it. Enhancement combines with both of the syntagmatic relations parataxis and hypotaxis, in contrast with extension and
elaboration which combine with parataxis only. The range of meanings differs somewhat in each case. In paratactic complexes the second clause enhances on the first by indicating a circumstance of time, manner or fear. In hypotactic complexes, the subordinate clause indicates a circumstance of time, condition, cause, or reason.

### 5.6.2.1.3.1 Parataxis

[1] Temporal. The referent situations of the two clauses may be related either by succession or by temporal inclusion. Only the former relationship may be explicitly marked morphologically, by means of conjunctions (niyinhingi, 'after that, then' niyajinhingi 'after this, then'), enclitics ( $-r n i$ 'then'), and occasionally adverbials (e.g. ngamoo 'before'). The order of clauses almost always reflects the order occurrence of the referent situations, regardless of whether or not the temporal relationship is morphologically marked. The following examples illustrate the three order possibilities:
(5-382) yoowooloo garndiwangooddoo -ngga gardboowooddarni
man many ERG they:fought:together
niyi -nhingi nardawooddarni thiddi -nhingi -ngga
that ABL they:cried:together fight ABL ERG
'Many men fought together and then they cried together
afterwards.'
(Note that niyi-nhingi (that-ABL) 'after that' and niyaji-nhingi (this-ABL) 'after this' appear to be most frequently used as sentential, rather than as clausal conjunctions - see the texts.)
(5-383) billycan jidiblimi babaabiddi -rni milala
I:lifted:it inside SEQ I:saw:it
'I lifted the billycan lid and then looked inside.'
(5-384) ngamoo dagooddwani middi maningga -rni barngiyi
before itentered sun night SEQ he:returned 'The sun had already set; he returned in the night time.'

The order of clauses need not reflect the actual order of the situations described: the individual referred to in (5-384) had already started on his way back when the sun set. Temporal adverbials in Gooniyandi do not function as clause connectives; that is, ngamoo 'before' in example (5-384) does not function like English 'before', in 'before he got back the sun had set.'

Temporal inclusion is not morphologically marked, but the including
clause always follows the included, giving a temporal location for it:
(5-385) boolga -ngga wardjiwiddangi bidiyooddoo mooyoo old:man ERG he:went:to:them they:two sleep bagiwiddi
they:lay
'The old man went up to them as they slept.'
[2] Manner. One clause may enhance the meaning of another by indicating the manner in which it was done; that is, the former indicates a state or action of the actor concomitant with his engagement in the latter. For instance,

## (5-386) miga waranggiri barndi -yooddoo dalwooddooyoo like:that he:sits arm DU they:two:are:extended '(The diver bird) sits with his wings out.'

This is the only circumstance I am aware of in which a clause from a clause complex in Gooniyandi may have a characteristic structure, which does not occur in independent clauses. The first clause of (5-387) describes the concomitant action of the man's arms, and treats them as Agents (cf. McGregor 1985:218-219). In independent clauses body parts may be non-participant Instruments only.
> (5-387) barndi -yooddoo -ngga briminbinmarni waranggiri
> arm DU ERG they:are:folded:together he:sits
> 'He's sitting with his arms folded.'

Further evidence of the distinctiveness of the type comes from the fact that this relationship may be expressed instead by a non-finite clause - compare example (5-330) above. Manners are not, however, usually marked distinctively: there is not usually an Adverbial in the first clause making reference to the circumstantial situation:
(5-388) wardgiri ngiddiwandi widdinywiddinygiri
he:goes across he:whistles
'He's going across whistling.'
Example (6-99) below compares two situations, and illustrates a second type of manner, comparison (see above section 5.2.3.4). This is, however, one of the two examples available of this relation, both of which are incomplete, showing the enhancing (manner) clause only.
[3] Apprehension. In apprehension, one clause indicates an undesirable
consequence that would result unless the situation referred to by the other clause occurs. This is expressed in Gooniyandi by means of finite clauses without the use of a conjunctive element. The clause referring to the undesired situation always comes after the one referring to the evasive action, and its verb is in the present tense and definite mode (see section 6.5.3.3 below). For example,
(5-389) ngaddagi yamadi gadlooni ngooddiya nirdganoo -woo my coolamon I:left:it there it:sticks DEF -ngaddagi
on:me
'I left my car there lest it got bogged (in the mud).'
(5-390) gamba wardbidda gamba -winyja rajgidda -woo water we:will:take:it water DEP we:die:of:thirst DEF 'We'll take water with us lest we die of thirst.'
The 'evasive action' may be an action to be avoided:

| (5-391) mangaddi warangginggira | -woo migi | -ngga wirdbilingga |  |
| :--- | :--- | :--- | :--- |
| not | you:sit | DEF ant | ERG it:bites:you |
| -woo |  |  |  |
| DEF |  |  |  |

'Don't sit there lest the ants bite you.'
It is clear that the relation between the clauses cannot be interpreted as one of extension (addition or replacement). Logically, it is a special case of the relation of disjunctive 'or' (exactly one of the clauses only may be true). However, it carries the added nuances that the second situation has not yet occurred, and that its occurrence is undesirable. The suggestion is that the first should occur in order that the second, undesirable situation does not. Apprehension may be viewed, then, as a type of purpose (Halliday, pers. comm.). The modality of the second clause would appear to be viewed from the perspective of the first. The situation to be evaded is seen as a certainty unless the avoidance action is undertaken. However, this may not contradict the present viewpoint: that is, it is assumed that the undesirable consequence has not occurred as of the time of speaking. (See also section 6.5.3.3 below.)

It should be noted that the relation of apprehension is not SIGNALLED by the verbal category of the second clause; the present definite occurs in complexes of clauses which are not related in this way:
(5-392) thoolnglimi -nhi nanggirdlooni wamba gardginyboo -woo I:kicked at:him I:missed:him later Ithityou DEF '(Although) I kicked at him and missed, I'll definitely hit you shortly.'

There are other expressions having a closely similar meaning. In (5-393) the second clause, which expresses an undesirable consequence - at least for the perpetrator of the first action, though presumably not for the hearer - occurs in the subjunctive future.
$\begin{array}{llllll}\text { (5-393) mangaddi } & \text { gardbinggooni } & \text { nganyi } & \text {-ngga } & -r n i & \text { gardjawoolooni } \\ \text { not } & \text { he:will:hit:you I } & \text { ERG SEQ I:might:hit:him }\end{array}$ 'He won't hit you lest I hit him in tum.'
[4] Purpose. Here one clause, invariably the second, indicates a purpose or reason for the occurrence of the first. As the following example shows, there is no morphological indication of this relationship.
(5-394) wardji doowa -yidda manyi doownga he:went store ALL food he:got:it 'He went to the store to get food.'

### 5.6.2.1.3.2 Hypotaxis

In hypotaxis, the only way one clause may expand on another is by enhancement. There are two types: [1] CONDITIONAL, realised by a subordinate clause in the subjunctive mood (section 6.5.4.1); and [2] TEMPORAL, realised by a subordinate clause in the factive mood (section 6.5.4.2) in the past tense, and by a subordinate clause in the subjunctive mood in the future tense.
[1] Conditional. Here the subordinate clause indicates the condition under which the situation described by the other clause occurred, might have occurred, will occur, etc.. The clause expressing the condition, the antecedent, has a VP in the subjunctive mood. It generally precedes the consequent clause, and is usually characterised by a fall-rise intonation contour, which occurs on the final salient syllable of the tone group. For example,

dry itmight:have;lain I:could:have:brought:it
'Had the ground been dry, I'd have brought my car.'

The order of clauses is not, however, fixed, and the antecedent may follow the consequent (though this is comparatively rare):
(5-396) doowyarni jirigi wamba
he:mali warangjayi
'He'd have got the bird had it kept still.'

These two facts suggest that the antecedent clause is dependent on the consequent, and the construction hypotactic (cf. Hale 1976).

Four types are distinguishable depending on the tense of the antecedent clause.
(i) In COUNTERFACTUAL conditionals the antecedent situation is assumed contrary to the facts, and the consequence is asserted on the basis of this assumption. The antecedent clause always has its verb in the irrealis tense, and the consequent clause is invariably in the irrealis potential. Both the antecedent and the consequent are contrary to fact; and for either of them, the situation may be assumed to have occurred when in fact it didn't occur, or assumed not to have occurred when in fact it did. Thus:

| (5-397) | barlanyi | mila | $-y a$ | ala |
| :--- | :--- | :--- | :--- | :--- |
| snake | see | SUBJ | IRR+(1sg)N+A not | step:on |
| -gila | $-m i$ |  |  |  |
| IRR+(1sg)N+A POT |  |  |  |  |
| 'Had I seen the snake, I wouldn't have stepped on it.' |  |  |  |  |

(5-398) manyi mangaddi ngab -ja -ala mangaddi
food not eat SUBJ IRR+(1sg)N+A not
gambi bagingi -rni
sick I:lay POT
'Had I not eaten the food I wouldn't have been sick.'
The counterfactual conditional may also have the generic sense. It may be used in referring to general truths, relating to the past, which no longer hold (see also section 6.5.1.1), and for which the antecedent is represented as never having occurred. For example, (5-399) comes from a text concerning traditional marriage practices, and represents the antecedent as an assumption against the facts. The effect of this is to suggest that not only would such an action in the old days have had as its consequence the death of the two individuals, but also such an action is inconceivable: then young people did not get married.

| (5-399) booji doow | -ya | -ya | yangbala | $-n g g a$ | yangbala |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| if | get | SUBJ | IRR+(3sg)N+A young | ERG | young |

goornboo / niyaji / mamoo gardgaddoowoo yilba
woman this devil
mangaddi wangga
they:hit:him for:good
'Had a young man taken a young woman (for his wife) they would have killed him dead.'
(Note that the consequent in this example is in the definite present; the reasons for this will become clear in section 6.5.3.3).
The particle booji 'if (cf. Rumsey 1982b:154) occurs but rarely in conditional constructions; the use of niyaji 'this' as in the above example is even rarer - this is the only instance I have available.
(ii) FUTURE conditionals indicate future situations whose occurrence is conditional on the occurrence of some other situation. Both clauses have verbs in the future tense (unlike the situation for English - cf. Comrie 1982:143).

```
(5-400) thiddoo galyjini gidda -ya -woomi mangaddi
    kangaroo fast run SUBJ FUT+(3sg)N+MI not
    nyag -goowa -woolooni
    spear PROG FUT+(1sg)N+BINI
    'If the kangaroo runs fast, I wont be able to spear it.'
```

(iii) PRESENT conditionals - i.e. those in which the tense of the antecedent clause is present - have generic (non-time bound) sense, indicating consequences that always result whenever the antecedent is satisfied:
(5-401) marndi waj -ja -wooddaddi
fighting:boomerang throw SUBJ PRES+(3pl)N+ADDI yilba wardgiri mangaddi barngiri forever it:goes not it:returns
'Should anyone throw a fighting boomerang, it will go right on, and not return.'
(iv) PAST conditionals (those in which the antecedent clause is in the past tense) indicate the cause or reason for the occurrence of a situation in the past. The difference from (i) to (iii) is that here the antecedent and the consequent are in fact both known to be true, and the antecedent is assumed CONSISTENT with the facts, the consequent being indicated as dependent on the prior occurrence of the antecedent. Examples:
(5-402) gamba -ya gard -ja -wani nyiminbani water LOC fall SUBJ (3sg)N+ANI he:drowned 'Because he fell in the water, he drowned.'

```
(5-403) ganggoo bïngarni -ngodda moa mila -yaa -la saliva itemerged on:me meat see SUBJ (1sg)N+A I was salivating (because) I was looking at the meat.'
```

In examples such as these the subordinate clause does more than indicate a temporal connection between the two situations: it asserts that they are linked as cause and effect. This is claimed to be the 'real' version of the conditional relationship.
[2] Temporal. Temporal circumstances of a situation belonging to past time are indicated by subordinate clauses in the past factive. (I do not propose to enter a discussion of the actual temporal relations that may obtain between the two referent situations; suffice it to say that it may be any of inclusion, succession, or contemporaneity.) The subordinate clause refers to a particular situation assumed to be known to, or identifiable by, the hearer (see section 6.5.4.2) contrast the situations referred to by subjunctive clauses in examples (5-395) and (5-396) above.

As a rule the -wila FACT clause occurs first, often displaying the fall-rise pitch contour mentioned above for the $-j a$ SUBJ clause. It establishes the time at which the main situation occurred:
(5-404) nganyi ngirndaji -ya bij -gila -larni
I this LOC arrive FACT (1sg)N+ARNI
mangaddi ngaddawangindimi
not I:was:knowing:them
'When I got here, I didn't know anyone.'
(5-405) barn -gila -ngi ngirndaji -nhingi biliga
return FACT (1sg)N+I this ABL middle
barlanyi moordla
snake I:stepped:on:it
'When I was going back, I stepped on a snake.'
Occasionally, the -wila FACT clause follows the main clause:

| (5-406) | yinigawinmi | ngidi | -yooddoo | ngirndaji |
| :--- | :--- | :--- | :--- | :--- |
| we:will:do:something | we(R) | DU | this | ABL |

```
jijag -gila -yiddi
speak FACT (1R)N+I
'What will we do after we've finished talking?'
```

It seems reasonable to regard subordinate enhancing clauses which occur initially as thematic clauses in their clause complexes, establishing conditions or times for the occurrence of the main situation. These are natural starting points for the conditional and temporal clause complexes. Secondly, being subordinate, -ja SUBJ and -wila FACT clauses do not carry the major part of the message, and so may be regarded as inherently thematic. (They do not, however, necessarily carry given information.) The main clause is inherently rhematic. This explains the preferred order of the clauses. Furthermore, it suggests that in the variant in which the subordinate clause occurs finally, that clause may be a tagged Theme (cf. page 376 above).

For situations belonging to the future, temporal circumstances may be indicated by subordinate clauses in the future subjunctive. An example is
(5-407) middi laandi -ya -woondi miga -ya bijbilarni
sun up SUBJ FUT+BINDI that LOC I:will:emerge
'I'll get there when the sun is high.'

As for subordinate conditional clauses, subordinate temporal clauses typically (but do not necessarily) precede the main clause, and are characterised by the same fall-rise pitch contour.

### 5.6.2.2 Constituent expansion

In constituent expansion, one clause expands on some entity or place referred to by a constituent of another clause. There appear to be no constraints on coreference between the two clauses. The entity may bear any experiential role in either clause; indeed, it may even be a PART of a constituent of the expanding clause.

Constituent expansion is of course the functional equivalent of relative clauses of formal grammar. Gooniyandi has no embedded relative clauses, either finite or non-finite. On the one hand, finite clauses, as we have seen, are never embedded; on the other hand, non-finite clauses, though embedded, do not usually function to modify nominal constituents of other clauses. (The only way non-finite clauses can do this is by indicating habitual associations of individuals; otherwise they always connect events.)

Finite clauses expanding on constituents of other clauses do so by either
extension of elaboration. These are dealt with in order in the following subsections.

### 5.6.2.2.1 Extension

Here one clause adds a new situation to a subpart of another clause, thereby extending what is known about that subpart. I will refer to this type as descriptives, since the extending clause adds a new, non-identifying description to something introduced in the other clause. It seems that the clausal constituent extended on is always an NP or PP referring to an entity, never a place (see below). This entity may bear any role in either clause (subject to the preceding constraint), and indeed need not even be a constituent of the extending clause, as (5-410) shows.

There are two main possibilities: the two situations may be contemporaneous, or they may be situated in different times:
[1] Contemporaneous situations. Here the extending clause adds to an entity a qualifying expression indicating something else that entity was engaged with at the same time as its engagement in the situation referred to by the initial clause. For example,

> (5-408) doowoo -ya ngaragbinmi goornboo waraani
> cave LOC they:made:it woman she:stands
> 'In the cave they drew a woman standing.'
(5-409) yawanbina garndiwiddi wagon -ngaddi gardiya
he:belted:them two
wardbiddi
they:went
'He ambushed two whitemen coming along in a wagon.'
(5-409) (and perhaps also (5-408)) would appear to be ambiguous, allowing both clausal and constituent expansion interpretations: either the second clause extends on the first, or the second clause extends on a constituent of the first. More particularly, the second clause in examples such as these always extends on a subpart of the first; it may in addition extend on the whole of the first clause. By contrast, in examples such as $(5-364)$ to (5-367) above, the second clause always extends on the first, and cannot be interpreted as extending on a constituent in the first. (Note that this has nothing to do with the presence of 'coreferential NPs' between the two clauses - see example (5-364).)
[2] Non-contemporaneous situations. Here the secondary clause adds, by
way of qualification, a situation that the entity was previously engaged in. (There are no examples in which the qualifying situation follows after the time of the primary clause.) Examples:
(5-410) government -ngga ngangbindi jiginya gambayi
ERG he:gave:them little boy
ngaddanyoowa nangbani
his:mother she:died
The government gave them a litule boy whose mother had died.'
(5-411) yaningi moongaya niyi thadda milala jamoondoo nganyi
today morning that dog I:saw:it other.day I
wirdginbinirni
it:might:have:bitten:me
"This morning I saw that dog which tried to bite me the other day.'
Extending clauses qualify an element of the new, typically the unmarked focus, the final constituent of the clause, as in the two examples above. A focal or tagged theme may also be extended by a clause.

### 5.6.2.2.2 Elaboration

An expanding clause may elaborate on either [1] an entity, which may be either a participant or a non-participant (i.e. an inner role), or [2] a place (i.e. a spatial circumstance in the other clause).
[1] Elaboration of an entity
A clause may elaborate on an entity introduced in another clause by identifying it, by clarifying its reference, or by providing a further characterisation of it.
(a) Identifying. The initial clause of a clause complex may serve to establish the identity of an entity fulfilling any participant or inner role (see section 5.2.2 above), or the circumstantial role of location, in the following clause. This entity or place is frequently, but not necessarily, referred to by one of the endophoric determiners niyi 'that' or niyaji 'this'. This pattern has been already referred to above (section 5.4.2) as 'reprise'. Examples are (5-237) and
(5-412) goornboo jaboodd -ila -yi gamba -ya niyi -ngga woman wade FACT (3sg)N+I water LOC that ERG ngangngindi gawi
he:gave:me fish
'The woman who waded through the water gave me fish.'

Occasionally, instead of one of these determiners, an open class nominal referring to the entity established occurs, as in the following example:

| (5-413) thangarndit | garndiwangooddoo | gooddoomba | -ya yoodjidi |
| :--- | :--- | :--- | :--- | :--- |
| ward many | maper | LOC we:put:it |  |
| thangarndi | binaddigmiloona |  |  |
| word | I:taught:them |  |  |
| Itaught them (some of) the many words we had put on paper.' |  |  |  |

(It is perhaps to avoid the suggestion that the speaker taught them all of the words previously committed to paper that the endophoric determiner is not used in this example.) Furthermore, the determiner and an open class nominal may both occur in an NP in this position:

| (5-414) $)$ jamoondoo | goowaj | -gila | -nggi | -ngaddagi | niyaji |
| :--- | :--- | :--- | :--- | :--- | :--- |
| other.day | tell | FACT | $(2 s g) N+I$ to:me this |  |  |
| thangarndi | nyinlimi |  |  |  |  |
| word | I:forgot:it |  |  |  |  |
| The words you told me the other day, I forgot.' |  |  |  |  |  |

It would seem reasonable to regard the initial 'relative' clause here as thematic in the clause complex (cf. page 435 above). Since it typically establishes an entity thematic in the second, or primary clause, the 'relative' clause is a natural starting point for the sentence - that is it is an unmarked choice of Theme. Being established by the earlier clause(s), the Theme of the primary clause is prone to ellipsis, as in the following two examples:
(5-415) ginharndi yoowooloo jijaggiddaa -nhi
you:know man we:are:speaking of:him
wambiggoowaari
he:is:going:inside
The man who we're talking about is going inside.'
(5416) ngarloodoo yamarda -ngaddi ward -gila -widdi -ddi
three horse COMIT go FACT (3pl)N+I pa
jamoondoo boorloomani marooddwidda
other.day bullocks they:mustered:it
The three men who came on horses the other day were mustering bullocks.'

Another way of putting it is that the Theme of the primary clause is coreferential with something which is often also a Theme in the secondary
clause (see examples (5-412) to (5-416) above). There seems to be no restrictions on the experiential roles borne by the common entity in the two clauses, except for those precluded by the nature of the thing referred to (which for instance cannot realise an Attribute) - see examples above. (In this way Gooniyandi differs from other Australian languages such as Dyirbal (Dixon 1972:99ff) and Yidiny (Dixon 1977:385ff), in which there are reported to be such restrictions.) Furthermore, as the following example illustrates, the entity established may be one of the set referred to by a participant NP:
(5-417) gardiya -yooddoo bagi -la -wooddoo -yoo
white:person DU lie FACT (3pl)N+I du
goornboo niyaji -ngga ngangngindi nganyi
woman this ERG she:gave:me I
'The woman who lives with the white man gave it to me.'
Here the discontinuous NP [gardiya-yooddoo goornboo] (white:person-DU woman) is the Medium of the first clause: the woman qualified is one of the two persons referred to by this phrase.

As the examples above show, the elaborating clause may have a VP in factive mood, or one which is plain tensed. The first occurs when the involvement of the elaborated entity in the situation referred to by the elaborating clause is (taken to be) shared knowledge. The factive clause identifies the entity as known to the hearer through its participation in the situation referred to (see also section 6.5.4.2 below). Thus, for example, in (5-416) reference is made to words that the speaker presumes the hearer will readily identify, although the speaker himself has forgotten them (this was elicited as an utterance I might have made to my collaborator at the time); in the context in which (5-416) occurred, the horsemen referred to had come up to my collaborator and I as we were working a few days earlier. These examples are typical of the circumstances in which an initial elaborating clause is in the factive mood. That is, they usually refer to situations shared by the speaker and the hearer.

On the other hand, when the initial elaborating clause is plain tensed it carries new information, and refers to a situation that is not presumed to belong to the register of things known about the entity. Thus, the entity established by the elaborating clause need not be one whose identity is already known, or presumed known to the hearer. (However, it is not explicitly indicated that the entity/situation is unidentifiable.) An example of this is (5-223), in which the first three clauses provide the new information (the final one providing the given information), defining the person who gave the speaker the fish.

I have said that the primary and secondary clauses are each continuous. There are, however, just a couple of instances in which the secondary clause follows the initial constituent of the primary clause. For example,

| (5-418) | ngooddoo | -ngga / ginharndi goornboo ward -gila |  |
| :--- | :--- | :--- | :--- | :--- |
| that | ERG you:know woman | go FACT |  |
| -yi | -ngangi moolooddja -yidda / niyaji | -ngga |  |
| (3sg)N+I on:us | ALL | this | ERG |
| barnnginaddi gaddwaroo maningga / |  |  |  |
| he:returned:me afternoon night |  |  |  |

'That woman who went to Mooloorrja with us brought me back last night.'
The secondary clause may be regarded as interpolated here (cf. page 375 above) - such clauses are always on a separate tone unit from the initial constituent and there is no reason to suppose that the two linguistic elements together form a single constituent. (For these reasons, (5-418) does not exemplify "ergative hopping" (page 412), in which the ergative PP is a constituent of the initial clause, and may occur on the same tone unit as the other constituents of the clause.)
(b) Clarifying. In clarification, the subordinate clause clarifies the identity of an entity or place involved in the main situation, by making reference to a situation that item is known to have been involved in. The clarifying clause invariably follows the main clause, and is added as a type of clarifying afterthought. This construction resembles the tagged Theme construction discussed on page 376 above. As should be expected, the tagged clause has its VP in the factive mood. Example:
(5-419) niyaji dagooddwiddaddi maroowa - ngga - -nyali
this they:inserted:them murderer
ngamoo thooddboord -gila -widdarni
before pull:out FACT (3pl)N+ARNI
'They put him back (in the hole), the murderers who had taken him out before.'
(The Agents of the first clause had been established previously in the text, and the final clause served to identify them uniquely.) Another example is
(5-420) yoowooloo -ngga wardbiddayi ngaddanggarni yoowooloo man ERG they:two:took:it dreamtime man
$\begin{array}{llllll}\text { warang } & \text { gila } & \text {-widdi ngamoo } & \text {-ngamoo } & \text {-nhingi } \\ \text { sit } & \text { FACT } & \text { (3pl)N+I before before ABL }\end{array}$ The two men took (the fire), the men from the dreamtime.

Clarifying clauses typically modify the theme of the main clause; they are the so called 'defining relatives'.
(c) Characterising. Here the expanding clause, which always comes second, characterises something introduced in the preceding clause, describing it in greater detail. This is the relation 'to be precise'. I distinguish this from (b) in which the entity is established in the preceding discourse and the elaborating clause refers to a known qualifying situation. This sort of elaborating clause has a plain tensed VP for obvious reasons. As in (b), the elaborating clause follows the primary clause, and elaborates on its Theme. For example,
(5-421) galamooda -nhingi goongooloo madiga -ya bagiri turkey ABL blood car LOC it:lies booladiwindi goongooloo it:dried blood 'Turkey's blood is on the car, dried blood.'

Identification and characterisation are in a sense reversals of one another, thematically but not experientially distinct (see below).

## [2] Elaboration of a place

The two main relations identified in [1], (a) identifying and (b) clarifying also occur in elaboration on places. There are no examples of (c) characterising. This is because, as distinct from entity elaboration, in place elaboration, the elaborating clause always occurs in the factive mood (see 6.5.4.2 below).
(a) Identifying. Here the subordinate clause occurs initially, establishing the identity of a place involved in the main clause. For example,
(5-422) girli -ya -nyali ngamoo yoodd -ila -winmi same LOC REP before start FACT (3pl)N+MI
niyaji -yangga -nyali wardbiddi
this $\mathrm{ABL}_{2}$ REP they:went
'They left from the same place where they had started from before.'
(5-423) bagi ta -wooddoo niyaji -nhingi barnloondi
lie FACT ( 3 pl )N+I this ABL I:returned
'I returned from where they're camping.'

When there is no determiner initial in the second clause, as in (5-424) below, it may be that the -wila FACT clause provides a locational enhancement of the second clause (cf. temporal enhancement - page 434), rather than an elaboration of a subpart (a Locational circumstance). Whether or not this is so remains unclear at present.

$$
\begin{aligned}
& \text { (5-424) migi } \\
& \text {-ngga wird } \\
& \text { ant } \\
& \text { ERG bila }
\end{aligned} \quad \text {-nginbini } \quad \text { FACT gaji } \begin{aligned}
& \text {-rni } \\
& \text { (lisg)A+BINI ngabgina } \\
& \text { 'It's sore where the ants bit me.' }
\end{aligned}
$$

In addition to examples such as the preceding ones in which the place established plays a role in the main clause, it is possible for the established location to be a starting point for the identification of the Theme (a place), as is the case in line (75) of Text 1 . In other words, the initial clause may be thematic in the sense that it identifies or establishes what the main clause is about, or it may be thematic in the topical sense.
(b) Clarifying. In this case the elaborating clause occurs finally, clarifying the place involved in the main clause, exactly as for [1](b) above. Examples are:

```
(5-425) girli -ya bagiyiddi balanyja -ya ngamoo bagi -la
    same LOC we:lay [place] LOC before lie FACT
    -yiddi booddoonggoo -nhingi ward -gila -yiddi
    (1R)N+I from:the:north ABL go FACT (1R)N+I
    'We camped at the same place we camped at and left before.'
```

(5-426) biddi -nhingi bagiyiddi ngaddarni mila -ala north ABL we:lay always look FACT -woodda bamathidi -waddawadda -ngga PRES+(3pl)N+A [place] denizens:of ERG
'We camped on the north side, where the Bayulu mob always look after bullocks.'

### 5.6.2.2.3 Enhancement

Here the relationship between the subordinate clause and the constituent it modifies is a circumstantial one of place. That is, the thing referred to by the modified constituent (either a nominal phrase, or an adverbial) fulfils a circumstantial role of location in the enhancing clause; by contrast, in extension (5.6.2.2.1) the thing fulfils a participant role in the extending clause, or is a part of a participating entity. The clausal constituent modified may be either a nominal phrase (NP or PP), or a spatial adverbial, referring to (or implying) a
place. The enhancing clause (like the extending clause discussed above) always occurs in final position in the clause complex, typically next to the constituent of the primary clause that it modifies. That is, the qualified referent is normally new, and the unmarked focus of the primary clause - and as such it always finds overt realisation in that clause. (It is of course normally ellipsed in the following enhancing clause.) Furthermore, the enhancing clause is invariably in the factive mood. This clause always occurs in final position in the clause complex, usually next to the modified constituent in the primary clause. An example is

| (5-427) yoowooloo biingarni | -ngiddangi maningga booddoongoo |
| :--- | :--- | :--- | :--- | :--- |
| man | he:emerged on:us night from:the:north |

'A man came up to us that night from the north, where Aborigines still live in the bush.'

```
(5-428) doornmi gambinyi jilji -ya ngilmangi
    he:covered:it egg sandhill LOC to:the:south
    warang -gila -ari
    sit FACT PRES/(3sg)N+I
```

    'He buried the egg in the sandhill that stands to the south.'
    Note that, as (5-429) demonstrates, the role borne by the modified constituent in the main clause need not be a circumstantial one.


### 5.6.2.2.4 Concluding remarks

We have seen that as a rule the elaborating clause and the subclausal constituent it modifies (in case it is not ellipsed) are as a rule immediately next to one another. They might be regarded as juxtaposed; however, the two do not together form a unit complex, as is the case in other juxtapositions. The clause either precedes the constituent it modifies, or follows it. These possibilities appear to be another reflection of Bolinger's (1967) distinction between referent and reference modification (discussed above, section 4.1.2.2). As was the case within
the NP, material preceding the referring expression (in the primary clause) serves to modify its reference, whilst material following it serves to modify the referent.

### 5.6.2.3 Linguistic significance of the types

The full range of logico-semantic and tactic relations that exist between the clauses of a complex are schematised in the following table.

Table 5-2: Inter-clausal relationships in Gooniyandi


To conclude this discussion of clause complexes I will briefly enquire into the linguistic status of the above relationships, addressing the question as to
whether the types merely interpretations engendered by the context, and have no linguistic significance (cf. Hale 1976:86, and McKay 1988). I will look at the tactic relationships first, then at the logico-semantic ones.

In all clause types identified in the table, one clause, the PRIMARY clause, carries the main burden of the message. The other clause(s) carry less important information, and will be referred to as SECONDARY clauses. Parataxis and hypotaxis may be distinguished in terms of the order relationships that may obtain between the primary and secondary clauses.

In clause complexes of the types listed in the first column of Table 5-2, the primary clause is the one which comes first. In enhancement, the enhancing clause, which always comes second, expresses a situation secondary to the situation enhanced upon. (Where the situations are temporally successive, the most important one is the one occurring first: in general, the occurrence of the second is dependent on the occurrence of the first. Furthermore, I would argue that the fact that the clauses are conjoined indicates that the speaker does evaluate the event first to occur as the most important; otherwise, s/he could have chosen to use two isolated clause-sentences.) In the case of addition, as in English, the first clause expresses the situation that the speaker evaluates as the most important: in (5-366) the most important part of the message concerns getting the hearer to do something. Similar remarks apply to the other relations of in the parataxis column. At first sight it may appear that in identification the opposite order occurs, i.e. that the secondary precedes the primary clause: here the identifying clause, which corresponds to relative clauses in languages such as English, always occurs first. But closer examination of the facts shows that this type does not in fact contradict the ordering principle. This type typically occurs in the context in which the identifying clause carries the new information, and the following clause carries given information. Consider for example (5-223) above, in which the final clause of B's response is information given in A's question.

It is clear that in clause complexes of the types listed in the second column of Table 5-2, the primary clause is always the one in unmarked (or indicative) mood; the secondary clause is always the one in a marked non-indicative mood. Here clause order has nothing to do with the primary/secondary opposition; where reversal of the order of the clauses is possible, it does not change the status of the clauses as primary or secondary. This suggests the inherent secondary status of clauses in non-indicative moods in these types of clause complex. The clauses are of unequal status. On the other hand, the fact that reversal of clauses in complexes from the first column of the table induces a
change in the relative status of the clauses indicates their equal footing. This justifies the distinction between parataxis and hypotaxis.

Turning now to the logical relationships, we find that in hypotactic clause complexes the enhancing relationship of location may be distinguished from the others by virtue of the fact that the order of clauses is fixed in the former, but not in the latter relationships. In location, the subordinate clause always follows the main clause; in the other hypotactic types, the subordinate clause more often than not precedes the main clause. Condition is morphologically distinct from identification and time, except in the future tense, where both condition and time are realised by a subjunctive clause (I will return to this shortly). Identification and time can be distinguished as follows: if there is, initial in the main clause, an endophoric word referring to (and/or summarising) the subordinate clause, it must be a determiner in identification, and the adverbial miga 'thus, in thus manner' in time. In other words, identification and time are sometimes formally distinct, and are in principle distinguishable. Similarly, it should be possible to distinguish future temporals from future conditionals by the endophoric element that may occur initially in the main clause. And it seems that only temporals allow the adverbial miga 'thus, in thus manner'. The discussion of this paragraph shows that the logical types in hypotaxis identified in the previous section have linguistic validity as covert categories: they are distinguishable by agnation, and not by form alone.

Things are not so clear for the various types of paratactic complexes, and it is beyond the scope of this book to determine whether each of the logical types identified above are linguistically significant. I will merely remark on the statuses of constituent descriptives, constituent identification, and clausal temporal inclusion. Identification stands out from the other paratactic relationships by virtue of the fact that one of the endophoric determiners may come initially in the secondary clause, and refer to the thing identified by the primary clause. It would seem that constituent descriptives and clauses related by temporal inclusion overlap, but do not coincide: clause complexes admitting the latter interpretation admit the former only if the clauses share a nominal constituent. Furthermore, neither of these two types appears to display a linguistic property distinguishing them from clausal addition.

But constituent identification in parataxis stands out from the remaining paratactic relations in other ways. Identification is the only logical relationship common to both parataxis and hypotaxis. Indeed, paratactic identification may be grouped together with hypotactic identification, conditionals, and temporals, in terms of textual structure. In each of these the expanding clause typically comes
first, and would appear to function as a type of thematic clause in the complex, establishing a thing involved in, a place at which, a time when, or a condition under which the situation referred to by the primary clause did or may occur. The thing established may be referred to by an initial endophoric element in the following, main clause. This makes the construction reminiscent of the thematic option of reprise (cf. above page 375, and Grimes 1975). As we have seen, such initial subordinate clauses always occur on their own, typically fall-rise, intonation contour. This may be compared with the rising tone on reprised nonclausal themes (page 374 above).

For each of the types identified in the preceding paragraph, final position for the expanding clause is far less frequent, and this clause may reasonably be regarded as a type of afterthought, added to clarify an omitted (or ellipsed) theme; the tone typically falls throughout, and is usually lower than the tone of the primary clause. Thus, as suggested above, the two types of constituent elaboration, characterisation and clarification, are merely thematic variants of identification. The subordinate types are typically added when the theme is something which has gone before, or is a presupposition, but which the speaker ascertains the hearer may have difficulty in identifying; the paratactic type adds new information of a peripheral nature. The four types, paratactic constituent elaboration, hypotactic constituent elaboration, hypotactic conditionals, and hypotactic temporals, may be grouped together and distinguished from the remaining types by virtue of their possession of a theme-rheme structure. They are thus in a sense more tightly structured, and more clause-like than the other types.

It is now clear that a number of the types distinguished in the above discussion do in fact have linguistic significance. This was shown by (1) formal differences in the choice of moods and resuming determiners; (2) differences in the significance of clause order; and (3) the fact that the class of complex sentences allowing a particular interpretation differs from the class allowing another interpretation. It remains true that many particular clause complex tokens are multiply ambiguous. Presumably the interpretations are influenced by the context of the text and the speech situation in which the particular complex occurs. To take one example, $(5-430)$ occurred in a context in which my collaborator and I were discussing the previous work on the Gooniyandi language. No previous mention had been made of this particular white person.
(5-430) ngamoo gardiya -ngga thangarndi yoodjingi
before white:person ERG word he:put:it
mirlimirli -ya nangbani
paper LOC he:died
'Before a whiteman put some (Gooniyandi) words on paper, but he died.'
'The whiteman who put (Gooniyandi) words on paper before died.'
'A/the whiteman put (Gooniyandi) words on paper and died.'
In this context, the first two interpretations are the most likely. Since the white person had not yet been mentioned, the speaker might have intended that the first clause establish such an individual, and mention as a further observation that this man had died (in fact, the speaker was wrong here). Alternatively, he may not have intended that the person be established in this way, but his identity left indefinite, the point of the utterance being that although someone had previously worked on the language, this was quite a while ago. If, however, the discourse had been concerned with the exploits of a particular white person, the third reading would be the most likely one. Naturally there are formal correlates of the discourse and speech situation factors, showing up in the order of words in the constituent clauses, whether or not they are ellipsed, etc. (cf. Merlan 1981:188ff). We cannot here attempt to identify factors influencing the interpretations of particular examples.

## CHAPTER 6

## TOPICS IN SEMANTICS

### 6.1 Preliminary remarks

This chapter is a preliminary investigation into the semantics of certain closed class units, in particular, logical modifiers (section 6.2), enclitics (section 6.3), particles (section 6.4), and the major categories of the finite verb (section 6.5). Up to now these morphemes have been given approximate English glosses only. Other closed class items - including stem forming suffixes, postpositions, pronominals, and infinitives - have already been discussed in Chapter 3 above.

As in the previous chapters, the object of study is the linguistic sign, a form-meaning correlation. Meaning, as we have seen (see page 323) must be distinguished from reference, or the extra-linguistic "reality" referred to by a particular utterance or sign in the utterance. Meaning and reference are not identical; the former imposes a classification on the latter. On the other hand, reference must be studied in order that linguistic meaning be determined. What is different about the investigation of this chapter lies primarily in the nature of the formal aspect of the sign. In Chapters 4 and 5 the forms were immediate constituents of phrases and clauses - that is, entities with no unique shape in terms of either their phonological or their lexical expression, and established by means of contrast and complementary distribution. It is assumed in this chapter that morphemes, the ultimate linguistic constituents which have meaning, are also signs. In this case, of course, the forms we are concerned with are primarily (morpho)phonological. The sign is an association between a phonological and/or a morphophonological form and a meaning. Qualifications must, of course, be made regarding: (i) homophony, in which two distinct signs share a phonological form; and (ii) allomorphy, in which a single sign has variant phonological expressions.

The fundamental assumption of the approach to meaning adopted here is, then, that each formal item or morpheme (with the exception of homonyms) has associated with it a linguistic meaning which remains constant throughout all of
its uses. I will refer to this invariant of meaning as the FORMAL meaning of the morpheme, following Ellis (1966:80). Other linguists have used terms such as "core meaning" (McConvell 1983a), "grammatical meaning" (King 1983), and "common denominator of meaning" or "Gesamtbedeutung" (Jakobson 1936 and Waugh 1975). This formal meaning must be distinguished from the various CONTEXTUAL meanings or interpretations that the morpheme acquires in the various circumstances of its use. Contextual meanings do not form a part of the essential meaning carried by a form, and they vary according to its linguistic and extra-linguistic environment. Of course, a given morpheme is always used in some context, linguistic and extra-linguistic. And each context will engender a particular semantic interpretation, which must not, however, be confused with the meaning inherent in the morpheme, and common to all of its uses (cf. Waugh 1975:439, and King 1983:113). In order to establish the formal meaning of a morpheme, ALL of its uses must be examined, and from them a common denominator of meaning extracted (if possible) on which the various uses are based.

As King (1983:102) points out, many grammarians have been content to delineate and catalogue the uses attributable to a particular form. There are, however, a number of problems and inadequacies with this sort of approach to semantic description (see King 1983:103). From the perspective of the present investigation, the major problem concerns the identification and delimitation of these meanings. Nothing seems to prevent the proliferation of meanings as more and more individual examples are taken into account: in this approach all meanings are accorded equal footing. Furthermore, there is another problem for the linguist who is not a native speaker of the language in establishing the intended referential meaning of the utterance (or subpart thereof), and its connotations. I have already discussed this problem in connection with the field methodology (see section 1.10). It is clear from that discussion that the pairing between the initial English prompts and the speaker's responses to them cannot be regarded as unassailable 'raw' data. Even when the context constrains the possible interpretations there may still be room for misunderstandings (especially in the region of non-experiential meanings, which will take up a significant part of the discussion of this chapter).

Thus the crucial problem with the cataloguing approach is that the only means of cross-checking and assessing the presence (or absence) of a particular sense is to elicit a native speaker's reaction and explanation. (And I have already mentioned practical problems inherent in this methodology, at least in the field situation where this research was conducted.) However, in the approach I am
advocating here, there is a constant interplay and exchange between the processes of refining the specification of contextual meanings and encapsulating the formal meanings. The complete meaning of an utterance or subpart of an utterance can only be approached by degrees, and this may entail successive modifications to the interpretation of particular examples, even in some cases the rejection of the speaker's gloss as inappropriate or inaccurate. Furthermore, examples are not seen in isolation from other like examples. Rather, by processes of crosschecking and comparison over as large a corpus as possible, significant contextual meanings can be identified, and proliferation of meanings/uses avoided. That is, we are more concerned with types of contextual meaning of a form than with the instantiated and unrepeatable meaning tokens in specific utterances (cf. Ellis 1966:81).

But the establishment of formal meaning requires more than a mere examination of contextual meanings. As a sign, a morpheme enters into paradigmatic relations with other signs, and it is the system of such relations that gives it linguistic 'value' (cf. Saussure 1959/1974:111ff). The formal meaning of a morpheme cannot be fully determined without an appreciation of the meanings of the other morphemes with which it enters into oppositions. This means that minimal pairs and the principle of paradigmatic opposition within fixed frames must be used in establishing formal meanings, in addition to the process of abstraction of invariants from contextual meanings. A special case of this is of importance to the study of a number of the forms dealt with in this chapter. That is, the contrast between the presence and the absence of the form in given contexts. Meaning is carried by the absence of a particular sign in a place where it may occur, and zero in such contexts may also be regarded as a sign belonging to the paradigmatic set including the former morpheme.

This account sets out to do more than merely assign English glosses to Gooniyandi morphemes, which glosses are frequently misleading, and have unintended connotations. An attempt is made to give sharp formulations (and formalisations) of the formal meanings. This enterprise meets with varying degrees of success and depth with the various morphemes discussed. The formal meanings have, in a few instances, been described in terms of systems of feature oppositions (cf. Waugh 1975, and King 1983). This has been done only for morphemes which enter into paradigmatic sets, one member of which is obligatorily chosen in all circumstances of a specified type - see sections 6.5.1 and 6.5.5. Elsewhere, formulae and short descriptions have been used.

### 6.2 Logical modifiers

There are three nominals which provide logical type modification of nominals functioning in the Entity role, yaabja, yaanya, and wajaddanyi, which may be given rough English glosses 'some, others', 'other, another', and 'different', respectively. These logical modifiers are discussed in order in the following three subsections.

### 6.2.1 yaabja 'some, others'

Yaabja is a non-specific determiner, which usually translates into English as 'some'. It makes reference to an unspecified set of things of the type indicated by the Entity nominal. Yaabja may be used partitively, selecting a subset of a previously identified or delimited set:
(6-1) yiyili -ya garndiwangooddoo yoowooloo yaabja [place name] LOC many man some ngaddagi ngaboo yaabja ngaddagi marna my father some my brother
'There are lots of people at Yiyili; some are my fathers, some are my brothers.'
(6-2) yaabja marla -ya gidgidnginmi
some hand LOC they:stuck:in:me
'Some (of the prickles) stuck in my hand.'
Alternatively this lexical item may be used non-partitively in reference to an indefinite set of things of the particular type, which do not form a subset of an established superset.
(6-3) gardjaalooni yaabja -ngga gardbiinbiddawoo nganyi -rni I:might:hit:him some ERG they:will:belt:me me SEQ 'Should I hit her, someone will hit me.'
(6-4) ngaragbinmi balyadi jimind -ngaddi -ngga yaabja
they:made:it flat cement COMIT ERG some
yoowooloo bijgooddarnoo -woo
man they:emerge DEF
'They laid cement (around the jail walls) lest someone dig themselves out.'

Yaabja 'some' is unspecified for number, but as the examples above indicate, when reference is being made to human beings, the cross-referencing
pronominal in the VP is typically plural (cf. example (6-85) below), whereas it is usually singular in reference to inanimates. Of course, number may be specified by means of a co-occurring numeral, as in e.g. yaabja yoowarni yoowoolaanyi (some one man-other) 'some other man' - that is, an indefinite single individual of another type of person (e.g. from a different country).

Gooniyandi has no term (either word or enclitic) explicitly indicating universal quantification, 'all'. The number word garndiwangooddoo 'many' may be used in this sense, though it remains ambiguous with 'many' and 'most' (cf. section 6.3.2 below). The same holds true for yaabja, which can be used partitively in reference to an arbitrary subset of some superset, as discussed above. Alternatively it may refer to the complement of a subset, if either: (i) the membership of that subset is uncertain (and/or immaterial), as is the case in
(6-5) yoowarni limba gardbini yaabja yoowooddwinmi
one policeman he:shot:him some they:ran:away 'He shot one policeman, the others (the remainder) ran away.'
(6-6) ngidi -yarndi -moowa warangjawiddiddi yaabja wardbinggiddi
we(R) pl ON we:will:sit some you:lot:will:go
'We'll sit here; you others can go.' (Literally: 'We'll sit here, some (of us) you will go.')
Here yaabja is glossed 'other(s)' in English. Thus, English explicitly marks the relation between the two subsets, and their relation to the superset (by means of the definite determiner the), but leaves the undefined status of the set(s) unmarked. By contrast, Gooniyandi indicates the undefined status of the sets, and leaves the set-theoretic relations unmarked. See also below pages 455-456.

Or (ii) the membership of the subset is determined, but the complement (and consequently the superset) has undetermined and indefinite reference. This is the case for instance in
(6-7) yaabja yoowooloo gadloonbini gindiwa danggoo -ya some man I:left:them upstream [name] LOC 'I left some (the remaining) people at Geikie Gorge.'

To indicate that the situation applies with respect to no entity of the stated type, the usual mode of expression is by negating a clause with yaabja. Thus:

| (6-8) yaabja -ngga yoowooloo mangaddi | jagbinmi | -ngaddagi |
| :--- | :--- | :--- | :--- |
| some ERG man | not | they:spoke to:me |
| No one spoke to me.' |  |  |

All of the above set-theoretic relations may apply here, of course (i.e. 'no $x$ at all', 'no $x$ in a particular set', and 'no $x$ in the complement of a subset').

### 6.2.2 yaanya 'other, another'

Yaanya is a comparative determiner which indicates that the referent of the NP is a different token of the type referred to by the Entity nominal. It invokes a comparison of the referent with some other entity of the same type, the standard.

This standard is frequently an entity already established in the discourse. For instance, in a text describing fish, the speaker introduced a new type of fish with the clause
(6-9) yaanya gawi gooloomangaddi
other fish catfish
'Another fish is the catfish.'

Note also
(6-10) wayandi ngooddi
fa ngabnga yaanya booddoo
fire that LOC it:bumed other north

But the standard need not necessarily be something that is mentioned in the preceding text. It is worth mentioning the other major possibilities in invoking 'standards', since Gooniyandi shows some differences from English (which presumably reflect different unmarked choices of speaker's empathy (Kuno 1976:431).
(a) The standard may be the entity of the given type that is involved in the present speech situation. For example, reference to earlier or later time is frequently made by expressions such as yaanya-ya wik (other-LOC week) 'the other week', or yaanya-ya gamba (other-LOC water) 'the other year'. These invoke a comparison with the present. Similarly present spatial location, direction of motion, goal, etc. is a likely choice of standard. Example:
(6-11) ngooddoo yaanya yaanya balma milawa
that other other fork you:will:see:it
niyaji boolooboowa
this you:will:follow:it
'That other (road - not the one you are following now); you see the other road, well follow it.'
(b) An implicit standard is normally the least active thing of the particular type in the situation. In describing a photograph of two men in a boat, one of whom was rowing, the speaker said:
(6-12) yaanya -ngga loowa garndiwiddi -ngaddi -ngga girili other ERG he:pushes:it two COMIT ERG tree 'The other one is rowing.'
(The person seated had not been identified in any way prior to this utterance.) Another example is
(6-13) yaanya -ngga yoowooloo balyoowa boorloobaa
other ERG man
'The other man is following behind.'

Similarly, in descriptions of activities such as putting one leg on the other, etc., it is normally the passive member that is chosen as the standard. For example:
(5-14) gaddawooloo yaanya thadladdi
leg other I:put:it:down
'I put one leg on the other.' (Literally: 'I put the other leg.')
There is a single example only available in which the active member was chosen as the standard. That example is:
(5-15) yoowooloo yaanya -ya birdi thadbaddi waraari man other LOC leg he:put:it:down he:stands 'The man is standing with one leg on the other.'
(c) An implicit standard is usually the 'correct' thing that should be involved in the action. (Possibility (b) can be seen as a subtype of this, in which the active member is the inappropriate one.) Example:
(6-16) yaanya warawoodoo boorloobbini wangaddagbani other road he:followed:it he:got:lost 'He followed the wrong road and got lost.'
(d) Both compared entities may be taken as standards for one another. Thus,
comparative utterances such as
(6-17) yaanya biddinyiwoorloo thiwa yaanya biddinyiwoorloo
other wasp red other wasp
gooroogooroo
black
'One wasp is red, another is black.'
are the norm in Gooniyandi. Unlike English, a specific member is chosen as the unique standard only when there is some compelling reason to do so. A second manifestation of this principle is that in 'reflexive/reciprocal' clauses yaanya 'other' can be used like the English 'each other':
(6-18) yaanya wididi gininybinmarni
other cloud they:mixed:up:together
'The two clouds met up together.'
(6-19) garndiwiddi yaanya -ya jaalinyi yaanya -yooddoo -ngga
two other LOC moon other DU ERG
doowwinmarnirni
they:might:take:each:other
'In a month the two people may marry (i.e. take one another).'
There is a term yawinhingi in the avoidance style which appears to cover the senses of both yaabja 'some' and yaanya 'other':
(6-20) thaddi ngirndaji -ngga widdwalnginbini yawinhingi -ngga mistaken this ERG he:hit:me other ERG
balija widdwalnginbini
man he:hit:me
I thought this man hit me, but it was really the other man.'

### 6.2.3 wajaddanyi 'different'

Wajaddanyi describes something as differing in some respect from a reference item with which it is compared. For example,
(6-21) yoowooloo waddmarla wajaddanyi
man desert:person different
'The desert people are different.'
(6-22) indicates the respect in which the comparison is made - in the text in which this occurred, the cat had just been introduced as a 'countryman' of the
dog:
(6-22) minyawoo wajaddanyi lambardi thadda nyamani -nyali cat different little dog big REP 'Cats are different, they're little; dogs are big.'

Similarity is expressed differently, by use of $-j a n g i$ SEM; there is no nominal which signifies the notion of likeness.

### 6.3 Enclitics

Enclitics were defined in section 3.8 to be those bound morphemes which do not as a rule enter into relations of constituency with the words to which they are attached. The distributional words so formed do not constitute grammatical units.

In this section a preliminary attempt is made at identifying the formal meanings of these enclitics, and at relating them to the contextual meanings. It will be shown that enclitics typically have a range of SCOPES or DOMAINS, and that the contextual meanings of an enclitic are at least partially determined by its scope (cf. McConvell 1983a, Taglicht 1984). In this section I discuss the 'nonverbal' enclitics (see Table 3-1), that is, those which occur else where than encliticised to verbal units; 'verbal' enclitics are discussed in sections 6.5 .2 to 6.5.4.

### 6.3.1 -rni SEQ

Gooniyandi speakers usually give as glosses for sentences with $-r n i^{1}$ SEQ, English sentences with 'next' or 'now' immediately following the English equivalent of the Gooniyandi word to which $-r n i$ SEQ is attached. Some examples are:

$$
\begin{array}{llll}
\text { (6-23) } & \text { nganyi } & -r n i \quad \text { landiwali } & \text { thoodgiyawingani } \\
\text { I } & \text { SEQ from:above } & \text { I:will:start:descending } \\
\text { '(You've already slid down the rope), now I'll start descending.' }
\end{array}
$$

[^25](6-24) wamba nyamaniyawoondi nganyi -rni gardbinbinirni later he:will:get:big I SEQ he:might:hit:me '(Should I hit the child) when he's grown big, he might hit me.'
(6-25) birdi galanyi gajmi nyawa -rni gajgoowami leg first he:cut:it tail SEQ he:is:cutting:it 'First he cut the leg off, now it's the tail he's cutting.'

But -rni SEQ indicates more than the mere temporal succession of situations, which can be indicated in a number of ways, including simple juxtaposition of clauses, and the use of niyinhingi 'after that, then'. -Rni SEQ would not, for example, occur on nganyi ' 1 ' in (6-23) if the preceding text had dealt solely with the speaker's previous exploits. It draws attention to some focal point whereby the situation contrasts with the previously obtaining situation(s) or circumstance(s). This may include more than the immediately preceding clause; it may be a larger circumstance set up by a part of the preceding text. For example, in (6-25) the presence of $-r n i$ SEQ, in addition to marking the second process as subsequent to the first, indicates that the goal of the process is a point of contrast. Similarly, in (6-23) and (6-24) the speaker is marked as a focal point of the difference in the (successive) situations, given in the context of situation and the context of the preceding text respectively. That is, the sense of 'next, now' implied by -rni SEQ applies specifically to the constituent to which it is attached. In effect, what is said is that at one time something was involved in a situation in a certain way, but now another, different thing is. The relation of succession is not of situations, but of things playing roles in situations: firstly $x$ was involved, now it is $y$. (The relationship of succession between situations follows from this, but of course does not imply it.)

The above may be summarised: the RANGE of $-r n i$ SEQ includes the full clause, but its FOCUS (cf. Taglicht 1984:1-11) is the constituent it is attached to. This constituent is as a rule, unsurprisingly, the marked information focus of the clause; that is, typically the first element of the new. Furthermore, this focus is normally contrastive.

When -rni SEQ occurs on Attributes, the comparison is usually with a situation in which the opposite Attribute, the negation of the Attribute, held at some previous time:

Attribute: NP
$\begin{array}{lll}\text { (6-26) langgagooloo girlingiddi } & \text {-rni bagiri } \\ \text { hollow:log hole } & \text { SEQ it:lies }\end{array}$
'The hollow $\log$ is open now (it was blocked with dirt before).'

Attribute: NP
(6-27) mooyoo -rni bagiri
sleep SEQ he:lies
'He's asleep now (he was awake before).'
Attribute: NP
(6-28) migi -ngga wirdgilanginbini gaji -rni ngabgina ant ERG it:had:bitten:me sore SEQ it:eats:me '(Where) the ant had bitten me it is sore now.'

Note that a specific antecedent need not necessarily be involved in a situation of the same type. For example, in
(6-29) nyiddi -rni wamba doodjawila spinifex SEQ later I:will:throw:it:on 'I'll put spinifex on(to the boughshade) next.'

Here nyiddi 'spinifex' does not invoke a contrast with something else that was thrown onto the boughshade. However, it does contrast with other things that were acted on in appropriate ways in the process of constructing the boughshade. The spinifex may be seen as one of a succession of materials used in the construction.

In the above examples, there has always been a definite antecedent for the -rni SEQ constituent, established somewhere in the text. This need not be the case. (6-30) uses a more general sense of 'next' - the hearer is warned that he'll be the next casualty on the road (none had been specifically mentioned previously):

| (6-30) niyi moodiga milawa | nginyji -rni |
| :--- | :--- | :--- | :--- |
| that car you:will:see:it you | SEQ |
| gilangginggaddoowoo |  |
| it:knocks:you! |  |
| 'Look out for that car or it will hit you next.' |  |

### 6.3.2 -nyali REP

This enclitic has the widest, and from an English perspective, the most unusual range of meanings of all the enclitics. -Nyali REP may be encliticised to nominals (including nouns, pronouns, and demonstratives), adverbials, and verbals, but it cannot go onto the inflected part of the verb phrase, the classifier complex. It is normally the final element of a distributional word. For example, where the nominal occurs in syntagm with a postposition, -nyali REP always
follows the postposition. The only exception occurs in the VP, where -nyali REP almost always appears as an infix between the verbal stem and the following classifier complex.

In this section I will first describe its range of meanings, and then go on to suggest that these all relate to a single formal meaning, which I will attempt to formalise. In delimiting this range of meanings I do not mean to suggest that they are all formally distinguishable, or that they are necessarily valid for native speakers. Some, however, have formal correlates relating to scope, and these may be assumed to be identified with some justification. It is important to note that the glosses given below cannot be taken at their face value, and only PARTICULAR CONTEXTUALISATIONS of them are applicable. For each gloss an explanation is given which attempts to identify the value of the English word. No implications should be drawn from the glosses as to further senses of the Gooniyandi morpheme.
(i) 'again'. As McConvell (1983a) points out, the English word again has two distinct senses: repetition of an action or fact, or return to a former position or state. (He shows that these senses are related - see page 468 below.) $-N y a l i$ REP also occurs in both of these senses. (6-31) involves repetition of the full situation, but in (6-32) there is just a return to a former position; there is no implication that the bird had previously swooped up.
(6-31) jamoondoo milanggiddinyayi mila -nyali -yawinggiddinyayi other:day I:saw:you:two see REP I:will:cxtend:you:two 'I saw you two the other day, and I'll see you again later.'
(6-32) landiwali woodoolwani thaanoonggoo doombaj -nyali -windi from:above it:swooped:up upwards go:up REP it:got '(The bird) swooped down, then went up again.'
In the 'repetition of an action or fact' sense, -nyali REP is usually, as these two examples illustrate, attached directly to the verb root or stem, preceding the classifier complex. For the 'back to a former state or position' it may instead be attached to a word referring to that state or location. This is shown in example (6-33):
(6-33) niyi barnbindi ngiwawoo -nyali
he he:returned south REP
'He returned south again.'
Contrast the preceding example, where, if -nyali REP had been attached to thaanoonggoo 'upwards', it would indicate that the whole situation (of going
upwards) was repeated.
All lexical verbs would presumably allow the interpretation of repetition of the situation. It would seem, however, that only accomplishments allow the 'return to a former position or state' interpretation. For other processes, such as mila- 'see, look', widdij- 'scratch' and so on, there is no former state or position to return to. In fact, this interpretation is likely to be further restricted to a proper subset of accomplishments, namely those for which the state or location is achieved at the point of accomplishment.

However, -nyali REP has more general senses of repetition of processes than does English again, as might be predicted from their different syntagmatic potentials. Unlike again which has clausal scope, and consequently refers to the repetition of whole situations, -nyali REP may include just the process in its scope. In this use only the process is repeated. The participants - their roles or their referents - may differ from one situation to the next. (6-34) and (6-35) retain the same participants, but show a change in their respective roles; but in (6-36) there is a new participant in the second situation.
(6-34) yoowarni -ngga baami -ngodda briyandi
one ERG he:called to:me in:return
baa -nyali -limi -nhi
call REP I:did to:him
'One (man) called to me, and in turn I called back to him.'
(6-35) gardjayooni briyandi gard -nyali
he:might:have:hit:him in:tum hit REP
-yoonirni
he:might:have:hit:him
'Had he ${ }_{1}$ hit him $_{2}$, he $e_{2}$ would have hit him ${ }_{1}$ back in revenge.'
And in
(6-36) birdi dijga yaanya birdi dij -nyala -a leg he:breaks:it other leg break REP he:extends:to:it 'He breaks one leg (of a frog) then the other.'
there is one new participant in the second situation. Similarly (6-37) does not suggest that the same letter was involved:
(6-37) moongayayoo bala -nyali -ya -wili morning call REP SUBJ I:will:catch:it 'Tomorrow I'll send a letter also.'

Although all available examples show some continuity of participants across the clauses, it is not known whether this is necessary.

There is also a particle ngambiddi which frequently translates into 'again' in English - see section 6.4.17. It is often followed by -nyali REP, as in the following example.
(6-38) nganyi nyagginboowoo ngambiddi -nyali
I he:will:spear:me again REP
'I might be speared again (not necessarily by the same person).'
(ii) 'too, also'. When -nyali REP is encliticised to a given constituent indicating a quality presumed to apply to some earlier established referent, it normally translates as 'too' or 'also'. The given quality is indicated to apply to a new entity, which is as a rule the theme of the clause (cf. section 6.3 .5 below). For example:
(6-39) yoowooloo gambi bagiri goornboo gambi -nyali bagiri man sick he:lies woman sick REP she:lies 'The man is sick, and so too is the woman.'
(6-40) thiddoo gooddgoo -ya -nyali bagiri
kangaroo hole LOC REP he:lives 'Kangaroos live in holes too.' (Given that dogs also sleep in holes.)
(iii) 'same'. This sense occurs when -nyali REP is encliticised to a constituent of a nominal phrase (NP or PP) with definite reference. The referent is asserted to be identical with a previously established entity. For instance:
(6-41) yiganyi warangbooddoorni niyaji -ya -nyali uncertain they:might:sit this LOC REP 'They might sit at this same (place).'
(6-42) nhoowoo -nyali yingi goowajgoolagini diyadiya miga -nyali his REP name he:calls:himself peewee that REP '(The peewee) is called by the name of his song, diyadiya.'
(Note that (6-42) occurred in a text in which the identity of the bird had already been established. Accordingly, the first occurrence of -nyali REP does refer back to the previous text, not forward to diyadiya 'peewee'.)
(iv) 'one and the same'. A slightly different sense of 'same' is involved in examples such as (6-43):
(6-43) yoowarni -ya -nyali mayaroo warangjiddi one LOC REP house we:sit 'We live in the same house.'
Here the entity or place is not asserted as being identical with one already established; rather, it is asserted as being the identical one for each of the participants referred to. This sense occurs only where there is a non-singular participant.
(v) 'all'. When -nyali REP is encliticised to a number word it usually has this sense; more specifically, it indicates that the totality of a given or presumed set is involved in the situation. -Nyali REP covers only this part of the semantic range of all. For example,

| (6-44) | garndiwangooddoo | -nyali |
| :--- | ---: | ---: |
| many | booldoogbiddani |  |
| REP | they:broke |  |

In fact, this meaning occurs when -nyali REP is attached to any quantifying expression, whether or not it is a number word:
(6-46) riwi mangaddi ngaddagi -yoo -miya yaddangi
camp not mine DAT ON our
boojoo -yoo -nyali
finish DAT REP
'This camp is not only mine, it belongs to all of us.'
As has just been mentioned, the sense of 'all' covered by -nyali REP forms only a part of the range of the English word all: all of a given set of referents. Where the set is not given, -nyali REP is not encliticised to the Quantifier of an NP. Thus Quantifiers such as garndiwangooddoo 'many' are ambiguous between the senses 'many' and 'all' (when the referent is not given).'
(vi) 'still'. Like the French encore, Italian ancora, and Spanish todavia, all of which normally translate as 'again', -nyali REP sometimes requires the gloss 'still'. In this sense -nyali REP always has a non-verbal constituent in its scope. A number of different nuances of meaning are identifiable depending on which non-verbal constituent is in its scope; this constituent indicates the particular respect in which the situation is continuing. This may be:
(a) A purely temporal continuation, with focus on the time; the situation obtaining now also obtained before. Example:
(6-47) jiginya biddangi mangaddi wardgiri giraddiri wamba -nyali child their not he:walks he:crawls still REP 'Their child doesn't walk; he still crawls.'
(b) A participant may be continuing to do or suffer a particular situation; that is, the focus of the continuation of the situation is on some participant's continued involvement:
(4-48) nganyi -nyali milaana mangaddi ngooddoo milaa me REP he:sees:me not that he:sees:him 'He's still looking at me, not at him.'
(c) The process may continue to occur in a particular circumstance:
(6-49) niyaji -ya -nyali warawiri
this LOC REP you:will:stand
'Keep standing there still.'
(d) Finally, a quality may continue to remain an attribute of a participant throughout the situation:
(6-50) mooyoo -nyali bagiyi sleep REP he:lay 'He still slept.'
(vii) 'always'. This sense may be found when -nyali REP has an attribute in its scope, the attribute being asserted as applicable forever, or for the entirety of a particular time span. An example is (6-51).
(6-51) mangaddi gilbawayingi marlami -nyali barnbindi not he:was:finding:it without REP he:returned 'He would never find (anything); he'd always return empty handed.'

Rarely, -nyali REP occurs on the particle ngambiddi 'again' in this sense, indicating daily iterative occurrences of processes such as shaving. For example,
(6-52) ngambiddi -nyali thiddajga
again REP he:defecates
'He defecates daily.'
(viii) 'throughout'. This is a very closely related sense to 'always', and indicates the continued presence of an atribute throughout the duration of a
process. The only difference is that a single action is referred to, rather than a number of like actions over a period of time. For instance:

> (6-53) jimandi -nyali bariwindi mangaddi dagooddawani good REP he:climbed not he:fell:in 'He climbed well all the way; he didn't fall.'
(ix) 'together'. This use of -nyali REP is closely related to sense (v) 'all', but carries the added nuance that the participants are considered to form a single group together with respect to their involvement in the situation. (6-54) exemplifies this sense.
(6-54) dibajwaddiwiddaniyi garndiwiddi -nyali gardbiddaniyi
they:two:pushed:each:other:over two REP Hey:two:fell 'They pushed each other and fell over together.'

This sense is not restricted to cases where -nyali REP is attached to a numeral; it also occurs when this enclitic is attached to a verb stem:
(6-55) ngooddoo
-yarndi yilib -nyali -widdiddi
(x) 'precisely, exactly, just'. When -nyali REP has in its scope nominal phrases (NPs or PPs) or adverbials, it may indicate that precisely the referent entity, quality, or circumstance, and none other, is the one involved in the situation referred to. Some illustrative examples of the various possibilities are given below:
(6-56) jijagji minyawoo -jangi -nyali
he:spoke cat SEM REP
'(The bird) made a noise exactly like a cat.'
(6-57) mangaddi yoodgoowali ngirnda marla -ya -nyali
not I:was:putting:it:down this hand LOC REP
goorijgila
r:hold:it
'I haven't put it down; it's right here in my hand.'
(Note that (6-57) admits of another interpretation: 'I haven't put it down, it's still in my hand'. In the particular context in which (6-57) occurred - where the
location of the item was the focus of attention - the translation given is the most reasonable one.)
(6-58) niyaji -ya -nyali birndiddi -ya gardbiddini this LOC REP plain LOC they:hit:him 'They killed him right there on the plain.'

Just as in English, this sense of -nyali REP combines with yaningi 'then, now, at that time', with the effect of specifying 'right now'. It is usually used to suggest the imminence of a process, or of the point of completion of an accomplishment (in combination with the progressive). Thus:
(6-59) wardngiri yaningi -nyali
I:go now REP
'I'm going right now.'
(6-60) yaningi -nyali thithiwalimi
now REP I:am:going
'I'm going right now.'
(xi) 'really'. A perhaps fairly closely related sense is a type of intensification, whereby a property is asserted as being held to a significant extent. The main difference would appear to lie in which element is in the scope of -nyali REP. Whereas in the last sense it is (treated as) some sort of thing, in this case it is a quality. Compare (6-61) with (6-56) to (6-60).
$\begin{array}{ccc}\text { (6-61) minyiidda } & \text {-nyali waddamba bijngarni } \\ \text { true } & \text { REP flood } & \text { itemerged }\end{array}$
'A truly big flood came up.'
(6-62) gooniyandi yalawa -nyali yoodbindi near REP he:put:them
'(The mythical being) put the Gooniyandi people very close by.'
(xii) 'intensive'. Yet another sense closely related to the preceding two is found when -nyali REP is encliticised to certain temporal adverbs. It is specified that the time at which the process took place was right at the central or paradigm point of reference of the adverbial. This is the case in
(6-63) moongaya -nyali gijloondi
morning REP i:got:up
'I got up early in the morning.'
where reference is made to the very early morning, just after sunrise, the
paradigm point of reference of moongaya 'morning', which can however include within its reference the time up to about midday.
(xiii) 'really, surprisingly'. There are just a few cases in which -nyali REP is encliticised to the verb stem, apparently suggesting that it is surprising that the event or process occurred at all, at least with the present actor. (However, as there are so few examples available of this type, it is impossible to be certain that this was the nuance intended.) An example is:
(6-64) ngaaddi wajbaddi -widdangooddoo thadda -yoo stone he:threw:it at:them dog DAT
gard -nyali -winbini
hit REP he:hit:them
'He threw stones at the dogs and really/even hit them.'
(6-65) thadda -ngga looddoob -nyali -woonaddi
dog ERG chase REP he:extends:to:them
'The dog really chases bullocks (which is surprising).'
(xiv) 'just, only'. In the odd example or two -nyali REP appears to have the sense 'only' or 'just':
(6-66) nganyi wanggalala biliga -nyali
I I:was:tired middle REP
'I felt tired at only half way.'
This covers the main uses of -nyali REP, as far as I have been able to distinguish them. Undoubtedly there are still further uses that $I$ have been unable to identify, and others not represented in the present corpus. There are also usages that do not fit neatly into any of these categories. I give one illustration only:

> (6-67) niyaji jigiddijla miga -nyali galgalmi
> this I:tickled:him like:that REP he:laughed 'I tickled him and made him laugh.'

It is possible, but by no means certain, that this involves a use of the type ( x ) 'precisely': 'I tickled him and that's exactly why he laughed'.

McConvell (1983a) has proposed that again in English, and -rningan -which is usually glossed 'again' - in Gurindji are both characterisable in the following way:
(6-68) again
Presupposition (P): $\mathrm{S}_{2}$ at a time before T .
Assertion (A): $\mathrm{S}_{1}$ at T .
where $S_{2}$ is a subpart of $S_{1}$ up to and including $S_{1}$; the relation between $S_{1}$ and $S_{2}$ being defined by a set of scope rules. (McConvell 1983a:4).

McConvell (1983a) suggests that the differences in scope of the two morphemes in English and Gurindji account for the differences in range of meaning between the two languages, and that the differences in scope are due mainly to the fact that the English morpheme is a free word whereas the Gurindji morpheme is an enclitic.
(6-68) clearly describes at least a part of the range of -nyali REP delimited above. However, it is not clear that the presuppositions involved in the use of -nyali REP are necessarily full situations (referred to by full clauses). It would seem that normally only subparts of situations are presupposed by, and relevant to, the use of -nyali REP. For this reason, and secondly, lacking a set of scope rules, I propose a modification to ( $6-68$ ) for a description of the formal meaning of -nyali REP. In order to keep the two approaches distinct, I will use the term PRESUMED (following Rochester and Martin 1979:55) when making reference to parts of situations. The term 'presupposed' will be reserved for full situations only. It follows that -nyali REP typically relates the constituent in its scope to some presumed antecedent. (6-68) may be replaced by:
(6-69) -nyali REP
Presumed: $\mathrm{A}_{1}$ at some time before T
Asserted: $\mathrm{A}_{2}$ at T
where $A_{1}$ and $A_{2}$ are subparts (either proper or improper) of the situation, determined by the scope of -nyali REP, and $A_{1}$ is less than or equal to $A_{2}$, this relation having the subset and scalar interpretations.
It is clear that in general $\mathbf{A}_{1}$ and $\mathbf{A}_{2}$ are identical: for example, in (6-31), $\mathbf{A}_{1}$ and $\mathbf{A}_{2}$ both refer just to the process mila- 'see', excluding all participants, circumstances, etc.. The qualification that $A_{1}$ may be included in $A_{2}$ is necessary, not only for the 'back to a former state or position' sense of (i), but for other uses, as will emerge below.

In (6-69) A refers to the referent of any constituent, nominal, verbal, or adverbial. Secondly, the exact nature of the relationship between $A_{1}$ and $A_{2}$ has not been specified as it is in (6-68); it is given as 'is less than or equal to', which can be interpreted either in the subset sense or the scalar sense (see below
page 475).
The main senses of -nyali REP identified above are listed below:
(i) 'again'; repetition of a situation, or back to a former state or position.
(ii) 'also, too'
(iii) 'same'
(iv) 'one and the same'
(v) 'all'
(vi) 'still'
(vii) 'always'
(viii) 'throughout'
(ix) 'together'
(x) 'precisely, exactly, just'
(xi) 'really, very'
(xii) 'intensive'
(xiii) 'really, surprisingly'
(xiv) 'only, just'

I now attempt to show how this range may be explained as specific contextualisations of the general meaning, encoded in formula (6-69).

In order to do this, we need to take a close look at the variables of formula (6-69), principally: the scope of -nyali REP, which determines $A_{1}$ and $A_{2}$; the relation between $A_{1}$ and $A_{2}$; and the time $T$. We begin with those senses involving the subset interpretation of the relationship 'is less than or equal to'; that is, either $A_{1}$ and $A_{2}$ are identical, or $A_{1}$ is contained in $A_{2}$.

A cursory examination of (i) to (xiv) above will reveal that four senses (i) 'again', (vi) 'still', (vii) 'always', and (viii) 'throughout' - stand out from the others in that they are inherently temporal: they relate processes according to the time of their occurrence. The three senses of 'again', 'repetition of a situation', 'return to a former state or position', and 'repetition of a process', may be accounted for by setting different values for $A_{1}$ and $A_{2}$ in (6-69). Respectively, $A_{1}=A_{2}=$ situation; $A_{1}=$ former state/position is contained in (or implied by) $A_{2}=$ situation; and $A_{1}=A_{2}=$ process.
Note that this indicates that (6-68) requires a slight adjustment, at least as far as the English 'again' is concemed: if $S_{1}$ and $S_{2}$ are identical, it must be assumed that there is some intervening time at which the situation does not occur. That is, two distinct but equivalent situations are referred to.
'Still' can also be accounted for by setting $\mathrm{A}_{1}=\mathrm{A}_{2}=$ situation, where the
equality is strict: the situation is precisely the same one, not just of the same type. It is presumed that the situation obtained at some time before $T$, and asserted that exactly the same situation obtains at $T$, and all times in between. $T$ is the time of the situation; this is usually, though not necessarily also the present time.

Senses (vii) 'always' and (viii) 'throughout' arise with identical values for $A_{1}$ and $A_{2}$. The three different senses arise in different contexts as follows. (vi) occurs when the main interest is centered on whether the situation obtains at the point of time $T$; it is taken for granted that the action took place over an extended period of time, continuously up to the point where it finished. For (vii) and (viii), the major concern rests on the status of the situation up to and including the time $T$. More specifically, sense (vi) occurs when there is an expectation to the contrary, that the situation did not obtain at $T$; senses (vii) and (viii) arise when the expectation is that the situation did not occur throughout the time period up to T . The differences between (vii) and (viii) lie simply in the nature of the referent situation: for (vii), there is a succession of regular iterations of actions of the particular type over an extended period of time; for (viii), there is a single occurrence.

Although a single formal meaning accounts for these uses of -nyali REP, the enclitic itself fulfils distinct functions in the utterance of which it is a part. In sense (i), it clearly has a textual function, associating one situation or part of a situation with a previously mentioned situation, or part of a situation. Here -nyali REP contributes to the maintenance of textual CONTINUITY, in the sense of Martin (1981). For the other three senses, however, likely as not there is no previous mention of the presumed thing or situation, and -nyali REP is not functioning as a discourse structuring device. Rather, its use is conditioned by EXPECTATIONS created by and in the speech event, and it explicitly marks these expectations as false. (Expectation is not an inherent part of the meaning of -nyali REP, as it is of -moowa ON and -ngaddaya TOO, and neither is the expectation compared with the assertion - see sections 6.3 .3 and 6.3 .4 below.)
No change need be made to the characterisation of (6-69). That -nyali REP has alternate functions of 'expectation modification' - in Halliday's terms an interpersonal function (Halliday 1970:143) - and continuity - a textual function in Halliday's terms (Halliday 1970:143) is not really surprising. (Compare the English may, can, etc. which occur in both interpersonal functions (marking modality) and experiential functions (marking modulation); cf. Halliday (1970/1976). These same two senses occur in English again (Rumsey 1982b:131).

The four senses (ii) 'too, also', (iii) 'same', (v) 'all', and (ix) 'together', also involve time, only in this case, it is speech-situation time, and not the time of
the referent situation. Instead of harking back to something that happened before the situation described by the clause, each of these four senses, as noted above, involves reference to an entity or quality mentioned earlier. The meaning is thus 'what I assert now is, or includes, what I (or someone else) said before'. In formula (6-69) the presumed becomes ' $\mathrm{A}_{1}$ at a time before now', the asserted is ' $\mathrm{A}_{2}$ now'. These are, in the terminology of Halliday and Hasan (1976:241) INTERNAL uses of -nyali REP, as against the EXTERNAL uses of (i), (vi), (vii), and (viii). (It is of course often the case that what is mentioned before also happened before; but there are test cases such as example (6-39) above where the referent situations are temporally contiguous.)
Inspection of the above examples shows that there need not be a relation of temporal succession between the situation including $A_{1}$ and the situation including $\mathbf{A}_{2}$. This time relation is immaterial to these uses of -nyali REP.

The four internal senses all occur when -nyali REP has less than clausal scope. The scope is typically, but not necessarily, nominal or adverbial; in the case of senses (ii) and (ix), it may also be verbal. Sense (ii) 'too, also' occurs when $A_{1}=A_{2}=$ attribute or process associated with the theme of the clause. Roughly, 'I've (or you've) mentioned this property or process in connection with some (other) entity before, and now I mention it with respect to $x$ (the theme of the clause)'. -Nyali REP is attached to a constituent functioning as a clausal attribute (or secondary predicate), or to the verb stem. This sense is in complementary distribution with sense (iii) 'same', which occurs when -nyali REP is attached to nominal phrases; the two senses correspond to different scopes of the enclitic. For 'same', $A_{1}=A_{2}=a$ referent thing or place. Senses (ix) and (v) differ from each other in precisely the same way. The first has as its scope a quality or process associated with the clausal theme; the second has an entity as its scope.

On the other hand, senses (ii) 'too, also' and (iii) 'same' group together in contrast to senses (v) 'all' and (ix) 'together'. The first two have a discourse structuring role, focussing on the relation of the present referent thing, quality or process, to an earlier mentioned one. The latter two are used to contradict expectations that not all of a previously mentioned group are involved, or that individuals were involved separately in the situation. -Nyali REP occurs in the latter two senses only where there is a contrary expectation: the same meanings of 'together' and 'all' are allowable interpretations of expressions without this enclitic.

We have seen that three major factors influence the interpretation of -nyali REP as one of these eight senses. They are; its scope and focus, which
determine the values of $A_{1}$ and $A_{2}$; the nature of the time $T$; and the function of the enclitic in the clause to which it belongs. Table 6-1 sets out the eight senses discussed so far in terms of these factors.

Table 6-1: Senses of -nyali REP

|  | Scope | Continuity | Counterexpectation |
| :---: | :---: | :---: | :---: |
| External: | Situation (clause) | (i) 'again' repetition of a situation | (vi) 'still' |
|  | Location <br> (Adv, PP) | back to a former state or location | (xiv) 'only, just' |
|  | Process <br> (VP) | repetition of process | (xiii) 'really, surprisingly' |
|  | Attribute (NP, PP) |  | (vii) 'always' <br> (viii) 'throughout' |
| Internal: | Attribute (NP, PP) | (ii) 'also, too' | (xi) 'really, very' |
|  | Entity, place, time (NP PP, Adv) | (iii) 'same' | (ix) 'together' <br> (v) 'all' <br> (iv) 'one and same' <br> (x) 'precisely, exactly, just' <br> (xii) 'intensive' |

The remaining six senses of -nyali REP may also be accounted for in terms of these principal factors, with the difference that the relationship between $A_{1}$ and $A_{2}$ is not the subset relation, but a scalar relation, whereby $A_{1}$ is evaluated as less than $\mathrm{A}_{2}$ on some presupposed scale of assessing items of the type A. This may involve potency, impressiveness, size, etc. In addition, these senses are all of the interpersonal type.

Sense (iv) 'one and the same', like (iii) 'same', occurs when the scope is an entity or place, and the time is speech situation, rather than thesis time. But in this case, -nyali REP has an interpersonal function, contradicting an implicit expectation that there is more than this one item involved. Furthermore, the fact
that there is a single item actually involved is evaluated as higher on some scale than the expectation that there were more. Thus, in ( $6-43$ ) above, one house is ranked higher than more than one in terms of living arrangements.

Senses (x) 'precisely, exactly, just', (xi) 'really, very', and (xii) intensive, may at first seem to contradict the description of (6-69): apparently the asserted is smaller than, and narrows down on the presupposed. However, whilst this may be true for a size scale, it is not true in general. Each involves some different (but implicit) scale of evaluation, which correlates with the type of thing that $\mathrm{A}_{1}$ and $\mathrm{A}_{2}$ are, and thus with the scope of -nyali REP. According to this scale, $\mathbf{A}_{1}$ is less than $\mathbf{A}_{2}$.

For ( $x$ ), $A_{2}$ is a definite entity or place, and $A_{1}$ is an indefinite set including $A_{2}$. In other words, there is a presupposition at a time before the utterance of the clause that something or somewhere is involved, but this time or place is not definitely pinned down. The entities or places are compared, not by their relative size, but the inverse: the more explicit and precise is not less than the less explicit and precise. That is, the asserted exactly $x$ is evaluated as higher on the scale than a presupposed anything/something, including possibly $x$. Roughly, definite > indefinite.

Sense (xi) arises when $A_{1}$ and $A_{2}$ are attributes or properties of the same type. $A_{1}$ and $A_{2}$ are evaluated on a scale of the degree to which the property is held. The asserted property $A_{2}$ is higher on the scale - the property is held to a greater degree - than the presupposed property $A_{1}$, either mentioned earlier with respect to another carrying entity (example (6-62)), or assumed by the speaker to be supposed by the hearer with respect to the same entity (example (6-61)).

Sense (xii) 'intensive' may be accounted for in a similar way. Here $A_{1}$ and $\mathbf{A}_{2}$ are times (or time spans), the latter exemplifying the central or paradigm point of reference of the temporal adverb; the former making non-specific reference to the entire time span, or some indefinite point on it. $A_{2}$ is evaluated as higher on the scale than $A_{1}$ because it is both more definite, and a more central instance of the time period.

At this stage, it is not certain how sense (xiii) 'really, surprisingly' should be accounted for. At least two distinct alternatives suggest themselves. Firstly, we could group this sense together with the four senses just discussed, as involving a scalar relationship between the A's. For this, let $A_{2}=$ process, and let the presupposed $A_{1}$ be that the process did not occur. This invokes a scale 'occurred > did not occur'. Alternatively, we could place this sense along with the external senses (vii) 'always' and (viii) 'throughout'. As examples (6-64) and (6-65) above illustrate, sense (xiii) normally arises when the situation involves a
number of repetitions of the situation again and again. This suggests that we could set $A_{1}=A_{2}=$ process, and $T$ as the time of the last occurrence of the process. There would be a presupposition that the process occurred at least once before; the sense of 'surprisingly' would arise from the fact that the process occurred repeatedly, rather than just the one time. Since it would appear that both of these are valid interpretations of formula (6-69), it does not really matter which was actually intended in the particular cases of examples ( $6-64$ ) and ( $6-65$ ).

The final sense (xiv) 'just, only' has a fairly obvious explanation in terms of a relationship of 'identity' between $A_{1}$ and $A_{2}$, which both refer to places which are in between the beginning and end of the journey. That is, it is presupposed that the speaker was somewhere in between at an earlier time. This is exactly as for sense (vi) 'still'. The difference is that the sense 'still' occurs in the context of an expectation that the situation might have ceased, whereas 'only' occurs when there is an expectation that the situation might never have occurred. (6-66), that is, contradicts an expectation that the speaker would not get tired during his journey.

It will be clear from the preceding discussion that the contextual senses (i) to (xiv) identified for -nyali REP are slippery, and shade into one another. It is by no means always perfectly clear how each should always be accounted for in terms of the underlying formal meaning. But this does not really matter. What is more important is the general principles or variables involved, and their values; this gives us a CLASSIFICATION of the contextual meanings into types, rather than just a catalogue of tokens. The important variables include: the scope of -nyali REP; the values of $\mathrm{A}_{1}$ and $\mathrm{A}_{2}$ and the way in which these are related to each other; the nature of the referent situation; the nature of the time $T$ (whether thesis or speech situation); the function of -nyali REP in the utterance (whether textual or interpersonal); and finally, within the counterexpectative uses, the nature of the expectation involved (whether it is of non-continuity of action or whatever.

### 6.3.3 -moowa ON

This enclitic, which almost always translates into English as 'only', is slightly more restricted than -nyali REP in terms of the range of units that it can occur with: it can be attached to lexical words of any type, except for verbal roots and stems. Its domain always includes the word to which it is attached, and may extend to the phrase of which that word is a constituent.
Although I never heard a speaker using -moowa ON in a VP, one example which I constructed, ngoorloogmoowala (drink-ON-I:extended:to:it), was immediately
accepted and understood to mean 'I only drank it'. Note that in Jaru -muwa 'only' can be attached to preverbs (Tsunoda 1981:208).

Very occasionally the form -miya is used instead of -moowa ON (see example (6-46)). This is certainly a borrowing from Bunuba, and was heard only in the speech of one of the younger speakers I worked with.

Unlike -nyali REP, from the English speaker's point of view -moowa ON seems clearly monosemous, with an invariant sense that is captured quite well in the gloss 'only':
(6-70) nganyi -ngga -moowa milala
I ERG ON
'Only I saw it.'
(6-72) booloomani -ngaddi -moowa barngiyiddi bullock COMIT ON we:started:back 'We returned with bullocks only.'

Like the English word only, the enclitic -moowa ON is an expectation modifier with two main senses (McConvell 1983a): (a) the SUBSET meaning, in which the asserted entity is a subset of the set of things expected to play that particular role in the clause; and (b) the SCALAR meaning in which entities are ranked on some scale (usually of potence) and the participant asserted as fulfilling a particular role in a process ranks lower on the scale than does the expected participant. Examples ( $6-70$ ) and ( $6-71$ ) illustrate the subset sense: in (6-70) the Agent, the speaker, is a proper subset of the set of individuals expected to see the thing; and similarly in (6-71), the man's head is included in the set of things that are expected to be visible, namely his entire body.

An example of the scalar sense is the following:
(6-73) yaningi -moowa bijngarni
now ON he:emerged
'He's only just arrived (here).'
Here 'now' is evaluated as lower on a scale of potency than 'before' or 'long ago'. The individual had just arrived in the area, and was thus not expected to be knowledgeable about the country, people or their customs; he was not a member of the group, and so did not rate highly in the eyes of the residents. Another example is:
(6-74) nhoowoo thangarndi wila -moowa gliggiri his word finish ON he:goes:glig '(The eagle's) language is just glig.'

This sentence, which occurred freely in a discussion of bird calls, clearly evaluates the noise of the eagle as against the noises of other birds. Since most other birds have a rich variety of calls the eagle might be expected to too; however, it has only glig.

The encliticisation of -moowa ON to wila 'finish, that's all' in (6-74), may be seen as a means of avoiding the problem that -moowa ON cannot occur on verbal units. The particle winhi 'nothing' (as it is usually glossed by native speakers of Gooniyandi - see also below 6.4.7), is most frequently found in this function, where it is often followed by -moowa ON , usually indicating that the asserted process is evaluated as less potent than the expected process. For example,

| (6-75) winhi -moowa danymilila mangaddi milala |  |  |
| :--- | :--- | :--- | :--- |
| nothing ON | I:heard:it not | I:saw:it |
| 'I only heard it, I didn't see it.' |  |  |

As the preceding two examples illustrate, for processes, -moowa ON usually conveys the scalar sense.

The two senses, scalar and subset, are not always distinct, and there are examples, such as (6-76), which are amenable to either interpretation. In this example, the speaker was contradicting what he understood to be the hearer's expectation that he had had a lot to drink, and was incapable of work.
(6-76) garndiwiddi -moowa ngoorlooglimi
two ON I:drank:it:up
'I drank only two (cans of beer).'
(6-76) could also have the subset sense if, for instance, the two cans had come from a carton of beer.

Because of this potential ambiguity, I suggest that the two meanings, subset and scalar, are particular instantiations of a more general relation is less than', where the exact nature of this relationship is not specified. A formal meaning may thus be assigned to -moowa ON as follows:
(6-77) Assertion $y<$ Expectation $x$
where < symbolises 'is less than'. In the context of evaluation < indicates a ranking, giving the scalar sense; otherwise the subset meaning is forced - only
relative size is relevant. The two senses, subset and scalar might be relabelled 'plain' (non-evaluated) expectation and 'evaluated' expectation respectively.

It must be remarked that what is expected need not be a definite circumscribed set, or point on an evaluation scale. It may be fuzzy: for example, it is unlikely that the speaker assumes a definite numerical value for the expectation in (6-76). The important point is the relationship: the assertion is in some sense less than the expectation.

All of the above is perfectly in accord with what the English speaker would expect, granted that there is a syntagmatic restriction preventing -moowa ON from occurring with verbal lexemes. There are, however, occasional instances which do not accord so well with English expectations, and for which -moowa ON cannot be glossed 'only'. These fall into two classes of set expressions, illustrated by $(6-78)$ and $(6-79)$ below.
(6-78) boorijbidda middi -yoo -moowa
they:danced sun DAT ON
'They danced till dawn.'
(6-79) wardgiri wangmadda thithi -moowa
he:walks mad going ON
'He's walking along madly, up and down.'
I suggest that these uses are explicable as contextualisations of the formal meaning given in (6-77). The 'till' sense in (6-78) may seem to be the inverse of 'only'; but what is happening here is that (6-78) is asserting that they danced with no purpose in mind other than reaching dawn. Significantly, 'till' seems to be restricted to just a few verbs referring to singing and dancing. In a similar way, (6-79) compares the expectation that a person will normally walk purposely to some destination with the actuality that this particular individual has no purpose to his movements.
It is interesting that McConvell (1983a:21) cites a Gurindji example exactly parallel to (6-78), his example (103). However, it seems that the corresponding Gurindji enclitic -rni 'only' has a more regular and extensive set of senses including the 'even' and 'right up to' sense (McConvell 1983a:21). Much of this range is of course covered in Gooniyandi by -nyali REP.

### 6.3.4-nyooloo ETC

-Nyooloo means 'etcetera' or 'and so on', and is apparently attached to nominals only. Very few examples of nyooloo ETC are available, and they show two main contexts of use.
(i) -Nyooloo ETC may occur on the last nominal of a list, in which case it means 'etcetera':
(6-80) diyadiya jalgaddoo -nyooloo
peewee jabiru ETC 'peewee, jabiru, etc.'
(ii) It may be attached to an indefinite determiner, in which case it means roughly 'all kinds, all types': jaji-nyooloo (something-ETC) 'all kinds (of animal)'.

### 6.3.5 -ngaddaya TOO

This enclitic, which has an invariant phonological shape, may be attached to nominal or adverbial units, but not to verbal units. It has two main senses, 'any, some', and 'too, also'; these are in complementary distribution according to whether the unit to which it is encliticised has indefinite or definite reference. It can be shown that these two senses are ultimately related.
(i) 'any, some'. Encliticised to an indefinite unit, -ngaddaya TOO can be given the English gloss 'any, some'. Examples are:
(6-81) ngoorndoo -ngaddaya migawimi
someone TOO he:will:say
'Anyone/someone may say.'
(6-82) ngoonyi -ya -ngaddaya riwi milayawidda banyangi which LOC TOO camp they:allegedly:saw:it outside 'They've seen it (the country they want) somewhere, outside.'
(6-83) manyi -ngaddaya ngabba vegetable:food TOO you'll:eat:it 'Do you want to eat anything?'
(6-84) wamba -ngaddaya yiganyi jagjawimingiddangi later TOO uncertain he:might:tell:us 'Sometime later on he might tell us.'

The indefinite plus -ngaddaya TOO asserts, against an implicit expectation to the contrary, that at least one item, whose identity is unknown, is involved in the situation. The clause contradicts a expectation that the situation did not, or will not, occur. The type of indefiniteness involved in this use of -ngaddaya TOO must be distinguished from at least three other types of indefiniteness: the
'identity unknown' sense of the indefinite determiners ngoonyoo 'which', yaabja 'some', ngoorndoo 'who', etc.; the 'something/ someone, I don't know and it doesn't matter which' sense of the enclitic -widdi UNKN; and the 'possibly, but not certainly' sense of the enclitic $m i \sim-m a$ IND. None of these latter invoke any expectation that the situation did not occur. The indefinite plus -ngaddaya TOO is used to assert, against an implicit expectation to the contrary, that at least one entity of the indefinite set (referred to by the lexeme) is involved in the situation. Thus (6-81) occurred in a text concerning the desire of the Bayulu people to gain title to a small tract of land forming a tiny corner of an enormous cattle station. The speaker is imagining, contrary to his belief or expectation to the contrary, that someone would say to them that they could take the land. Similarly, (6-82), which comes from the same text, contradicts an implicit presumption that the speaker attributes to the authorities, that the Bayulu people do not really want any land of their own.

On the other hand, the unmarked indefinite phrases (such as ngoorndoo 'someone', yaabja 'some', etc.) and those followed by the enclitic-widdi UNKN are not found where there is a presumption that the situation does not obtain. Rather, if there is any presumption involved, it is that the situation does obtain: the indefinite indicates that it is the identity of the relevant entity (or whatever) in the situation that is not known to the speaker (cf. the discussion of questions in section 5.4.1).
This clarifies the nature of the difference between the opposition some vs. any in English and -widdi UNKN vs. -ngaddaya TOO in Gooniyandi (which on first glance appear parallel). Roughly, English favours 'some $x^{\prime}$ where a unique referent is expected; and 'any $x$ ' when there is doubt as to whether an $x$ was in fact involved, or if the situation holds for every member of the given set. Neither of the English terms counters an expectation or presumption contrary to the statement of the clause itself, which is the only circumstance in which -ngaddaya TOO occurs. Otherwise, an indefinite determiner (or NP) will cover the meaning of 'some' and 'any'.

Exactly as predicted by the above remarks, negating a clause with an indefinite followed by -ngaddaya TOO has the effect of indicating that no one or nothing was involved in the particular role in a situation of the type referred:
$\begin{array}{cllll}\text { (6-85) mangaddi ngoorndoo -ga } & \text {-ngaddaya wardnginbidda } \\ \text { not } & \text { someone ERG TOO } & \text { they:took:me }\end{array}$
'No one gave me a lift.'
A slightly different nuance occurs when -ngaddaya TOO is encliticised to number words, as shown in the following example:
> (6-86) joongoolmi garndiwiddi -ngaddaya gambayi gajgoondimi skin two TOO boy they:cut:them 'They circumcise any/at least two boys (in any ceremony).'

This clause occurred in a context in which it is likely that the speaker was contradicting what he understood the hearer to believe, that one boy could be circumcised at a time.
(ii) 'too, also'. When attached to a unit with definite reference, -ngaddaya TOO indicates 'including the referent $x$ among other things'. It can normally be glossed with the English words 'too' and 'also', but its meaning only partly coincides with that of these two English words. Some examples are:
(6-87) nginyji -ngaddaya goon.goodoo waddin.ginggi you TOO phlegm you:were:sick 'You were sick too (i.e. as well as everyone else).'
(6-88) moorloo -ngaddaya yilba bithawaami eye TOO for:good it:is:stiff 'His eye too is no good (that is, as well as his leg).'
And in negative clauses, the written English translation normally employs 'either' (though the spoken variant can employ 'too'); it is clear that exactly the same sense of the enclitic is involved. For example:
(6-89) nganyi -ngaddaya marlami diribbingi
I TOO nothing I:will:go:in
'I can't go in either.' (Literally: 'Me too, I can't go in.')
When it occurs in this sense, -ngaddaya TOO normally occurs on the initial word of the clause, this word also being the marked information focus of the clause (see section 5.3.1). This means that what follows is given information, which is marked as presupposed. (6-87), for instance, occurred in a context in which it was well known that an epidemic of the 'flu was going around. That is, -ngaddaya TOO is used when there is a presupposition that a similar situation involving at least one other entity obtains. It asserts, against an implicit expectation to the contrary, that this is not the entire set of things for which the situation obtains; the referent of the nominal to which it is attached being an additional one.
-Ngaddaya TOO clearly contrasts with two other morphemes which sometimes translate into English as 'too': the enclitic -nyali REP, and the particle joorloo 'together'. The latter asserts merely that the things concerned are
involved in the situation as a group, and involves no presupposition or expectation. On the other hand, -ngaddaya TOO does not suggest that there was concerted involvement in the situation.
-Nyali REP differs from -ngaddaya TOO in terms of scope: the former has as its scope the presupposed part of the situation, and indicates that it is repeated; the latter has the new, and non-presupposed part as its scope. There is no implicit expectation to the contrary (cf. discussion of sense (ii) in section 6.3.2). Compare for instance the following pair:

| (6-90) | yoowooloo man | manill nose | biddib block | -nyali <br> REP | -yingi <br> he:catches:it |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{ll}\text { goon.goodoo } & \text {-ngga } \\ \text { snot } & \text { ERG }\end{array}$ |  |  |  |  |
| 'The man's nose is blocked too.' |  |  |  |  |  |
| (6-91) | nganyi | addaya | biddib | ngindi <br> ks:me |  |
|  | 'My nose | lock | too.' |  |  |

Both (6-90) and (6-91) involve presuppositions that there was at least one other person whose nose was blocked. But, with the use of -nyali REP in (6-90), a new member is simply added to the set of people with colds. By contrast, the use of -ngaddaya TOO in (6-91) adds the new member in face of an expectation that it was the members of the presupposed set, and nothing more, for which the situation obtained. Summarising, in its 'too' sense -nyali REP has a textual function of continuity (see above page 470); but the 'too' sense of -ngaddaya TOO occurs when this enclitic fulfils an interpersonal function.

These two senses can be accounted for as contextualisations of a single formal meaning, given in the following formula:
(6-92) -ngaddaya TOO:
Expectation: $\mathrm{A}_{1}$
Assertion: $\mathrm{A}_{2}$
where $\mathrm{A}_{1}$ and $\mathrm{A}_{2}$ are determined by the scope of -ngaddaya TOO, and $A_{2}$ is not contained in $A_{1}$.
This differs somewhat from the description given in McGregor (1984b:390), where it was claimed that the relation between $\mathrm{A}_{1}$ and $\mathrm{A}_{2}$ was containment: the latter contains the former. However, as we will see shortly, this is too strong a statement; what is invariant is that $A_{2}$ is not contained in, but may overlap with, $\mathrm{A}_{1}$. In effect, the asserted adds new things, beyond what was expected, to the class of things for which the situation obtains. Compare also the Gurindji -payin 'too' discussed in detail in McConvell (1977:23).

This formula is a type of complement to formula (6-77) above which describes the formal meaning of -moowa ON. It involves only the set-theoretic relation, and not the scalar relation. For -moowa ON, the set relation is that $\mathrm{A}_{2}$ is a proper subset of $\mathrm{A}_{1}$; for -ngaddaya TOO , the relation is a strong negation of this, $A_{2}$ is not contained in $A_{1}$. Less formally, -moowa ON reduces from the expected, while -ngaddaya TOO adds something new to what is expected.

Sense (i) 'any, some', as we have seen, occurs in two situations. The first is where there is a presupposition that the situation does not obtain; that is, it is expected that NO entity of the specified type is involved. What is asserted is that at least one entity is actually involved. This asserted $\mathrm{A}_{2}$ is clearly not contained in the presupposed set, which is empty. The second is where there is an expectation that a certain number, greater than zero, of items from the indefinite set are, or may be, involved. The assertion is that more are actually involved; here the asserted set CONTAINS but is not contained in, the presupposed set.

Sense (ii) 'too, also' occurs where there is a presupposition that a set of entities exclusive of the one referred to by the constituent to which -ngaddaya TOO is added, is the entire set involved in the situation. The asserted $A_{2}$ is clearly not contained in the presupposed $A_{1}$; in fact, the two sets are typically disjoint.

### 6.3.6 -widdi UNKN

This morpheme is normally encliticised to indefinite NPs and PPs (i.e. ones whose Entity nominal is an indefinite determiner), where it indicates specifically that the identity of the referent is unknown to the speaker. The indefinite determiner itself (when not followed by -widdi UNKN) also suggests that the identity of the referent is unknown to the speaker, but in addition it may have the effect of requesting its identity from the hearer (see section 5.4.1). However, with -widdi UNKN encliticised to it, the indefinite is never response-requesting. That is, not only is the identity of the referent unknown to the speaker, but it is immaterial:

| (6-93) | ngoorndoo | -ga | -widdi |
| :--- | :--- | :--- | :--- |
| someone ERG | gardbini |  |  |
| UNKN he:hit:him |  |  |  |
| 'Someone (it doesn't matter who) hit him.' |  |  |  |

The indefinite followed by -widdi UNKN, rather than the indefinite itself, corresponds closest to the senses of the English indefinites 'someone', 'something', etc.. Native speakers of Gooniyandi normally gave me English glosses involving 'someone, I don't know who'.

A form -wini occasionally occurs on open-class nominals meaning roughly 'it could be a [nominal]':
(6-94) nyamnyamgiri ngoorndoo yoowooloo -wini he:whispers someone man ?
'Someone is whispering, maybe its a man.'
It remains unclear whether -widdi UNKN and -wini are allomorphs or contrast with one another; there would seem to be sufficient commonality in meaning to suggest the former possibility. However, there are too few examples of either form to test the hypothesis.

### 6.3.7 -jangi SEM

I have already remarked (see page 189) on the atypical syntagmatic properties of this enclitic, whereby in some of its uses it forms a grammatical unit with the constituent to which it is encliticised. The fact that this does not invariably occur, and the variability of its scope (which may be either word, phrase, or clause level), distinguishes -jangi SEM from postpositions and stem forming suffixes, and is why I have grouped it together with the enclitics.
-Jangi SEM may be encliticised to distributional words of all types except for VPs, and indicates that an entity, a circumstance, or a situation resembles the one referred to by the constituent included in its scope.

In comparing Entities, a -jangi SEM syntagm will realise either a qualifying or a classifying role in an NP, or an Attribute or a circumstantial role of Manner in a clause. Examples of the first two possibilities are, respectively:
(6-95) ${ }_{\mathrm{NP}}[$ yaanya [diwiwi $\left.-j a n g i]\right]_{\mathrm{N}}-n y a l i$ wiliddabi other short:necked:turtle SEM REP long:necked:turtle
'Another (creature) like the short necked turtle is the long necked turtle.'
(6-96) $\mathrm{NP}^{[\mathrm{pp}}[\text { wajaddi -nhingi }]_{\mathrm{PP}}$ mawoolyi jirliwa -jangi $]_{\mathrm{NP}}$ [tree type] ABL little:ones sinew SEM
'fibres of the wajaddi tree.'
For examples of the second pair of possibilities, see above sections 5.2.1.1.1.2 and 5.2.3.4.
(6-97) illustrates a comparison of temporal circumstances:
(6-97) miga -ya bijbiddarni yaningi -jangi like:that LOC they:emerged now SEM 'They arrived around this time.'

And (6-98) compares locations:
(6-98) [pp $\left.[n g o o n y i ~-y a]_{\mathrm{Pp}}-j a n g i\right]$ warlibiddi which LOC SEM river
'How far is the river?' (Literally 'Like which (other place) is the river (situated).')
Whole situations are compared in the following two examples. That is, -jangi SEM is encliticised to the first word of the clause which indicates the major point or focus of resemblance:
(6-99) ngidi -jangi David -jooddoo bagiyiddi we SEM DU we:lie '(They live under one roof) like me and David lie (under one roof).'
(6-100) ngamoo -jangi warang -gila -yidda before SEM sit FACT we:were '(We would like to be in a situation) like we had it before (when there were no white people here).'

The focal point of these comparisons is of course not a resemblance of the processes (which is impossible, since -jangi SEM does not occur within VPs), but some other element in the situation: in (6-99) they live like the speaker and David do; in ( $6-100$ ) the situation the speaker would like now is like it was before white people arrived.

Finally I remark that -jangi SEM occasionally compares qualities of entities rather than the entities themselves:

> (6-101) miga -jangi wardba
> like:that SEM you:will:bring:it 'Bring another like this.'
(6-101) was used in requesting that I bring the speaker another book like the one we had been looking at. The point of resemblance was not the physical properties of the book, but its contents - and the point of the utterance was that the book should be a good quality one. The adverb miga 'thus, like that' is the appropriate word to use in reference to such abstract notions - see pages 152-153.

## $6.3 .8-m i \sim-m a$ IND

As was mentioned above (page 189), $-m i$ and $-m a$ are allomorphs of an indefinite-marking morpheme, -ma occurring in VPs, and -mi elsewhere. The type of indefiniteness indicated is 'possibly, but not certainly $x$ ', where -ma ~ $-m i$ is encliticised to the expression referring to $x$ :

```
(6-102) nginyji ward -ma -wiri
    you go IND you:are
    'You'll come?'
(6-103) nginyji -mi ward -biri
    you IND go you:will
    'You'll come?'
(6-104) gidi -yarndi gawi -binyi uard -ma -winggiddi
    you(pl) PL fish PER go IND you:pl:will:go
    'You lot will go fishing?'
(6-105) gawi -binyi -mi wardbinggiddi
    fish PER IND you:pl:will:go
    'You lot are going fishing?'
(6-106) gidi -yarndi -mi gawi -binyi wardbinggiddi
    you(pl) PL IND fish PER you:pl:will:go
    'You'll go fishing?' (= 'Is it you lot who will be going fishing?')
```

In (6-102) the uncertainty is whether the hearer will come or do something else; in (6-103) it is whether it is the hearer (as against anyone else) who will come. Similar remarks apply for ( $6-104$ ) to ( $6-106$ ). The remainder of the clause is presupposed (to the extent that this is possible - obviously in ( $6-103$ ) and (6-106) the hearer need not be presupposed as actor, despite its pronominal reference in the VP) and remains fixed, as a frame within which to place an item contrasting with the $-m i$ IND constituent.

This means that $-m i \sim-m a$ IND is semantically related to the indefinite words jaji 'something, what', ngoorndoo 'someone, who', yiniga 'do something, do what, how', etc.. The difference is that -mi ~-ma IND marks one possible filler of the role. As is the case for the indefinite words, the use of $-m i \sim-m a$ IND often requests clarification from the hearer. That is, it often occurs in the context of eliciting information. (There is no grammatical system of interrogatives at clausal, or any other level in Gooniyandi - see section 5.4.1.)

All classes of clausal constituents, including NPs, PPs, VPs, adverbials,
and particles can be the focus of indefiniteness, and may be followed by -mi~ $-m a$ IND. The focus may be a phrasal constituent: this is the case for VPs, where the focus is always on the process itself - in any participant, time, or whatever of the process is in doubt, $-m i \sim-m a$ IND will go onto a constituent realising that function. However, the focus of uncertainty need not be the Entity of an NP:
(6-107) manyi nyamani -mi gooddijginyja
food big IND you:hold:it
'You have plenty of food?'

There is one context in which -mi $\sim-m a$ IND may arguably function as a root formative. The d-word yaningimi 'when, sometime' is obviously constructed from yaningi 'then, at that time, now', together with -mi IND. Whereas -mi IND normally indicates a possibility, and is typically used in requesting confirmation or disconfirmation, yaningimi is normally used in requesting information, temporal location, rather than a yes/no reply. That is, it appears to belong paradigmatically with the indefinite determiners ngoorndoo 'someone, who', etc..

There is one piece of formal evidence that provides support for the hypothesis of lexicalisation of yaningimi 'when, sometime'. This comes from the fact that another instance of $-m i \sim-m a$ IND may occur in the same clause:
(6-108) yaningimi ward -ma -wiri
sometime/when go IND you:will:go
'When might you go?', or 'Maybe you'll go sometime.'
Otherwise, only one instance of $-m i \sim-m a$ IND may occur in any clause.
Note that in Bunuba there is an unanalysable lexeme meaning 'when' (Alan Rumsey, pers. comm.). It is possible that yaningimi is a constructed form, perhaps invented to replace a lexeme proscribed by a death taboo.

Disjunction may be expressed through the use of the indefinite enclitic, as in example (4-93) above. Two forms, -wamiri and -wami, evidently built on $-m i$, are sometimes found in the expression of disjunction. (They are, however, never used as markers of doubt alone.) Example:
(6-109) wamba barngooddini yaningi -wamiri
later they:are:retuming today DISJ
moongaya -wami
tomorrow DISJ
'They'll be retuming later, today or tomorrow.'
It could be that the -wamiri ... -wami construction marks closed disjunction, as opposed to the open disjunction of (4-93). However, there are too few examples to be sure of this. (It is also possible for a disjunction to be closed by means of another clause, explicitly stating that there are no further possibilities.)

### 6.3.9 -woo DEF

-Woo may be encliticised to any non-verbal distributional word, and to the verbal CC (which occurs in position 5 of formula F1, page 192); however, it may not be attached to the verbal stem, as may -nyali REP, and -mi $\sim-m a$ IND. The common meaning running through all of its uses is the speaker's assertion: 'definitely $x^{\prime}$. In the majority of examples, -woo DEF occurs on the CC, and has a modal meaning. This will be discussed in section 6.5.3.3. In this section I will discuss only the cases in which -woo DEF is encliticised to a non-verbal unit. But there are too few examples of this type to allow firm conclusions to be drawn. The following remarks are tentative.
-Woo DEF frequently occurs in exclamations, marking the focal point of the message: it draws attention to the thing referred to by the constituent it is encliticised to. For example,
(6-110) garnanganyja -woo migalimiwiddangi
emu $\quad$ DEF I:told:them
'I told them, "emus!".'
In (6-110) the speaker draws the hearer's attention to the (presence of) emus. And (6-111) comes from a text concerned with tracking two lost people. It draws attention to the place at which the activities of the lost people were discovered.
It is possible that woo DEF is cognate with the exclamative suffix -aw found in a number of Australian languages, including Alyawarra (Yallop 1977:37), Nyigina, Diyari, and Kaitij (Stokes 1982:122).
-Woo DEF is sometimes found on particles, usually forming exclamatory interjections, such as wilawoo 'finished, OK, goodbye', which seems to be more emphatic than wila, which has the same experiential meaning. An example is:
(6-112) migayinmiwiddangi marlama -woo ngamoo nangbani we:told:them nothing DEF before he:died 'We told them, "No good! He's already dead.".'

### 6.4 Clause modifying particles and adverbials

### 6.4.1 mangaddi 'not'

This lexeme is a negative particle which usually has the role of Propositional Modifier, and indicates that the proposition in its scope is false. It may perhaps be most accurately glossed 'it is not the case that' - in preference to 'not', which is a VP constituent in English. (However, for convenience, I will use the label 'not' in glossing the morpheme, under the understanding that this is an abbreviation for the longer expression.) The modified proposition may be in any tense or mood category. (In this respect Gooniyandi differs from many languages of the Kimberleys, including Ungarinyin (Rumsey 1982b:89), Nyikina (Stokes 1982:280), Nyulnyul (my own fieldnotes), and Miriwoong (Kofod 1978:85) at least, in which the negative particle occurs with unreal (irrealis and occasionally negative) modes only.) The meanings of the combinations of mangaddi 'not' with the various verbal categories are predictable, and will be mentioned at the relevant points in the discussion of the verbal categories in section 6.5 below.

The word order generalisations made above (section 5.4.1) apply to mangaddi 'not'. The only thing that needs to be added on this is that occasionally two instances of mangaddi 'not' are found in a single clause, as illustrated in the following two examples. (There are no examples of this phenomenon for other particles.)

| (6-113) yaadi | -yarndi | ngarloodoo mangaddi |
| :--- | :--- | :--- | :--- |
| we(U) PL | three | not |
| girili | -ya | -nyali mangaddi warayaddi |
| tree LOC | REP not | we:stood |
| 'We didn't stand by that tree again.' |  |  |

(6-114) mangaddi ganaddaya mangaddi bijginyjawoo not dawn not you:will:come! 'Don't come at dawn.'

It is probable that, as in non-standard English, the two negatives intensify the force of the negation.

Mangaddi 'not' occurs in two other contexts. Instead of modifying a full proposition, mangaddi 'not' sometimes appears to modify a single word referring to a scalable quality or quantity, as in
(6-115) wardbiddi mangaddi marnangooddoo graa
they:went not far close 'They went only a little distance away.'

This construction, in which the negated quality is followed by a positive term of the same sense, seems to indicate an intensification of the quality or quantity, much as English 'very' (which has no counterpart in Gooniyandi).
It might be suggested that mangaddix can be accounted for as an elliptical clause, as was suggested above (section 5.4.1) for similar examples with non-scalars. Against this hypothesis is the fact that in this use mangaddi $x$ is invariably followed by the corresponding positive, and the two would appear to form a type of correlative construction. Contrast example (5-255), where the correlation would seem to be with the preceding clause.

Mangaddi 'not' is also used as an interjection, as a response to both confirmation (yes-no) and information-seeking questions. In the first case, it indicates that the asserted proposition is false:
$\begin{array}{clll}\text { (6-116) A: } & \text { nginyji joorloo } & \text { ngoorloogjimi } \\ \text { you } & \text { too } & \text { you:drank:it }\end{array}$
B: mangaddi nganyi marlami mgooddoo -yarndi not I not that PL
yaabja -ngga ngoorloogbidda
some ERG they:drank:it
A: 'You drank with them?'
B: 'No, not me. That other lot (only) drank.'
It seems that mangaddi 'not' is used in this way only in indicating the falsity of a preceding positive assertion. Otherwise, marlami 'nothing, without' invariably occurs if the preceding assertion is negative (see next section).

The occurrence of mangaddi 'not' in responses to information probes is rather unexpected to the English speaker. An example of this use is the following:
(6-117) A: yinigaanggiddaddi you:pl:are:doing:something
B: mangaddi maa ngabgidda
not meat we:eat:it
A: 'What are you doing?'
B: 'No(thing), we're eating meat.'
(6-118)
A: jaji goowajgila
something I:call:him
B: mangaddi niyi girli joowooddoo gandiyangi not he same [subsection] wife's:brother
goowajba
you:will:call:him
A: 'What do I call him?'
B: 'No(thing). He's joowooddoo; you call him brother-in-law.'
It remains unclear just what sense mangaddi 'not' conveys here. In both circumstances outlined above, marlami 'nothing, without' (see discussion of next section) occurs far more frequently than does mangaddi 'not'.

### 6.4.2 marlami 'nothing, without'

Gooniyandi has another word for expressing negation, marlami 'nothing, without', which indicates that no entity, time, or place is involved in the referent situation. It corresponds to the English words 'no', 'nothing', 'nowhere', and 'never', and is frequently glossed najing (from standard English nothing) in Pidgin English and Kriol. As distinct from mangaddi 'not', marlami 'nothing, without' never functions as a Propositional Modifier. Rather, it negates an entity or circumstance, and from this the clause itself may gain negative force, as happens with the English words nothing, nowhere, and so on.

Marlami 'nothing, without' has three main contexts of occurrence, which are not always distinguishable: (i) it may realise a phrasal role; (ii) it may realise a clausal circumstantial role of time or place; or (iii) it may be used as an interjection.
(i) I will first deal with the case in which marlami 'nothing, without' fulfils a modifying role in an NP. There are two main possibilities: it may precede or follow the Entity nominal. The relative order is significant, and finds clearest explanation in terms of Bolinger's (1967) distinction between referent modification and reference modification, discussed above (see page 267). In addition, the phrase in which it occurs may function either atributively, within another phrase (i.e, as a Qualifier or Classifier) or clause, or referentially.

In the first case, the phrase attributes of an entity the property of being without something, as discussed in section 5.2.3.5 above. The usual word order is for marlami 'nothing, without' to follow the Entity nominal, as exemplified in e.g. (4-36) and (4-79). Only rarely does it precede the Entity nominal, as in

| (6-119) | nginyji | binaddi | nganyi marlami | moodiga |
| :--- | :--- | :--- | :--- | :--- | :--- |
| you | know I not | motorcar |  |  |

In referential phrases marlami 'nothing, without' typically precedes the

Entity, and indicates that nothing of the type referred to by the Entity nominal was involved in the referent situation. In this circumstance marlami 'nothing, without' clearly modifies the reference of the phrase. For example,
(6-120) marlami gamba ngambiddi baali -ya
not water again road LOC
'There's no water again on the road.'
(6-121) marlami banda doowwidda
not ground they:got:it
'They got no dirt.'
Note: ( $6-120$ ) and ( $6-121$ ) may be contrasted with sentences such as (5-258) and (5-259) in which mangaddi 'not' occurs in the same place in the clause. There is a sharp distinction in meaning. With marlami 'nothing, without', there is no focus on the following element, and no presupposition that the predicate holds true of anything (although it may).

Only occasionally is the reverse order found in referential phrases, and in this case the absence of the entity is typically less permanent than is the case with the reverse order where the lack classifies the entity. Compare for instance:
(6-122) marlami gamba ngoorlooggoodda
not water they:drink:it
'They drink no grog.'
(6-123) gamba marlami ngoorloogla
water not I:drank:it
'I drank no grog (yesterday).'
(6-122) referred to a pair of teetotallers, whereas (6-123) described the situation in which the speaker had drunk nothing on a particular day, though he was a fairly regular imbiber. The distinction I have proposed might be brought out with a more accurate and literal paraphrase for (6-123): of grog nothing did I drink'. (This is exactly the distinction between the two types of modification identified by Bolinger (1967): in (6-123), but not in (6-122), marlami 'nothing, without' qualifies the amount drunk.) Compare also:
(6-124) marlami binyirdi maa ngabgila galyba ngabgila
not hard meat I:eatit soft I:eat:it
'I eat no hard meat; I eat soft meat.'
(6-125) manyi -moowa ngabla maa marlami ngabla
food ON I:ate:it meat not I:ate;it
'I ate only vegetables; I ate no meat.'

The NP in which marlami 'nothing, without' occurs may have, instead of a nominal referring to an entity, one referring to a property or quality, which it negates:
(6-126) waya marlami joodoo
wire not straight
'The wire is not straight.'
It is possible that, in the few examples of this type available, the property is as it were nominalised, so that joodoo (in (6-126)) realises the Entity role in its NP. If so, such examples could be paraphrased in the manner of '(the) wire has no straightness' (for (6-126)).

The NP in which marlami 'nothing, without' occurs is subject to ellipsis and splitting, in the same way as other NPs. Sentences such as (6-127) and ( $6-128$ ) are most naturally accounted for in this way: in (6-127) the Entity nalija 'tea' has evidently been ellipsed, being given; and in (6-128) the phrase has been split.
(6-127) nalija boordbara marlami ngoorloogbila
tea hot not I:will:drink:it
'The tea is hot. I won't drink any.'
(6-128) nganyi marlami goorijgila yawarda
I not I:hold:it horse
'I haven't got a horse.'
It seems that marlami 'nothing, without' may also discharge the Entity role in an NP, in which case it functions as a clausal substitute (Halliday and Hasan 1976:130ff), referring to a non-existent state of affairs. For example,
(6-129) ngirndi -yarndi ligayawinggiddinyayi jaddi
this PL you:two:could:wait:for:me if
marlami barnjawinggiddiyi
not you:two:will:return
'You two can wait for me. If nothing (i.e. if I don't come back) you can return.'

This is presumably how marlami 'nothing, without' is used in
(6-130) marlami -nhingi gindiwa -rni wardjiddi
not ABL upstream SEQ we:went
'From nothing (i.e. since we caught no fish) we went upstream.'

But marlami 'nothing, without' is not always used in such a qualifying sense; it may also be used evaluatively. That is, the entity involved may be evaluated as nothing, or worthless, rather than as non-existent. For example,
(6-131) marlami jijagbi doorloo yijgawoo not he:will:talk heart bad 'He'll tell you nothing; his heart is no good.'
allows that the individual concerned may talk, but only a little (and not well), because of his bad heart, and consequent weakness.

Marlami 'nothing, without' is also occasionally found in VPs, as (a part of) the Process - see examples (3-104) and (3-105) above.
(ii) There are other occurrences in which marlami 'nothing, without' cannot be viewed as a phrasal constituent. For example, in the following two examples there is no NP containing marlami 'nothing, without'.
(6-132) marlami wardbi
not he:will:go
'He can't walk.'
(6-133) marlami wardj̈ddi
not we:went
'We didn't go.'
It is suggested that in such examples marlami 'nothing, without' realises a circumstantial role of time or place, translating 'never' (or 'at no time') in (6-132), and 'nowhere' (or 'to no place') in (6-133).

At present this possibility remains hypothetical. It might be remarked that unlike mangaddi 'not', marlami 'nothing, without' does not focus on a following element, nor is there a presupposition that a related process applies to some other entity (or whatever) in contrast to the focal one.
$\begin{array}{llll}\text { (6-134) garndiwangooddoo marlami } & \text { nganyi } & \text { milaabidda } \\ \text { many } & \text { not } & \text { they:see:me } \\ \text { 'They don't see me.' } & & \end{array}$
Secondly, the force of the negation seems to be more 'generalised' than is the case for mangaddi 'not'. That is, it indicates that the situation held for no time, place or entity (within presumed limits) - as in the previous example.

Thirdly, and related to the first point, there is no evidence that marlami 'nothing, without' modalises the proposition as does mangaddi 'not'. As was suggested above (section 5.4.1), clauses negated by mangaddi 'not' occur in
contradiction to the presuppositions and expectations of the speech-situation. And clauses that correlate with them invariably supply the positive counterpart, namely, what did happen. (See examples (5-216), (5-370) and (5-371).) But clauses negated with marlami 'nothing, without' do not seem to invoke such relations to the expectations of the speech situation, and they do not appear to contradict implicit presumptions of the truth value of the proposition. This shows up in the type of clause that correlates with the marlami 'nothing, without' clause: it never indicates what DID happen ${ }^{2}$, but always provides an enhancing comment. Some illustrative examples are:
(6-135) wajbali marlami bijngarni ngoonyi -ya -widdi
white:person not he:emerged something LOC IND waranggiri
he:sits
'The white man hasn't arrived yet; I don't know where he is.'
(6-136) marlami milala mangaddi niyaji -ya warangii not I:saw:him not this LOC he:sat 'I didn't see him. He wasn't there.'
(iii) Marlami 'nothing, without' may also occur as an interjection - i.e. as a minor clause by itself. Like mangaddi 'not', it occurs initially in responses to requests for confirmation/disconfirmation, and in responses to requests for information. In the former case, marlami 'nothing, without' indicates the correct polarity for the preceding clause. It does not affirm or deny the proposition asserted by that clause, as does ngajirta 'not', the negative particle in Walmajarri - see Hudson and Richards (1978:101). Thus:
(6-137) A: gaddwaroo bijngarni
afternoon he:emerged
B: marlami jamoondoo bijngarni
not other:day he:emerged
A: 'He arrived yesterday(?)'
B: 'No, he arrived the other day.'
(6-138) A: jamoondoo ngaaddi mangaddi doowya
otherday stone not you:got:it

[^26]B: marlami mangaddi doowla
not not I:got:it
A: 'You didn't get your money the other day?'
B: 'No, I didn't.'
(Note that, as remarked above, both mangaddi 'not', and marlami 'nothing, without' may be used in replying to positive clauses, indicating the falsity of the proposition asserted. Only marlami 'nothing, without' appears to occur in response to negative polarity clauses, indicating the falsity of the embedded (negated) proposition.)

Compare also the following, in which the polarity is negative, though the potential mode indicates that the situation did not in fact occur:
(6-139) A: thaddi yiwindi gardyanirni
mistakenly:believed rain it:might:have:fallen
jamoondoo
other:day
B: marlami
not
A: 'I thought it would rain the other day.'
B: 'No (it didn't).'
Marlami 'nothing, without' appears to be used in exactly the same way as mangaddi 'not' in initiating a response to a request of information. It is, however, far more frequently used in this way than is mangaddi 'not'. Example:
(6-140) A: jaji goowajgina
something you:name:me
B: marlami nganyi -ngga ngaloowinyi goowajginya
not I ERG son I:call:you
A: 'What do you call me?'
B: 'Nothing. I call you "son".'
In a closely related use, marlami 'nothing, without' occurs as a type of tag by which the speaker affirms that the situation did not come to a successful conclusion, or to its desired conclusion. The tagged clause may be either positive (example (6-141), or negative (example (6-142).
(6-141) milalimi marlami
I:looked not
'I looked, but didn't find it.'
(6-142) jirigi mangaddi milayiddayi marlami bird not we:two:saw:it not 'We didn't see any birds, nothing.'

### 6.4.3 woomoorla 'not, without'

Woomoorla 'not, without' is a negative particle specific to the avoidance (mother-in-law) style. It has three main uses.
(i) Like marlami 'nothing, without' it occurs in NPs conveying a privative sense. For example,
(6-143) mangaddinyi woomoorla rooginyngiri
food not I:sit
'I've got no food.'
(6-144) woomoorla thadda rooginyngiri
not $\quad$ dog I:sit
'I've got no dog.'
(ii) It also occurs as a clause level negative adverbial, as in
(6-145) woomoorla ngaddagi ngaaddi woomoorla ngawooddajbindi not my stone not itarrived 'My money hasn't arrived.'
(iii) It occurs as an interjection (or minor clause), at least in the context of a reply to a request for information:
(6-146) woomoorla dambalngoo milinggiddila
not place I:am:looking:for:it
'No, I'm looking for a camp.' (Answer to 'What are you doing?')
(There are no examples of woomoorla 'not, without' used as a Propositional Modifying minor clause (see section 5.4.2).)

It remains unclear whether or not woomoorla 'not, without' is an avoidance equivalent of both mangaddi 'not' and marlami 'nothing, without'. It certainly seems to cover the range of senses of marlami 'nothing, without' - but it is not clear whether in its apparent role of negating clauses (as in example (6-145)) it realises the role of Propositional Modifier, or some circumstantial role. That mangaddi 'not' itself occurs in avoidance style utterances and marlami 'nothing, without' does not, perhaps suggests that woomoorla 'not, without' is an equivalent of marlami 'nothing, without' only.

### 6.4.4 thaddi 'mistakenly believed'

Like the Pama-Nyungan languages to the south and east (including Jaru (Tsunoda 1981:206), Warlpiri (Harkins 1986:566-567), Arrernte (Aranda) (Wilkins 1986:588), Wangkajunga (my own field notes) and other Western Desert dialects, but unlike the nearby non-Pama-Nyungan languages such as Ungarinyin (Rumsey 1982b), Nyikina (Stokes 1982)), and Bunuba (Rumsey, pers.comm.), Gooniyandi has a modal particle which indicates that a proposition which was formerly believed (usually by the speaker), is in fact false. This particle, thaddi, can usually be glossed 'it was/is mistakenly believed that $P^{\prime}$ (where $P$ is the proposition expressed by the embedded clause). In example (6-147), the mistaken belief is the speaker's; but it is most likely someone else (whose identity is left unspecified) who was mistaken in (6-148).
$\begin{array}{llll}\text { (6-147) nginyji } & \text {-ngga } & \text { wooddoogiaddi } & \text {-ngadda } \\ \text { you thaddi } \\ \text { mamoo } & \text { ERG } & \text { you:startled } & \text { on:me } \\ \text { mistakenly:believed } \\ \text { devil } & \text { ERG he:got:me }\end{array}$
(6-148) thaddi nganyi -ngga gardlooni ngooddoo -ngga mistakenly:believed I ERG I:hit:him that ERG yaanya -ngga gardbini
other ERG he:hit:him
'It was mistakenly believed that I had hit him, but really it was that other man.'
In its role as a Propositional Modifier thaddi 'mistakenly believed' occurs only with past and irrealis potential VPs. ${ }^{3}$ With the past tense, as in the examples above, the proposition mistakenly believed' concerns events in the past with respect to the time of the (mistaken) thought. On the other hand, with the irrealis potential, the proposition mistakenly believed' concerns events in the future with respect to the time of the mistaken thought, and in the past with respect to the utterance. For example,

[^27](6-149) thaddi thilmangga bijginyjarnirni
mistakenly:believed early you:could:have:come
'I thought you would arrive early.'
was uttered in a context in which the speaker had earlier entertained the notion that the hearer would visit him early in the day, but as of the time of speaking that proposition was false - that is, the hearer arrived late.

Thaddi 'mistakenly believed' may also realise an experiential role in a clause, as a circumstance of Manner, but only when the clause refers to a thought process. The verbal is invariably miga-, in its sense of 'think' (but not in its sense of 'say' or 'do'). An example is:
(6-150) migalimi -nganggi thaddi
I:thought of:you mistakenly:believed ounyangide
I thought that you had gone outside.'

It is clear that thaddi 'mistakenly believed' modifies the manner of thought, and that it does not modify the proposition expressed by either of the clauses in this example. As a Manner modifier, thaddi 'mistakenly believed' usually follows the VP. This contrasts with its usual pre-verbal position when in its role of Propositional Modifier.

This biclausal construction allows explicit reference to be made to the one who suffered the misconception that the proposition was true. It is also often used in reference to past predictions that turned out to be false, as in the following example.
(6-151) migalimi thaddi

I:thought mistakenly:believed cloud $\quad$| ranboondirni |
| :--- |
| It:could:go |

This construction, with the future potential, appears to be synonymous with clauses in which thaddi 'mistakenly believed' modifies a proposition in the irrealis potential.

It should be noted that it is beliefs about propositions that thaddi 'mistakenly believed' claims to be mistaken. It does not apply to actions, except as far as actions are based on mistaken beliefs, in which case that belief is explicitly stated. Thaddi is not used like the English term mistakenly in examples such as I hit him mistakenly; instead, the following multi-clausal construction occurs:

| $(6-152)$ |  |  |  |
| :---: | :---: | :---: | :---: |
| $\mathrm{K}_{1}[\text { walanganginybini }]_{\mathrm{K} 1}$ | $\mathrm{~K}_{2}[$ nginyji | $-r n i$ | gardnginybini $]_{\mathrm{K} 2}$ |
| I:mistook:you | you | SEQ | I:hit:you |

$$
\begin{array}{lll}
\mathrm{K}_{3}[\text { thaddi } & \mathrm{K}_{4}[\text { ngooddoo } & \text { yaanya } \\
\text { mistakenly:believe that } & \text { other } & \text { man }
\end{array}
$$

'I mistook you, and hit you, thinking you were the other man.'

### 6.4.5 yiganyi 'uncertain'

Depending on context, yiganyi occurs in two apparently distinct senses. As a Propositional Modifier it indicates possibility, and is normally glossed maydbi in the local varieties of Kriol or Aboriginal English. Secondly, it occurs as a circumstance of Manner, in which case it usually indicates that the action was done sneakingly. In this usage it is usually glossed jineg (from English sneak) by native speakers of Gooniyandi. A single formal meaning is postulated, 'uncertain', to account for these two apparently distinct contextual senses. (Cf. Rumsey 1982b:172-176.)

As a Propositional Modifier, yiganyi indicates an attitude of uncertainty of the speaker towards the proposition $\mathrm{s} / \mathrm{he}$ is uttering. As a circumstance of Manner, this word indicates that the actor performed the action in an uncertain manner: $\mathrm{s} / \mathrm{he}$ was in a condition of uncertainty as $\mathrm{s} / \mathrm{he}$ did it . That is, the modal particle yiganyi 'uncertain' has both interpersonal and experiential uses: it may indicate either a subjective attitude within the speech situation, or a subjective attitude in the thesis, the events described - that is, in the mind of the actor. I will examine these two senses in turn, adducing evidence in support of the postulated formal meaning.

Firstly, in its role as a Propositional Modifier, yiganyi 'uncertain' appears never to be used in drawing inferences from the observed to the hypothetical. Rather, it expresses the fact that the speaker just does not have the appropriate backing to allow him/her to make a definite assertion. If ever an enhancing clause is added to explain why the speaker does not make a plain unmodalised statement, it always explains that the speaker did not see, hear or otherwise perceive that the event did or did not take place - see example (5-346). It never provides evidence suggesting the occurrence of the event to be likely; there are no examples of the type, familiar to the speaker of English, illustrated by He might have taken it, (likely) because I saw him there. That is, yiganyi 'uncertain' does not comment on the likelihood of the occurrence of the situation referred to, given the speaker's knowledge of the relevant facts: the proposition is not evaluated as either likely or unlikely. Thus yiganyi 'uncertain' occurred in elicited Gooniyandi equivalents for English sentences involving both maybe and maybe not (in which the proposition is evaluated either as more or less likely), depending on context. The first sense typically occurs in case the embedded
proposition expresses something 'greater than' the expectation of the speaker, in the sense invoked in sections 6.3.3 and 6.3.5 above. For example (6-153) was given as an utterance I might make to the speaker, telling him that I might come to see him one night.
(6-153) yiganyi maningga wardjawingi uncertain night I:might:come 'Maybe I'll come one night.'

The sense of unlikeliness is suggested by the fact that otherwise the utterance would be pointless: I had never visited him before at night, and there was no expectation that I would start doing so.

On the other hand, the sense 'maybe not' may be suggested if the expectation is greater in some sense than the embedded proposition. For example, the sentence
(6-154) yiganyi sergeant
uncertain
una
I'm unsure that the sergeant will bring (my uniform).
was given in response to the English prompt 'Maybe I won't get my uniform this year'. This was elicited at a time when the speaker was becoming increasingly convinced that the authorities had forgotten him, and would not bring him his new police uniform for the Fitaroy Crossing races.

The point is that yiganyi 'uncertain' does not itself evaluate the proposition as likely or unlikely. But as elsewhere, the fact that the proposition has been modalised at all conveys meaning - basically it counters an expectation or presupposition, and the nature of this presupposition suggests either the 'likely' or 'unlikely' interpretation of yiganyi.

The above points are clearly illustrated in example (5-364) which also contains an embedded negative proposition. This utterance was used to describe a situation in which a bustard was hit by a Landrover as it was flying up off the road; the bird flew uncertainly off. As far as the speaker knew, the bird did not fall (and had not fallen since): this is expressed in the second embedded clause mangaddi gardgoonaani' 'it isn't falling' which is modified by yiganyi 'uncertain', indicating the speaker's lack of knowledge. At the same time it suggests an evaluation that it is likely that the bird fell - or otherwise a more neutral mode of expression, such as for example mangaddi gardbani 'it didn't fall (then)', would have been chosen. And here 'not falling' is clearly evaluated as greater than 'falling', just as is 'breaking its leg' is greater than 'not breaking its leg'. Yiganyi
'uncertain' can itself indicate neither an evaluation of likelihood, nor a purely objective viewpoint, that the proposition is purely 'possible'. ${ }^{4}$ I cannot see how these senses can be explained unless yiganyi indicates the speaker's attitude of uncertainty.

It seems that yiganyi expresses the same sort of uncertainty as does the enclitic -widdi UNKN (see section 6.3.6), which is restricted to occurring on nominals and indicates that the speaker is unsure of the referent. And in each instance the expression of lack of certainty is not normally used if information is being sought from the hearer.

As remarked above, in the clausal experiential role of manner, yiganyi 'uncertain' usually translates into English as 'sneakingly', as is shown in the following examples:

| (6-155) mangaddi | yiganyi | -ngga | wardnga balngarna wardnga |  |
| :---: | :--- | ---: | :--- | :--- |
| not | sneakingly | ERG | he:took:it open | he:took:it | 'He didn't take it sneakingly, he took it openly.'

(6-156) wabjingi yiganyi -ngga -nyali he:sniffed:it sneakingly ERG REP 'He sniffed it sneakingly.'

My hypothesis was that this is a contextualisation of the formal meaning of yiganyi 'uncertain', which refers to a mental attitude of uncertainty, here in the mind of the actor. In these instances, the type of uncertainty in the mind of the actor, in the way s /he preforms, is that $\mathrm{s} / \mathrm{he}$ is cautious and mindful of the possible consequences of his/her act, which encroaches on the rights of others. (6-156), for example, described an individual who had sniffed the food collected by another group of people, to which he had no right, at the same time watchful of their arrival. He acted without assurance, uncertain as to whether he would get away with it.

However, as
(6-157) yiganyi warangbinggiddi
uncertain you:pl:will:sit
'You lot stay quiet.'
shows, yiganyi does not always find a contextual meaning as 'sneakingly'. The intent of this utterance is that the addressees, a group of children, should remain

[^28]sitting uncertainly - that is, careful that they do not act in such a way as to disturb the nearby adults: they should be quiet, and not act with too much confidence or assurance in themselves.

It seems that yiganyi signifies a circumspect, unsure, or uncertain mode of behaviour. In all available examples, this has been with respect to the possible consequences of the action which always involves human confrontation. No examples of yiganyi 'uncertain' correspond to the uncertainty of 'the bird flew uncertainly away' (see above), in which the uncertainty rests in the ability of the actor to effect the action. It remains to determine the full significance of this mode of behaviour, which is certain to be culturally specific.
There is an adverb biyari which more properly translates 'sneakingly'. A story of a man who had escaped from the Derby leprosarium described him as sneaking back to his own country some hundreds of miles distant. The adverb biyari was used throughout to describe his behaviour. He travelled all the way avoiding stations, towns, outposts, etc., staying out of the sight of all Europeans. At no stage need he have acted without assurance: rather, he acted so as to avoid the possibility of confrontation. Going biyari 'sneakingly' he could avoid acting yiganyi 'uncertainly'.

Finally, I remark that yiganyi sometimes appears to modify a process of thought - to think uncertainly - as may thaddi 'mistakenly believed':

| (6-158) nganyi migangiri yiganyi marlami yaningi | bijboowarni |  |  |
| :--- | :--- | :--- | :--- |
| I | I:think uncertain not | today | he:could:come |

If ( $6-158$ ) is really appropriate to the prompt, yiganyi 'uncertain' is a Manner in the projecting clause. But it is impossible to be sure of this without more examples.

### 6.4.6 minyjidda 'true'

This particle, which may be glossed 'true, truly', is most frequently found as an interjection in a minor clause, following a major clause as a type of afterthought, reaffirming the speaker's commitment to the truth of the proposition. minyjidda 'true' is also occasionally found in the role of Propositional Modifier:
(6-159) mangaddi woongooloo bagingiri minyjidda waddinngiri
not for:fun I:lie true I:am:sick
'I'm not pretending, I'm really sick.'
Here, minyjidda 'true' modifies the proposition expressed by the second clause,
asserting: 'it is true that I'm sick'. At the same time it indicates the seriousness of the sickness contrasting this with the presumption that the speaker is pretending.

Like other particles indicating speaker attitudes, minyjidda 'true' occurs in clauses of speech in the sense of 'speak the truth' (not - in the available examples - in the sense of 'actually speak').
(6-160) minyjidda jagma -ngadda
true you:will:tell to:me
'Tell me truly.'
(Contrast ngirli jagmingadda (lie he:told:me) 'he told me a lie'.)
In the following example minyjidda 'true' appears to be an NP constituent:
(6-161) minyjidda waddamba bijngarni
true flood it:emerged
'A truly big flood came up.'
There is a verbal form minyjiddan- 'believe, take notice of', which is clearly built on minyjidda 'true' (the final -n is a (perhaps meaningless - but cf. McGregor forthcoming-d) formative. Examples:

| (6-162) nganyi | -ngga | mangaddi | minyjiddangoowaalimi niyaji |
| :---: | :---: | :--- | :--- | :--- |
| I | ERG not | I:am:believing:it | this |

'I don't believe it.'
(6-163) nganyi minyiiddangoowaalimi -nganggi I I:am:believing on:you
'I believe you.', or 'I'm taking notice of you (i.e. of what you are saying).'

### 6.4.7 winhi 'just, only'

This particle is an expectation modifier which usually translates into English as 'just, only'. (Native speakers, however, preferred to gloss it najing 'nothing' in their variety of Aboriginal English or Kriol.) It is a clause level counterpart of the enclitic -moowa 'only, just' (discussed in section 6.3.3), from which it differs in terms of scope. Whereas the latter modifies speaker's expectations as to what will fulfil particular roles in the situations referred to, and contains within its scope constituents of clauses, winhi 'just, only' modifies expectations as to what situation will occur, and contains full clauses in its scope. Compare for example, the following pair:

| (6-164) winhi wardngi thangarndi | -yoo |
| :--- | :--- | :--- |
| just I:went word | DAT |
| 'I only went for a talk.' |  |

In the first example there is an expectation that I might have done something else; in the second, the expectation is that I might have had some other purpose in mind in going than just to talk.

The same formula as was invoked in describing -moowa 'only, just' (section 6.3.3), Assertion $x<$ Expectation $y$, accounts for the meaning of winhi 'just, only'. Here $x$ and $y$ are different, however: they are situations, rather than participants or manners, etc.. That is, winhi 'just, only' evaluates the situation asserted as occurring as 'less than' the situation expected to occur. Only the scalar sense (see above page 475) of 'less than' is possible here; the subset reading clearly cannot apply. Depending on the way the relation 'is less than' is understood, winhi 'just, only' may contextualise in a few different ways, at least from an Anglo-centric perspective.
(a) The occurring situation may be evaluated as less potent in some sense than the expected situation. Thus:
(6-166) mangaddi jijaggiddarni winhi milayiddarni not we:talk:together only we:look:at:one:another 'We're not talking together; we're only looking at one another.'
(Here of course the second clause replaces the first (see section 5.6.2.1). The expectation that we might be interacting in some way, such as talking is created by the larger context (e.g. of culture), and obviously not by the immediately preceding clause. This remark applies to the following, and a number of other examples.)

In this sense, winhi 'just, only' is frequently followed by the enclitic -moowa 'only', which perhaps intensifies its effect:
(6-167) wambawoo gardnginbinirni winhi -moowa
nearly he:might:have:hit:me only ON
madnginmi
he:swiped:at:me
'He tried to hit me, but only swiped me.'
(b) In a very closely related sense, the evaluation is not so much on a scale
of 'potence', but of the DEGREE to which the situation affects an undergoer. In the following example, the person referred to is asserted as not being as sick as might have been expected:
(6-168) mangaddi gambi nyamani winhi yalijmi not sickness big only he:is:sick 'He's not very sick, just a little off-colour.'

Clearly this sense merges in with (a).
(c) The asserted occurrence may be evaluated as less than expectation because the actor is not serious in his engagement in the process. For example,
(6-169) winhi rooddijginya mangaddi minyjidda
only I:am:yelling:at:you not true 'I'm just yelling at you, not seriously.'
(d) The evaluation may rest on an expectation of responsibility of the actor - that $\mathrm{s} / \mathrm{he}$ acts with purpose or intent. In this case, the use of winhi 'just, only' suggests that the action was done without reason.
(6-170) yaabja yoowooloo wardjawooddoo -nhi winhi
some man they:may:go to:him only wirdinboowoo
he:bites:him!
'Should any man go past (the dog), he'll bite him (for no reason in particular).' (This describes a vicious dog.)

Winhi 'just, only' often occurs in responses to information questions, where the effect seems to be to counter presuppositions implicit in the question. (Cf. similar uses of mangaddi 'not' and marlami 'not' mentioned in sections 6.4.1 and 6.4.2 respectively.)
(6-171) A: gidi -yarndi -ga yiniganggiddiwiddangooddoo
you:pl PL ERG you:pl:are:doing:something:to:them mawoolyi -yoo
children DAT
B: winhi gamba -ga ligiddyiddra mawoolyi
only water ERG we:are:washing:them children
A: 'What are you lot doing to the children?'
B: 'Nothing much. We're washing them.'
Cf. Goody's (1978) suggestion that pure information questions, which do not at the same time challenge the addressee, either by the presupposed right of the
speaker to ask the question, or the presuppositions of the question itself, occur but rarely (and only amongst social 'equals'). And indeed, (6-171) could hardly have been intended as a pure information question. It was part of an elicited dialogue (in which the speaker took on both sides) that might occur between a man and a group of women and children who were bathing in the river. Even if not intended in this way, such a question would most likely be seen as a challenge to the addressees. The effect of use of winhi 'just, only' here appears to be to counter an apparent presupposition or expectation that something untoward was being done to, or happening to the children.

McConvell (1983a) discusses a particle jupu 'only, just' in Gurindji which has an almost identical range of contextualisations as winhi 'just, only'. The one sense of the Gurindji jupu 'only, just' that does not appear to occur for the Gooniyandi winhi 'just, only' is 'for a little while' - this may be because Gooniyandi has a separate temporal adverbial janggoo which carries this meaning. Similarly, winhi 'just, only' does not frequently occur in sense (c), since there is a separate adverbial woongooloo 'for fun, for no particular purpose' which is normally used to cover this sense. (It would appear that the Gurindji jupu 'only, just' occurs more regularly in this sense.) The two frequently occur together, as in
(6-172) winhi woongooloo gardbiyiddarni only for:fun we:fight:together 'We're just fighting for fun (with no serious intent).'
This was elicited as an appropriate response to jaji-yoo gardbinggiddarni (something-DAT you:lot:are:fighting) 'Why are you lot fighting?'.

### 6.4.8 moorda 'completely'

Due to the paucity of examples, it is impossible to be certain of the exact significance of this particle. The available examples show three main contextual senses.
(a) 'Whole, completely'. This sense normally occurs with reference to swallowing something whole, without chewing:
(6-173) gambayi -ngga maa mangaddi binyjangnga moorda
boy ERG meat not he:chewed:it whole
niyigbaddi
he:swallowed:it
'The boy didn't chew the meat, he swallowed it whole.'
(b) 'For no reason'. Moorda may suggest that the process referred to occurred for no apparent reason. An example is (5-370) above. This sense may also be enhanced by the use of winhi 'just, only' (in sense (d) of the previous section):
(6-174) winhi moorda gardnginbini
only no:reason you:hit:me
'You hit me for no reason at all.'

Winhi 'just, only' and moorda 'completely' have apparently similar senses 'for no real reason'. However, the English glosses here in fact conflate two quite distinct senses: 'to engage in an action just for the sake of it', and 'to become engaged in an action for no apparent reason'. The first is a contextual sense of winhi 'just, only' contradicting the expectation that an individual would not normally do the action without some purpose in view; the second, a contextualisation of moorda 'completely', contradicting the implicit assumption that the process would not occur unless the actor intended to engage in it. The former is less than expectation; the latter, greater than expectation. This may explain the combination of the two in (6-174): 'just (for the sake of it) you hit me for no reason (or cause)'.
(c) 'By accident'. A closely related sense to the one just discussed is that the process was not done intentionally: it just happened. (This does not cover the full range of 'unintentional' in English.) For example:

| (6-175) mangaddi | ngaaddi | -yoo | moowla | nhi | moorda |
| :--- | :--- | :--- | :--- | :--- | :--- |
| not | stone | DAT | I:looked for:it | by:accident |  |

## I:found:it

'Although I wasn't looking for money, I found some.'
It seems likely that a single formal meaning can be identified as underlying these three senses. Moorda 'completely' would appear to be a type of expectation modifier, which indicates that the situation referred to is evaluated as greater than expectation (in the sense of evaluation identified above). That is, in the symbols used above, Assertion $x>$ Expectation $y$. Thus swallowing food whole may be evaluated as greater than expectation if there is no apparent reason for it, or if the actor does not try to do it.

Moorda 'completely' is then an inverse of winhi 'just, only', for which the assertion is evaluated as less than the expectation. Furthermore, moorda 'completely' and the enclitic-ngaddaya TOO (see section 6.3.5) have identical formal meanings, and differ only in scope: clausal vs. subclausal. For moorda 'completely', $x$ and $y$ in the formula of the previous paragraph are situations
(expressed linguistically in clauses), whereas for -ngaddaya TOO they are participants or circumstances (expressed linguistically in nominal phrases and adverbials). We can now set up the following proportion:
winhi : moorda :: -moowa : -ngaddaya

### 6.4.9 wajanginyji and jinginyji 'but really'

Very little can be said about these two words, of which there are a couple of instances only of each. In the few examples, wajanginyji and jinginyji have approximate senses 'but really', and the clauses they modify follow clauses modified by thaddi 'mistakenly believed', in a replacive clause complex (see section 5.6.2.1). It is not clear, either, in what way the two lexemes differ (assuming that they do differ). It proved impossible to systematically elicit either word in this replacive construction: the contrast usually went unmarked as in example (6-146).

Examples of usage of the two particles are:
(6-176) nginyji -ga -ngaddaya thaddi manyi -yoo
you ERG TOO mistakenly:believed food DAT
moowya grog -jinginyji moowya
you:looked but:really you:looked
'I thought you too were looking for food, but really you were
$\quad$ looking for grog.'
(6-177) thaddi migalimi -nganggi manyi -yoo
mistakenly:believed I:thought of:you food DAT
moowya wajanginyji grog -joo moowya
you:looked but:really DAT you:looked
'I thought you were looking for food, but it was really grog you were looking for.'

### 6.4.10 ngamoo 'before'

Ngamoo has a purely temporal meaning 'before, at an earlier time'. As has already been mentioned, this word may fill one of two main roles in a clause: Temporal Location, or Propositional Modifier.

In the former role, ngamoo 'before' can indicate past either with respect to the speech situation (which is the usual state of affairs), or with respect to an event set up in the text. Examples are, respectively,

# (6-178) ngamoo yoowooloo -moowa warangbiddi before man ON they:sat 'Before there were only Aborigines (here).' 

and
(6-179) manyi ngamoo giribali doowa
food before I:was:finishing:it door gardbigardbinga -ngadda
he:knocked:repeatedly on:me
'I was just finishing up my tea when he knocked at my door.'
In its role as a Propositional Modifier, ngamoo 'before' normally translates as 'already':
(6-180) ngamoo bijgoowayiddarni
before we:are:arriving
'We're almost there.' (Literally, 'We're already arriving.')
This sentence may be used to contradict an expectation that we were not nearing the destination, that is, an expectation that there was still a long way to go. (6-180) was elicited as appropriate to a context in which the speaker contradicts the hearer's belief that they still have some distance to travel. Here ngamoo 'before' modifies the proposition bijgoowayiddarni 'we're getting there', and contrasts with mangaddi 'not', yiganyi 'uncertain', etc., not with other temporals such as jamoondoo 'the other day', etc. (cf. section 5.4.1).

### 6.4.11 yaningi 'now'

Yaningi is a temporal adverbial which, like ngamoo 'before', may locate an event either with respect to the speech situation, in which case it means 'now', or with respect to another described event, in which case it means 'at the same timet. In its first use at least, the exact temporal expanse covered may vary considerably, depending on what 'now' is presumed to contrast with. It can mean anything from 'right now', 'at this very instant', 'now, any or all of the time from the beginning of the present speech situation to its end', 'today', to 'these days (as opposed to the early days, etc.)'.

Yaningi 'now' may also be used as a Propositional Modifier. For example, in
(6-181) wamba -nyali marla -ya goorijga yaningi -nyali later REP hand LOC he:holds:it now REP

## balayawi

he:will:send:it
'He's still got (the letter) in his hand, (but) he'll send it directly.' (Note: speaker's gloss used the term directly.)
it would seem that it is not taken for granted that the person concerned will post the letter at all - perhaps he looks undecided about it. That is, yaningi 'now' provides more than a temporal location for the process, and contrasts with e.g. yiganyi 'uncertain', mangaddi 'not', and so on.

### 6.4.12 yaniyaningi 'right now'

This word is clearly a partial reduplication of yaningi 'now', and has a formal meaning predictable from this, 'right now, at the very time'. That is, reduplication has the effect of intensification.

Yaniyaningi 'right now' seems to occur only with extendible processes, or with the progressive of accomplishments, and appears to usually suggest that the process has just been entered into, as of the speech situation time (see example (6-182)), or as of the time of the events described (see example (6-183):
(6-182) yiwindi -ga yaniyaningi -nyali gadgoowaanboo
rain ERG right:now REP it:is:leaving
giribaari
it:is:finishing
'The rain is just starting to finish up now.'
(6-183) manyi yaniyaningi ngabla doowa
food right:now I:ate:it door
gardbigardbinga -ngadda
he:knockedit:repeatedly on:me
'I had just started to eat when he knocked on the door.'
In case the comparison is with respect to speech situation time, yaniyaningi 'right now' seems to normally counter an expectation that the process has not yet started, and for this reason appropriate English glosses may involve 'already'. For example,
(6-184) yaniyaningi thangarndi thigiwaari giribjawidi right:now word it:is:getting:short we:might:finish:it 'The cassette is already getting short; we'll be finishing up.' was uttered in a context in which the speaker was surprised that the time had
passed so quickly, and the cassette had almost run out.
Both yaniyaningi 'right now' and ngamoo 'before' (see section 6.4.10) may be felicitously translated as 'already' in certain circumstances, with the progressive aspect. The difference seems to be that whereas yaniyaningi 'right now' suggests that the 'train' of progress has just started, ngamoo 'before' suggests that it started some time ago. Thus the use of ngamoo 'before' in this context gives the sense of greater immediacy or imminence of the attainment of the accomplishment. Thus, ( $6-180$ ) above makes a stronger claim than

> (6-185) mangaddi marnangooddoo yaniyaningi graaggaowayinmi not far right:now we:are:nearing:it 'It's not far now, we're already nearing (our destination).'

### 6.4.13 wamba 'later'

The interpretation of this adverbial poses some difficulties. It would appear to form the third member of a triplet with ngamoo 'before, an indefinite time in the past', and yaningi 'now, an indefinite time including the present', to indicate 'an indefinite time in the future'. The temporal reference point is usually the speech situation time, and the VP usually occurs in the future tense, as the following example shows.
(6-186) wamba jalbawinggiddinya
later I:will:meet:you:pl
'I will meet you lot later.'
But, as is the case for ngamoo 'before' and yamingi 'now', another reference point may be chosen, the time set up in the events described. I have been unable to locate examples in which wamba 'later' is used in locating past events with respect to one another (of the type illustrated in (6-179) and (6-183)). In (6-187) and $(6-188)$, however, the present event is located in the future with respect to the understood or presupposed situations.
(6-187) wamba -nyali waranggiri gamba -wimi ngoorloogga
later REP he:sits water IND he:drinks:it
'He's probably still sitting there drinking.'
wamba -nyali mangaddi bijgoowaarni
later REP not itis:emerging
'It (the island) still hasn't emerged (from the floodwaters).'

In (6-187) it was already established that the individual concerned had been
drinking at an earlier time in the day (he had been seen), and in (6-188), it was part of the common knowledge of everyone in the town that, as of recently, the islands in the river were still under the floodwaters.

The preceding two sentences do more than just locate the present situation with respect to one presupposed in the past. By implication, continuity of the present situation with the past is suggested, and wamba 'later' appears to be functioning as a Propositional Modifier. The occurrence of wamba 'later', that is, contradicts an explicit expectation that the situation located at the earlier time might have ceased to obtain now. (Cf. the discussion of sense (v) of nyali REP, in section 6.3.2.) In this context, wamba 'later' usually translates into English as 'still'.

In fact, it would appear that this interpersonal usage of wamba 'later' is far more frequent than the corresponding usage of ngamoo 'before' and yaningi 'now'. Whereas in (6-84) wamba 'later' provides a temporal location of the situation, in (6-186), it is quite likely that the speaker is contradicting an assumption that he will not be meeting the addressee later on.

### 6.4.14 wambawoo 'nearly'

This particle occurs only with VPs in the potential mode, and indicates that although the process did not actually occur, it very nearly did. For example,
(6-189) wambawoo gardyanirni
nearly she:could:have:fallen
'She nearly fell.'
described a situation in which a woman tripped over on a stick and very nearly fell over. Gardyanirni 'she could have fallen' itself could be used to describe the same situation (see section 6.5.3.2 below); but wambawoo 'nearly' suggests that the process very nearly occurred, and that there was a strong expectation that it would. The presence of the particle disambiguates the utterance from other possible interpretations of the potential mode (section 6.5.3.2). In (6-189) it was only at the last moment that the woman regained her balance. In the following example, the speaker had expected to hit the kangaroo, but it got up in time:
(6-190) wambawoo gardgooloonirni niyi thiddoo bajgiwindi
nearly I:could:have:hit:it that kangaroo it:got:up
'I very nearly hit it, but the kangaroo got up.'

The phonological shape of this particle suggests that it might be analysed into wamba 'later', plus the definite mode enclitic -woo DEF. That this is not entirely improbable finds some support in the possible English gloss for (6-189) 'Still,
she could have fallen'. I cannot pursue the implications of this possibility here.

### 6.4.15 yilba 'forever'

This particle indicates that either the process will continue indefinitely on into the future, or its effects will. For example, to illustrate the first sense,

> (6-191) warangjawingi yilba
> I:might:sit forever
> 'I'll be staying (here) for good.'

The second sense is illustrated in:
(6-192) mangaddi gardbiddini yilba
not they:hit:him forever
'They didn't hit him for good (i.e. they didn't kill him).'
(6-193) thinga gajbinmi yilba
foot they:cut:him forever
'(The doctors) cut his toe right off.'

### 6.4.16 ngaddarni 'always'

Ngaddarni 'always' indicates that the process referred to occurs habitually; it can usually be translated into English 'always':
(6-194) gadduraroo ngaddarni bagingiri
afternoon always I:lie
'I always sleep in the afternoon.'
In section 6.5.1.2 it is shown that one of the senses of the present tense is general or habitual action. The function of ngaddarni 'always' seems to be to bring prominence to this facet of the proposition expressed. Usually, the plain present tense is used to indicate habituality. It seems that ngaddarni 'always' is used only when there is an expectation to the contrary, an expectation that the proposition may not be a universal truth. For example, in the context in which (6-194) was elicited, there was an expectation that the speaker might be available for an interview some afternoon. Thus it appears that ngaddarni 'always' is fulfilling the interpersonal role of Propositional Modifier in examples like (6-194).

The idea 'never' is not lexicalised in Gooniyandi, but may be expressed by placing a negated clause within the scope of ngaddarni 'always' (i.e. 'always not $P^{\prime}$ ):

| (6-195) | ngaddarni | mangaddi bijbiyaniila goomboorna |
| :--- | :--- | :--- |
| always not | not | I:frequently:come early |
| 'I never come early.' |  |  |

### 6.4.17 ngambiddi 'again'

Ngambiddi 'again' is a particle which can usually be glossed 'again'. It indicates that the situation referred to by the clause is a repetition of an earlier situation; formula (6-69) describes its meaning. Ngambiddi 'again' contrasts in a number of interrelated ways with the enclitic -nyali REP, which may sometimes be glossed 'again' (see section 6.3.2):
(i) The particle is a clause level particle, and indicates the repetition of the full situation, whereas -nyali REP indicates the repetition of part of a situation only. There are no examples of the 'back to a former place or position' sense with ngambiddi 'again'. In saying that the full situation is repeated, I do not mean to suggest that it must be repeated in all its aspects. But, as a rule, the same participants are involved in each instance. The only exception I am aware of it when reference is made to a generic, not an individual participant, as in

| (6-196) nganyi | nyagginboowoo ngambiddi | nyali |
| :---: | :---: | :---: | :---: |
| I he:will:spear:me again | REP |  |
| I might be speared again.' |  |  |

(6-197) ngambiddi -nyali wayandi jardli again REP fire I:lit:it ' I lit a fire again.'
(ii) Unlike -nyali REP, ngambiddi 'again' appears never to have an interpersonal sense in which the time T of formula (6-69) is speech situation time.
(iii) Being a full word, ngambiddi 'again' may become either the Theme or the Focus of a clause, possibilities denied to the enclitic -nyali REP. This property is crucial in two contexts: where it is desired to indicate that a situation will 'not occur again', and to indicate 'again not'.
(6-198) mangaddi ngambiddi giddagiddayidi not again we:ran
'We didn't run again.'

| (6-199) maa | $-r n i$ | ngabbiddayi | ngambiddi | mangaddi |
| :--- | :--- | :--- | :--- | :--- |
| meat | SEQ | they:ate:it | again | not |

doonggooloo -yoo
bereaved DAT
'Then they ate meat, no longer under the taboo.'
(Cf. pages 387-388 above.) As shown by (6-198), -nyali REP never occurs when ngambiddi 'again' is in the scope of mangaddi 'not' (cf. discussion of sense (i) in section 6.3.2 above).

### 6.4.18 briyandi 'in revenge'

This adverbial indicates that the action was done in return for, or as revenge for, some other action by a different actor. That is, the action was done to redress a balance. Examples are (6-34) and (6-35) above. Occasionally briyandi 'in revenge' is followed by the locative postposition -ya, in which case it indicates that a number of successive events were done each in return for the preceding. Examples are:
(6-200) briyandi -ya boolooboowa wardbinggiddi
in:revenge LOC you:will:follow:him you:will:go
'Set off, taking turns to follow one another.'
(6-201) nangbiddani briyandi -ya
they:died in:revenge LOC
'They died in turn' (i.e. each in turn for the death of the other).

### 6.5 Verbal categories

In this section I discuss the major verbal systems of tense (6.5.1), aspect (6.5.2), mode (6.5.3), mood (6.5.4), and in addition, the system of verbal classifiers (6.5.5). Although I refer to the first four as 'verbal' categories - they are realised by morphemes within the VP - they have in fact clausal scope. That is, they modify the full situation referred to by the clause, or the full proposition expressed by the clause. They do not qualify just the Process (referred to by the verbal stem), or indeed the "nuclear situation" (i.e. the part of the situation referred to by the VP alone) - cf. Lyons (1968:305) and Fawcett (1980:47). Examples such as ( $6-202$ ) make this clear. (And similar examples can be found for the other three categories.)
(6-202) gaddwaroo bij -y +arni -rni aftemoon emerge IRR +ARNI POT 'He might have come yesterday (but he didn't).'
(6-211) marndi yilba wardgiri mangaddi barngiri [boomerang type] forever it:goes not it:returns 'The marndi boomerang goes straight along; it doesn't return.'

- actor is able to do the action -
(6-212) A: wardmaari
he:goes?
B: wamba -nyali giddaariri
later REP he:crawls
A: 'Does he walk?'
B: 'He still crawls.'
- action is socio-culturally appropriate -
(6-213) ngoolyoongoolyoo goon.gila cutter I:do:not:converse:with:him 'I don't talk to my circumcisor.'
- process is what typically happens in the circumstances -
(6-214) ngidi lanngaddi wardgiddi yoowooloo thadda we(R) above we:go man dog babaabiddi thooddwoonmoo yaanya bawardgoonmoo below they:descend other they:climb:up 'We people go across the footbridge; dogs go down the bank and up the other side.'
- actor habitually does the action -
(6-215) (ngaddarni) gardbaa.
(always) he:belts:him
'He (habitually) belts him.'
This sense is sometimes explicitly indicated by the use of ngaddarni 'always'
(iv) Hypothetical sense. The present tense is sometimes used 'hypothetically', in the antecedent and/or the consequent in an 'if-then' construction.
(6-216) mangaddi lawoowooddaddi yiwindi nyamani gardganoowoo not they:hug:it rain big it:is:falling! '(If) they don't hug (the tree), big rain will fall.'
Each of the above senses occur in negated clauses: that is, a clause such as
mangaddi wardgiri (not he:goes) has interpretations corresponding to each of the above senses: 'he isn't walking (right now)', 'he isn't going (shortly/later)', 'he doesn't/can't walk', and '(supposing) he doesn't walk.'


### 6.5.1.3 Future tense

In all of its uses, the future tense (which is realised by the prefix -bi+) projects into future time. Unlike the plain or unmodalised past and present tenses, the future is attested in both assertions and proposals (see section 5.4.1). I will discuss these in order.
(a) Assertions. In assertions, the future may have a purely temporal sense in which the speaker claims that the situation will occur at some time in the future. The future does not appear to be used in making general (i.e. not bound to a particular point in time) predictions. Unless some particular time is stated (by an adverbial, PP, or another clause), or understood, the immediacy or imminence of the situation is normally suggested. For example, the normal interpretation of

$$
\begin{aligned}
& \text { (6-217) jaji ngabba } \\
& \text { something you:will:eat:it } \\
& \text { 'What will you eat?' }
\end{aligned}
$$

(in the absence of cues to the contrary) is that it is an inquiry as to what the speaker would like to eat now, not next week.

In asserting a clause in the future, the speaker does not indicate intention, desire, obligation, etc., though any of these may be present. The future makes a stronger assertion than any of these modalities. The speaker indicates that the situation will occur at the designated time, no matter what. He or she does not allow that there is any possibility of it not occurring. Where there is uncertainty, the future is modalised by the subjunctive (see section 6.5.4.1) or the potential (see section 6.5.3.2).

If a clause in the future tense is negated (by mangaddi 'not' or marlami 'not') the speaker is claiming that the process will definitely not occur at the specified or understood time, or in the immediate future. This may be for a number of reasons:

- lack of intention on the part of the actor -

| $(6-218)$ | gamba mangaddi |
| :--- | :--- |
| water not | I:will:drink:it |
| 'I don't want to drink now (I don't feel like it).' |  |

- temporary disability of the actor -

| (6-219) mangaddi | wardbingi |
| :---: | :--- |
| not | I:will:go |

'I can't walk (I've got a broken leg).'

- a temporary restraint on the actor -
(6-220) mangaddi jijagbi ganybiliri
not he:will:talk he:is:ashamed
'He won't talk, he's ashamed.'
- avoidance of unwanted consequences -

| (6-221) mangaddi | ngaladda | bagiwingi |
| :--- | :--- | :--- |
|  | not | back |
| I:will:lie |  |  |
| II won't lie on my back (it's sore).' |  |  |

It could be for any number of other reasons; all that is stated is that the situation is not going to occur.
An English sentence such as 'I can't walk' has two possible translations into Gooniyandi: mangaddi wardngiri (not I:go), and mangaddi wardbingi (not I:will:go). The former indicates (in this context) that I do not have the general characteristic - that is, I do not walk at all; the second, that I will not walk in the immediate future - due to some temporary disability. (The two Gooniyandi clauses have, of course, a wide range of other senses, having nothing to do with ability.)

The future tense projects into future time with respect to the speech situation, or with respect to a reported speech situation. There is one counterexample in the corpus, in which the reference point is a referent event which is not one of speech:

$$
\begin{aligned}
& \text { (6-222) gamba }- \text {-rni jaayi -nhi gooddgoo -ya yijgawoo } \\
& \text { water SEQ it:lay on:him hole LOC bad } \\
& \text { thadda mangaddi niyaji -ya bagiwi } \\
& \text { dog not } \\
& \text { 'This LOC it:will:lie } \\
& \text { 'Then water lay in his hole. This was bad and the dog wouldn't lie } \\
& \text { there.' }
\end{aligned}
$$

(Note: this utterance occurred in a constructed narrative, and not in describing currently relevant goings-on.)
(b) Proposals. The unmarked mode of expressing a command to do something is by a clause with the future tense. For example,
(6-223) thithi wardbiri
going you:will:go
'Go away!'
Other examples include (5-366) and (5-371). Commands to continue doing something are also expressed through the future tense, frequently in conjunction with a temporal adverbial such as wamba 'later'. Examples:
(6-224) bagiwiri ngirndaji -ya nganyi bagingiri lilingganyi
you:will:lie this LOC I I:will:lie west:side
'You remain there, I'll lie on the west side.'
(6-225) wamba goorijba
later you:will:hold:it
'Keep holding it.'
Commands need not have a second person actor. Most non-second person commands require that the addressee not intervene in an ongoing process; they do not normally request positive action from him/her. (The positive action would usually be explicitly indicated in a separate clause with second person actor.) An example is
(6-226) wamba bagiwi
later he:will:lie
Let him lie (don't get him up).'
With a first person inclusive actor, the proposal may have the effect of a first person command. This sense usually occurs in conjunction with the interjection $b a$ 'come on, lets go':
(6-227) $b a \quad$ wardbadda
come:on we:will:go
'Come on, lets go.'

See also line (32) of Text 1.
Negative commands - that is, commands not to do something, or to stop doing something - are not as a rule expressed by negating a clause in the future tense. Instead, they are usually realised by the negation of a clause in the definite present (see section 6.5.3.3 for details). There are just a few instances in the corpus in which a negated future clause expresses a command -

| (6-228) | mangaddi | wardbiri | warangbiri |
| :---: | :---: | :---: | :---: |
|  | not | you:will:go | you:will:sit |
| 'Don't go, sit.' |  |  |  |
| (6-229) | mangaddi | migama | -ngadda |
|  | not | you:will:say | to:m |
|  | 'Don't tel | me (that word) |  |

It remains unclear in what respects the two possibilities differ in meaning, and native speakers claimed both modes of expression meant the same thing.

In addition to expressing commands, the future may be used in offers, as in
(6-230) nya ngoorloogba
here you:will:drink:it
'Here, have a drink.'
and in granting permission - see e.g. line (52) of Text 1.
One further use of the future tense in proposals must be mentioned. It is used in offering advice to the addressee as to how s/he might go about doing something. For example,
(6-231) A: yiniga ngawali ngaragba
somehow spear:thrower you:make:it
B: miga ngaragba this:way you:make:it
A: 'How do you make a spear?'
B: 'Like this.'
Utterances such as these are in a sense intermediate between assertions and proposals, and contain features of each: information is exchanged, but it is also expected to be acted upon. (Note that in Aboriginal Australia in general, it seems that instruction on how to do something was and is normally given by way of example, not by a description of procedures - see e.g. Harris 1984 and Christie 1985.)
(c) Exclamations. The plain future - but again, not the plain past or present tenses in the available data - sometimes occurs in exclamations, normally of the expletive type. An example is:

> (6-232) banyangi wardbi thithi
> outside he:will:go going
> "Let him go to fucking hell!" (speaker's gloss)
(Contrast the exclamations mentioned in section 6.5.3.3 below.)

### 6.5.1.4 Irrealis tense

The irrealis tense does not have the privilege of independent occurrence: it must occur with either the potential mode (for discussion of this combination see section 6.5.3.2) or the subjunctive mood (this combination is discussed in section 6.5.4.1). In both cases it specifies the unreal status of the situation at a past time.
Many languages of the Kimberley region - including Ungarinyin (Rumsey 1982b:89ff), Nyikina (Stokes 1982:276ff), Miriwoong (Kofod 1978:182), and apparently Walmajarri (cf. Hudson 1978:77ff - Hudson does not however treat the opposition as one of mood), but not Bunuba (Rumsey pers.comm.) - have an opposition of realis vs. irrealis mOOD. Significantly, in all of these languages only the irrealis occurs in negative clauses (see the references cited above, and page 488 above). This does not of course hold true of Gooniyandi.

### 6.5.1.5 Semantic analysis of the tense system

It is proposed that the tense system can be described, and the contextual meanings of each tense accounted for in terms of two binary feature oppositions, as diagrammed in Figure 6-1. ${ }^{5}$

Figure 6-1: Gooniyandi tense system


This is of course not a standard system network: it has realisation statements which involve the conjunction of pairs of features, and past and irrealis are opposed to one another in one way, while past and present are opposed to one another in another way; the four terms of the tense system are not in mutually exclusive systems of opposition. The matrix of Figure 6-2 perhaps better encapsulates these properties.

[^29]Figure 6-2: Matrix analysis of the Gooniyandi tense system

|  | tanterior | -anterior |
| :--- | :--- | :--- |
| -unrealised | past | present |
| +unrealised | irrealis | future |

The proposed feature systems discriminate between the tenses in a semantically revealing way. Furthermore, I claim that the feature values of Figures 6-1 and 6-2 constitute the total formal meaning of the tense categories. All of the other meanings discussed above (in sections 6.5.1.1 to 6.5.1.4) are contextualisations of these formal meanings. For example, the sense of certainty and temporal proximity carried by the future (see section 6.5.1.3 above) is a contextual meaning. In combinations with the potential mode and subjunctive mood, these connotations do not exist (and so they cannot be part of the formal meaning of the category).

It is clear from these diagrams, and the preceding discussion, that the tense system conflates modal type meanings with purely temporal meanings (as does the English system - see e.g. Kress and Hodge 1979). The first system might be labeled time, the second, realisation or mood. The time sub-system is thus equatable with the common past/non-past found in many languages. In this subsystem, past and irrealis are grouped together as happening before the now of speech time, while present and future are specified as not belonging to the realm of the past. There is a linguistic correlate of this grouping of past and irrealis against present and future: the particle thaddi 'mistakenly believe' occurs with the past and irrealis tenses only.

The second system, mood, groups together the irrealis and future against the present and past. The former pair are specified as unrealised (they did not occur), while the latter pair are specified as not unrealised. (The reason for this choice of terms over the perhaps more natural [ $\pm$ realised] relates to markedness: it is clear that irrealis and future are relatively marked with respect to past and present.) A morphological correlate of this binary opposition is that only the irrealis and future occur with the potential mode, and only past and present occur with factive mood.

The contextual senses of [tanterior] and [-anterior] require no comment beyond the observation that the time may be either the time of speaking (which
it usually is), or a point of time established in the referent reality, usually the time of a referent speech event. As we have already seen, the present and future tenses may occur in reference to past events (note however that there is no evidence that the present is used to give immediacy to narrated events in the past, as is the case in English). However, the process in present or future tense is always clearly specified as not anterior to a point of time in the referent reality - typically it is a point of time established as the time of a referent speech act.

The term [-unrealised] is meant to capture the fact that the past and present tenses are used both in reference to specific and individual processes - that is, processes which occurred once, at some point in time, or during some particular period of time - and also to processes which occurred more than once, either habitually, as a characteristic of a particular participant, or generically, as a general characterising quality. In any event, the process occurred at least once, or is presented as having occurred at least once. Both past and present tenses are used in reference to hypothetical events - for instance, the past tense was used in a text to describe events that may have occurred in the past, before the arrival of whites, these events being presented as general characteristics of the earlier time. What is important here is that the events are PRESENTED BY the speaker as realised, or potentially realisable. They are evaluated as realised - as events that could have, and/or did happen. Such hypothetical events are ones which could have happened. By contrast, events which are hypothetical for irrealis and future tense are counterfactual hypotheticals - that is, the unrealised event definitely did not occur or has not yet occurred.

Processes specified as [+unrealised] did not occur, or have not yet occurred; it is always the case that a specific process is under consideration, never a generic or habitual one. That is, an event was not realised at a specific point in time. It is not indicated that the whole of a generic class of events were not realised (this meaning is expressed with the negation of past or present tensed clauses).

Now a clause in a [+unrealised] tense may be asserted, that is, the speaker may merely state that the process did not occur in the past, or that it has not yet occurred, as of the time of speech; this gives the contextual senses of counterfactual hypotheticals, and potentialities, for the irrealis, and of future hypotheticals, predictions, and so on for the future tense. Clauses in the [+unrealised] tenses may also be used in proposals - that is, they may be used in order to get someone to do something (see section 5.4, and Halliday 1985:71) - as well as assertions. Uttering a clause which specifies that the process is not realised may be used with the effect of indicating that it should have, or should
occur. This gives rise to the contextualisations of admonishments for the irrealis, and of commands, exclamations, and so on for the future. (That the future is used in commands to continue to do something does not necessarily contradict any of the above claims. Here the speaker is choosing as his/her temporal reference point some future time at which s/he is assuming that the process is not occurring: that is, s/he is supposing that the event which is presently occurring will not be occurring at some point of time in the future. Thus, it might be suggested that there is a felicity condition (see e.g. Lyons 1977:733) whereby commands to continue are appropriate only where there is a presupposition that the process will cease.)

Clauses in the present tense are also used in proposals. This occurs only in the definite mode, which is realised by the verbal enclitic -woo DEF, and only in negative commands. This contextual sense may be accounted for, I claim, in terms of the two features of the present: [-anterior], and [-unrealised]. Specifically, by negating the proposition that the process is occurring now or will occur later, and that it is not unrealised, the speaker is suggesting that the process will not occur in the near future (in this speech-context). In the circumstances of the utterance, this amounts to a strong suggestion that the event should not occur, and that the hearer should not do it.

The above remarks indicate, in outline, how the many uses of the Gooniyandi tenses may be accounted for as contextualisations of unique formal meanings.

### 6.5.2 Progressive aspect

As a rule the progressive aspect, which has allomorphs -goowa-~-wa-~-a-(see section 3.9.3.3 for details), usually occurs with accomplishment type classifiers. It does not normally occur with the extendible classifiers +A and $+\mathrm{ARNI}_{2}$, and occurs with +I only when +I replaces +BINDI , under conditions discussed on pages 202-203.

There are just two or three examples in the corpus of the progressive with the extendible classifier +A: all involve the verbal lexeme ngab- 'eat', as in ngabgoowaa 'he is eating'. And, as remarked in section 5.5.2.5 above, verbals which normally occur with extendible classifiers usually occur with the progressive when they are embedded in a LOC PP. It was suggested that the progressive may not be inconsistent with the feature [extendible], but redundant with it. If this is so, the presence of the progressive in the non-finite verb serves to convey some of the information otherwise carried in the classifier.

The progressive views an accomplishment process from a temporal
perspective before its point of accomplishment, but after it has entered into the train of circumstances that should eventually lead up to that point. There are two major possibilities. Firstly, the temporal point may be prior to the point of accomplishment, and it is always possible to refer to this part of the process that is, all accomplishment types have some temporal build up. It is the part of the process that the progressive aspect typically refers to. For example,
(6-233) baddangga baddangga
summer summer PROG it:falls
'Summer (hot dry season) is coming.'
(6-234) yoowarni -ya garndiwiddja nimin -goowa -yi
one LOC twice heal PROG it:was
'After a day or two (the wound) started healing up.'
Secondly, the temporal reference point may follow the point of accomplishment - preceding, of course, the point of completion of the process. As a rule, this possibility is available only to the classifier +ANI 'fall'. For example, (6-233) may refer either to the build up of the summer, or to part of its duration. Another example is provided by:
(6-235) gaddig -goowa -wingirni ngarlooddja
absent PROG I:could:be thrice
I could be away for three days.'

Here the process of being away is accomplished well before the three days are up; but it is not completed until the individual returns. Note that for some classifiers, such as + BINDI and +I (where it replaces + BINDI) the progressive can only refer to the preceding train. For others, such as +MI , there is sometimes a train of circumstances following the point of accomplishment, from within which the reference point may be located. The verb dawoong- 'love, like', for example, invariably occurs with the classifier +MI , and with the progressive aspect when reference is being made to the ongoing process of liking or loving someone or something: dawoonggoowaalimi means 'I like/love him/her/it.'

In the past and future tenses the progressive aspect is not normally chosen over the plain past or future - which are more informative, indicating that the process actually did or will happen and became/become completed - unless it is to temporally locate another process which occurred or will occur before the situation is completed. Examples are ( $6-179$ ) above and

| (6-236) yaniyaningi barn | -goowa | -ngi ngaddagi | -ya riwi |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| right:now | return | PROG | I:was my | LOC camp |
| yiwindi | bijngarni | -ngadda |  |  |
| rain | itemerged | on:me |  |  |

'I was almost back at my camp when rain appeared.'
More generally, any temporal point may be located within the train of the process. The present progressive of course occurs when that temporal point is the time of the speech situation.

I have said that the progressive most frequently views an accomplishment from within the 'train' of events leading up to the point of accomplishment. But up until that point in time is reached, the process itself has not yet occurred; that 'train' is not an instantiation of the process. It is rather a set of circumstances that are regarded as leading up to, even necessary preliminaries to, the occurrence of the process; consequently, there is no specific or well defined extent to the train, in general. Usually, however, the unmarked suggestion is that the accomplishment of the process is imminent, given the situation. (Quite different absolute times are involved in ( $6-233$ ) and ( $6-234$ ) with respect to ( $6-236$ ).)

When the usual sense of the progressive is modified by mangaddi 'not', it is claimed that not only didn't the situation occur, but it didn't even show signs of occurring. Thus where the choice is available, the progressive has the effect of strengthening the force of the negation. Thus, for example, the reply in (6-237) is more forceful than it would have been if the plain past tense occurred:

| (6-237) A: | ngoonyi | -ya yoodji |
| ---: | :--- | :--- |
|  | where | LOC you:put:it |
| B: | mangaddi | yoodgoowali |
|  | not | I:was:putting:it |

A: 'Where did you put it?'
B: 'I haven't put it down.'
In negated clauses the progressive normally functions absolutely, not relationally, as it usually does in positive clauses. (See discussion of example (6-236).) Depending on what the speaker takes to be the extent of the train, there are perhaps two major contextualisations.
(a) Not even an attempt was made to do the act. This sense arises in contradicting expectations to the contrary (that the deed was attempted). For example,
(6-238) ngoorloogloonayi ngambiddi 'mangaddi
I:drank:two again not
ngoorloog -goowa -limi
drink PROG I:did:it
'I drank two, but then I drank no more.'
(b) Even though an attempt was made, the process showed no signs of occurring. For example:
(6-239) lalanggadda woodijlimi -nhi jinali -ngaddi -ngga crocodile I:threw:it at:him spear COMIT ERG mangaddi nyag -goowa -limi
not pierce PROG I:did:it
I threw spears at the crocodile, but missed.'
(c) The actor did not even get a chance to do the action:
(6-240) marlami galooyingi gawi mangaddi
nothing he:found:nothing fish not
nyag -goowa -wini
pierce PROG he:did:it
'He didn't find any fish, he couldn't spear anything.'

### 6.5.3 Mode

There are three verbal categories which express speaker evaluation of the status of the situation - the desirability, likelihood or certainty of its occurrence. They are, in Halliday's terminology (Halliday 1970/1976), MODULATIONS, otherwise known as "deontic modalities". They are never used as modalities (in Halliday's 1970/1976 usage), or "epistemic modals" - that is, they never indicate the speaker's modifications of, or attitude towards the proposition expressed by the clause (see section 5.4.1). Their meaning is entirely representational: they constitute part of the experiential meaning conveyed by an utterance.

### 6.5.3.1 Desiderative mode

The desiderative mode, which is realised by -nyji DESID (see section 3.9.3.5), occurs in combination with the future tense only. It indicates that, in the speaker's assessment, the occurrence of the situation is desirable, that it should occur, or ought to occur. As I have already mentioned, the desirability lies in the
speaker's assessment of the situation. Desire or intention is not imputed to the Actor (see for instance example (6-242)), although this sense may be present (but not asserted), especially if the Actor is not the speaker:
(6-241) manyi ngabbila -nyji
food I:will:eat DESID
'I should eat (it is desirable that I do (and I want to)).'
The desiderative mode occurs most frequently in proposals. By indicating the desirability of a situation, the speaker may thereby suggest that the hearer might do something to enable it to occur. The desiderative is thus somewhat softer in its effect than the plain future tense, which presents the doing as a foregone conclusion. This can be seen by a consideration of the various senses which are typically associated with the desiderative, depending on the Actor of the clause.
(i) With a second person singular Actor, the proposal normally construes as a warning, or as a piece of advice - that it would be in the hearer's best interests to do the act (contrast the 'advice' sense of the future - section 6.5.2.3). For example,
(6-242) nginyji -ga thangarndi danymiliwa -nyji you ERG word you:will:hear:it DESID 'You want to (=should) listen.'
suggests that the speaker would be well advised (in his own interests) to listen to the story.
(ii) When the speaker is the Actor, the proposal usually contextualises as a request. Thus, for instance, ( $6-241$ ) and
$\begin{array}{lll}\text { (6-243) thangarndi gooniyandi } & \text { doowwila } & -n y j i \\ \text { word } & & \text { I:will:get:it } \\ & \text { DESID }\end{array}$
ngaddagi -ngga milyilyi
my ERG brain
'I want to get Gooniyandi into my brain.'
may be used appropriately in requesting food, and tuition in the language respectively. By contrast, the plain future tense does not so much request assistance, but suggests the speaker's determination to do the act.
(iii) Perhaps the most frequent choice of Actor is a set including the speaker and the hearer. As is the case for the optative sense of the plain future tense, the interjection $b a$ 'come on, lets go' usually also occurs. For example,
(6-244) ba wardbadda -nyji come:on we:will:go DESID 'Come on, we'd better go.'

It is difficult to pinpoint the difference in senses conveyed by the plain vs. the future desiderative in this context. However, the latter would seem to suggest less intentionality, and a greater sense of obligation on the part of the interlocutors, as the gloss to ( $6-244$ ) suggests.
(iv) With a third person Actor (as for first person Actor), the suggestion is that the hearer should do something to enable the desirable state of affairs to occur. The necessary enabling situation is often explicitly mentioned:
(6-245) jiddibma thithi thayadba gaddigboomi -nyji
you:will!lift:it going you:will:walk:it he:will:cease DESID
Lift up the child and carry it around so it will stop (crying).'
(6-246) girili ngangba milawa -nyji
tree you:will:give:him he:will:see:it DESID
'Give him the stick so he can look at it.'
As the examples above show, the situation may be evaluated (by the speaker) as desirable for one of at least two different reasons, either: it is in the Actor's interests (but not necessarily in the speaker's); or it is in the speaker's interests (but not necessarily the Actor's). Presumably there are numerous other possibilities, including desirability from a socio-cultural point of view, desirable for the hearer (but for neither the Actor nor the speaker), etc..

But the desiderative mode is not restricted to proposals (which is why I do not refer to it as an "optative"). For example,

> (6-247) barwingirni milawila -nyji
> I:could:climb I:will:see:it DESID
> 'I might climb up so as to get a look.'

In addition, it would seem that examples above such as $(6-241)$ to ( $6-243$ ) may be interpreted as assertions of desirability of the situations referred to, as well as proposals.

### 6.5.3.2 Potential mode

The potential mode evaluates a situation as an as yet unrealised possibility, given the surrounding circumstances: it indicates that the situation could or might occur, or might have occurred in the circumstances, but didn't in fact
occur, or hasn't as yet occurred. That is, the occurrence of the situation is/was expected, and ascertained to be a potentiality, based on the speaker's evaluation of the real world circumstances. It has nothing at all to do with the speaker's lack of knowledge or uncertainty concerning the occurrence or future occurrence of the situation (which is indicated by yiganyi 'uncertain' - see section 6.4.5). Indeed, in the speaker's opinion the situation has not yet occurred, or will only occur in the future given certain conditions. The potential occurs with the two [+unrealised] tenses only, the irrealis and the future. I will discuss these in order below.
(a) Irrealis potential. This combination indicates that in the speaker's estimation the situation could have happened - there were signs that it might come into being - but it didn't. A number of specific senses may be identified depending on the nature of the signs. The main ones (as far as I have been able to determine them) are:
(i) An unsuccessful attempt was made by the Actor to perform the action:


To indicate that the attempt very nearly succeeded, the particle wambawoo 'nearly' may be used - see example (6-190).
(ii) The Actor did not attempt to effect the action, but it nearly occurred anyway - usually through momentary clumsiness or carelessness, for which the necessary physical or mental adjustments were made in time. Such situations, which the Actor does not attempt to bring about, are normally undesirable in some way. In this sense, the particle wambawoo 'nearly' normally occurs (see above section 6.4.14). Some examples are:
(6-249) wambawoo gilangginaddirni
nearly it:might:have:knocked:me
'(The car) nearly knocked me.'
(6-250) wambawoo gamba -ya dinggilyanirni
nearly water LOC it:might:have:immersed
gamba -ya yalawa doowla
water LOC close I:got:it
'It nearly fell into the water, but I grabbed it close by the water.'
(iii) It looked as though the situation would occur, except that something intervened to prevent it. For example,
(6-251) giddgiddyanirni balyjangga -nyali doowla it:might:have:rolled quickly REP I:got:it 'I grabbed it before it rolled down the bank.'
(iv) The Actor desired the situation, but something intervened to prevent him/her from doing it:
(6-252) yaanya thangarndi jaggilimirni nyinlimi other word I:might:have:said I:forgot:it
I was going to tell another story, but I forget it.'
(v) An inanimate Actor nearly effects the situation: (6-249), (6-250), (6-251) and
(6-253) wambawoo giddayarni waddamba -ga nearly it:might:have:run:it flood ERG 'The flood nearly washed it away.'
(vi) Had some other situation occurred (which might have occurred), the unrealised situation would have. That is, as mentioned in section 5.6.2.1.3, the potential mode indicates the consequent of a counterfactual conditional. (5-397) is one example. In the following example, the antecedent condition is implicit. It was mentioned in the preceding discourse.
(6-254) wardngirni milaalarni
I:might:have:gone I:might:have:seen:him
'(Had you told me) I would have gone and seen him.'
(vii) Under normal conditions the situation would have occurred, but an unforeseen contingency prevented it:
(6-255) booloogoo -ngga garingi ngangyirni
[name] ERG wife he:might:have:given:him
'B. would have given him (his daughter as) a wife (but she died).'
(viii) The Actor did not get around to doing the action, though nothing prevented him/her (so s/he could have done it). Normally speaking, there is an implicit suggestion that although the action did not occur, it would have been better that it did. This use of the potential translates into English as 'should' or 'ought'. Examples are:
(6-256) jamoondoo wajgiladdirni maa
other:day I:might:have:thrown:it meat
'I should have thrown the meat out the other day.'
(6-257) manyi yan.ginngindi wardgilarninganggi
food you:asked:me I:might:have:brought:it:for:you
marlami
not
'You asked me for bread. I should have brought you some.'
(ix) The speaker believed at an earlier time that the situation would occur, though it turned out not to. (And this belief was founded on evidence.) In this case, thaddi 'mistakenly believed' can occur with the irrealis potential. See section 6.4 .4 for examples.

I do not claim that these nine senses have linguistic significance as covert categories, and they are clearly not disjoint. There are, no doubt, many more contextualisations of this category that have not yet appeared in the corpus. They are all specific contextualisations of the general meaning that the process was a potentiality. The specific contextualisations, however, are likely to be of more significance to the interlocutors than this abstract core meaning - and not all senses are glossed by native speakers in the same way.

The potential mode has, as has been mentioned already, the full situation referred to by the clause in its scope, not just the Process (referred to by the VP). But when the clause is modified by a Propositional Modifier, the potential is contained within the scope of that Modifier. In particular, the potential is contained within the scope of mangaddi 'no, not' in negated clauses. A negated potential clause is consistent with both the occurrence and the non-occurrence of the situation - since a clause in the potential logically implies the negation of the clause in the past tense: i.e. the situation did not occur. Depending on which of these obtains, whether the situation occurred or did not occur, the potential mode in negated clauses has two distinct sets of contextual senses.
(A) In case the situation occurred, a potential clause may be negated to indicate that although it occurred, the situation was not evaluated as a potentiality in the circumstances. There are three major reasons why the actual might not be evaluated as potential:
(A-i) The Actor did not attempt to do it; s/he did it unintentionally, without trying. For example,

| (6-258) mangaddi niyi | -binyi wardyirni | daddgbani |
| :--- | :--- | :--- | :--- |
| not | that | PER he:might:have:gone he:fell |

'He didn't mean to go that way (i.e. to step on the glass); (but) he fell (on it).'
(A-ii) The situation would not have occurred had some other situation
occurred. This is a counterfactual, the negative of sense (vi) above. See example (5-398).
(A-iii) The situation occurred unnecessarily - it need not have, and should not have occurred. For example,
$\begin{array}{lll}\text { (6-259) mangaddi jagyimirni } & \text { ngaddanyi } & \text {-yoo } \\ \text { not } & \text { he:might:have:spoken mother } & \text { DAT }\end{array}$
'He needn't talk to his mother like that.'
(B) In case the situation did not occur, the negation of the potential has the effect of indicating that, not only didn't the situation occur, but it was not expected to occur. The main contextualisations are:
(B-i) The Actor did not even try to do the action, which did not occur. For example,

| (6-260) mangaddi | doowyarni |
| :--- | :--- |
| not | he:might:have:got:it |
| 'He didn't try to get (the beer he'd dropped into the flooded creek).' |  |

(6-261) mangaddi wardyirni boolga nhoongjinga
not he:might:have:gone old:man by:himself
'The old man wouldn't attempt to cross the flooded creek alone.'
( $\mathrm{B}-\mathrm{ii}$ ) The Actor did not even want to do it:
$\begin{array}{ll}\text { (6-262) } & \text { mangaddi } \\ \text { not } & \text { diribyoondirni } \\ \text { 'He didn't want to go in (and he didn't).' }\end{array}$
(B-iii) The Actor didn't nearly achieve his goal; s/he missed out by a long way.
(6-263) ngaaddi wailaddi mangaddi gardgooloonirni stone I:threw:it not I:might:have:hit:him 'I threw the stone, but didn't nearly hit him.'
(B-iv) The Actor didn't undertake the action because of other - personal or social — considerations:

| (6-264) mangaddi | nganggilirni | maa |
| :---: | :--- | :--- |
| not | I:maddaght:have:given:him meat |  |
|  | I wy |  |
| I wouldn't give it to him; it's my meat.' |  |  |

A comparison of the contextualisations reveals that two senses of the potential are negated in each context. They are: sense (i), that the Actor tired to do it,
giving (A-i) and ( $\mathrm{B}-\mathrm{i}$ ); and sense (viii), that no convention or circumstance stood in the way of the Actor doing the action, which gives rise to (A-iii) and (B-iv). What is consistently negated is the potentiality of the situation, not its occurrence. ( $\mathrm{A}-\mathrm{i}$ ) and ( $\mathrm{B}-\mathrm{i}$ ) deny that any attempt was made; ( $\mathrm{A}-\mathrm{iii}$ ) and ( $\mathrm{B}-\mathrm{iv}$ ) deny that there was no constraint on the Actor inhibiting him from performing. This might be seen as further evidence in support of the claim that this category has the full clause in its scope.

It is likely that other senses are also capable of being negated in both contexts, given appropriate speech situations. For example, one would expect that next to (ii) (that the situation nearly occurred), there would be a contextualisation 'didn't nearly occur, but really occurred with plenty of leeway' in addition to (B-iii) 'didn't nearly occur, but missed by a long way'.
(b) Future potential. The future potential evaluates a situation as potential in the future, again on circumstantial evidence. In this case, the circumstantial evidence is what the speaker imagines will be the circumstances, or possible circumstances at the time when the situation is expected to occur. That is, the speaker evaluates the situation as likely to occur should circumstances be suitable. There is always a definite temporal location in mind. Unlike the plain future tense, and the subjunctive future, the future potential is never used in predicting future occurrences. Its projection into the future is tempered by a qualification that the future occurrence of the situation is contingent upon factors out of the control of the speaker and/or Actor.

Thus it is frequently found as the consequence in future conditionals. For example,

| (6-265) jaddi | marlami | wardbingirni |
| :---: | :---: | :--- |
| if | nothing | I:could:go |
| 'If nothing, I'll come back (here).' |  |  |

(Note: such clauses indicate the potentiality of the future situation given another situation. This parallels the irrealis potential in the counterfactual construction.)

The condition need not be made explicit:
(6-266) wardbingirni yaningi -yoo
I:could:go now DAT
'I could go soon.'
(6-267) monday -moowa wardbingirni -nganggi
ON I:could:go to:you
'I can only come on Mondays.' (That is, only on Mondays am I able to come - the other days there is no lift available.)

Clauses with the future potential are frequently modified by Propositional

Modifiers, primarily mangaddi 'no, not', marlami 'not', and yiganyi 'uncertain'. As for the irrealis potential, in negated clauses what is asserted is that the situation is not a significant potentiality given the expected circumstances: it is judged highly unlikely to occur (in these circumstances). Typically it strongly denies that the Actor would make any attempt to bring the situation about, no matter how easy or tempting it would be for him to do so, in the circumstances. This strong denial of intention is clear in

| (6-268) mangaddi diribbingirni nhoowoo ngooddoo -yoo mayaroo |  |  |
| :--- | :--- | :--- | :--- |
| not | I:could:enter his that | DAT house |
| I wouldn't think of going in; it's his house.' |  |  |

It is likely that the other types of potentiality identified above for the irrealis potential also occur in the future; the lack of examples is probably a reflection of the limited corpus.

There is some evidence that when yiganyi 'uncertain' contains a clause in the future potential in its scope, what is being asserted is that the potentiality of the situation is not certain (given the surrounding conditions). The following pair of examples lend support to this interpretation:
(6-269) yiganyi barnbingirni moolooddja -yidda
uncertain I:could:return [name] ALL
'I might return to Mulurrja (sc. if I can get someone to take me).'

| (6-270) | ngaja | yiganyi bijboowarnirni wamba mangaddi |
| :--- | :--- | :--- | :--- |
| younger:brother uncertain he:could:emerge later not |  |  |

(6-270) occurred in a context in which the potentiality of the speaker's brother's arrival was uncertain. The speaker had not heard from his brother for some time, and did not know what he had been doing, or the circumstances surrounding his actions.

The potential mode seems to normally occur in assertions, and only rarely in proposals. The only instances of the potential in proposals are of the irrealis potential being used as a type of indirect post hoc command to the effect that the addressee shouldn't do (again) something that $\mathrm{s} / \mathrm{he}$ has done, or should do something that $\mathrm{s} / \mathrm{he}$ hasn't done. Thus:
$\begin{array}{lll}\text { (6-271) mangaddi } & \text { jagjimirni ngaddanyi -yoo } \\ \text { not } & \text { you:could:say mother DAT } \\ \text { 'You shouldn't talk to your mother (like that).' }\end{array}$
(Compare (6-259) above.)

### 6.5.3.3 Definite mode

The definite mode is realised by the enclitic -woo DEF, which, as has been mentioned already, is not restricted to occurring in VPs. Definite mode occurs with the three tenses past, present and future, but not, apparently, with the irrealis. It indicates that the speaker evaluates and asserts the occurrence of the situation - at a past, present, future or unspecified time - as definite or certain. As was the case for the potential, this evaluation would appear to be based on the speaker's assessment of the surrounding circumstances, and their likely outcome.

If the potential and desiderative modes are typically associated with assertions and proposals respectively, the definite mode finds an unmarked association with exclamations (see section 6.5.1.3 above). The definite can occur in exclamations with each of the three tenses. As distinct from, the expletive type of exclamation mentioned earlier in connection with the unmodalised future tense, these exclamations are of a type that draws attention to the occurrence of the situation - just as occurs when -woo is encliticised to nominal constituents, drawing attention to the existence of some entity or place (see section 6.3.9). Examples in the three tenses are, respectively,

| (6-272) | gilbala | -woo |
| :--- | :--- | :--- |
| I:found:it DEF |  |  |
|  | I found it!' |  |

The definite mode occurs but rarely in combination with the past and future tenses. The handful of examples of these combinations are all used as exclamations, and little more can be said about the combinations. But there are numerous examples of the combination with the present; this combination is
not restricted to exclamations and shows an interesting range of uses.
(a) Exclamations. Firstly, in exclamations, the speaker may draw attention to a situation that is going on at the present time. For example, (6-273) above COULD be uttered whilst the speaker is in motion. But more usually, the situation is not one which has already started, but, rather, it is one which is about to start (if it is an extendible), or about to occur (if it is an accomplishment). Thus, a more likely circumstance in which (6-273) might be uttered is just as the speaker is about to take his/her leave. And (6-275) refers to an imminent accomplishment:
(6-275) gamba -ya yimininyganoo -woo
water LOC he:drowns DEF
'He'll drown in the water!'
(b) Assertions. A clause such as (6-275) (and probably also (6-273)) may be uttered as an assertion, in which case the speaker merely states that the occurrence is imminent. The present progressive - yimininygoowaani 'he is (in the process of) drowning' - could be used to describe the same events (see 6.5.2). But it would not carry the same sense of urgency as (6-275), and would probably be unlikely as an exclamation. Secondly, by comparison with the 'future time' sense of the plain present, the present definite suggests that the situation is far closer to actualisation and threatens to occur. Furthermore, the situation is usually seen as undesirable in some sense (as in (6-275), and see also examples below).

When a clause in the present definite is negated, the speaker is normally denying that the situation is about to occur, and thus, by suggestion, that the Actor has any intention of doing the act - or in fact that there is any chance that s/he will do it. For example,

| (6-276) | mangaddi not | wardgaddoo we:go | $\begin{gathered} -w o o \\ \text { DEF } \end{gathered}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 'We won't | go', or 'We | on't wa | to go. |  |  |
| (6-277) | mangaddi <br> not | diribngira I:enter | $\begin{gathered} \text {-woo } \\ \text { DEF } \end{gathered}$ | mangaddi <br> not | ngaddagi my | mayaroo house |

'I won't go in (there is no chance I'll go in); it's not my house.'
At first glance sentences such as these, which seem to strongly deny the occurrence of the situation, would appear to involve a switch in meaning from the expected 'not definite' to 'definitely not'. However, to assume this would be to confuse the type of definiteness of the Gooniyandi category with the meaning of the English word definite. The definiteness at stake here, as has been mentioned
above, is based on an evaluation of the circumstances: thus the preceding two example sentences claim that the evaluation of the situations 'we are going' and 'I am going inside' (respectively) as definite - that they are imminent and threaten to occur - is mistaken. These sentences do not claim that the non-occurrence of the situation is inevitable or imminent. Thus it seems that the apparent strong denial in ( $6-276$ ) and (6-277) is illusory: rather, it is a strong claim that is being denied.

This analysis is further strengthened by an example of a slightly different type, which involves the generic sense, instead of the present time sense of the present tense. The clause
(6-278) mangaddi milaa -woo
was elicited in response to 'he doesn't see well'. It is evident that this clause does NOT assert that the speaker evaluates the Actor as definitely or certainly unable to see anything. What is asserted is the negation of milaawoo 'I evaluate the facts as indicating that he sees (anything)'. Clearly here it is the strong claim - that he sees well (i.e. everything around) - that is being negated.

But the most frequent use of the present definite is in the lest construction discussed in section 5.6.2.1.3. Another example is
(6-279) mirlimirli -ya yoodbidi wangaddagganoo -woo
paper LOC we:will:putit it:gets:lost DEF
'We'll put the words on paper lest they get lost.'
In a paratactic clause complex in which the logical relationship between the clauses is 'if-then', the consequent may be marked by the present definite, especially if it is undesirable. (The antecedent is in the irrealis potential.) For example,
(6-280) diribngirni wamba nirdnganoo -woo
I:might:have:entered later I:stick DEF
'I might have gone in, (in which case) I'd still be stuck.'

There is a single example in the corpus of yet another variant of the conditional, in which the ANTECEDENT is in the present definite:
(6-281) ngiddinyi diribgondoo -woo nirdgani
fly it:enters DEF it:gets:stuck
'The fly goes in (the honey) and he's stuck.'
(c) Proposals. As a proposal a clause in present definite with first person Actor usually constitutes a threat.
(6-282) nyagginyboo -woo
I:spear:you DEF
'(Careful or) I'll spear you.'
(6-283) thoolnglimi -nhi nanggidlooni wamba gardginyboo -woo I:kicked at:him I:missed:him later I:hit:you DEF '(Although) I missed when I kicked at him, I'll still hit you.'

What is involved in this type of threat is that unless the addressee modifies his/her behaviour appropriately, an undesirable (for him/her) consequence will ensue. A clause may occur expressing the type of action that the addressee should take to avoid this consequence. The resulting sentence is then a lest type, used as a proposal.

In case the addressee is an undergoer and the Actor is a third person, it will probably be a warning to him or her:

| (6-284) | moodiga | milawa nginyii | -rni | gilangginggaddoo |
| :--- | :--- | :--- | :--- | :--- |
| car | you:will:see:it you | SEQ it:knocks:you | DEF |  |
| 'Watch out or the car will knock you.' |  |  |  |  |

Finally, in case the Actor is a third person, and the clause does not involve the addressee, as in (6-275), the purpose may be to elicit intervention from the hearer - in this case, to help the person out of the water.

In proposals, the present definite most frequently occurs in negated clauses functioning as negative commands - commands to desist from doing, and commands not to do. For example,

| (6-285) mangaddi goomboorna | bijginyjarnoo | -woo |
| :---: | :--- | :--- | :--- |
| not early | you:come | DEF |
| 'Don't come early.' |  |  |

(6-286) wilawoo gadboo wayandi mangaddi gajginyja -woo finish you:will:leave:it fire not you:cut:it DEF 'Enough. Stop. Don't cut any more firewood.'
As is the case for positive commands, the negative command need not have a second person Actor. These usually have a sense 'don't let' or 'don't allow', requesting that the hearer try to prevent the event from occurring. For example,

| (6-287) mangaddi maa ngabga | -woo |  |
| :---: | :--- | :--- |
| not | meat he:eats:it | DEF |

'Don't let him eat the meat.'
(As above, the negative command involves the negation of a 'strong' possibility (that the situation will occur), not the evaluation of the situation as nonoccurring.)

These uses of the present definite may be explained in terms of the analysis of the present tense presented in section 6.5.1.5. Roughly, in using the definite mode in combination with the present tense the speaker evaluates the occurrence of the situation as definite or certain, on the basis of factual evidence of the surrounding conditions, etc.. However, s/he does not assert a particular temporal or realisation value for it - s/he does not assert it to be anterior or posterior to the present time, nor realised or unrealised as of the time of the speech situation. The main possibilities, as outlined for the present tense (section 6.5.1.2), occur also with the present definite: present time, which appears to occur in exclamations only; future time, in all three speech act types, referring to imminent occurrences; generic, in assertions (see example (6-289)); and hypothetical, in conditional constructions (example (6-281)).

In accordance with a general principle that the speaker will normally make the strongest assertion consistent with the facts as s/he understands them, the speaker uses the present definite only if s/he believes the process not to be both realised (i.e. [-unrealised]) and [+anterior] - in which case past tense would be used; or [tunrealised] and [-anterior] - in which case the future tense would be used. In other words, use of the present definite is normally concurrent with the speaker's belief that the process has not yet occurred (in which case it would belong to the past), and that it is not a projection into the future. This explains why, as remarked in section 5.6.2.1.3, the apprehensional construction does not occur if the situation against which the avoidance action was taken did in fact occur. If, however, the situation to be avoided did not occur in the past, the present definite clause may refer to it, the present tense being marked as [-anterior].

Unless there is some possibility or suggestion to the contrary - that the situation is NOT certain to occur - the present tense will not be marked as definite. Where reference is being made to a presently on-going situation, this presumably invokes a contrast with the possibility that it is not occurring. More interesting is the future time sense, where the definite marking, paradoxically, suggests that the situation need not in fact occur. The situation is evaluated as definite, given certain circumstances. The implicit suggestion is that if one (or more) of these circumstances is changed the occurrence is no longer assured. Thus there can be an "out" whereby the undesired situation may be avoided, as in the 'lest', 'threat/waming', and 'indirect command' uses.

### 6.5.4 Mood

### 6.5.4.1 Subjunctive mood

The use of subjunctive mood - realised by the verbal enclitic -ja- - in subordinate clauses has been discussed already, in section 5.6.2.1.3 above. The subjunctive is not, however, restricted to occurring in subordinate clauses, and is frequently found in independent clauses in the unreal tenses (future and irrealis); the combination with real tenses (past and present) is rare in independent clauses. It follows that the Gooniyandi subjunctive is not primarily a device for marking the subordinate status of the clause, as the subjunctive appears to be in languages such as French (Lyons 1968:312).

Two major uses of the subjunctive can be identified in independent clauses. Firstly, there is the interpersonal use in which it is asserted or proposed (in the sense of 5.4.1) that the proposition expressed by the clause is hypothesised, supposed, reckoned, wished, hoped, claimed, or whatever. In other words, the difference between an unmodalised clause and the clause in the subjunctive is parallel to the difference between $P$ and $\mid-\mathrm{P}$ (cf. Mendelson 1964:30, McCawley 1981:39), and - $j a$ - SUBJ functions like the operator $\mid$. This means that the speaker is not uttering a proposition about the world, but a proposition about a proposition about the world. This use of the subjunctive translates into English as 'I assert, claim, hypothesise, predict, hope, know, wish, declare, reckon, (etc.) that P', or 'let's suppose, hypothesise, assume, (etc.) that P'. This interpersonal use also occurs in conditional hypotactic clause complexes, in which the antecedent clause - which refers to the hypothesised condition - occurs in subjunctive mood (section 5.6.2.1.3).

Secondly, there is an experiential use, in which the subjunctive 'operator' becomes a part of the experiential meaning conveyed. That is, the speaker asserts that someone hypothesises, supposes, reckons, wishes, hopes, or claims (etc.) the proposition to be the case. This involves a further 'embedding' of the proposition: i.e. the speaker asserts (someone asserts or proposes (it is hypothesised/believed/entertained/hoped (etc.) that P)). Compare the two uses, experiential and interpersonal, of the particles yiganyi 'uncertain' and thaddi 'mistakenly believed' - see sections 6.4.5 and 6.4.4 respectively.

In the following two subsections I will examine the contextual meanings of the subjunctive in independent clauses, discussing first the senses that arise in assertions, then those which arise in proposals. In these subsections, each tense combination will be taken in turn. It is important to stress that there is no suggestion that the senses identified below are linguistically significant.

### 6.5.4.1.1 Subjunctive mood in assertions

[1] Future subjunctive. In independent clauses, the subjunctive is most often found with the future tense, and a considerable proportion of independent clauses in the corpus - I would estimate around a quarter to a third - which project into future time, are in the subjunctive mood. The following contextual senses are attested. Of course, it should be borne in mind that each example is open to multiple interpretations; I give the interpretation appropriate to the situation in which the example occurred, together with brief remarks on that situation.
(a) Interpersonal. Here, as I have already said, the speaker asserts a claim, hypothesis, or whatever, not a proposition.
(a-i) Predictions. It has already been mentioned (section 6.5.1.3) that the use of the plain future tense makes a claim to the occurrence of a situation at a given point of time in the future, or otherwise immediately. Furthermore, it has a far stronger sense than merely predicting that a situation will occur, and as I have said, it is never used in making general non-time-bound predictions (section 6.5.1.3). The subjunctive future is used when the speaker does not subscribe strongly to the future occurrence of the situation; s/he sees it as subject to some uncertainty. This is normally because s/he does not have adequate factual evidence on which to base the statement: $s /$ he is simply guessing, or predicting that it will happen. In the following example the speaker was merely predicting what I would do after I left him.

| (6-288) | babligaj | -nhingi | ngilanggoo balma | yoowarni |
| :---: | :---: | :---: | :---: | :--- |
| pub | ABL | east | creek | one |
| thood | $-j a$ | -winggani |  |  |
| descend | SUBJ | FUT+(2sg)N+ANI |  |  |

'From the pub you'll go east, and cross one creek.'
Another example is the second clause of the paratactic clause complex in example (6-181).
(a-ii) Truths. The subjunctive future may be used in reference to future certainties, which, however, the speaker is unable or unwilling to locate temporally. For example, in the Kimberley region, which has a well defined wet season, everyone takes it for granted that the rivers will regularly rise and fall throughout the season. However, exactly when events such as described in (6-289) will occur can't be known for sure.
(6-289) waddamba yawimbiddi -ya -wani birij -ja
flood recede SUBJ FUT+ANI bridge LOC 'The floodwater will eventually recede from the bridge.'
(a-iii) Claims. The speaker may use the subjunctive in making a claim about the future (conceming an event which is neither a truth, nor a prediction). For example,
(6-290) ian ward -ja -wi thithi
go SUBJ FUT+I going
'Ian will be going (sometime).'
This clause has been classified as a claim since at the time it was uttered, the speaker had only hearsay evidence (from the individual himself) that Ian would shortly be leaving the district. The claimed situation may by temporally unlocated or located:
(6-291) yaningi ngaaddi ngang -ja -winyji now stone give SUBJ FUT+(1sg)N+(2sg)A+DI '(I claim that) I'm going to give you money now.'
(6-292) yaningi -nyali mooyoo bagi -ya -wingani now REP sleep lie SUBJ FUT+(1sg)N+ANI 'I'm ready to go to sleep.'
(a-iv) Guesses or suppositions. The speaker need not subscribe as strongly to the occurrence of the situation as to predict it: s/he may just guess, suppose, hope, or entertain it as a possibility; it need have no factual basis. (Compare the potential mode, which indicates an evaluation based on the surrounding circumstances - see section 6.5.3.2). For instance,
(6-293) niyaji -ya warang
this LOC sit $\quad$ SUBJ
thooddi
yoowarni -ya wik
one LOC week
'I guess/think they'll stay until next week.'
(b) Experiential. (b-i) Desire. The future subjunctive may be used to suggest that the actor desires or wishes the situation to occur, but for various reasons s/he may be unable or unwilling to immediately engage in it. An example is
$\begin{array}{clll}\text { (6-294) Jack -ngga } & \text { mila } & \text {-ya } & \text {-wingga } \\ \text { ERG see } & \text { SUBJ } & \text { FUT+(2sg)A+A } \\ \text { 'Jack wants to see you.' }\end{array}$
Where the actor is the speaker, it is impossible to decide whether the speaker is expressing his desire (as a fact), or a wish (as an interpersonal modality). Examples such as line (51) of Text 1 could be interpreted either way, as can

| (6-295) bithawaalimi mooyoo bagi | -ya | -wingani |
| :--- | :--- | :--- | :--- | :--- |
| I:am:getting:stiff sleep lie SUBJ | FUT+(1sg)N+I |  |
| I'm getting stiff, and want to go to sleep.' |  |  |

As usual, it need not be the actor who desires the situation:

| (6-296) | niyi | -ngga | ward | -ja |
| :--- | :--- | :--- | :--- | :--- | -wina

Negation of a clause in the subjunctive future usually suggests that there is no desire to do the action:
(6-297) mangaddi mila -ya -winya
not see SUBJ FUT+(1sg)N/(2sg)A+A
'I don't want to see you.'
(b-ii) Attempt. There may be a suggestion that the actor will try to do the action. Thus,
(6-298) lambardi -ngga thaanoonggoo doow -ya -wa
child ERG up get SUBJ FUT+(3sg)N+A
was offered in response to the English prompt "The child will reach up and try to get it'.
(b-iii) Ability. In a couple of examples the particle yiganyi 'uncertain' calls to question the ability of the actor to effect the process. For example,

| (6-299) gool | -ya | -wili | yiganyi | dirib |
| :--- | :--- | :--- | :--- | :--- |
| try | -ja |  |  |  |
| try | SUBJ | FUT+(1sg)N+DI uncertain enter | SUBJ |  |
| -wingi | jaddi | marlami | barnbingirni |  |

My explanation for this apparently unrelated sense of the subjunctive is that the speaker is here indicating his uncertainty towards the proposition that he will be
able to effect the action. Note that in all cases in which this sense occurs the action for which ability is claimed is not located at a definite point of time in the future.
[2] Irrealis subjunctive. The irrealis tense combines with the subjunctive mood as well as the potential mode. The irrealis subjunctive and the irrealis potential contrast as follows. The irrealis potential implies that the speaker has evaluated the circumstances surrounding the unrealised situation, and concluded that it might have occurred in the normal run of things, had things gone right, whereas the irrealis subjunctive requires no such factual basis. It merely asserts, claims, hypothesises (etc.) the proposition that the situation might have occurred when it didn't. There need be no evidence backing up this hypothesis though presumably it will normally be something which is not logically impossibly. For example, in uttering

| (6-300) yoowooloo | -ngga marni | -wa | gard | -ja | -yooni |
| :--- | :--- | :--- | :--- | :--- | :--- |
| man | ERG sister his hit | SUBJ IRR+BINI |  |  |  |
| 'The man might have hit his sister (though I know he didn't).' |  |  |  |  |  |

the speaker merely supposes that the man might have hit his sister ('I suppose he might have hit her'). But had the irrealis potential gardyoonirni occurred instead, it would indicate that there were definite signs that the situation was going to occur. The contextual meanings overlap with those identified for the future subjunctive, and include the following.
(a) Supposition or claim. An example is (6-300) above.
(b) Obligation. Use of the irrealis subjunctive as a plain independent supposition is decidedly rare. Either it is followed by a clause indicating a consequence of the supposition (see section 5.6.2.1.3), or there is a suggestion that the supposed situation OUGHT to have occurred - that it would have been better that it did occur. ( $6-300$ ) would usually suggest that the man ought to have hit his sister. Thus:
(6-301) maa thoowoorndoo waj -ja -aloddi
meat rotten throw $\operatorname{SUBJ}$ IRR+(1sg)N+ADDI
marlami
nothing
'I could (and should) have thrown out the rotten meat, but I didn't
bother.'
$\begin{array}{llll}\text { (6-302) } \begin{array}{lll}\text { word } & \text {-ja } & \text {-ala }\end{array} & \text {-nganggi } & \text { nyinlimi } \\ \text { bring } & \text { SUBJ } & \text { IRR+(1sg)N+A } & \text { on:you }\end{array}$
But this sense of the irrealis subjunctive, i.e. counterfactual supposition, is more naturally proposed than asserted, particularly if the actor is the addressee. The suggestion of obligation is still present: the hearer ought to do the action.
(c) Desire. The actor may have wanted to, or thought of engaging in the action, but for some reason did not. There is no suggestion that s/he made any attempt to act. For example,
(6-303) ngab -ja -ala milala yaanya yoowooloo
eat SUBJ IRR+(1sg)N+A I:saw:it other man
gadlooni
I:left:it
'I wanted to eat it, but saw the other man (whose food it was), and left it.
(6-304) dirib -ja -yoondi yoowayi nirdganoo -woo enter SUBJ IRR+BINDI he:was:afraid he:sticks DEF 'He wanted to go inside but was afraid of getting stuck.'

In contrast to the irrealis potential, there is no suggestion in (6-303) that the speaker tried, or made any move towards eating the food, and no suggestion in (6-304) that any attempt or move towards effecting the action was made.

As is the case for negated irrealis potential clauses - and for the same reasons - a negated irrealis subjunctive clause is consistent with both the occurrence and the non-occurrence of the situation. There are no examples of the irrealis subjunctive in negated independent clauses where the situation occurred - but cf. example (5-398). But when the situation did not occur, the negation of the irrealis subjunctive strengthens the negative sense, indicating that not only did the process not occur, but it could not, or would not occur: the speaker holds it as a virtual impossibility. In effect, it is denied that the occurrence of the situation is entertained or suggested, or that the actor wanted to do it. The following examples illustrate the latter, experiential sense:
$\begin{array}{llll}\text { (6-305) mangaddi gard } & \text {-ja } & \text {-alooni } \\ \text { not } \quad \text { hit } & \text { SUBJ IRR+(1sg)N+BINI } \\ \text { I wouldn't hit him.' (I had no intention of doing so.) }\end{array}$

> (6-306) mangaddi dirib -ja -ayoondi yoowayi not enter SUBJ IRR+BINDI he:was:afraid 'He wouldn't go in; he was scared.' (He didn't entertain the notion of going inside.)

Contrast the typical senses of the negative irrealis potential - see section 6.5.3.2 above.

There is one example available where the interpersonal sense is denied: that is the speaker denies that the proposition could be claimed, entertained, believed, or whatever. It is:
(6-307) mangaddi waj -ja -awaddi wamba -nyali goorijga not throw SUBJ IRR+ADDI later REP he:holds:it 'He can't have thrown it away (because) he's still got it.'
(Note the English gloss involves the internal sense of because - see Halliday and Hasan 1976:257.)
[3] Past subjunctive. The subjunctive occurs far less frequently in independent clauses in real tenses, i.e. past and present, and it is impossible to be sure of the meaning intended. However, the present framework provides for reasonable interpretations of the examples available. With the real tenses nonindicative carries the force of 'allegedly'. Both the interpersonal uses, in which the speaker alleges or reckons that the situation occurred, and the experiential uses, in which someone else (usually the actor) alleges, or is in a position to allege that the situation occurred, occur. By "allege" it is meant that the speaker/actor attests to the validity of the proposition in his/her opinion or estimation. This allows that s/he may be mistaken, and the situation did not occur.
(a) Interpersonal. A typical example involving the interpersonal sense of the past subjunctive in an independent clause is (6-308). This comes from a text in which a police posse come across the recently vacated dinner-camp of a group of Aborigines they were following. The head tracker asserts (to the policemen):

| (6-308) $n g a b$ | $-j a$ | - widda ngamoo | -nyali |
| :---: | :---: | :---: | :---: |
| eat | SUBJ (3pl)N+A before | REP |  |
| 'They were eating here not long ago.' |  |  |  |

By using the subjunctive here the speaker indicates that the proposition that they had eaten there recently was determined by circumstantial evidence, and that $s / h e$ is not prepared to assert unreservedly to the proposition as a fact. Presumably there is, or may be, some uncertainty as to whether or not the situation occurred.

A more appropriate English translation might therefore be 'I reckon/I'm telling you/it looks as though (etc.) they were eating here a short while ago'. (6-308) is typical of the couple of examples available - the speaker has adequate evidence to the truth of the proposition, but $\mathrm{s} / \mathrm{he}$ is not relating (a set of) events. Rather, $s /$ he is vouching for the validity of the proposition.
Compare the effect of this modalisation with the other possibilities: propositional modification by yiganyi 'uncertain' of the past tense - yiganyi ngabbidda ngamoo-nyali (uncertain they:ate before-REP) 'it is/I am uncertain that they were eating here a while ago'; and the irrealis subjunctive - ngabjayoodda ngamoo-nyali (they:might:have:eaten before-REP) 'suppose (against the facts) that they were eating here a little while ago'.
(b) Experiential. The experiential use is exemplified in the following example. (The relationship between the clauses here appears to by paratactic, not hypotactic.)

> (6-309) boolga wardji -widdangi mooyoo bagi -ya -widdi old:man he:went to:them sleep lie SUBJ (3pl)N+I 'The old man went up to them thinking they were asleep.'

This sentence comes from a description of an old man who met up with two young men who offered him food. They camped together, and during the night, the old man sneaked up on them when he thought they were asleep, in order to kill them. (He could not know they were asleep until he got up close to them; they could be feigning sleep. Here the events are narrated from the perspective of the old man.)
[4] Present subjunctive. I can only suggest that a similar explanation can be invoked for the two available instances of independent use of the present subjunctive. Consider:

$$
\begin{array}{lllll}
(6-310) \text { yaadi } & \text { ngarloodoo warang } & \text {-ja } & - \text { wadda } & \text {-ddi } \\
\text { we(U) three } & \text { sit } & \text { SUBJ } & \text { PRES+(1U)N+I } & \text { pa } \\
\text { 'We're all sitting here (I tell you).' } & &
\end{array}
$$

(Contrast (6-320) below.) It may be that the speaker chooses the subjunctive in cases such as this in order to avoid stating the obvious, by intruding his own attitude. That is, I suggest as a possibility that utterances such as (6-310) have closer translation equivalents in English biclausal constructions such as 'I reckon/tell you that we're sitting here'.

In a single example the present subjunctive was used with the sense that the action was done hard, or energetically:

## (6-311) ward -ja -ngiri go SUBJ PRES/(1sg)N+I 'I walk hard.'

This sense is usually expressed by means of the present tense together with the adverbial mayaaddayadda 'hard'. It is likely that this sense arises by implication, from the assertion 'I reckon I walk', 'I claim to walk', as it may for these English glosses. Compare the use of the irrealis category in the habitual/generic senses in Mangarayi (Roper River, Northern Territory) - see Merlan (1981: 196-198).

### 6.5.4.1.2 Subjunctive mood in proposals

Unreal subjunctive clauses (but not real ones) may be proposed as well as asserted.

Predictably the effect of proposing a clause in the future subjunctive is less direct and threatening than is proposing a clause in plain future tense. Whereas the latter has the force of a command (section 6.5.1.3), the former amounts to a request of permission. Consider, for example, the turns in the reported dialogue of (6-312):

iii) gay ward -bina -yi migamingadda

OK go FUT+(3pl)A+A du he:told:me
i) "I'm going", I told the boss.'
ii) "II might (would like to) take my two horses".'
iii) "'OK, take them", he told me.'

The speaker moves from his assertion to the effect that he's on his way, realised by the clause in present tense (line (i)), to a wish or request that he take the horses, realised by the future subjunctive of line (ii). The addressee evidently interprets this as a request, in turn granting permission, by use of the interjection gay 'O.K.', and the plain future (line (iv)). He then switches to a future subjunctive (line (iv)), making the claim that he will be going too, or perhaps a temporally unlocated assertion (see above). See also Text 1, lines (51)
and (52), and

| (6-313) mangaddi | jidibangginmi | ngidi | -ngga | $-r n i$ |
| :--- | :--- | :--- | :--- | :--- |
| not $\quad$ you:were:lifting:it:up | we(R) | ERG | SEQ |  |
| gool | -ya | -widi |  |  |
| try | SUBJ | FUT+(1R)N+DI |  |  |
| 'You lot couldn't lift it up; let us try now (please).' |  |  |  |  |

When proposed, irrealis subjunctive clauses have senses almost diametrically opposite to the future subjunctive. It appears that in proposing an irrealis subjunctive, an interpersonal sense of the subjunctive is invoked and proposed - that is, the proposition is hypothesised, entertained, or whatever. By contrast, when a future subjunctive is proposed, it is an experiential sense of the subjunctive that is invoked - typically sense (b-i), desire (see above). If the future is used in requesting, the irrealis occurs in offers of permission, and in criticising someone for non-action. In both of these cases the process has not occurred.

The first of these senses arises where some constraint (such as a social constraint) prevents the hearer from doing the action:
(6-314) gawi -yidda uxard -ja -wiri jaji -nhingi fish ALL go SUBJ FUT+(2sg)N+I something ABL wiliwili ward -ja -anyja fishing:line take SUBJ FUT+(2sg)N+A 'If you're going fishing, why don't you take (my) fishing line?'

The second sense arises when there is no such constraint, and the person has failed to do something expected of him/her. Thus:
(6-315) jaji -nhingi gard -ja -anyjooni ngaddagi thadda
something ABL hit SUBJ (2sg)N+BINI my dog
'Why don't you hit my dog?' or 'You should have hit my dog (because of its threatening behaviour).'

An even stronger sense of disapproval may be obtained by negating the irrealis subjunctive (in the context of the non-occurrence of the situation), thus rebuking the addressee for failure to act competently. ( $6-316$ ) was given as an appropriate mode of rebuking someone for not holding a fence stake properly as the speaker was hammering it into the ground.

## (6-310) mangaddi goorij -ja -anyja not hold SUBJ IRR+(2sg)N+A 'Can't you hold it (properly)?'

Finally, I give an example of the irrealis subjunctive in a rhetorical question:
(6-317) jaji -nhingi yoowooloo dirib
something ABL man
sonter
'Why doesn't (or wont) he go inside?'

### 6.5.4.2 Factive mood

As we have seen, the factive mood, realised by the enclitic -wila-, occurs in a class of subordinated enhancing clauses of time which neatly complements the conditional subjunctive construction (see section 5.6.2.1.3), and in a class of "relative" type clauses which modify either an entity or a place within another clause (see sections 5.6.2.2.2 and 5.6.2.2.3). Furthermore, as is the case for the subjunctive, the factive is not restricted in distribution to subordinate clauses. It occurs in independent clauses, including clauses in paratactic clause complexes. Again, there is no reason to presume that -wila- signifies (or primarily signifies) a relation of subordination between the clauses.

The factive mood - which as has been mentioned already, is restricted to occurring with [-unrealised] tenses (i.e. past and present) in all available examples - assigns factual status to the proposition expressed by the corresponding plain tensed clause, indicating that in the speaker's estimation it is a fact. As suggested for the subjunctive, the factive mood behaves like the logical operator 1 , and may be reasonably glossed 'it is a fact that ... ${ }^{\prime}$. (It never has the sense 'the fact that'.) Unlike the subjunctive, the factive mood appears to have interpersonal uses only. Some examples are:
(6-318) moodiga miga gad -gila -wini mangaddi drivimbiddini car like:that leave $\operatorname{FACT}+\mathrm{BIN}$ not they:drove:it 'It's a fact that they left the car, they didn't drive it.'
The major contextual senses of the factive exhibited in the data are the following.
(1) It may be used with the sense that the action was done habitually (example ( $6-319$ )), and in stating the obvious (example ( $6-320$ )).
(6-319) ward -gila -ari barnbadda
go FACT PRES+(3sg)N+I slowly
'She walks slowly.'

i) 'What are we doing.' ii) 'We're sitting.'

These may be compared with similar uses of the subjunctive - see examples ( $6-311$ ) and ( $6-310$ ) above, respectively. It would appear that whereas the subjunctive is speaker/actor orientated, the factive shows primarily hearer orientation. That is to say, the factive is frequently used by the speaker to remind the hearer that s/he knows that the situation occurred, and frequently translates as 'you know'. This comes out clearly in the contrast between (6-319) and (6-311); in the former, but not the latter, the speaker and hearer had previously discussed the walking pace of the actor.
(2) Secondly, the factive has an important textual function. Independent clauses in the factive mood tend to occur towards the beginning and end, rather than the middle, of narratives (especially myths). The early occurrence of a factive clause seems to provide a starting point or setting for the text, a fact which underpins the subsequent text. The following two examples occurred as the second sentence of the texts in which they occurred, the first describing a recent experience of the speaker, the second describing birds.
$\left.\begin{array}{llllll}\text { (6-321) } & \text { nganyi lanngaddi } & \text { ward } & \text {-gila } & \text {-ngi } & \text { yiyili } \\ \text { I } & \text {-nhingi } \\ \text { y up } & \text { go FACT } & \text { (1sg)N+I } & \text { [place] } & \text { ABL }\end{array}\right]$
(6-322) ngaddanggarni ngamoo ngaboo -ngga yood -gila -yingi dreamtime before father ERG put FACT (3sg)N+DI jirigi yingi -ngaddi bagiri bird name COMIT he:lies 'It's a fact that our fathers named the birds a long time ago.'

As a rule such early factives are pivotal in the progression from introductory remarks (setting) to the main theme. See also line (6) of Text 3.

Late occurrence in a text draws attention to a permanent conclusion, and here the tense is typically present. For example:
(6-323) dagooddwani yilba warang -gila -ari itentered forever sit FACT PRES/(3sg)N+I 'He went into (his hole) and has been there ever since.'

Interestingly, the main collaborator tended to favour offering satisfactory conclusions to texts, often ending them with a factive clause. However, he showed relatively little interest in introductions, rarely providing any circumstantial information at all, let alone a 'fact' to pin them on. Other story tellers tended to favour providing more circumstantial information at the beginning - and found it easier to conclude the story!

It is suggested that these textual senses of the factive may be explained by the fact that, in making an assertion about a proposition, the speaker in a sense pulls that sentence out of the surrounding narrative text. The effect is that the proposition is made into the ground against which the remainder of the text is thrown into relief as figure (cf. McKay 1988). This is of course perfectly in keeping with the nature of the logical operator 1 .
(3) There is another very rare use of the factive, in names of places and items. I have available a single place name consisting of a full clause, and it is in the factive: diyadiya bliddijgilayi (peewee bliddij-FACT-PAST/(3sg)N+I) '(name of place where) the peewee went bliddij. A single item, the auger, is referred to by such a clause, instead of by an independent nominal word.

The dependent factive clause of example (5-406) above - in which ngirndaji-nhingi (this-ABL) 'after this', appears to function as a type of 'complementiser' - is readily explicable as an instantiation of the sense of the factive outlined here: 'after it is a fact that we have spoken ...'.

### 6.5.4.3 Concluding remarks

I have shown in this section that the two mood enclitics $-j a-$ SUBJ and -wilaFACT function like the logical operator $\mid$-. In effect, they contain full clauses (with or without logical particles) within their scope, indicating the speaker's attitude towards (his/her acceptance of, provisional acceptance of, etc.) the * proposition expressed. The three modes (see sections 6.5.3.1 to 6.5.3.3), by contrast, express the speaker's evaluation of the status of the situation referred to - the desirability, likelihood, or certainty of its occurrence. Use of the modes is based on the speaker's evaluation of the actual circumstances surrounding the situation; use of the moods is not.

### 6.5.5 The classifiers

Gooniyandi has a set of twelve verbal classifiers, obligatory in each finite VP (see section 3.9.3.2.1 for morphological details) which provide a semantically based classification of processes. These classifiers divide processes into two primary groups which have been referred to (above page 201) as accomplishments and extendibles. A correlate of this opposition is that the progressive aspect marker normally occurs only in conjunction with accomplishments (for exceptions see page 527). Nine of the classifiers identify the process as an accomplishment, the remaining three identify it as an extendible.

Within the two subsets of classifiers so defined three matching subdivisions may be made, depending partly on the transitivity of the clause in which the classifier occurs (see section 5.2.1.3). Two classifiers, one from each acktionsart (or lexical aspect) type, occur uniquely in reflexive/reciprocal clauses. A further three never occur in transitive clauses; they usually occur in intransitive clauses, but one may occur in middle clauses also. The remainder typically occur in transitive clauses, though all but one also occur in intransitive and middle clauses as well. Classifiers from the first two groups may occur with a single pronominal prefix only (cf. page 203).

Given these distinctions, the classifiers may be divided into six primary subsets as shown in Table 6-2.

Table 6-2: System of verbal classifiers

|  | Extendible | Accomplishment |
| :---: | :---: | :---: |
| Reflexive/ <br> Reciprocal | $+\mathrm{ARNI}_{2}$ | +MARNI |
| Middle and Intransitive | +I 'be, go' | +BINDI 'get, become' +ANI 'fall' |
| Middle, Intransitive, and Transitive | +A 'extend' | +MI 'effect' <br> +BINI 'hit' <br> +DI 'catch' <br> +ADDI 'put' <br> + ARNI ${ }_{1}$ 'emerge' <br> +BIRLI 'consume' |

Here the major oppositions are: (a) acktionsart (that is, lexical aspect); and
(b) transitivity of the clause. It is clear from this table that, as I have claimed, the classifiers primarily classify processes (which are referred to by lexical verbals); and they indicate clausal transitivity but secondarily, and usually as a consequence of their classification of the process. $+\mathrm{ARNI}_{2}$ and +MARNI are the exceptions. Similarly, the accomplishment-extendible opposition applies to processes and not to full situations. That the classifier classifies the process, and not the full situation follows from the fact that although ' $x$ walked to the river' is clearly an accomplishment achieved when the river is reached, it is always treated as an extendible process, the classifiers chosen in the Gooniyandi version being invariably +I . Clearly it is the extendible process 'walk' that is being classified.

As has been mentioned before, the classifiers do not divide the class of lexical verbs into disjoint classes. Most lexical verbs may occur with at least two classifiers, the combinations having contrasting meanings. Usually the verb will occur with classifiers from alternate columns of Table 6-2, with an acktionsart difference, or from alternate rows, with a 'transitivity' difference. Fewer verbs choose alternate classifiers from within single cells in the table.

Before discussing each classifier in turn, it will be useful to provide exemplification of the primary bipartition between accomplishments and extendibles. (For exemplification of the transitivity distinctions, see section 5.2.1.3.) Examples are:

| bagi- | $\left\{\begin{array}{l}\text { +I 'lie' } \\ \text { +ANI 'lie down' }\end{array}\right.$ |
| :--- | :--- |
| waddin- | $\left\{\begin{array}{l}\text { +I 'be ill' } \\ \text { +ANI 'fall ill' }\end{array}\right.$ |
| lingi- | $\left\{\begin{array}{l}\text { +A 'think about' } \\ \text { +ANI 'remember' (i.e. 'fall to thought') }\end{array}\right.$ |
| ngarag- | $\left\{\begin{array}{l}\text { +A 'work on constructing' } \\ \text { +MI 'make, complete' }\end{array}\right.$ |
| miga- | $\left\{\begin{array}{l}\text { +I 'say, talk, think' } \\ \text { +MI 'tell' }\end{array}\right.$ |
| gaj- | $\left\{\begin{array}{l}\text { +A, +ARNI 'cut, chop (self)' } \\ \text { +MI, +MARNI 'cut off (self - e.g. finger)' }\end{array}\right.$ |

$$
\begin{array}{ll}
\text { yoowa- } & \left\{\begin{array}{l}
\text { +A 'fear someone' } \\
\text { +I 'exercise caution' } \\
\text { +BINI 'be frightened by someone' }
\end{array}\right. \\
\text { mila- } & \left\{\begin{array}{l}
\text { +A 'look at, see' } \\
\text { +I 'be seeing/sighted' } \\
\text { +MI 'glance at' }
\end{array}\right. \\
\text { ngoorloog- }\left\{\begin{array}{l}
\text { +A 'drink' } \\
\text { +MI 'swallow down liquid in a gulp' }
\end{array}\right. \\
\text { rooddoob- }\left\{\begin{array}{l}
\text { +A 'pull at' } \\
\text { +MI 'pull out' } \\
\text { +BINDI 'fall out' }
\end{array}\right. \\
\text { ngab- } & \left\{\begin{array}{l}
\text { +A 'eat' } \\
\text { +ARNI 'consume completcly' }
\end{array}\right.
\end{array}
$$

There is to the best of my knowledge a single unexpected and so far unexplained irregularity: the verb doow- 'get' occurs with +A , never with the expected (given the English gloss) accomplishment type classifier.
[1] Extendibles
(a) $+\mathrm{I}^{\prime} \mathrm{be}$, go'
(b) + A 'extend'
(c) $+\mathrm{ARNI}_{2}$ reflexive/reciprocal

There is a significant correlation between the extendible classifier chosen and the transitivity of the clause in which it occurs. The correlation is perfect in the case of $+\mathrm{ARNI}_{2}$, which occurs only in reflexive/reciprocal clauses; and conversely all reflexive/reciprocal clauses choose the classifier $+\mathrm{ARNI}_{2}$ when the process is an extendible. There is a less than perfect association of +A with transitive clauses, and $+I$ with intransitive and middle clauses. $+I$ never occurs with more than one pronominal prefix, and so when it occurs in a clause with two inherent participants, one of them must be referred to by an oblique pronominal enclitic. Usually this participant is referred to by a DAT (sometimes a LOC) PP, and the clause is middle.

There are, in fact, a significant number of examples in which +A occurs in intransitive and middle clauses. These include among others (5-67) and (5-369), respectively. Examination of the counterexamples brings to light the meaning
distinction involved. +A classifies the PROCESS as one which extends from or emanates from an Actor; $+I$ classifies the process as one which is totally contained within the Actor/Medium, which does not extend out from him/her. Processes of the former type need not of course be directed effectively from an Agent to a Goal, while processes of the latter type, actualised completely within the Actor, may still be directed non-effectively towards a Goal.

I will now give some specific exemplification of the proposed distinction. The only verb classified by +A which occurs in middle clauses is moow- 'look for/at, direct the gaze towards', which process MUST extend beyond the Actor. By contrast, the lexemes which occur with +I in middle clauses - such as jijag'speak', nyimij- 'blink, wink' - are totally located within the behaver.

The main processes classified by + A which occur in intransitive clauses are: mila- 'look at, see', moow- 'direct gaze (at)', and ngab- 'consume'. In intransitive clauses mila- 'look at, see' and moow- 'direct gaze at' refer to looking in a direction at nothing in particular. (Contrast the very rare collocation of mila- with +I (and also of danymili- 'listen, hear' with the same classifier), which refers not to looking in a direction, but to the general ability to see.) Furthermore, mila- 'see' and ngab- 'eat' can occur with inanimate Actors, referring respectively to the shining of the sun, and burning of a fire. Both processes extend beyond the Actor. Contrast for example, riny- 'blow (of the wind)', which occurs with $+A$ in transitive clauses, having the sense '(the wind) blows something (e.g. a leaf)'. But in intransitive clauses riny- occurs with +I , and has the sense '(the wind) blows', a process entirely located in the wind. There is a single stem-classifier collocation that does not immediately lend itself to the proposed interpretation. This involves the derived verbal stem bij-bi-wani(emerge $+\mathrm{IT}+\mathrm{IT}_{1}$ ) 'to emerge or arrive at a place successively, day after day', which like all stems involving -bi-IT occurs with the classifier +A .
+A classifies the process as one in which the activity emanates from an Actor (the Medium or Agent, depending on the clause type), which is as a rule an active participant in the process (even if it is inanimate). However, for $+I$ type processes, the Medium may be either active or inactive in the situation, which may be an action, being, becoming, or happening situation.

## [2] Accomplishments

(d) + BINDI 'get'
(e) +ANI 'fall'

These two classifiers were distinguished (see Table 6-2) from the other
accomplishment classifiers by their inability to occur in transitive clauses. Indeed, they appear to always occur in intransitive clauses. (I hesitate to deny that they could occur in middle clauses, though there are no examples available.) They occur with two major types of processes: those involving a change of state, and those involving a change of position, or motion. The Medium may be either active or inactive/passive.

The semantic contrast between +BINDI and +ANI can be explained in general terms as follows. +BINDI indicates that the point of accomplishment of the process is reached as the natural conclusion of a progression of events or circumstances leading up to that point. The actualised process is an extension of this build up, from which it does not differ in type. +ANI on the other hand indicates that the process is accomplished suddenly, and is not (seen as) the natural conclusion or extension of a progression of circumstances. (This is not to say that, in the real world, the process just occurs out of the blue, any more than that an Agent need be an ultimate active and controlling causer. There may be a sequence of cause and effect, but the actual process referred to is seen as typologically different from the sequence leading up to its actualisation.) +ANI focusses on the point of accomplishment as the initial point, before which there is no evidence of the process. However, after the accomplishment there may be a continuation of the induced state of affairs. + BINDI by contrast focusses on the point of accomplishment as the culmination of preceding events, of which there is evidence. After the accomplishment of an + ANI process, activity (and change) may still ensue; but the active or dynamic part of a + BINDI process is all before the point of accomplishment. Where the condition obtains subsequently, it is entirely inactive, a state of result. This is evident from the fact that the progressive aspect may refer to the time subsequent to the point of accomplishment of an +ANI process, but not a +BINDI process - see section 6.5.2, and especially example (6-233).

In the case of processes involving motion, +ANI typically indicates the direction of motion as downwards from a point. Examples are gard- 'fall', thood'descend', yood- 'sit down', yilij- 'rain to fall', etc.. These processes may be regarded as accomplished once the point of origin is left. Downward motion typically reaches a bottom, or point of completion, under the influence of gravity, though this is not necessarily the case in water, where reaching the bottom is usually the marked state of affairs. For instance, nyoombool'immerse in water' collocates with +ANI, referring to the process of diving under the surface of water. This may refer to a "surface dive", beginning and ending in the water; this process is accomplished once the point of origin (the surface of
the water) is left. +BINDI processes of motion, on the other hand, are typically directed upwards towards a point. Examples include doorloog- 'arise', bajgi- 'get up and go', bar- 'climb upwards', etc.. +BINDI processes are accomplished once the endpoint has been reached. The opposition between +ANI and +BINDI in this context is brought out in the contrast between baabiddi 'below', which is classified by +ANI, and laandi 'up', which is classified by +BINDI. The former may, for instance, refer to any drop in the water level of a river, without suggesting that the lowest point has been reached. The latter may refer only to a rise of water level that reaches at least a local peak.

But both +ANI and +BINDI may refer to horizontal motion, and here + ANI normally refers to leaving, or setting off from a point - e.g. looddoob'turn off', daloodd- 'slip', etc. - whereas +BINDI refers to reaching or achieving a point - e.g. barn- 'retum, get back', dirib- 'enter, go inside' (contrast dagoodd'fall in' (e.g. into a hole, and by extension of the sun setting) which is classified by +ANI), yilib- 'sneak away' (successful only after a certain point has been reached), and so on. Furthermore, there are a couple of examples in which +ANI refers to processes in which the motion is initially upwards, such as jaddg'jump up or across'. Here, of course, the process is accomplished as the ground is LEFT (not as it is reached). Examples like this show the inadequacy of the gloss 'fall', for +ANI, but support the proposed description in terms of the location of the point of accomplishment.

Similar remarks apply to processes of change of state. As has been mentioned already, +BINDI frequently occurs with nominal roots, with an inchoative sense. The resulting quality is always 'grown into' through, or brought about by natural means, and the end result is typologically like an earlier stage, only further advanced. (Naturally in specific instances it may occur so suddenly that there is no appreciable progression, but this does not affect the general point being made here. The process is treated as though there is a progression.) The same applies to processes of change of state referred to by verbal lexemes, and classified by +BINDI: they are processes which typically show signs of occurring before they are actually accomplished. Examples include lalbag- 'split', langgidd- 'tear', dij- 'snap' (which all involve progression of the disjunction through the Medium), nyil- 'get an erection', and so on.

Where the change of state process is classified by +ANI, the new state is seen as a sudden change of condition of the entity, which cannot differ in degree from any previous condition. Included are processes such as waddin- 'fall ill', nang- 'die', booroo- 'hide', bagi- 'lie down, fall to sleep', wangaddag- 'get lost', ngaloong- 'be born', etc.. Nominals do not as a rule occur with +ANI, since they
normally refer to qualities which may be acquired by degrees.
A few verbal roots occur with both +ANI and +BNDI , carrying predictable differences in meaning. For example,
+ANI 'fall busted'
booldoog. (e.g. as for an egg dropped on the ground.) +BINDI 'get busted' (e.g. as of an egg busting as the result of being hit, or eventually bursting with age.)
yoolaj- $\quad\left\{\begin{array}{c}\text { tANI 'fall undone' } \\ \text { (e.g. of own accord.) }\end{array}\right.$
+BINDI 'come undone'
(e.g. as a result of someone pulling at a shoelace.)
raddiny- $\quad\left\{\begin{array}{l}\text { +ANI 'fall thirsty' (e.g. from lack of water.) } \\ \text { +BINDI 'get thirsty' (e.g. for water or alcohol.) }\end{array}\right.$
(The examples given here are attested senses in the corpus.)
Compare also the following:

| waddin- | $\ldots$ | + ANI |
| :--- | :--- | :--- |$\quad$ 'fall ill'

Finally I reiterate that the description given here applies to the central significance of the lexical item only. If things may totter before they fall, and split instantaneously, these distinctions are not marked by the choice of classifiers. They are of the order of aspectual distinctions, not process distinctions - contrast the three examples of the previous paragraph.
(f) $+\mathrm{ARNI}_{1}$ 'emerge'

This classifier is definitely attested in combination with three verbal lexemes only: bij- 'emerge, come out', goorla- 'lift out', and thooddboord- 'lift out'. Each of these processes involves the emergence of something, the Medium, which was formerly obscured from view.

Bij- 'emerge' (which is possibly cognate with the Western Desert pitj-~
pij- 'go, move, walk'), in combination with $+\mathrm{ARNI}_{1}$ refers to the emergence of something at a particular location (i.e. arrival) or of its moving into view out of an obscuring medium (as in the rising of the sun). This lexeme also occurs with the classifiers +MI , in reference to boring holes through something, and +A in reference to bringing something up to a place.

Goorla- 'lift out' and thooddboord- 'lift out' refer only to such processes of lifting as involve the removal of a thing from an obscuring environment. Typically they refer to the removal of food from coals. Contrast other processes of lifting, such as jiddib- 'lift up', most of which occur with + MI; cf. also goorla-wani-, which is always classified by +A , and means 'to arouse someone from sleep by continual prodding'.

## (g) +ADDI 'put'

This is the only classifier which seems to always occurs in transitive clauses. It classifies the process as involving putting, or placement of an object, which is the Goal/Medium. The term 'placement' requires some comment. It may involve physical motion of the object, shifting its position; this is the case in about three quarters of the available examples (numbering around fifty). There are two main possibilities:
(i) The object may be placed in a new location, for example, dad- 'put up', dagoodd- 'insert', booroo- 'hide', ngaladd- 'roll onto back', and barn- 'return'.
(ii) The object may be moved, and placed in a new orbit or projection. Verbs of this type are waj- 'throw', yooddoog- 'spew up', gilang- 'knock over', gininy- 'mix', and doomboog- 'split'. We may also include here processes such as raddiny- 'hang up', and bandig- 'hang up', in which the object is both placed in a new location, and in a new "orbit", its positional mode.

But in about a quarter of the examples the object does not change location. Instead, it changes state - that is, it is placed in a different state or condition by an Agent. Examples include banag- 'dry out', bilyig- 'break', thathadd- 'stop, bring to rest', and jaa- 'soak (through) in water (to induce a change in condition), leach'. Also included are a few processes in which the existence of the Medium is affected. This entity may be brought into existence - e.g. gooddg- 'make a hole', jard- 'make a fire' - or put out of existence - e.g. boojoo- 'finish up'. Note that nearly all of these verbals occur with +ANI rather than +BINDI, if and when they occur in intransitive clauses, as would be expected.
(h) + DI 'catch'

It is very difficult to find a suitable English verb as a gloss for this classifier,
which indicates that the process is accomplished through the establishment, breaking, or prevention of a connection or juncture of some type, usually between the Goal and some other entity.
+DI almost always occurs in clauses of directed action. Dalyidd- 'slip on something', which occurs in an intransitive clause, is the only exception I am aware of. Furthermore, the directed action clause is almost always transitive. This generalisation admits two exceptions only, involving the verbals gilij'prevent someone from doing something (e.g. fighting)', and garloo- 'to find nothing (at some particular location)', which always occur in middle clauses. Significantly, these are the only cases in which the connection - between the (non-Medium) Goal and something else - is prevented, and the middle clause type classifies the situation as non-effective (see section 5.2.1.3).

In a fair number of cases, the connection is made between the Goal and the Agent (including the non-participant Agent, the Instrument). Examples are gool'taste, try', nyoonoong- 'move something (e.g. grass) by direct contact', ying'crush (e.g. a beetle)', biddib- 'block up', and girib- 'use, finish something up'. The connection between the Agent and the Goal need not be a physical one. It may involve a perceptual connection - for example, gilba- 'notice, catch sight of', wab- 'catch scent of', and minyjiddan- 'take notice or cognisance of'.

Alternatively, the Goal may be connected to something else as in booj'put a light to, catch something alight', lamaj- 'bring up to', ngaloog- 'to double something back', ngamool- 'flatten to the ground', ngang- 'give', yood- 'put down', and diladd- 'spread out'. (At this point, it is not worth identifying and systematising the range of possible things the Goal may connect with.) It should be noted, however, that there are cases in which there is ambiguity as to which connection is established. For instance, when classified by +DI, lamajmay refer either to the act of lifting something onto one's back, or to bringing something on the back to a particular place.

Processes in which the connection is severed include: bala- 'send (away)', dij- 'snap an object into two pieces', gij- 'remove', and loow- 'push away'. (Contrast dij- ... +A 'snap, break, but not necessarily into distinct pieces, and loow- ... +A 'push along'.)

## (i) +BINI 'hit'

'Hit' is an inadequate gloss for this classifier in as much as only about two-thirds of the attested verbals occurring with + BINI involve 'hitting', and many verbal lexemes that involve the notion of hitting are not classified by + BINI. What + BINI indicates is that the process is realised through action along a straight
line, which involves connection, usually between the Agent and Goal, at a single point, or at a multiplicity of single points. As distinct from +DI , the accomplished connection is the one between the Agent and something else, usually the Goal: where this connection is involved in a +DI process, it is really the Actor establishing the connection of the Goal with himself/herself (e.g. as in gilba- 'find'), not of himself/herself to the Goal.

Like the preceding two classifiers, +BINI occurs predominantly in transitive clauses. There are perhaps two exceptions. The verbal roots doorloog'rise up to the surface of water', and also, apparently, yilij- 'rain down heavily', occur with + BINI, in intransitive clauses. In both cases the process satisfies the general semantic characterisation suggested above: there is straight line motion (upwards or downwards), connecting the water surface in a single point in the case of doorloog- (contrast doorloog- ... + BINDI 'stand up, get up'), and the ground in a multitude of points in the case of yilij- (contrast yilij- ... +ANI 'fall (of rain)'.)

The verbs of hitting that are classified by + BINI all involve hitting at a single point through action directed straight at the Goal. Included are such processes as gard- 'hit, kill, fell', ngool- 'punch', bilgoodd- 'crack on the skull', nyag- 'pierce', bilyig- 'break a surface with a point', ${ }^{6}$ and bananggadd- 'snatch'. Excluded are such processes as laj- 'slap', thoolng- 'kick', and manggadd- 'stab' (the latter presumably is excluded by virtue of the fact that the arm (like the leg in kicking) does not follow a straight trajectory from the shoulder).

The remaining processes are of two main types: (i) causative processes, involving the designated type of action directed at the undergoer, as in giddra'chase someone away by moving threateningly towards', and yoowa- 'scare someone by moving threateningly towards'; and (ii) processes involving the meeting of the Agent and Goal at a point: jalba- 'meet up', maddaj- 'pass someone (going same or opposite directions)', maroodd- 'gather up' and gad'leave someone'.

In most cases the action moves towards the Goal (or the thing directed at), but with gad- 'leave', and sometimes maddaj- 'pass' and doorloog- 'arise', it may go in the opposite direction.

[^30]
## (j) +BIRLI 'consume'

+ BIRLI is known to occur with three lexical verbals only: ngab- 'eat, consume', the corresponding avoidance style term ngirij-, and moorlag- 'ripen, or cook completely', from moorla 'ripe, ready for consumption'. It indicates that the process completely affected the Goal/Medium: that the item was completely consumed, or fully ripened. An example (from a narrative text) is
(6-324) wayandi -ga ngab -binbirli
fire ERG eat (3pl)A+BIRLI
'The fire consumed them completely.'
(k) + MI 'effect'
(l) +MARNI Reflexive/Reciprocal

These are the least specific of the accomplishment classifiers, which signify no more than that the process is relatively 'active' (see below). They are distinguished from each other by the transitivity of the clause in which they occur: +MI occurs in intransitive, transitive, and middle clauses, though most frequently in transitive clauses; and +MARNI occurs only in reflexive/reciprocal clauses. +MARNI thus corresponds to the classifiers +MI, +DI, +BINI, $+\mathrm{ARNI}_{1}$, and +ADDI of transitive and middle clauses. In other words, the fine distinctions of process types in accomplishments are neutralised in reflexive/reciprocals. Thus, in reflexive/reciprocal processes, the only distinction maintained is between extendibles and accomplishments.
+MI is of a quite different order of generality than the other accomplishment classifiers, and its semantic specification subsumes the other five classifiers from the bottom right hand cell of Table 6-2, all of which are active and effective processes. In keeping with this, many more verbal lexemes occur with + MI than are attested with any of the other five classifiers.

A fair number of lexemes occur with either +MI or one of the five more specific classifiers. There is usually a clear semantic contrast (although it is possible that there is occasional free variation, or dialectal variation). For example,

$$
\begin{array}{ll}
\text { yilga- } & \left\{\begin{array}{l}
\text { +MI 'take a look, glance at' } \\
\text { +DI 'notice, catch sight of' }
\end{array}\right. \\
\text { dij- } & \left\{\begin{array}{l}
+ \text { MI 'break, not necessarily into pieces' } \\
\text { +DI 'snap into pieces' }
\end{array}\right.
\end{array}
$$

$$
\begin{aligned}
& \text { girib- }\left\{\begin{array}{l}
+ \text { MI 'finish up something' } \\
+ \text { DI 'finish with' }
\end{array}\right. \\
& \text { nanggid- }\left\{\begin{array}{l}
+ \text { MI 'miss (e.g. something thrown)' } \\
+ \text { BINI 'miss (e.g. hitting)' }
\end{array}\right.
\end{aligned}
$$

In general, the choice of a more specific classifier, in addition to +MI , is possible only when there is no other lexeme covering a similar semantic range, which typically occurs with that more specific classifier. For example, in the everyday lexicon there is a verbal root gilba- 'find', standing against mila- 'see'. The former occurs with +DI, with the sense 'notice, catch sight of', while the latter occurs with +MI (as well as +A and +I ), never with +DI . Compare also the avoidance style yilga- 'see' above - the potential of the classifier system is exploited to a greater extent in the avoidance style than in the everyday style. It is presumably for the above reason that woodij- 'throw a spear' and ngadd- 'throw a stone' do not occur with +ADDI as might be expected - there is a verbal waj'throw' which refers to processes of throwing in general.

There are a number of apparent idiosyncrasies in the matchings of verbal lexemes and classifiers. For those lexemes classified uniquely by + MI, the process they refer to NEED NOT, as a rule be accomplished in any of the ways specified by the five more specific classifiers - although in particular instances it may be that they are. In other words, there is a tendency for the most semantically informative classifier to be chosen. For example, consider the three verbs of throwing, waj- ... +ADDI 'throw', ngidd- ... +MI 'throw a stone', and woodij- ... +MI 'throw a spear'. Waj- refers to the process of putting something into an orbit, and is invariably accomplished when that entity enters its orbit. Ngidd- and woodij- may also refer to the more specific process types of putting stones or spears into orbit. However, they have more general significance than this, and they usually refer to processes the Goal of which is not the entity thrown, but the thing thrown at. Thus woodij- 'throw spear' and ngidd- 'throw stone' typically occur in clauses referring to throwing spears or stones at things, in which the item thrown is an Instrument, the Goal either a Medium or Affected. These processes, that is, may be accomplished either as the thing enters orbit, or as it reaches its goal, and in each case they are classified by +MI - but occur in different clause types.

More puzzling at first sight is the fact that gard-'hit, kill', and nyag- 'spear, pierce' are classified by +BINI but thoolng- 'kick' and manggadd- 'stab' occur with +MI and not +BINI . It turns out that thoolng- refers to the process of kicking out the foot or leg, and does not require the connection with a Goal. Furthermore, in
the processes of kicking and stabbing, the action does not normally proceed along a straight line path, as in the case of + BINI processes. Instead, it normally describes an arc.
+MI also partly overlaps in significance with the two single valent classifiers in the middle cell of the last column in Table 6-2, the semantic specifications of which are not inconsistent with an active Medium. There is, in fact, a semantic contrast between the two groups of accomplishment classifiers, which were distinguished in Table 6-2 above in terms of the clause types they may occur in. The one group, including $+\mathrm{MI},+\mathrm{DI},+\mathrm{BINI}$, etc., is positively specified as involving an active participant (whether Actor, Medium, or Agent). The other group, consisting of +ANI and +BINDI , is unmarked for this feature, and frequently the process is not under the control of an active inherent participant. Furthermore, the two sets differ in that the single valent classifiers occur only with non-extensive processes - that is, processes which are inherently immanent in the Actor - whereas the classifiers from the other set occur with both extensive and non-extensive processes.

There are a number of lexemes which occur with either +MI , or one of +ANI or +BINDI . These include a number of processes of mental/physical state, and conditions. The difference invariably lies in the degree of activity of the individual: where the classifier +MI is chosen, the state or condition is more strongly under his/her active control, or s/he is more actively involved in it. For example, thiddi- 'anger', ngiddinyjila- 'hungry' (among others) occur with both + BINDI and +MI , in the latter case typically with the progressive aspect, referring to processes of increased agitation. With + BINDI no more than that the state/condition was achieved is indicated. This is the classifier chosen when the achievement is the result of external causation - see examples (3-86) and (5-286) above.
Contrast also the possibility of choosing the extendible +I with the progressive, at least of ngiddinyjila- 'hunger', as in ngiddinyjilawangiri 'I'm getting hungry'. In fact, there are a number of verbals of bodily behaviour showing choices between +I and +MI . In the former case a state is referred to - and the body part is a Range in an intransitive clause (see example (6-71)). Where +MI occurs the body part is a Goal/Medium in a transitive clause referring to the effective process of moving the body part. The differences are of course in the way the action is viewed, or the part of it that is focussed on: there need be no significant difference in the reality referred to. For more on the incorporation of body parts into Gooniyandi clauses, see McGregor (1985).

There are, however, a few unpredictable pairings.
(1) A couple of verbals (e.g. barn- 'return', bar- 'climb up') which are classified by + BINDI refer to typically active processes of motion reaching a
goal. Because of the restricted range of occurrence of +BINDI , it is not possible to explicitly refer to the accomplishment of these processes where the Actor is of non-singular number. In this event, different lexical choices are made. Instead of barn- 'return' and bar- 'climb up', the verbals balbidd- '(many) return' and baward- '(many) climb up' occur. These latter occur only with non-singular Mediums, and are classified by +MI only. They are in complementary distribution with barn- 'return' and bar- 'climb up.'
(2) In just a couple of cases a lexeme occurs with +MI where +BINDI is expected: booboob- 'swell up (e.g. of a lump)', and bitha- 'get stiff'. One would expect these processes to be unmarked for active.

The relationships among the accomplishment classifiers may be conveniently explained by a feature system which specifies the formal semantic content of each classifier. We have seen that these classifiers fall into two primary subsets, which are distinguishable by the fact that one set (the bottom right hand cell of Table 6-2) indicates that the process is active, while the other set leaves this unspecified. This can be captured by the feature [active], which can take on the values positive or unmarked.

It is also clear that +ANI and +BINDI positively specify the process as not extending from the Medium, but as being entirely immanent. The other classifiers (except for +ADDI ) do not indicate whether or not the process extends out from the Actor. (About a quarter of the initial list of around 130 lexemes occurring with +MI involved action entirely immanent in the Actor/Medium; these lexemes never occurred in transitive clauses (with +MI at least).) This can be captured by the feature [non-extensive], which like [active] takes on values + (positive) or u (unmarked).

The two sets of classifiers may be characterised as follows:

$$
\begin{aligned}
& {\left[\begin{array}{l}
+ \text { non-extensive } \\
\text { u. active }
\end{array}\right]+\mathrm{ANI},+\mathrm{BINDI}} \\
& {\left[\begin{array}{l}
\text { u. non-extensive } \\
+ \text { active }
\end{array}\right]+\mathrm{MI},+\mathrm{BINI},+\mathrm{DI},+\mathrm{ADDI},+\mathrm{ARNI}_{1},+\mathrm{BIRLI}}
\end{aligned}
$$

Although logically only one feature is required to distinguish the two sets, it seems that a single feature could not do justice to the known facts. The classifiers from both sets actually have positive semantic content. Furthermore, recognition of these two features allows +MARNI to be characterised in a natural way as $\left[\begin{array}{l}+ \text { nonextensive } \\ + \text { active }\end{array}\right]$. (This feature specification correctly indicates the relative markedness of + MARNI with respect to the other accomplishment
classifiers.)
It will be clear from the foregoing that the equivalence between the contrast on the one hand between $+I$ and +A in the extendibles, and on the other between + ANI and + BINDI, and $+\mathrm{MI},+$ DI, + BINI, etc. in the accomplishments, which is suggested by Table $6-2$ does not obtain. +I and +A appear to be in privative opposition, marked respectively as [-extensive] and [+extensive].
$\left[\begin{array}{l}\text { u. non-extensive } \\ \text { +active }\end{array}\right]$ fully characterises + MI. The remaining five classifiers containing this feature specification each have in addition a positive lexical-type semantic content as follows:

```
+ARNI [+emergence of Medium]
+ADDI [+placement of Goal/Medium]
+DI [+juncture/disjuncture of Goal and other entity]
+BINI [+straight-line action of agent on Goal]
+BIRLI [+consumption of Medium]
```

+MI must be assumed to be unmarked for each of these features, and each of the five classifiers must be assumed to be unmarked for the features of the others. The first assumption is necessary because there exist processes which are classified by + MI but which satisfy (or appear to) the positive specifications above. The second assumption is necessary because these positive specifications do not impose mutually exclusive classifications on the class of processes: a process could well satisfy two or more of them, in which instance it is by no means clear what motivates the choice between the equally appropriate classifiers.

+ BINDI and +ANI would seem to be in a relation of equipollent opposition, the former being [achievement final], the latter, [achievement initial] - see discussion under (d) and (e) above. It appears that the two impose mutually exclusive classifications on the set of processes they encompass which is not to say that they divide the verbal lexemes into disjoint sets. That is, it is not necessary to assume that each is unmarked with respect to a feature of the other, as was the case among the [+active] classifiers. Furthermore, there is no evidence that the relationship between them is privative. For these reasons, it is assumed to be equipollent.

The accomplishment classifiers impose a rather loose semantic classification on the set of accomplishment processes, in the sense that nearly all of the oppositions are between positive values of a feature, and unmarked for that feature. Given a particular process it is not normally possible to accurately
predict the classifier that will mark the verbal root: often more than one classifier is consistent with the relevant characteristics of the process. (For example, we saw above that the process of returning to a starting point may be classified by either + BINDI or +MI - it is an active and non-extensive process.) As was suggested above, it seems that as a general rule the most informative classifier consistent with the process will be chosen. This is, however, a only a tendency, and there are a number of instances in which a verbal root is classified by +MI , rather than by an (apparently) applicable more specific classifier. For example, it might be expected that + DI would classify thalig- 'attach spear to woomera'; however, only +MI occurs with this root. The unpredictability of classifier choice has been accounted for here as a consequence of the types of semantic opposition between the classifiers. But the pairings of classifier and process do not as far as I know contradict the semantic analysis presented above. And the major predictive value of the proposed analysis lies in its ability, given that a particular root occurs with $n$ different classifiers and with $n$ distinct meanings, to predict which meanings will be associated with which rootclassifier pairings.

## APPENDIX 1: TEXTS

This appendix contains three texts selected from the corpus used in the study of the textual organisation of the Gooniyandi clause in section 5.3 (see page 35 ). They are all unedited transcripts of spoken texts.

The texts are divided into tone units, indicated by slashes, and "sentences", which correspond to the numbered lines; paragraph divisions are not indicated. Supra-segmental features are indicated by the same symbols as are used in section 5.3. In addition, the colon (:) indicates non-phonemic vowel length, and dots (.) indicate tone-unit internal pauses of varying lengths, depending on the number of dots. When the dots follow a word directly without any space, this indicates that the word was broken before it was completed; otherwise there is a single space between a word and following dots.

Each numbered section consists of three parts, in the following order: the Gooniyandi original, divided into words (indicated by spaces) and morphemes (indicated by hyphens); an interlinear morpheme by morpheme translation into English; and finally, a free translation of the sentence. There is a single exception to this: the classifier complex is treated as a single unit in the Gooniyandi line; this is because of its internal complexity. However, in the interlinear gloss, each morpheme in the complex is glossed, and a plus sign ( + ) is used to separate the morpheme glosses. For convenience and space, however, zero pronominal prefixes are not normally glossed; thus ( 1 sg ) $\mathrm{N}+\mathrm{A}$ will be understood to mean (1sg) $\mathrm{N}+(3 \mathrm{sg}) \mathrm{A}+\mathrm{A}$.

This is far from an ideal way of representing Gooniyandi texts (see McGregor forthcoming-a). However, for the purposes of this book, it seems to be the most reasonable compromise, given considerations of space.

## Text 1: Hunting and fishing on the Fitzroy River Jack Bohemia, 1982.

This text was recorded 'on site', at the waterhole on the Fitzroy River where the events described took place. It tells of a hunting trip the speaker had gone on with two friends a number of years previously. (If, as is likely, the place referred to in line (80) is the Fitzroy Crossing ration station, the events must have
occurred sometime between the end of the Second World War and 1951 - see Kolig 1981:23).
$1 /$ ngirndaji -ya walyadda -ya bagi -yiddi / ngarloodoo
this LOC sand LOC lie (1R)N+I three
yoowooloo bagi -yiddi -ddi /
man lie (1R)N+I pa
'Here on the sand we camped, we three Aborigines.'
2 ... a ... wiliwili . joorndoo / yood -jidi / ngarloodoo fishing:line fishing:line put (1R)N+DI three
joorndoo yood -jidi /
fishing:line put (1R)N+DI
'Um, we put in fishing lines; three lines we set.'
(Both of the terms wiliwili and joorndoo are used to refer to fishing lines. It is not clear in what respects the terms differ.)

3 mird -jinmi / lalanggadda -yoo /
tie ( 1 R$) \mathrm{N}+\mathrm{MI}$ crocodile DAT
'We tied up (the lines to trees) for crocodiles.'
4 maningga bagi -yiddi: /
night lie (1R)N+I
'We camped the night.'
5 moongaya / mila -wa -winmi bidi -yooddoo -ngga /
morning look PROG (3pl)N+MI they DU ERG
'In the morning they were looking at the lines.'
6 nganyi mooyoo bagi -ngi/
I sleep lie (1sg)N+I
'I was sleeping.'
7 ... a ... / ridd -winbidda -yi / ngarloodoo
um pull (3pl) $\mathrm{N}+(3 \mathrm{pl}) \mathrm{A}+\mathrm{A}$ du three
ridd-winbidda -yi /
pull (3pl)N+(3pl)A du
'Um, they pulled them in, the three lines.'
8 yoowarni galanyi ridd -widda -yi: / gard -biddini -yi / one first pull (3pl)N+A du hit (3pl)N+BINI du 'They pulled one crocodile first, and killed it.'

| 9 yoanya id -nyali | -midi / gard | -bidding | -vi / |
| :--- | :--- | :--- | :--- | :--- | :--- |
| other pull REP | (3pl)N+DI hit | (3pl)N+BINI du |  |
| 'They pulled another in and killed it.' |  |  |  |

10 yaanya / ngambiddi -nyali ridd -widi / gard -biddini /
other again REP pull (3pl)N+DI hit (3pl)N+BINI 'Then they pulled yet another in and killed it.'
11 jingirnali wandaj-bidda -yi /
from:west carry (3pl)N+A du
'They carried them back from the west.'
12 wandaj -bidda -yi:: ngirndaji -yayoo /
carry (3pl)N+A du this ALL
'They carried them back here.'
13 moon ... ngany ... / nganyi -ngga: manyi woobi -la /
I ERG food cook (1sg)N+A
nalija /
tea
'I was cooking breakfast, tea.'
14 wayandi fard -jidi/ nyamani /
fire light (1R)N+DI big
'We lit a fire, a big one.'
15 gooddgoo gidda:bingaddi manyji -yinmi / will /
hole boong make (1R)N+MI finish
'We dug a loooong hole.'
16 liddi gaj -ida -vi: wilt /
guts cut (3pl)N+A du finish
'They cut out its guts.'
17 mirli -nyooloo doom -want -widda -xi:: will /
liver ETC get IT (3pl)N+A du finish
'They got out the liver and so on.'
18 liddi ngab a -yiddi /
guts eat PROG (1R)N+I
'We were eating the guts.'

19 woobi -yidda:: liddi ngab -jidda /
cook (1R) $\mathrm{N}+\mathrm{A}$ guts eat (1R) $\mathrm{N}+\mathrm{A}$
'We cooked the guts and ate them.'
20 jilywiri / woob -bidi -yi / ngab -nga
guts cook (3pl)N+I du cook (3sg)N+A
gooddgoo -ya /
hole LOC
'They cooked the guts, leaving them to cook in a hole.'
21 nyamani .-yooddoo / ngarloodoo niyi -yarndi gird -biddini /
big DU three that PL leave (3pl)N+BINI
'Two big ones, three (crocodiles) they left (cooking in the hole).'
22 gooddgoo -ya / gird -biddini: wili/ ngab -nga /
hole LOC leave (3pl)N+BINI finish cook (3sg)N+A 'They left them and let them cook.'

23 liga -yidda/ liga -yidda:: lanygiya / dina -ya / wait (1R) $\mathrm{N}+\mathrm{A}$ wait (1R) $\mathrm{N}+\mathrm{A}$ midday dinner LOC moorlag -birli /
cook (3sg)N+BIRLI
'We waited, we waited until midday, dinner, when it had cooked.'
24 goorla -widdarni/ yood -bidi balngarna /
lift (3pl) $\mathrm{N}+\mathrm{ARNI}_{2}$ put (3pl)N+I outside
'They lifted it out, and put it aside.'
25 wamba goony -jidda:: gawirla -wani/
later wait (1R)N+A cold (3sg)N+ANI
'We waited until it got cold.'
26 gaj -gaj -jidda:: thigi -yigi -yidda gaj -gaj -jidda: /
chop chop (1R)N+A piece piece ALL chop chop (1R)N+A
wili /
finish
'We chopped it up; we chopped it into little pieces.'
$\begin{array}{rllll}27 & \text { thigi } & \text {-yigi } & -r n i & \text { bagi } \\ \text { piece } & \text { piece } & \text { SEQ } & \text { lie } & \text { (3pl) } \mathrm{N}+\mathrm{I}\end{array}$
'Now they lay in little pieces.'

28 ngab -jidda / ngab -jidda:: wili /
eat (1R) $\mathrm{N}+\mathrm{A}$ eat (1R) $\mathrm{N}+\mathrm{A}$ finish
'We ate it until we finished.'
29 yaabja miga -nyali bagi -yi /
some like:that REP lie (3sg)N+I
'But still some remained.'
30 niyi -nhingi warang -jiddi: / wamba ngab -jidda niyaji
that ABL sit (1R)N+I later eat (1R)N+A this walwaddangga /
crocodile
'Then we sat; still we were eating the crocodile.'
31 walwaddangga ngab -jidda: wili / girib -jidi /
crocodile eat (1R) $\mathrm{N}+\mathrm{A}$ finish finish (1R) $\mathrm{N}+\mathrm{DI}$
'We ate the crocodile, and finished it up.'
32 miga -winmi -ngaddagi -yi thiddoo joog
say (3pl)N+MI (1sg)O du kangaroo hunt:kangaroos
-banma -woo / lilinggoo niyi / ngaaddi /
FUT+(1U)N+MI DEF to:west that rock
'They said to me, "Let's go hunting for kangaroos in that hill to the west".'
(The verb joog-refers to a method of hunting kangaroos in which the animal is chased towards a group of hunters hiding and waiting with spears.)

33 yoowoo /
yes
""Yes." (I said.)
34 jinali mirn -mird -jidda:: wili / binyidi -yidda / spear tie tie (1R)N+A finish hard ALL 'We tied up the spears, tightly.'

35 wij -jidda: jabiddi /
rub (1R)N+A sharp
'We rubbed them sharp.'
36 wij -jidda wili jaab../ ngoorndoongoornoo . jabiddi / rub (1R)N+A finish sharp.. what:cha:ma:call:it sharp
wij -jidda: wili /
rub (1R)N+A finish
'We rubbed them sh... what's it called? Sharp. We rubbed them.'
(The speaker almost said jaabala, the Kriol word deriving from sharp, in the first tone unit, but quickly corrected himself.)

37 lilinggoo / joog -jinmi -ddi niyi / lilinggoo ngaaddi / to:west hunt (1R)N+MI pa that to:west rock marliwa ngaaddi joorlgoo /
[name] rock round
'We hunted them in the west at that hill, Marliwa, the round hill.'
38 nginyji -ga joodda -wa -woo / miga -yinmi -nhi you ERG chase (2sg)N+A DEF say (1R)N+MI (3sg)O garndiwiddi -ngga /
two ERG
'"You chase them," we two told him.'
39 niyi ward -ji liya /
he go (3sg)N+I west
'He went west.'
40 niyaji -yangga widdb -nga ngaaddi / joodda -nga /
this ABL throw (3sg) $\mathrm{N}+\mathrm{A}$ stone chase (3sg) $\mathrm{N}+\mathrm{A}$
'From there he threw stones, and chased (the kangaroos).'
41 ngidi ngirnda biliga warang -jiddi -yi / niyi . lililoowa /
we this middle sit (1R)N+I du he west:side
nganyi ngilingiliwa /
I east:side
'We sat in the middle, him on the west end, and me on the east.'
42 warang -jiddi:: / mila -la / niyi -ngga barawoo
sit (1R)N+I see (1sg)N+A that ERG female:kangaroo
nyag -bini / jagadda -ngga yoowooloo jagadda
spear (3sg)N+BINI [subsection] ERG man [subsection]
-ngga / nawoon.ga bagi -yiddi -nhi / bamathidi -ya /
ERG bereaved lie (1R) $N+I$ (3sg)O Gogo LOC
'We sat; I saw him spear a female kangaroo, the jagadda man, who we are bereaved of at Gogo.'
(Note that this is the first place in the text where the speaker attempts to
establish the identity of one of the other hunters. This description identifies a recently deceased resident of Gogo Bayulu - note that he is not named. See Dixon 1980:28-29.)


45 liga -yidda -yi:: / niyi yaanya yoowooloo wait (1R) $\mathrm{N}+\mathrm{A}$ du that other man
bij -ngarni / yaanya jagadda -nyali /
emerge (3sg) $\mathrm{N}+\mathrm{ARN}_{2}$ other [subsection] REP
'We waited for the other man to come, the other jagadda man.'
(It is interesting that having established the identity of one of the other two hunters, the speaker now provides information on the other. The description is, however, non-defining.)
$\begin{array}{llll}46 & \text { wandaj -jidda:: } & \text { ngirndaji -yayoo / } \\ \text { carry (1R)N+A this } & \text { ALL } \\ \text { 'We carried them up to here.' }\end{array}$
47 niyaji -ya woobi -yidda -ddi walyadda -ya /
this LOC cook (IR)N+A pa sand LOC
booddoonggoo /
to:north
'We cooked the kangaroos here on the sand, to the north.'
48 woobi -yidda -ddi:: wili /
cook (1R)N+A pa finish
'We cooked them, OK.'
49 niyi -nhingi warang -jiddi / goony -jidda::
that ABL sit (1R)N+I wait (1R)N+A
goorla -yiddarni /
lift:out (1R)N+ARNI ${ }_{2}$
'Then we sat, and waited and lifted them out.'

50 thigi -yigi -yidda gaj -gaj bidda -yi:: wili / piece piece ALL chop chop (3pl)N+A du finish 'They chopped it up into little pieces.'

51 miga -mi -ngiddangi / ngirnda ward -ja tell (3sg)N+MI (1R)O this go SUBJ
-wila -widdangi / ngiwawoo / boolga -woolga -yoo /
FUT+(1sg)N +A (3pl)O south old:man old:man DAT
yaanya -ngga jagadda -ngga miga -mi -ngiddangi/
other ERG [subsection] ERG say (3sg)N+MI (1R)O
bamathidi -yidda /
Gogo ALL
'He said to us, "I'll take this to the old men in the south," one of the jagadda men said, "at Gogo."'

52 yoowoo ward -ba -widdangi/
yes take $(2 \mathrm{sg}) \mathrm{N}+\mathrm{A}(3 \mathrm{sg}) \mathrm{O}$
"Yes, take it to them." (We replied.)'
53 gaj -gaj -jinmi: bagi -ya dagoodd -winaddi -ddi
chop chop (IR)N+MI bag LOC insert (3pl)N+ADDI pa wili/ nyamani bag/
finish big
We chopped it up, and put it into a bag, a big bag.'
54 ngiwawoo wandaj -mawoo ward -ji / ngidi
to:south carry INF go (3sg)N+I we
ngirndaji -ya -nyali warang -jiddi/
this LOC REP sit (1R)N+A
'He went south carrying it, while we stayed here still.'
55 ward -nga -widdangi ngiwawoo:: / bamathidi ..
take (3pl)N+A (3pl)O south Gogo
bij -nga /
emerge (3sg) $\mathrm{N}+\mathrm{A}$
'He took it to the south, and brought it to Gogo.'
56 boolga -woolga ngang -bindi -ddi/
old:man old man give (3pl)A+DI pa
'He gave it to the old men.'

57 niyaji -ya bagi -yi / moongaya barn -gi -yi/
this LOC lie (3sg)N+I morning return INC (3sg)N+I 'He stayed the night, and returned next morning.'

58 ngidi ngirndaji -ya bagi -yiddi / liga -yidda -yi / we this LOC lie (1R)N+I wait (1R)N+A du bij -ngarnil emerge (3sg) $\mathrm{N}+\mathrm{ARN}_{2}$ 'We stayed there, and waited until he arrived.'

59 wawanyi / wawanyi yawan -jidda/ ngiyi .. ngoo .. goanna goanna belt (1R)N+A south ngoowawoo /
to:south
'We belted goannas in the south.'
60 yawan -jidda: wili /
belt (1R)N+A finish
'We belted them all right.'
61 nganyi -ngga barawoo / garndiwiddi
I ERG female:kangaroo two
nyag -loonbini wanyjiddi -yooddoo $/$
spear (1sg) $\mathrm{N}+(3 \mathrm{pl}) \mathrm{A}+\mathrm{BINI}$ river:kangaroo DU
'Me, it was two female river kangaroos that I speared.'
62 barn -gi -yidda ngirndaji -yayoo / ngaaloo /
bring:back INCEP (1R)N+A this ALL shade
ngaaloo riwi -ya niyi /
shade camp LOC that
'We brought them back here to the shade, over there.'
63 [cough]/ warang -jiddi / woobi -yidda -ddi wili / sit (1R)N+I cook (1R)N+A pa finish
ngab -jidda:: /
eat (1R)N+A
'We sat, cooked them, and ate them.'
64 yoowarni bij -ngarni / babligaj -nhingi /
one emerge (3sg) $\mathrm{N}+\mathrm{ARNI}_{2}$ hotel ABL
walkabout -joo /

> DAT
'Someone came up from the pub, on walkabout.'

| 65 garndiwiddi / garndiwiddi bij | -biddarni / |  |  |
| :--- | :--- | :--- | :--- |
| two | two | emerge | (3pl) $\mathrm{N}+\mathrm{ARNI}_{2}$ |

'Two, two people came up.'
66 ngang -jiddidi / niyaji wanyiddi wandaj -bidda -yi give (1R)N+DI this river:kangaroo carry (3pl)N+A du ngilayani /
from:east
'We gave them the kangaroo, and they carried it away to the west.'
67 ngidi ngirndaji -ya -nyali bagi -yiddi / gaddwaroo
we this LOC REP lie (1R)N+I afternoon
barn -gi -widdi ngilayani /
return INCEP (3pl)N+I from:east
'We stayed here, but in the afternoon they went back east.'
68 gindiwa ward -biddi: / mayaroo -yidda / ngila bi .. / upstream go (3pl)N+I house ALL east em .. 'They went upstream to town, east.'

69 ngidi ngirndaji -ya nyali wamba bagi -yiddi wili / we this LOC REP later lie (1R)N+I finish
'We stayed there for a while.'
70 balyoowa / uxard -jiddi ngilanggoo /
behind go (1R)N+I to:east
'We came followed behind.'
71 ngilanggoo joog -jinmi thithi -ngga / to:east hunt:kangaroos (1R)N+MI going ERG wanyjiddi /
river:kangaroo
'We hunted river kangaroos as we were going along east.'
72 bidi -ngga nyag -biddini / barawoo nyag -bini /
they ERG spear (3pl)N+BINI female:kangaroo spear
(3sg)N+BINI
barawoo yaanya -ngga nyag -bini / yaa garndiwiddi
female:kangaroo other ERG spear (3sg)N+BINI yes two
barawoo nyag -loon.. nyag -boondini
river:kangaroo spear (1sg)N+(3pl)A+.. spear (3pl)N+(3pl)A+BINI
'They killed some; one killed a female kangaroo, the other killed a female kangaroo - yes, they killed two female kangaroos.
73 nganyi werd -ngi: marlami / mangaddi nyag
I go (1R)N+I nothing not spear
-goowa -looni/
PROG (1sg)N+BINI

- 'I went along without luck; I didn't spear anything.'

74 ward -jiddi gindiwa: /
go (1R)N+I upstream
'We went upstream.'
75 bridge ngooddoo ngila bagi -la -ari/ niyi -nhingi -ngga that east lie FACT (3sg)N+I that ABL ERG mirnaloogoo -mirnaloogoo/ niyaji -ya nyag -looni this:side this:side this LOC spear (1sg)N+BINI nganyi -ngga yoowarni /
I ERG one
'A little bit this side of the bridge, there I speared one.'
76 gindiwa hard -jiddi yalawa -nyali / bridge -nhingi -ngga upstream go (1R)N+I close REP ABL ERG gindiwa -a / niyaji -ya warang -jiddi ngaaloo /
upstream MD this LOC sit (1R)N+I shade
'We went upstream a little way, and on the upstream side of the bridge we sat in the shade.'

77 woobi -yidda -ddi: wili /
cook (1R)N+A pa finish
'We cooked the kangaroos.'
78 gindiwa / gaddwaroo ward -jiddi: / babligaj -ja
upstream afternoon go (IR)N+I hotel LOC
bij -jiddarni/
emerge (1R) $\mathrm{N}+\mathrm{ARN}_{2}$
'Upstream, in the afternoon we went on, and arrived at the pub.'
niyi -nhingi bagi -yiddi / bidi / ngidi gindiwa
that ABL lie (1R)N+I they we upstream
maddajga -nyali ward -jiddi /
past REP go (1R)N+I
'Then we rested, and went upstream right past the pub.'
80 manyi ngang-jinbidda niyaji -ya / jaba manyi
food give (1R)A+(3pl)N+A this LOC supper food
ngang -jinbidi/
give ( 1 R ) $\mathrm{A}+(3 \mathrm{pl}) \mathrm{N}+\mathrm{DI}$
'They gave us food, supper, there (presumably at the ration station).'
81 ngab -j̈dda wili /
eat (1R)N+A finish
'We ate it up.'
82 gindiwa ward -jiddi / ngila .. policestation -jayoo /
upstream go (1R)N+I east ALL
niyaji -ya bagi -yiddi /
this LOC lie (1R) $\mathrm{N}+\mathrm{I}$
'We went upstream, east to the police station, where we stopped.'
83 ngidi mayaroo -rni / nganyi mayari -ya -rni
we house SEQ I house LOC SEQ
dirib-loondi/ waddgoom -ja /
enter ( 1 sg )N+BINDI work LOC
'We house now ... I went into the station to work.'
84 yilba waddgoom -jiddi / garndiwiddi -nyali dirib -jiddi
for:good work (1R) $\mathrm{N}+\mathrm{I}$ two REP enter (1R)N+I
ngidi garndiwiddi /
we two
'For good we worked, the two of us went back to work.'
85 niyi yaanya ngiwawoo barn -bindi / bamathidi -yidda /
that other to:south return (3sg)N+BINDI Gogo ALL
ngidi yilba warang -jiddi niyaji -ya /
we for:good sit (1R)N+I this LOC
'The other one went south to Gogo, but we stopped here for good.'

## Text 2: A myth about fire

Dave Lamey, 1982.
This story is a short version of a traditional myth about fire. It was told to me
for inclusion in a reader for school children. (For a detailed discussion of this text, see Hodge and McGregor forthcoming.)

1 / yoowooloo garndiwa girnaj -biddi boolga -woolga / man many sit:together (3pl)N+I old:man old:man 'Lots of old men were sitting around together.'

2 warang -biddi/ maadi -ya nyamani -ya gamba sit (3pl)N+I cold LOC big LOC water
bij -ngarni -widdangi /
emerge (3sg)N/ARNI (3pl)OBL
'They were sitting there. In the very cold time rain came to them.'
3 maadi / bilanggidi marlami / majooddoo marlami /
cold blanket without matches without
galigoo marlami /
calico without
'It was cold. They had no blankets, no matches, no tents.'
4 winhi warang -biddi yoowooloo / ngamoo ngaddanggarni / only sit (3pl)N+I man before dreamtime 'People just had nothing, before, in the dreamtime.'
5 niyaji -ya warang -biddi / balngarna /
this LOC sit (3pl)N+I outside
'At that time they sat out in the open.'
6 gamba -ga yilij -bina / garndiwa /
water ERG rain:on (3pl)A+A many
maadi dij -ji -wina /
cold snap IT (3pl)A+A
'Rain fell on them all, and made them cold.'
7 niyaji -ya / yoowarni lambardi yoowooloo / yingi jilngirndi / this LOC one little man name [name]
'At that time, there was a little man named Jilngirndi.'
8 niyaji -ngga ward -ji -widdangi / doodoo -ji -widdani / this ERG go (3sg)N/I (3pl)OBL shiver IT (3pl)N+ANI maadi / yoowooloo -yarndi -ga / boolga -woolga -ngga cold man PL ERG old:man old:man ERG
barndanyi -barndanyi -ngga /
old:woman old:woman ERG
'He went up to them, who were shivering from the cold, all the people, the old men and the old women.'

9 niyi -ngga doow -ngarni -widdangi/
that ERG get (3sg)N+A (3pl)O
'He took it from them.'
10 gindiwa yalawa -nyali giddari -nga / doowoo -ya
upstream close REP run (3sg)N/A cave LOC
dirib -bindi /
enter BINDI
'He ran a little way upstream, and went into a cave.'
11 miga -winmi baljoowa / ngirndi -ya wayandi
say (3pl)N+MI behind this LOC fire
ngoorndoo -ga giddari -nga /
someone ERG run (3sg)N/A
'Behind they said "Who's run off with the fire?"'
12 booga -ngga ginharndi -ga -waami / gindiwa
baby ERG you:know ERG IND upstream
giddari -nga niyaji -yidda /
run (3sg)N/A this ALL
"IIt was the little one, you know, he ran off upstream to this place."'
13 baljoowa birlaj -binmi -nhi / niyaji -ya doowoo -ya
behind follow (3pl)N+MI (3sg)O this LOC cave LOC
gindiwa / nhin -nhin -bidda girili -ngaddi -ngga /
upstream poke poke (3pl)N+A stick COMIT ERG
goorlarda -ngaddi -ngga /
spear COMIT ERG
'They tracked him behind and poked up into the cave with their sticks, their spears.'

14 gindiwa niyaji nyag -bi -widda / wayandi
upstream this pierce IT (3pl)N+A fire
gindiwa -nyali warang -nga /
upstream REP sit (3sg)N+A
'They pricked him again and again, but he still held the fire up in the cave.'

15 yilba niyaji warang -ji baabiddi / wila / for:good this sit (3sg)N+I inside finish 'He stayed there inside for good. That's all.'

## Text 3: Pumping water for a thirsty bull Mervin Street, 1982.

This is story, designated a humorous story by the narrator (see McGregor forthcoming-g), is about pumping water for a thirsty bull in the early days. The narrator is perhaps the youngest fluent speaker of the language. (This text is discussed at length in McGregor forthcoming-g; see also Allan forthcoming for an alternative analysis.)

1 / niyi -nhingi ngirndaji thangarndi / joolang jijag -ji / that ABL this word [name] say (3sg)N+I ngaddagi -nhingi /
my ABL
'Now that Frank has told his story, it's my turn.'
2 babiddi ngirnda birnboorni -ya / baajathngarna / below this [name] LOC [name] woombadda / warang -biddi / bambim -bidda gamba / [name] sit (3pl)N+I pump (3pl)N+A water booloomarni -yoo /
cattle DAT
'Below here at Birnboorni, Baajathngarna and Woombadda were living, pumping water for cattle.'
3 niyi -nhingi / yoowarni nyiddaji ward -ji gamba -yoo /
that ABL one bull go (3sg)N+I water DAT
'Then one bull came up for water.'
4 yoowarni -ngga / gamba bambim -gila -nga /
one ERG water pump FACT (3sg)N+A
'One of them was pumping water.'
5 bambim -nga: niyaji / nyiddaji wara -yi /
pump (3sg) $\mathrm{N}+\mathrm{A}$ this bull stand (3sg) $\mathrm{N}+\mathrm{I}$
'He pumped, while the bull stood there.'

6 well .. ngirndaji -ngga / bambim -gila -nga gamba / this ERG pump FACT (3sg)N+A water 'This one was really pumping water.'
7 wara -mi wara -mi wara -mi niyaji stand (3sg) $\mathrm{N}+\mathrm{MI}$ stand (3sg) $\mathrm{N}+\mathrm{MI}$ stand (3sg)N+MI this nyiddaji /
bull
'It stood and stood and stood, the bull.'
(This is the only instance in the entire corpus of the verbal lexeme wara- 'stand' collocating with a classifier other than +I .)

8 ngirndaji / ngoonyoo -nhingi nyiddaji ngirndaji /
this where ABL bull this
joowoorloo nyamani / ward -ji /
stomach big go (3sg)N+I
'"Where did this bull come from, the one with the big stomach?"'
9 nd ngirnda bida -wa -yi no? / wayaddmi /
and this get:stiff PROG (3sg)N+I now (he:left:off??)
bambim -nhingi gamba /
pump ABL water
'He was getting stiff, and left off (??) from pumping water.'
(The meaning of the term wayaddmi is uncertain. On playing back the tape recording of this story, I was informed by the narrator that it meant 'arm'. It is not, however, among the terms I have elicited for 'arm'. The most likely possibility - both semantically and formally - seems to me to be that it is a careful, or dialectal variant of the verb wadd- 'leave off, forget'.)

10 baa -mi -nhi / yaanya -yoo / nginyji -ga now /
call ( 3 sg ) $\mathrm{N}+\mathrm{MI}$ (3sg)O other DAT you ERG
bambim -ja -wa ngirndaji -yoo / nyiddaji -yoo /
pump SUBJ FUT+(2sg)N+A this DAT bull DAT
'He called out to the other one, "You now, you can pump water for this bull."'

11 well niyi -ngga / miga -mi -nhi / nginyji -ga / he ERG tell (3sg)N+MI (3sg)O you ERG
nyiddaji / thangarndi gard -boowoo / joowoorloo nyamani
bull mouth hit (2sg)N+BINI stomach big

## niyaji nyiddaji /

this bull
'Well, he said, "You should punch the bull in the mouth; it's got too big a stomach."'

12 gad -bi -ya -wani / yaabja -yoo /
leave IT SUBJ (3sg)N+BINI some DAT
boorloomani -yoo /
cattle DAT
"Let it leave some water for the other cattle."'
13 well niyi -nhingi wila / ngirndaji thangarndi that ABL finish this word
ngaddagi -nhingi /
my ABL
'Well, that's all my story.'

## APPENDIX 2: VOCABULARY IN SEMANTIC FIELDS

This appendix includes most of the starred items of Sutton and Walsh (1979), with the exception of some closed class items discussed in the body of this book (e.g. pronominals), and a few terms for things not found in the region. The vocabulary is organised into semantic domains following the model of Sutton and Walsh (1979). Items are glossed by one or two English words, in order to give an approximate idea of their main meanings. It is beyond the scope of the present work to give detailed statements of the meaning of each item. Another wordlist, in the Hudson-Street-Chestnut orthography, is contained in McGregor (in preparation-b).

## Nominals

A. Body parts and products
head
brain
hair of head
grey hair
face, forehead
eye
nose
ear
cheek
jaw
chin
mouth
lip
moustache
beard
tooth
tongue
saliva
midda
milyilyi
yambadda
boolga
moowooloo
moorloo
manili
man.ga
ngiddirli
garli
limimi
thangarndi
marliwidi
ngoonyjoongoonyjoo
thaawooddoo
minyjoo
thalanyi
goonggoodoo

| neck (exterior) | wiliwili, wirn.gaddi |
| :--- | :--- |
| throat | garndagarndadi |
| nape of neck | jaabi |
| shoulder | lawadi |
| armpit | gaddi, gaddwi |
| arm | barndi |
| hand | marla |
| fingernail, toenail | miljarndi |
| back | wirla |
| upper back | winyjiddgi |
| chest | doomoodoo |
| heart | dooloo |
| rib | walamboo |
| breast | gamoo |
| navel | jinyjili |
| hip | mirali |
| lungs | gawoo |
| liver | mirli |
| stomach (internal) | moonda |
| stomach (external) | joowoorloo |
| guts | liddi, jilywiri |
| urine | yilaa |
| penis | girlinggi |
| testicles | ngalyadi |
| semen | thaaliya |
| pubic hair | ngooddoorndoo |
| vagina | nyaninyi |
| buttocks | marnba |
| facces | roowoo |
| thigh | birdi |
| knee | gimani |
| calf | jawoorloo |
| ankle | linggali |
| foot | thinga |
| body | garajbi |
| cicatrice | moordoo |
| sweat | joowadi |
| sore | gaji |
|  |  |
|  |  |
|  |  |
|  |  |

boil
blood
bone
fat
B. Human classification
person, Aboriginal
baby, child
boy (preinitiate)
old man
girl
woman
old woman
widow
doctor
white person
policeman
poor fellow
husband
wife
son (of a man)
son (of a woman)
mother
father
older brother
younger brother or sister
older or adult sister
digi
waaddi
gooji
min.ga
yoowooloo
booga, joogoo
gambayi
boolga
marlara, galinda
goornboo
barndanyi
galara
jalngangooddoo
gardiya, maringaddi, wajbali
limba, mirnmirdgali
boogalangi
ngoombarna
garingi
ngaloowinyi
ngalinyi
ngaddanyi
ngaboo
marna
ngaja
marni

## C. Language, mythology and ceremony

language
name
fighting ground
song
red ochre
yellow ochre
ghost
thangarndi
yingi
barawooddoo
joonba
bilyji
garndaadda
birliddi

## D. Human artefacts

camp
hut
path
boomerang
digging stick
club
spear
fighting spear
woomera
coolamon
fishing net
shield
axe
knife (European)
fire saw
riwi
wirinyi
baali, gaali
garli
gananyi
moowooddoo
jinali
than.gindi
ngawali
yamadi
ramboodda
gaddoona
jamayina
nayoo
gooddoo
E. Food, cooking and fire meat
maa
vegetable food
manyi
fire
ashes (cold)
charcoal
flame, light
smoke
wayandi
gawoondoo
biddi
dili
wan.gi
F. Water
water
mud
creek
river
rain
gamba
galamanda
jarlangga
warlibiddi
yiwindi
G. Elements
sky
cloud
biddinyi
ngoomooddoo

| thunder | naya |
| :--- | :--- |
| lightning | jimilooroo |
| wind | girn.gali |
| star | warda |
| moon | jaalinyi |
| sun | middi |
| shade | ngaaloo |
| daytime, midday | lanygiya |
| night | maningga |
| ground, dirt | banda |
| hill, rock | ngaaddi |
| pebble | ngaddali |
| sand | walyadda |
| dust | joodoo |
| hole in ground | gooddgoo |

## H. Mammals

echidna
possum
kangaroo (generic)
tail
dingo
tame dog
flying fox
horse

## I. Reptiles

## crocodile

bluetongue lizard
goanna (generic)
snake (generic)
watersnake

## J. Birds

bird
egg
feather
minaji
jambiyindi
thiddoo
nyawa
maddanyi
thadda
ginyma
dimana, yawarda
lalanggadda
loomoogoo
wawanyi
barlanyi
joonggoodda
jirigi
gambinyi
bin.gidi

| emu | garnanganyja |
| :--- | :--- |
| brolga | gooddalga |
| pelican | mayarda |
| bustard | galamooda |
| scrub turkey | wirndoowoo |
| bower bird | jooddgina, joojgana |
| peaceful dove | maddawi |
| topknot pigeon | barlara |
| peewee | diyadiya |
| butcher bird | gooddanggool |
| crow | wanggiri, wanggana |
| willywagtail | jindiwiddinyi |
| sulphur crested cockatoo | balnganyja |
| black cockatoo | giddamala |
| kite hawk | booloogoo |
| eagle | garnbidda |
| spoonbill | jadiyadi |
| diver bird (cormorant?) | gaddanggaddang |
| black duck | lawarla |
|  |  |
| K. Marine life |  |
| fish | gawi |
| catfish | goolamangaddi |
| barramundi | balga |
| crayfish (cherrabun) | jaddamba |
| shell | jaddja |
| mussel | ngawaya |
| pearlshell | binyjawinyja, jagooli |
| frog | woogoo, jiddagi |
|  |  |
| L. Insects and spiders |  |
| termites | gooradooroodoo |
| lice | nyanggi |
| bee | wida |
| ant (generic) | migi |
| antbed | ngawagoo |
| sugarbag, honey | ngalinya |
|  |  |
|  |  |
|  |  |

butterfly
grubs (witchetty)
scorpion
spider (generic)

## M. Plants

tree, stick
leaf
scrub
root
flower
grass
water-lily
red gum
paperbark
yam
bindi-eye (burr)
spinifex
N. Physical qualities

| one | yoowarni |
| :--- | :--- |
| two | garndiwiddi |
| three, a few | ngarloodoo |
| many | garndiwa, garndiwangooddoo |
| black | gooroogooroo |
| white | labawoo, lawagimana |
| red | thiwa |
| big | nyamani |
| small | jiginya, lambardi |
| long | giddabingaddi |
| short | thigi |
| straight, right | joodoo |
| straight (as of a line) | thiddgirli |
| sharp (point) | jalgoodoo |
| blunt, deaf, blind | damarda |
| rotten | thoowoorndoo |
| raw (meat) | goorn.ga |


| hot (weather) | boordbara |
| :--- | :--- |
| cold (weather) | maadi |
| wet | giyi |
| dry | booladi |
| soft | galyba |
| hard, strong | binyidi |
| light (weight) | ramboodda |
| heavy | tharidi |
| new | yanoonggoo |
| old | ngamoonhingi |
| hungry | ngiddinyilla |
| thirsty | ngayirla |
| sated with food | joowoorloongaddi |
| sick | gambi |
| dead | nganyandi, gijali |
| fat | gaddirndi |
| thin, skinny | laddbi |
| asleep | mooyoo |

## O. Non-physical qualities

good
bad, stupid
clever
frightened, cautious
insane
ashamed
wild, angry, fight
secret
joornanygadda
yijgawoo
binaddi
yoowa
wangmadda
ganybili
thiddi
daddoogoo
Verbals
P. Verbs of motion
go, walk
ward-
run
climb up
climb down, descend
giddar-
fall
bar-
thood-
sit down, put
gard-
yood-

| stand up | thoorloog- |
| :--- | :--- |
| go away | gird- |
| return | barn- |
| turn around, turn over | goornag. |
| swim | bayal- |
| dive into water | thinggil- |
| enter | dirib- |
| emerge, arrive, rise (of sun) | bij- |
| jump | jaddg- |
| dance | boorij- |
| chase | joodda- |
| search for, look for | moow- |
| follow | boorlooboo- |
| pass by | widag- |


| Q. Verbs of state |  |
| :--- | :--- |
| be sitting | warang- |
| be standing | wara- |
| be lying | bagi- |
| be burning | mooddoob-, ngab- |
| float | loombaddany- |
| wait | liga- |
| go out (of fire), extinguish | balib- |

## R. Verbs of vocalisation and thought

## speak

cry, weep
ask for something
shout
laugh
sing (song or person)
dream (of someone)
teach someone
learn
promise
jag-, jijag-, miga-
narda-
yan.gin-
baa-, ngooddab-
galgal-
ngalany-
gooni-
binaddig-
binaddi-
yag-

## S. Bodily functions

see, look
hear
smell it
lick
bite
swallow it
consume, eat, burn
drink
vomit
die
urinate
defecate, void, eject
wake up
ache
mila-
danymili-
wab-
nginoong-
wird-
niyig-
ngab-
ngoorloog-
yooroog-
nang-
nhar-
thiddaj-
gij-
woorloorl-
T. Verbs of impact and violence
hit, kill, fell gard-
pience
kick
dig, scratch
break it
cut it
bathe
tie up
rub
squeeze
cover it
make, construct
cook
nyag-
thoorlng-
widdij-
dij-, garoong-
gaj-
nyoomboorl-
mird-
boodd-, nyoon-
jany-
doorn-
ngarag.
woob-

## U. Verbs of holding and transfer

take it, get it, catch it, fetch it doow-
give it
put down
throw
hold
ngang-
yood-
waj-
goorij-
carry leave it
lose it, leave, forget
push along
hang up (on peg)
hide it
find it
galiny-, ward-
gad-
nyin-
loow-
thard-
booroo-
gilba-

Adverbials and interjections
V. Locationals, directionals and temporals
north
south
east
west
far
near, close by
up, above
down, below
this side
other side
ahead
behind
now, today
later on
before, already
long ago, dreamtime
yesterday
tomorrow
boowooddoo
$n g i y i$
ngila
liya
marnangooddoo
graa, yalawa
laandi
baabiddi
ngirndangaddingga
ngooddoongaddingga
wilangajaddi
balyoowa, balyjoowa
yaningi
wamba
ngamoo
ngaddanggarni
gaddwaroo
moongayayoo

## W. Interjections

yes yoowoo, yoowayi
no
come on, lets go
OK, you can go
ba
gaj

## APPENDIX 3: LIST OF BOUND MORPHEMES

This appendix lists all allomorphs of bound closed-class morphemes, with the exception of those forms deriving from the regular application of the sandhi rules described in section 2.4. References are made to the section(s) containing major discussions of the conditioning factors, occurrence and semantics of these morphemes.

CL indicates classifier; PF indicates prefix, either pronominal or tense, to the classifier (section 3.9.3.2); INF indicates infinitive; SF indicates stemforming suffix; EN indicates enclitic; and P indicates postposition. Suffixes and enclitics that are restricted in occurrence to the VP are denoted by VSF and VEN respectively. [C] marks those exceptional bisyllabic morphemes (all (w)-initial) which do not bear inherent stress, and which cohere with the preceding phonological word. (VR6 applies to delete the initial segment, except when the following vowel is ( 00 ); the resulting vowel sequence is modified as per VR5). An asterisk marks those morphemes which do not undergo the sandhi rules which apply at their initial boundary type.

| $+a$ | CL | +A 'extend' - 3.9.3.2.1, 6.5.5 |
| :---: | :---: | :---: |
| $+a_{1}$ | CL | +I 'go, be' - 3.9.3.2.1, 6.5.5 |
| +addi | CL | +ADDI 'put' - 3.9.3.2.1, 6.5.5 |
| +ani | CL | +ANI 'fall' - 3.9.3.2.1, 6.5.5 |
| +arni | CL | +ARNI ${ }_{1}$ 'emerge' - 3.9.3.2.1, 6.5 .5 |
| +arni | CL | $+\mathrm{ARNI}_{2}$ 'extendible, reflexive/reciprocal' $-3.9 .3 .2 .1,6.5 .5$ |
| -badi | SF | 'your [kin-relation]' - 3.3.2, 3.12.1.1 |
| -ban | VSF | continuative - 3.12.2.1 |
| -bari | INF | '-en/-ing' - 5.5.3.1 |
| -bi+ | PF | (3pl)A - 3.9.3.2.2 |
| -bi+ | PF | future tense - 3.9.3.2.4 |
| -bio ~ -bili- | VSF | iterative - 3.12.2.1 |
| -bidd+ | PF | (3pl)N - 3.9.3.2.2 |
| +bidd + | PF | (3pl)A - 3.9.3.2.2 |


| -bin+ | PF | (3pl)A - 3.9.3.2.2 |
| :---: | :---: | :---: |
| +bindi | CL | +BINDI 'get' - 3.9.3.2.1, 6.5.5 |
| +(b)ini | CL | +BINI 'hit' - 3.9.3.2.1, 6.5.5 |
| -binyi | P | perlative - 3.7.2.8 |
| +birli | CL | +BIRLI 'consume' - 3.9.3.2.1, 6.5.5 |
| +(b)00 | CL | +BINI 'hit' - 3.9.3.2.1, 6.5.5 |
| $+d a_{1} \sim+d i$ | CL | +DI 'catch' - 3.9.3.2.1, 6.5.5 |
| $-d d i \sim-d d o o$ | VEN | paucal - 3.9.3.7 |
| -gali | SF | 'good at doing' - 3.12.1.1 |
| -gi- | VSF | inceptive - 3.12.2.1 |
| -giddangi | VEN | (2pl) $\mathrm{O}-3.9 .3 .6$ |
| -goowa | VEN | $\begin{aligned} & \text { progressive aspect }-3.9 .3 .3,5.5 .2 .5 \\ & \quad 6.5 .2 \end{aligned}$ |
| +i | CL | +1 'go, be' - 3.9.3.2.1, 6.5.5 |
| +iny+ | PF | (2sg)A - 3.9.3.2.2 |
| -ja- | VEN | subjunctive mood - 6.5.4.1 |
| -jadd+ | PF | (1U)N - 3.9.3.2.2 |
| -jant | PF | (1U)A - 3.9.3.2.2 |
| -jangi | EN | semblative, 'like' - 6.3.7 |
| -ji+ | PF | (2sg) N - 3.9.3.2.2 |
| -ji- | VSF | iterative - 3.12.1.2 |
| -jidd + | PF | (1R) N - 3.9.3.2.2 |
| -jint | PF | (1R) $\mathrm{A}-3.9 .3 .2 .2$ |
| -jinga (*) | SF | 'emphatic/self' - 3.6 |
| -langi ~ -langoo | SF | kin-dyad - 3.3.2, 3.12.1.1 |
| -li+ | PF | (1sg) N - 3.9.3.2.2 |
| -ma | VEN | indefinite -6.3.8 |
| +ma ${ }_{1}$ | CL | +MI 'effect' - 3.9.3.2.1, 6.5.5 |
| +marni | CL | +MARNI accomplishment, reflexive/ reciprocal - 3.9.3.2.1, 6.5.5 |
| -mawoo | INF | '-en/-ing' - 5.5.3.2 |
| -mi | EN | indefinite - 6.3 .8 |
| +mi | CL | +MI 'effect' - 3.9.3.2.1, 6.5.5 |
| -mi | VSF | iterative - 3.12.2.1 |
| -mili | SF | 'characterised by' -3.12.1.1 |
| -moowa | EN | 'only' - 6.3.3 |


| -ng+ | PF | (1sg) $\mathrm{N}-3.9 .3 .2 .2$ |
| :---: | :---: | :---: |
| -ngadda(gi) | VEN | (1sg) $\mathrm{O}-3.9 .3 .6$ |
| -ngaddaya | EN | 'too, else' - 6.3 .5 |
| -ngaddi | P | comitative - 3.7.2.9 |
| -nganggi | VEN | (2sg) O - 3.9.3.6 |
| -ngangi | VEN | 'first person dual inclusive accusative and oblique' - 3.9.3.6 |
| -ngarna | SF | 'inhabitant, dweller of' -3.12.1.1 |
| -ngg+ | PF | (2sg) N - 3.9.3.2.2 |
| -ngga | P | ergative - 3.7.2.1 |
| -nggi+ | PF | (2sg) $\mathrm{A}-3.9 .3 .2 .2$ |
| -nggidd + | PF | (2pl) $\mathrm{N}-3.9 .3 .2 .2$ |
| -nggin+ | PF | (2pl)A - 3.9.3.2.2 |
| -ngiddangi | VEN | (1R) $\mathrm{O}-3.9 .3 .6$ |
| -ngim+ | PF | (2sg) $\mathrm{A}-3.9 .3 .2 .2$ |
| -ngint | PF | $(1 \mathrm{sg}) \mathrm{N}-3.9 .3 .2 .2$ |
| -nhi | VEN | (3sg) $\mathrm{O}-3.9 .3 .6$ |
| -nhingi | P | ablative - 3.7.2.4 |
| -nyali | EN | 'again, repeated' - 6.3.2 |
| -nyji | VEN | desiderative mode - 3.9.3.5, 6.5.3.1 |
| -nyooloo | EN | 'etcetera' -6.3.4 |
| tri+ | PF | (3pl)N - 3.9.3.2.2 |
| +ri+ | PF | (3pl)A - 3.9.3.2.2 |
| $-m i$ | EN | 'next, now' - 6.3.1 |
| $-r n i$ | VEN | potential mode - 3.9.3.5, 6.5.3.2 |
| -(w)a ${ }^{(*)}$ | VEN | $\begin{aligned} & \text { progressive aspect }-3.9 .3 .3,5.5 .2 .4 \\ & 6.5 .2 \end{aligned}$ |
| -wa | SF | 'way' - 3.12.3.1, 5.5.1.3 |
| -4a | SF | 'his, her, their kin-relation' - 3.3.2, 3.12.1.1 |
| -wadda | SF | [C] manner - 3.12.3.1, 5.5.1.4 |
| -waddawadda | SF | 'everyone associated with the place' - $3.5 .5$ |
| -wadki | VEN | [C] paucal - 3.9.3.7 |
| -waddi | VSF | iterative - 3.12.2.1 |
| -(w)ali | SF | 'good at doing' - 3.12.1.1 |


| -wanggoo | SF | 'someone associated with the place' 3.3.5 |
| :---: | :---: | :---: |
| -wanhi | VEN | [C] (3sg) $\mathrm{O}-3.9 .3 .6$ |
| -wanya | SF | [C] 'other, different' - 3.12.1.1 |
| -warni | VSF | iterative - 3.12.2.1 |
| -warnoo | SF | 'all members of the subsection' - 3.3.2, 3.12.1.1 |
| -wi+ | PF | present tense - 3.9.3.2.4, 6.5.1.2 |
| -wi+ | PF | irrealis tense - 3.9.3.2.4, 6.5.1.4 |
| -widdangi | VEN | (3pl) O - 3.9.3.6 |
| -widdi | EN | 'identity unknown' - 6.3.6 |
| -wila- | VEN | [C] factive mood - 3.9.3.3, 6.5.4.2 |
| -winyja | P | deprivative - 3.7.2.10 |
| -woo | VEN | definite - 3.9.3.5, 6.3.9, 6.5.3.3 |
| -woo | P | dative-3.7 |
| -ya | P | locative - 3.7.2.3 |
| -yaddangi | VEN | (1U) O - 3.9.3.6 |
| -yali | SF | 'good at doing' - 3.12.1.1 |
| -yangga | P | ablative - 3.7.2.5 |
| -yarndi | P | plural - 3.7.2.11 |
| -yawoo | P | allative - 3.7.2.7 |
| -yayi | P | allative - 3.7.2.7 |
| -yayoo | P | allative - 3.7.2.7 |
| -yi+ | PF | irrealis tense - 3.9.3.2.4, 6.5.1.4 |
| -yi | VEN | dual - 3.9.3.7 |
| -yidda | P | allative - 3.7.2.6 |
| -yiddi | P | dual - 3.7.2.11 |
| -yila | SF | privative, 'un-/-less' - 3.12.1.1 |
| -yoo | VEN | dual - 3.9.3.7 |
| -yoo | P | dative - 3.7.2.2 |
| -yooddoo | P | dual - 3.7.2.11 |

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[^0]:    1 The language has usually been referred to in the anthropological and linguistic literature as Gunian; in my earlier writings on the language I used the spelling Kuniyanti. (For a full list of the variant spellings, see McGregor 1988e.) However, speakers generally feel the term Gunian to be a shortening (see below page 72), and prefer that the full form Gooniyandi be used in written reference to the language and people (Street and Chestnut 1984).

[^1]:    2 For instance, on one occasion a verb form which I constructed was rejected as proper Gooniyandi, but acknowledged as a form used by some Gooniyandi/Kija speakers in Mulurrja. And some verb forms in the Gooniyandi word book produced in the Yiyili School (Yiyili Aboriginal Community School 1983) differ from the

[^2]:    ${ }^{3}$ A useful spin-off of this principle is that a part-Aboriginal child's subsection membership may be determined without necessarily placing the white father in a subsection, or even knowing his identity.

[^3]:    4 This is interesting since a classificatory MM is a possible third choice of spouse in some tribes with subsections, including the neighbouring Jaru (Tsunoda 1981:10) and Walmajarri (Kaberry 1939:46,119). Kolig (1981:100) mentions that $8 \%$ of the marriages he recorded in the Fitzroy Crossing region were of this type, and that some individuals insisted on the legality of such unions. This joking insult is, however, the only evidence I have at all suggestive of the acceptability of the jaja 'mother's mother' union amongst the Gooniyandi people.

[^4]:    6 This is an oversimplification. In most cases the Gooniyandi speaker did not speak Standard Australian English, and there was no certainty that s/lue put the same values to the categories as I did. Nor could misunderstandings be entirely eliminated by my using Kriol or Pidgin (of which I claim litte speaking control) as the prompting language.

[^5]:    1 About 200 spectrograms were made of elicited words and sentences. The quality of the recordings was not generally good enough to produce spectrograms with sufficient clarity to allow consistent discrimination between the 'problem' phonemes which I had most difficulty in distinguishing (see page 34-35 above), as had been originally hoped. However, there were enough reasonable spectrograms of stops, nasals and vowels to allow some generalisations to be made with a fair degree of confidence. Fortunately partial acoustic characterisations of some

[^6]:    2 Compare also the cognate terms japanangka (Warlpiri), and panaka (Western Desert).

[^7]:    ${ }^{3}$ There is only one exception that I am aware of, the place name ngoombandi (see page 72 above). As Rumsey has pointed out to me (pers.comm.), this is possibly evidence of a former morpheme boundary between the $/ \mathrm{n} /$ and the $/ \mathrm{d} /$. Note, however, that at the boundary between a nominal root and the ergative postposition -ngga, the latter is reduced to -ga if the preceding syllable contains a homorganic nasal-stop cluster - see rule R7 of section 2.4.1.2.2.

[^8]:    4 The only place in which this rule gives counter-intuitive results is in the exceptional intervocalic tri-consonantal cluster /rn-g-r/ of mirngriya 'dodge'. Given that the sequence $/ \mathrm{g}-\mathrm{r} /$ occurs word initially, and that $/ \mathrm{m}-\mathrm{g} /$ does not occur word finally, it would seem most likely that the syllable boundary should follow the nasal, not the stop.

[^9]:    1 In including both words and morphemes in this classification I am going against the usual practice of grammarians, who normally include only words, and not morphemes, in their parts-of-speech classification. There seems to be no

[^10]:    2 Note the change of final /oo/ to $/ \mathrm{i} /$ preceding the initial $/ \mathrm{y} /$ of the allative postposition; this is accounted for by R8 above (section 2.4.1.2.3).

[^11]:    ${ }^{3}$ That the words for the seasons and parts of the day are adverbials rather than nominals (as they are in in English) is evidenced by the fact that they realise circumstantial roles of temporal location without having the LOC postposition attached, as is necessarily the case for nominals.

[^12]:    4 Although the third person singular nominative form is homophonous with the determiner niyi 'that' (see 3.3.1.1), that they are indeed two distinct words is evident from the fact that the latter does not have a distinct oblique form nhoowoo, as does the pronominal; nor does it contrast with the non-singular pronominal bidi 'they'.

[^13]:    5 As Alan Rumsey has pointed out to me, in Ungarinyin -ni occurs with the cognate root boo ~woo 'hit' as a past indicative marker (see Rumsey 1982b:81). In Gooniyandi, however, ni cannot be segmented from $b i$ and identified as a tense or mood marker, as the other contexts of occurrence of -bini indicate.

[^14]:    ${ }^{6}$ The fact that the morphemes in question never occur finally in d-words shown below by hyphens on their right hand side - might seem to suggest that they are infixes rather than suffixes. However, they are regarded as suffixes since they are clearly suffixed to the initial $g$-word of the VP, which they modify, and which they may terminate; they do not occur within a single grammatical word.

[^15]:    1 Perhaps another reason why this phrase has no Entity nominal is because there is no well accepted Gooniyandi term for 'teacher'. In other contexts the speaker might borrow the English word teacher.

[^16]:    intonation contour.

[^17]:    ${ }^{1}$ I use the term 'inherent' in essentially the same sense as it is customarily used in systemic theory. It refers to those roles or functions that necessarily occur in structures of a particular type. That is, the particular role must be realised by some linguistic expression, unless it has been ellipsed: the absence of a realising expression means that it is taken to be understood what thing fulfils the particular role. As I employ the term, however, it need not necessarily refer to participant roles, as systemic usage normally has it (e.g. Fawcett 1980:135-136). The reason for this departure from tradition will shortly become clear.

[^18]:    ${ }^{2}$ The facts of pronominal forms in the CC have been simplified somewhat here. The prefixes to the CC are identified as either NOM(inative) or ACC(usative), based on the form that the third person plural pronominal would take in reference to an entity in the respective role.

[^19]:    3 It follows that although a clause is as a rule 'replaceable' by its VP, it is not an endocentric construction with the VP as its head. Compare Matthews (1981:148149), Robins (1964:235), and cf. Blake (1983:145, 163).

[^20]:    5 However, spatial adverbials do occasionally occur as NP constituents with

[^21]:    temporal meanings (cf. page 163) and occasionally occur in syntagms with temporal adverbials in expressions of time - e.g. maningga thoolngooddoo (night through) 'throughout the night'.

[^22]:    ${ }^{6}$ That is, assuming - as would seem reasonable - that pre-Focal material, which is unmarked for given/new, is strictly ordered given^new.

[^23]:    7 Note the ellipsis of the quantifier nyamani 'big, much' in the second clause of this example. This clause did not assert that they ate nothing.

[^24]:    8 In this connection it may be relevant to enquire whether (felicitous) responses to utterances such as (5-347) and (5-348) respond to the clause of communication or to the clause representing the utterance communicated, or to either. If the first (only), this would suggest that the clauses do in fact form a complex together. Unfortunately, I have no data bearing on this question.

[^25]:    1 This enclitic must be distinguished from the homophonous -rni POT (see section 6.5.3.2), which occurs in VPs. Although the two are in complementary distribution, they appear to have nothing in common semantically. For this reason they are taken to be two distinct morphemes.

[^26]:    2 Of course where marlami 'nothing, without' is a phrasal constituent a correlating clause may contrast the lack of something with the presence of something else, as in example (6-124).

[^27]:    ${ }^{3}$ It is clear why, since the embedded proposition must be known to be false at the time of utterance, which must differ from the time at which the belief was first held.

[^28]:    4 Note that the reverse order, mangaddi yiganyi 'not uncertain', does not occur. This fact is consistent with the view adopted here, but is difficult to explain under the alternative hypothesis that yiganyi indicates possibility.

[^29]:    ${ }^{5}$ This analysis differs slightly from that presented in McGregor (1984:426-429). In my earlier analysis I took the positive values of the features to be in opposition to the value unmarked for the particular feature. The reason for the change in my analysis should become clear as the discussion proceeds.

[^30]:    ${ }^{6}$ Recall that bilyig- 'break surface with a point' also occurs with +ADDI (see (g) above). In describing the action of a bird breaking an egg with its beak, +BINI was used; +ADDI was used in description of a situation in which an egg was broken by being thrown onto the ground.

