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A GRAMMAR OF KUNIYANTI:

An Australian Aboriginal Language of
the Southern Kimberley, Western Australia

by

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A thesis submitted in fulfilment of
the requirements of the degree of
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ABSTRACT

This thesis sets out to provide a detailed and comprehensive description of the phonology, morphology, and syntax of the Kuniyanti language.

The Introduction places Kuniyanti in its linguistic and social context, surveys previous work, and discusses methodological issues.

Chapter 2 describes segmental phonology in standard post-Bloomfieldian terms. Phonetic realizations of the phonemes are described in both articulatory and acoustic terms. In addition, a phonological feature system is proposed to account for allophony and phoneme distribution patterns, and abstract morphophonemic units are set up because this allows for a more systematic account of word morphology. Stress placement is accounted for in terms of mora-counting over the phonological word.

Chapter 3 gives a detailed description of word morphology, which is mainly agglutinative. Words and morphemes are classified into parts-of-speech, the combinatorial and formal properties of which are described in detail. The special structure of the verbal phrase (distributionally a word) is examined. Additional (non-morphemic) processes of stem formation are discussed.

Chapter 4 investigates the structure of nominal phrases. Two types are distinguished: the endocentric Noun Phrase and the exocentric Postpositional Phrase. The semantic significance of word order and Postposition placement is examined.

Chapter 5 presents a functional description of the Kuniyanti clause in the general neo-Firthian tradition. Following Halliday, three metafunctions are identified (Experiential, Textual and Interpersonal), each of which contributes a distinct constituent structure to the clause. A preliminary, semantically based investigation of the clause complex is undertaken, inspired largely by Halliday's recent work.

Chapter 6 turns to semantics. It is assumed that each form has a constant grammatical meaning which may be abstracted from its meaning in particular contexts. A semantic interpretation of a number of function words and morphemes is suggested based on detailed investigation of their contextual meanings.

Appendix 1 gives three sample texts; Appendix 2 is a short dictionary organized into semantic fields; and Appendix 3 lists all known bound function morphemes.

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ABBREVIATIONS AND CONVENTIONS

A	Accusative
ABL	Ablative
ACC	Accusative
ADV	Adverbial
AG	Agent
ALL	Allative
C	Consonant
CC	Classifier Complex
CHAR	Characterized by
CI	Classifier (in the Verb Phrase)
CLAS	Classifier (in the Noun Phrase)
COMIT	Comitative
CTV	Continuative
DAT	Dative
DEF	Definite Mode
DEIC	Deictic
DEP	Deprivative
DESID	Desiderative Mode
DET	Determiner
du	Dual number enclitic (in the Verb Phrase)
DU	Dual number Postposition
d-unit	Distributional unit
DW	Dweller of niche
EMP	Emphatic
EN	Enclitic
ENTY	Entity
ERG	Ergative
ETC	Etcetera
F _n	Formant n
FACT	Factive Mood
FUT	Future Tense
GD	Good at
GL	Goal
g-unit	Grammatical unit
H	Hearer
IC	Immediate Constituent
INC	Inceptive
Incl	Inclusive
IND	Indefinite

INF	Infinitive
IRR	Irrealis
IT	Iterative
K	Clause
K _{nf}	Non-finite clause
LOC	Locative
MED	Medium
N	Nominal, Nominative Case (in glosses of pronominal prefixes)
NOM	Nominative
NP	Noun Phrase
nsg	Non-singular
NUM	Numeral
O	Other, Oblique Case (in glosses of pronominal enclitics)
OBL	Oblique
ON	Only
OR	Orientative
P	Postposition
pa	Paucal number enclitic (in the Verb Phrase)
PAST	Past Tense
PF	Prefix
pl	Plural (in pronominal categories)
PL	Plural Postposition
POT	Potential Mode
PP	Postpositional Phrase
PRES	Present Tense
PROG	Progressive Aspect
QUAL	Qualifier
QUAN	Quantifier
R	Restricted
REP	Repetition
S	Stressed Syllable
SEM	Semblative Enclitic
SEQ	Sequential Enclitic
SF	Stem formative
sg	Singular (in pronominal categories)
SUBJ	Subjunctive Mood
tns	Tense
u	Unmarked
U	Unrestricted
V	Verb, Vowel
V _{nf}	Non-finite Verb

VP	Verb Phrase
WC	Word Complex
1	First person
2	Second person
3	Third person

Kin-term Abbreviations:

B	brother
D	daughter
F	father
H	husband
M	mother
S	son
W	wife
Z	sister
+	older
-	younger

Special Symbols:

/	/	enclose phonological forms and tone units.
[]	enclose phonetic form, phonological features, and constituents.
<	>	enclose morphophonemic units, and constituents interpolated within other constituents.
()	enclose optional material.
→		becomes (in phonological rules); acts on (elsewhere).
/		is conflated with.
/	_____	in the environment.
↘		is realized by.
↓		falling tone.
↑		rising tone.
-		level tone.
~~~~~		under a syllable indicates that it is salient.
~		alternates with.
<		derives from, is less than.
>		is greater than.
^		concatenation.
.		syllable boundary.
+		positively specified for the feature, morpheme boundary within the Classifier Complex.
-		negatively specified for the feature, morpheme boundaries (except those within the Classifier Complex).

...	constituents in apposition, pause in a tone unit.
$\left\{ \begin{array}{l} a \\ b \end{array} \right\}$	a or b (in phonological rules).
$\left\{ \begin{array}{l} a \\ b \end{array} \right\}$ 1 1	exactly one of a or b (in phonological rules); the one chosen is the same on each side of the arrow ( $\rightarrow$ ).
$\rightarrow \left[ \begin{array}{l} a \\ b \end{array} \right]$	feature a or feature b, but not both.
$\left\{ \begin{array}{l} -a \\ -b \end{array} \right\}$	feature a and feature b.
§	stem boundary.
#	boundary of distributional word
∇	unstressed vowel.

Phonetic transcriptions use IPA symbols throughout, except that a dot under a vowel indicates retroflexion, and (for typographical reasons)  $\text{ɟ}$  is rendered  $\text{j}$ .

Verbal Classifiers are cited throughout the text in capitals (e.g. -PINTI 'get'). Pronominal prefixes to the Classifier are glossed as follows: the person and number information is enclosed in brackets, and is followed by a letter referring to the case form. (E.g. (1R)N indicates the nominative form of the first person restricted.)

Category and function labels are given initial capitals.

Example sentences normally consist of three parts: (a) Kuniyanti text; (b) interlinear gloss; (c) free translation.

(a) Kuniyanti text is divided into (distributional) words, bounded by spaces. Morpheme boundaries are not indicated, except for morphemes under discussion. Examples are not punctuated. Where appropriate to the discussion, suprasegmental features (tone units, rising/falling tone etc.) are indicated.

(b) Interlinear glosses are given for example sentences, except where they consist of the same words as the immediately preceding example, (normally in a different order). Interlinear glosses are morpheme by morpheme (all boundaries being indicated), except in the case of the Verb Phrase, which is normally glossed as a unit. This is primarily because of the large number of constituent morphemes.

(c) A free translation is given for each sentence. This is enclosed in quotes: double quotes for translations provided by the speaker himself; single quotes otherwise.

## CHAPTER 1: INTRODUCTION

### 1.1 Language Type

Kuniyanti* is an Australian Aboriginal language spoken by about 100 people in the Southern Kimberley region of Western Australia. It has been classified as a member of the Bunaban language family, a small family consisting of two languages only - Bunaba being the other member (Capell 1940; O'Grady, Voegelin & Voegelin 1966:28,35; Wurm 1972:123). To date, no definite genetic relationship has been established with any other language family in Australia (or elsewhere), Dixon (1980:3) notwithstanding. The language shows a number of characteristics which have come to be regarded as 'typical' of Australian languages, but in many respects atypical.

Kuniyanti has a typical Australian phonology, having 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, a tap, and two semivowels. Three short vowels are distinguished; length is contrastive for the low vowel only. Voicing is not distinctive, and stress has a purely delimitative function (Trubetzkoy 1969:27).

Words begin with a consonant, very rarely a consonant cluster; the apical distinction is neutralized word initially. Word medially a 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: a large number of monosyllabic, and many end in consonants, occasionally consonant clusters.

Lexical words can be divided into three main classes, each with a number of subclasses: Nominal, Verbal, and Adverbial. 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 usually found in Australian languages in the first-person non-singular, Kuniyanti makes a Restricted-Unrestricted distinction, in which the Unrestricted pronominal refers to the speaker, hearer and at least one other individual (see 3.6).

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* The language has usually been referred to in the anthropological and linguistic literature as Gunian. However, speakers generally feel this to be a shortening, and prefer that the full form be used in written reference to the language and the people (v. ALS Newsletter (Jan.1984, page 7)).

'Case' marking is by means of phrase-level enclitics. There are enclitics covering Ergative, Dative, Ablative, Allative, Locative, and other local meanings. Kuniyanti nominal phrase marking is not split Ergative (Silverstein 1976b; Dixon 1979). The Ergative enclitic is however optional for all phrase types in 'transitive subject' function.

The Verb Phrase (VP) has properties characteristic of both phrases and words. It has two obligatory constituents, the verbal stem, which always occurs first, and a 'classifier complex', which consists of bound pronominals referring to certain actants in the clause, a tense marker, and a 'Classifier'. Classifiers distinguish twelve classes of processes. In addition there are a number of optional constituents, which provide aspectual, and modal qualification, and a further system of bound pronominals, referring to other ('oblique') actants. VP constituents occur in a fixed order.

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

Modality and other speakers' evaluation of the proposition is encoded in free particles, and enclitics.

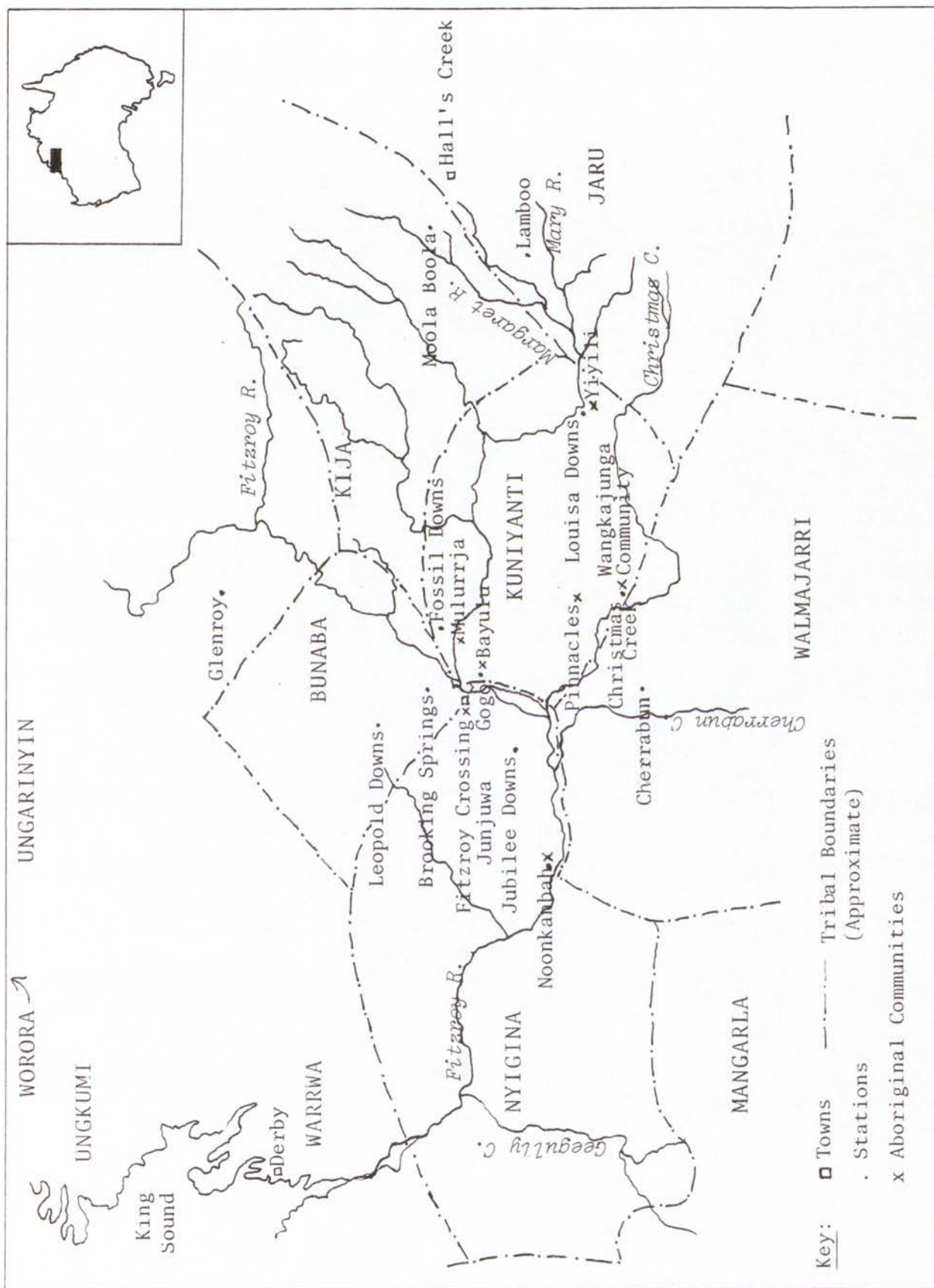
Two main types of clause, verbal and verbless, are distinguishable, depending on whether or not there is an inherent VP. The former show four distinct 'transitivity' types - intransitive, transitive, middle and reflexive - defined by the 'case-frames' of the inherent nominal phrase constituents. Verbless clauses are either relational (Halliday 1970:154) or existential. As in the majority of Australian languages, (see Dixon 1980:441) constituent order is 'free' in the sense that it does not affect the 'content', or the experiential meaning (Halliday 1974:47) of the clause. Constituent order is, however, significant in respect of the textual organization of the clause (Halliday *loc.cit.*), the way the clause is organized as a communicative event.

## 1.2 Territory and Surrounding Languages

Map 1 shows the approximate traditional territories of the Kuniyanti and surrounding peoples (cf. Tindale 1974).

The languages spoken are representatives of five distinct language families, according to Capell 1940, 1966; O'Grady, Voegelin & Voegelin 1966 and Wurm 1972. Although it has been claimed that all Australian Aboriginal languages (with two or three exceptions) belong to a single

Map 1: Kuniyanti Territory



language family, (Dixon 1980:3), genetic relations between these five families have not yet been convincingly demonstrated.

Walmajarri, Jaru and Wangkajunga, spoken to the south and east of Kuniyanti, are the local representatives of the Pama-Nyungan family, which covers most of the continent (see e.g. map facing page 112 in Wurm 1972).

The Djeragan family, of which Kija is a member, is located in the north and north-east of Kuniyanti; the Nyulnyulan family, which includes Nyikina, is spoken to the west of Kuniyanti; the Wororan languages, including Ungarinyin, and Worora were spoken to the north and north-west of Bunaba, and were not geographically contiguous with Kuniyanti.

The two members of the Bunaban family, Kuniyanti and Bunaba, are fairly close genetic relatives, and are grammatically and typologically quite similar. They are perhaps as similar as Italian and Spanish. There is a very high degree of bilingualism, especially among the older generation of fluent speakers.

The phonological inventories of the two languages are identical except that Bunaba has a distinctive lamino-dental lateral phoneme, /l/, not found in Kuniyanti (Alan Rumsey, p.c.). Kuniyanti and Bunaba have a cognate density of about 45% on a 138 item list including the 109 items of Hale's core vocabulary for Australian languages (the items marked by double asterisks in Sutton and Walsh 1979), plus other starred words from an AIAS word list current as of 22/1/75 (A. Rumsey, p.c.). A count of some of the frequent and easily segmentable function morphemes (36 in number) showed a higher cognate rate of 66%. The verbal constructions in the 2 languages are quite similar. But whereas the VP of Kuniyanti is a minimal free form, in which both the verbal stem and classifier complex (v. section 3.9.3.2) are bound in occurrence for one another, in Bunaba, one of the auxiliaries (which corresponds to the classifier complex of Kuniyanti), namely -ma, has the privilege of free occurrence (A. Rumsey, p.c.).

The Bunaban family differs in a number of respects from the surrounding families. Unlike the Wororan and Djeragan families, nominal classes are not distinguished, and the NP distinguishes Ergative marking. The lamino-palatal vs lamino-dental distinction for stops and nasals is found in Bunaban and some at least of the Djeragan languages (e.g. Kija (Taylor and Taylor 1971:100)).

A comparison of Kuniyanti and surrounding languages shows the

following lexical resemblance rates:

Walmajarri: 22% (based on Hudson's word list, of approximately 400 items - Hudson 1978:97-110, but cf. Tsunoda 1981:5).

Wangkajunga: 3% (on Hale's 104 item list; my own field notes).

Jaru: 23% (on Hale's 104 word list; Tsunoda 1981:5).

Kija: 38% (on Hale's 104 word list; Tsunoda 1981:5).

Ungarinyin: 22% (on a 138 item list, A. Rumsey p.c. - see above page 4).

Nyikina: 8% (on approximately 1500 items in Stokes (et.al) 1980.)

The 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. Some of these are likely to be the result of areal diffusion. For example, all of the languages shown on Map 1 have bound pronominals referring to certain actants in the clause. In the non-Pama-Nyungan languages, they are typically prefixed to the Auxiliary (or 'Classifier' in Kuniyanti), while in the Pama-Nyungan they are suffixed to a 'catalyst', (Capell 1956/66:11) or to the first word of the clause. It is also likely that at some stage the preverb-auxiliary verb construction, as it may be called, typical of most of the languages in the area, including the Pama-Nyungan ones, was diffused. Such a construction is fairly certainly the historical source of the Kuniyanti VP, in which the two elements, preverb and auxiliary have fused into a single free word. Changes have led to a reanalysis of the VP into root plus classifier.

### 1.3 Geographical Variation

A few minor geographically determined differences were encountered in Kuniyanti speech. These were almost entirely lexical. In boundary regions, a slightly higher percentage of common vocabulary shared with the neighbouring language is usually found. For example, in the speech of the Kuniyanti people of Yiyili, a couple of words were encountered that are shared with Kija and Jaru, and which are not usually found in the Kuniyanti speech of Fitzroy Crossing or Gogo-Bayulu. One such word is kartij- 'cut' shared with Kija. There are too few differences to identify dialects.

The speakers themselves are aware of variation in their language, some of which is attributed to regions, some to particular individuals in these regions. The main variation perceived is lexical, but speakers are also conscious of some minor grammatical differences, and the variant pronunciation of kinharnti 'you know' as kinyarnti. My observation showed that in fact the last was not geographically determined, despite

native speaker claims. The so called 'light' form, with the lamino-palatal, was found in the community in which it was claimed to be used, but beside the 'heavy' form with the lamino-dental; the 'light' form was also found in speech in other communities. It may be that the choice of words is governed by other factors, such as formality, but I was unable to verify this.

Quite often speech differences were labelled Juwaliny, which is also the designation of a dialect of Walmajarri (Hudson and Richards 1978:3). It would be interesting to determine the connotations of this term.

#### 1.4 Remarks on Culture

In Aboriginal society interpersonal (and intergroup) rights, obligations, duties and behaviour were, and still are, to a large extent determined by 'kin' relations. The 'kindred' is perceived as coterminous with society. And (partly) because of this, the kin-relation between a pair of individuals is usually negotiable to some extent, and not as fixed as in our system.

Kuniyanti has a sizeable system of kin-terms. There are over twenty 'unmarked' or simple kin-terms, all used in both reference and address; two 'possession' indicating suffixes -wa 'his', and -pati 'yours'; dyadic terms, which consist of -langi added to the appropriate simple term, referring to groups of two or more individuals in the designated kin-relation to one another; and a small set of 'triangular' terms, which indicate the relation of both the speaker, and a distinct propositus (often the addressee), to the referent (v. McConvell 1982, and Laughren 1982). The latter system is restricted to cases in which at least one of these relations is affinal. Some of the distinctions made in the 'simple' system are neutralized in this system.

The Kuniyanti kinship system is a variant of the Aranda type (Radcliffe-Brown 1931), in which four kinds of kin are distinguished in the grand-parental generation (cf. Scheffler 1978, Chapter 9). In the Aranda type, two different types of cross-cousin are usually distinguished terminologically: first and second, the second being a prescribed spouse of Ego - and designated 'spouse'. In Kuniyanti, however, the actual MMBDD and FMBSS are designated kurnti, which term also applies to first cross-cousins FZD, MBD, and marriage was proscribed. The first choice of spouse is from the same subsection as MMBDD and FMBSD, but must be distant from Ego: a classificatory and not actual cross-cousin. This was explained to me in geographical terms - marriage with a (classificatory) second cross-cousin living in a distant place



would be acceptable. (This perhaps suggests a predilection for local group exogamy.) Compare Elkin 1938/1974:101, Rumsey 1982a:161-2. That is, genealogy (or imputed genealogy) is not the only factor determining the kin-terms actually used in particular speaker-referent (-propositus) situations. Distance, which could be a more complex factor than geographical (see Rumsey 1982a:162), is also taken into account.

Genealogy and distance may conflict, and my present evidence suggests that these 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, 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. In speaking of his own initiation, my main teacher referred to men of the jawanti subsection, who he would normally call ngapu 'F', as nyanyi 'MB (etc.)'. This was because they were his mother's countrymen - thus her brothers, not her spouses. (When questioned about this in a later elicitation session, he denied ever calling a jawanti man nyanyi!).

Elkin (1938/74:103) distinguishes the Alurija system, in which there is a merging of cross-cousins with siblings: thus the cross-cousins of M and F are called by the same term as the siblings - FZ, FB, and MZ, MB. This is precisely the merging found in the Kuniyanti system, where the 'distance' is small. Moreover, there is occasional 'merging' of cross-cousin and sibling. In one case, two individuals who should have called each other kurnta, preferred to use ngaja 'B₋' and 'B₊' - their mothers were countrywomen (and hence 'sisters'). (Note that actual MMBD becomes a ngarranyi 'mother', and so her children become siblings: these cross-cousins are always treated as siblings.)



These two factors are by no means the only ones that may apply in a given instance. To give one example, the opposition of generation levels - same or alternate vs adjacent - is applicable in the contexts of disposal of the dead. As there is no term for alternate generation sets in Kuniyanti, those of the same generation as the dead were referred to as marnawa 'his (older) brothers', the others jukuwa 'his children'.

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

Table 1-1 : The Subsections

	(M) jawalyi	$A_1 = B_1$	jakarra	
	(F) nyawajarri		nakarra	
	(M) jawangari	$A_2 = B_2$	jampiyinti	
	(F) nawangari		nampiyinti	
	(M) juwurru	$C_1 = D_1$	jawanti	
	(F) nyawurru		nyawana	
	(M) jangala	$C_2 = D_2$	jungkurra	
	(F) nangala		nyanyjili	

## Key:

-  : mother-child relation  
 : marriage partners

The subsections are referred to locally (in English and Kriol) as 'skins', and in Kuniyanti, as kuru. The subsection system is today found over a large geographical area, in the southern Kimberleys, and Northern Territory. The terms are often similar or identical over large areas.

There are distinct terms for the male and females of each subsection, the male term having initial jV, the female term having initial nV or nyV, where the vowel (/a/ or /u/) is usually identical to the vowel of the second syllable. (This feature is typical of the subsection systems of the area - v. Tsunoda 1981:8). The remaining piece can, in a number of cases, be identified etymologically. The terms for  $A_1$ ,  $B_1$ ,  $D_1$  and perhaps for  $C_1$  are evidently derived from the corresponding section terms (in use over a large area, including the Great Sandy Desert and Pilbara), by the prefixing of jV, nV or nyV to palyarri (A), kar(r)imarra (B), panaka (D), and purung (C) respectively, with a regular rule  $p \rightarrow w/V \rightarrow V$ , and syllable/consonant deletions and additions (for which I can see no regular rule).

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 (column of Table 1-1), and two generations distant: i.e. from what would be the same section as the first choice, in a four class-system. E.g. The two choices for an  $A_1$  male are  $B_1$  and  $B_2$  female.

Today at least there is a high frequency of 'wrong' marriages, even

among the older Kuniyanti and other groups (v. Kolig 1981:100-1). In all cases of non-ideal marriage, the subsection of the child is determined by subsection of the mother, irrespective of the father's subsection. I encountered no instances of individuals claiming membership to two subsections, one determined by the mother's, the other by the father's subsection, as has been found in the neighbouring areas; Tsunoda 1981:11; McConvell 1982:90. (There are some such instances in the Wangkajunga Community in Christmas Creek.)

Wrong marriages have probably always occurred, no doubt traditionally at a lower frequency (v. Kolig 1981:101). Interestingly there is a traditional way of legitimizing such a union: the individual paints himself with ochre from a site, somewhere in the desert. When he appears before the woman of his choice, she will immediately "fall in love" with him, and their union is legitimate.

Subsection and kin-terms are frequently used in address and reference; personal names are used infrequently. In my observation, mainly of the means by which I was addressed, the kin-term was used in more intimate contexts, the subsection term, to signify 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 last section, 'kin'-relations determine the tenor of interpersonal relations. Two extremes will be considered: joking and avoidance relations. Other relations may be placed somewhere between these extremes on a scale of familiarity.

Joking (v. e.g. Thompson 1935) is institutionalized between individuals in the MM relation (i.e. jajalangi 'MM kin-dyad'), who enjoy free and familiar relations with one another. Complete avoidance was observed between a man and his actual WM (marriyali): they would not enter into close physical proximity, or talk to one another. Any interchange between them, either verbal or a gift, was 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. Such relatives could sit together, or go on trips together, and engage in limited 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 (ritualized) insults (cf. Stanner 1982). I use the latter term 'insult'

since in the data (consisting 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*, and joking about the other's promiscuity. I have no evidence of joking about one-another's genitals, which is widespread in Australia (e.g. McConvell 1982:98).

Joking behaviour is still in evidence today, and is not restricted to the traditional languages; 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 English.

Avoidance behaviour, too, is manifested in speech, in the use of an 'avoidance style' (sometimes called 'mother-in-law language' - e.g. Dixon 1972), for which the Kuniyanti had no particular name. (There is, however, a verb kun- meaning 'to speak shamefacedly, to avoid speaking (directly) to', which is clearly a cognate of the Bunaba term for the avoidance style, kunkunma (Rumsey 1982a:160)). This style was used in four main contexts: (1) speaking to a classificatory marriyali, (2) speaking to the actual WMB, (3) referring to any marriyali, (4) in the presence of (within earshot of) a (close?) marriyali.

Unlike its Dyirbal Dyalnguy counterpart the Kuniyanti avoidance style is not a fully distinct and separate language (Dixon 1972:32). Nor is it obligatorily and mechanically chosen in response to a fully pre-determined interaction type. As Rumsey (1982a:160) points 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). It is characterized by a cluster of formal features, and strategies of language use which differ from those of other Kuniyanti speech, and which may be found in varying degrees in actual utterances. Different degrees of avoidance can thus be 'marked' or 'indicated', by varying usage of avoidance features (see below page 12).

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* This is interesting, since the 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 area were of this type, and that some individuals insisted on the legality of such a union. The joking insult is however the only evidence I have of the acceptability of the jaja (MM) union amongst the Kuniyanti.

In Kuniyanti avoidance speech, as in Bunaba (Rumsey 1982a), not every word in the utterance need be an avoidance word. Often only one word - and sometimes only one 'feature' (such as use of a non-sg. pronominal) - of an utterance marks avoidance.

Formally, the avoidance style differs somewhat in lexicon, but has the same bound-morphemes as ordinary Kuniyanti. There are over 100 distinct avoidance lexemes; they tend to be longer than ordinary ones and there is a higher frequency of heterogeneous consonant clusters within the avoidance lexicon than elsewhere. Not every ordinary lexeme has a distinct avoidance counterpart. Some omissions, such as terms for sexual organs or acts are expected; others are not - e.g. only one animal, the dog, has a distinct term. As yet I have been unable to discern general principles characterizing 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 Kuniyanti it is primarily the verbal roots that are more general than their ordinary counterparts. For example, kamalk- 'say, tell, speak (etc.)' has a range that is covered by a number of more specific everyday terms, including jak- 'say', jijak- 'speak', and mika- 'tell', etc. Avoidance verbs typically occur with a larger range of Classifiers (v. 3.9.3.2) than do ordinary verbs, and in this way some but not all of the lexical ambiguity may be resolved. For example, kamalk- occurs with the Classifier -MI in the sense 'tell, say', and with -I in the sense 'speak, talk'. In this respect, the Kuniyanti avoidance style differs significantly from the Bunaba one, which has a specific avoidance element in the Auxiliary (which corresponds to the Kuniyanti Classifier) (Rumsey 1982a:167), and the choice of Auxiliary (=Classifier) is not available to distinguish among the senses of the lexical verb.

Nominal roots generally have approximately the same meaning as their everyday counterparts. E.g. ngarlumali 'spear' corresponds to the ordinary jinali 'spear' (generic), including in its range precisely the same sub-types. In those cases where I requested an avoidance equivalent for a more specific type (e.g. of spear), I was invariably given the ordinary term. I could detect no tendency to extend the range of an avoidance nominal beyond the range of the corresponding ordinary term: avoidance terms have exact ordinary equivalents, and do not effect higher taxonomic groupings (cf. Dixon 1972). A few 'closed class' grammatical items also have distinct avoidance terms: wumurla~marlami, mangarri 'no, not, nothing', yawinhingi~yanya 'other', yapja 'some'.

Different strategies of language use are found in at least the following (1) address and reference; (2) propositional modification; (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. munga 'dark'), or by a 'marked' or 'triangular' (above page 6) kin-term (e.g. manaru 'your M', talking to W or WB), or by the third person plural pronominal piti 'they'. Other marriyali, with whom speech was possible, were addressed with the second person non-singular pronominal kiti, not nginyji 'you (sg)'; he/she would be referred to by means of the third person plural piti 'they' if close, but more frequently by the singular, if distant, and the first person unrestricted yati (see page 142) would be used instead of ngiti 'we dual, we plural exclusive'. The bound pronominals with the VP are also skewed in this way. This is familiar as a 'politeness' strategy in Indo-European and other language families.

(2) In contrast to the ordinary style, modal modification, such as by -mi ~ -ma 'dubitive/indefinite' is more frequent in both questions and statements. winhi 'just' and marlami 'no, without' are also more frequently found in avoidance speech, to soften the force of the utterance.

(3) Avoidance speech is characteristically vaguer in expression than ordinary speech (Rumsey 1982a:173 and 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 by the context of occurrence. For example, in

(1-1) malapmi            kurrku            'he dug a hole'  
       he made it    hole

the most obvious sense of malap- is 'dig'. Potential ambiguities are rarely if ever resolved by paraphrase in actual texts (cf. Dixon 1972: 293). And I suspect that this is partly because the actual ambiguity (of the contextualized utterance) is relatively small, and far less than the potential ambiguity.

### 1.6 Contact History

The first major contact between the Kuniyanti and whites occurred about a hundred years ago in the eighteen eighties, when pastoralists established cattle and sheep stations in the area. Before this, white explorers had entered the southern Kimberleys: A.C. Gregory and his party came

in 1856, and the surveyor A. Forrest in 1879. Forrest's glowing report on the potential of the region for cattle and gold rapidly attracted settlers. Pastoralists entered the region from both the east, droving cattle from as far away as Queensland, (and in one instance, Victoria), and from the west, bringing mainly sheep (Kolig 1981:17, Jack Bohemia p.c. - see below page 16). Fossil Downs station (v. Map 1) which was established in 1886 by the McDonalds, seems to have been the first property to be established in the Fitzroy Crossing area. It was followed shortly after by Old Bohemia Station (Jack Bohemia, p.c.).

Labour was recruited mainly from the local Aboriginal population, often by coercion. Initially only small numbers lived and worked on the stations at any one time, whilst many still lived traditional lives in the bush. Stock-work has always been seasonal, with employment for most only during the dry. In the wet season (roughly November to March), the Aboriginal workers were normally free to return to the bush and lead their traditional lives. The wet season thus became, and has remained, the time for ceremonies.

There was of course active resistance to the white invaders, and a number of white men and cattle were speared. Pigeon the famous 'outlaw of the Leopolds', (Idriess 1952) was a Bunaba man who organized a band of Aboriginals who, for years in the mid 1890's, carried out guerilla style warfare against the intruders from their base in Tunnel Gorge in the Oscar Ranges. But resistance was normally less organized than this.

Cattle spearing continued well into this century, and such exploits were frequently followed by punitive measures such as massacres and jailing (Jack Bohemia, p.c.; cf. Kolig 1981:20). Not all massacres were however motivated by retaliation; the so called retaliatory measures usually bore little relation to the 'crime' (cf. Kolig loc.cit.). The aim was to subjugate the Aboriginal people, to provide a cheap work force, and to ensure the personal safety of the white cattle-men and their property (see also Reynolds 1981, especially Chapter 3).

Sometime late last century the 'desert peoples' of the Great Sandy Desert started moving into the Fitzroy Valley (Kolig 1981:21). 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, Kukaja, and Yulparrija peoples, who were traditionally located some hundreds of miles south of the Fitzroy River, in the Pilbara region (Kolig 1973:38, 1981:18). The last of the Wankajunga did not leave the desert until the mid-sixties,

or perhaps later. Some Northern Kimberley people also moved into the Fitzroy Crossing area, but most ended up in Derby; and the groups to the east, including the Jaru, tended to centre around Hall's Creek. There are thus two major cultural groups in the Fitzroy Crossing area: the Kimberley and the desert 'cultures'.

The UAM Mission in Fitzroy Crossing was established in 1951 (Kolig 1981:23, cf. Hudson 1983:13), and around it a small Aboriginal community, Junjuwa, grew up. Until then, only a few Aboriginals lived in Fitzroy Crossing, those who worked for the publican or police (Jack Bohemia, p.c.). Shortly after it was established, the Mission opened the first school in the area and a Hostel for children from the outlying stations. The speaking of their mother tongues was apparently banned in the Hostel (Hudson 1983:13). The first Government school in the area was at Gogo station, established in 1957.

Until 'equal wages' were introduced in 1969, most of the Aboriginal population lived relatively sedentary lives in small communities on the stations, and Fitzroy Crossing (after 1951) 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 moved to Fitzroy Crossing (Kolig 1981:52-5). Recently an 'outstation movement' has become popular and many Aboriginal groups are returning to the stations, on which they have established or intend to establish, independent communities on small excised blocks of land, usually 1 square km. in area.

### 1.7 Present Situation

Kuniyanti is spoken fluently by about 100 Aboriginals living mainly in the Fitzroy Crossing area (as shown in Map 1); a few speakers live outside of this region, in Hall's Creek, and Kununurra. Of these perhaps a half would identify themselves as Kuniyanti people and 'owners' of the language, the remainder being primarily Bunaba, Kija, Jaru and Walmarjarri people who learnt it as a second, or even (equal) first language, and who are not 'owners'. A few Aboriginals from the Northern Kimberleys also speak it fluently. I encountered no Wangkajunga fluent in Kuniyanti; but a few have some speaking control as a second (or third) language, or can at least understand it a little.

All fluent speakers are over the age of thirty. Some individuals under this age understand the language when it is spoken to them, but do not speak it. They use Kriol as their normal mode of communication, and a



variety of English when speaking to whites. The older people all understand English, and speak an English-based variety in the presence of whites, and (usually) when speaking to the younger generation.

However, among themselves, the old generation usually use a traditional tongue. Most of them are bi- or multi-lingual; a number of factors motivate the actual choice of language, but it is beyond the scope of this thesis to investigate them. (In McGregor 1983a(Ms) I have suggested a few factors.) Kuniyanti is thus in daily use; however, the avoidance style seems not to be actively used today, but is remembered only.

Kuniyanti people are found in most of the communities marked on Map 1. The largest numbers are found at Bayulu village and Mulurrja, on Gogo station, Yiyili on Louisa Downs, and Junjuwa in Fitzroy Crossing; smaller numbers are found at Cherrabun, Margaret River, Fossil Downs, Lamboo, and Brooking Springs stations, the independent settlement at Ngumpan (Pinnacles), and scattered individuals elsewhere.

### 1.8 Education and Orthography

Until very recently, no consideration was taken in the schools (Government or Mission) of the different cultural background of the Aboriginal pupils. Their traditional languages were not just ignored, but their use was at times actively discouraged by physical punishment (e.g. at the early Mission Hostel, mentioned above). There are signs of changes. In 1982, for the first time, a language and culture programme was started in the Fitzroy Crossing school, and the involvement of the adults in the Aboriginal community, Junjuwa, was sought and encouraged. The Government school at Christmas Creek also appears to be moving in this direction.

In 1982 the Yiyili Community school, independently run by that community, started operation. It employed one white school-teacher. 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 Kuniyanti language and literacy programme."

During my 1982 field trip the community requested my assistance as a linguist. I spent a few weeks at Yiyili, and provided some introductory materials for their programme, including a preliminary draft of a collection of Kuniyanti stories, a short dictionary, and a brief description of the principles of writing the language, intended for literate Aboriginal, and teachers involved in the programme.

In 1983, the Yiyili community employed an SIL linguist, Joyce Hudson, on a part time basis, to initiate the language programme in the school. Hudson developed the following orthography, in consultation with two literate native speakers, David Street and Topsy Chestnut (see ALS Newsletter, Jan. 1984; page 7):

Vowels: a, ar (= long a), i, ii (long i), oo.

Consonants: b, m (bilabials); d, n, l (apico-alveolars); d, n, l, r (apico-domals); th, nh, lh (lamino-dentals); j, ny, ly (lamino-palatals); g, ng (dorso-velars); and w, y (semivowels).

This orthography was chosen in order to facilitate the transfer of literacy skills from English. It is not phonemic. The symbol 'd', for example, represents two distinct phonemes: the apico-alveolar stop, and the apico-alveolar tap or trill. The system also appears to over differentiate in distinguishing a long and short i vowel (v. 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 (v. section 2.1.5.2).

Useful as this orthography may be in the school, the fact that it is non-phonemic makes it inappropriate for this thesis. And since there is no substantial body of material written in the Hudson-Street-Chestnut orthography, I have decided not to employ it. Instead I will retain the practical orthography I had suggested in 1982 (except in cases where a narrower transcription is necessary, where I will use IPA symbols). This orthography, which is purely phonemic, uses the following symbols:

Vowels: a, aa, i, u.

Consonants: p, m (bilabial); t, n, l, rr (apico-alveolar); rt, rn, rl, r (apico-domal); th, nh (lamino-dental); j, ny, ly (lamino-palatal); and w, y (semivowels).

Cluster restrictions prevent ambiguity between digraphs and consonant clusters, except for l-y which occurs at certain morpheme boundaries. This is entirely predictable morphologically, and contextually unambiguous.

### 1.9 Other work on Kuniyanti

Very little previous linguistic work has been done on Kuniyanti, and there are only scattered references to it in the literature. (See McGregor (1984) - a copy of which is lodged in the AIAS library - for a bibliography.)

Capell (1940:416-18) gives a short word 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 for the verb wart- 'go' (loc.cit.:416). Most of the forms given are inaccurate: the plural marker ge (= /ki/) given in the first person non-singular forms is found in Bunaba only, and word final /i/ has been mistranscribed as a (cf. 2.1.6.1 below). To the best of my knowledge this is the only published data on Kuniyanti. Capell (1940:244) grouped together Bunaba and Kuniyanti typologically as 'prefixing language without noun classification'. The linguistic surveys of O'Grady, Voegelin & Voegelin (1966:78) Oates and Oates (1970) and Wurm (1972) repeat Capell's remarks, adding nothing new.

In the mid-1960's, Howard Coate, a missionary and linguist, worked for a short time on Kuniyanti with the Fossil Downs 'mob'; the Kija bias in the lexicon is evident (see 1.1.3). He elicited a number of words, and recorded and transcribed some excellent and valuable texts (about 40 minutes duration) - traditional and historical - all told by a very knowledgeable old man (FP), since deceased, who is still remembered as an expert jalangurru, i.e. person knowledgeable in Aboriginal traditional law and ritual. (Mr. Coate has generously made his material available to me, and because of the value of the texts I have retranscribed them, hopefully more accurately.) His transcription is accurate, except that he does not recognize the phonemic distinctiveness of the lamino-dental (/th/ and /nh/), which he writes as apico-alveolars ('d' and 'n') (this distinction is very difficult for the English speaker, and it is quite likely that there are some such mistranscriptions in this work), and he took the mid-vowels [e] and [o], which are allophones of /i/ and /u/, to be distinct phonemes. Coate undertook some grammatical analysis, none of which is published. The analysis is quite good, as far as it goes and considering the short time he spent on the language; he correctly identifies the free pronominals (but sometimes confuses yaati 'we plural Inclusive' as 'we plural Exclusive'), and the verbal paradigms are reasonably accurate, though incomplete. There are just a few unidentified forms, which could perhaps be Kija, e.g. mangany 'no, not' (mangarri and marlami in Kuniyanti), and -ningi 'to him/her/it' (-nhi in Kuniyanti).

In 1978 an SIL linguist, Carol Morris, in collaboration with David Street, a Kuniyanti man literate in English, produced a short dictionary of a few hundred entries, on the whole accurately transcribed. She recognized the phonemic distinctiveness of the lamino-dentals, but, like

Coate, took the mid-vowels [e] and [o] to be phonemically contrastive. Also in the late seventies a few academic linguists, including A. Rumsey and T. Tsunoda collected short word lists (of around 100 words, mainly for purposes of lexical comparison), but did not undertake grammatical analysis.

A number of anthropological studies have at least touched on the Kuniyanti, and a couple of them include some Kuniyanti words. (For a list of these works see my bibliography.) The most recent study is Kolig (1981), who cites a number of identifiably Kuniyanti words, which are not accurately transcribed. However, Kolig generally does not identify these terms as Kuniyanti, nor distinguish them from terms in the other languages of the Fitzroy Crossing area.

#### 1.10 Data used in this Investigation

This study is based almost entirely on material I gathered in the course of two field trips, totalling about fourteen months, conducted in 1980 and 1982. The material includes both formally elicited words, phrases and sentences, and texts. This corpus was 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 is spoken onto tape at my request, or offered for recording by the speaker. Although Kuniyanti is a language in daily use, I recorded little free conversation (perhaps an hour in all and none surreptitiously). A secondary source of data were the observations I recorded in my notebook of free speech, but which I had no opportunity to record on cassette. The only other primary sources I had access to were the texts Howard Coate recorded (see last section).

About twenty Aboriginal people contributed material to the field investigation.

Jack Bohemia, BEM (nyayiparri), the oldest living speaker of Kuniyanti (age estimated as over eighty), was my main collaborator. A tracker of 32 years service to the W.A. police force (v. Identity, October 1971, page 15), Jack Bohemia has an incomparable knowledge of the history of the Fitzroy Crossing area since the turn of the century. The account of contact history (section 1.6) is based primarily on information he conveyed orally to me. Where possible I checked and extended (especially by providing dates) his account by a study of written sources. I found no substantial inconsistencies - he was always careful to distinguish fact from supposition, and refused to tell me

stories about events he had no certain knowledge of. He loved telling of his experiences as a tracker and stockman. I recorded a large body of such texts, which I hope to eventually prepare for publication (which is his wish). But Jack Bohemia also participated in the traditional law; he never went over completely to the 'white side'. He is a fully initiated man knowledgeable in traditional lore; he provided numerous mythological texts, stories of first contact with whites, and accounts of traditional customs. Jack Bohemia worked with me for a couple of hours almost every day, giving me texts and assisting in their transcriptions, providing and checking lexical and verbal forms, and translating English sentences. His daughter Daisy, also a fluent speaker, told me a number of stories.

Dave Lamey, a community leader at Bayulu, was another important source of data. He told me numerous stories, in a variety of genres, including a particular type which he alone gave - expository texts, asserting relations between entities, and attributes of entities more than describing situations or events (characterized formally by a significantly greater than usual frequency of verbless clauses). A number of lexical items, verbal forms, constructions etc. elicited from Jack Bohemia were counter-checked with Lamey. In 1982 Dave Lamey (a middle-aged man) started to learn to read and write English. At the same time, I worked intensively with him, developing Kuniyanti writing materials (see below page 20), and teaching him the elements of writing Kuniyanti.

Bigfoot, probably the most knowledgeable living Kuniyanti jalngan or 'lawman', and Joe Dimay, the owner of a Tingarri tradition (v. Kolig 1981:38), provided a number of important mythological (and other) texts. Bigfoot, together with Dave Lamey and Jack Bohemia, were the primary sources of avoidance style speech. Not only did each give me lexical items peculiar to the style, but 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 (Bunaba), George Nayndu (Kija/Bunaba/Ungarinyin) and Lanis Pluto (Kija/Kuniyanti) provided invaluable assistance in text transcription.

At 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 Kuniyanti and an accomplished artist and story-teller - all told me stories and assisted in detailed articulatory-

phonetic work (see below page 21), and in the preparation of texts for a school-reader.

A primary corpus of over 6000 sentences plus some thousands of isolated words was assembled, on which most aspects of the present investigation are based. The major part of this data was systematically elicited from native speakers in response to English prompt words and sentences; and all elicited data was included. Also included were all sentences from half a dozen or more texts. Nearly all of the textual material has been scanned at some time or other, and a selection of the interesting sentences included in the corpus.

Very early in the course of the fieldwork I became aware of problems inherent in eliciting responses to decontextualized English sentences. Quite often, 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 expressing speakers' viewpoints and evaluations of propositions. A single English verbal category, such as a tense, might emerge as any one of three or four Kuniyanti verbal categories. Such meanings are evidently not as easily identifiable by the linguist as are representational ('content') meanings, for which it is as a rule easier to verify that the linguist and native speaker have matching or non-matching conceptions.) It was clear that in many cases native speakers did not perceive equivalences, or even unmarked correlations between grammatical categories in the two languages. They did not translate sentences category by category. In seeking a translation for the English prompt, it seemed that the Kuniyanti speaker first imagined some context in which the English* prompt might be uttered, and then found a suitable Kuniyanti utterance, carrying roughly the same connotations in that context. The problem was that I had no access to the imagined context. Consequently I quickly modified my method of elicitation, and concentrated on eliciting within controllable and circumscribable contexts. These were constructed and real scenarios, especially ones of which both participants had knowledge. I would request utterances appropriate to descriptions of the situations, and utterances

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* This is of course an oversimplification. In most cases the Kuniyanti speaker did not speak Standard Australian English, and there was no certainty that he put the same values to the categories as I did. Nor could the problem be entirely circumvented by my using Kriol (of which I have little speaking control).

which 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 we had matching conceptions.

Formally elicited utterances can never be completely decontextualized - and all sorts of speaker behaviour indicated that they did not perceive their or my utterances as isolated. For example, the entities I established in my English prompts were treated as belonging to the registry of discourse, and where possible, treated as 'given' (Halliday 1970:162). Speakers did not like to be forced to translate the English NPs verbatim (see also page 209 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 content. Much of the formally elicited data is, then, in a sense controlled, or constructed text, rather than isolated decontextualized sentences. The primary thrust of elicitation was to develop and construct such contexts as might not frequently arise in conditions where recording is possible.

Speakers' intuitions and explanations of meaning differences were sought at various stages, but this did not prove to be a satisfactory field method. In most cases speakers were unable to pinpoint the subtle distinctions of meaning conveyed by the variant modes of expression, in cases where the forms might conceivably refer to the same referent situation. I was invariably informed that no meaning difference existed.

In the course of producing material for the Yiyili Kuniyanti language programme (v. section 1.8), I had opportunity to carefully check my transcription of a number of words, and my phonemic analysis. Careful attention was paid to certain 'problem areas', especially: (1) distinguishing between apico-alveolars, apico-postalveolars and lamino-dentals, which I experience great difficulty in telling apart; and (2) the question of whether the contrast between apico-alveolars and apico-postalveolars is neutralized 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 and relevant items of Douglas (1959/77), 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 - see section 2.2.5.

The investigation into the textual organization of the clause (section 5.3), and a significant part of the study of the clause complex (section 5.6), are 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 them appear in Appendix 1.)

These texts, which were chosen more or less at random - and not for 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 the genres. They were told 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 totalling 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 other 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 a role in the textual organization of the utterance (see section 5.3).

The reader will notice that there are no starred (unacceptable/ungrammatical) sentences in this grammar. This description is based entirely on occurring (acceptable) sentences. Problems in eliciting speakers acceptance or rejection of constructed examples are well known, and I will not go into them here - but see for example, Bolinger 1968, Christie 1980, Haas 1973, and Quirk and Svartvik 1966. Suffice it to remark that speakers were as a rule unwilling to label utterances I produced as unacceptable, and in more than one instance in which a speaker had firmly rejected an invented example, he later used the same construction himself.



CHAPTER 2: PHONETICS AND PHONOLOGY2.1 Phonemes and their Realizations2.1.1 Inventory

Kuniyanti has nineteen consonant phonemes, and three vowels, one of which has distinctive length. They are shown in Table 2-1A and B.

Table 2-1A: Consonant Phonemes

	Bilabial	Apico- alveolar	Apico- post- alveolar	Lamino- dental	Lamino- palatal	Dorso- velar
Stops	p	t	rt	th	j	k
Nasals	m	n	rn	nh	ny	ng
Laterals		l	rl		ly	
Flap/Tap		rr				
Glides	w		r		y	

Table 2-1B: Vowel Phonemes

	Front	Back
High	i	u
	Short	Long
Low	a	aa

The glottal stop [ʔ] occurs in a few Interjections (e.g. [nʔn] 'yes'), and is also occasionally used to mark morpheme boundaries in elicited speech (v. section 2.4.2). A voiceless vowel [ʌ] also occurs in at least one Interjection, [ʌʌ] 'O.K.'. Since they do not distinguish between 'full' words, [ʔ] and [ʌ] have not been included in Table 2-1, and will not figure in the following account of phonology.

2.1.2 Phonemic Contrasts

In this section minimal or near minimal pairs are given in illustration of the phonemic oppositions between 'suspicious pairs' of phones only (i.e. those which are phonetically sufficiently alike to be (potentially) allophones of a single phoneme). Each consonant contrast is illustrated

for all environments 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 for word final position.

## [1] Apical Contrasts

## (a) Stops /t,rt/:

/jutu/([ 'cɔdu ]),      /jurtu/([ 'cɔɖu ])  
 'straight'                      'dust'  
 /wat-/([ 'wat ]),      /wart-/([ 'wɔɖ ])  
 'turn around'                      'go'

## (b) Nasals /n,rn/:

/maningka/([ 'manɪŋɡʌ ]),      /marningka/([ 'manɪŋɡʌ ])  
 'night time'                      'sister-ERG'  
 /kanpati/([ 'kanbɛdi ]),      /karnpak/([ 'kənɓak ])  
 'centipede'                      'clapsticks'

## (c) Laterals /l,rl/:

/wila/([ 'wɪlʌ ]),      /wirla/([ 'wɪɾʌ ])  
 'O.K.'                      'back'  
 /pilnga/([ 'pɪlŋʌ ]),      /pirlnga/([ 'pɪɾŋʌ ])  
 'osprey (a bird)'                      'bark (of tree)'

## (d) Rhotics /r,rr/:

/jaari/([ 'ja:ɾi ]),      /jarri/([ 'jɛrɪ ])  
 'dry roots of grass'                      'if'  
 /par-/([ 'pɑɾ ]),      /panangkarr-/([ 'pənənɔ'gar ])  
 'climb up'                      'snatch off'

## (e) Others /t,rr/:

/yaati/([ 'ja:di ]),      /jarri/([ 'jɛrɪ ])  
 'we (Unrestricted)'                      'if'  
 /wat-/([ 'wat ]),      /warr-/([ 'war ])  
 'turn around'                      'forget, leave'

## [2] Laminal contrasts

## (a) Stops /th,j/:

/thila/([ 'tʰilʌ ]),      /jila/([ 'ji·lʌ ])  
 'back part' of kangaroo'                      'sun'  
 /thuthulu/([ 'tʰɔtʰɔlu ]),      /puju/([ pɔju ])  
 'wren'                      'finish'  
 /pajathngarna/([ pajaɪŋŋʌ ]),      /paj-/([ paj ])  
 [personal name].                      'get up and go'

## (b) Nasals /nh,ny/:

/nhinnhin-/([ 'nɪ+n'nɪ+n ]),      /nyin/([ 'nɪn ])  
 'poke about'                      'leave, forget'

/winhi/([wɪnɪ]),      /wanpinyi/([wɛnbɪni])  
 'nothing'                      'eyebrow'  
 /minhmithi/([mɪnɪmɪtɪ]),      /kiyinyama/([ki:ɪnɪmɪ])  
 'chicken hawk'                      'bat'

### [3] Apico-Alveolar vs Lamino-dental Contrast

#### (a) Stops /t, th/

/tili/([tɪli]),      /thiliki/([tɪlɪki])  
 'flame'                      'frogmouth'  
 /jutu/([cɔtɪ]),      /thuthulu/([tɔtɔlu])  
 'straight'                      'wren'  
 /patjangka/([pɛtcɔŋgɔ]),      /paajathngarna/([pa:jaɪŋgɔ])  
 'quickly'                      [a personal name]

#### (b) Nasals /n, nh/:

/nit-/([nɪt]),      /nhinnhin-/([nɪnɪnɪn])  
 'stick'                      'poke around'  
 /yinika/([yinɪga]),      /winhi/([wɪnɪ])  
 'how'                      'nothing'  
 /pinypiny/([bɪnɪbɪn]),      /pinhngurlu/([pɪnɪŋgɔlu])  
 'crimson chat'                      'golden whistler'

### [4] Vowel Contrasts

/a, i, u/:

/paj-/([paɪc]),      /pij-/([pɪc]),      /puj-/([pɔc])  
 'get up'                      'emerge'                      'finish up'  
 /kurnta/([kɔnɪtɪ]),      /kurnti/([kɔnɪtɪ]),      /ngurntu/([ŋɔnɪtɪ])  
 'MBS (etc)'                      'MBD (etc)'                      'someone'

/a, aa/

/japi/([caɪ]),      /jaapi/([ca:bi])  
 'small'                      'back of neck'  
 /tharra/([tɛrɔ]),      /marra/([mɛrɔ:])  
 'dog'                      'sandhill country'

#### 2.1.3 Phoneme Variation within mono-morphemic Words

Within mono-morphemic words phonemic variation is very occasionally found, both across the range of speakers, and within the speech of a single individual.

I have already mentioned the fluctuation between /nh/ and /ny/ in the pronunciation of kinharnti 'you know the one' (v. page 5 ). The opposition between nh and 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, whose first language is Walmajjarri, do not make this distinction, although many do distinguish the corresponding stops th and 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 /nh-ny/ opposition (v. section 2.2.5). However, a, aa and awa alternate in at least one word, jawangari, a subsection term. The oldest speaker regularly used the forms /jawangari/ (i.e. ['jawa,ŋʌɹɹ]), and /jaangari/ (i.e. ['ja:,ŋʌɹɹ]), (almost) never /jangari/ (i.e. ['jʌŋʌɹɹ]). The latter was more popular with younger speakers who also used the long vowel variant; the quadri-syllabic form was almost never heard from speakers under the age of fifty.

#### 2.1.4 Feature Description

In this section I suggest a possible future description of Kuniyanti phonology. The features are chosen so as to:

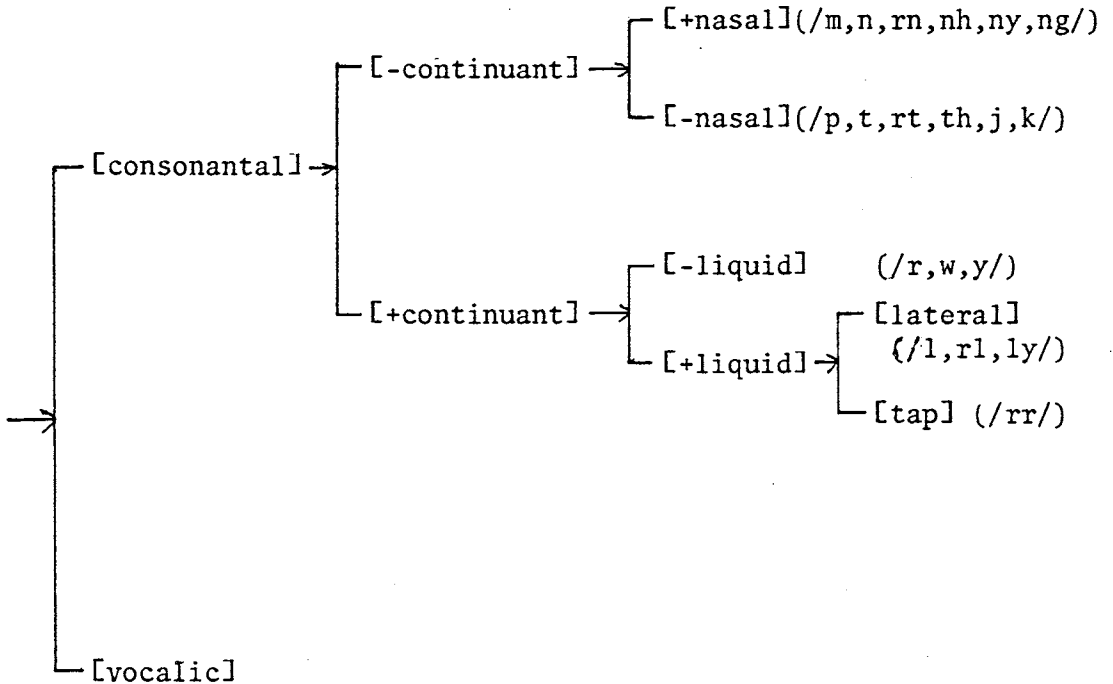
- (a) account for allophonic variation in a revealing way,
- (b) allow general statements of phonotactic patterns, and
- (c) enable economical and perspicuous statements of morphophonemic alternations.

Economy of features is not seen as a goal in itself. It is not claimed that this is the only, or the best, possible system.

Feature oppositions are binary and classified as either equipollent or privative - see Trubetzkoy (1969). No multilateral or gradual oppositions are required for the description of Kuniyanti phonology (cf. Dixon 1980:183). In a number of cases, the decision to regard an opposition as equipollent or privative is based on less than fully convincing evidence. Oppositions have been 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' (Halliday 1961/76:54,67; Fawcett 1980:19) of Figure 2-1.

Figure 2-1: Manner Features



Key:  $\rightarrow \begin{bmatrix} a \\ b \end{bmatrix}$  means a or b (but not both)

The first opposition is between consonants and vowels, distinguished by the feature opposition [consonantal]/[vocalic]. I define these features phonotactically, and not in terms of manner of articulation. [consonantal] identifies those segments that must occur in the margins of syllables; [vocalic] identifies segments occurring as syllabic nuclei (v. section 2.3). The glides /r/, /w/ and /y/, which are phonetically very vowel-like, are identified as [consonantal] by this definition. Their localization features belong to the [consonantal] system, and not to the [vocalic] system (see below page 31). The opposition between [consonantal] and [vocalic] is equipollent, neither member being marked with respect to the other. (The feature labels 'consonantal' and 'vocalic' are retained in preference to the corresponding terms 'syllable margin' and 'syllable nucleus' of Dixon (1980:190) for convenience of reference.)

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 the 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; they are 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] (v. section 2.4.2.3.1). There is some 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 evidence suggests 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 the two is privative, with nasals marked with respect to stops. Firstly, stops become nasals when preceding nasals at reduplication boundaries (v. section 2.4.2.1); and secondly, nasal segments are occasionally reduced to stops following stops at enclitic boundaries (v. section 2.4.2.3.1). It seems reasonable to account for such alternations between stops and nasals with the feature opposition [±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 à vis nasals.

In grammars of Australian languages /r/ and /rr/ are commonly grouped together by the feature [rhotic], and distinguished by their place of articulation, postalveolar vs alveolar. This feature description is not appropriate to Kuniyanti phonology. The opposition between /r/ and /rr/ is not parallel with the opposition between the apico-alveolar and apico-postalveolar articulation in stops, nasals and laterals. /r/ and /rr/ 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 the grouping serve in any useful generalization.

Only /r/, and not /rr/, occurs word initially, and only /rr/ occurs syllable finally (in root medial syllables). However, this is not evidence of the neutralization of the distinction between these two phonemes, any more than is the fact that /r/ and /ly/ share exactly the same distributional patterns evidence for the neutralization of the opposition between them.

For both phonetic and phonological reasons, /r/ belongs with the glides /w/ and /y/. Phonetically, /r/, /w/ and /y/ differ from all other consonants in not involving contact between the two articulators (see next section). Phonotactically, /r/ occurs in ranges of structural

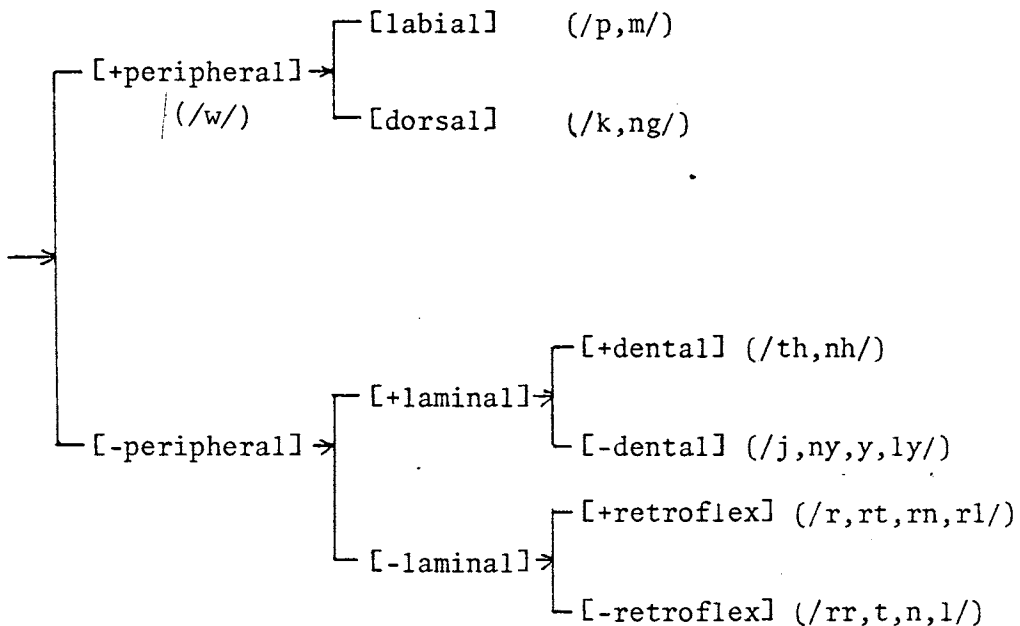
positions almost identical with those for /w/ and /y/ (v. section 2.2), and differs considerably from the tap /rr/ in terms of these ranges.

Phonotactically, /rr/ behaves very much like the laterals, occurring in a very similar range of consonant cluster types (v. section 2.2.1). They are 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 neutralizations of the [ $\pm$ liquid] opposition, evidence that it is privative is not particularly compelling.

/rr/ is distinguished from the other liquids by the equipollent opposition [lateral]/[tap]. I use the feature [tap] even though /rr/ has trill allophones - these may be regarded as sequences of taps. [central], referring to the passage of air across the centre of the tongue, is an equally appropriate feature.

[2] Consonantal Localization System. It is convenient to describe the six places of articulation of the consonant phonemes in terms of feature oppositions, summarized in the 'system' of Figure 2-2.

Figure 2-2: Localization features



In Kuniyanti, as in other Australian languages (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 generalizations to be stated simply (v. 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 these three binary oppositions [labial]/[dorsal], [±dental] and [±retroflex] into a single opposition, such as [±high], or [±retracted]. 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 neutralizations between the two places, 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 [±retroflex], 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 neutralized root initially (v. section 2.2.1), where apico-alveolar articulation predominates. This suggests that 'tip raised' is the marked member of the opposition. In articulatory terms 'tip raised' is also marked. There is evidence that the apical glide /r/ is positively specified [+retroflex] (v. section 2.4.2.2.1), while the tap /rr/ 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. There are a few instances of fluctuation between lamino-palatal /ny/ and lamino-dental /nh/, as mentioned in the previous section. In all such cases, it always is the palatal member that replaces a dental, never the reverse. Furthermore, palatal allophones of /ly/ and /y/ predominate. /y/, at least, belongs to the palatal series, on the evidence that it hardens to /j/, never to /th/.

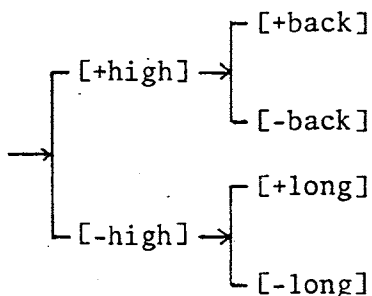
The distinction between peripherals (articulated in the periphery of the oral cavity, the lips and velum), laminals, and apicals is described in terms of two binary oppositions, [±peripheral] and [±laminal], rather than a single ternary one (peripheral/laminal/apical). This is justified primarily by the evidence of phoneme distributions. This evidence supports the relative markedness of peripherals with respect to non-peripherals, and laminals with respect to apicals (v. section 2.2.5). There is also a small piece of morphophonemic evidence suggesting the privative nature of the laminal/apical contrast: in the only circumstance in which an apical stop follows a laminal nasal at a morpheme boundary, the apical becomes a laminal (v. below 2.4.2.2.1.1). Also in agreement with the proposed analyses is the fact that the most marked manner feature, [±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 [±laminal], the dental/palatal opposition



appears to be neutralized.

[3] Vocalic System. Different features are proposed for the description of vowels; they are summarized in Figure 2-3.

Figure 2-3: Vocalic Features



The primary opposition distinguishes /i/ and /u/ from /a/ and /aa/ by the feature opposition [ $\pm$ high]. There are some cases of alternation between high (especially /i/) and low vowels at and across morpheme boundaries, which suggests that the opposition is privative. The formulation of certain sandhi rules is made easier by this assumption. However this may be - and I do not regard the evidence for the privative nature of the opposition as strong - there is certainly no strong evidence that one member of the opposition is marked with respect to the other (see also below page 72).

But the two secondary oppositions, distinguishing /i/ from /u/ and /a/ from /aa/ are almost certainly privative, with the second member marked in each case. This finds some support in the relative frequencies of vowel occurrence (v. section 2.2.5). And in the case of the /i/ - /u/ opposition, it is also supported by vowel harmony rules operating across certain morpheme boundaries (v. section 2.4.2.3.2), and the frequency of harmony between high vowels in successive syllables within roots. (v. section 2.2.5).

It may be tempting to economize on features and describe the long/short opposition in the low vowel in terms of the feature [ $\pm$ back]. There is some phonetic evidence in support of this (v. section 2.1.6.4). However, phonologically and phonotactically there is no support for a 'proportion' /a:/aa/=/i:/u/, and so the two systems are assumed to be distinct.

Dixon (1980:187) suggests that vowels in Australian phonologies be described 'in terms of some of the same feature oppositions as consonants'. In Kuniyanti, at least, there do seem to be good reasons to use distinct feature oppositions for consonants and vowels. These are both phonetic and phonological.

Vowels are normally articulated with the tongue tip down, in a

'neutral' position. However, preceding apico-postalveolars, they are re-coloured (v. section 2.1.6) - that is, the feature [+retroflex] is carried, non-distinctively, in the vowel. If /i/ were positively specified as [+laminal], it could not at the same time carry the feature [+retroflex]. By keeping the two localization 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 the duration of the vowel.) The consonantal localization features are simply not distinctive for vowels, nor are the vocalic localization 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 share features.

There is an unmarked correlation between the vowels /i/ and /u/ and the features [+laminal] and [+peripheral] respectively, such that the corresponding feature is usually taken on in the articulation of the vowel. However, in certain circumstances, notably in a sequence /iki/ or /ingi/, /i/ centralizes to [ɨ], and /k/ is fronted, so that the highest point of the tongue in the vowel is in the dorsum, the part which contacts the hard palate for the /k/. That is, /i/ is non-laminal. The use of different localizations features for vowels and consonants appears to provide the clearest description of these circumstances. That is, /i/ takes the feature [dorsal], making it a  $\begin{bmatrix} \text{-back} \\ \text{dorsal} \end{bmatrix}$  vowel (which is phonetically accurate), and /k/ takes on the feature [-back], making it  $\begin{bmatrix} \text{-back} \\ \text{+peripheral} \end{bmatrix}$  (which is again phonetically accurate). (The specifications  $\begin{bmatrix} \text{+laminal} \\ \text{+peripheral} \end{bmatrix}$  and  $\begin{bmatrix} \text{+laminal} \\ \text{dorsal} \end{bmatrix}$  are contradictory.)

A second reason why the consonantal localization features are inappropriate for vocalic distinctions comes from markedness considerations. If the consonantal system were used to describe the vowels, then /i/ would be marked ([+laminal]) with respect to /a/ ([-laminal]), and the two together would be unmarked with respect to /u/. There is no evidence in support of this. /i/ and /a/, are, as far as I can determine, about equally marked: they are approximately equally frequent (though /i/ predominates textually - v. section 2.2.5), and each has allophones covering roughly equal areas in the vowel triangle (see Figure 2-4). Furthermore, evidence can be adduced which suggests the relative markedness of each

Table 2-2: Feature Specification of Kuniyanti Phonemes

	p	t	rt	th	j	k	m	n	rn	nh	ny	ng	l	rl	ly	rr	r	w	y	a	aa	i	u
[Consonantal]/[Vocalic]	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	V	V	V	V
[±continuant]	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+	+	+	+	+				
[±nasal]	-	-	-	-	-	-	+	+	+	+	+	+	+										
[±liquid]													+	+	+	+	-	-	-				
[lateral]/[tap]													L	L	L	L	T						
[±peripheral]	+	-	-	-	-	+	-	-	-	-	-	+	-	-	-	-	-	+	-				
[labial]/[dorsal]	l					d	l					d						ld					
[±laminal]		-	-	+	+			-	-	+	+		-	-	+	-	-		+				
[±dental]			+	+	-						-				±				-				
[±retroflex]		-	+					-	+				-	+		-	+						
[±high]																				-	-	+	+
[±back]																						-	+
[±long]																				-			+

Key: C = Consonantal  
V = Vocalic  
L = Lateral  
T = Tap  
l = labial  
d = dorsal

vowel with respect to the other. The length distinction for /a/ suggests the relative unmarkedness of this vowel. On the other hand, the fact that consonant final nominal roots sometimes occur with final /i/ (never /a/), suggest that /i/ is unmarked. The feature oppositions proposed in Figure 2-3 account for these facts in a natural way.

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

Remarks:

(i) /ly/ is shown as unmarked for the feature [dental], whereas by contrast /y/ is positively specified as [-dental]. The reason for this is that when /y/ hardens, it is always to /j/, and never to /th/.

(ii) The opposition [labial]/[dorsal] is not taken to be neutralized for /w/. Rather, this phoneme is regarded as marked for both features, [labial] and [dorsal]. My reasoning is that, even though /w/ need not always show both features, it may readily take on either or both in any particular instance.

### 2.1.5 Realization of Consonant Phonemes

#### 2.1.5.1 Stops and Nasals

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

The only place where stops are consistently voiced is word internally following nasals and laterals. For example, kampa 'water' is normally pronounced ['kambʌ], and yilpa 'still, later', is usually pronounced ['ji·lbʌ]. However, following /rr/, voiceless allophones typically occur: /winyjirrki/ → [wi'ɲjɛrki] 'top of back'.

Word initial stops tend to be fortis and voiceless; voice onset tends to follow very shortly after their release (v. page 42). In word initial stop-liquid clusters, stops tend to be voiced: /priyanti/ → ['b_ɹeⁱandi] 'in retaliation'. Sometimes, under heavy stress, an initial stop may be aspirated, (e.g. ['k^hambʌ] for kampa 'water'.

Intervocally both voiced and voiceless allophones occur, though the latter (in which voicing ceases at closure, and resumes at release) is the more common allophone. In some words intervocalic stops are consistently voiceless (e.g. thiki 'short' is, to my knowledge, always pronounced ['t_ɹik_ɹ]); in others, they are consistently voiced (e.g. ngapu 'father'

seems to be invariably pronounced ['ŋa·bu]). There are some words in which voiced and voiceless pronunciations alternate (e.g. juku 'child' is usually pronounced ['cɔgɥ] but ['jɔkɥ] 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, which correlates well with voiceless/voiced.) For example,

/maati/ → ['ma:di] 'cold', but  
/paka/ → ['bakʔ] 'burr'.

Syllable finally, unreleased allophones occur, and voicing from the preceding vowel extends into the period of occlusion. In word medial stop-stop clusters, the cessation of voicing normally follows shortly after the closure of the first stop, and the onset of voice usually immediately follows the release of the second stop, which is normally fortis. E.g.: yapja 'some' is normally pronounced ['j̥ap̥cɔ] or ['j̥ap̥pcɔ]. If followed by a voiced consonant, voicing is usually (but need not be) extended throughout the duration of the stop. E.g., ngapnga 'he ate it' is normally pronounced ['ŋab'ŋɔ], less usually ['ŋabp'ŋɔ].

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 final stops, especially j, tend to be lenis. When /j/ is the first member of a stop-stop cluster, complete closure is not always effected, and some friction may occur, or the segment may be elided. E.g. yijkawu 'bad' may be pronounced ['iʒgãw̃] or ['igãw̃].

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

#### [1] Bilabials

These segments always involve bilabial occlusion. The lips are rounded preceding the maximally close, lip rounded allophone [u] of /u/ (v. 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 front part of the alveolar ridge, just behind the base of the upper

teeth (it is never as retracted as the articulation illustrated in Figure 2 of Dixon 1980:136).

### [3] Apico-postalveolars

In the articulation of Apico-postalveolars the tip of the tongue only (not the under side - cf. Ladefoged 1971:39-40) contacts the roof of the mouth at the back of the alveolar ridge (when preceding the front vowel /i/), and at the forward part of the hard palate (preceding the non-front vowels /a/ and /u/. The apex of the tongue points straight up, and is not turned back.

### [4] Lamino-dentals

The active articulator in these phones is the front part of the blade of the tongue, which contacts 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 1cm 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 in both articulators. Preceding /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 /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, with such a large area of the 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 lamino-dental one. For the corresponding nasals there is of course no such turbulence following 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 - see below page 39).

#### [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 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 /l/ and /rl/ 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 /l/, and low for /rl/, giving the former a 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 roof of the mouth, compared with the area of contact involved in articulation of the lamino-palatal stop and nasal. The place of contact may perhaps vary slightly more than is the case for nasals and stops. Front allophones occur following /a/, but usually contact does not extend to 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):

/wangkalymani/ → [ wɑŋgɑlmani ] 'skull'

/kalypa/ → [ kaɭbɽ ] 'soft'

#### 2.1.5.3 Tap

Word medially /rr/ is normally realized as a voiced alveolar flap [ɾ]. Preceding the apico-postalveolar glide /r/, it is normally a trill (sometimes a flap) in the postalveolar region (i.e. IPA [r̥] or [r] - see International Phonetic Association 1949:10,17). Preceding stops, it is usually a partly devoiced tap [ɾ̥]; preceding nasals, it is a voiced tap. Word finally it is a voiced flap, or trill. The trill may be partly or fully devoiced, and if so, it is normally accompanied by friction. E.g., /panangkarr-/ 'snatch' may be pronounced ['panɑ'ŋgʌɾ], ['panɑ'ŋgʌɾ̥], or ['panɑ'ŋgʌɾ̥]

#### 2.1.5.4 Glides

The major allophones of /y/, /w/ and /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 [o] of /u/. The lips are sometimes slightly protruded and rounded. In the sequence /iwi/, /w/ may be realized by a frictionless, lip-rounded continuant, with the mid-part of the tongue raised to about the position of [ɨ]. That is, in the realization of /iwi/ the tongue may remain fixed, with the lips rounding briefly. The only other place where /w/ regularly shows lip rounding is preceding (rarely, following) /u/.

/y/ involves the blade of the tongue as active articulator, moving to a position similar to that of the high front [i] (it is closer than for the unmarked allophone of /i/, [ɪ]). On at least one occasion friction was heard: /yijkawu/ 'bad' was pronounced (once) as ['jiɰgʌ^o]

For /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 close enough for friction); this is represented by [ɹ], and [ɻ] for the retracted variant, in the IPA (International Phonetic Association 1949:10,17). As remarked above, /r/ is specified [+retroflex], (see also rule CCR 3 and 4 of section 2.4.2). However it is rarely pronounced with the tongue tip as upright as it is in the other apico-postalveolars (/rt, rn, and rl/.) Word initially it is sometimes realized by a vocoid [ə] with slight lip protrusion, similar to the occasional idiolectal variant of word initial r in English.

Word initial /y/ and /w/ are occasionally elided preceding /i/ and /u/ respectively. This usually occurs only when it also shares a localization feature with the following consonant - e.g. /yijkawu/ 'bad' may be pronounced ['jiɰgʌ^o] or ['iɰgʌ^o] (etc.); /wungulu/ 'for fun' may be pronounced ['wɔŋɔlu] or ['uŋɔlu]. There is another possible variant in which the glottal stop replaces the semivowel, e.g. /wungulu/ may also be pronounced ['ʔɔŋɔlu]. But elision has not always been observed in words satisfying this condition, e.g. /wumurla/ 'no, nothing' (avoidance style) is to my knowledge always pronounced with an initial [w].

/w/ is sometimes lost between two /a/ vowels, resulting in a phonetically long vowel (e.g. /pakawaka/ → ['pakʌ'wakʌ] or ['paka:kʌ] 'a



type of tree'). It is also normally lost between two /u/'s (see also below section 2.1.6.2). Similarly /y/ is usually lost between /i/ vowels (v. below section 2.1.6.1). When they occur word finally, they may form a phonetic diphthong or half long vowel with the preceding vowel, e.g. /kurtay-/ → ['kɔɖei] 'grind'; /muw-/ → ['mu·] 'look for'. (For further details of realizations of vowel and semivowel sequences, see section 2.1.6).

#### 2.1.5.5. Acoustic Characteristics

An attempt was made to characterize the articulatory 'places' acoustically, in terms of formant loci.* The tentative results are shown in Tables 2-3 A and B. Depending on the surrounding environment, F2 and F3 values are within a range of about 300 cps. (more or less, depending on the consonant) of the values given in Table 2-3A. The loci of dorso-velars showed a wider range of variation, such that it was impossible to give any single figure. Table 2-3B gives approximate values depending on the preceding vowel allophone: front to central allophones of /i/ and /a/ (see below 2.1.6.1 and 2.1.6.3) determine one set of loci, and back allophones of /a/ and /u/ determine the other set. This is no doubt attributable to the wide range of points of contact possible for dorso-velars. Lamino-palatals and apico-postalveolars were the only consonants for which vowel formants consistently showed transitions extending to the loci. For 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 are at least a couple of Sonograms (of nasals) showing a formant within the range given in the table. The values given for the loci are comparable with those mentioned in Lehiste and Peterson (1961:270) and Fant (1962:14).

Apico-postalveolars have very close F2 and F3 loci (cf. Fant 1962: 14), which were distinguishable only by transitions of F2 and F3 of the preceding vowel (see below section 2.1.6), which tended towards one another, and a point somewhere in the range 1600 cps. to 1800 cps. (Spectrograms normally showed the two formants meeting.) F1 and F2 are very

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* About 200 spectrograms were made of elicited words and sentences. The quality of the recordings was not generally good enough to produce spectrograms of sufficient clarity to allow consistent discrimination between the 'problem' phonemes (which I had most difficulty in distinguishing - v. page 21 above), as I had originally hoped. However, there were enough reasonable spectrograms of stops, nasals and vowels to allow some generalizations to be made with a fair degree of confidence. And partial acoustic characterizations of some problem segments was possible, so that their identification was sometimes possible.

Table 2-3A: Formant Loci of Consonants

Formant	Place of Articulation				
	Bilabial	Lamino-dental	Lamino-palatal	Apico-alveolar	Apico-postalveolar
F ₁	500	750	300	500	500
F ₂	1000	1600	2200	1750	1600
F ₃	2500	2500	3000	2750	1800

Table 2-3B: Formant Loci of Dorso-Velars

	Preceding Vowel:-	
	Front - Mid	Back
F ₁	700	200
F ₂	1500	750
F ₃	2000	-

similar for the apico-alveolars and the apico-postalveolars, making F3 the main 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.

F2 and F3 are usually separate and easily distinguished in the case of the apical glide /r/, the centres of the bands being usually about 500 cps. apart. F2 is usually around 1600 cps., F3 around 2100 cps. That the degree of separation of F2 and F3 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 /r/, i.e. pointing towards the alveolar ridge itself (v. above 2.1.5.1).

The formant loci of the lamino-palatals are approximately those of cardinal [i] (cf. Figure 2-5 below). F2 may lower to about 2000 cps. preceding /a/ and /u/.

Lamino-dentals and apico-alveolars are not readily distinguishable by formant loci: the ranges overlap quite considerably, as might be expected from the articulation of both in the dental-alveolar region. But 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 generalizations 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 the spectrogram. Depending on the point of articulation, highest energy concentrations are found in different frequency ranges (cf. Halle, Hughes and Radley, 1957:171).

-/p/ has a strong burst of energy at low frequencies, less than 700 cps., and another, usually stronger burst, with midpoint at about 2500 cps., extending at least a few hundred cps. on either side.

-/t/ has strongest energy in the higher frequencies, over 2500 cps., and weaker energy in very low frequencies, below 500 cps. /rt/ appears to have the highest energy concentrated slightly lower than /t/, around 2000 cps.

- In the case of /th/, energy is distributed more evenly over the whole frequency range, 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 cps.

-/j/ has energy in the higher frequencies above 2000 cps., and may also have a moderate amount of energy below 750 cps.

-/k/ usually has high energy in the range 1000 to 2500 cps. (higher or lower, depending on the neighbouring vowels), in a band 500-1000 cps. wide. There is little energy at 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 in the following ranges:

/p/	.01 - .02 sec.
/t,rt/	.01 - .02 sec.
/th/	.02 - .03 sec.
/j/	.05 - .07 sec.
/k/	.02 - .03 sec.

(Only in the case of /j/ was this noise perceptible to me.) During this period, /t/ shows much more noise in the lower frequencies than does /th/, and its duration is typically a half (or less) the duration of the latter. For /th/, noise is more evenly distributed over the range of frequencies, being everywhere quite weak, though sometimes visible in spectrograms especially in higher frequencies (2000 cps. and above). The even distribution of energy of the lamino-dental corresponds to the auditory impression of 'diffuseness' and 'flatness' of /th/ relative to /t/, /rt/ and /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 Realization of Vowel Phonemes

Figure 2-4 shows the approximate range of allophonic variation of the vowel phonemes.

Figure 2-4: Vowels

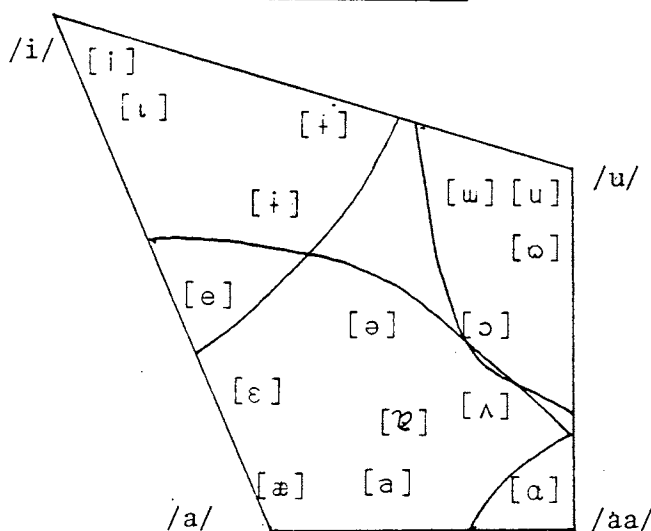
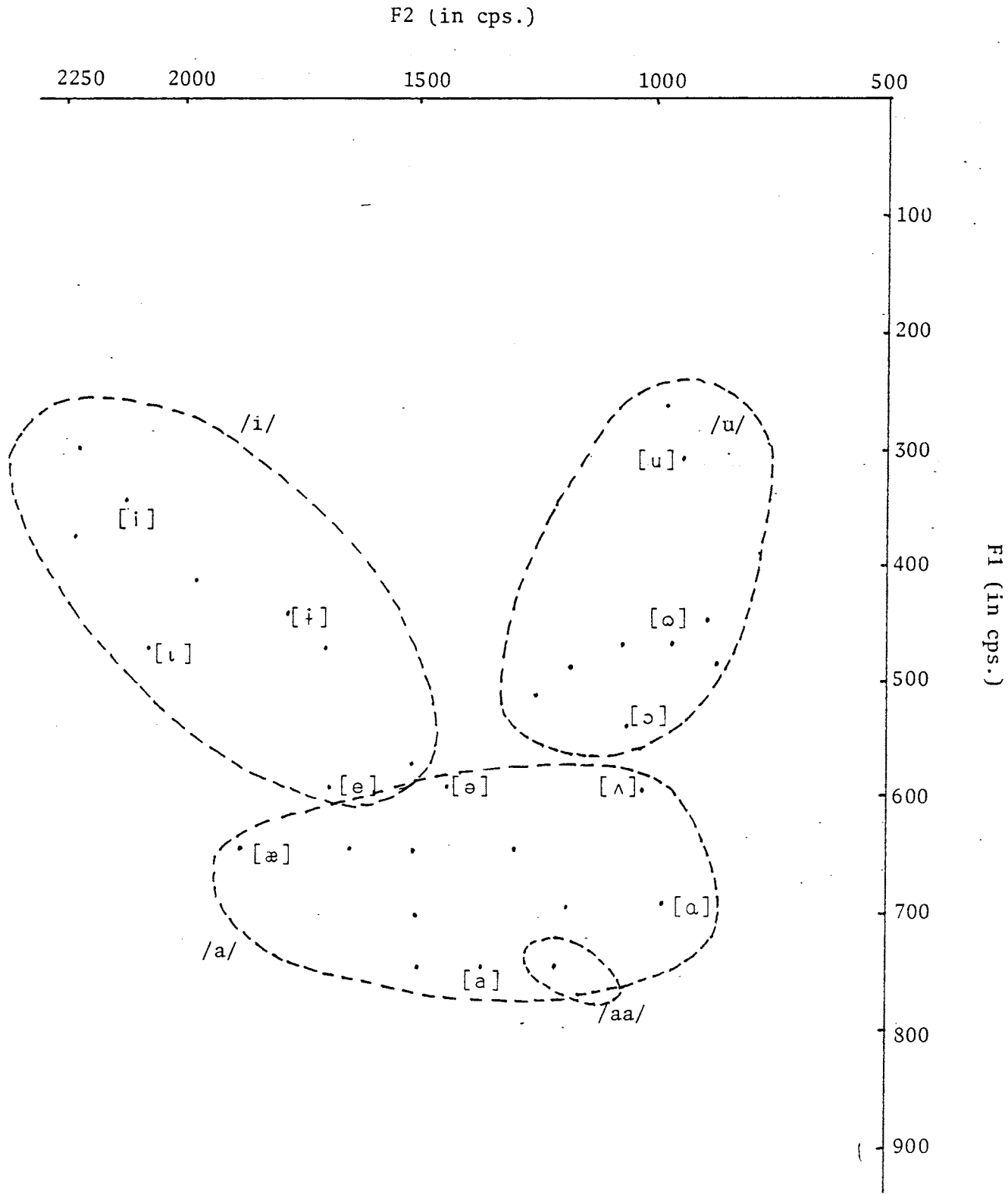


Figure 2-5: Plot of Vowel Formants, F1 against F2



For comparison, Figure 2-5 plots the first two formants for 100 or so of the clearest and stablest vocalic spectrograms available. No attempt has been made to indicate each example: the dots give approximate centres for a number of points within a radius of 50 cps. (F1) to 100 cps. (F2).

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 consonantal articulation. 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:

/ngurntu/	→	['ŋɔŋdɔ]	'who', but
/ngurntuyu/	→	['ŋɔŋdɔ'yu]	(who-DAT) 'who for'
/ngurntuka/	→	['ŋɔŋdɔkʌ]	(who-ERG) 'by who'

r-colouring of a preceding vowel shows up on spectrograms in the third formant, which starts around 1500 cps. (for all vowels), and falls to 1800 cps., the F3 locus of the apico-postalveolars.

Word final, unstressed vowels tend to be short and lax. In the spectrograms this shows up in weak, or indiscernable F2 and F3.

#### 2.1.6.1 /i/

As indicated in Figures 2-4 and 2-5, /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 of the word. There is also a certain amount of free variation.

The unmarked or 'elsewhere' realization of /i/ is somewhat lower than cardinal [i], and in the vicinity of [ɪ]. Allophonic variation conditioned by neighbouring segments is conveniently described in terms of a displacement vector, defined by the distance and direction of the high point of the tongue from its position in the pronunciation of the 'elsewhere' allophone [ɪ]. 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 is determined by the preceding consonant. However, the quality of a morpheme final vowel 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 [ɨ] range, except when following lamino-palatals, which condition close variants in following vowels, so restricting the retraction to about [ɨ]. For example, following a non-palatal:

/tiki/	→	[tɨkɨ]	'boil'
/wiki/	→	[wɨkɨ]	'frog'
/yaalingi/	→	[ja:lɨŋɨ]	'all around'
/pirti/	→	[pɨtɨ]	'upper leg'
/kilirni/	→	[kɨlɨŋɨ]	'grass'

Contrast the following:

/jikinya/	→	[jɨkɨnʌ]	'little'
/jiriki/	→	[cɨjɨki]	'bird'
/jirliwa/	→	[cɨlɨwʌ]	'sinew'

Both preceding and following laminals have a marked effect on the quality of the allophone.

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

/thithi/	→	[tɨtɨ]	'motion'
/thila/	→	[tɨlʌ]	'mid-back of kangaroo'
/thilmangka/	→	[tɨlmangʌ]	'quickly'

In the immediate environment of lamino-palatals /i/ is always realized as a high front vowel, in the region of [i] to [ɨ]. The maximally close [i] occurs:

(1) In open syllables, when followed by a lamino-palatal, as in:

/niyajiya/	→	[ni ⁺ ajɨ]	'there',
/piyari/	→	[pi ⁺ aɨ]	'sneakingly',
/jijak/	→	[ji ⁺ ɨk]	'speak',
/nyilyimpu/	→	[ni ⁺ ɨmbu]	'mouse', and
/jinyjili/	→	[ji ⁺ nɨli]	'navel',

except in the environment [+peripheral] — {^{1y}_{ny}}, where [ɨ] occurs.

Thus:

/ngurrupinyi/	→	['ŋɔɔo'biɾɪ]	'through there'
/milyilyi/	→	['miʌliɪ]	'brain'
/kinyirri/	→	['kiɾiɾi]	'fight for women'

(2) In closed syllables, when followed by lamino-palatals. For example,

/pijngarni/	→	['pi·ŋŋaŋi]	'he emerged'
/pinypiny/	→	['piŋ'biŋ]	'crimson chat'
/tily/	→	['tiɪ]	'flame'

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

/yilpa/	→	['ji·lba]	'forever'
/yimarrarra/	→	['jimaraɾa]	'leaf'
/yikanyi/	→	['jikani]	'uncertain'

(4) Following word initial /j/ or /ny/, in open syllables in bisyllabic words (see also below page 48). E.g.:

/nyirri/	→	['ni·ri]	'spinifex'
/jitip/	→	['ciɪp]	'lift up'

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

/ngarraki/	→	['ŋaraɾgi]	'my, mine'
/ngarrakinhingi/	→	['ŋaraɾgi·ŋiŋi]	'from me'
/paapirri/	→	['ba:biɾi]	'below'

There are, however, a certain number of systematic exceptions to this generalization. When a sequence /iCi/ occurs word finally, there is a tendency for the consonantal features [+retroflex], [dorsal], and l+dental] (which, as mentioned above (page 45) condition a mid to central allophone), 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 (assuming (as seems reasonable) that [dorsal] is marked as a lingual feature, as against the lingually neutral [labial]) will be retained, there being no need for the tongue to rapidly change its shape in anticipation of a following segment. For example,

[+retroflex]:

/wartpiri/	→	['wɑɾpɪ̠ɪ̠]	'you'll go'
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[dorsal]:

/kampanhingi/	→	['kambɾ'ŋiŋi]	'from water'
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/tiki/ → [tʰkʰi] 'boil'

/w/ must be treated as [dorsal] (see also above page 34), since:

/riwi/ → [rʷiʷ], [ʷiʷ] 'camp, place'

(Lip protrusion does not extend over the /i/ vowels.)

[+dental]:

/thithi/ → [tʰtʰi] 'motion'

/winhi/ → [wʰnʰi] 'nothing'

During the articulation of the /i/ vowels 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 so markedly, when a different vowel occurs in the preceding syllable, especially if the intervening consonant is [+retroflex]. For example,

/tijpari/ → [tʰijbaɹi] 'broken'

Compare /ngarraki/ → [ŋaɹagi] 'mine', for which the final vowel has never been heard centralized.

The vowel of the following syllable may also affect the height of the allophone of /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 /i/ may condition a maximally close [i] (for conditions on this see below page 48). For example, compare:

/minka/ → [mɛŋkʌ] 'fat',

/lika-/ → [lʰikʌ] 'wait for',

/mirra/ → [mɛɹʌ] 'head',

with;

/lirri/ → [lʰiɹi] 'guts'

/mirri/ → [miɹi] 'sun'

Length does not appear to be significant for the vowel /i/. However, phonetic lengthened varieties [i:] do occur, and they arise from at least four different sources.

(1) An /i/ vowel in the first syllable of a disyllabic word is sometimes slightly longer than usual. Examples are: [ŋi·di] 'we (Restricted)', [mi·ɹi] 'sun', [ʃi·lʌ] 'sun', and [ʃi·lbʌ] 'forever'. I analyse these as conditional variants of /i/ for the following reasons:

(a) Following or preceding lamino-palatals in bisyllabic words, /i/

is invariably realized as a half-lengthened [i·] (see above examples).

(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 apico-alveolar or lamino-palatal (that is, a consonant that does not condition backing or centralization of the vowel.) Elsewhere, occasional variants such as ['mi·ki] 'ant' have been heard, but variants with the shorter, retracted vowels predominate; [mɪkɪ] is the more frequent variant.

For all words showing a phonetic lengthened [i·] under circumstances discussed in (b), variants have been heard with a short [ɪ]. For example, both ['ŋɪdi] and ['mɪɾi] have been heard in place of the long variants given above (page 47). The shorter variants predominate when unstressed monosyllabic morphemes, such as Postpositions (v. section 3.7) are added. E.g.:

/ngitingka/ → ['ŋɪdɪŋɔ] 'we-ERG'

Some speakers favour versions with the short [ɪ], while others (including the oldest speaker) tend to prefer the longer [i·] forms. When I asked speakers which pronunciation was 'correct', they seemed to show no particular preference for either one over the other.

(2) Elsewhere within morphemes a longer variant [i:] occurs, which I propose to treat as realization of underlying /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 [iɪ] (but unlike the case dealt with under (1), such words do not have [ɪ] variants). For example,

/yiyili/ → ['jɪɪli], or ['iɪli] ([a place name]),  
/kiyinyma/ → ['ki:ɲmɔ] 'bat'

The shape of this diphthong, having the maximally high part first, is accounted for by (1) above. In any environment there may be a non-flat pitch contour over the vocalic segment, especially in careful speech. Secondly, it could be uneconomical to account for the phonetic long vowel as a separate phoneme, long /ii/. This is because [i:] does not contrast with [iɪ] (or any other phonetically similar vowel), which, as has just been mentioned, can be accounted for as a realization of /iyi/.

The sequence /iyi/ arises at certain morpheme boundaries, such as in e.g. /paki-yi/ 'he lay', for which there is evidence that /y/ is

actually present (it alternates with /j/, depending on the nature of the preceding segment). The sequence is realized as [i:], if the syllable /yi/ does not bear inherent stress (v. sections 2.4 and 2.5), and [i'i]~[i'ji] if it does. For example, contrast

/pakiyi/ → ['pa'gi:] 'he lay'

(where stress is assigned to [gi:] as a 'late' rule (v. section 2.5.3)), with

/pakiyirri/ → ['pagi'iri] ['pagi'yiri] 'we lay'

Within morphemes, /iyi/ is realized as either [i:] or [iɿ], 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. E.g.

/jampiyinti/ → [jam'biɿndi], [jam'bi:ndi] ([a subsection])

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. For example,

/yitiyiti/ → ['jidi'jidi], ['jidi'idi] 'cicada'

The meaningless formative yiti bears inherent stress on its initial syllable, like any root, and the boundary behaves like a morpheme boundary. It follows that [i'i] and [iɿ] are conditioned variants.

(3) At certain morpheme boundaries, [i:] arises from a sequence /i-i/, which in turn derives from an underlying i-wi or i-wu (where '-' indicates a morpheme boundary), through elision of the /w/ (v. 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 realizations of the two sequences are identical, except where a morpheme boundary falls between /i/ and stressed /'yi/ (on which see (2) above).

(4) On at least one occasion, a lengthened [i:] was heard instead of the more usual [iɿ], with a symbolic effect, indicating extreme smallness. The word jikinya 'little, small', usually pronounced ['jɿkiɿɿ], was once pronounced ['jɿki:iɿ], suggesting very small size (cf. below 2.1.6.3 on lengthening of /a/).

#### 2.1.6.2. /u/

/u/ has the smallest range of allophonic variation of any short vowel. Although in terms of height its range is comparable to that of /i/, all

of its allophones are in the back third of the vowel quadrilateral. No central allophones occur. /u/ is lip-rounded when followed by, and sometimes when preceded by bilabials (/p,m,w/), but otherwise the lips are usually in a neutral position. (Where necessary, I will use 'ω' under the vowel to indicate lip-rounding; in the transcriptions below, the symbols for the back vowels will distinguish tongue position only.)

Examples are:

/puwurru/	→	[ 'p _ω u:ru ]	'north'
/nganyimuwa/	→	[ 'ŋaŋi'm _ω ·ʌ ]	'only me'
/kuma/	→	[ 'k _ω ma ]	'full (of mouth)'

Word finally, /u/ tends to be realized by a maximally high, lax and unrounded allophone, which I will transcribe [u̠]. E.g.:

/kurnpu/	→	[ 'k _ω ɾnpu̠ ]	'woman'
/ngapu/	→	[ 'ŋa·bu̠ ]	'father'

When followed by a consonant other than /w/, /u/ (unlike /i/) shows no tendency to assimilate in height with the following vowel, but is generally realized by [o] (which is closer and tenser than the [o] of English 'foot'), except as otherwise specified below. E.g.:

/munga/	→	[ 'm _ω ŋʌ ]	'dark'
/nurna/	→	[ 'n _ω ɾʌ ]	'greedy'
/tungkulu/	→	[ 't _ω ŋg _ω lu̠ ]	'bereaved'
/thuru/	→	[ 't _ω ru ]	'windbreak'
/pulka/	→	[ 'b _ω lga ]	'old man'

Neighbouring palatal consonants front and lower u 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 /u/ is realized by a vowel between [o] and [u], e.g.:

/juku/	→	[ 'cok _u ] or [ 'cuk _u ]	'child'
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Elsewhere, spectrograms confirm that the vowel is in the lower front of the range of /u/ (Figure 2-5). E.g.:

/jumu/	→	[ 'c _ω mu̠ ]	'soak'
/muyu/	→	[ 'm _ω ju̠ ]	'asleep'

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 /rr/, /u/ is normally realized by a mid-back vowel:

/kurrku/	→	['kɔrkɥ]	'hole'
/mulurrja/	→	['mɔlɔrcɔ]	([a place name])

When /u/ is followed by a syllable closing /w/, the sequence /uw/ is realized by a maximally high, and usually lip-rounded and half long [u̥]. E.g.:

/muwa/	→	['mɥ·ʌ]	'he searches'
/muwnga/	→	['mɥ·ŋʌ]	'he searched'

Otherwise, when followed by a /w/ opening the following syllable, the quality of /u/ depends on the following vowel. If the following vowel is /a/, it is lowered by varying degrees. For example,

/nganyimuwa/	→	['ŋɔŋi'mɥ·ʌ]	'only me'
/ruwa/	→	['ɽɔ·ʌ]	'walkabout'
/yuwarni/	→	['jɔwɔŋi]	'one'

Within a single phonological word, the sequence /uwu/ is usually realized as a long [u:], less frequently as a lowering diphthong [u̥ɔ]. (In very careful elicited speech, [uɔ] and [u?ɔ] have been heard.)  
Examples:

/yuwulu/	→	['ju:lu]	['jɥ̥ɔlu]	'man'
/puwurru/	→	['pu:ru]	['pɥ̥ɔru]	'north'

All instances of long [u:] can be accounted for as realizations of /uwu/, 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 by preceding segments.

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

/mangarri/	→	['mɔŋɔɽi]	'no'
/thangarnti/	→	['tɔŋɔŋɽi]	'mouth'
/paka/	→	['bɔkɔ]	'bur'

Preceding the flap /rr/, an even higher and backer variant, [ʌ] may occur:

/marraa/	→	['mɔɽɔ:]	'sandhill country'
/parrangka/	→	['pɔɽɔŋŋɔ]	'dry season'

When /w/ follows /a/, a somewhat fronted allophone, between [æ] and [a] occurs.

/kawu/	→	['kæ̃u]	'lungs'
/kawi/	→	['kə̃wi]	'fish'
/jawanti/	→	['jə̃wə̃ndi]	([a subsection term])

The sequence /awu/ may be realized by a long [o:], if neither phonological syllable bears inherent stress. For example:

/thilmangkawu/	→	['t̃ɪ̃lmango:]	'quickly!'
/pulupiinawu/	→	['pɔlɔ'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, a is raised and/or fronted somewhat, by amounts depending on other features of the phonetic environment.

(1) When an /i/ vowel occurs in the following syllable, /a/ is realized by a vowel somewhere in the triangle defined by [e], [æ] and [ə]. If the following vowel is /a/ or /u/, then a vowel in the range of [ə] results. For example,

/nganyi/	→	['ŋæ̃ni]	'I'
/ngaja/	→	['ŋə̃jʌ]	'younger brother'
/manyi/	→	['mæ̃ni]	'vegetable food'
/maja/	→	['mə̃jʌ]	'boss' (< English 'master')

Within these ranges, the most fronted allophones occur following non-peripheral consonants. For example,

/naya/	→	['næ̃iʌ], [nə̃iʌ]	'thunder'
/lajanga/	→	['læ̃jɑ,ŋʌ]	'he rode it'
/mulurrjaya/	→	['mɔlɔɾ,jə̃iʌ]	'at Mulurrja'

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

/wartpinayi/	→	['wɑd̃'bi.nə̃i]	'he took them two'
/yawartayu/	→	['jɑwɔ'də̃'jɪ]	'for a horse'
/yawartaya/	→	['jɑwɔ'də̃iʌ]	'on a horse'

(In the last two examples, the third syllable is stressed by a 'late' stress rule - v. section 2.5.3). Contrast these examples with the following, in which the preceding consonant is [+peripheral]:

/pilikaya/	→	['pɪlɪ,kə̃iʌ]	'in the middle'
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(Here too, the third syllable is not inherently stressed.)

A more accurate description may be given in terms of the lingual

feature [+laminal]. The tongue begins to take on this feature - 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 (v. 2.1.5) - during the articulation of a. The tongue moves relatively slowly into the consonantal articulation, exactly as for postalveolar consonants (in which it is the tip, not the blade that 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 retroflexes, it is the third (retroflex) formant that moves gradually). Transitions in other environments are more rapid, and (except word finally), a constant position is usually maintained for a short period of time.

(3) Especially (but not only) when the following laminal is syllable closing, a diphthongal glide is heard. For example,

/kajnga/ → ['ka^hj,ŋʌ] 'he cut it'  
 /jurnanykarra/ → ['cɔŋe^hiŋ, gɔrʌ], also ['cɔŋeŋ, gɔrʌ] 'good'

If /y/ closes the syllable, /ay/ may be realized by [e] (cf. page 39 above). For example:

/kurtaynga/ → ['kɔt^ee'ŋʌ] '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:

/yamparra/ → ['jambʌrʌ] 'hair'  
 /yaliyali/ → ['jæliæli] (a type of bird)  
 /yanya/ → ['je^hiŋʌ] (or [ja.ŋʌ]) 'other'  
 /jaliji/ → ['cɔliji] 'friend'  
 /wayanti/ → ['wɔi^hjændi] 'fire'

A somewhat heightened allophone, in the vicinity of [ɤ] is found in the environment of lamino-dentals. E.g.:

/thatharrwani/ → ['tɤtɤr^hwani] 'he stopped'

Elsewhere, in stressed syllables /a/ is realized by a vowel in the region between [a] and [ɑ]. In unstressed syllables, it is centralized to about [ɤ], and word finally, a lax allophone occurs, which tends to be in the mid to low back region, [ɤ] or [ʌ] (it is not, to my knowledge, centralized as far as [ə]). For example,

/munga/	→	['mɔŋʌ]	'dark'
/palngarna/	→	['palŋaŋɤ]	'outside'

#### 2.1.6.4 /aa/

The long vowel /aa/ is invariably realized as the long low back vowel [ɑ:]. I can detect no significant allophony. For example,

/yamaa/	→	['jɤma:]	'foot' (avoidance style)
/pilkaali/	→	['bil'ga:li]	'midnight'

Very occasionally, in elicited speech only, a slightly centralizing diphthong occurs, which, however, remains within the [ɑ] region, e.g.:

/ngaanti/	→	['ŋɑ̃ndi]	'flesh'
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Phonetic long [ɑ:] comes from a number of sources other than /aa/. At certain morpheme boundaries the 'underlying' sequence /awa/ is realized as [ɑ:]. This is accounted for in 2.4 by a sandhi process of w-elision. The long vowel is thus the realization 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-a phoneme.) Since long /aa/ and the sequence /a-a/ are in complementary distribution, the former occurring only within morphemes, and the latter across morpheme boundaries, both are represented unambiguously by aa.

There are other morpheme boundaries at which /awa/ is realized either as [awa] (usually in more careful speech) or as [ɑ:] (in more natural speech). In these cases 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 a Adverb and the stem forming suffix -wa (see section 3.12.3.1), as in

/mikawa/	→	['miɤgʌwʌ], ['miɤga:]	'that way'
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It has also been attested (once) in a root which is a reduplicated (meaningless) formative:

/pakawaka/	→	['pʌkʌ'wʌkʌ], ['pʌka:kʌ]	(a type of tree)
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I mentioned above (2.1.3) that there is a single word, /jawangari/ (a subsection term) in which /awa/, /aa/ and /a/ all occur as free variants. But intra-morphemic /awa/ is not normally realized phonetically as [ɑ:], and for this reason I take it that this word has three possible phonological forms. No (other) occurrence of [ɑ:] within a morpheme



has been observed to alternate with [awa]. Thus intramorphemic long a: must be a separate phoneme.

There are about a dozen or so monosyllables with [a:], e.g. ['ma:] 'meat' (cf. Bunaba /milha/), ['pa:-] 'call out'. There are also a couple of Interjections with short [a], such as [pa] 'come on, let's go'. It seems most natural to account for the long [a:] in ['ma:] and ['pa:] as a realization of /aa/, and the short [a] of [pa], as a realization of /a/.

There are a couple of words in which an /a/ in the second syllable is sometimes realized as [a:], suggesting intensification of size, (cf. above page 49). For example /nyamani/ 'big' (usually pronounced ['naamani]), may be pronounced ['naama:ni] (indeed the second vowel may be three or four times its usual length), indicating that the entity is very big. Similarly, /marnangurru/ 'far' may be pronounced with a long to extra-long [a] in the second syllable, suggesting a very great distance. (See also line (12) of Text 1).

## 2.2 Phonotactics

### 2.2.1 Roots

Phonologically, all lexical roots in Kuniyanti begin with consonants. Word initial [i] and [u] occur. But as they do not contrast with [ji] and [wu], they are taken to be realizations of initial /yi/ and /wu/. There are just a couple of exceptions: some Interjections are vowel initial (e.g. [ʌʌ] 'OK'). These 'non-linguistic' (v. section 3.1.2) words are not accounted for in the following discussion.

Root initially the opposition between the two apical series is neutralized. Both the alveolars [t,n,l] and the postalveolars [ʈ,ɳ,ɭ] occur word initially, but they do not contrast. In isolation, alveolar and postalveolar articulations are in 'free variation'. For example,

['ʈu:],	['tu:]	'cave'	(/tuwu/)
['ɳa:gʌ],	['na:gʌ]	'dress'	(/naaka/)
['ɭa:rɪ],	['la:rɪ]	'bream'	(/laarri/)

Since I experience difficulty in distinguishing alveolar from postalveolar articulations, I visually checked about one hundred and fifty apical initial words, each with at least three speakers, and over a number of repetitions (successively, and on different occasions.) (See section 1.10 above.) On the basis of the observations made, the following generalizations can be formulated:

- (1) Alveolar articulation is overall most frequent.

(2) Postalveolar articulation is rare preceding /i/, but occurs about as frequently as alveolar articulation preceding /u/ and /a/.

(3) Root initial apicals tend to assimilate to following apicals. For example, in the pronunciation of /tirippinti/ 'he entered', the apex of the tongue tends to point towards the postalveolar region throughout the articulation of the first two syllables, i.e.

[^ht̪i̪p̪p̪ɪnd̪i]. (It has, however, been observed pronounced [^ht̪i̪p̪p̪ɪnd̪i]). On the other hand, words such as /tili/ 'light', a flame', tend to be pronounced [^hti̪li̪].

For obvious reasons 't', 'n', and 'l' are used to represent the three contrasting apicals word initially.

The following consonants occur (contrastively) root initially: /p, t, th, j, k, m, n, nh, ny, ng, l, r, w, and y/. /rr/ and /ly/ do not occur root initially. (This is also true of the neighbouring languages, Ungarinyin (Rumsey 1982b:14), Jaru (Tsunoda 1981:37) and Nyikina (Stokes 1982:23)). Only three consonant clusters occur initially, and they are infrequent both textually and in the lexicon. They are:

/pr/ e.g. /prijanti/ ([^hb_ɹe^hænd̪i]) 'in exchange, in revenge'  
 /pl/ e.g. /planpirra/ ([^hp_lanp_ɹr̪ʌ]) '(lie) on (one's) back'  
 /kr/ e.g. /kraa/ ([^hg_ɹɑ:] ) 'near'

Root finally, vowels predominate, though consonants do occur. Except for the lamino-dental nasal, all consonants are attested in this position. (It is possible that /nh/ does occur in this position. I find it very difficult to identify lamino-dentals and 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 (v. section 2.2.5). There are significantly fewer consonant final roots belonging to other parts-of-speech. 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 have occasional variants with final [i]. For example, the word for 'galah' is usually heard [^hku̪l̪ip̪g̪u̪l̪ip̪], occasionally [^hku̪l̪ing̪u̪l̪ip̪i̪]. The [i] final versions occur only when the word is free-standing (i.e. not followed by a bound morpheme), and then only occasionally. Therefore it is 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 /i/, occur without this vowel when certain bisyllabic stem forming suffixes are added. E.g.: /kaljini/ 'fast', /kaljinkali/ 'speedy one'; /nyanyi/'MB (etc.)', /nyanypati/ 'your MB (etc.)'. 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 found in the isolated root, and before most 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 /i/ (which is not as a rule elided before the above mentioned suffixes -(k)ali 'good at' and -pati '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).

(iii) A number of Nominals show alternations between final /n/ and final /nti/, e.g.:

/jilnginti/, /jilngin/	'wet, dew'
/jawanti/, /jawan/	[a subsection]
/ngumpanti/, /ngumpan/	[name of mountain]
/kuniyanti/, /kuniyan/	[name of language/people]

The shorter variants occur only when the root stands alone - the long forms occur before all enclitics and suffixes. E.g. /ngumpan/ is the most frequently heard variant, but instead of /ngumpan-ja/ 'at Ngumpan', /ngumpantiya/ only occurs. Similarly, the name of the language is always /kuniyanti/ preceding the Ergative /-ngka/ or the Comitative /-ngarri/. For this reason, it seems most natural to assume that the long forms are the 'basic' or 'underlying' forms, from which the short ones derive by an optional rule of /ti/ deletion. This assumption is in agreement with native speaker's intuitions, to the effect that the /nti/ forms are 'correct' or 'full' - see footnote to page 1.

/ti/ deletion applies to only a small subset of words ending in /nti/, and this subset is not characterizable and distinguishable from its complement either formally or semantically. It is therefore necessary to mark with a diacritic those words which may optionally undergo the rule.

It is possible that the /ti/ in /nti/ is a relic of an old gender suffix*. In Ungarinyin ti is an anaphoric element for w-class words, which include words for languages, stone things and water (compare the list above). When used attributively, ti (which is a free word) 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). Further evidence suggesting an earlier morpheme boundary within these words, is the existence of a number of close cognates in Jaru, differing only in the absence of final /ti/ (sometimes /tu/) - e.g. Jaru /jawan/ (subsection term) (Tsunoda 1981:8), /kawun/ 'ashes' (Tsunoda 1981:33) - this is invariably (to my knowledge) /kawuntu/ in Kuniyanti (v. Rumsey 1982b:41). It has been noticed that the variants with final /n/ are more frequent in Yiyili, which borders on Jaru territory. Yiyili people have more contact in that direction than with the rest of the Kuniyanti community. Variants with final /nti/ are more frequent in Fitzroy Crossing, where e.g. I have never heard /jawan/, only /jawanti/.

A few root final consonant clusters occur: /l-k, rl-k, rl-ng, rr-r, rr-k, and rr-p/. 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, /p, k, or ng/. There is a single exception, /rr-r/, in which the second member is the apical glide /r/; this cluster is very rare by comparison with the others.

Intervocally, all consonant contrasts are maintained (see also Dixon 1980:159). A fair number of intervocalic consonant clusters occur, all of which have two members. The attested clusters are shown in Table 2-4. Across morpheme boundaries there is a larger range of possibilities (see below section 2.2.3), not indicated on the table. Roots that are reduplications (of meaningless forms), or which are segmentable into formatives (v. 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, which is apparently constructed with the suffix -ngarna 'inhabitant of, dweller of' 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 (i.e. 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 of the table, and a number of generalizations 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

---

* This possibility was suggested to me by Alan Rumsey (p.c.).

Table 2-4: Intervocalic Consonant Clusters

## First Member

Second Member

	p	t	rt	th	j	k	m	n	rn	nh	ny	ng	l	rl	ly	rr	r	w	y
p			X		X	X	X	X	X		X		X	X	X	X			
t								X					1						
rt									X										
th										X									
j	X	X						X	X		X		X	X	X	X			
k			X		X			X	X		X	X	X	X		X			
m									X	X	X	X	X	X	X	X			
n																			
rn																			
nh																			
ny																			
ng								X	X	X			X	X		X			
l																			
rl																			
ly																			
rr																			
r																	X		
w													X	X	X	X			
y														X					

Key: 1 one example of cluster only.  
 X cluster attested more than once.  
 (usually at least three examples)

liquid-glide. The manners of articulation can be ranged from least marked to most marked as follows: stops, nasals, glides, liquids (v. Figure 2-1, section 2.1.4). All clusters satisfy two conditions: (a) The first consonant may not be less marked than the second; (b) glides must be the second member of a cluster, liquids the first. (The latter qualification is necessary 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 /rn-t/, or /nh-j/. However, both apico-alveolars and apico-postalveolars as well as laminals, may precede a laminal consonant. E.g.: /junjunanajku/ 'pardalote', /kampurnjuwa/ (place name), and /karnanganyja/ 'emu'.

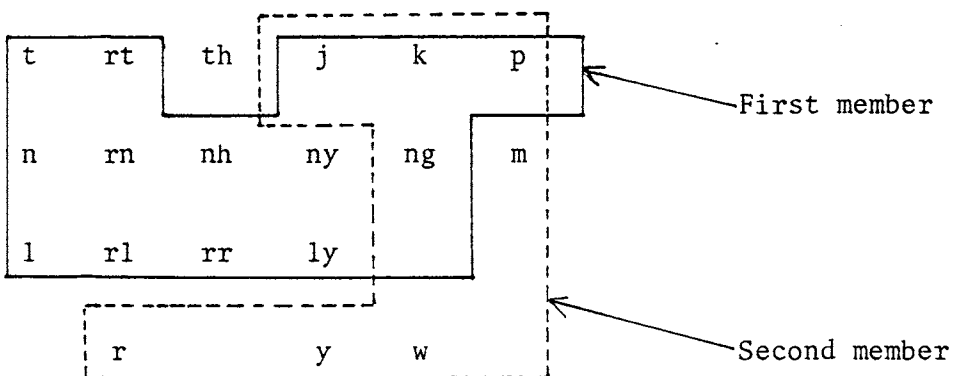
[3] In non-homorganic clusters, if the second member is a non-continuant, it must be either peripheral or laminal; if it is a nasal, it must be peripheral. In terms of markedness of the places of articulation, the second member of the cluster tends to be at least as marked as the first. (There is a single exception, the cluster /p-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, /l-t/ and /ly-j/ are attested, e.g.: /pultuk-/ '(to)burst', /milyjimilyji/ 'a paperbark tree'. These appear to be fewer in number than the non-homorganic lateral-stop clusters /l-j/ and /rl-j/. The homorganic /rl-rt/ is not attested, and /lt/ is attested once only; /ly-th/ does not occur either.

The possibilities in first and second place in non-homorganic clusters are tabulated below.

Figure 2-6: First and Second Members of Consonant Clusters



(It seems 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 manners, 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 that the outermost member must be peripheral (but not /m/) and the innermost member must be an apical continuant (with the single exception of /rr-r/, as mentioned previously).

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*, non-homorganic nasal-stop clusters, stop-stop clusters, nasal-nasal clusters, or liquid initial clusters. But combinations of different types are possible. For example, winyjirrki 'top of the back', linyparnti 'an edible leaf', miljarnti 'fingernail', and pliny marrki 'gland'. There are a few words in which there are two homorganic nasal-stop clusters, but separated by a syllable, e.g. the subsection terms jampiyinti and nampiyinti.

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 be identical (see below, 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 (suffixes, enclitics, prefixes, etc.) differ phonotactically from roots. Most, but not all, begin with consonants and end with vowels. An initial consonant may, however, disappear as the result of a sandhi process, in certain contexts (see 2.4 and next section). All consonants except /ly, rl, rt, th, n/ are attested morpheme initially. /rr/ may begin a bound morpheme, but not a root. Two homorganic nasal-stop clusters are attested initially in bound morphemes: /ngk/ and /nyj/. /mp/ might be added, depending on the analysis (see below). Consonant clusters are also rare within morphemes, and are limited to homorganic nasal-stop clusters (including /nyj, ngk and rnt/).

Six Classifiers (v. section 3.9.3.2.1) are vowel initial. Five of these have initial /a/, one has initial /i/. Two more have vowel initial allomorphs.

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* There is only one exception that I am aware of, the place name ngumpanti (see above page 57). As Rumsey has pointed out to me (p.c.) this is possibly evidence of a former morpheme boundary between the /n/ and /t/ (loc.cit.). But compare below rule R7 of section 2.4.1.2.2.

A handful of morphemes, all of which are pronominal prefixes, end in consonants, /n, ny, m or rr/.

### 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 boundaries (across which different sandhi processes operate). For example, /y/ follows any consonant within the verbal distributional word (v. section 3.1.2), but elsewhere, follows only continuants.

Vowel sequences must be either /a-a/ or /i-i/. /u-u/ does not occur. Other sequences (e.g. /i-a/, /u-i/, etc.) may exist in 'underlying' representations, but sandhi rules change them to acceptable /a-a/ or /i-i/.

Intermorphemic consonant clusters have two or three members.

[1] Two member clusters. Two member clusters are numerous. With the exception of /nh/, all consonants have been attested as first member of some intermorphemic cluster. It is possible to rule out /th/, /ly/ and /rr/ as possible second members, since no known morpheme begins with /th/ or /ly/, and the only /rr/ initial morphemes always follow vowels. Apicals are occasionally found as second members of intermorphemic consonant clusters. Examples are /l/, which may follow any final consonant of a verbal root; /t/, which follows /n/ within the Classifier Complex; and /r/, which may follow /rr/, also within the Classifier Complex. (It is likely that following apico-postalveolars /l/ assimilates to /rl/.)

Table 2-5 tabulates the clusters which have been observed at the boundaries between verbal stems and following morphemes. 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 intramorphemically: stop-nasal, stop-lateral, stop-glide, nasal-lateral, nasal-glide, glide-nasal, glide-lateral, and glide-glide clusters.

Geminate consonants of all manners except for the tap - i.e. 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:

/warangi/ 'I stood'

/warangngi/ 'I sat'

/naaka/ 'dress'

/nakka/ 'hit right place -wa'



Table 2-5: Two Member Consonant Clusters following Verb Stems

		First Member																			
		p	t	rt	th	j	k	m	n	rn	nh	ny	ng	l	rl	ly	rr	r	w	y	
Second Member	p	X	X	X	X	X	X	X	X	X		X	X	Λ	Λ	Λ	Λ	Λ	Λ	Λ	
	t	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	rt	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	th	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	j	X	X	X	X	X	X	X	X	X		X	X	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
	k	X	X	X	X	X	X	X	X	X		X	X	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ
	m	X	X	X	E	X	X	E	E	E		X	X	E	E	E	E	E	E	E	E
	n	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	rn	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	nh	X	X	X	E	X	X	X	X	X		X	X	X	X	E	X	E	E	E	E
	ny	X	X	X	X	X	X	X	X	X		X	X	X	X	E	X	X	X	X	E
	ng	X	X	X	E	X	X	X	X	X		X	X	X	X	E	X	X	X	X	X
	l	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
	rl	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	ly	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	rr	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	r	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	w	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	X	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	X	E

Key: X Attested  
 Λ Impossible by sandhi rules  
 / Impossible: the second consonant does not begin an appropriate morpheme.  
 E Expected, but not attested.

/lapa/ 'cockatoo'	/ngappa/ 'you'll eat it'
/ngulutu/ (a vegetable)	/ngulluni/ 'I punched him'
/muwa/ 'he looks'	/muwwarra/ 'we look'

Phonetically, geminate stops are realized in the same way as other stop-stop clusters. All geminates are phonetically distinct from 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 (the 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 (in the speech I have heard), and the geminate always has a distinct phonetic realization. E.g. /ngappa/ 'you'll eat it' has never been heard pronounced as /ngapa/ would be. The glides are not phonetically geminate: only the second one shows up. Thus, /muwa/ and /muwwarra/ (above) have phonetic realizations ['mu·,ʌ] and ['mu·,wʌɾʌ] respectively.

Not all clusters occurring intramorphemically also occur intermorphemically (across the boundary between the verbal stem and following material). The notable gap is liquid-stop clusters (some of these do, however, appear across other boundary types). 'Underlying' sequences of this type 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 2-5 are attested, and there are a couple more: /ng-w/, and /l-j/. (It is likely that /j/ may follow any continuant in this environment, cf. 2.4.2.1.)

Nominals are rarely consonant final, and consequently very few clusters have been encountered between Nominal roots and attached morphemes. No consonant clusters have been found between nominal roots or stems and following Enclitics. Between nominals and stem forming suffixes at least the following clusters occur: /nk/, /kp/, /nyp/; and /ngp/.

A few clusters are found between Nominals and Postpositions (v. section 3.7). /nh/ may presumably follow any consonant (since it belongs to the same morpheme that follows Verbal roots giving the /nh/ final clusters set out in Table 2-5), though only a few of the possibilities are actually attested: /j-nh/, /l-nh/, and /k-nh/. (This is because only a few Nominals are consonant final.) It appears that /y/ may follow any continuant, while /j/ may follow any non-continuant (again on the evidence provided by the same morphemes when following Verbal roots). Attested possibilities

are: /l-y/, /j-j/, /n-j/, /t-j/, /k-j/. Most of these are found only in English borrowings.

[2] Three Member Clusters. Intermorphemic clusters have at most three members. The rules of /ki/ insertion and deletion of /ng/, between a consonant and following /ngk/ (VR 7 and VR 8 - v. 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 /ngk/ in the finite verb. The two rules also prevent a number of tri-consonantal clusters: a cluster of the type C-ngk (where '-' indicates morpheme boundary will not occur. E.g. <wart-ngkirri> → /wartkingkirri/ 'you (pl) went', and <panangkarr-ngkimi> → /panangkarrkimi/ 'you snatched it'. Their effect is to allow only clusters of the type liquid C₁ - C₂, where liquid C₁ occurs root finally, and C₂ is any stop, liquid, nasal, or /y/ occurring initially in a Classifier Complex. Examples:

<kunthurrk-ngkirri> → /kunthurrkkingkirri/ 'you (pl) coughed'  
 <thurlng-limi> → /thurlnglimi/ 'I kicked'  
 <wirrppirra> → /wirrppirri/ 'they threw it'  
 <wirrpnga> → /wirrpnga/ '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 attached to English borrowings, usually personal names - e.g. Dayip-ngka (< English 'David').

#### 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 (v. sections 3.12.1.2 and 3.12.3.2) and the sandhi processes that affect consonants at reduplication boundaries (v. section 2.4 below). Initial /p/, /j/ and /th/ (but not /k/) of Nominal roots and formatives are frequently lenited to /w/, and /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 2-6. This is only a partial list; a detailed investigation has not yet been undertaken. Remarks:

[1] Clusters at reduplication boundaries must be two-member. Where a

Table 2-6: Consonant Clusters at Reduplication Boundaries

		First Member																		
		p	t	rt	th	j	k	m	n	rn	nh	ny	ng	l	rl	ly	rr	r	w	y
Second Member	p		X	X			X	X		X		X		X		X		X		
	t		X				X							X			X			
	rt		/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	th																			
	j	X					X		X					X						
	k	X		X		X			X			X	X	X		X	X			
	m		X	X		X		X	X	X	X	X		X			X			X
	n																			
	rn	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	nh								X											
	ny					X		X					X	X						
	ng								X					X				X		
	l	X																X		
	rl	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	ly	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	rr	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
r	X																			
w			X		X								X							
y																	X	X		

Verbal root with a final liquid-non-continuant cluster is reduplicated, the non-continuant may be deleted. For example, jilk- 'to spot' is reduplicated to jiljilk- '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 initially (the apical contrast is neutralized). There are two gaps in the table, for /th/ and /n/; these gaps 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 roots and stems that are reduplications. For example, liplip- 'dance shake-a-leg', in which lip appears to be a meaningless formative; tuktuk- 'tap repeatedly', from tuk- '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: laj- '(footprint) lies' and lalpak- 'split' reduplicate to lalaj- '(footprints) lie about' and lalpalapak- 'split all over' respectively.

[3] Glides may occur as the first member of a cluster. For example, yapunaparpar-, a type of snake, said to habitually climb (par-) in the yapuna tree, yurruryurrur 'cuckoo shrike'. (As far as I know, yurrur 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 /th/, /rl/ and /w/ are no doubt accidental and should be filled with a more complete search. There is a potential example of /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 ones (v. section 2.4.2.1). E.g. mirt- 'tie up' reduplicates sometimes to mirtmirt-, but more usually to mirnmirt- 'tie up repeatedly'. Regressive nasalization 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 21 above. Probabilities of final consonants were calculated for verbs only. Less than 3% of non-Verbal roots (primarily names for birds), and about 19% of all roots in the dictionary

Table 2-7: Phoneme Frequencies

	Root initial		Root final	
p	.14	} .5	.06	} .4
t	.05		.05	
rt	-		.03	
th	.05		-	
j	.11		.13	
k	.15	.12	} .79	
m	.10	.01		
n	.02	.04		
rn	-	.03		} .22
nh	(.004)	-		
ny	.03	.05		
ng	.09	.09		
l	.08	.05		} .07
rl	-	.01		
ly	-	(.004)		
rr	-	.09	} .21	
r	.01	(.004)		
w	.09	(.002)		
y	.07	(.002)		
a		.1	} .21	
i		.07		
u		.04		

(The phonemes with frequencies below .01 are given to the nearest thousandth, and enclosed in brackets.)

end in a consonant. The figures for Verbals are based on an extended corpus of about 500 verbs. There was no significant difference in distributions of the phonemes between the extended and the basic corpora.

In terms of manner, the initial frequencies are almost identical with those of Jaru (v. Tsunoda 1981:41). The main differences are in terms of localization features, the frequencies of which are, in Kuniyanti:

	Initial	Final
Peripheral	.58	.28
Laminal	.26	.19
Apical	.16	.31

Kuniyanti has relatively more initial apicals, about the same frequency of initial laminals, and relatively fewer initial peripherals (v. Tsunoda, loc.cit.)

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 other parts of speech (.18 as compared to .27), fewer initial peripherals (.47 as compared to .64), and more initial apicals (.25 as compared to .14). These differences were shown to have some significance on the chi-squared test. The values of  $\chi^2$  for the associations were respectively, 5.6, 13.9 and 15.8, in systems of 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 correspond to a probability of less than .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 beyond the .001 level. ( $\Sigma\chi^2 = 49$  with 13 degrees of freedom.) That such difference exist is not surprising, in view of the other distinguishing phonological characteristics of Verbal roots - see above page 56, and below page 75. (Leaving verbal roots out of account, the relative frequencies of consonants approach those of Jaru even more closely.)

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

p	.1	} .24	nyj	.01	} .05
t	.01		ngk	.04	
j	.08		l	.02	
k	.03		rr	.01	
m	.07	} .3	r	.01	} .31
n	.02		w	.20	
rn	.01		y	.10	
ny	.03		i	.03	} .12
nh	.02		a	.08	
ng	.09		u	.01	

Compared to 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 see also below, this page.) 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 (from three different speakers, on different topics) totalling about 1000 lexical items, including roots (about 70%) and bound closed class items (v. section 3.1.2). The frequencies were as shown in Table 2-8. The final column again gives the frequencies of final consonants for Verbals only (only about 2% of words of other parts of speech had final consonants). In terms of 'place' features the distribution was:

	Initial	Final
Peripherals	.52	.17
Laminals	.32	.19
Apicals	.16	.32

By both text and dictionary 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 glides 'derived from' stops by sandhi processes as stops.) /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 nhuwu 'his, hers', and its bound form -nhi.

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

<u>Manner</u>		<u>'Place'</u>	
Stops	.17	Peripheral	.31
Nasals	.18	Laminal	.12
Laterals	.25	Apical	.57
Tap	.15		
Glides	.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 /th/, /nh/ and /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 /ly/ have very marginal



Table 2-8: Textual Frequences of Phonemes

	initial		final			
p	.05	}	.05	}		
t	.02		.04			
rt	-		.17		.4	
th	.02		-			
j	.08		.18			
k	.12	.01				
m	.09	}	-	}		
n	.07		.02			
rn	(.006)		.04		}	
nh	.04		-			.18
ny	.03		(.005)			
ng	.1	.12				
l	.06	.01				
rl	-	-				
ly	-	-	(.005)			
rr	-	-	.05			
r	.01	}	-	}		
w	.12		.28		(.005)	
y	.15		-			
ngk	.03	-	-			
a			.11	}		
i			.07		.30	
u			.12			

frequencies:

nh	.004
ly	.004

(These frequencies are less than a tenth the value had they been randomly distributed. All other consonant phonemes are at least twice as frequent as these two.)

Of the intervolic consonant clusters (following the first vowel), the most frequent are nasal-stop combinations, which are slightly more frequent (.19) than plain stops and plain nasals (which account for .12 and .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	.64
Liquid-Non-liquid	.28
Stop-Stop	.04
Nasal-Nasal	.03

Somewhat over half of all of these clusters are homorganic; homorganic nasal-stop clusters make up for 55% of all clusters (and 85% of nasal-stop clusters). Relative frequencies of these nasal-stop clusters were:

mp	.2	} .49	nt	.15	} .38	nth	.02	} .13
ngk	.28		rnt	.22		nyj	.12	

Word finally the only clusters are of liquids and non-continuants. These account for only .03 of final segments in verbal roots.

Probabilities of vowels in the first syllable of roots were:

a .45; aa .02; i .3; u .22.

The same relative distributions were found in second syllables. In bound morphemes the frequency of /i/ is somewhat higher, and /u/, lower. However, the vowels are distributed quite differently root finally. Their relative frequencies are:

a .32 (.24); aa .01; i .46 (.55); u .20 (.14)

(Figures in brackets are for bound morphemes.) In this position /i/ appears to be the unmarked vowel.

Textual count also shows an overall predominance of /i/, and a high frequency in final syllables:

	Overall	Initially	Finally
a	.40	.40	.34
i	.43	.39	.52
u	.17	.20	.14
aa	(.004)	.001	-

Vowels are not distributed randomly over the syllables of a word. There are very strong tendencies for vowels in adjacent syllables to be the same, and for the vowel of the final syllable to be identical with the vowel of the initial syllable. Calculations showed that there is a probability of .6 that the second vowel will be identical with the first vowel, and of .54 that the final vowel will be identical with the first. These probabilities are considerably above the value of .33 had they been distributed randomly. Table 2-9 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 expected, assuming that there is no association between the vowels. (For example, there are only .6 as many words with /a/ in the first syllable and /u/ in the second syllable, as expected from the independent frequencies of /a/ in the first syllable and /u/ 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 is 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 or final syllables.

The association is shown to be significant on the chi-squared test. For the vowels of the first and second syllables  $\chi^2$  is approximately 360, and for vowels of the first and final syllables  $\chi^2$  is approximately 245, in systems of four degrees of freedom. Both of these values correspond to chances of well above .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 a morpheme. 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 localization features [ $\pm$ peripheral] and [ $\pm$ laminal] are the most frequent. Intervocally and syllable finally, the less marked consonants in terms of these two features predominate (cf. Dixon 1980:188). In each case the relative frequencies

Table 2-9: Comparison of Observed Frequencies of Vowel Pairs from First, Second and Final Syllables with Expected Frequencies

Initial V	Second v			Final v		
	a	i	u	a	i	u
a	1.3	.8	.6	1.3	1	.7
i	.9	1.9	.1	.7	1.6	.4
u	.6	.3	3	.9	.4	2.6

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 (page 70), but less frequent than non-peripherals as a whole. Secondary localization 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 68 shows.

### 2.3 Syllabic Structure of Words and Morphemes

All roots, and most morphemes, consist of a whole number of syllables.

#### 2.3.1 Simple Roots

Simple roots (i.e. those which cannot be analysed into formatives - v. section 3.12) consist of from one to six syllables. The majority have between two and four syllables - these make up 90% of the 1000 item dictionary. Relative frequencies of one to six syllable roots are shown in Table 2-10. As this tabulation shows, verbal roots have consistently fewer syllables than other roots.

[1] Monosyllabic roots. With the exception of Interjections and Sound Effects (v. sections 3.10 and 3.11), all monosyllabic roots have syllabic structures C(C)aa, or CVC(C), where V is a short vowel. That is, all monosyllabic roots consist of two morae (v. section 2.5).

There are very few monosyllables of the form Caa or CCaa. The following is a complete list of known examples: paa- 'call out', taa- 'give', yaa 'which one, what's it called' (in some idiolects), maa 'meat', ngaa- '(mouth) open', kraa 'close, near', jaa- 'lie about (of water)'.

Verbals comprise nearly all of the CVC(C) monosyllables - the only exception I am aware of is the allomorph nyany of nyanyi 'MB (etc.)' - see 2.2.1 above). Examples are kaj- 'cut', wart- 'go', parn- 'return' yarlk- 'glance back', and wirrp- 'throw'. Monosyllabic Verbals number around 100 or so, and, if Interjections are included, there are considerably more than 100 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

Table 2-10: Frequencies of Words of n syllables

Number of Syllables	Verbal	Non-Verbal	Total
1	.3	.01	.08
2	.58	.29	.35
3	.09	.47	.39
4	.03	.20	.16
5	-	.03	.02
6	-	.001	.001

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. Using a dot to indicate syllable boundaries,

/paka/ : /pa.ka/ 'bur'  
 /ngaarri/ : /ngaa.rri/ 'stone'  
 /palka/ : /pal.ka/ 'bream'  
 /palngarna/ : /pal.nga.rna/ 'outside'

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

This gives syllables of the shape CV, CVC, CGV, CVCC. The last two of these are restricted respectively to root initial, and to verbal root final position. There are different possibilities for the Cs of the first two types of syllable depending on the position of the syllable within the word, and, if it is a medial syllable, on the final segment of the preceding syllable (see the previous section).

It is necessary to distinguish between phonetic and phonological syllables. Phonetically the glides /w/ and /y/ fuse with a preceding /a/ to form diphthongs [au̯] and [ai̯] respectively (in a very broad transcription - for details see above), and with the high vowels /u/ and /i/ respectively to give the half long and close [u·] and [i·]. This does not, however, happen for the sequences /iw/ and /uy/, which do not become diphthongs [i̯w̯], or [i̯y̯]. This shows that a phonetic syllable boundary may follow an intervocalic /w/ or /y/ - as in e.g. /maya/ → ['mai.ʌ] 'hard'. As already mentioned, sequences /Cuwu/ and /Ciyi/ may be realized monosyllabically as consonant followed by a 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 (v. section 2.2.1).

The rule of syllable boundary placement will place a boundary between the two members of a homorganic nasal-stop cluster - e.g. /parntanyi/ : /parn.rta.nyi/ 'old woman'. There are certain difficulties with this placement of the syllable boundary. Firstly, three stop consonants, /t, rt, th/, occur only following a homorganic nasal (or lateral, in one case), 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. For example, paarnti 'spider'. Thirdly, the rules of stress

placement given in 2.5 will give incorrect results if the nasal is assigned to the preceding syllable, and it will not be possible to formulate as simple rules of stress placement. These difficulties are overcome by assuming that the syllable boundary precedes the nasal. This finds further support in the fact that (as mentioned above, and see also next section) bound morphemes may have these clusters initially. It also allows the following generalization to be made: the long vowel /aa/ occurs only in open syllables.

The frequency of nasal-stop clusters intervocalically - they are at least as frequent as either nasals or stops taken separately (see 2.2.5 above) - is also suggestive that phonologically it may be more appropriate to regard them as prenasalized stops, which, like /rr/ and /ly/ do not occur word initially, rather than as clusters. I do not follow up this possibility here.

Syllable shapes in roots are now: CV(:), CV(C), CCV, and CVCC, where V is a short vowel, and C is a consonant or homorganic nasal-stop sequence, provided that the syllable is non-initial. I am aware of no case of an initial or final syllable with a consonant cluster which also has a long vowel.

### 2.3.2 Non-root Morphemes

Except for some morphemes that make up the Classifier Complex in the VP (see 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 one or two syllables; trisyllabics are few, and all but one are encliticized forms of (trisyllabic) free words. Only one, a suffix, has four syllables, -warrawarra, which is evidently the reduplication of meaningless warra.

Syllables are of the types: CV, where the possibilities for C are as for root medial CV syllables (although not all possibilities actually occur), and CVC, where again the possibilities for the Cs are as in word medial/final syllables. CVC syllables occur only in monosyllabic morphemes; the only clusters (as mentioned above) are homorganic nasal-stop clusters, which are analysed as being syllable initials - e.g. -ngka 'Ergative' is syllabic of the type CV.

The remaining morphemes (and allomorphs) are non-syllabic, with forms: V, VC, VCV, C, 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







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 usually give, 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 categories rather than by sense: for example, examples in Present tense will be translated by 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 manner of articulation. Depending on the morphological environment, two different sets of sandhi process 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: /p^w/, and /j,th^y/. These alternations are taken to be instances of underlying /p, j and th/, on the basis of evidence provided by reduplicated forms:

<u>pulkawulka</u>	'old men'	<	<u>pulka</u>	'old man'
<u>julkuyulku</u>	'round things'	<	<u>julku</u>	'round'
<u>thikiyiki</u>	'little pieces'	<	<u>thiki</u>	'short'

(Not all initial [+laminal] and [labial] stops undergo these lenitions; it may be necessary to mark those that do with a diacritic (v. below 85)). There is one Stem forming suffix showing the /p^w/ alternation (but none showing the other alternations), and consequently it can be seen as having initial /p/ underlyingly: ngarranypati (M-yours) 'your mother', ngapuwati (<ngapu-pati>) (F-yours) 'your father'.

The rules can be written:

R1 p → w /\$ Y V-__ V Z \$

R2 j → y /\$ Y V-__ V Z \$

R3 th → y /\$ Y V-__ V Z \$

In these rules \$ indicates a Nominal stem boundary; Y and Z indicate remaining material irrelevant to the rule; and the dash indicates the morpheme boundary. Clearly these rules can be collapsed to something like

$$R4 \quad \left[ \begin{array}{l} \text{consonantal} \\ \text{-continuant} \\ \left\{ \begin{array}{l} +\text{labial} \\ +\text{laminar} \end{array} \right\} \end{array} \right] \rightarrow \left[ \begin{array}{l} \text{consonantal} \\ +\text{continuant} \\ \left\{ \begin{array}{l} +\text{labial} \\ +\text{laminar} \end{array} \right\} \end{array} \right] \quad / \$ Y V - _ V Z \$$$

It will be assumed that  $\left[ \begin{array}{l} +\text{continuant} \\ +\text{laminar} \end{array} \right]$  is sufficient to characterize /y/.

More generally, it will be assumed that if a feature is not specified in a rule the unmarked value is chosen. In this case, [+liquid] is not specified on the right, although it is a subtype of [+continuant]; since the unmarked value is assumed, the features specify /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 recognized because /p/ and /j/ fail to lenite outside of stem boundaries, while still within the boundaries of distributional words (see 3.1.2):

<nganyi-jangi> → /nganyijangi/      'like me'  
 I            -SEM  
 <palyuwa-pinyi> → /palyuwapinyi/      'from behind'  
 behind -OR

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 /y~j/ which occurs in seven of the twelve Postpositions. Since /j/ does not lenite, this can be accounted for as a hardening of <y> in specifiable environments. A rule can be written as follows:

$$R5 \quad y \rightarrow j \quad / \# X \left[ \begin{array}{l} \text{consonantal} \\ \text{-continuant} \end{array} \right] - _ Y \# ,$$

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

<warlipirri-ya> → /warlipirriya/      'at the river'  
 <paplikaj-ya> → /paplikajja/      'at the pub'

See also examples under 3.7 below.

Another alternation, /k~w/, is attested for only 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. (k is unlikely to lenite in this context given that it does not lenite in stem formation.) The Postposition undergoing this strengthening is the allomorph -wu of the DAT, which occurs on Verbal roots. Rule VR6 accounts for the alternants -wu and -ku.

On present evidence, it may be assumed that VR6 applies within the

boundaries of all d-words, not only Verbal ones. In the environments in which the w-initial Postpositions and Enclitics have been encountered they behave as VR6 predicts, assuming the disyllabics have initial stress. However, these /w/ initial forms have been encountered only following vowels, and it is not known whether the <w> strengthens to /k/ following non-continuant. (The Jaru cognate of one of them, -winyja 'for lack of', -wunyja, does show the /wv̥k/ alternation (Tsunoda 1981:226).)

#### 2.4.1.2.2 Consonant Dissimilation

There is a rule of dissimilation which 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 -ngka (no others have initial nasal-stop clusters). Examples:

<kurnpu-ngka> → /kurnpuka/ 'by the woman'  
 <ngurntu-ngka> → /ngurntuka/ '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 /kampayingka/ 'by the boy', nor can it apply to the cluster in -winyja 'for lack of', which is separated from any earlier cluster by an intervening syllable.

The rule may be formulated in very general terms as follows:

$$R6 \begin{bmatrix} \text{consonantal} & \text{consonantal} \\ \text{-continuant} & \text{-continuant} \\ \text{+nasal} & \text{-nasal} \end{bmatrix} \rightarrow \begin{bmatrix} \text{consonantal} \\ \text{-continuant} \\ \text{-nasal} \end{bmatrix}$$

$$/ \# X \begin{bmatrix} \text{consonantal} & \text{consonantal} \\ \text{-continuant} & \text{-continuant} \\ \text{+nasal} & \text{-nasal} \end{bmatrix} V \text{---} Y \#$$

(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 (v. 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 morpheme - loc.cit.)

#### 2.4.1.2.3 Vowel Assimilation

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

R7 u → i / ___-ya

R8 i → u / ___-wu

Here assimilation is regressive, whereas all of the sandhi rules discussed above affecting consonants were progressive. Examples are:

<langkakulu-ya> → /langkakuliya/ 'in a hollow log'  
 <paki-wu> → /pakuwu/ 'for lying'

### 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 phoneme may be affected in quite different ways in the same phonological environment, depending on its morphological context.

This account is divided into four parts. The first section (2.4.2.1) concerns processes applying within the Verbal stem (see below (3.12.2)); the second section (2.4.2.2) deals with sandhi processes operating within the Classifier Complex (CC) (described in (3.9.3.2)); thirdly, section 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 the distributional word; and finally, sections 2.4.2.4 deals with the ordering of the rules. For want of a better term, the third group will be referred to by the term 'external sandhi': it is external to the grammatical words (v. section 3.1.2) constituting the Verb.

#### 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 /p~w/. This occurs with the two Stem forming suffixes -pi~wi Iterative, and -pan~wan Continuative. Compare:

/wilajpankiri/ 'it goes round and round'  
 around-Continuative-it goes  
 /talyarrwankiri/ 'he slips along'  
 slip over-

The two morphemes could be written morphophonemically with initial /p/s, with a slightly modified version of R1 giving the phonological realizations:

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

Unfortunately, this rule appears to be of limited generality in verbal stems. It does not appear to apply in many reduplications; for example, pintilpintil- 'to shower out (of sparks)', palypaly- 'to pat flat (e.g.

dough)' (v. 3.12.2.2 below). Perhaps the easiest way of handling the two instances of /p^w/ within this wider context is to assume the morphemes have initial /p/, and to mark them with a diacritic indicating that R1' applies. The other alternations /j,th~y/ do not occur within the boundaries of the verbal stem. For example, in /pala-ji-la/ 'I sent them all over the place', the Iterative -ji does not lenite.

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

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

Examples:

<mirt-mirt-wali> → /mirnmirtkali/     'policeman'  
                   tie            -expert

<maj-maj-nga> → /manymajnga/     'he felt around'  
                   feel -he did

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:

<matmatnga> → /matmatnga/     'he poked around'  
                   poke - he did

And sometimes /mirtmirt-/ and /majmaj-/ are heard instead of /mirnmirt-/ and /manymaj-/ respectively.

#### 2.4.2.2 CC Internal Sandhi

Quite a number of sandhi processes operate within the boundaries of the CC word, the net result of which is to obscure 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 morphophonemic 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 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 \$_{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 (assimilating to a preceding segment) and regressive (assimilating to a following segment). Both may apply in a single sequence. The rules are:

CCR1 rr → n / ___+m

For example,

<ngarak-pirrr+mi> → /ngarakpinmi/ 'they made it'  
make -(3pl)N+MI

CCR2 t → j /ny+___

For example,

<ngang-nginy+ti> → /ngangnginyji/ 'I gave it to you'  
give -(1sg)N+(2sg)A+TI

CCR3 rV → t  $\left[ \begin{array}{c} V \\ +\text{retroflex} \end{array} \right] /n+ _$

CCR4 n → rn /  $\left[ \begin{array}{c} V \\ +\text{retroflex} \end{array} \right] _$

CCR3 has the effect of assimilating /r/ in place and manner to a preceding consonant (/n/ is in fact the only consonant /r/ follows within the CC). I have marked the feature of [+retroflex] on the following vowel since it does show up in the one circumstance, the one indicated in CCR4: that is, when it can progressively 'attach' to a following consonant, necessarily an apical. For example,

<kart-ngin+ri+pini> 'they hit me'  
hit -(1sg)A+(3pl)N+PINI  
→ kartngin+rūni [by CCR9 below]  
→ kartngint  $\left[ \begin{array}{c} u \\ +\text{retroflex} \end{array} \right] ni$   
→ /kartnguntūni/

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

<jangi-ngin+ri+mi> → /jangingintimi/ 'they answered me'  
answer-(1sg)A+(3pl)N+MI

#### 2.4.2.2.1.2 Fusion and Syncope

There are three rules which have the effect of either fusing consonants or





with a third person plural Nominative.

<mila-ngim+pirr+a> → /milangimpirra/      'they saw you'  
see -(2sg)A+(3pl)N+A

A hypothetical derivation for ngimpirr- may go as follows. Assume that the regular allomorphs ngki- and pirr- of (2sg)A and (3pl)N respectively are chosen: ngki+pirr-. Then, if a prenasalization rule like CCR8 applies to the <p>, ngkimpirr- is derived. Now a dissimilation rule may be applied to eliminate the succession of two prenasalized stops within a single word, (in a manner of R7 except that it operates in the opposite direction), to give ngimpirr-.

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 a plain statement of allomorphy. Consequently I accept ngki-, ngkim-, ngkirr- and ngkin- as base forms of the second person pronominals.

#### 2.4.2.2.2 Syllable Fusion

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

CCR9 i+p  $\left[ \begin{array}{l} \text{vocalic} \\ +\text{high} \end{array} \right] \rightarrow u$

For example,

<parn-li+pinti> → /parnlunti/      'I returned'  
return-(1sg)N+PINTI

CCR10 i+j  $\left[ \begin{array}{l} \text{vocalic} \\ +\text{high} \end{array} \right] \rightarrow i$

For example,

<mila-pi+jirr+a> → mila-pirra → /milawirra/      'we'll see him'  
see -FUT+(1R)N+A

CCR11 i+ngi → i

Example:

<kilang-pi+ngin+arri> → /kilangpinarri/      'he'll knock me over'  
knock over-FUT+(1sg)A+ARRI

CCR12 i+ja → a

For example:

<parn-wi+jan+arri> → parn-wanarri      'he takes us back'  
return-PRES+(1U)A+ARRI  
→ /parnkanarri/

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

of syncope.

### 2.4.2.2.3 Vowel Alternations

#### 2.4.2.2.3.1 <a,>

A vowel morphophoneme <a,> is set up in order to explain alternant forms of certain Classifiers in non-past tenses (v. section 3.9.3.2.4). <a,> harmonizes with a preceding vowel except when it is followed by <w>, or if there is no preceding vowel (within the CC), in which case it is realized by /a/. Examples of <a,> harmony are:

<wart-wi+pirr+a,> → wart-wurra, [by CCR9] 'they go'  
 go -PRES+(3pl)N+I  
 → /wartkurru/  
 <wart-wi+jirr+a,> → wart-wirra, [by CCR10] 'we go'  
 (1R)N  
 → /wartkirri/  
 <wart-wi+jarr+a,> → wart-warra, [by CCR12] 'we go'  
 → /wartkarra/

The following example shows that harmony does not occur when the following segment is a <w>:

<wart-wi+pirr+a,-wu> 'they're going!'  
 (3pl)N -DEF  
 → wart-wurra,-wu [by CCR9]  
 → /wartkurrawu/

The 'elsewhere' realization of <a,> is /a/. For example,

<ngang-pi+ta,> → ngang-pita, [by CCR3] 'you'll give him to'  
 give -FUT+TI  
 → /ngangpa/

One way of formalizing the rule of <a,> realization is as follows:

CCR13 a, → { (i) a/___-w  
 (ii)  $\left[ \begin{array}{c} \text{vocalic} \\ \alpha_{\text{high}} \\ \beta_{\text{back}} \end{array} \right] / \$_{\text{cc}} \text{ X } \left[ \begin{array}{c} \text{vocalic} \\ \alpha_{\text{high}} \\ \beta_{\text{back}} \end{array} \right] \text{ C } _ _ (Z) \$_{\text{cc}}$

(Here C is a consonant or consonant cluster.) For this to give the right realizations, the two parts must be disjunctively ordered (i) - (ii):

(ii) applies only if (i) has not already applied. It is to be understood that in environments not mentioned by the rule, <a,> is realized 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:

<pij-li+arni> → /pijlarni/ 'I arrived'  
emerge-(1sg)N+ARNI

<mila-ngi+iny+a> → /milanginya/ 'I saw you'  
see-(1sg)N+(2sg)A+A

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

CCR14  $V_1 + V_2 \rightarrow V_2$

( $V_1$  must be <i> and  $V_2$  one of <a, a or i>.) An alternative formulation of this rule is

CCR15  $i \rightarrow \phi / \text{---} \left\{ \begin{array}{l} a \\ a, \\ i \end{array} \right\}$

#### 2.4.2.2.3.3 Vowel Harmony

Sometimes the vowel <i> harmonizes with /u/ in the following syllable. This process affects the vowel of tense prefixes wi- PRES and pi- FUT, when the following vowel is /u/:

<wart-wi+li+pin+a> → wart-wiluna [by CCR9] 'I bring them'  
→ /wartkuluna/

Harmony, however, appears to apply once only, so that only the immediately preceding vowel is affected:

<kart-ja-pi+ngkin+ri+pini> 'They might hit you (pl)'  
hit-SUBJ-FUT+(2pl)A+(3pl)N+PINI  
→ kart-ja-pingkir+runi [by CCR9]  
→ kart-ja-pingkinturni [by CCR3 and CCR4]  
→ /kartjawingkunturni/

Furthermore, if the /u/ arises as a result of the process external sandhi, R8, a preceding <i> will not harmonize with it.

<kart-wi+ngin+pi-wu> → kart-winpi-wu 'he's hitting me!'  
hit-PRES+(1sg)A+PINI-DEF  
→ /kartkinpuwu/

The process may be formalized:

CCR16  $i \rightarrow u / \$_{cc} X \text{---} C u (Z) \$_{cc}$

(where C is any consonant or consonant cluster.) Alternatively, using features,

CCR17  $\left[ \begin{array}{l} \text{vocalic} \\ +\text{high} \\ -\text{back} \end{array} \right] \rightarrow [+back] / \$_{cc} X \text{---} C \left[ \begin{array}{l} \text{vocalic} \\ +\text{high} \\ +\text{back} \end{array} \right] (Z) \$_{cc}$

### 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 F1 of 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: /p~w/, /j~y/, and /k~w~φ/. (In the last of these, under certain circumstances, the consonant disappears as a distinct segment, and the resulting contiguous vowels coalesce.) I take these to be alternate realizations of underlying <p>, <j> and <w> respectively (cf. section 2.4.1.1). (i) The main reason I take <p> rather than <w> as the basic form in the /p~w/ alternation is that this allows us to account for the shape of the bound Oblique third person plural pronominal in the verb. As an independent word its shape is /pirrangi/, which lenites to /-wirrangi/ when bound in the verb - e.g. /wartji-wirrangi/ 'he went up to them'. (ii) <j> is taken as the base form in the /j~y/ alternation since otherwise there would be an exceptional <y> that does not harden to /j/ in the environments where the others do. (This is the /y/ of the Irrealis - see 3.9.3.2.4). (iii) Finally, the choice of <w> rather than <k> for this alternation is based on the fact that in exactly the same circumstances as <p> lenites to <w> just described, <k> remains invariant - e.g. /wartji-kirrangi/ 'he went up to you (pl)'.

Realization rules for <p> and <j> can be written:

$$\text{VR2} \quad p \rightarrow w / \# X \left\{ \begin{array}{l} [\text{vocalic}] \\ [\text{consonantal}] \\ [+continuant] \end{array} \right\} - \text{---} Z \#$$

$$\text{VR3} \quad j \rightarrow y / \# X \left\{ \begin{array}{l} [\text{vocalic}] \\ [\text{consonantal}] \\ [+continuant] \end{array} \right\} - \text{---} Z \#$$

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

<nyumpul-pirr+i> → /nyumpulwirri/      'they bathed'  
 bathe-(3pl)N+I

Examples of VR3 are:

<nyumpul-jirra+i> → /nyumpulyirri/ 'we bathed'  
 -(IR)N+I  
 <kurtay-jirra+a> → /kurtayyirra/ 'we ground it'  
 grind-(1R)N+A

The realization of <w> is more complicated, depending on the preceding segment, and 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 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 realization rule to divide it into four parts corresponding to the main distinctive environments.

VR4 (i) w → k/ # X  $\left[ \begin{array}{l} \text{consonantal} \\ -\text{continuant} \end{array} \right]$  - ___ Z #  
 (ii) w → w/ # X  $\left\{ \begin{array}{l} \text{[vocalic]} \\ \text{[consonantal} \\ \text{+continuant]} \end{array} \right\}$  - ' ___ V Z #  
 (iii) w → ø/ # X  $\left\{ \begin{array}{l} \text{[vocalic]} \\ \text{[consonantal} \\ \text{+continuant]} \end{array} \right\}$  - ___ {a} Z #  
 (iv) w → w/ # X  $\left\{ \begin{array}{l} \text{[vocalic]} \\ \text{[consonantal} \\ \text{+continuant]} \end{array} \right\}$  - ___ u Z #

(ii) is disjunctively ordered with respect to (iii) and (iv): the former applies stressed syllables only, the latter two, to unstressed syllables.

(i) <w> invariably appears as /k/ when the preceding segment is a non-continuant consonant. For example,

<wart-wi+li+a> → /wartkila/ 'I bring it'  
 go-PRES+(1sg)N+A  
 <wart-wi+pirra+a₁> → /wartkurru/ 'they walk'  
 +(3pl)N+I

(In the first example the syllable <wi> is unstressed (until a late stress rule); in the second, <wu> bears inherent stress (v. section 2.5.3).)

(ii) When <w> follows a vowel or continuant, and occurs in a stressed syllable it is realized as /w/. For example:

<mila-wi+'jarr+a> → mila-'warra 'we see it'  
 see -PRES+(1U)N+A  
 → /milawarra/  
 <payal-wi-'jarr+a₁> → payal-'warra₁ 'we swim'  
 swim-PRES+(1U)N+I  
 → /payalwarra/

(iii) In unstressed syllables, following a vowel or continuant, <w> is deleted preceding /a/ and /i/.

<nyumpul-wiri> → /nyumpuliri/ 'he bathes'  
 bathe-PRES/(3sg)N/I  
 → ['nɔmbɔl'ɪɹɪ]  
 <panangkarr-wi+ngin+pi-wu> 'he's snatching it from me!'  
 snatch-PRES+(1sg)A+PINI-DEF  
 → panangkarr-winpu-wu [by CCR11]  
 → /panangkarrinpuwu/  
 → ['pʌŋŋar'ɪnbu:]

When a vowel precedes underlying <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, aa, ai, ia and ua become /aa/); otherwise, the sequence /ii/ results (that is, ii and ui become /ii/). Below I give examples of each possibility in the above order:

<mila-wi+a> → mila-wa 'he sees him'  
 see-PRES+A  
 → /milaa/  
 <mila-wi+li+a> → mila-wila 'I see him'  
 -PRES+(1sg)N+A  
 → /milaala/  
 <tanymili-wi+a> → tanymili-wa 'he hears him'  
 hear  
 → /tanymilaa/  
 <pulupu-wi+a> → pulupu-wa 'he follow him'  
 follow  
 → /pulupaa/  
 <ngang-ji-wi+li+a> → ngangji-wila 'I feed him'  
 give-IT-PRES+(1sg)N+A  
 → /ngangjiila/  
 <pulupu-wi+li+a> → pulupu-wila 'I follow him'  
 follow-PRES+(1sg)N+A  
 → /pulupiila/

The rule might be formulated as follows:

$$\text{VR5 } V_1 V_2 \rightarrow \begin{cases} /aa/ & /V_j = a \text{ for some } j. \\ /ii/ & /V_j \neq a \text{ for any } j. \end{cases}$$

(iv) Finally, when <w> precedes an unstressed <u>, (and following a vowel or continuant) it is unchanged. For example,

<ngang-wi+ngin+ta,-wu> → /ngangkintawu/ 'he's giving me it!'  
 give-PRES+(1sg)A+TI-DEF

The realization of <w> can now be formalized more succinctly as VR6:

$$\text{VR6 } w \rightarrow \left\{ \begin{array}{l} k/ \# X \left[ \begin{array}{l} \text{consonantal} \\ -\text{continuant} \end{array} \right] \\ \emptyset/ \# X \left\{ \begin{array}{l} \text{[vocalic]} \\ \left[ \begin{array}{l} \text{consonantal} \\ +\text{continuant} \end{array} \right] \end{array} \right\} \end{array} \right. \rightarrow \left. \begin{array}{l} \text{--- } \overset{\circ}{a} \# \\ \left. \begin{array}{l} \overset{\circ}{a} \\ i \end{array} \right\} \text{ } Z \# \end{array} \right.$$

(where  $\overset{\circ}{V}$  indicates an unstressed vowel).

Occasionally the initial segment of -nyali REP is denasalized following non-nasal non-continuants:

$$\begin{array}{ll} \langle \text{tij-nyali-wi+a} \rangle & \text{'he breaks it again'} \\ \rightarrow / \text{tijnyalaa}/, / \text{tijjalaa}/ & \end{array}$$

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,

$$\begin{array}{ll} \text{R7: } \langle \text{pulupu-ja-pi+li+a} \rangle \rightarrow \text{pulupu-ya-wila} & \text{'I may follow you'} \\ \text{follow-SUBJ-FUT+(1sg)N+A} & \\ \rightarrow / \text{pulupiyawila}/ & \end{array}$$

$$\begin{array}{ll} \text{R8: } \langle \text{pij-wi+arni-wu} \rangle \rightarrow \text{pij-warni-wu} & \text{'he's arriving!'} \\ \text{emerge-PRES+ARNI-DEF} & \\ \rightarrow / \text{pijkarnuwu}/ & \end{array}$$

These two rules apply within phonological words (v. section 2.5). They do not as a rule apply between phonological words, as the following example illustrates:

$$\begin{array}{ll} \langle \text{pulupu-yarr+a} \rangle \rightarrow / \text{pulupuyarra}/ & \text{'we followed him'} \\ \text{follow-(1U)N+A} & \end{array}$$

#### 2.4.2.3.3 Syllable Insertion

Finally there is a rule which inserts the syllable <ki> between a stem final non-continuant and a following nasal-stop cluster <ngk>, and one which deletes the initial nasal of <ngk> following a continuant:

VR7 Insert <ki> between a stop or nasal and a following <ngk>.

VR8 Delete <ng> when <ngk> follows a continuant.

Examples are:

$$\begin{array}{ll} \langle \text{wart-ngk+i} \rangle \rightarrow / \text{wartkingki}/ & \text{'you went'} \\ \text{go -(2sg)N+I} & \end{array}$$



$\langle \text{kart-ngkirr+pini} \rangle \rightarrow / \text{kartkingkirini} /$  'you (pl) hit him'  
 hit-(2pl)N+PINI  
 $\langle \text{mangkarr-ngki+mi} \rangle \rightarrow / \text{mangkarrkimi} /$  'he belted you'  
 belt -(2sg)A+M1

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

$\langle \text{parn-ngkim+pirr+arri} \rangle$  'they brought you back'  
 return-(2sg)A+(3pl)N+ARRI  
 $\rightarrow / \text{parnkingkimpirrarri} /$  (careful),  $/ \text{parnkimpirrarri} /$

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

$\langle \text{wart-ngk+i} \rangle \rightarrow / \text{wartkingki} /, / \text{wartrnki} /$  'you went  
 go -(2sg)N+I

Since the vowel of epenthetic  $\langle \text{ki} \rangle$  assimilates to a following /u/ (as per rule CCR16), it is useful to formulate VR7 and VR8 more precisely:

VR7'  $\emptyset \rightarrow \text{ki} / \left[ \begin{array}{l} \text{consonantal} \\ -\text{continuant} \end{array} \right] - \$_{\text{cc}} \text{ngk } Y' \$_{\text{cc}}$

VR8'  $\text{ng} \rightarrow \emptyset / \left[ \begin{array}{l} \text{consonantal} \\ +\text{continuant} \end{array} \right] - \$_{\text{cc}} \text{k } Y \$_{\text{cc}}$

According to VR7', epenthetic  $\langle \text{ki} \rangle$  belongs to the CC, and so is available to undergo CCR16.

#### 2.4.2.4 Rule Ordering

For convenience, a list is provided below of all of the rules introduced in the preceding subsections.

R1  $p \rightarrow w / \$ Y V \text{---} V Z \$$

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

R2  $j \rightarrow y / \$ Y V \text{---} V Z \$$

R3  $\text{th} \rightarrow y / \$ Y V \text{---} V Z \$$

R4  $\left[ \begin{array}{l} \text{consonantal} \\ -\text{continuant} \\ \left\{ \begin{array}{l} +\text{labial} \\ +\text{laminal} \end{array} \right\} \end{array} \right] \rightarrow \text{[+continuant]} / \$ Y V \text{---} V Z \$$

R5  $y \rightarrow j / \# X \left[ \begin{array}{l} \text{consonantal} \\ -\text{continuant} \end{array} \right] \text{---} Y \#$

R6  $\begin{bmatrix} \text{consonantal} \\ -\text{continuant} \\ +\text{nasal} \end{bmatrix} \begin{bmatrix} \text{consonantal} \\ -\text{continuant} \\ -\text{nasal} \end{bmatrix} \rightarrow \begin{bmatrix} \text{consonantal} \\ -\text{continuant} \\ -\text{nasal} \end{bmatrix}$   
 /# X  $\begin{bmatrix} \text{consonantal} \\ -\text{continuant} \\ +\text{nasal} \end{bmatrix} \begin{bmatrix} \text{consonantal} \\ -\text{continuant} \\ -\text{nasal} \end{bmatrix} \text{V-} ___ \text{Y} \#$

R7 u → i / ___ -ya

R8 i → u / ___ -wu

CCR1 rr → n / ___ +m

CCR2 t → j /ny+ ___

CCR3 rV → t  $\begin{bmatrix} \text{V} \\ +\text{retroflex} \end{bmatrix}$  / n+ ___

CCR4 n → rn /  $\begin{bmatrix} \text{V} \\ +\text{retroflex} \end{bmatrix}$  ___

CCR5 t → ∅ / [vocalic]+ ___ [vocalic]

CCR6 rr+t → t

CCR7 rr+p → r

CCR8 j → nyj / V+ ___ V₁  
 $\begin{bmatrix} \text{2nd} \\ \text{singular} \end{bmatrix}$

CCR9 i+p  $\begin{bmatrix} \text{vocalic} \\ +\text{high} \end{bmatrix}$  → u

CCR10 i+j  $\begin{bmatrix} \text{vocalic} \\ +\text{high} \end{bmatrix}$  → i

CCR11 i+ngi → i

CCR12 i+ja → a

CCR13 a_i →  $\begin{cases} \text{(i) a / ___ -w} \\ \text{(ii) } \begin{bmatrix} \text{vocalic} \\ \alpha\text{high} \\ \beta\text{back} \end{bmatrix} / \$_{\text{cc}} \text{X} \begin{bmatrix} \text{vocalic} \\ \alpha\text{high} \\ \beta\text{back} \end{bmatrix} \text{C} ___ (\text{Z}) \$_{\text{cc}} \end{cases}$

CCR14 V₁ + V₂ → V₂

CCR15 i → ∅ / ___  $\begin{Bmatrix} a \\ a_i \\ i \end{Bmatrix}$

CCR16 i → u / \$_{cc} X ___ C u(Z) \$_{cc}

CCR17  $\begin{bmatrix} \text{vocalic} \\ +\text{high} \\ -\text{back} \end{bmatrix}$  → [+back] / \$_{cc} X ___ C  $\begin{bmatrix} \text{vocalic} \\ +\text{high} \\ +\text{back} \end{bmatrix}$  (Z) \$_{cc}

- VR1  $\begin{bmatrix} \text{consonantal} \\ -\text{continuant} \end{bmatrix} \rightarrow \begin{bmatrix} \text{consonantal} \\ -\text{continuant} \\ +\text{nasal} \end{bmatrix} / \$ X _ - \begin{bmatrix} \text{consonantal} \\ +\text{nasal} \end{bmatrix} Z \$$
- VR2  $p \rightarrow w / \# X \left\{ \begin{bmatrix} \text{[vocalic]} \\ \text{consonantal} \\ +\text{continuant} \end{bmatrix} \right\} - _ Z \#$
- VR3  $j \rightarrow y / \# X \left\{ \begin{bmatrix} \text{[vocalic]} \\ \text{consonantal} \\ +\text{continuant} \end{bmatrix} \right\} - _ Z \#$
- VR5  $V_1 V_2 \rightarrow \begin{cases} /aa/ & /V_j = a \text{ for some } j. \\ /ii/ & /V_j \neq a \text{ for any } j. \end{cases}$
- VR6  $w \rightarrow \begin{cases} k / \# X \begin{bmatrix} \text{consonantal} \\ -\text{continuant} \end{bmatrix} - _ Z \# \\ \phi / \# X \left\{ \begin{bmatrix} \text{[vocalic]} \\ \text{consonantal} \\ +\text{continuant} \end{bmatrix} \right\} - _ \begin{Bmatrix} \circ a \\ i \end{Bmatrix} Z \# \end{cases}$
- VR7'  $\phi \rightarrow ki / \begin{bmatrix} \text{consonantal} \\ -\text{continuant} \end{bmatrix} - \$_{cc} _ ngk Y \$_{cc}$
- VR8'  $ng \rightarrow \phi / \begin{bmatrix} \text{consonantal} \\ +\text{continuant} \end{bmatrix} - \$_{cc} _ k Y \$_{cc}$

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 to follow the internal sandhi rules. However, it turns out that to do this necessitates the use of diacritics (distinguishing identical segments deriving from different sources - (see page 99 below). It is possible to avoid their use by ordering some external sandhi rules before certain of the internal sandhi rules, and so I have chosen to do this.

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 it will be 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 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.



CCR9 must precede CCR16 since <i> vowels assimilate to a following /u/ which arises from CCR9; /kartjawingkunturuni/ 'they might hit you (pl)' (page 90) is an example of this. Since the <i> deriving from the sequence <i+ngi> by CCR11 undergoes harmony with a following <u>, whereas the <i> deriving from <i+ji> or <i+ju> by CCR10 does not, CCR11 has been ordered to precede CCR16, CCR10 to follow CCR16.

Of the rules resulting in syllable fusion, CCR9, and CCR12 precede the rule of external sandhi VR6, while 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 effect of deleting the <w> of the present tense <wi> (which bears no stress), in the forms <mila-wi+pirr+a> 'they see him', and <mila-wi+jarr+a> 'we (U) see him'. /w/ is however present in the actual forms, /milawurra/ and /milawarra/. The following derivations show that the order given in the list gives the correct results:

<mila-wi+pirr+a> → mila-wurra [by CCR9] 'they see him'  
see-PRES+(3pl)N+A

→ /milawurra/ [by VR6]

<mila-wi+'jarr+a> → mila-'warra [by CCR12] 'we see him'  
see-PRES+(1U)N+A

→ /milawarra/

(b) That CCR11 does not need to be ordered with respect to VR6 follows from the fact that the sequence <i+ngi> arises only from a tense prefix (v. 3.9.3.2.3) and a following first person pronominal prefix, neither of which bears stress.

(c) VR6 and CCR10 may be assumed to apply simultaneously, both preceding VR5. The j<sub>[vocalic  
+high]</sub> effected by CCR10 must be a part of the Nominative or Accusative first person Restricted (v. section 3.6) pronominal prefix, and forms such as /nyumpulirri/ 'we swim', deriving from <nyumpul-wi+jirr+a> (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 CCR10 to <wi+'ji>. (It is still possible for VR6 to follow CCR10 (if 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 'f(ront)' indicating its derivation.)

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

<tanyмили-wi+jirr+a> → tanyмили-'irra 'we hear it'  
 hear-PRES+(1R)N+A  
 → /tanyмилиirra/  
 → ['təpmili'ɪrʌ], or ['təpmi'li:ɾʌ]

The second alternative is the normal phonetic realization of /tanyмилиirra/, the first being the most careful pronunciation of elicitation sessions.

Sequences of unstressed-stressed vowels arising from V-wi+ji  $\left\{ \begin{matrix} rr \\ n \end{matrix} \right\}$  are not dealt with in the rules of sections 2.4.2.2 and 2.4.2.3. As the preceding example shows, i-'i normally becomes a stressed long [i:], as does u-'i:

<pulupu-wi+'jirr+a> → pulupu-'irra 'we follow him'  
 → /pulupiirra/ → ['pɔlɔ'pi:ɾʌ]

The sequence a-'i appears to be normally realized as [e'ɪ].

CCR16 cannot apply before VR6, since the form /milaaluna/ 'I see them' derives from <mila-wi+li+pin+a> (see-PRES+(1sg)N+(3pl)A+A) by first applying CCR9 to get <mila-wiluna>. However, there is no counter-evidence to the assumption that the two rules apply simultaneously on forms such as <mila-wiluna>, to delete the <w>, and harmonize the <i> with the following <u>.

The reason VR5 precedes CCR13 is that <a,> will harmonize with a long /aa/ vowel derived from the sequence a-i by VR5:

<ngang-kuwa-wi+li+ta,> → ngangkuwa-wila, 'I'm giving him it'  
 give-PROG-PRES+(1sg)N+TI  
 → ngangkuwa-ila, [by VR6]  
 → ngangkuwaala, [by VR5]  
 → /ngangkuwaala/

Finally it is clear VR3 must precede R8, from the derivation of /pulupiyawila/-see page 94 above.

## 2.5 Stress

The function of stress in Kuniyanti is delimitative, rather than distinctive (Trubetzkoy 1969:27). No two roots are distinguished by placement of stress, which is predictable. Stressed syllables tend to sound louder, and to have higher pitch than unstressed syllables; they are probably uttered with greater pulmonic air pressure.

It is necessary to distinguish stress from pitch. Although stressed syllables tend to have high pitch, the reverse does not hold: a syllable may have high pitch without being stressed. For example, the final (unstressed) syllable of a tone unit (see 5.3.1) may have higher pitch than preceding syllables, including the stressed syllables. This phenomenon is

not lexically significant, and appears to be conditioned by discourse considerations. It seems to suggest that the utterance is incomplete: either there is more to follow, or a response (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 below sections 5.3.1, 5.6.2.1.2, and 5.6.2.1.3.

(i) The word final unstressed monosyllabic Enclitics -rni 'now, next', and -mi IND may have high, sometimes high rising pitch.

/nginyjikarni/ → [ 'ŋiŋʒi, kɛŋi ] 'you-ERG-next'  
 /yuwulumi/ → [ 'ju: l̄umi ] 'a man?'  
 /kurnpumi/ → [ 'kɔŋ b̄umi ] 'a woman?'

The first example occurred in a text in which action was requested of the hearer ('you do it now'). As the second and third examples illustrate, high pitch may occur on -mi (when final in a tone unit) in requests of confirmation.

(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. E.g.: ngamu 'before' was heard pronounced [ 'ŋāmu^wi:: ] 'long ago'; /jawanti/ (a subsection term) is sometimes pronounced [ 'cāwāndei:: ] in the context of calling out to a person of that subsection.

(iii) Unstressed final syllables of isolated, elicited words often have higher pitch than the preceding syllables, for example:

/tumpu/ → [ 'tombu ] 'owl'  
 /tumutu/ → [ 'tomotu ] 'chest'

### 2.5.1 Simple Roots

Simple (unreduplicated) roots, including most Interjections, Sound effects and monosyllables, have at least one stressed syllable. There are a variety of stress patterns:

(1) Bisyllabic roots usually have an initial stressed syllable followed by an unstressed syllable:

'paka 'bur'  
 'pulka 'old man'  
 'tirip- 'enter'  
 'kuwaj- 'call, name'  
 'laanti 'up, above'

One exception is the Interjection /iki/, phonetically [i'k̥i], which is also phonotactically unusual for a free word, having an initial vowel (it is never pronounced with initial /y/). Other exceptions occur when the bisyllabic word is phonetically monosyllabic. For example, niyi 'that' is normally pronounced as a stressed monosyllable, ['ni:].

(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):

' <u>ngarraki</u>	'my'
' <u>warrampa</u>	'flood'
' <u>yikanyi</u>	'uncertain'
' <u>pampirra</u>	(a type of tree)

(ii) In addition to an initial stress, the final syllable may also be stressed. In this case, the final syllable usually bears primary stress, although sometimes the initial syllable has equal or stronger stress (SUS):

' <u>kurra</u> 'ngkul, , <u>kurra</u> 'ngkul; or ' <u>kurra</u> ,ngkul	'magpie'
' <u>wirrnga</u> 'luk-, , <u>wirrnga</u> 'luk-, or ' <u>wirrnga</u> ,luk-	'to lengthen (shadow)'

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

<u>pil</u> 'kaali	'midnight'
<u>ma</u> 'ntaarra	'Leichhardt tree'
<u>ka</u> 'rajpi	'body'

(iv) If the word is phonetically bisyllabic, it will have the pattern SU. E.g.:

/wintuwu/ → ['wɪntu:], or ['wɪntu̯] 'turkey'

(3) Roots with four syllables:

(i) The norm is for the first and third syllable to be stressed, with primary stress usually going onto the third syllable. For example,

, <u>papu</u> 'rrungku, ' <u>papu</u> 'rrungku	'to the bottom'
' <u>ngirri</u> 'warnti	'across'
, <u>ngarra</u> 'ngkarni, ' <u>ngarra</u> ,ngkarni	'dreamtime'
, <u>yima</u> 'rrarra, ' <u>yima</u> ,rrarra	'leaf'
, <u>tharlmi</u> 'ngkiti, ' <u>tharlmi</u> ,ngkiti	'tree stump'

(ii) The second and third syllables may become a single phonetic syllable



(if the consonant of the third syllable is either /w/ or /y/); this syllable usually bears stress. Examples:

/kintayingi/ → ['ki'ndeĩŋi] 'upstream end'  
 /jampiyinti/ → ['ja'mbi:ndi] (a subsection)

(iii) A few words show the pattern SUUS. This is illustrated in the place name 'ngatharra'many.

(iv) Where the third and fourth syllable form a single phonetic syllable, the pattern SUS arises:

/warriyayi/ → ['wari'yeĩ] "sugarleaf" (a type of gum with crystalline sugar on the leaf).

(4) Roots of five syllables show the pattern SUUSU. Examples are:

'lawaki'mana 'white'  
 'nyalala'ngkarra (a type of crocodile)

There is one exception, which has the pattern SSUSU, 'jun'junu'najku 'pardalote'. (I suspect that this is 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 six syllable roots, and they show the following patterns:

(i) SUUSUU, for example,

'ngawali'milija (a place name)

(ii) SUSUSU, for example,

'wili'murumuru 'chicken hawk'

However, it may be that this word is a complex root, a partial reduplication of a formative /wilimuru/ (v. section 3.12.1.2), showing stress according to the pattern of such reduplications, rather than of simple roots.

To account for these patterns, I distinguish the mora from the syllable. A syllable consists of one or more morae: open syllables of the form CV (V short) have a single mora, and closed syllables of the form CVC, or syllables with a long vowel (i.e. of the form Caa) 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 counterevidence to this possibility.

Given these sequences, syllabic stress is assigned by the rules:

S1 A syllable is stressable if one if its morae is stressed.

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

I will define a phonological word as a sequence of syllables/morae over which these 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 papaa'pirri 'below' and jampin'paru (a type of fish). In addition, if 'phonetic syllable' is read for 'syllable' in S1 and S2, these rules also explain forward stress movement when syllables coalesce, as discussed under (2)(iv), (3)(ii), and (3)(iv).

### 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 verb roots), which are prefixed to the full form, and (2) repetition of the final two syllables, which are suffixed to the full form. Examples of each type are found both in reduplications of roots, and in the reduplications of meaningless formatives. The first type predominates in each case.

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: 'karnta'karntati 'windpipe', which is a reduplication of the meaningless karntati, and 'kampa'kampayi 'many young boys', which is a reduplication of kampayi 'young boy'. Examples of the second type are: 'jangala'ngala 'red ant', a reduplication of the here meaningless 'jangala, and 'palngarna'ngarna 'wide' from 'palngarna 'outside'.

Reduplications of the first type (i.e. of the first two syllables) give rise to stress patterns atypical of simple roots, and 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 6 morae words are stressed as suggested on page 104), 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 tri- or more syllabic words), both forms are stressed as for roots. For example, 'takurla'takurla 'rough (surface)', from takurla '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 'piny'piny 'crimson chat', a reduplication of piny, which is meaningless, and 'la'laj- '(footprints) lie about', from laj- '(footprints) lies'. There are a few apparent exceptions, such as jaja 'MM', for which the second syllable is never stressed. However, these are not properly regarded as reduplications, since the corresponding unreduplicated forms are of the form CV, for V a short vowel, which are not admissible shapes for roots or formatives.

A less frequent pattern, limited to Verbal roots, (v. 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: 'titi'rip- 'enter (e.g. of ants into hole)', from 'tirip- 'enter'; 'yula'laj- 'pull off repeatedly', from yulaj- 'pull off'; 'kulul- 'try repeatedly', from kul- 'try'; and 'tulu'luk 'surface all around' from 'tuluk- 'come to surface'.

### 2.5.3 Polymorphemic Words

It is convenient to divide the account of stress in polymorphemic words into two sections, one dealing with words involving one or more Suffixes, Enclitics, or Postpositions; the other, concerned with the Classifier Complex (CC) of the finite verb.

[1] Suffixes, Postpositions, and Enclitics.

These morpheme consist of between one and four syllables. Most monosyllables are unstressed, while most polysyllables are stressed initially. Some examples are:

Monosyllables: 'nganyi-ngka 'I-ERG', 'niyi-ya 'that-LOC', 'marla'mi-ya 'nothing-LOC'.

Bisyllables: 'ngarraki-'nhingi 'my-ABL', 'ngurru-'nhingi 'that-ABL',  
'pirla-'pinyi 'yams-OR', 'jinali-'ngarri-ngka 'spear-COMIT-  
ERG'.

Polysyllables: 'pij,ngarni-'ngirrangi 'he came up-to us', 'pulka-'warra-  
,warra '[place name]- everyone associated with'.

As these examples show, the stressed syllable in a morpheme is frequently as heavily stressed as - in fact it may be more heavily stressed than - the stressed syllable of the root to which the morpheme is attached.

(a) Monosyllabic non-root Morphemes. It appears that there is only one stressed monosyllable, the pronominal enclitic -nhi((3sg)OBL) 'for him'; -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 word unit. In case this gives rise to a sequence of stressed syllables, the second syllable in the sequence loses its stress. When added to a monosyllable or bisyllable, these monosyllabic morphemes have no effect on the stress pattern - e.g. 'maa-yu 'meat-DAT'; and 'nganyi-ngka 'I-ERG'. If added to a root of three syllables (having SUU pattern), stress falls on the final syllable of the root: 'ngarra'ki-ngka 'my-ERG'. (When the trisyllabic has SUS pattern, of course, the morpheme has no effect on it - e.g. 'kuru'ngal-ya 'Christmas-Creek-LOC'.) When added to a word of four syllables the stress pattern of the root is unchanged. For example, 'warli'pirri-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 successively to a word. For example, 'ngapu-'wa-ngka (F-his-ERG) 'by his father', 'ngarra'nyu wa-ngka (M-his-ERG) 'by his mother', and 'nganyi-'ngka-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 poly- syllabic morphemes may be accounted for under either the assumption that it 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, 'wart'nhingi ('go-ABL) 'from walking', 'maa'nhingi (meat-ABL) 'from meat', etc.

There are just a few bisyllabic morphemes for which it is useful to assume that they are not stressed; all have initial <w> which is realized as per VR6. They include -wanya 'other', -warra Manner (on which see section 5.5.1.3), -wila Factive Mood, -wanhi, an allomorph of (3sg)0, etc. These morphemes appear to be 'cohering'. For example,

<kurnpu-wanya>	→ /'kurnpaanya/	'other women'
woman		
<yuwulu-wanya>	→ /'yuwu'laanya/	'other men'
man		
<narta-warra>	→ /'nartaarra/	'crying along'

## [2] The Classifier Complex

The Classifier Complex usually constitutes 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 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:

<wart-pi+a>	→ /'wart'pa/, /'wart,pa/	'you'll take it'
go -FUT+A		
<wart-wi+li+a>	→ /'wart'kila/, /'wart,kila/	'I take it'
-PRES+(1sg)N+A		
<mila-pi+'jarr+a>	→ /'mila'warra/	'we'll see him'
see -FUT+(1U)N+A		
<mila-pi+ngim+pirr+a>	→ /'mila'wimpirra/	'they'll see you'
see-FUT+(2sg)A+(3p1)N+A		
<kuwaj-wi+pilakini>		'he calls himself (name)'
name-PRES+(3sg)N/ <u>-ARNI</u> ₂		
	→ /'kuwaj'kula'kini/	
<mila-'jirr+iny+pirr+a>		'we'll see you'
see-(1R)N+(2sg)A+(3p1)+A		
	→ /'mila'yirriny'pirra/	

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 final 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 /milawarra/ 'we (U) see him' (see derivation of page 92 above), whereas it is lost in forms such as /milaanpirra/ (from <mila-wi+ngim+pirr+a>) 'they see me'. There is, in fact,

independent evidence supporting this assumption. This comes from the second person plural Nominative and Accusative pronominals ngkirr- and ngkin- 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,

<wart-wi+'ngkirr+i> → /'wartking'kirri/ 'you (pl) go'  
go -PRES+(2pl)N+I

<mila-pi+'ngkirr+a> → /'milawi'ngkirra/ 'you (pl) will see it'  
see -FUT+(2pl)N+A

It turns out that a single CC contains at most one inherently stressed pronominal prefix - this is due to the choice of allomorphs (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 page 103-4 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 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 following a stressed syllable. For example wartji 'he went' usually has main stress on the initial syllable, with secondary or tertiary stress on the second syllable. (But occasionally the main stress has been heard to fall on the second syllable.)

Sequences of up to three stressed syllables have been heard: 'wart'pa-ngarra (go-FUT+A-(1sg)0) 'you'll buy it for me', and 'tij'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 one.

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 above page 49). However, when the <w> of the Present tense prefix wi- is lost following a vowel (but not when 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,

- <mila-wi+a> → /milaa/        'he sees him'  
               see-PRES+A  
                       → ['mɪlɑ:], (or, rarely, [mɪ'la:])
- <mila-wi+li+a> → /milaala/        'I see him'  
                   -PRES+(1sg)N+A  
                       → [mɪ'la:lʌ]
- <mila-wi+jan+a> → /milaana/        'he sees us'  
                   -PRES+(1U)A+A  
                       → ['mɪ'la:nʌ]
- <mila-wi+ngin+pirr+a> → /milaanpirra/        'they see me'  
                   -PRES+(1sg)A+(3pl)N+A  
                       → [mɪ'la:npɪrʌ]

(Note: /milaanpirra/ has six morae.* Stress should fall on the first and fourth morae by the rule above (page 104); by the rule preventing successive stressed syllables, stress goes onto the second syllable (which includes the fourth mora).)

- <pulupu-wi+li+a> → /pulupiila/        'I follow him'  
                   follow-PRES+(1sg)N+A  
                       → ['pʊlʊ'pi:lʌ]

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* This is so under the assumption that the second /a/ and the final /n/ in the second syllable each contribute one mora (cf. above page 103).

## CHAPTER 3: THE WORD

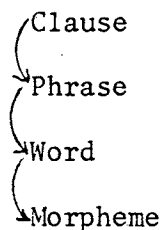
### 3.1 Preliminary Remarks

#### 3.1.1 Grammatical Outline

The primary notion invoked here to explain the grammatical patterns in Kuniyanti is the notion of constituency. I assume that constituents are linguistic signs, that is, have both form and meaning; consequently their identification is dependent on concurrent identification of their meaning. 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, ngurru 'that' is a constituent of ngurru yuwulu 'that man', which has the function of Deictic within the full phrase (see 4.1.2.1 below). This function must be distinguished from the lexical meaning of the word ngurru. This approach contrasts with IC analysis, in which cuts are usually assumed to be binary, and in which constituents need not fulfil functions in the whole (cf. Halliday forthcoming). It is a type of 'string constituent analysis' (Longacre 1960), with constituents labeled by function. In this section I will represent constituency in terms of trees, 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 can be given by recognizing a constituency hierarchy, or 'rank scale' (Halliday 1961/76: 58), as shown in Figure 3-1.

Figure 3-1: Rank Scale



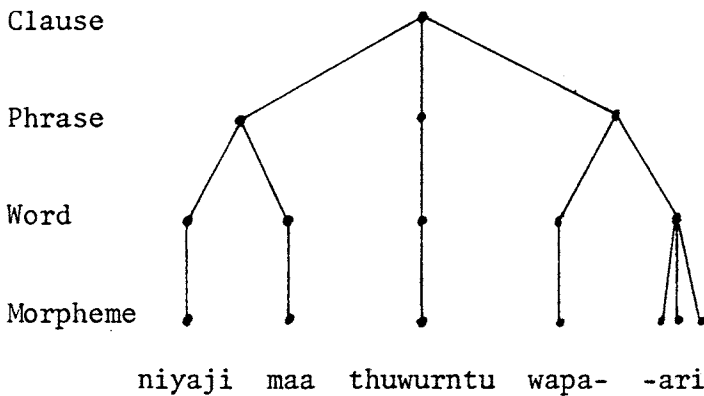
[ ( denotes 'is of immediately lower rank than']

The immediate constituents of a 'unit' (Halliday *op.cit.*) of a given rank are typically units of the immediately lower rank. A unit of one of the three highest types 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, and so on. For example, the clause of (3-1) has constituent structure as shown in Figure 3-2.

(3-1)	niyaji	maa	thuwurntu	wapaari	'This meat stinks'
	this	meat	rotten	it stinks	



Figure 3-2: Example (3-1)



(-ari may be regarded as 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 below section 3.9.3.2.4.)

The intermediate ranks of 'phrase' and 'word' are introduced in order to account for the possibility of branching: in the figure, in each case in which a node (except for nodes of the bottom line) is marked, there is either a branch, or branching is possible. That is, the function that this constituent has, is realized, or could be realized by a unit with internal structure (though other changes (e.g. to the person/number agreement in the VP) may be necessary to preserve grammaticality). For example, the word wapa- realizes the function Process, which can also be realized by bimorphemic constructions such as kart-pi 'hit-Iterative' (= 'belt').

There are, however, certain linguistic units that cannot be placed on the rank scale. There are 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 of the word mangarri in (3-3), and of the morphemes -yurru and -jirra in (3-2) and -ngka in (3-3), as is shown in the constituent analyses of Figures 3-3 and Figure 3-4.

(3-2) ngiti-yurru      karntiwirri      wart-jirri      paplikaj-jirra  
 we    -DU                      2                      go    -we did                      -ALL  
 'We two went to the pub'.

(3-3) mangarri      niyi-ngka      tij-jingi  
 not                      he    -ERG      break-he did to it  
 'he didn't break it'

Figure 3-3: Sentence (3-2)

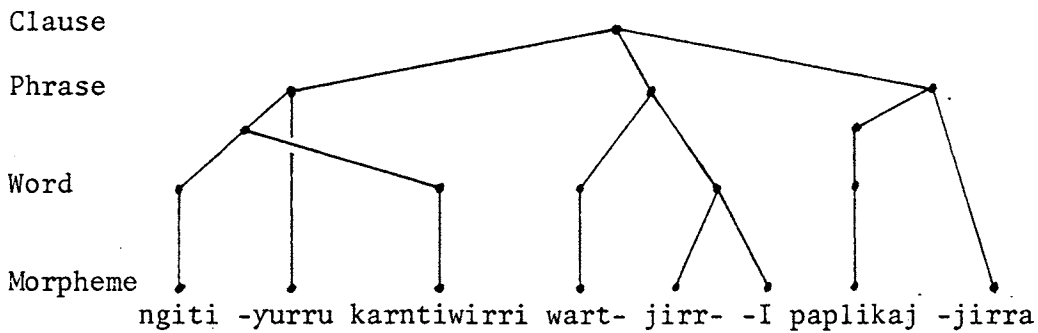
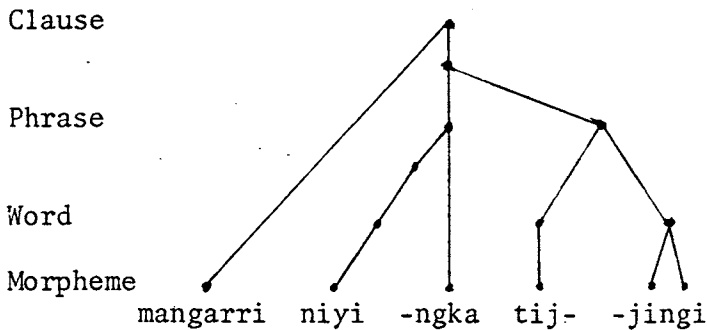


Figure 3-4: Sentence (3-3)



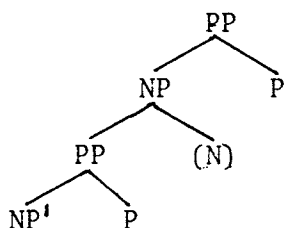
-yurru and -jirra in Figure 3-2, and -ngka in Figures 3-3 and 3-4, have bypassed the Word level, while mangarri in Figure 3-3 has bypassed both Phrase and Word levels. This is because in these cases, there is no possibility of branching between the morpheme and the next unit up: these morphemes do not enter into syntagms with other morphemes, to form grammatical words. Because of this, I do not refer to forms such as mangarri, even though they are free forms, as grammatical words (see also below 3.1.2).

Two types of unit have now been identified: ranking and non-ranking. It turns out that all form items (Matthews 1981:59) are non-ranking, and conversely the majority of non-ranking units are form items. The only exceptions are the Adverbials, which are non-ranking (v. section 3.2), but not form items. Otherwise, all non-ranking form units must occur in construction with ranking ones. The resulting syntagm is typically a unit of the same rank as the ranking one (as is the case in the preceding two examples above - but compare below section 3.8).

One further qualification must be made: certain clauses may consist only of a single morpheme, usually an Interjection, such as yuwayi 'yes' (see below 3.10). Evidently these are 'minor' clauses, and might reasonably be placed off the rank scale: they never have internal structure. Here '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 sentences it happens that the embedded unit is of the same rank as the unit it is embedded in. However, rankshifting (Huddleston 1965:45) is possible, though rare and of limited productivity (see below 4.1.2.1 and 5.5). The maximum depth of embedding in my corpus is three, as in



Here NP' cannot have another phrase embedded in it (see section 4.2). When the embedding 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 (usually each of the same rank) may form syntagms that are not units of the next highest rank. For example,

(3-4) karntiwirri      yuwulu      yuwarni      kurnpu  
 two                    man                    one                    woman  
 'two men and one woman'

(3-4) consists of two phrases, [karntiwirri yuwulu] and [yuwarni kurnpu], 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 in the NP (v. section 4.1.2.1), although its two constituents can be; nor is it a clause. Constructions such as these will be referred to as 'complexes', following Huddleston (1965). There are word complexes, phrase complexes and clause complexes; in addition, certain complexes of words and phrase occur. (It is possible that there are also morpheme complexes.)

### 3.1.2 Types of Word

It is necessary to distinguish four different types of word in Kuniyanti. Firstly there is the phonological word, which was discussed in the last 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 a constituency structure. This unit was introduced in the last section.

The g-word must be distinguished from the lexical word, for which I will sometimes use the term 'lexeme'. Lexemes are the things that are

listed in the dictionary. I include here both morphemes (of all types) and certain larger units which are constructions of morphemes, but I 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, Kuniyanti shows little inflection; most of it 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 ngaangki 'yours' 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, which are the minimal forms that can be freely permuted. Constituents of d-words are in general not permutable. The Postpositions (see 3.7) are the only exceptions: they can 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-ngka	manyi	wart-ja-wila-ngangki
	I -ERG	food	move-SUBJ-I'll do it-for you

'I'll bring you food'

But the parts cannot be permuted: -ngka for example could not be attached to manyi, 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. At the end of my first field trip, having spent a full hour giving me person, number and tense forms of verbs, my helper finally started to tire of the task, and pauses occurred between the verbal stem and following CC. 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 at the beginning of the d-word. In these sessions of intensive elicitation of the verb paradigm I was never given just the paradigmatically significant piece (the CC), but always the full form with the initial lexical item. In the entire body of texts there are no more than a handful of instances in which there is a perceptible pause within a d-word. These pauses always

occur at morpheme boundaries, and apparently only 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 were willing to explain their meaning to me - smaller items could not be. Smaller units such as bound morphemes did not seem to have 'psychological reality' and were not identified on the few occasions when I mentioned them in isolation (although they were immediately identified in retrospect once I gave an example in a d-word).

The four types of word do not necessarily coincide in Kuniyanti. However, some correlations can be made between them. Every g-word consists of one or more lexemes, but not every lexeme is a g-word. For example, mangarri 'no, not' is a lexeme, but not a g-word. And distinct g-words may be instantiations of a single lexeme. This is the case for pronominals. 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 CC and the Verbal Stem) 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 Kuniyanti, embracing all words and morphemes. The entities I want to classify are the lexical items themselves (v. 3.1.2) abstracted from all context; I do not aim to classify the g-words and morphemes, the units of the rank scale. Classification of the lexemes provides more information than does classification of the contextualized units, and it is mainly for this reason that I attempt the former task.

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

- (3-6) [ngirntaji yuwulu] 'this man'  
 NP NP  
 this
- (3-7) [ngiti-yurru yuwulu] 'we two men'  
 PP PP  
 we(R)-DU
- (3-8) [yuwulu-winti] 'he became a man'  
 VP VP
- (3-9) [yuwulu] 'man!'  
 K K
- (3-10) [yuwulu-mili] 'man-crazy'  
 N N  
 -CHAR

But there are a number of reasons that suggest yuwulu is a single lexeme uniquely assignable to the class Nominal. That there is a single morpheme yuwulu throughout (3-6) to (3-10) is clear from the commonality of meaning in each instance, differences being clearly attributable to the different grammatical environments. Secondly, a large class of words, all of which are notionally nouns, appear to be able to occur in most of these environments, and always in the first two. Restrictions are attributable to semantic, including cultural factors. Many words that are notionally nouns, have not been encountered in context (3-9); this is because people don't (usually) address trees, ants, water, etc. But these are semantic, not grammatical restrictions. On the other hand there are lexical roots that occur in only 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 groups by occurrence in common ranges of syntagmatic environments.

In these respects, Kuniyanti is intermediate between English and what appears to be the norm for Australian languages. According to Dixon (1980:271), in most Australian languages lexical roots belong to disjoint classes defined by occurrence in specified syntagmatic environments. In Kuniyanti classes defined in this way have many lexical items in common. As in English, a single word-form can usually occur in a variety of syntagmatic contexts. But Kuniyanti is unlike English, in which there are a number of pairs like dog (Noun) vs. dog (Verb) and bottle (Noun) vs. bottle (Verb) where the meaning differences are not fully predictable, making it necessary in a dictionary to give separate definitions for each distinct context of occurrence. In Kuniyanti differences of meaning are

completely predictable, and one dictionary definition will suffice.

This is not to deny the existence of homophones in Kuniyanti. There are very few, however. The only ones I've been able to find are: tuwu 'cave', tuwu- 'get'; and nginyji 'you', nginyji 'certainly, indeed', -nginyji, the first person singular Nominative/second person singular Accusative form of the Classifier -TI (v. below section 3.9.3.2).

Most examples which at first appear to be homophones turn out on closer examination to be a single lexeme whose variant senses can be explained as contextualizations of a single basic meaning. Consider for example, wirrij- 'scratch', 'dig (a hole)'; yinika 'how, in what manner', 'say, do' what'; mika 'that way', 'tell, think'; and yikanyi 'maybe, perhaps', 'sneekingly'. For each of these four 'words' I have given two or three approximate English glosses, based on the native speaker glosses in various examples. Across a large number of examples (consisting of Kuniyanti - English translation 'equivalents') the glosses given for the words fall into the two or three distinct English expressions given. It seems likely however that these senses are not as unrelated as the English glosses suggest, and that each form is a single lexeme, having a single basic meaning. Very approximately, wirrij- means 'scrape a surface with relatively sharp (elongated) instrument'; yinika, 'what manner of action'; mika, 'this manner of action'; yikanyi, 'uncertain, unsure', (cultural factors determine what constitutes lack of assurance).

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

Table 3-1: Kuniyanti Word and Morpheme Classes

		Free	Bound	
		Non-Verbal		Verbal
"Linguistic"	Open Classes	Nominals Adverbials		Verbals
	Closed Classes	Particles  Pronominals	Nominal Stem forming Suffixes	Verbal Stem forming Suffixes
			Postpositions	Infinitives
			Enclitics	Verbal Enclitics
			Classifier Complex	
"Para-linguistic"	Interjections Sound-effects			

The parts-of-speech are classified in the table according to four major contrasts: (1) free vs. bound, (2) non-verbal vs. verbal, (3) linguistic vs. para-linguistic, and (4) 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, assigned to one of the six major divisions of Table 3-1. However, determining their class from among the possibilities within a single box is not always so easy (except in the case of Verbal items).

There is a fundamental distinction in Kuniyanti between units of the Verbal class versus all other classes, at each rank, morpheme, word, phrase, and perhaps also clause (see 5.2.1 where 'Situation' and 'non-Situation' clauses are distinguished; 'Situation' clauses may be seen as 'Verbal'). Verbal units (other than clauses) are more restricted in distribution than are non-verbal units, and occur only as constituents of finite Verb Phrases, or within non-finite (embedded) clauses (see section 5.5 below). As already mentioned, non-Verbal words/ morphemes are less restricted in distribution, and need not occur in phrases of the same class. As the table 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 3.9.2-3). 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 (v. section 3.9.3). As the term suggests, the Classifier Complex can be analysed into constituent morphemes (see 3.9.3.2). However, it is a g-word, and it may reasonably be regarded as an 'inflectional form' of the Classifier (loc.cit.). For this reason the constituent morphemes (which occur only in this position) 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 - v. 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, 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. I use the term 'Enclitic' throughout this thesis to refer 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, -yurru 'dual' and -yarnti 'plural', which appear to be distributionally restricted to Nominals. Occurrence, or lack of occurrence with these two morphemes would not seem to be a useful property for defining word classes. However, it does appear to agree with a classification in terms of syntagmatic properties. In realizing clausal functions, Nominals must occur in NPs or PPs. Although Adverbials may occur in NPs and PPs, realizing clausal roles, they typically do not, and for every Adverbial, there is some clausal role that it can realize alone. Thus, Adverbials contrast with PPs in realizing circumstantial roles. For Adverbials such roles are not normally mediated through Postpositions, as is necessarily the case for nominal units. The two classes, Nominal and Adverbial, can thus be distinguished by the ability or non-ability of their members to realize circumstantial roles. It follows that Adverbials are non-ranking units.

It appears that the three lexical classes can be ranged from most marked distributionally to least marked, thus: Verbal, Nominal, Adverbial. 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 markedness corresponds between words and 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 in the rank scale: Verbals must realize the function Process in a VP; Nominals must realize a function in an NP, or (less frequently) Process in a VP; and Adverbials may realize functions

in clauses, NPs, PPs, or VPs.

It is convenient to recognize a distinct class of Pronominals, even though the members usually occur in NPs. This is for two main reasons: 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 context of occurrence); and secondly the distribution of this lexeme differs significantly from the distribution of Nominals (and all other parts-of-speech). (Recognition of this class requires some obvious and minor adjustments in the definition 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.

There are two classes which have been set off from the remainder as 'paralinguistic'. (There may well be 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 (v. section 5.4.2 below). As has been mentioned already (section 2.1.1) many of them are phonologically (and even phonetically) irregular.

### 3.3 Nominals

Nominals are those words which usually occur as constituents of NPs - although they are sometimes found elsewhere (as the lexical head of the finite VP), and words of other classes are found within NPs. It was suggested in the preceding section that Nominals may be characterized by the fact that they occur in precisely these two contexts (in non-minor clauses) - i.e. as NP constituents, and a lexical 'heads' of VPs. The class so defined is open, with a large number of members.

There are no compelling reasons to identify distinct subclasses of Adjectives and Nouns. Certainly no such subclass can be distinguished on morphological grounds, such as ability to combine with a distinct set of morphemes, or choosing particular allomorphs of nominal morphemes. Furthermore, the classes of words which may realize the NP roles of Classifier, Entity or Qualifier (defined in 4.1.2.1 below) have many members in common. Nearly all words which can realize Entity - except for non-nominals such as Pronouns - can also realize Qualifier (and also lexical head of a VP): in other words, words which can be referential can also be qualifying, and indicate qualities or properties of things.

There are however a number of words which realize either Classifier

or Qualifier but which have not been encountered in the Entity role. Examples include at least twenty words which, from the English point of view, we would like to call Adjectives. They include:

Colours: kurukuru 'black', wirrkali 'blue/green' lawakimana 'white'

Mental attributes: kanypirli 'ashamed', yuwa 'frightened (careful of)', pinarri 'knowledgeable', jakarnti 'awake', nurna 'greedy'.

Physical properties: kawirla 'cold', kijali 'dead', palyati 'flat', pinyiti 'hard', jarrarnti 'sharp', tamarta 'blunt', kirrapi(ngarri) 'long', yanungku 'new', thuwurntu 'rotten'

Value judgements: jurnanykarra 'good', marulu 'valuable'

I hesitate to set these words off as a distinct class. This is because semantically similar words do occur in the Entity function, and so would not be Adjectives (by the criterion above). Examples are: thiwa 'red', 'a person of European descent'; purtpara 'hot', 'heat'; nyamani 'big, boss'; thiki 'short', 'a bit'; muyu 'asleep', 'sleep', and thithi 'moving', 'motion'. It seems to me that the differences of meaning associated with different functions are predictable. (In each example the first gloss is for the word as a Qualifier, or Classifier, the second, as an Entity.) 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 an appropriate situation, I would expect that they could be used referentially. For example, it is expected that kawirla 'cold' could realize the Entity role in an NP in the Kuniyanti version of 'this cold is making me stiff', since purtpara 'hot' is attested in this role in a similar sentence. At this stage of the investigation it would be premature to set these words off as a distinct subclass. To do so would be to take actual 'distribution' too seriously, to ignore the limitations of the data, and ultimately to deny an aspect of creativity in language.

It is 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 subclasses are semantically homogenous, 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 of the preceding paragraph): words for concrete entites, 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 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 some of 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 realize the function Deictic in the NP (see 4.1.2 for a description of this term). To be precise, Determiners may be defined as those words which may realize Deictic, Entity or Qualifier, but not Quantifier or Classifier in the NP (loc.cit.). This formulation is necessary in order to exclude from the class words such as yuwarni 'one', karntiwangurru 'many', which may also realize 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.

Determiners can be assigned to two categories: Definite and Indefinite.

#### 3.3.1.1 Definite Determiners

Definite Determiners are of three types: Demonstratives, which point to something in the situational context of the utterance; Endophors, which refer to entites mentioned in the linguistic context - usually in the preceding text, but sometimes in the immediately following text; and a non-Demonstrative non-Endophoric Determiner which identifies an entity which is 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: ngirntaji 'this'

Distal: ngurru 'that'

Both terms are used in reference to both things and places (but not, apparently, times).

There is a third form, ngirnta, which also refers to an object close to the speech situation. But it is not clear precisely how this term differs from ngirntaji. In a number of examples ngirnta was used in reference to something closer to the speaker than to the hearer, especially when that 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 to be elsewhere). To the best of my knowledge, there are no examples in which ngirnta is used in reference to something relatively closer to the hearer.

[2] There are two endophoric determiners which are usually used in anaphoric reference to a previously mentioned entity. They are:

niyaji 'this'

niyi 'that'

(niyi is homophonous with the third person singular Pronoun, but can be distinguished from it on morphological, as well as functional grounds (see 3.6). It is often difficult to determine whether a particular instance of niyi is the Determiner, or Pronoun.)

The difference in meaning between these two words is not perfectly clear, but is 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 (v. 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 concerning Pigeon (cf. page 13 above) reference is made to an Aboriginal tracker by the phrase niyingka yuwulungka Roeburn Mickngka (that-ERG man-ERG Roeburn Mick-ERG) 'by that man Roeburn Mick'. This person, who had been introduced ten clauses earlier, had played no significant role in the events described in the eight immediately preceding clauses. (See also line (42) of Text 1.) However sometimes niyi is used in reference to an entity foregrounded in the text, or 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 is thus more likely to lie in the relative prominence they give to



so marked. As distinct from the English definite article, kinharnti indicates a specific characteristic by which the referent is identifiable: it must belong to the registry of known but not 'present' (in the linguistic or non-linguistic 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, (v. section 6.1) but is engendered or suggested from the context of occurrence (see also below sections 5.4 and 5.3.1). This follows from the fact that there are contexts of occurrence of these Determiners (namely when they occur with the Enclitics -ngarraya 'too' (section 6.3.5) and -wirri 'identity unknown' (section 6.3.6)) which do not admit the interrogative senses. The three Indefinite Determiners are:

<u>ngurntu</u>	'someone, who'
<u>ngunyu</u>	'something, which'
<u>jaji</u>	'something, what'

ngurntu is used only when the unknown entity is believed to be human (but see below page 126):

(3-13) ngurntungka	tijjingi	'Someone broke it' or
-ERG	he broke it	'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) ngunyu	ngaangki	jikinya	'Which is your child?'
	yours	little	

ngunyu 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 (3-14), in which the hearer was requested to identify her child from a group of children. (ii) The most frequent use of ngunyu is, however, as an indefinite/interrogative for places. In this use, ngunyu occurs as the only word-level constituent in a 'local' Postpositional Phrase, realizing a spatial circumstance (v. 5.2.3.1). For example:





(3-18) ...ngur tungurnu...American kartiya...  
white person  
'what's it called, Americans?'

(3-19) ...ngur tungurniya...Mable Downsja...  
-LOC -LOC

'(he died) at what's it called ... at Mable Downs.'

ngur tungurnu does not occur particularly frequently in texts. [a:] is preferred as a hesitation marker. Some speakers use yaa as well as ngur tungurnu, with apparently the same meaning.

### 3.3.2 Kin-terms

Kin-terms constitute a class of over twenty members which occur with the stem forming morphemes -wa, -pati and -langi (see 3.12.1.1). Kin-terms so defined also have a characteristic distribution: they normally realize only the Entity function in NPs, and appear never to be used non-referentially. (This could not, however, be taken as a defining property of the class, since it holds true of other Nominals (such as proper names).) Included in this subclass are terms for relatives, such as ngapu 'F', ngarranyi 'M', marriyali 'WM' etc. (see 1.1.4), and also a few which are not based on genealogy or imputed genealogy, jaliji 'peer, agemate', narruku 'namesake'.

### 3.3.3 Subsection Terms

Subsection terms, sixteen in number (there are distinct terms for male and female members of each subsection (see page 8), may be defined by occurrence with the morpheme -warnu 'all members of the subsection'. For example, jakarrawarnu refers to all members of the jakarra subsection. -warnu appears not to occur with any other lexemes.

### 3.3.4 Numerals

Only the first three numbers have distinct terms: yuwarni 'one', karntiwirri 'two', and ngarlutu 'three, a few'. There are a couple more terms denoting larger, indefinite numbers, such as karntiwangurru (~karntiwa~karntiwangarri) 'many', and karawulu, waringarri 'very many'. Occasionally larger numbers are referred to by combinations of the terms for one and two. For example, five has been referred to by karntiwirri karntiwirri yuwarni. (It is because ngarlutu does not precisely designate 'three', (but indicates rather 'a few') that this three word expression is used instead of the simpler karntiwirri ngarlutu- cf. Harris 1982:166ff.) Alternatively, five may be referred to by the NP (ngirntaji) marla '(this) hand'. On a couple of occasions the Numerals yuwarni and karntiwirri were heard in the combination with marla to indicate the numbers five and ten.

However, both modes of expression are used very infrequently, and I have not heard numbers above ten constructed by either means.

### 3.3.5 Proper Nouns

Proper nouns are names of persons or places. They invariably realize the role of Entity in an NP, which may of course be embedded within another NP, usually indicating the possessor of the thing referred to by the second NP. There are apparently restrictions on the realizations of other roles in phrases in which they occur: the only other role normally filled is that of Classifier, as in

(3-20) riwi        ngatharramany  
           place  
           'the place Ngatharramany.'

Place names are formally distinguishable by their occurrence with the two suffixes -wangku 'one who is associated with the place,' and -warrawarra 'all of the people associated with the place.' These two suffixes do not occur elsewhere. Ideally, the association between the person(s) and the place is that it is his/their dreaming or conception site: pulkawangku refers (ideally) to a person whose conception site is pulka (i.e. Bulga Swamp). However, in actual use the association may be less stringent. It may be an affiliation through residence, as when all of the residents of pamathiti were referred to collectively in a text as pamathitiwarrawarra, with no suggestion that this place was the conception site of every individual. Alternatively it may be an affiliation through birth, or through the patriline (less regularly the matriline). Thus a single individual may on different occasions be referred to as x-wangku for more than one place x.

Personal names are used infrequently and cautiously, and one way of avoiding their use is to refer to the individual indirectly through his association with a place, usually his 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 man who was characteristically referred to as malawangku. For other individuals this mode of reference was not as frequently employed (in my presence at least), other modes of indirect reference being preferred. Both place and personal names are normally unanalysable forms. The only exception I'm aware of is the place-name tiyatiya plirrijkilayi 'where the peewee went plirrij.'

### 3.4 Adverbials

Adverbials were distinguished above (section 3.2) by their ability to

realize clausal roles of circumstance (such as location, direction, etc.). On the one hand they are distinct from Nominals, which can realize phrasal roles only, never clausal ones. On the other hand they differ from Particles which, while they have the property of occurring as constituents of clauses (where they realize the role of Propositional Modifier - v. section 5.4.1), do not realize circumstantial roles.

It has been suggested that Adverbials do not form phrasal units with one another. They do however form word complexes together. The two Adverbials in examples like (3-21) initially appear to form a phrase, with mayarrayaarra modifying kaljini (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' (see below 4.3.1 and 5.6.2).

(3-21)	mayarrayaarra	kaljini	kirrakirrayi
	hard	fast	he ran
	'he ran very quickly'		

In fact, as the gloss shows, it seems mayarrayaarra is better glossed 'hard', rather than 'very'. (It does not occur as an intensifier of Adverbials other than those relating to speed, and secondly, it occurs alone in clauses of motion with the sense of 'hard, energetically'. Thirdly, it is apparently the partial reduplication of mayaarra, which is segmentable into maya, an Adverbial indicating 'hard, energetically' of actions other than those of motion, and the suffix -warra (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 complexes, and not phrases.

Adverbials are generally 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 are four main types of Adverbial: Adverb; Temporal Adverbial; Spatial Adverbial; and Frequency Adverbial. These are discussed in order in the subsections below.

In addition, there are two very general Adverbials yinika 'in what manner, in some manner', and mika 'in this/that manner', which might perhaps be regarded as indefinite and definite adverbial 'determiners'. They are not used in respect of concrete entities (for which the Determiners of 3.3.1 are used), but rather for types of action, including speech, and other 'abstracts' such as qualities. For example,

(3-22) Q. yinika ngawali ngarakkinyja  
woomera. you make it

A. mika ngarakpa  
you'll make it

'How do you make a woomera?' 'Like this.'

Here yinika and mika 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 jajiyu 'what-DAT' were normally answered in terms of entities: unlike English 'what', the use of jaji 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. (Nominals would have to occur in an ERG PP in these examples, if modifying the manner of action).

mika can refer to at least the following:

manners of action, as in (3-22) above and

(3-23) mika waraari 'he stands like that';  
he stands

qualities or attributes of things:

(3-24) mika-jangi wartpa  
SEM you'll bring it

'Bring one like this (i.e. one of this type)';

spoken words, or their content:

(3-25) marlami mika jijackingkirawu 'don't talk like that';  
nothing you talk!

directions, e.g.:

(3-26) mika (wa) wartpiri  
you'll go

'Go this way' (accompanied by a gesture);

times when, or conditions under which processes occurred or will occur, for example:

(3-27) mirri laantiyawunti mikaya pijparni  
sun it might get high -LOC you'll come

'Come when the sun is high';

quantity, including quantity of time:

(3-28) kampa karntiwirri karntiwirri yuwarni mikaya  
water two two one  
ngangpinpiti maa  
they gave them meat

'After 5 years have elapsed they give them meat';



- (3-32) mayaarrayaarra      wartkali      'a hard walker'  
           hard                    go-CHAR
- (3-33) waya            thirrkirliwinti      'the wire got straight'  
                           it 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 parrangka 'dry season', munquwarla 'winter' and yitirla 'wet season'; words primarily referring to part of the day: maninka 'night time', pilkaali 'midnight', karrwaru 'afternoon, yesterday', karrakarrwaru 'late afternoon', lanykiya 'daytime, midday', mungaya 'morning', mungamungaya 'tomorrow (morning)', etc.; and the three shifters (Jakobson 1957), yaningi 'today, now, then (at that point of time)', ngamu 'before, already', and wampa 'later, still'. (These last three are also found in the role of Propositional Modifier - see below 5.4.1, 6.4.10, 6.4.11, and 6.4.13.) There are also words locating the event in the near or distant past: jamuntu 'the other day', ngarrangkarni 'long ago, in the dreamtime'. The second group includes yingki 'for some time', yingkiyila 'for a short time', and yilpa 'for good, forever'.

Some Temporal Adverbials can enter into syntagms with others. These syntagms are very restricted in nature, and first member being usually yaningi 'today' or jamuntu 'other day', the second, a word signifying a part of the day. For example:

- (3-34) yaningi            karrwaru            'this afternoon'  
           today                afternoon
- (3-35) jamuntu            maninka            'the other night'  
           other day            night

Very occasionally the word order is reversed, as in

- (3-36) maninka            yaningi            'tonight'

These constructions are regarded as complexes, because the second member expands on the first, making its reference more precise (v. 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) ngamu            nganyi            marlami-ya            ngarakpirra            Post Office  
           before            I                    nothing-LOC            they made it
- '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) yanya-ya            karrwaru            'the other afternoon'  
           other-LOC            afternoon

### 3.4.3 Spatial Adverbials

Kuniyanti has quite a rich set of Spatial Adverbials, which qualify the location, direction, orientation, extent proximity, etc. of a situation or entity, with respect to some (chosen) point(s) of reference. As in the case for other Adverbials, the Spatial ones realize clausal circumstantial roles 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 below 4.3.2).

Two major subclasses are identifiable (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 'coordinates' such as the speaker's location or direction of movement. In this sense non-Cardinals are inherently (i.e. in their lexical meaning) deictic.

Cardinals orientate horizontally with respect to the compass points and direction of flow of the river, and vertically, either upwards or downwards. In natural speech, Cardinals are very frequent; clauses of motion nearly always specify direction through their use, often together with a PP (e.g. indicating the actual place from/to which motion was directed). They are usually employed in giving directions, for which the terms for left and right are almost never used. For example, while driving a group of Bayulu residents through the bush in a 4 WD vehicle, whenever they advised me to alter my course, it was with respect to the compass points, by the 'Direction to' forms (see Table 3-2), which were simply stated in one word utterances: e.g. lilingku '(Veer more) towards the west'.

Cardinals are not 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 process was attempted, usually when there was no specific goal, or the goal is not reached. For example:

(3-39) thaanungku            milarla            'I looked upwards'  
           upwards                I saw it





(3-43) ngilangku      wartjirri      'we went east'  
                               (1R) went

Table 3-3 shows the terms for the Vertical directions, for which there are again four distinct forms, making the same systemic distinctions.

Table 3-3: Vertical Directions

	Below (Down)	Above (Up)
Location	paapirri	laanti
Side/End	papaapirri	lanngarri, lannyingi, lanjingi
Direction from	papirnali	lantiwali
Direction to	papurrungku	thaanungku

Examples of usage are:

(3-44) warangkiri      paapirri      ngaarriya  
                               he sits                                stone-LOC  
                               'he sits at the bottom of the hill'

(3-45) yutpiti                                papaapirri      'they put it inside (a bag)'  
                               they put it

(3-46) papirnali                                martuwarranhangi      parwinti  
                                                       river                                -ABL                                he climbed  
                               'he climbed up from the river'

(3-47) wartngi                                papurrungku      'I walked down'  
                               I went                                downwards

Note that Side/End refers to an aspect of a physical body, either the underside or the top-side - in many circumstances papaapirri translates into English as 'inside', and lanngarri (etc.), as 'on top of'. (I am unable to distinguish among the three words in the "Above Side" box). As (3-44) illustrates, the terms up and down allow for horizontal displacement. Another illustration of this is that motion between Junjuwa and the river is usually referred to in these terms, in preference to compass orientation, even though the height difference is very slight.

The forms for the two sets of Cardinals are suppletive, and bear little resemblance to shapes of the corresponding 'case-marking' Postpositions. The main morphological regularities are:

-ngku, in the 'direction towards' forms;









(3-68) yuwarningarri kartpuwu 'hit him once!'  
                   you'll hit him

These Adverbials are also used to count number of days, for example

(3-69) karrikuwawingirni ngarlurrja  
           I could be away

'I could be away three/a few days'

(3-70) ngalurrja pakiyirri 'we camped (there) for 3 days'  
                   (1R)lay

It is possible to be more explicit by using riwi 'camp, place', in the sense 'day':

(3-71) yuwarningarri riwi pakiyirri  
                           camp we (R) lay

'we camped (there) one day'

### 3.4.5 Concluding remarks

Adverbials in Kuniyanti form a rich system, even if the class has relatively few members. The description above gives the broad outlines only. There remain a number of words whose status as Adverbials is doubtful. jurly 'together (normally as a pair)', mulpa 'together (as a large group)' are almost certain to be properly classified as Adverbials; so also are mawirnti 'hold in a bearhug', and mirnkiriya 'dodge (out of way of missile)'. For some words, such as priyanti 'in turn, in retaliation', and kalanyi 'do first' it is more difficult to be sure of Adverbial rather than Particle status.

### 3.5 Particles

There is a small class of a dozen or so Particles, which are non-ranking d-words that enter into syntagmatic relations with clauses, which they contain in their 'scope' (see example (3-3)). As mentioned above, Particles modify the propositional content of clauses (on which see section 5.4.1 below). Particles may be defined as those lexical d-words which occur in this context, but do not occur in other clausal roles. This qualification is necessary because there are at least three Temporal Adverbials (namely ngamu 'before', yaningi 'now' and wampa 'later') which can function as propositional modifiers.

The following are the main Particles:

<u>mangarri</u>	'not, it is not the case that'
<u>marlami</u>	'nothing, nowhere, never, none'
<u>priyanti</u>	'in turn, in revenge'
<u>thaarri</u>	'it was mistakenly believed that'

<u>yikanyi</u>	'uncertain'
<u>winhi</u>	'only, just, nothing of importance'
<u>wajanginyji, jinginyji</u>	'but really, in actual fact'
<u>murta</u>	'completely, certainly'
<u>minyjirra</u>	'true'
<u>pirli</u>	'maybe, perhaps'
<u>wumurla</u>	'not' (in Avoidance style)
<u>ngarrarni</u>	'always'
<u>ngampirri</u>	'you, next time'
<u>wampawu</u>	'almost, nearly'
<u>yaniyaningi</u>	'already'

The glosses given here are to be taken with a grain of salt; for a 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, in the case of Nominals, phrase like constructions. If a clause contains two Particles, each realize a different propositional modifying role; they never go together to realize a single 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 page 312 below).

Some Particles occur elsewhere, as constituents of NPs. For example, the 'subjective' Particles tharri 'mistakenly believed' and yikanyi 'uncertain' can be 'nominalized'. This involves a shift from speaker's subjectivity to subjectivity of the actor (in the situation referred to), thus: tharri '(Actor) was mistaken in his belief', and yikanyi '(Actor was uncertain in the manner he did the action'. In these 'nominalizations', the Particles occur as the sole lexical constituents of an NP or ERG PP (depending on whether the clause is Intransitive or not) realizing a circumstance of Manner (v. 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 mangarri 'no, not' occasionally contains a word (or phrase) within its scope (see example (6-113)).

### 3.6 Pronominals

The category of person is realized in a number of different ways in the grammar of Kuniyanti. Within the VP it is realized by bound morphemes, occurring either as prefixes to the Classifier Complex, or as Enclitics to the VP (see 3.9.3.6). Elsewhere, it is realized by free words, and in a set of two possessive suffixes (see section 3.12.2.1). With two minor exceptions (see pages 186 and 194) the system is constant throughout,

distinguishing three persons (first, second and third), two numbers (singular and non-singular) and a R(estricted)-U(nrestricted) opposition in the first person non-singular.

The Restricted category of the first person non-singular encompasses the traditional categories of first person dual Inclusive, dual Exclusive, and the plural Exclusive, while the Unrestricted category corresponds to the plural Inclusive. That is, the Unrestricted includes the Speaker, Hearer, and at least one other person; the Restricted excludes one of the non-speakers. Using the symbolism S = Speaker, H = Hearer, O = Other(s), where S and H can refer to a single individual only, and 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.

Kuniyanti and Bunaba appear to be unique among the languages of Australia, and indeed the world in making this particular opposition. Among the neighbouring languages, the Pama-Nyungan ones, including Walmajarri (Hudson 1978:85), Jaru (Tsunoda 1981:64ff) and Wangkajunga (my fieldnotes), as well as the Northern Kimberley languages such as Ungarinyin (Rumsey 1982b:31) make the usual (for Australian languages) distinction between Inclusive and Exclusive in the first person non-singular. This distinction is also made at least optionally in the Djerakan languages Kija (my fieldnotes) and Miriwung (Kofod 1978:47). However, the Nyulnyulan language Nyikina shows a minimal/augmented system, distinguishing four personal categories 1, 1/2, 2 and 3 (Stokes 1982:151ff).

If the additional feature [ $\pm$ singular] is invoked, it is possible to distinguish and characterize all of the pronominal categories, as shown in Table 3-4 (in which the Nominative forms are cited).

Table 3-4: Feature Specification of Pronominals

	nganyi	ngiti	yaati	nginyji	kiti	niyi	piti
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 the categories are so marked is evident from the fact that when the non-singulars occur in Entity role in NPs, number can be, but is not necessarily, marked more precisely by number words, or by the Postpositions -yurru DU, and -yarnti PL.

I have referred to yaati as a category of the first person, distinguished from ngiti by the opposition Unrestricted/Restricted. This implies an arrangement of the pronominals as follows:

	sg.		n-sg.
		R	ngiti
1	nyanyi	U	yaati
2	nginyji		kiti
3	niyi		piti

Instead of taking + values for S in Table 3-4 as defining the category of first person, yaati might be distinguished from all of the other pronominals by the fact that it alone has a + value for each of S, H, and O. The pronominals could then be arranged as follows:

	sg.		n-sg.
1	nganyi		ngiti
2	nginyji		kiti
3	niyi		piti
1/2/3	-		yaati

There seems to be no strong reasons to favour one of these over the other, and I have arbitrarily chosen to view yaati as a first person form.

It is clear that at least three individuals must be included in the referent set of yaati. I have heard only the plural marker -yarnti in construction with yaati in natural and elicited Kuniyanti speech. However, when I constructed the d-word yaati-yurru (first person Unrestricted-DU) it was not rejected outright, but speakers suggested that it might refer to just three of us, the speaker, hearer, and just a single other. (Alan Rumsey elicited a similar response to the corresponding constructed form in Bunaba (p.c.)). This would suggest that -yurru marks 'plus one' or 'unit augmented' (McKay 1978) rather than 'dual' were it not for the fact that speakers themselves use yaatiyarnti in reference to this particular group of three.

I have already mentioned (section 1.5) shifts in the pronominal categories in avoidance contexts, where non-singular forms are used in reference to, and in addressing a single avoidance kinsman. Reference to the speaker and a single hearer (where they are in an avoidance relation) is by means of the Unrestricted yaati, instead of the usual Restricted ngiti.

(It might be expected that in such a situation the dual Postposition could be used to mark the number: i.e. yaatiyurru in reference to a S and H in avoidance relation. However, I have no supporting examples.)

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: Kuniyanti Pronominals

		singular	non-singular	
			Restricted	Unrestricted
1	NOM	nganyi	ngiti	yaati
	OBL	ngarraki	ngirrang	yarrangi
	EMP	ngarrajinga	ngirrangjinga	yarrangjinga
2	NOM	nginyji	kiti	
	OBL	ngaangki	kirrang	
	EMP	ngaangjinga	kirrangjinga	
3	NOM	niyi*	piti	
	OBL	nhuwu	pirrang	
	EMP	nhungjinga	pirrangjinga	

* Although the third person singular Nominative form is homophonous with the Determiner niyi (see 3.3.1.1), that they are indeed two distinct words is evident from the fact that the Determiner niyi does not have an Oblique form nhuwu, nor does it contrast with the non-singular piti.

There are certain regularities in the forms shown in the table.

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 singular, the final consonant and vowel is deleted; and for the third person singular the velar nasal is inserted preceding -jinga.

Secondly, the non-singulars show /t/ in the second syllable of the Nominative forms, and /rr/ in the corresponding position in the Oblique forms. /t^hrr/ could be identified as a plural marker. This suggests identifying the non-singular 'roots'.

(1R)	<u>ngi-</u>
(1U)	<u>ya(a)-</u>
(2nsg)	<u>ki-</u>
(3pl)	<u>pi-</u>

(See also below page 172.) The final /i/ in the Nominative forms might

be regarded as epenthetic (/i/ is the unmarked vowel word finally - see section 2.2.5), inserted so as to give the word an acceptable phonological shape (v. page 75 above). The Oblique pronoun involves in each case -angi following the number marker. In view of the shape of the corresponding Emphatic pronouns, this might be segmented into an Oblique suffix -ang and an epenthetic /i/ (which gives 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 (/t^vrrr/ and /-ang(i)/) are phonotactically unusual for morphemes (the phonotactic patterns are otherwise restricted to a few verbal morphemes), and the forms themselves do not occur outside of the pronominals.

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 (v. section 4.1.2), except when it (i.e. the Nominative form) would be directly followed by a case marking Postposition (see page 147 below) other than -ngka ERG. The Oblique form is found in all other contexts within NPs. It typically realizes either the Deictic or Qualifier (v. section 4.1.2), in which case it indicates possession (alienable (including 'temporary access' possession) or inalienable):

(3-72) ngarraki            ngarranyi            'my mother'  
           my                    M

(3-73) riwi            ngirrangi            'our country'  
           country    our

(3-74) ngarraki            yawarta            'my horse'  
                                   horse

Otherwise, the Oblique is the form found preceding case-marking Postpositions other than -ngka ERG, no matter what role it bears in the phrase.

(3-75) wartpirri            ngarrakiyirra            'they came up to me'  
           they came            my - ALL

(3-76) pinarri            ngarrakiyu            '(they) know me'

nganyiyirra and nganyiyu do not occur. However, this is the only context in which the Oblique form may realize the Entity function. If there is an intervening morpheme, such as a number marking Postposition, the Nominative form occurs:



## 'Case' marking:

<u>-ngka</u>	ERG(ative)
<u>-yu</u> ~ <u>-wu</u>	DAT(ive)
<u>-ya</u>	LOC(ative)
<u>-nhingi</u>	ABL(ative) ₁
<u>-yangka</u>	ABL(ative) ₂
<u>-yirra</u>	ALL(ative) ₁
<u>-yayi</u>	ALL(ative) ₂
<u>-yayu</u>	ALL(ative) ₃
<u>-yawu</u>	ALL(ative) ₄
<u>-pinyi</u>	OR(ientative)
<u>-ngarri</u>	COMIT(ative)
<u>-winyja</u>	DEP(riative)

## Number marking:

<u>-yurru</u> ~ <u>-yirri</u>	DU(al)
<u>-yarnti</u>	PL(ural)

All but four of these Postpositions show phonologically conditioned allomorphic alternations. The ERG -ngka dissimilates by rule R9 to /ka/ when following a vowel that is preceded by a nasal-stop sequence. (see examples on page 83 above.) Nine Postpositions have an initial <y>. In accordance with rule R6 (of section 2.4.2.3:1), this initial segment hardens to /j/ following non-continuant consonants. Few Kuniyanti 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 final stop or nasal (see below). Examples: Jackju (Jack-DAT) 'for Jack', paplikaj-ja/-jangka/-jirra/-jayi/-jayu/-jawu (pub-LOC/ABL₂/ALL₁/ALL₂/ALL₃/ALL₄) 'at/from/to the pub', kurijjangka (hold-ABL₂) 'from holding', and Dayp-jurru/-jarnti (Dave-DU/PL) 'a pair/a group including Dave'. The allomorph <wu> of the DAT is subject to VR6, the effect of which is to harden the <w> to a /k/ when following a non-continuant, as for example in /kajku/ (cut-DAT) 'for cutting', and /ngarakku/ (make-DAT) 'for making'. The -yurru ~ -yirri allomorphy is not phonologically conditioned. The choice seems to be a matter of speaker's preference: some use the former, others use the latter. (Today at least, the two forms do not appear to be regional variants.)

In addition to occurring in constituency with NPs, some Postpositions also occur in constituency with PPs, Adverbials 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 (v. page 228). The first member of any Postposition sequence must be one of -nhingi ABL₁, -ngarri COMIT, -pinyi OR, -yurru DU or -yarnti PL. Of these -yurru and -yarnti can be followed by any other Postposition; they are

always first in the sequence. The remaining three are followed only by the ERG -ngka.

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 Locative, both Ablative, and all Allative Postpositions at least are attested in construction with Adverbials.

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, or non-finite Verb Phrase in the non-finite clause. The occurring Postpositions are: -ngka ERG, -ya LOC, nhingi ABL₁, -yangka ABL₂ and -ngarri COMMIT. Where the DAT -yu is expected, instead the form -wu is found. Since -wu occurs in complementary distribution with -yu, it is taken to be an allomorph of the DAT which occurs only on verbal stems.

The major meaning and functions of the Postpositions are set out below.

[1] -ngka ERG marks:

(a) the Agent (regardless of person) in a clause of 'directed action' i.e. a Transitive, Middle or Reflexive/Reciprocal clause (see section 5.2.1.3, and examples in that section). The Ergative marking is, however, optional, except where the Agent is inanimate.

(b) the Instrument in all clause types (v. section 5.2.2.3).

(c) nominal expressions (NPs and PPs) realizing 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 (v. section 5.2.3.5), in clauses of directed action.

(d) nominal expressions functioning as Attributes on Agents (v. section 5.2.4).

[2] -yu DAT marks:

(a) nominal possessors, both alienable and inalienable (but not pronominal possessors - see examples (3-72) to (3-74) above) - see example (4-11) below.

(b) the Goal in Middle clauses - see section 5.2.1.3 and example (5-55); and Affected in other clause types - see 5.2.2.1.

(c) the circumstantial roles of Purpose (section 5.2.3.7) and Matter (section 5.2.3.8).

(d) frequently (but not always) nominal and adverbial expressions referring to future time (see section 5.2.3.2).

[3] -ya LOC marks:

(a) location in space 'at', 'in', 'on', 'near', 'into' (as in 'pour water into a bucket') and so on - see below pages 243, 253, and section 5.2.3.1.

(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, which normally enables the process to occur - for example, 'see in the torchlight', and

(3-83)	purlumani	kamu	purtparaya	kampawinti
	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,

(3-84)	mirraya	kartluni	'I hit him in the head'
	head-LOC	I hit him	

(More usually the body-part of the patient is a Range (see section 5.2.2.2), realized by an NP. The meaning difference between these two modes of expression is at present unclear.)

[4] -nhingi ABL₁ marks:

(a) the place from which the process (usually one which involves or implies the motion of some entity) started - see below section 5.2.3.1.

(b) time after which the process occurred - see section 5.2.3.2.

(c) the cause of a process - see section 5.2.3.6.

(d) the starting state of an entity when it first becomes involved in a process - see page 289 .

As has already been mentioned, -nhingi phrases may, in addition to fulfilling clausal roles, fulfil NP roles, usually Classifier and Qualifier. In these cases, the Entity is claimed to originate from a source. The major possibilities are:

(e) the animate source of bodily products, e.g. kampinyi jirikinhangi (egg bird-ABL₁) 'bird's egg'. (Animate beings are never referred to as

'owners' of bodily products and referred to by DAT PPs, or Oblique pronominals.)

(f) the originator of words, stories, songs, etc., as in ngapunhingi thangarnti (father -ABL₁ word) 'god's word/story'.

(g) a temporal or spatial origin of an individual, as in palyuwanhingi yuwulu (behind -ABL₁ man) 'today's people'.

[5] -yangka. This Postposition also indicates source or origin. The difference from ABL -nhingi is one of viewpoint: -yangka occurs when the situation is viewed as emanating from the source or origin; -nhingi 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. -yangka frequently translates into English as 'away from':

(3-85) wartji            jiljiyangka  
he went            sandhill -

'he walked away from the sandhill', or  
'he was walking away from the sandhill'.

(By contrast, the use of a -nhingi PP here would 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 cut-off point, beyond which -nhingi would have to be used: 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 -yangka PP - not by a -nhingi PP. Examples include the issuing of water from a pipe, or from the mouth (in example (3-86) below), emergence of a person from a cave, emergence of a bodily product from the body, throwing of an object from a car, removal of something (e.g. a thorn) from a place (e.g. a leg), and so on. By extension, processes such as looking may emanate from a source, the location of the sensate being (example (3-87) below).

(3-86) kampa            putlarri            nganyingka            thangarntiyangka  
water    I sprayed it    I - ERG            mouth-

'I sprayed water from my mouth'

(3-87) panyangiyanya (/or) yamatiyangka            milanginpirra  
outside -            car -            they saw me

'they looked at me from afar/from the car'

There is one example available in which a -yangka PP indicates a cause (see example (5-269) in section 5.2.3.6). Significantly here the situation is a happening, occurring at the same time that the process of the embedded clause took place: contrast the -nhingi cause.



Another use of -yangka is illustrated in the following examples:

- (3-88) nyawayangka      rirrwa  
tail -                      you'll pull it  
'pull it by the tail'
- (3-89) jampirriyangka      rurrupmi      jinali  
point -                      he pulled it out spear  
'he pulled the spear out by the end'

Here the -yangka 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 -yangka into -ya LOC + ngka ERG. Even if this is historically valid, it is not possible as a synchronic analysis. For, in all of the uses described above, -yangka is regularly stressed on its initial syllable; it is not stressed as a sequence of Postpositions.

[6] -yirra ALL marks

(a) a final terminus (place, position or thing) to which the process extends and reaches. In clauses involving motion of some entity, this is the final place that entity reaches (see section 5.2.3.1); where there is no motion, it is an end point 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.

[7] -yayi ALL₂, [8] -yayu ALL₃, [9] -yawu ALL₄. These Postpositions which are used only in 'local' senses, indicate the direction towards which the action proceeded. Unlike -yirra 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 this place or thing was ever reached, or was at any stage an intended destination. I have been unable to discern any semantic difference between the three forms.

All are apparently built on -ya LOC. In two cases the increment is identical with a form of the DAT, either -yu or -wu (see page 148 above). And the remaining form could easily have arisen from -yayu 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. Neighbouring Jaru, for example, has an Allative built on the Locative with the addition of -wu, an allomorph of the Dative (Tsunoda 1981: 55).

We can summarize the system of 'lative' Postpositions as follows:

	Focus on the Terminus	Focus on the motion
Motion towards	- <u>yirra</u>	- <u>yayi</u> , - <u>yayu</u> , - <u>yawu</u>
Motion from	- <u>yangka</u>	- <u>nhingi</u>

[10] -pinyi OR indicates

(a) direction or orientation with respect to a non-terminal point along a path, covering the senses 'through', 'along', 'beside', 'around', 'past', 'via', etc. - see examples (5-112) and (5-113) of section 5.2.3.1, and the following examples, in which the process is not one of motion:

(3-90) pilikapinyi      tangkalmi  
middle -              he chopped it  
'he chopped (the carcass) through the middle'

(3-91) yuwarnipinyi      pakingi  
one -                  I lay  
'I lay on/along one (side) (of the camp)'

(b) a foodstuff to be sought after, in clauses referring to hunting and gathering activities. For example,

(3-92) pirlapinyi      wirrijjawila  
yam -                  I might dig it  
'I'm going to dig for yams'

(3-93) muwyawila      thirrupinyi  
I might search      roo -  
'I'm going to search for kangaroo'

-pinyi contrasts with -yu DAT which can also mark the thing sought after, treating it as a type of 'purpose'. Where -pinyi occurs, there is never a specific entity in mind, the ultimate 'goal' of the action. (Consequently, the thing sought after is never cross-referenced by an Oblique bound pronominal in the VP - otherwise, muw- typically 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 -pinyi phrase are normally 'topical', and introduce the subject matter of the narrative in the most general way, as concerned with a particular type of hunting. Following sentences normally describe the details, the type of action undertaken in order to obtain the food. When -yu occurs, there is invariably a specific 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 warukupinyi (left-OR) 'left handed'.

On one occasion only, -pinyi was followed by the ERG Postposition - on repetition the ERG was omitted. The example was

(3-94) palyuwapinyingka      kilpawiti      thinga  
           behind -                    they found him      foot  
           'they found his footprints from behind'

The explanation of this remains unclear.

[11] -ngarri COMIT marks:

(a) Means - see section 5.2.3.3.

(b) Accompaniment, 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 (4-69)) or inalienable (example (3-95)):

(3-95) ngaraknga      kurnpu      kamungarri  
           he made it      woman      breast  
           'he painted a woman with breasts'

(As these examples show, this sense arises when the -ngarri PP fulfils a role in a phrase. It also occurs in Characterizing clauses - see section 5.2.1.1.1.2).

There are a few apparently irregular uses of -ngarri, where it might be suggested that this Postposition functions as a Stem forming suffix: yuwarningarri (one-COMIT) 'once', ngirntangarri (this-COMIT) 'this way', ngirntangarringka (this-COMIT-ERG) 'this side', ngurrungarringka (that-COMIT-ERG) 'that side', yinikangarri (how-COMIT) 'by what means'.

[12] -winyja DEP indicates something the lack of which causes the event to occur - see section 5.2.3.6, and examples (5-148) and (5-149).

[13] -yurru~yirri DU, and [14] -yarnti PL optionally mark the number of an NP as either dual or plural (three or more). See below page 224 for evidence that these morphemes are indeed Postpositions. Further examples, are (4-68), (4-76), (4-85), 4-86), lines (5), (18), (58) of Text 1, and line (6) of Text 2. (It is not clear what factors motivate the occurrence /non-occurrence of these morphemes on non-singular NPs.)

### 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 recursion, which is possible to a small extent with Postpositions and Stem-forming Suffixes.

The main Enclitics are:

<u>-muwa</u>	'only' (ON)
<u>-nyulu</u>	'etcetera' (ETC)
<u>-ngarraya</u>	'else, too'
<u>-wirri</u>	'identity unknown'
<u>-jangi</u>	'like' (SEM)
<u>-rni</u>	'next, now' (SEQ)
<u>-mi</u> ~ <u>-ma</u>	'indefinite, question' (IND)
<u>-nyali</u>	'repetition, again' (REP)
<u>-wu</u>	'definite' (DEF)

The meanings of these morphemes are discussed in section 6.3 below.

-jangi is exceptional for an Enclitic in that it sometimes forms a g-unit with the constituent to which it is attached (for example, (6-95) and (6-94) below). The fact that it does not always form such a unit justifies the classification of -jangi as an Enclitic. This, however, necessitates a slight modification to the definition of the first paragraph of this section: Enclitics do not necessarily form g-units with this unit to which they are attached. (Postpositions and Stem forming Suffixes always do.)

There is very little allomorphy (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 -mi are chosen depending on the class of the item to which it is attached: -ma if it is Verbal, -mi otherwise.

Two groups can be distinguished: the first, consisting of the six morphemes -muwa to -rni, are attached to non-verbal units only, while the remaining three occur with all units, verbal and non-verbal. When attached to non-verbal items Enclitics typically occur in final position, following all other bound morphemes. But in the VP, -ma and -nyali occur medially, in order class (3), labelled Mood in formula F1 (on page 157); that is, following the first grammatical 'word' of the VP. -wu, by contrast, follows the CC word, occurring in position (5), labelled Mode. Placement is not arbitrary; it largely determines the 'scope' or 'focus' of the Enclitic (v. section 6.3).

Sequences of Enclitics do occur, though too infrequently to allow me to make firm generalizations. I suspect that the order is meaningful. The most common sequence is -jangi-nyali SEM-REP 'just/exactly like', as in minyawu-jangi-nyali 'just like a cat'.

### 3.9 The Verb

In this section I discuss this structure of the 'Verb' - that distributional word and grammatical phrase which realizes the clausal role 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 can occur within a non-finite 'purposive' clause, in which construction it is followed by the -wu allomorph of the DAT Postposition (see page 147 above) - e.g. wart-ku (go-DAT) 'for going', payal-wu (swim-DAT) 'for swimming'. We have seen that Verbals as a class are phonotactically distinct from the other (lexical) word 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). Transitivity has a clausal locus, and a single Verbal lexeme may occur in more than one transitivity type of clause, unlike the situation in most Australian languages (Dixon 1980:278). Choice of Classifier may go some way towards distinguishing the transitivity of a VP - e.g. wart-ji (go-PAST/(3sg)N+I) 'he went' vs. wart-nga (go-PAST(3sg)N+A) 'he took it'. However, it proves equally impossible to distinguish transitivity classes at phrase level (see below section 5.2.1.3, and 6.5.5).

Verbals in Kuniyanti form a large open class of lexemes referring to all sorts of processes, including: states (e.g. wara- 'stand', paki- 'lie'); changes of state (e.g. nang- 'die'); motion, including induced motion (e.g. wart- 'go, walk, bring'); violent actions (such as kart- 'hit, fell', panangkarr- 'snatch'); perception and mental processes (e.g.

tanyili- 'hear, listen', mila- 'see, look'); communication (e.g. jangi- 'answer', jak- 'tell'), and so on.

### 3.9.2 The non-finite Verb

Within non-finite embedded clauses (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 -pari (section 5.5.3.1) or -mawu (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 addition of a (verbal) Stem forming suffix (v. section 3.12.2.1), or by the addition of an Infinitive, there seems to be little reason to regard the construction as a phrase. In contrast with the finite VP, it carries very little 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 or word node. (Postpositions and stem forming Suffixes, as distinct from Infinitives, are not constituents of the non-finite Verb, as 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, -ngka ERG is the only Postposition that 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 (v. section 5.2.1), in which they realize the role of Process. A finite VP consists of two obligatory constituents, a lexical 'head' referring to the process, and a Classifier Complex, which indicates person and number of certain 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 the 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) -  
 (1) (2) (3) (4) (5) (6)  
 (Number)  
 (7)

(Brackets indicate optional constituents).

As was claimed earlier, this unit is a single d-word of phrasal rank; it is not an inflectional form of the Process lexeme. The two obligatory constituents are g-words. The remaining optional constituents are Enclitics to these words. That is the latter do not form g-words with the former. There is no evidence, for example, that Root + Aspect is an inflectional form of the Root, or a distinct stem. Lacking such evidence, I make the weakest assumption, that the Aspectual markers etc. are constituents of the VP.

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 realizing Process, and the CC are usually distinct phonological words, but, as mentioned earlier (see pages 108 and 115) the boundary of the phonological word may shift forward, 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'. Enclitic morphemes of two or more syllables are usually phonological words, 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 (3sg) 0 pronominal Enclitic (v. section 3.9.3.6), and the allomorph <warri> of the paucal number enclitic (v. section 3.9.3.7).

(3) and (5) in F1 appear to be in complementary distribution; otherwise there are examples displaying choices from all other combinations of categories. Some examples (written phonemically) are:

(1) (2) (4) (5)  
 (3-96) karrik - kuwa - wingi - rni 'I could be away'  
 be away - PROG - I'll do -POT

(1) (2) (3) (4)  
 (3-97) pij - kuwa - ya - warni 'it might be arriving'  
 emerge - PROG - SUBJ - it will emerge

(1) (3) (4) (6) (7)  
 (3-98) jijak - ja - wirri - ngarraku - rru 'they might speak to me'  
 speak -SUBJ-they'll do it-(1sg)0-pa

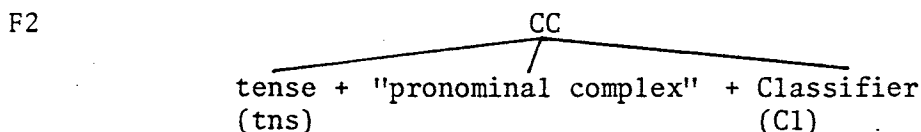
(1) (4) (5) (6)  
 (3-99) wart - pingi - rni - ngangki 'I could come to you'  
 go - I'll do - POT - (2sg)0





so irregular that they are best seen as exceptional; the rules necessary to derive them from regular underlying forms would be restricted to unique contexts of application, and have no phonological plausibility.

The CC can be described as follows:



That is, it consists of an obligatory tense marker, an obligatory "pronominal complex", and an obligatory Classifier. As the term suggests the "pronominal complex" is amenable to further analysis; since 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 description, see section 3.9.3.2.2 below). I do not, however, mean to suggest that this complex is an immediate constituent of the CC; it is recognized for convenience of description 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 Kuniyanti.

This analysis has (I hope) some theoretical validity; I do not know how much speaker validity it has, 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

There are twelve Classifiers, most of which have a unique underlying morphophonemic shape. They are listed in Table 3-6, together with some basic combinatorial and semantic information.

For each of the Classifiers -A, -ARRI, -PINTI, -ANI, -ARNI₁, -PIRLI, -ARNI₂ and -MARNI there is no non-phonologically conditioned allomorphy. Their ultimate phonemic shapes are affected by the following sandhi rules:

(1) Rule CCR9  $i+pi \rightarrow u$ . This affects -PINTI and -PIRLI, in case they are prefixed by a tense or pronominal prefix. Examples are:

```

<parn-ji+pinti>      'you returned'
  return-(2sg)N+PINTI
                    → parn-junti
                    → /parnjunti/

<ngap-li+pirli>     'I ate it up'
  eat-(1sg)N+PIRLI
                    → /ngaplurli/
  
```



In each case 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 realization. Both exceptions involve <ti>. Firstly, by rule CCR2 <t> assimilates in place to a preceding palatal, as in /ngangnginyji/ 'I gave you it' (see derivation on page 86 above). Secondly, with the person/number combinations (1sg) → (3sg) (i.e. first person singular acting on third person singular), (2sg) → (3sg), (3sg) → (2sg) and (3sg) → (3sg), the Classifier appears to have no phonological realization in any tense. For example, instead of the expected /ngangliti/ 'I gave him it' (from ngang- 'give', li- (1sg)N, and -ti '-TI'), /ngangli/ occurs; and instead of /ngangpingkiti/ 'he'll give you it' (from ngang- 'give', pi- FUT, ngki-(2sg)A, -ti '-TI'), /ngangpingki/ occurs. One way of accounting for these forms is by a rule deleting /t/ unless it is preceded by a consonant. This is the motivation for rule CCR5. Evidence in support of this proposal comes from the Progressive Present of verbs such as ngang- 'give' (which habitually collocate with -TI). The forms found have the vowel /a/, the expected shape given that -TI has the allomorph <-ta,> in non-past. The (1sg) → (3sg) form would derive as follows:

<ngang-kuwa-wi+li+ta,>	'I'm giving it to him'
	→ ngankuwa-wi+li+a, (t deletion)
	→ ngankuwa-wila, (VR9)
	→ /ngankuwaala/ (VR6 and CCR13)

This indicates the presence of the Classifier in underlying form, and I adopt this solution: otherwise the final /a/ is inexplicable.

A disadvantage with this solution is that it requires us to posit pirr- as a third person plural Accusative allomorph, in morpheme configurations where ri- and pi- (but not pirr-) are attested for other Classifiers.

The phonological realizations of the second allomorphs are determined by Rule CCR13, and of course by the two rules just discussed.

<a,> is realized by /a/ if followed by /w/. This occurs in three circumstances: when the DEF Enclitic -wu follows the CC, as exemplified in

<wart-wi+ji+a,-wu>	'you're going!'
go-PRES+(2sg)N+I-DEF	
	→ /wartkinyjawu/ (by CCR3, VR6, and CCR14))

secondly, when followed by the -warri allomorph of the paucal number marker (see below 3.9.3.7), as in

<ngang-pi+jin+ta,-warri> 'he'll give it to us few'  
give-FUT+(1R)A-TI-pa

→ ngangpinta-warri (CCR10)

→ /ngangpintaarri/

and thirdly when followed by the -wanhi allomorph of the third person singular oblique pronominal enclitic:

<jijak-wi+jirr+a,-wanhi> 'we talk to him'  
talk-PRES+(1R)N+I-(3sg)0

→ /jijakkirraanhi/(CCR10, VR6, and CCR13)

Otherwise <a,> harmonizes with the vowel in the preceding syllable of the CC, if there is one. Examples:

<ngang-pi+jarr+ta,> 'we'll give him it'

→ ngangparr+ta, (CCR12)

→ /ngangpata/ (CCR6)

<jangi-ja-pi+jirr+iny+pirr+pi+ma,>  
ask-SUBJ-FUT+(1R)N+(2sg)A+(3pl)N+(3pl)A+MI

'we might ask you lot'

→ /jangiyawirrinypirimi/ (CCR10, CCR7, VR2, VR3, and CCR13)

<wart-wi+pirr+a,> 'they're going'

→ wart-wurra, (CCR9)

→ wartkurru (VR6 and CCR13)

Finally, if <a,> is in the initial syllable of the CC it is realized by /a/. Example:

<ngang-pi+ta,> 'give him it'  
give-FUT+TI

→ ngang-pa, (CCR5, CCR14)

→ /ngangpa/

The second series of allomorphs, <ta,, ma,, and a,> account for the shape of the Classifiers in nearly all pronominal combinations in the Present and Future. The only exceptions are in the (3sg) → (3sg) form of the future of -TI and -I, where the shape of the CC in each case is /pi/, instead of the predicted /pa/, from underlying <pi+(t)a,>, which becomes pa,, ultimately /pa/; and in the same pronominal combination in the present tense of -MI, where the form is an invariant /mi/. The only way I can account for these forms is to assume that, exceptionally, they instantiate the first allomorph of each Classifier.

The remaining Classifier -PINI presents a more complicated and less regular pattern. There are three main allomorphs, <pini, pu and u>, the choice being morphologically conditioned. <pini> occurs in the

Past* and Irrealis tenses, and Progressive and Subjunctive Futures; <pu> and <u> occur almost everywhere in the plain Future, Present and Present Definite.

Since the latter are strongly orientated to the speech situation, and are the categories used most frequently in 'proposals' (Halliday, forthcoming) it may be worth speculating that the -pu allomorph derives from an earlier Imperative form of the Classifier which has now generalized to cover the corresponding Indicative categories. (See also footnote at bottom of page.) This is almost certainly how the zero second singular pronominals in (2sg) → (3sg) futures of other Classifiers arose: that is, by generalization of an Imperative.

<pini> can be affected drastically by the following rules:

(1) VR2 p → w/#X  $\left\{ \begin{array}{l} \text{[vocalic]} \\ \text{[consonantal]} \\ \text{[+continuant]} \end{array} \right\} - \text{___Z\#}$ . This rule applies only in case

<pini> is the sole constituent of the CC; this occurs only in the Past tense for (3sg) → (3sg), following a root final vowel or continuant:

<pilkurr-pini> 'he cracked him on the skull'  
crack skull-PINI

→ /pilkurrwini/

(2) Rule CCR7 rrp → r. This rule applies where <pini> follows the /rr/ of Nominative plural pronominals (see next section). For example,

<nyak-jirr+pini> 'we speared it'  
pierce(1R)N+PINI

→ /nyakjirini/

(3) Rule CCR4 n → rn/  $\left[ \begin{array}{l} \text{[vocalic]} \\ \text{[+retroflex]} \end{array} \right] \text{___}$ . This rule applies when <pini>

follows the -ri allomorph of the third person plural Nominative, when the morpheme follows a [-continuant] consonant. Example:

<kart-ngin+ri+pini> 'they hit me'  
hit-(1sg)A+(3pl)N+PINI

→ kart-ngin+runi (CCR9)

→ kartngint  $\left[ \begin{array}{c} \text{u} \\ \text{[+retroflex]} \end{array} \right] \text{ni}$  (CCR3)

→ /kartngunturuni/ (CCR4, CCR16)

(4) Rule CCR9 i+pi → u. Only the singular pronominals have final vowels, so this rule applies only in case of two singular actants (and then with the exception of the cases in which (1sg) is Goal, since the (1sg)A

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* As Rumsey has pointed out to me, in Ngarinyin -ni occurs with the cognate root pu~wu 'hit' as a past indicative marker (v. Rumsey 1982b:81). In Kuniyanti, however, -ni cannot be segmented from pi and identified as a tense or mood marker, as the other contexts of occurrence of -pini indicate.

pronominal has a final consonant). Examples:

<kart-li+pini> → /kartluni/ 'I hit him'  
hit-(1sg)N+PINI

<kart-ngki+pini> → /kartkingkuni/ 'he hit you'  
-(2sg)A+PINI

Construction of the CC with the <pu> and <u> allomorphs is somewhat irregular in terms of the construction of the "pronominal complex", which also varies according to whether it occurs with the Present or Future tense prefix. The <u> allomorph usually occurs following /rr/, of Nominative plurals (cf. CCR7) and <pu> elsewhere. For example,

<kart-wi+ng+iny+pu-wu> 'I hit you!'  
hit-PRES+(1sg)N+(2sg)A+PINI+DEF  
→ /kartkinypuwu/

<kart-pi+jirr+u> 'we'll hit him'  
hit-FUT+(1R)N+PINI  
→ /kartpirru/

There are however irregularities in the distribution of allomorphs. <pu> is restricted to the three categories mentioned above, but in just a few cases <pini> replaces expected <pu>. These appear to be irregular, and I do not attempt to explain them. Instead, the forms are tabulated in section 3.9.3.2.3. In some cases <pini> and <pu> both seem to occur, apparently in free variation. For example,

<kart-pi+ngkirr+ri+pu> 'you (pl) will hit them'  
FUT+(2pl)N+(3pl)A+PINI  
→ kart-pingkirrru  
→ /kartpingkurrru/

and

<kart-pi+ngkirr+pi+pini> 'you (pl) will hit them'  
FUT+(2pl)N+(3pl)A-PINI  
→ kart-pingkirr+puni  
→ /kartpingkuruni/

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 meaning.

Only one of the rules above, namely (4) or CCR9, also applies to <pu>, and in similar grammatical circumstances. (2) (i.e. CCR7) is prevented from applying by the choice of the /u/ allomorph following /rr/; (3) (CCR4) can only apply to <pini>; and (a) (VR2) cannot apply since there is always at least an intervening tense morpheme between <pu> and the Verb root. The following example illustrates the rule in conditions

as specified for (4) above:

<kart-wi+ngki+pu-wu> -PRES+(2sg)A+PINI-DEF	'he's hitting you!'
→ /kartkingkuwu/	

The function of a Classifier is to indicate the type of process referred to. It classifies the lexical word (realizing the function Process in F1) with which it occurs, thereby modifying its significance. Classifiers do not divide the verbal lexemes into disjoint classes. Most verbals collocate with more than one Classifier, and the choice between them distinguishes between processes referred to by the same lexical item which differ in terms of the features of meaning set out in the second and third columns of Table 3-6 (see also section 6.5.5).

Classifiers numbered (1) to (5), (9) and (10) may occur with pronominal prefix complexes referring to two actants in the situation referred to. However, all except (apparently) for -arri may occur with a single pronominal prefix, referring to a single actant. On the other hand, those numbered (6) - (8), (11) and (12) occur with only one pronominal prefix. I will refer to them as monovalent rather than Intransitive since they can occur in clauses of 'directed action' (section 5.2.1.3).

At the least 'delicate' level, Classifiers can be divided into two groups, those which classify the process as an Accomplishment, and 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 an Accomplishment, 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 actualized, 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 actualization, such as for example the nearing of a destination, in the case of the process 'arrive'. But, until the point of actualization is reached, the process cannot truthfully be said to have occurred. After the point has been reached, the process is usually completed and may then be described in past tense. By 'Extendibles' I mean processes without such points of completion: once started they can (potentially) continue on indefinitely. Examples include processes such as 'walk', 'sit', 'see', 'carry', etc. There is no inherent point of accomplishment.

Other meanings, very roughly glossed in the final column of Table 3-6 can be attributed to the individual Classifiers. These will be

discussed in more detail in 6.5.5. A few further remarks may be in order here.

Many more subdivisions are made within Accomplishments than Extendibles, in which there are only three subtypes, which very broadly correspond to the trichotomy transitive (-A), intransitive (-I) and reflexive/reciprocal (-ARNI₁). However, the importance of the major division Accomplishment/Extendible can be seen from the fact that all other distinctions are neutralized in the reflexive/reciprocal.

It is tempting to see -rni of -ARNI₂, and -MARNI as a reflexive/reciprocal suffix to the two Classifiers -A and -MI. However, -ARNI₂ chooses different allomorphs of the first person singular and has an irregular third person singular. And -MARNI cannot be regarded as consisting of the <ma,> allomorph of -MI, since (i) the first vowel of -MARNI does not harmonize with the preceding vowel, and (ii) rule CCR13 cannot be modified to give /a/ as the realization of <a,> preceding /rn/, since this does not occur when the /rn/ belongs to the Potential mode -rni (see below section 3.9.3.5). A special allomorph <ma>, occurring only before the reflexive/reciprocal -rni, would need to be proposed in order to account for the occurring forms. (The same problem would arise for the suggestion that -ARNI₂ should be segmented into -I-rni.) For these reasons I regard -ARNI₂ and -MARNI as Classifiers.

-PINTI is much more restricted in behaviour than the other Classifiers. It occurs only with singular pronominal prefixes, the corresponding plurals having the Classifier -I. For example, /nyamanilunti/ (from <nyamani-li+pinti>) 'I grew big', but /nyamaniwirri/ (from <nyamani-pirri+i>) 'they grew big' or 'they are big'. Furthermore, -PINTI 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 -I, as in /nyamaniwangi/ (from <nyamani-wa-ng+i>) 'I was getting big'. It is probably also for this reason that -PINTI is almost never found in commands, or other uses of language aimed at modifying the behaviour of the hearer, where -I is again favoured. (This is presumably because the focus is on engagement in the process over its completion.) Example:

(3-103) mangarri           tirip-wi+ngkira, -wu  
           not                enter-PRES+(2sg)N/PRES/I-DEF  
           'don't go inside'

Compare /tiripjunti/ 'you entered'.



### 3.9.3.2.2 Pronominal Complex

First I will consider the case in which the Classifier occurs with one pronominal prefix only; these are Classifiers -I, -PINTI, -ANI, -ARNI₂ and -MARNI. Table 3-7 shows the forms of the pronominals.

Table 3-7: Pronominal forms, 1-Valent Classifiers

	sg.	nsg.	
		R	U
1	ng- (Set 1) li- (Set 2)	jirr-	jarr-
2	ngk- (Set 1) ji- (Set 2)	ngkirr-	
3	∅	pirr-	

The first and second person singulars have two allomorphs, one which is designated as occurring with Set 1, which includes the Classifiers -I, -ANI, and -ARNI₂, the other with Set 2 Classifiers, -PINTI and -MARNI. There is a phonological correlate: the Set 1 Classifiers are vowel initial, while Set 2 are consonant initial. Examples:

Set 1:

<wart-ng+i> → /wartngi/      'I went'  
go-(1sg)N+I

<wart-ngk+i> → /wartkingki/      'you went'

(See VR7' for /ki/ insertion).

Set 2:

<parn-li+pinti> → /parnlunti/      'I got back'  
return-(1sg)N+PINTI

<parn-ji+pinti> → /parnjunti/      '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 -PINTI. The Set 1 prefix ngk- of the second person does not occur in /wartpiri/ 'you'll go'. (It is a rather common phenomenon across a broad spectrum of languages for imperative forms to have no second person pronominal (Kuniyanti does not distinguish future from imperative).)

The table shows third person singular as having zero realization. This is clear in examples such as the following with Set 2 Classifiers:

<parn-pinti>	→ /parnpinti/	'be returned'
return-PINTI		
<mirt-marni>	→ /mirtmarni/	'it's tied up'
tie -MARNI		

However, for the Set 1 Classifiers matters are not as simple. Firstly there is an irregular form pilakini for the third singular of -ARNI₂: wirrij-pilakini 'he scratched himself'. This form is prefixed by the appropriate tense markers in a regular manner, and 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. wart-ji 'he went', wara-yi 'he stood', nang-pani 'he died' paki-wani 'he lay down'. 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 is necessary because in certain cases, loss of underlying <w> gives rise to a long vowel, and the CC has no initial consonant in its phonemic realization.) The consonant inserted in each case is unexceptional: <j> preceding <i> and <p> 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 wi- and pi-, so consonant insertion is not required. There is one exception, in the unexpected form -puwani in the future of the Classifier -ANI (e.g. kartpuwani 'it will fall'), which has an inserted /w/. It seems reasonable to suppose that /w/ is inserted because of pressure to keep the past and future forms distinct. The rules would derive from underlying <kart-pi+ani>, the form /kartpani/, which is homophonous with the past tense form. The irregularity may be seen as further evidence for the proposed rule of consonant insertion, rather than as counterevidence, and I tentatively adopt this solution. Furthermore, this solution saves positing exceptional third singular allomorphs <j> and <p>, which would be deleted in 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  $j \rightarrow y/\#X \left\{ \begin{array}{l} \text{[vocalic]} \\ \text{[consonantal]} \\ \text{[+continuant]} \end{array} \right\} - \text{Z\#}$

Example: <wara-jirr+i> → /warayirri/ 'we stood'  
stand-(1R)+I

(2) VR2  $p \rightarrow w/\#X \left\{ \begin{array}{l} [\text{vocalic}] \\ [\text{consonantal}] \\ [+continuant] \end{array} \right\} \text{---} Z\#$

Example: <wara-pirri+i> → /warawirri/ 'they stood'  
-(3pl)+I

(3) VR7'  $\phi \rightarrow ki/ \left[ \begin{array}{l} \text{consonantal} \\ -\text{continuant} \end{array} \right] \text{---} \$_{cc} \text{---} \text{ngk Y } \$_{cc}$

Example: <warang-ngkirri+i> → /warangkingkirri/ 'you (pl) sat'  
-(2pl)+I

(4) CCR1  $rr \rightarrow n/\text{---}+m$

Example: <mirt-pirri+marni> → /mirtpinmarni/ 'they tied one another up'

The remaining seven Classifiers, viz. -A, -ARRI, -TI, -MI, -PINI and ARNI₁ and -PIRLI, are potentially bivalent. In the following three tables I give the underlying forms of the two member pronominal complexes, which occur regularly throughout the paradigm of each Classifier, with the exception of a small part of the future and present forms of -PINI (cf. page 161 above), which show certain irregularities. The exceptional present and future tense pronominal paradigm for -PINI 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 3-8A: Two Member Pronominal Complexes : First Person Agent

Agent Goal	(1sg)	(1R)	(1U)
(2sg)	nginy-	jirryny-	
(2pl)	ngkirryny-	jirrynypirryri-(-A, -ARNI ₁ , -ARRI) jirrynypiri-(-TI, -MI, -PINI)	
(3sg)	li-	jirr-	jarr-
(3pl)	lun-	jirryri-(-A, -ARKI, -ARNI ₁ , -MI) jiri-(-TI, -PINI)	jarryri-(-A, -ARRI, -ARNI ₁ , -MI) jari-(-TI, -PINI)

Table 3-8B: Two Member Pronominal Complexes : Second Person Agent

Agent Goal	(2sg)	(2p1)
(1sg)	ngin-	nginpirr-(-A, -TI, -ARNI ₁ , -ARRI) nginti-(-MI, -PINI)
(1R)	jin-	jinpirr-(-A, -TI, -ARNI ₁ , -ARRI) jinti-(-MI, -PINI)
(3sg)	ji-	ngkirr-
(3p1)	jun-	ngkirrr-(-A, -MI, -ARNI ₁ , -ARRI) ngkiri-(-TI, -PINI)

Table 3-8C: Two Member Pronominal Complexes : Third Person Agent

Agent Goal	(3sg)	(3p1)
(1sg)	ngin-	nginpirr-(-A, -TI, -ARNI ₁ , -ARRI) nginti-(-MI, -PINI)
(1R)	jin-	jinpirr-(-A, -TI, -ARNI ₁ , -ARRI) jinti-(-MI, -PINI)
(1U)	jan-	janparr-(-A, -TI, -ARNI ₁ , -ARRI) janti-(-MI, -PINI)
(2sg)	ngki-	ngimpirr-
(2p1)	ngkin-	ngkinpirr-(-A, -TI, -ARNI ₁ , -ARRI) ngkinti-(-MI, -PINI)
(3sg)	∅	pirr-
(3p1)	pin-	pinpirr-(-A, -TI, -ARNI ₁ , -ARRI) pinti-(-MI, -PINI)

These forms are posited on the basis of the shapes of the CC in past tense, which is realized by a zero prefix; in the other tenses initial /ng, j and p/ are lost by the sandhi rules as per 2.4.2.2. Secondly, sandhi processes operating between the pronominal complex and the following Classifier may affect the shape of the final consonant of the pronominal complex, its vowel(s), or the initial consonant and vowel(s) of the Classifier. Thus the underlying forms are obscured by sandhi processes, and the segmentation is not the only one possible - though it does seem to be the most economical. For example, in case the Classifier has an initial consonant, no posited final /rr/s of the pronominal complex actually show up in phonemic realization. Conceivably these forms might be treated as having no underlying /rr/. However, the assumption that they do allows for a more general account involving less allomorphy, and it also allows an explanation of the phonological shapes by fairly natural sandhi rules, which, in any case, are required elsewhere.

There are two irregularities, in which the predicted forms do not occur.

(a) The first occurs when second singular acts on third singular in future tense, in which case the expected pronominal ji- does not occur. An explanation of this is probably found in the general phenomenon mentioned earlier whereby the second person singular tends not to have overt realizations 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 case of 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, arri, and arni/. The forms actually occurring are /nga/(-A); /parri/(-ARRI) and /ngarni/(-ARNI). Again it seems reasonable to regard the initial consonant as inserted for phonotactic reasons. <p> is expected, as above; but it is not clear why <ng> is inserted in two cases. Furthermore, the sandhi rules predict that the (3sg) → (3sg) form of the Classifier -TI is /i/. Instead, the irregular form /jingi/ occurs. It is notable that these irregularities, however they are accounted for, occur just in those cases in which the CC is vowel initial in some underlying form.

It is clear that further analysis of the forms is possible. I suggest one possible analysis, but do not attempt to justify it, or show that

it is the best one possible.

The majority (75%) of the forms can be accounted for in terms of a sequence of two pronominals, one referring to the Agent, the other referring to the Goal. Each pronominal comes in two case-forms, a NOM(inative), referring to the Agent, and an ACC(usative), referring to the Goal; some of the case-forms have allomorphs. Table 3-9 sets out the forms, which account for all but the combinations involving a first and a second person actant.

Table 3-9: Pronominal Prefixes

	NOM	ACC
(1sg)	li-	ngin-
(1R)	jirr-	jin-
(1U)	jarr-	jan-
(2sg)	ji-	ngki-~ngim-
(2pl)	ngkirr-	ngkin-
(3sg)	∅	∅
(3pl)	pirr-~-ri-	pin-~-ri-~-pi-~-pirr-

The non-singular Nominative pronominals are strikingly similar in shape to the free forms:

<u>jirr-</u>	<u>ngiti, ngirangi</u>
<u>jarr-</u>	<u>yaati, yarrangi</u>
<u>ngkirr-</u>	<u>kiti, kirrangi</u>
<u>pirr-</u>	<u>piti, pirrangi</u>

It is tempting to segment the non-singulars into an invariant person marker followed by a number/case marker, /rr/ for the Nominative, and the corresponding nasal /n/ for the Accusative (cf. page 145 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 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 singular occurs for all Classifiers when the other pronoun is third plural (and in no other circumstances).
- (ii) The allomorph ri- of (3pl)NOM occurs with the Classifiers -MI and -PINI whenever the other pronominal is first person; or plural (any person), pirr- occurs elsewhere. From Table 3-8 it would appear that this

allomorph has an invariant shape /ti/; however, that it is underlyingly /ri/ is evident from the fact that when circumstances permit, the retroflexion modifies an initial apical consonant in the following syllable - as per rules CCR3 and CCR4. Example:

<kart-pin+ri+pini> 'they hit them'  
 → kart-pin+r_uni (CCR9)  
 → kartpinturni (CCR3 and CCR4)  
 → /kartp_unturni/ (CCR16)

(iii) For the third plural ACC, the choice of allomorph is as follows:

-ri-, if the other pronoun is first or second plural, -A, -ARRI, -ARNI₁ and -MI classifiers;  
 -pi-, in same circumstances, for -PINI;  
 -pirr-, in same circumstances, for -TI - the postulated final /rr/ never shows up phonemically: it 'supports' the initial consonant of the Classifier; and  
pin- 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

H2 ACC > NOM.

The symbol > indicates 'is ranked higher than', and in the present context indicates also the order - i.e. > is interpreted as 'precedes'. The second hierarchy H2, of course, applies only if the first fails to order the pronominals, which is when both are third person.

Eight forms from Tables 3-8A and 3-8C remain to be accounted for; those with a first and a second person actant.

Four of these can be dealt with fairly easily by a person-neutralization rule which has the effect of neutralizing the person of the lower ranking pronominal on H1 in case it is also outranked on H2. In other words, if  $x \rightarrow y$  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, neutralization has 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) → (2sg): ng+iny  
 (b) (1sg) → (2pl): ng+ngkirr+iny  
 (c) (1R) → (2sg): yirr+iny  
 (d) (1R) → (2pl): yirr+iny+pirr+ $\left. \begin{array}{l} \text{ri} \\ \text{pi(rr)} \end{array} \right\}$

This involves recognition of allomorphs ng- of the first singular NOM and -iny- of the second singular ACC (the latter involves a final nasal of the same point of articulation as the (initial) consonant of the NOM). It is fairly reasonable to assume that the posited underlying geminate /ng-ng/ of (b) would be reduced to the single /ng/ (geminate nasals occur, 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 (ngkirr-) followed by the second singular ACC (-iny-). A similar problem occurs in (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. -pi(rr) differs slightly from the choice elsewhere: -ri- occurs with -A, -ARRI, and -ARNI₁; -pi- with -MI and -PINI; and -pirr- with -TI. 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 3-7 with Table 3-9 shows 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 singular Set 1 form ngk- of Table 3-7 does not occur in Table 3-9; its closest relative on the latter Table is the Accusative ngki-. (The first singular ng- is not marked in Table 3-9 but has been subsequently discussed.) The evidence seems to justify regarding the members of Table 3-7 as NOM forms of the pronominal prefixes. All occurring forms are shown in Table 3-10.



Table 3-10: The Pronominal Prefixes

	NOM	ACC
(1sg)	li-, ng-	ngin-
(1R)	jirr-	jin-
(1U)	jarr-	jan-
(2sg)	ji-, ngk-	ngki-, ngim-, -iny-
(2pl)	ngkirr-	ngkin-
(3sg)	∅	∅
(3pl)	pirr-, -ri-	pin-, -pirr-, -ri-, -pi-

3.9.3.2.3 Irregularities in -PINI

In the following three tables I set out the paradigm of the CC for -PINI 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). (This is not necessarily the complete paradigm.)

Table 3-11A: Future and Present of -PINI, First Person Agent

Agent Goal	(1sg)	(1R)	(1U)
(2sg)	nginypini (SUBJ) (ng+iny+pini) nginypu (ng+iny+pu)	jirrinypini (SUBJ) (jirr+iny+pini) jirrinypu (jirr+iny+pu)	
(2pl)	ngkirrinypini (SUBJ) (ngkirr+iny+pini) ngkirrinypu (ngkirr+iny+pu)	jirrinypirini (jirr+iny+pi+ri+ini)	
(3sg)	lunu (FUT) (li+pinu) lu (PRES) (li+pu)	jirrini (SUBJ) (jirr+ini) jirru (jirr+u)	jarru (jarr+u)
(3pl)	lunpunu (FUT) (li+pin+pini) lunpu (PRES) (li+pin+pu)	jirini (SUBJ) (jirr+pini) jirruri (jirr+u+ri)	jarraru (jarr+a+ri+pu)

Table 3-11B: Future and Present of -PINI, Second Person Agent

Agent Goal	(2sg)	(2pl)
(1sg)	nginpu (ngin+pu)	nginpurru (ngin+pirr+u) (FUT) nguntorni (-ngin+ri+pini) (PRES)
(1R)	jinputu (jin+pu)	jinputurru (jin+pirr+u) (FUT) jintorni (jin+ri+pini) (PRES)
(3sg)	juni (ji+pini) (SUBJ) pu ( $\emptyset$ +pu) (FUT) ju (ji+pu) (PRES)	ngkurru (ngkirr+u)
(3pl)	pinpu ( $\emptyset$ +pin+pu) (FUT) junpu (ji+pin+pu) (PRES)	ngkurrru (-ngkirr+ri+pu)

Table 3-11C: Future and Present of -PINI, Third Person Agent

Agent Goal	(3sg)	(3pl)
(1sg)	nginpini (ngin+pini) (SUBJ) nginpu (ngin+pu)	nguntu(rni) (ngin+ri+pi(ni))
(1R)	jinpini (jin+pini) (SUBJ) jinputu (jin+pu)	jinpini (jin+pini) (SUBJ) jintorni (jin+ri+pini)
(1U)	janpini (jan+pini) (SUBJ) janpu (jan+pu)	janpani
(2sg)	ngkuni (ngki+pini) (SUBJ) ngku (ngki+pu)	ngimpirri (ngim+pirr+ini) (SUBJ) ngimpirru (ngim+pirr+u)
(2pl)	ngkinpini (ngkin+pini) (SUBJ) ngkinpu (ngkin+pu)	ngkuntorni (ngkin+ri+pini)
(3sg)	pini ( $\emptyset$ +pini) (FUT) pu ( $\emptyset$ +u) (PRES)	pirrini (pirr+ini)
(3pl)	pinpini (pin+pini) (FUT) pinpu (pin+pu) (PRES)	puntorni (pin+ri+pini)

## Remarks:

(1) As mentioned earlier, there seems to be little regularity governing the choice between the major allomorphs <pini~pu>. In some cases (such

as (1sg) → (2sg) <pini> occurs in the Subjunctive and Potential Future, but not in the unmodified Future or Present. For example, the Subjunctive Future for (1sg) → (2sg) with the verb kart- 'hit' is kartjawinyypini 'I might hit you', but the plain Future is kartpinypu 'I'll hit you'. The places where this is the conditioning factor for the allomorph choice are indicated in Table 3-11 by (SUBJ) next to the form. In other places (e.g. (1sg) → (3sg) <pini> occurs with the Future tense (irrespective of mood), while <pu> occurs with the Present. For example, compare nyak(ja)wuluni 'I'll/I might spear him' with nyakkuwaalu '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 complexes are formed regularly, though different allomorphs are chosen depending on tense, mood, and on the form of the Classifier. Where <pini> occurs, the pronominal allomorphs are those which go with <pini> elsewhere (i.e. in past tense etc.); for <pu~u>, the allomorphs are those which occur elsewhere, for -A, -ARRI, -ARNI, and -TI. (There may be one exception, the combination of (3pl)N with (1sg)A, in which <nguntu> and <ngurni> alternate.)

(3) The major irregularities occur with the two first person plural categories in combination with third person plural. The form <jirruri> for (1R) → (3pl) appears to involve <jirr> (1R)N, <u>, and <ri> (3pl)A, in an unusual order, and <jarraru> (1U) → (3pl) is probably analysable as regular <jarr+ri+pu>, with an epenthetic vowel. In the two forms with first person non-singular Goal, <jinipini> and <janpani> there is no (3pl)N prefix. The first is indistinguishable from the corresponding form for third person singular Agent, whilst the second differs from the corresponding (3sg) → (1U) in the (irregular) shape of its second vowel. Finally, in the Subjunctive of (1R) → (3pl) the (3pl)A prefix does not occur (but the form remains distinct from that of (1R) → (3sg) by (4) below).

(4) To explain the forms of (1R) → (2pl), (3sg) and (3pl) → (2sg) it was necessary to posit a further allomorph of -PINI, <ini>.

#### 3.9.3.2.4 Tense

Tenses, of which there are four, 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 realization. As already discussed, this can lead to the situation in which a CC is without an initial consonant. This occurs when the pronominal is zero, and the Classifier

has an initial vowel or <t>; the first condition arises when third 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 third singular acting on third singular.

[2] Future. The majority of future forms are constructed with the prefix <pi> - which regularly lenites to /wi/ following vowels and continuants - together with the appropriate form of the Classifiers -TI, -MI, -I and -PINI. The main irregularities in the construction of the Future lie in the pronominal prefixes; and, in the case of -PINI, 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 -ARNI₂. These are two of the three which choose the ngk- allomorph of the second person singular (Table 3-10 above):

<tumu-pi+ngk+ani> close-FUT+(2sg)N+ANI	'you'll clench (your fist)'
	→ /tumuwingkarni/
<mila-pi+ngk+arni> see-FUT+(2sg)N+ARNI ₂	'you'll look at yourself'
	→ /milawingkarni/

Elsewhere, with a single exception, the pronominal has been deleted.

Examples:

<wart-pi+φ+a> go-FUT+φ+A	→ /wartpa/	'you'll bring it'
<ngang-pi+φ+pin+ta,> give-FUT+φ+(3pl)A+TI		you'll give them it'
	→ ngang-punta,	
	→ /ngangpuntu/	
<kart-pi+φ+pin+pu> hit-FUT+φ+(3pl)A+PINI		'you'll hit them'
	→ /kartpunpu/	

It is still possible to claim that these forms involve the pronominal ji-, which has disappeared through the operation of rule CCR10. However, in that case, this strengthening rule 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 pronominal deletion occurs in imperatives in many languages. 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: wartpiri '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 -PINI, where, as distinct from the 'plain' Future, the (2sg)A prefix ji- occurs, as shown by

<kart-ja-pi+ji+pini>                    'you might hit him'  
hit-SUBJ-FUT+(2sg)N+PINI  
→ /kartjawinyjuni/ (CCR8, VR2, and CCR9)

(Compare /kartpu/ 'you'll hit him'.)

The two irregular futures of -I and -MI given in the next but last paragraph above are the only Futures which cannot be synchronically analysed as having the prefix pi-. (Even here it would be possible to analyse <-piri> as <pi+r+a,>, where an epenthetic <r> serves to keep this category distinct from the (3sg) Future.)

A number of morphophonemic sandhi rules affect the ultimate shape of pi- and the following syllable, sometimes coalescing them into a single syllable. 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 vowel of a vowel initial Classifier, rule CCR14 applies, to replace <i> by the following vowel. Example:

<paki-pi+ani> → /pakiwani/            'he'll lie down'  
lie-FUT+ANI

(b) Four rules collapse pi- with the following syllable, which must be either <pini~pu> (the allomorphs of -PINI), a first person or third person plural pronominal prefix (see the forms in Table 3-10 above), or the exceptional allomorphs <i> (of -I), <ti> (of -TI) in the third singular (as mentioned on page 162 above). They are:

(1) Rule CCR9.  $i+p \begin{cases} i \\ u \end{cases} \rightarrow u$ , exemplified in examples on page 178 above;

(2) Rule CCR10  $i+ji \rightarrow i$ , as in

<mila-pi+jirr+a> → /milawirra/            'we'll see it'

(3) Rule CCR11  $i+ngi \rightarrow i$ , as in

<kart-pi+ngin+pu> → /kartpunpu/            'you'll hit me'  
hit-FUT+(1sg)A+PINI

(4) Rule CCR12 i+ja → a:

<mila-pi+jarr+a> → /milawarra/ 'we'll see it'  
see-FUT+(1U)N+A

Forms such as /wartpingi/ 'I will go' may at first appear to be counterexamples to (3). However, this derives from <wart-pi+ng+a,> and since CCR13 is unordered with respect to, and hence simultaneous with CCR11 (see page 98), only the former applies. Thus:

<wart-pi+ng+a,> → wartpinga,  
→ /wartpingi/ (CCR13)

Having applied, CCR13 cannot be followed by CCR11.

(c) Finally there is a rule of vowel harmony R9, which changes <i> to /u/ when the following syllable has an u. Examples:

<kart-pi+li+pini> → kart-pi+luni 'I'll hit him'  
hit-FUT+(1sg)N+PINI

→ /kartpuluni/

<kart-pi+ngin+pu> → k'art-pinpu 'he'll hit me'  
hit-FUT+(1sg)A+PINI

→ /kartpunpu/

[3] Present. The formation of the Present tense category in the CC is largely regular, realized by the prefix wi- and by marked allomorphs of certain Classifiers (and occasionally of pronominal prefixes).

-I has irregular Present tenses for the singulars of each person, involving the infix -(i)r- between the pronominal and the Classifier. For the second and third persons the forms are the expected ones with wi-Present prefix, but for the first person,  $\emptyset$  occurs. The forms of the CC are then:

(1sg) -ngiri e.g. wartngiri 'I walk'

(2sg) -wingkiri e.g. wartkingkiri 'you walk'

(3sg) -wiri e.g. wartkiri 'he walks'

For non-singular numbers, the construction of the Present of -I is regular.

The reason I analyse these forms as having an infix -(i)r- rather than the more immediately obvious analysis involving a suffix -ri is that the final /i/ must derive from underlying <a,>, since the Present Definite forms are -ngirawu 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 (1sg) 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 -I, -ANI, and -ARNI, all of which choose the 'Set 1' allomorph <ng>:

<mila-ng+arni> → /milangarni/ 'I see myself'  
see-(1sg)N+ARNI₂

and

<kart-ng+ani-wu> → /kartngarnuwu/ 'I'm falling!'  
 fall-(1sg)N+ANI-DEF

However, there is no infix /-(i)r/ to distinguish the Present from the Past in the first person singular of -ANI and -ARNI₂: milangarni can mean either 'I saw myself', or 'I see myself'.

The realizations of <wi-> are affected first by changes to the vowel through the influence of following elements in the CC, and secondly by the rules of realization 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. I will examine here only the ultimate realizations of <w>.

(i) Following occlusive consonants, as rule VR6 indicates, <w> is realized by /k/. Examples:

<wart-wi+pirr+a,> 'they walk'  
 → /wartkurru/ (CCR9, VR6, CCR13)

<kart-wi+ji+pu-wu> 'you hit him!'  
 hit-PRES+(2sg)N+PINI-DEF  
 → /kartkinyjuwu/ (CCR8, VR6)

(ii) Elsewhere, <w> is realized by /w/ or  $\emptyset$ . The former occurs if the following vowel is /u/ or an inherently stressed /a/ or /i/. For example,

<payal-wira,> → /payaliri/ 'he swims'  
 swim-PRES/(3sg)N/I

<payal-wi+pirr+a,> → /payalwurru/ 'they swim'  
 swim-PRES+(3pl)N+I

<mila-wi+'jarr+a> → /milawarra/ 'we see it'  
 see-PRES+(1U)N+A

Contrast the last of these with:

<mila-wi+jan+a> → /milaana/ 'he sees us'  
 see-PRES+(1U)A+A

A following /u/ normally arises from underlying <ipi>, in the third person plural category (as in the second example above), and stressed /a/ arises from the first person Unrestricted Nominative prefix jarr-. (In this grammatical environment, <w> is never followed by a stressed i.)

[4] Irrealis. Irrealis has allomorphs <yi-~wi->. The second is homophonous with the present tense prefix; and in fact the Irrealis form of the CC is sometimes indistinguishable from the Present. This is especially the case in the unreal subjunctive (v. 6.5.4.1 below), which very largely falls in with the Present Subjunctive. (Elsewhere, the Potential

-rni serves to disambiguate non-future Potential from Present tense).

<yi> occurs immediately preceding third person pronominal prefixes,  $\phi$ , pin-, and pirr-, the first person Restricted jirr- and jin-, and sporadically (under conditions I cannot specify completely and precisely) before the first person Unrestricted jarr- and jan-. The initial <y> shows no sandhi alternations at morpheme boundaries: it invariably appears as /y/, following both vowels and consonants. The only processes affecting the eventual shape of <yi> are thus those which affect the vowel. This is affected in the same way, under the same conditions as have already been described for pi- FUT. For example (for explanation of the meanings see 6.5.3.2 and 6.5.4.1):

<kart-yi+pirr+pini-rni> hit-IRR+(3pl)N+PINI-POT	'they could have/almost hit him'
	→ /kartyurinirni/
<kart-ja-yi+pini> -SUBJ-IRR+PINI	'he might have hit him'
	→ /kartjayuni/
<talyarr-yi+jirr+ani-rni> slip-IRR+(1R)N+ANI-POT	'we could have/almost slipped'
	→ /talyarryirranirni/

<wi> occurs elsewhere, that is, preceding the first person singular, occasionally the first person Unrestricted, and the second person, both singular and plural. It shows precisely the allomorphy of the present tense prefix with which it is homophonous. A few examples are:

<kilang-ja-wi+li+arri> knock-SUBJ-PRES+(1sg)A+ARRI	'I might have knocked him'
	→ /kilangjaalarri/
<kart-wi+jarr+ani-rni> hit-PRES+(1U)N+ANI-POT	'we could have/almost fallen'
	→ /kartkarranirni/
<wart-ja-wi+ji+a> go-SUB-PRES+(2sg)N+A	'you might have brought it'
	→ /wartjaanya/

As remarked above, the four Classifiers -PINI, -TI, -MI and -I, which show tense-governed allomorphy, occur in their unmarked, or past tense forms in the Irrealis, which forms differ from their Present tense shapes. This fact alone serves to prevent a large amount of homophony between the Present and Irrealis. Examples:

<wart-wi+jarr+i-rni> go-PRES+(1U)N+I-POT	'we could have gone'
	→ /wartkarrirni/ (cf./wartkarra/ 'we go').



<wart-yi+i-rni> 'he could have gone'  
 → /wartyirni/ (cf./wartkiri/ 'he goes').

In just those cases where present tense <wi> does not show up, i.e. where the /ng/ allomorph of this first person singular occurs with monovalent Classifiers (-I, -ANI, and -ARNI₂), it does not show up in the Irrealis either. Examples:

<wart-ng+i-rni> 'I could have gone'  
 go-(1sg)N-I-POT  
 → /wartngirni/ (cf./wartngiri/ 'I go').

<kart-ng+ani-rni> 'I could have fallen'  
 → /kartnganirni/

### 3.9.3.3 Aspect

One morpheme only occurs in the second order class, the marker of Progressive aspect. This morpheme refers to the train of circumstances leading up to the point of actualization of an accomplishment, or to the subsequent train of events following this point of actualization. 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 -I, in case the latter occurs in place of -PINTI (see page 166 above).

The Progressive has three allomorphs, /kuwa~wa~a/, which are distributed as follows:

(i) /kuwa/ occurs following non-continuant consonants other than /p/. For example, /pijkuwangarni/ (emerge-PROG-it emerged) 'it was arriving'.

(ii) /a/ occurs following [+continuant] consonants, and the bilabial stop /p/. (It is not known whether this allomorph also occurs following an /m/.) For example, /takurrawani/ (insert-PROG-it fell) 'it was going inside', /tiripangi/ (enter-PROG-I went) 'I was entering'.

(iii) /wa/ occurs following vowels. For example /palawayingi/ (send-PROG-he caught it) 'he was sending it away'.

The shape of the allomorph following continuant consonants can be accounted by VR6, under the assumption that it is underlyingly <wa>. However, the allomorph /a/ following /p/ 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, rather than qualify the process referred to. They indicate the speaker's attitude towards or qualification of the proposition with respect to his, or his understanding of the hearers', presuppositions or presumptions. Their meaning is thus of the Interpersonal type (Halliday 1970:143), and for this reason I have labelled the position Mood. The fourth member of the order-class, -nyali REP, would appear to carry a distinct, though perhaps related type of meaning.

Two of the morphemes, -nyali REP and -ma, the allomorph of the IND occurring in VPs, are Enclitics which are not restricted to occurring in this position in finite VPs. Examples are: pakinyaliri 'he's lying down again', and wartmawiri 'you'll go?' (See above section 3.8, and below 6.3.2 and 6.3.8 for a discussion of the meaning of these morphemes.)

The two other morphemes are:

(i) <ja> Subjunctive Mood (SUBJ). This indicates the status of the proposition as a non-fact (see 6.5.4.1 for detailed discussion). As Rule VR3 predicts, it is realized by /ja/ following non-continuant consonants, and /ya/ elsewhere. For example: ngapjawila 'I want to eat (it)', and milayawila 'I want to see it'.

(ii) <wila> Factive Mood (FACT). This morpheme indicates the status of the proposition as a fact (v. 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 /k/ following non-continuant consonants, or otherwise is deleted; VR5 gives rules of realization of sequences of vowels that may result. I will not give examples of all possible realizations here, since they are exactly as detailed for the Present tense <wi>, on page 181 above.

### 3.9.3.5 Mode

Three morphemes occur in the order-class immediately following the CC, and are encliticized to it. They indicate the speaker's attitude towards the process, or, rather, the situation referred to by the clause, and its occurrence. In this respect they contrast with the Mood elements discussed in the last section, which qualify the proposition expressed. The three morphemes are:

<u>-nyji</u>	Desiderative	(DESID)
<u>-rni</u>	Potential	(POT)
<u>-wu</u>	Definite	(DEF)

The labels are approximate; the significance of the morphemes will be discussed in some detail in sections 6.5.3.

The 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 CCR13, <a,> preceding the Definite mode enclitic is realized by /a/ - compare /wartngirawu/ 'I'm going!' (from <wart-ngira,-wu>) with /wartngiri/ 'I go'. Like the majority of monosyllabic enclitics, -rni, -nyji, and -wu cohere with the CC, constituting a single phonological word with it.

Whereas -rni and -nyji occur only within finite VPs in order-class (5), -wu 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. 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 -wu, in the available examples, occurs only with Past, Present and Future, never Irrealis.

### 3.9.3.6 Oblique Bound Pronominals

The Oblique bound Pronouns are encliticized forms of the Oblique forms of the personal Pronominals (discussed in 3.6 above). They refer to Affected participants in most clause types, and to the Goal in Middle clauses (see 5.2.1.3 for details and examples). These pronominals are obligatory in VPs in all Middle clauses and clauses with Affected participants. They are given in Table 3-12. (Compare Table 3-5).

Table 3-12: Oblique Bound Pronouns

	sg	nsg	
		R	U
1	ngarra(ki)	ngirrangi	yarrangi
2	ngangki	kirrangi	
3	nhi ~ wanhi	wirrangi	

## Remarks:

(i) As this Table shows, the final syllable of the first person singular form may (optionally) be elided: both wartpiringarraki and wartpiri-ngarra 'come to me' occur, apparently in free variation.

(ii) The third person non-singular has the invariant form /wirrangi/. Since this enclitic always follows a vowel, and bears initial stress, it could be written morphophonemically as either <wirrangi> or <pirrangi>, the latter being the form of the corresponding free pronominal. I will, however, represent it in the least abstract way, by <wirrangi>.

(iii) The third person singular enclitic shows slightly more divergence from its corresponding free form pronominal, nhuwu. In addition to the monosyllabic <nhi>, I have postulated a second (unusual) allomorph, <wanhi>. The reason for this is to explain a range of forms involving the Classifiers -I, -TI and -MI in non-past tenses, where their allomorphs <a, ta, and ma,> occur, such as the following: /wartpiraanhi/ 'go up to him', and /jakjawilimaanhi/ 'I'll talk to him'. Preceding the other Oblique pronominals, the final vowel of the CC is the expected one, namely /i/- /wartpiriwirringi/ 'go up to them', and /jakjawilimiwirringi/ 'I'll talk to them'. The easiest way of accounting for these alternations is to assume that the third singular pronominal has the form <wanhi> when following <a,>; the long /aa/ vowel (as in the examples above) is derived by VR5.

There is a further, exceptional, pronominal enclitic -ngangi, infrequently used in reference to the speaker-hearer pair, i.e. it is a dual inclusive form of the first person), in either an Affected or Goal function (irrespective 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/ 'he saw me and you', the Goal is referred to in the CC by the ACC prefix jin- (1R) and by ngangi in addition. The latter restricts the possible reference of the former to just the speaker and 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 -ngirringi. The two are not however in complementary distribution. Both wartjingangi 'he came up to me and you' and wartjingirringi 'he came up to us (R)' 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 a third 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 in the CC, or an Oblique pronominal enclitic) is of non-singular number. It can modify any one of the up to three non-singular pronominals that may occur in a VP. In case there is more than one such non-singular category, the question arises as to which one the number applies to. I have been unable to provide a categorical answer to this question. Moreover, I doubt if 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 preceding 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 non-singular things are a little more complicated. Naturally 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 paucal may modify the Restricted first person plural, but the dual is used only when a pair, one of which is the speaker, and the other a third person, is referred to. 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 milayirrayi (see-(1R)N+A-DU) can only mean 'We two (exclusive of the hearer) saw him'. It cannot mean 'We two inclusive saw him'. (As mentioned in the previous section, the irregular form -ngangi 'we two inclusive' could be used in place of -yi, and refer to the speaker and hearer pair; but this only when they are Goal or Affected. -ngangi could not be used in a VP with a meaning such as 'we two inclusive saw him'.)

The number enclitics have the following allomorphs:

/-yi ~ -yu/	'dual'
/-rri ~ -rru ~ -warri/	'paucal'

The first allomorph in each case seems to be the most frequent variant, occurring following /i/ or /a/, while the second allomorph usually follows /u/. Some examples are: wart-pirri-yi 'they 2 went', wart-kurru-yu 'they 2 go', ngap-jirra-yi 'we 2 (exclusive) ate', mila-winpirra-rri 'those few will see me', mika-rlimi-wirrangiyi 'I told them 2', mika-winmi-ngarraki-yi 'they 2 told me'.

A third allomorph of the paucal, -warri, occurs in exactly the same

circumstances as the allomorph -wanhi of the third person singular bound Oblique pronominal, namely in the environment of non-past tense forms of the Classifiers -I, -TI and -MI, i.e. following <a,>. Examples:

- <wart-wi+pirr+a,-warri> 'they few go'  
 go-PRES+(3pl)N+A-pa  
 → wart-wurra,-warri (CCR9)  
 → /wartkurraarri/ (VR6, CCR13)
- <ngang-pi+ngin+ri+ta,-warri> 'they few will give me it'  
 give-FUT+(1sg)A+(3pl)N+TI-pa  
 → ngangpinta,-warri (CCR11)  
 → /ngangpintaarri/ (VR6, CCR13)

### 3.9.3.8 Summary: Interpretation of the Finite VP

The structure of the VP can be summarized 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. The order reflects a progression from specific to general, in terms of lexical content, and at the same time, paradoxically, a progression from the item that is least specific and individuating, in terms of pinning down the process to reality, 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 occurrence, in itself, 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 a process emerging into instantiation; Repetition (realized by -nyali) refers to repetition of a process, with or without the same participants, not to the repetition of an instantiation. On the other hand, the categories labelled Mode concern the occurrence and actualization of a process; it is the enactment which is seen as desirable, definite or potential. Enclitics attach to the words 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, not fulfilling any role within them or entering 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 (v. 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 as Interjections. For example, yuwulu! 'man!', can be used as a complete utterance, to attract someone's attention. But these words also (in their normal usage) occur in major clauses.

The class of Interjections includes:

<u>pa</u>	'come on; let's go'
<u>nya</u>	'here you are (take this)'
<u>kay</u>	'go on'
<u>kaj</u>	'O.K., you can go'
<u>ngay, yay</u>	'hey!' (attracting attention)
<u>pay</u>	'eh?'
[^ [^] ]	'O.K.'
[^?^] [n?n?]	'yes, that's right/you're correct'
<u>yuwu, yuwayi</u>	'yes'
<u>wa'rawu</u>	'youch!', an exclamation of pain
<u>warriwarri</u>	'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.
<u>wila</u>	'finished, complete', may be used to conclude a story, or an episode within a story (e.g. line (13) of Text 2.
<u>wilawu (=wila -wu (DEF))</u>	'goodbye'

Except for those of 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 phones not found elsewhere: [^] and [?] do not distinguish 'linguistic' (as on Table 3-1) words/morphemes.

### 3.11 Sound Effects

By "Sound Effects" I refer to onomatopoeic words imitative of noises; they are probably used mainly for stylistic effect, giving the text a flavour of the reality referred to.

Kuniyanti has a very large and rich subclass of bird and animal calls, which are normally phonologically regular, but typically uttered in a distinct, higher, voice register. Some examples are

/tiyatiya/ → ['tiʌ'tiʌ] (peewee's noise)  
 /kikik/ → ['ki'ki:k] (neigh of horse)  
 /klikklik/ → ['kli:k'kli:k] (noise of eagle)

These animal mimic words may occur as citations within a clause, as in

(3-104) wutwut            tumpu            jijakji  
                          owl                he said

'The owl hooted "wutwut"'

The cited noise may still be uttered in the distinct voice register. In addition, most (all?) mimicked calls may be phonetically normalized (i.e. uttered in a normal voice register), and realize linguistic functions, typically the Process of a VP.

(3-105) karnpirra            klikklik-kiri  
                          eagle                        -he goes

'Eagle goes "klikklik"'

(3-106) tiyatiya            plirrij-kila-yi  
                          peewee                        -FACT-he went

'(place where) the peewee went "plirrij"'

Furthermore as (3-106) shows, some of the calls have been lexicalized as the name of the bird that makes that call.

Other sound effects mimic other natural noises, and they are not always phonologically regular. An example is [nə:], imitating the sound of someone falling from a great height. It probably makes sense to include in the class of sound effects words such as wirriwirriwirriwirri, suggestive of tumbling down head over heels, (e.g. out of a tree). Although this is not imitative of the sound, it is suggestive of the movement. No doubt the class is much more extensive than this; but as yet I have not undertaken a systematic investigation of it.

### 3.12 Word Formation

There are two main processes whereby new lexical stems are formed from roots: suffixation and reduplication. There are also some regularities in the structure of lexical roots. Many of these regularities are accounted for by the same two processes, suffixation and reduplication. These processes are, however, less productive here than they are in stem formation.

Furthermore, in the case of root formation, the 'processed' units have no independent morphemic status, and the roots are morphologically unanalysable. I refer to the units involved as 'formatives'. As has



already been mentioned, formatives are indistinguishable from root phonologically and phonotactically. 'Inherent' reduplications (i.e. where a root is a 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 meaning. For example, the form kimangarna 'bushman' clearly involves the suffix -ngarna 'dweller of, inhabitant of', although in this particular case it is not morphologically segmentable, and kima does not appear to occur elsewhere. Thus kimangarna must be regarded as a root, whose meaning is built up partly by -ngarna. In this section I will be mainly concerned with stem formation, but mention of root formation will be made where appropriate.

### 3.12.1 Nominal Word Formation

#### 3.12.1.1 Nominal Stem Forming Suffixes

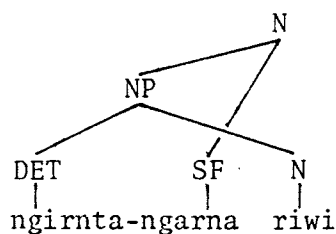
These suffixes are usually attached to roots to form stems belonging to the Nominal class. They may, however, be attached to phrases or even clauses. For example,

(3-107) ngirntangarna      riwi      'inhabitant of this country'  
           this    - DW            camp

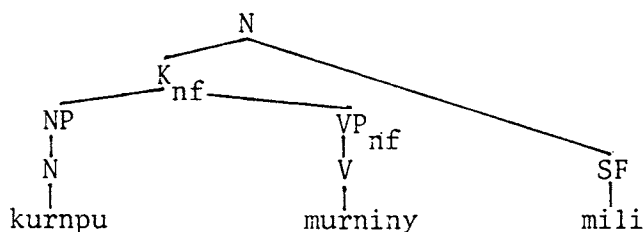
(3-108) kurnpu            murninymili      'one who is promiscuous with women'  
           woman            fuck -CHAR

I analyse such examples as embeddings, with rankshifts from phrase/clause to word (v. page 113). Thus (3-107) and (3-108) have the following structures:

(3-109)



(3-110)



Some evidence for this is that the resulting construction, here labelled N, must realize a role within the structure of the NP, and cannot (unlike PPs which they closely resemble) realize a clausal role. (To put it loosely,

there is always an intervening NP node between the construction and the dominating clausal node.) I discuss the 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,

(3-111) ngirntaji            walwarrangka            kampangarna  
           this                crocodile                water-DW  
           'this (species of) crocodile is a water-dweller'

(3-112) yanya            kampangarna-nyali            kiwili  
           other                -REP                water goanna  
           'yet another water dweller is the water goanna'

-ngarna can be used with place-names, though this is not frequent. E.g.: Fitzroyngarna 'denizen of Fitzroy Crossing'. But by far the most frequent construction has -ngarna attached to 'common nouns' referring to ecological niches, such as kampangarna (in (3-111) and (3-112) above), kiliwurlungarna 'limestone range dweller', etc. There are a couple of instances of the suffix attached to Adverbials (and to phrases - (3-107) above). For example,

(3-113) yalawangarnangka            kirippiti  
           nearby -DW -ERG            they finished it  
           '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 ('soldiers') is referred to as karlatingarna 'yellow ochre -DW'. It was customary for the avenging party to paint themselves with ochre before going out to effect the revenge; there was no suggestion that the avengers were from a place noted for its ochre. A more general gloss for -ngarna may be, as suggested by Rumsey (p.c.), 'characterized by a circumstantial association with'.

[2] -mili. -mili can be attached to Nominal and Verbal roots (as well as clauses, example (3-108)), to form a Nominal stem. It can be glossed roughly as '(one who is) characterized 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, kampamili (water-CHAR) 'a drinker, drunkard', yuwulumili (man-CHAR) 'a (woman) in habitual association 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. muyumili (sleep-CHAR) 'lazy', thirrimili (fight-CHAR) 'angry'.

Attached to Verbal roots (or stems), -mili indicates 'one who typically does':

(3-113) niyaji      kurnpu      jidakmili  
           this        woman      speak

'this woman is a real talker'

(3-114) kurnpu      murninymili      jakmingarra  
           woman        fuck-CHAR      she said - to me

'the promiscuous woman told me'

(Contrast (3-114) with (3-108) above, in which kurnpu belongs to an embedded clause.) I say 'root or stem' because -mili may follow Verbal Stem-forming Suffixes such as -ji 'Iterative' - e.g. ngangjimili (give-IT-CHAR) 'a giver'. Further examples can be found in section 5.5.1.1.

[3] -kali~-( $\left. \begin{matrix} w \\ y \end{matrix} \right\}$ )ali      This suffix can be added to Nominals, Adverbials

and Verbals. It characterizes someone (or something) as 'good at doing something in respect of'; it is agentive like -mili. Some examples are:

(3-115) ngarraki      kalyjinkali      yawarta      'My racehorse'  
           my            fast-            horse.

(3-116) ngarraki      tharra      maaali  
           dog            meat-

'My dog is a good hunter'

The allomorph /kali/ occurs following non-continuant consonants, as in kalyjinkali 'speedy' (see also above page 57), wupkali (cook-GD) 'good cook'. /ali/ occurs following /a/: maaali (meat-GD) 'good hunter'.

Following words with final /i/ or /u/, the phonetic realization is ['ali]: ['kawi'ali] (fish-GD) 'good fisherman', ['tʷnəŋdʲi'ali] (talk-GD) 'good talker', ['tʷɹu'ali] (kangaroo-GD) 'good kangaroo catcher'. Since the sequences /ia/ and /ua/ do not otherwise occur, and since these forms may be accounted for as realizations of /kawiyali/, /thangarntiyali/, and /thirruwali/ respectively, by the realization rules of 2.1, I will assume that the allomorphs are /yali/ and /wali/ following the vowels /i/ and /u/ respectively.

Alternatively, it might be proposed that the morpheme has underlying shape <wali>, and does not bear inherent stress. VR4 would account for the hardening to /k/ 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 on page 204 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: ngapuwa 'his father', ngarranyuwa 'his mother', and karingiwayurru 'his two wives'. I have mentioned that terms such as jali 'peer, agemate', narruku 'namesake' are also treated as kin-terms. In (3-117) jali is extended to the animal world:

(3-117) minyawu        tharra        jaliwa  
                   cat                dog  
                   'cat and dog are 'mates'' (i.e. two of a kind)

This -wa is perhaps also the source of -wa in kirlingkuwa 'male of an animal species'. (kirlingki is the term for 'penis'.) However I would hesitate to analyse the term synchronically in this way.

[5] -pati. When attached to a kin-term, /pati~wati/ indicates 'your (sg/nsg) relative': ngarranypati 'your mother', ngapuwati 'your father', karingiwatiyurru 'your two wives', etc. Note that there are no suffixes indicating first person 'possession'; often use of the plain kin-term itself suggests that it is the speaker's relative, e.g. karingi is often used in the sense of 'my wife'.

As the examples above show, <p> lenites to /w/, as per rule R1. However, the free forms of words which are followed by -pati invariably have a final vowel, which is always [+high] and almost always [+front]. It was suggested above (page 57) that the consonant final forms of these kin-terms are allomorphs conditioned by the presence of -pati.

[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 case of triangular terms: see page 6). Examples are: ngapulangi 'father and son (or daughter)', marnalangi 'brothers' (marna 'B₊'), nyanyilangi 'a pair in the uncle - nephew relation' (nyanyi 'MB' etc.).

In cases where non-reciprocal terms would be used between the two individuals, a choice must be made between the two terms. It is beyond the scope of this thesis to investigate 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 that is chosen, as the three examples above illustrate. But note that karingilangi is the normal term for a husband and wife pair,

while ngumparnalangi does not occur. Instead there is the irregular ngumparnarra, almost certainly a borrowing from the Pama Nyungan languages to the south. (-(ra)rra is the regular kin dyad marker in Wangkajunga (my own fieldnotes), and Ngaanyatjarra (v. Glass & Hackett 1970:66).) Against these most frequent choices, the marked options usually also occur; for example, ngaluwinyilangi (ngaluwinyi 'offspring of a male') sometimes occurs instead of ngapulangi. It seems that -langi may refer to more than two individuals; karingilangi '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] -warnu 'all members of the subsection', [8] -wangku 'person associated with the place', and [9] -warrawarra '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 not at present able to account for the alternation in the final vowel.) The initial syllable 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,

<yuwulu-wanyiy> → /'yuwu'laanyi/      'a different man'  
man

<riwi-wanyiy> → /'riwaanyi/      'other place'  
country

-wanyi is 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,

(3-118) ngirntaji      yuwulu      yuwulaanyi  
this              man              man-  
'this man is a different (type of man)' (e.g. he's from a different country.)

(3-119) ngunyiya      karntiwirraanyi      kurnpuyurru      ngunyiya  
which-LOC      two-              woman -DU      which-LOC  
katjunpini  
you left them  
'where did you leave the other two women?'

And in (3-120), -wanya is followed by a Postposition:

(3-120) riwaanyiya      warangngi      'I sat at another place'  
camp -LOC      I sat

In reference to action that is done with respect to a variety of instantiations of a single type, a common mode of expression is by reduplication of a -wanyi Nominal. E.g.:

(3-121) riwaanyi            riwaanyi            pakiwirri  
           place-different place-different they lay  
           'they lay scattered all over the place'

There is a single example which does not seem to fit the description proposed:

(3-122) yarrangi        thaanungku        marlami        pilikaanyi        marla  
           I reached up        up                nothing        middle-            hand  
           pakingi  
           I lay

'I reached up, but couldn't get it; my hand only went halfway'.

Note the striking similarity in both form and meaning with yanya '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 half a dozen instances, which indicates a kind of negation, and usually translates into English as 'un-' or '-less'. Examples are pinarriyila (know-yila) 'unknowing, know nothing', yingkiyila (for some duration of time -yila) 'for a short while', and matikayila (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 Kuniyanti. 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, or what other factors condition the type employed.

Reduplication proved impossible to elicit systematically: although its semantic effect as described in this section is clearly 'experiential' (see section 5.1), it carries a high expressive 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 1976(a):49-50). When reduplicated forms arose in elicitation sessions, it was spontaneously. This section describes broad trends only; detailed characterization awaits future, text-orientated investigation.

Partial reduplication involves repetition of two syllables only, 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 three syllables.)

In partial reduplication, it is normally the first two syllables that are repeated, and prefixed to the full form of the root. For example, kampakampayi 'young boys' from kampayi 'young boy', karikaringi 'wives' from karingi 'wife', nyamanyamani 'many big ones' from nyamani 'big'. In one case a partial reduplication included a part of the third syllable (a nasal homorganic with a following stop), as a syllable closing nasal in the prefix: jarranjarranti 'twigs' from jarranti 'twig'. This harks back to the question of the status of final /nti/ sequences (above page 57-8).

Occasionally it is the final two syllables that are reduplicated, as in jikinyakinya 'very little' from jikinya 'little'.

Some words occur in both partial and total reduplication, with unclear semantic difference: parntanyi 'old woman', and parntawarntanyi, parntanyiparntanyi 'old women'.

Reduplication normally indicates plurality. Nominals in Kuniyanti 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 Numeral (v. section 3.3.4), number Postposition (section 3.7), or, in the case of human and higher animate 'participants' (v. page 235 below), by non-singular pronominals and number enclitics in the VP (section 3.9.3). It is not certain precisely how reduplication differs from the less marked means of indicating plurality. However, reduplications normally seem to suggest vagueness, generality, or distributiveness of reference, that the reduplicated stem refers to a whole as a single entity, ignoring the individuality of the entities making it up. For example, reduplications of 'human reference' terms, such as pulkawulka 'old men' from pulka 'old man', and parntanyiparntanyi 'old women', are normally used generically (see lines (1) and (6) of Text 2). And kampakampayi 'young boys' (cited above) occurred in a text describing initiation, and may be glossed 'all the young boys'. Reduplications of other Nominals show a similar pattern. For example: takurla 'depression, hole' reduplicates to takurlatakurla 'covered in depressions', used to describe a rough (dirt) road; similarly jarringki 'sharp, a point' reduplicates to jarringkijarringki 'covered with sharp points', used to describe a limestone range. In keeping with this, Numerals do not normally modify reduplicated Nominals.

In some cases reduplication seems to have an effect of intensifica-

tion, especially where the Nominal is used as a modifier (cf. below 3.12.3.2 for Adverbials). For example, jikinyakinya 'very little' (cited above page 197), and wirrkawirrkarli 'blue' (of sky), from wirrkarli, a colour term covering the range from blue to green.

There are a fair number of independent 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. In all cases, the reduplication involves two syllables of the formative, usually the first two, which are prefixed to the formative. For example, kurukuru 'black' pinypiny 'crimson chat', pinyjawinyja 'shell pendant', karntakarntati 'food pipe'. (Contrast Walmajarri karntarrkarntarr 'interior of throat' - Hudson 1978:97). As already mentioned, formatives are phonotactically regular - for example, they are of at least two morae, and are treated (for the purposes of stress) as independent words, each having an initial stressed syllable. They also show /p → w/ lenition (third example above), which occurs in stem forming reduplication, and consonant clusters occurring at formative boundaries appear to be as for stem forming reduplication (cf. page 65). 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, and to a lesser extent animal and plant names account for most of this type of reduplication. The process is iconic to the extent that the formatives involved frequently form part of the accepted renderings of the calls of the birds. For example, tiyatiya 'peewee', one of whose calls is [ 'tiʌ, tiʌ? 'tiʌ, tiʌ ] (uttered in a 'high' voice register - page 189 above).

Morphologically unanalysable roots may be perspicuous reduplications of independent verbal roots, which signify a characteristic activity (instead of a call) of the species. An example of this is yapunaparpar, a species of snake which, as mentioned on page 67, habitually climbs (par) in the yapuna tree. Perhaps another example is kirrakirrayi, reduplicated kirra 'run' (plus -yi which appears to be the third person singular past form of the -I Classifier), which refers to a water bird of 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 which form verbal stems from verbal roots; the stems invariably differ in meaning from the roots from which they are





I am not sure precisely what conditions the choice of -mi; the lexical roots appear to usually collocate with -MI. Examples are: pinarrik-mi- nginpirra (teach-IT-they did to me) 'they taught me', and malap-mi-la (do-IT-I did (to) it) 'I made it'. The first of these was used to refer to the repeated task of teaching me Kuniyanti; by contrast, pinarrik- refers to a single event, such as teaching someone a single fact.

[2] -pan. This morpheme is not very frequent, so it is not possible to be sure of its full significance. It seems to be suffixed to roots referring to non-extendible 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 IT discussed in [1], the individual subprocesses constituting the situation referred to flow into one another, and they cannot really be seen as discrete. I will refer to this morpheme as Continuative (CTV). The new stem appears to always occur with the Classifier -I. Some examples are: put-pan-kiri (spill-CTV-it goes) 'it spills out' (e.g. as in water spilling out of a (full) bucket continuously while it is being carried along), and nirt-pan-kiri (stick-CTV-it goes) 'it's stuck (there)' (e.g. of bone in throat). Contrast, respectively, putpani 'it spilt out', and nirtpani 'it got stuck'. One speaker described the meandering Fitzroy River as wilaj-pan-ngarra, where the final morpheme is presumably an instantiation of -ngarri COMIT. The lexeme wilaj- means 'go around', and is a non-extendible process; the derived stem wilaj-pan- can be used in the sense of going around and around, as for example in reference to the circling of an eagle or kite:

(3-123) puluku            wilaj-pan-kiri            'the hawk is circling around'  
                         hawk

Rule R1 applies to lenite the initial <p> to a /w/ in the specified circumstances - for example, talyarr-wan-kiri (slip-CTV-it goes) 'he's slipping along'.

[3] -ki. Again -ki is very infrequent, occurring on only half a dozen or so lexical roots in my data. In fact, it is not certain that -ki is not an Aspect marker (like -kuwa~wa~a). 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 -ki. "Inceptive" (INC) will do for the present. Roughly, it indicates that an accomplishment process with a definite starting point (see below page 459) has started to occur, but has not yet ceased.

For example, consider the lexeme parn- 'return'. This process is treated as an accomplishment, and is classified by -PINTI. 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: parn-ki-ngi (return-INC-I went) 'I started back'. Contrast parn-kuwa-ngi (return-PROG-I went) 'I was going back'. Presumably both INC and PROG may be used in description of the same event, with only the perspective differing: 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 paj- 'to get up and go, to set off ': paj-ki-ngi (set off-INC-I went) 'I get up and went, I started off'. Contrast this with paj-kuwa-ngi (set off-PROG-I went) '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 -ki has been found with include: thut- 'descend' (thut-ki- 'start descending'), and rarriny- 'hang' (rarriny-ki- 'to start hanging down').

It is not surprising that many examples of -ki refer to imminent processes, which the participants of the speech situation expect to engage in. For example, thut-ki-wirrani (descend-INC-we'll fall) '(let's) descend (the rope)' was elicited as an appropriate utterance to be made immediately prior to the event.

[4] -warri~warni. Here too it is by no means certain that -warri~warni is a Stem forming suffix; I have assumed so largely for convenience of exposition, and because <w> does not harden to /k/ following non-continuant consonants as would otherwise be expected by VR6. Like the IT this morpheme indicates that the process referred to is constituted of a number of repetitions. That this is not an allomorph of IT is likely since the two may occur in sequence (see third example cited below). However, at this stage I am unable to pinpoint the meaning difference with any degree of surety. I will refer to <warri~warni> as IT₁.

The choice between the allomorphs -warri and -warni appears to be governed by the lexical root, accomplishments choosing the former, and extendibles, the latter. E.g. tuwuwanaa 'he picks up (things) all around', from <tuwu-wani-wi+a> (get-IT₁-PRES+A). (tuwu- is an extendible which always occurs with the Classifier -A.) And kilangwarriwirrarri 'they were kicking rocks over (as they went along)' from <kilang-warri-wirrarri> (knock over-IT₁-(3p1)N+A-pa). (kilang- is an accomplishment, which usually occurs with -ARRI.)

In at least one case a repeated process was referred to by a combination of IT and IT₁: pijpiwaniila 'I come here daily'. The form ['jurʌ'ja:,ra:] 'he is brushing (flies) away' probably consists of -ji IT followed by -warri, with the sequence /iwa/ reducing to /aa/ (as per VR5 and VR6): <jurra-ji-warri-wi+a> (chase-IT-IT₁-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,

kaj- 'cut': kajkaj- 'cut/chop up'  
lingi- 'think of': lingilingi- 'think about for a while'  
maj- 'touch, feel': majmaj- or manymaj- 'feel about'  
lungku- 'to throb (once)': lungkulung- 'throb repeatedly'

It may be that the process was attempted, unsuccessfully, a number of times. For example, rurruprurrup-, reduplicated rurrup- 'pull out' (which is usually an achievement) was used to describe a number of attempts made at removing a splinter. Equally, repetitions may affect some entity a number of times: lalpak- 'split' reduplicates to lalpalalpak- '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, warung- 'fly' was reduplicated warungwarung- to describe the flight of a number of birds overhead, at a single time; laj- 'lie on the ground (as of footprints)', reduplicates to lalaj- 'lie all about (as of a number of footprints of different people)'; kit- 'to catch in (as burr in socks)', reduplicates to kitkit- 'to catch in all over (as a large number of burrs in socks)'.

Sometimes reduplication suggests that an action was done continuously over a long period of time, and it may or may not consist of repetitions. For example, purupuru- was used to describe the lengthy period of time an initiand spent in the bush, from puru- 'hide'; wulwul- 'pain, or ache (as of tooth) for some time', from wul- 'ache'; ngarangarak- 'to work on for some time' from ngarak- 'to make, work on'. The reduplicated form may, in addition, suggest that the process was enacted energetically, as in ngayirrngayirr- 'breathe heavily, as after hard exercise', from ngayirr- 'breathe, take a breath'.

It is not clear as yet precisely how reduplication differs semantically from the stem forming suffixes, such as -pi~ -mi~ -pili~ -ji, and

-warri~-wani which also indicate repetitions. Both modes occur in kartpikartpi- 'belt all over' from kartpi- 'belt' (from <kart-pi> (hit-IT)).

Verbal reduplication differs fromally from Nominal reduplication in a number of respects. All available examples of verbal reduplication are of monosyllabic or bisyllabic roots (which account for most simple verbals - v. page 76).

Most reduplications of monosyllables (which are invariably of the shape CVC(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', (v. preceding page), wawap- 'smell, sniff a number of times', from wap- 'sniff', and jiljilk- 'spotted', from jilk- 'spot' (v. page 67 above). (2) Occasionally an initial dorso-velar is lost in the second syllable when preceded by /l/ and followed by /u/. For example, kulul- 'try out repeatedly' from kul- 'try out, test', and wulwul- 'ache' (as of tooth), from wul- 'pain, ache'.

In the few instances available, reduplications of bisyllabic roots which are vowel final are normally of the full root. E.g. kirra- 'run', kirrakirra- '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: yuwurryuwurr- 'run about', from yuwurr- 'run', nyunungnyunung- 'move along (e.g. of snake in grass)', from nyunung- 'move'.

Partial reduplications may involve the elision of the final consonant in the first instance of the root. For example, wilaj- 'go around', wilawilaj- 'go round and round', or 'many go round', ngalak- 'head ache' ngalangalak- 'to ache continually 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. For example, pir-laj- 'follow' reduplicates to pir-lar-laj- 'keep following along', tur-luk- 'come to surface (of water)', has reduplicated variant tur-lur-luk- 'come to surface (of water) all around'. I know of one case only in which the first, instead of the second syllable was repeated: titirip- 'to go in (as of ants into a hole)', from tirip- 'to enter'.

Sometimes a root has both full and partial reduplications. For example, ngarak- 'to make, work on' is reduplicated to ngarangarak- or ngarakngarak- '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 or disyllabic forms. For example, liplip- 'dance shake a leg', lip- does not occur as a root; pintilpintil- 'shower out (of sparks)', pintil- is not an independent root; nyamnyam- 'whisper', nyam- is not a root; pulupulu- 'to be too smart for, to outsmart', pulu- is meaningless. As these examples show, 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' (page 194), is found attached to Nominals, Adverbials and, most frequently, Verbals. When suffixed to words of the latter class, the initial <w> is subject to VR6 (and subsequently VR5, if applicable). That is -wa is realized by /ka/ following non-continuant consonants, as in e.g. parnka (return-wa), and by /a/ following vowels, in which case VR5 applies to convert the resulting sequence of vowels to long /aa/, as in waraa (stand-wa, wara-'stand'), pakaa (lie-wa, paki-'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 realized as either /wa/ or becomes /aa/ with the preceding vowel. For example, both /mikawa/ and /mikaa/ (from mika 'that way') 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. Some examples of -wa have already been given (in 3.4.3) in the side/end forms of the Cardinal Adverbials, where it was suggested that forms such as purrungkuwa 'on the north side/end of' might be understood as 'the mode or aspect to the north (of a body)'. Similarly, the Adverbials, wilajka 'around' and marrajka 'past' are obviously adverbializations of the Verbals wilaj- 'go around' (mode of being 'around') and marraj- 'go past' (mode of being 'past').

Other examples include, mikawa 'that way, in that direction' (see page 130 and example (3-26)), thirrkiriwa (from thirrkirli 'straight'),

indicating, in (3-124), a straight mode of 'being' of the words in the speaker's brain, and kiningiwa (from kiningi 'breath, life force') indicating, in (3-125) the 'way' of dying, i.e. by exhaustion.

(3-124) karntiwangurru      thangarnti      thirrkirliwa      milyilyingka  
many                      word                      brain      -ERG

tuwuwilanyji  
I want to get it

'I want to get the words straight in my brain'.

(3-125) kampanyu      kiningiwa      nangkuwawurrani  
water-DAT                      they are dying

'they are dying of thirst'.

For a discussion of the combination of -wa with Verbal roots, see section 5.5.1.3.

[2] -warra. The <w> of this morpheme, like the initial segment of -wa, is realized by /k/ following non-continuant consonants, as in wirrinnykarra (whistle-warra), and by  $\emptyset$  elsewhere, i.e. following vowels and continuants, irrespective of the class of the word to which it is suffixed, as in nartaarra (narta- 'cry' -warra), and kalkalarra (kalkal- 'laugh' -warra). These alternant shapes can be accounted for under the assumption that -warra does not bear inherent stress, and is subject to VR6. It must also be assumed that VR5 applies to convert the sequences /i-a/ and /u-a/ to /aa/, as in pakaarra (paki- 'lie' -warra).

-warra appears to indicate a certain manner of action, although its exact meaning remains unclear. It is attached to Nominals, Adverbials and Verbals, though most frequently to the latter (see section 5.5.1.4 for a discussion of this combination). -warra appears to indicate a manner of action characteristic of the actor throughout the action; it is an 'active' manner by contrast with the type of 'mode' or 'way' of being or action expressed by -wa - see especially examples (3-124) and (3-125) above. Examples are (3-21) above in which -warra is attached to an Adverb, and

(3-126) wangmarraarra      wartji      'he walked along madly'.  
mad-                      he went

in which -warra is attached to a Nominal.

The facts of allomorphy and of meaning suggest the segmentation of -warra into -wa-rra. However, -rra does not occur elsewhere, and I regard -warra as a single distinct morpheme in the present language.

A morpheme -karra or -warra with a similar meaning is found in Jaru (Tsunoda 1981:241-2), Guurindji (Tsunoda loc.cit.) and Walmajarri (Hudson 1978:35). There is some evidence that -warra is a stem formative in Kuniyanti, as is -karra in Jaru (Tsunoda 1981:241-2). This comes from the partial reduplication of mayarra in the word mayarrayaarra

'hard, energetically' (see page 129), and also from the fact that -warra may be followed by the ERG Postposition - see example (5-266) below. (By contrast, Hudson (1978:35) regards the corresponding Walmajarri morpheme as a case ending.)

There are a couple of Adverbials which, although apparently synchronically unanalysable roots, appear to involve -warra as a formative. An example is wantaarra 'single file' (page 138). To the best of my knowledge, wanta does not occur as a root; however, this form does occur in wantamarri 'side by side' (-marri is not a morpheme). It is possible that the Adverb parnparra 'quickly' contains -warra in the form -arra (or even -parra, which is an allomorph of -karra in Jaru (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 Adverbials, and this phenomenon usually indicates some sort of intensification. Most reduplication is partial, and both types - reduplication of the first two syllables, and reduplication of the final two syllables - are equally represented in the data.

For each of the Temporal Adverbials mungaya 'morning', yaningi 'today, now' and karrwaru 'afternoon', reduplication is partial, involving the first two syllables, and the effect is to suggest 'very much at the time referred to by the word: mungamungaya 'very early morning', yaniyani-ningi 'right now, this instant', karrakarrwaru 'late afternoon'. With the disyllabic ngamu 'before', reduplication is total, and the resulting ngamungamu suggests 'a very long time ago'. In each case the semantic effect is intensification, though it falls into two distinct types, qualitative and quantitative.

Reduplication of Spatial Adverbials occurs very infrequently, and appears to be limited to Adverbials indicating either locations with respect to a chosen reference point or orientation with respect to other entities of the same type - that is, types (2) and (4) page 136. (Reduplication of Cardinals does not occur.) As a rule, reduplication of these Adverbials indicates that a multiplicity of entities are located or oriented in the particular configuration. For example, wilajka 'around' reduplicates to wilawilajka 'all around', used in describing a number of entities scattered around. Other examples are yirrmirnimirni 'level', used to describe the configuration of a large number of individuals e.g. running level (cf. the unreduplicated yirrmirni 'level' used of two individuals in example (3-61)) and langarnimirmirni 'into one another', as in 'run into one another (of a large number of people)'. An exception is the Spatial Adverbial palngarna 'outside' which reduplicates to palngarnangarna 'right outside', which involves intensification.



With Manner Adverbials, the effect of reduplication is clearly intensification - e.g. mayaarrayaarra 'very quickly' (see above).

### 3.13 Word Complexes

Free lexical words can form word complexes, syntagms that are structurally distinct from phrases. In all of the available examples, the relation between the words is that of conjunction or addition. Some examples are:

(3-127) wilirriwilirri	[kunkurnu	rangkarti]
	WC	WC
stripe	black	white

'black and white stripes'.

(3-128) [wampi]yurru	[pirritpiya]
WC WC	WC WC
[name] -DU	[name]

'Wampy and Pirritpiya'.

(WC = Word Complex.)

It will probably be necessary to distinguish word complexes from compound words. yuwulu-kurnpu (man-woman) would seem to be an example of the latter. It has a meaning similar to that of reduplications such as pulkawulka 'old men'; it means 'people'.

## CHAPTER 4: THE PHRASE

The rank of Phrase was introduced in 3.1.1 in order to account for the grammatical patterns that words enter into. The largest structural unit, the clause, cannot be adequately 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.

Phrases can be classified by their internal structure: that is, in terms of the constituents, which (as mentioned in 3.1.1) are labelled by their function in the phrase. Three distinct phrase types (or 'classes') can be identified in this way in Kuniyanti: Noun Phrases (NPs), Verb Phrases (VPs), and Postpositional Phrases (PPs). It is possible that there is also a distinct Adverbial Phrase. The first two correspond to the two largest open lexical classes (above 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 open-class lexeme. In this chapter I describe NPs (4.1), PPs (4.2) and complexes of these units (4.3). The VP, which constitutes a single free word, was described in section 3.9 above.

### 4.1 The Noun Phrase

#### 4.1.1 General Characteristics: the NP as a Syntagm of Words

The NP is realized by a syntagm of words (including rankshifted clauses and phrases). NPs are commonly described in terms of the classes of these words (e.g. Lyons 1968:216ff), the constituents of the NP being labelled by their class. In this section I set the stage for the functional analysis presented in 4.2.2 below by first describing the NP in this way. I start off with the simple NP, whose ICs are all of word rank, working up to the complications, embedding, and discontinuity.

Lexemes in NPs are normally from the Nominal and Pronominal classes, but may also be Adverbials. 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' is the only Particle (if indeed it is a particle), that definitely occurs in NPs. The order of words of the various classes is not rigidly fixed. Determiners, Numerals, and Adverbs precede or follow (open class) Nominals and Pronominals. Illustrative examples are:

(4-1)	yuwarni	kurnpu	'one woman'
	one	woman	

(4-2)	ngiti	karntiwirri	'we two'
	we	two	

(4-3)	ngurru that	yuwulu man	nyamani big	'that big man'
(4-4)	kampayi boy	ngirntaji this		'this boy'

Modifying nominals are found both preceding (as in example (4-5)) and following (as in example 4-3)) the modified nominal.

(4-5)	lapawu white	jika flower		'white flower'
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There are, however, some definite ordering tendencies:

- (1) In pronominal NPs (roughly, those whose 'head' is a pronoun, as in (4-2)), Pronominals tend to occur initially, followed by Nominals.
- (2) In non-pronominal NPs, Determiners and Numerals normally precede the open-class Nominal. In a count of 140 examples, these orders were favoured over the reverse in ratios 9:1 and 7:2 respectively.
- (3) Modifying Nominals (other than Determiners and Nominals) 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'.

In actual texts, NPs 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) showed 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, karntiwirri 'two', ngurru 'that' and nyamani 'big' may all be sole lexical items in NPs. Furthermore, when the NP consists of two or more Nominals or Pronominals, there are no restrictions on (sub-) class combinations. For example:

(4-6)	niyaji this	karntiwirri two		'this two'
(4-7)	ngurru that	nyamani 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 only two (cf. 3.1.1).

(4-8)	[ [ [ngurru]-yu NP ₁ PP NP ₂ NP ₂	[yuwulu] ] NP ₂ NP ₂ PP	[tharra] ] N N NP ₁	'that man's dog'
	that -DAT	man	dog	

(4-9)	[	[	[	[murlu	wirrikawu]	[ngangji]	-mili]	]	]	]	'(the fly is a)
	NP ₁	N	K	NP ₂	NP ₂	V	V	K	N	NP ₁	bung-eye giver'
				eye	bung	give	-CHAR				

Again the constituents of embedded phrases (when there is more than one, as in (4-8) are not bound to occur in any particular order. Corresponding to English examples such as 'that man's dog's bone', which involve deeper embedding, are phrase complexes in Kuniyanti. See examples in section 4.3.1.

In NPs expressing both alienable and inalienable possession, the possession is referred to by either an embedded Dative PP (as in (4-11)), or by an Oblique form pronominal (as in example (4-10)).

(4-10) ngarraki            marla/tharra            'my hand/dog'  
           my                    hand/dog

(4-11) ngurru-yu        kurnpu        marla/tharra    'that woman's hand/dog'  
           that-DAT        woman

There is one other possessive construction, which applies only to kin-terms. This involves the stem-forming suffixes -wa 'his, hers, their' and -pati 'yours', attached to the appropriate kin-terms. For examples, see 3.12.1.1 above. The regular possessive constructions may always be used in place of these suffixes. E.g.

(4-12) ngaangki/ngarraki        karangi            'your/my wife'  
           your            my                    W

There are two circumstances in which inalienable possession appears to be realized simply by juxtaposition of the possessor and the possessed, as is the case in a number of Australian languages (Dixon 1980:293).

They are illustrated in:

(4-13) thirru            nyawa                    'kangaroo tail'  
           kangaroo        tail

(4-14) nganyi            mirra            ngarlak-ngiri    'I have a headache'  
           I                    head            I ache

It is shown below that (4-13) is not a possessive phrase, but, like the English translation, involves 'classification' of the tail as kangaroo. On the other hand in (4-14) nganyi mirra is not an NP, but a pair of phrases [nganyi] and [mirra] (see McGregor 1983b and Hale 1981).

As sentence (4-8) illustrates, NPs need not always be continuous; in this case, NP₂ is split by the Postposition -yu. But the pieces are sometimes split by full words, and may be more distantly separated:

(4-15) [kurukuru]        [tajkila]        [jalanti]    'I'm wearing a black belt'  
           NP₁            NP₁    VP            VP    NP₁            NP₁  
           black            I wear it        belt

It is likely that the separation of NP constituents serves a discourse function (v. 4.3.1 below).

## 4.1.2 Structure of the NP

### 4.1.2.1 Functions and their Realizations

In the last section I described the NP as a string of words of various parts of speech, which may occur in any order and show at best a few word order preferences. I will now show that a much more satisfactory and complete description is possible by taking account of the function of the immediate constituents within the phrase.

The NP may be described as a sequence of one or more constituents, with associated functions as shown in formula (4-16).

(4-16) DEICTIC ^ QUANTIFIER ^ CLASSIFIER ^ ENTITY ^ QUALIFIER

An NP need not have constituents realizing each of these functions. Any subset of the functions may be realized in an NP, but they invariably occur in the order indicated. Constituents of the NP may also be ellipsed, if given (v. below 5.3.1). Some examples are given in Table 4-1.

It follows from the preceding paragraph that a given NP may be ambiguous, depending on the function that the lexical words are understood to realize. When context is taken into account ambiguity normally disappears. For example, mikiyu 'ant-DAT' in (4-17) would normally be understood to classify the nest as one of the type made by ants (see below page 215). However, it could potentially also be used as a Deictic, identifying the actual nest (rather than its type). Had yuwuluyu 'man-DAT' occurred instead, the unmarked interpretation would be the latter, i.e. that yuwuluyu realized Deictic.

(4-17)	mikiyu	riwi	'ant's nest'
	ant-DAT	camp	

The fact that an elliptical NP will be formally identical to some non-elliptical NP (the difference is 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 contrast with the 'free' order of lexical words and their classes in the NP (as mentioned above in 4.1.1), the functions occur in a strict sequence relative to one another. This means that the correlation between lexical classes and the function they realize in the phrase is not biunique. In the next section it will be shown that the order of lexical words is 'free' only to the extent that all orders are grammatically acceptable. Variant word orders differ in meaning. In the remainder of

Table 4-1: Examples of NPs

DEICTIC	QUANTIFIER	CLASSIFIER	ENTITY	QUALIFIER
ngarraki my	karntiwirri 2		tharra dog	
		'my two dogs'		
	karntiwirri	kartiya white person	kurnpu woman	
	'two white women'			
ngurru that	karntiwirri 2		yuwulu man	kimangarna bushman
	'those two bushmen'			
ngarraki my			tharra dog	maaali hunter
	'my good hunting dog'			
		kampa water	yiwinti rain	
	'rain'			
				yanungku new
	'the new teacher'			

this section I discuss the functions of (4-16) in turn, from left to right.

[1] Deictic. The function of the Deictic (DEIC) is to contextualize the phrase, relating it to the linguistic or extralinguistic context, thereby helping to establish its referent. Determiners are the most natural class to realize this function; they were discussed in 3.3.1.

The referent is also frequently identified through its being the property of some (usually identifiable) individual. Thus the Deictic is often realized by Oblique form Pronominals, and by embedded Dative PPs - see examples (4-10) to (4-12).

A third way in which this function may be served is by comparison of the entity with one whose identity has already been established, by specifying that the referent of the NP is either the same as, or different from that entity. Numerals may function in the first way, indicating that reference is being made to precisely the same one, two, etc. entities already established. In this case the Numeral is normally followed by the Enclitic -nyali REP (v. 6.3.2). Thus:

(4-18) yuwarni-nyali      mayaru                      'the same house'  
           one      -REP            house

The indefinite words yanya 'other(s)', yapja 'some' and wajarranyi 'different' may function the second way (see 6.2). Example:

(4-19) yanya            pirti                              'the other leg'  
           other            leg

yanya and yapja are also used non-comparatively in the senses 'some (one)' (or perhaps more accurately, 'a certain'), and 'some (more than one)', respectively.

[2] Quantifier. The Quantifier (QUAN) indicates quantity, usually the number of entities of the specified type. This function is typically realized by Numerals (discussed in 3.3.4 above). Other words that may occur here are such generic terms as puju 'the lot, all (finish)', karawulu and waringarri 'very many', and the open-class nominal nyamani 'big', which in this context has the sense 'a large quantity of', in reference to masses. Example:

(4-20) nyamani            kampa                              'a lot of water'  
                                           water

nyamani also qualifies karntiwangurru to indicate 'very many'. jikinya 'small, little (one)' seems to contrast with nyamani in phrases like (4-20), and has the sense 'a little bit/small quantity of'.





This is the usual way of indicating the part-whole relation for inanimates, such as tools, topographical features, etc., and also parts of plants. For animals, the part is usually treated as a possession; a part of an animal is classified by the whole only in marked circumstances. For example, (4-13) treats the animal as food; it occurred in talking about cooking.

(iv) A person may be classified by his (usually racial) type.

(4-26)	kartiya	<u>Colin</u>	'the person of European descent Colin'
	white man		

(v) An entity may be classified by its characteristic size:

(4-27)	jikinya	marla	'finger'
	little	hand	

(4-28)	lamparti	<u>saddle</u>	'little saddle' =
	little		'racing saddle'

In these examples the size indicates the type, not a quality of the thing; (4-27) does not suggest that the hand (or finger) is small.

(vi) A thing may be classified by its typical location in space or time:

(4-29)	karrwaru	warta	'evening star, Venus'
	afternoon	star	

(vii) The thing may be classified by a physical trait, such as colour:

(4-30)	thiwa	kurnpu	'woman of European descent'
	red	woman	

(viii) The classification may be by the purpose of use of the object.

The paradigm example of this is probably edibility, maa distinguishes edible animals, and manyi distinguishes edible plants. E.g.:

(4-31)	maa	thirru	'the edible, animal kangaroo'
	meat	kangaroo	

Another examples of purpose is

(4-32)	kalyjinkali	yawarta	'race-horse'
	fast - good at	horse	

(ix) Yet another way of classifying something is by its owner or maker, as in example (4-17).

It would appear that things are classifiable by any trait they display, which means that a given entity is not uniquely classifiable, and that the set of lexical words that can realize CLAS is not closed. Indeed the Classifier may be realized by a phrase, as in

(4-33)	[kampinyi	marlami]	pija	'empty nest'
	NP	NP		
	egg	without	nest	

In these respects (at least) nominal classification in Kuniyanti is a phenomenon of quite a different type from noun class marking in languages to the north (such as Ungarinyin) and north-east (e.g. Kija). (Compare Dixon 1982 Part D, especially Chapter 3).

The preceding discussion may be summarized 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 (v. e.g. discussion of example (4-27) 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, as in example (4-29) above, in which karrwaru indicates a typical temporal association of Venus, not a quality (cf. English 'criminal lawyer'). The Classifier indicates the type of thing; this may have only a tenuous connection with any of its qualities.

[4] Entity. The constituent realizing this function designates the thing, or class of things referred to: usually a material object (real or imaginary), but also possibly an intangible such as junpa 'song', thirri 'fight', ruwa 'walkabout', etc. This function may be realized 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 3.3 may occur in this function, with the possible exception of Numerals.

If this is indeed the case, I suspect it is more likely, a semantic restriction than a grammatical one: mathematics is not a normal topic of conversation. If mathematics were to be taught in Kuniyanti, I would expect that Numerals would be used referentially.

As mentioned earlier (section 3.3), all open-class nominals appear to be able to occur in this position: Kuniyanti does not distinguish a lexical class of Adjectives in opposition to Nouns. Nominals in the ENTY function make reference to a class of things which have the property or quality of being a man, being a tree, being a little (thing), or whatever. For example:

(4-34) niyaji            jikinya                            'this child'  
           this            little

In addition to single words, word complexes may also realize the ENTY function.

(4-35) karntiwangurru      yuwulu      kurnpu    'lots of men and women'  
           many                    man            woman

[5] Qualifier. It is possible to recognize (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 'qualification': the narrowing down of the (potential) set of referents of the Entity-nominal by a property or quality. The Qualifier usually indicates a physical quality of a thing such as:

size,

(4-36) yuwulu            nyamani                            'big man';  
           man                    big

shape,

(4-37) ngaarri            julku                                'round stone';  
           stone                    round

colour,

(4-38) jalanti            kurukuru                            'black belt';  
           belt                    black

appearance,

(4-39) mirra            pirntirri                            'bald head';  
           head                    plain (treeless)

age,

(4-40) tharra            ngamunhingi                        'old dog';  
           dog                    before-ABL

value,

(4-41) kampa            yijkawu                            'bad water';  
           water                    bad

texture,

(4-42) manyi            pinyiti                                'hard food';  
           vegetable            hard  
           food

sex and other human characteristics,

(4-43) ngiti            yuwulu                                'we men';  
           we                    man

and so on. This explains the norm orders for Numeral and Pronominal; only rarely are arbitrary subsets selected from definite sets of referents.

In addition to open-class nominals, all of which can potentially occur here, many closed-class nominals can also be Qualifiers. They include Determiners, e.g. (4-4), Numerals, e.g. (4-2), and perhaps also Subsection Terms; but apparently Kin-terms and proper Nouns are excluded. Of the Pronominals, only the Oblique forms are attested as Qualifiers:

(4-44) tharra        ngarraki                                'my dog'  
           dog            my

As well as lexical words, the Qualifier can be realized by word complexes and phrases. Examples:

(4-45) kirili        ngamunhingi        mintirti        'an old dry stick'  
           tree            before-ABL        dry

(4-46) yuwulu        karayili        kirrapingarri        'a very tall man'  
           man            much            long

In concluding this section I remark on some correlations between the functions and the lexemes that typically realize them. The Deictic correlates well with Determiners, being frequently realized by a lexeme of this class (or an Oblique pronominal), and conversely Determiners tend to occur in this role (v. page 209 above). Quantifier and Numerals are also closely connected in each direction (see also above page 209). The remaining three roles tend to be associated with the other types of Nominals, and Pronominals. The Entity and Qualifier functions are frequently realized by words corresponding to nouns and adjectives respectively in English. Words from the closed classes of Kin-terms, Subsection Terms, non-Oblique Pronominals, and Proper Nouns, which may perhaps be the 'most referential' and least like qualities of nominal expressions, appear to be restricted to the Entity role.

#### 4.1.2.2 Illustrations of Significance of Word Order

The contrast between pre- and post- Entity position is accurately captured by Bolinger's distinction between referent and reference modification (Bolinger 1967). Pre-Entity constituents modify the reference of the Entity-Nominal (i.e. the Nominal which realizes the function Entity), whilst post-Entity constituents modify its referent, the thing itself. Roughly, the Deictic modifies the reference by tying the Entity-Nominal 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.

The classes of lexemes realizing the three pre-Entity functions are largely disjoint: as mentioned above, occasionally Numerals realize Deictic, and open class Nominals realize Quantifier. Approximately the same range of properties or qualities occur in both referent and reference modification. Consequently, it is possible to set up quite a large number of minimal and near minimal pairs for the distinct functions. In this section I will examine a number of these pairs, providing evidence in support of the functional analysis proposed in the preceding section, and at the same time more accurately circumscribing the functions themselves.

When a Determiner occurs initially, as the Deictic, it provides information to help the hearer identify the intended referent - it modifies the reference of the Entity-Nominal - by means of its relative proximity to the speech situation, or some deictic reference point (v. Lyons 1977: 646ff.). In contrast, when a Determiner is in final Qualifier position, it frequently serves a 'pointing' function. That is, it points to some thing in the context, singling it out to the hearers attention, identifying it as the intended referent. (4-47) singled out the intended referent, and was accompanied by lip-pointing at the actual object:

(4-47)	[ngunyju NP tobacco	ngirntaji] NP this	warangkila I hold it	tinayawu dinner-ALL
	'I keep this tobacco until tea-time'			

Another example is:

(4-48)	Q:	kampa water	warangkinyja you hold it	
	A:	yuwu you	[kampa NP water	ngirntaji] NP this
				ngurlukpa you'll drink it
		'Have you got any water? Yes, you can drink <u>this</u> water'		

This is clearly a type of qualification as characterized in the last section, 'narrowing down to the referent'.

Oblique pronominals occur in approximately the same frequency initially and finally. 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 pronominal may occur finally because the fact that the thing is someone's possession is insufficient to identify it. For example, in (4-49), ngaangki 'yours' does not identify the dogs since the hearer has more than one dog.

(4-49) milarla        karntiwirri        tharra        ngaangki  
       I saw it            2            dog            your  
       'I saw two dogs of yours'/'I saw two of your dogs'

But ngaangki does serve to narrow down the reference of the NP somewhat; it qualifies the referent (much in the way a word such as kurukuru 'black' would).

Evidently pre-Entity constituents may modify the referent thing itself, and post-Entity constituents may modify the reference of the phrase as the examples above show. The point is that they need not: referent modifiers are assumed to be unmarked with respect to reference modification; reference modifiers unmarked with respect to referent modification.

Numerals occur either initially or finally. When initial they either simply indicate the number of things referred to (as in examples such as (4-1), (4-21)), or, if followed by the enclitic -nyali REP, may serve to identify previously established referents. That is, initially they may function as Deictics or Quantifiers, and contribute to the establishment of the identity of the referent of the phrase. In final position Numerals still of course indicate the number of things referred to, but with a slightly different nuance of meaning. Whereas a syntagm NUM[^]N (N a lexeme realizing Entity) may be paraphrased in English as 'x things of the type N', a syntagm N[^]NUM is more accurately paraphrased 'the entities referred to of type N are x in number'. The first involves a selection of a 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 Entity. In such NPs, unlike NPs with Nominals as Entity (v. 4.1.1), Numerals usually occur finally. Contrast an example of the normal order (such as (4-2)) with (4-50), in which the initial Numeral selects two members from the set of possible referents of ngiti, namely the three referred to by the bound pronominal jirr-, just as it selects two things of the type N if followed by the Nominal N.

(4-50)	tina	ngapjirra	[ngarlutu-ngka PP	yuwulu] PP
	dinner	we ate it	3	-ERG man
	[ [ [karntiwirri	ngiti]	-yurru]	yuwulu]
	NP PP NP	NP	PP	NP
		2	we	DU man
	[yuwarni	kartiya]		
	NP	NP		
	1	whiteman		

'The three of us ate dinner, two of us Aboriginals, and one whiteman'

By contrast, in (4-2) the Numeral does not select two individuals (from a set of potential referents) - instead it qualifies the Pronominal, making explicit the number of individuals concerned. The difference of meaning is brought out clearly in the glosses 'we two' for (4-2) and 'two of us' for (4-50).

As already mentioned, for NPs with Nominal Entities the norm is for the Numeral to precede the Nominal: they select so many entities of the designated type. If, however, the referent is established, and the number of entities included in the set is known, that number can be taken as a property or quality of the referent. Compare for example the following two phrases:

ngarraki	karntiwirri	ngaluwinyi
my	2	son
ngarraki	ngaluwinyi	karntiwirri

The second occurred in a context in which the referent thing was given, and known to be two in number, it may be glossed 'the two of my sons', or 'both of my sons'. The first is a neutral version, simply indicating the number of my sons (under consideration), 'my two sons'.

Finally I will compare the significance of pre- vs. post- Entity Nominals. Below are some near minimal pairs that clearly indicate the meaning distinction carried by order:

	(CLAS)	(ENTY)	(QUAL)
(4-51)	thiwa red	kurnpu woman	'woman of European descent'
(4-52)		jika flower	thiwa 'red flower'
(4-53)	jikinya little	marla hand	'finger'
(4-54)		marla	jikinya 'a little hand'
(4-55)	tumu clenched	marla	'a clenched hand'
(4-56)		marla	tumu 'a fist'

A pre-Entity Nominal indicates a property characteristic of the referent set as a whole. The set of things of the type N, where N is the lexical nominal realizing Entity, is partitioned into natural subsets by such a Nominal. For example, marla 'hand, part of the hand' is classified by jikinya in (4-53) to indicate the little part of the hand, the finger, contrasting with e.g. nampurru marla 'thumb'. It is also classified - in (4-55) - by shape, tumu here referring to hands of the type 'clenched' - this phrase was 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 N (where N is the Nominal in final position). It does not normally distinguish 'natural subclasses'; for example, (4-54) does not distinguish a particular type of hand as does (4-53). 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 the reference of the Entity nominal is being modified.

I regard the Generic[^]Specific syntagm as an instance of Classifier[^]Entity. At first glance it would appear that a Generic term would only redundantly and trivially classify the specific. 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 maa 'meat' when they are being considered as food, but not, for example when personified in myths. The generic maa signifies that the animal is being considered as edible meat. As another example, consider yiwinti 'rain', which may be preceded by the generic kampa 'water', as in (4-23), but not in (4-57).

(4-57) yiwinti      pijkuwaarni      'rain is coming up'  
                                it is emerging

In (4-23) the rain is regarded as water: it is rain as droplets of water that spot the ground. Compare also (4-24), in which it is water of the type derived from rain (in contrast to e.g. soak water, etc.), that is lying around. The generic/specific opposition may be identified as a cryptotype. Whereas reversal of word order in (4-51) to (4-56) above caused a concomitant change in function of the modifying nominal, reversal of order in the Generic[^]Specific type does not. Rather, the Specific becomes a Classifier of the Generic Entity (cf. above page 214).

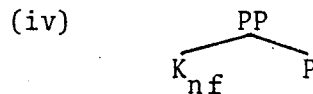
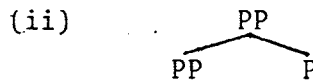
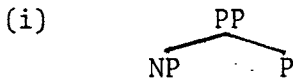


Another cryptotype might be labelled the 'associative'. Here the Classifier indicates an association of the Entity, rather than a quality. (see example (4-29) above). In this case, reversal of order is not possible - warta karrwaru 'star afternoon' does not occur. karrwaru in this example provides a clear example of a reference modifier that cannot be a referent modifier.

Thus, although word order is free, in the sense that permutation preserves grammaticality, it is meaningful. Moreover, generalizations 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.

#### 4.2 The Postpositional Phrase

Postpositions were defined above (section 3.7) as morphemes which enter into syntagmatic relations with phrases (less frequently with clauses or words), to form units of phrase rank, Postpositional Phrases. The main types of PP are schematically:



NPs and PPs differ structurally. The former are endocentric, with no uniquely identifiable head, and the latter are exocentric. In fact, it might be argued that the NP, PP, ADV and  $\text{K}_{nf}$  are complements of the Postposition in (i) to (iv).

(i) Postpositions are phrase-level encliticized morphemes, occurring usually one for phrase; they enter into syntactic constituency with phrases, and not words (as do suffixes - above section 3.12). The Postposition may be attached to any word of an NP. There are, however, definite statistical tendencies. It is attached to the following in order of preference: Deictic, Quantifier, Qualifier, Entity, Classifier.

Some illustrative examples are:

(4-58) ngurru-ngka      karntiwirri      yuwulu      'by those two men'  
           that -ERG      two                    man

(4-59) marla            tumu-ngka                    'by a fist'  
           hand            clenched-ERG

(4-60) mayaru            yuwarni-ya                    'in one house'  
           house            one            -LOC

(4-61) yuwarni-ya      mayaru                    'in one house'  
           one            -LOC            house

(4-62) niyi-ngka      yuwulu      kimangarna 'by that bushman'  
           that-ERG      man            bushman

By contrast, word level suffixes attach to the word which they are in constituency with, regardless its function in the phrase. For example, in

(4-63) yuwulu      kiliwulu-ngarna      'a man who lives in limestone  
           man            limestone-DW          country'

-ngarna cannot be attached to yuwulu, preserving the sense. For this reason, the number morphemes -yurru 'dual' and -yarnti 'plural', which are stem-forming suffixes in the majority of Australian languages (Dixon 1980: 323), must be treated as Postpositions in Kuniyanti. They occur on any phrasal constituent, with the same preferences as other Postpositions (cf. Rumsey 1982b:58). For example, both of the following occur:

(4-64) ngurru-yarnti      yuwulu      'those men'  
           that -PL            man

(4-65) ngurru      yuwulu-yarnti      'those men'

In either case, word order may be reversed. The unmarked placement is on ngurru, whether it realizes Deictic or Qualifier. Another manifestation of this distinction shows up at word-level. Postpositions always follow suffixes: karingi-wati-yurru (W-your-du) 'your two wives' (cf. section 3.12).

At least two other analyses of the above phrases might seem reasonable.

(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: the stems, and Postpositions. This approach would analyse (4-62) as follows:

(4-66)

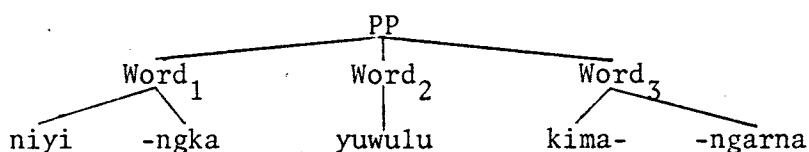
```

      PP
     /  \
  niyi  /  \
       /    \
  ngka /      \
     /  \      \
yuwulu /        \
      /          \
kimangarna
  
```

The problem with this is that it does not recognize that the words niyi, yuwulu, and kimangarna together form an NP. which can reduce to a single word - any one of these three. And (4-62) may contract to niyi-ngka, yuwulu-ngka, or kimangarna-ngka; but it may not contract a single stem (minus -ngka). The analysis of (4-66) does not explain these facts.

(b) Secondly it might be suggested that -ngka, -yu, -ya etc. are case-suffixes, and that d-words such as niyingka are inflectional forms of the Nominal. An analysis of (4-62) in this way would be

(4-67)



There is, however, no evidence for such a proposal. It suffers from the same problems as mentioned for (a) above; and secondly, there is simply no evidence that niyingka is an inflected form of the root niyi (v. above 3.7). No generalizations 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 generalizations concern the full phrase. The full phrase, and not the nominal word, is the locus at which the system of nominal Postposition is 'entered'. For this reason I avoid use of the term 'case', which properly refers to nominal word level systems (cf. Jespersen, 1924).

The constituent to which the Postposition is attached may be a word complex or another phrase. In the former case, the Postposition normally occurs on the first word only:

(4-68) wampi-yurru      pirritpiya      'Wampi and Anee'  
 [name] -DU      [name]

When an NP (dominated by a PP) has a phrase embedded within it, the Postposition may attach to the embedded phrase, probably tending to show the preferences remarked on above. There are not sufficient examples to be sure of this, as nearly all embedded phrases consist of a single distributional word only. For example,

(4-69) [ [yuwulu [jinali-ngarri] ]-ngka]      maa      ngapka  
 PP₁   NP      PP₂      PP₂   NP      PP₁  
 man      spear -COMIT      -ERG      meat      he eats it  
 'The man with a spear is eating meat'

The only available example in which the embedded phrase has more than one word in it is (4-70) below.

(4-70) [ [kurnpu [ngumparna marlami] ]-ngka]      milangina  
 PP   NP₁      NP₂      NP₂   NP₁      PP  
 woman      H      without      -ERG      she saw me  
 'Woman without a husband was looking at me'

(4-69) illustrates the preference for attaching the Postposition to the Qualifier, [jinalingarri]; however, this preference is occasionally overridden if the resulting sequence of Postposition is inadmissible, as in (4-71).

(4-71) [pulpa-ngarri            wirla-ya]            kirrakirraari  
 PP                            PP  
 things-COMIT            back -LOC            he runs  
 'he runs with a pack on his back'

The PP has constituent structure as follows:

[ [pulpa            [wirla-ya] ] <-ngarri>]  
 PP NP            PP            PP NP            PP

There is further, negative evidence in support of the claim of the preceding paragraph. Where a 'possessive' phrase such as

[ [ngurru yuwulu] <yu> ]            'that man's'  
 PP NP                    NP            PP

in (4-72) below is embedded in an NP, such as

[ [ngurruyu yuwulu] tharra]            'that man's dog',  
 NP PP                    PP            NP

which is to play the role of Agent in a clause, the Ergative Postposition is expected (by the above) to occur on ngurruyu. However, -yu-ngka is an inadmissible sequence. Instead of placing the Postposition elsewhere in the phrase, on a less preferred constituent (for reasons that will soon be made clear), a 'topicalization' pattern is employed, as shown in (4-72) (v. also 4.3.2 below).

(4-72) [ngurru-yu            yuwulu            tharra]            nganyi  
 NP                            NP                            I  
 that -DAT            man            dog  
  
 [nhuwu-ngka            tharra]            witnginpini  
 PP                            PP  
 his -ERG            dog            he bit me  
  
 'that man's dog bit me'

In certain circumstances, a single 'phrase' may have more than one Postposition.

(a) If the PP is discontinuous, each continuous segment usually occurs in syntagm with a Postposition. For example,

(4-73) wayanti-ka            wita            jurrami            wanki-ka  
 fire -ERG            bee            he chased it            smoke-ERG  
  
 '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 is explicitly marked as belonging to the PP: either by its distinctive Oblique form, for Pronominals, or by a Postposition otherwise. Quantifiers, and Qualifiers are especially prone to misconstrual, and are usually followed by a Postposition:

(4-74) ngirrangi            karntiwirri-yu            tharra  
 our                      two                      -DAT            dog  
 'our dog / the dog belonging to us two'

Contrast [Ngirrangi karntiwirri tharra] 'our two dogs'. By contrast non-pronominal entities, such as yuwulu in the first NP of (4-72), are unlikely to be misconstrued: it is not likely that this would be interpreted as 'that (individual)'s man and dog' or 'that (individual)'s man-type dog' (on the model of (4-35) and (4-30) respectively above).

(c) Occasionally two (or more) instances of a Postposition are found within what appears to be a single continuous (and non-embedded) PP, as in the following example:

(4-75) yuwulu-ngka            ngurru-ngka            ngaarri  
 man    -ERG            that    -ERG            stone  
 yikanyi            tuwungangarra  
 uncertain            he took it - on me  
 'maybe that's the man who took my money'

As the English gloss shows, the phrase yuwulu ngurru '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 (v. section 5.3.1). I will refer to this phenomenon as fracturing. What is 'experientially' (see section 5.1) a single phrase constitutes a pair of juxtaposed phrases 'textually' (v. loc.cit.).

(d) Sometimes both members of a word complex (between which there is a relation of addition) are followed by Postpositions, as in

(4-76) muwunga - wirrangi            yuwuluyarntiyu            kurnpuyarntiyu  
 he looked - for them            man    -PL -DAT            woman -PL -DAT  
 'he looked for the man and the women'

It seems that the main reason that a phrase is split is to give equal salience to each member of the conjunction (see also line (6) of Text 2).

(c) and (c) amount to fracturing of phrases, giving 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 fact that gives the effect of the 'cleft' (v. section 5.3.2).

The above can be summarized as follows. Postpositions are attached to (and mark) the (textual) head of the NP, the constituent that may replace the whole phrase (in the particular textual environment in which

it occurs). The head of the phrase is textually the most important element of the phrase. This constituent also bears the strongest stress in the phrase (see also below section 5.3.1).

(ii) It has already been mentioned that there are restrictions on the embedding of PPs within PPs: depth of embedding can be at most two (i.e. figure (ii) (page 223 above) shows the maximum attested depth (v. 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 a rule, the outermost Postposition is attached to and follows the innermost; the two Postpositions are not usually attached to different words (compare example (4-71) above). For example:

(4-77) [ [ngarraki-ngarri]            -ngka            [jinali] ]            nyakluni  
          PP₁ PP₂                            PP₂            PP₂ PP₁  
          my            -COMIT            -ERG            spear            I speared it  
          'I speared it with my spear'

The small number of possible sequences of Postpositions (as discussed in 3.7) restricts the range of embedding even further.

(iii) There is little to say about the third type, since only two constituents are involved, the Postposition, and an Adverbial. Example:

(4-78) [panyangi-yirra]            pijpiwarninyji  
          outside -ALL            he wants to emerge  
          'he wants to go outside'

The Adverbial may appear to be nominalized, to be a referential expression - panyangi in (4-78) might be seen as referring to a location outside of something. The main reason I haven't adopted this point of view, and inserted an NP node between the Adverbial and PP (in figure (iii) of page 223), is that there is no evidence that this (NP) node can branch. (In other examples in which I have claimed that Adverbials realize NP roles, the NP may branch, and the Adverbial is not usually the sole constituent of the phrase).

(iv) Only non-finite clauses - that is, clauses which have non-finite VPs (v. above 3.9.2) - may be embedded. Since Verbal roots do not have privileges of free occurrence, Postpositions are always attached to the non-finite Verb. For examples, see section below 5.5.2, and sentence (4-79).

- (4-79) [ [thangarnti ngaa-mawu] -ngka] ngalanynga  
 PP K_{n-f} K_{nf} PP  
 mouth open-INF -ERG he sang  
 'he sang with open mouth'

The Postposition may, in addition, be attached to another word in the embedded clause (provided that word is not already followed by a Postposition):

- (4-80) marnti thirri-yu kartpu-wu  
 fighting boomerang fight-DAT belt -DAT  
 'the marnti boomerang is for fighting'

I take such examples to be instances of constituent fracturing (as discussed under (i)), giving rise to a pair of juxtaposed phrases (see also below 5.5.2).

Not all Postpositions have been observed in construction with non-finite clauses. Those attested are: -ngka ERG, -ya LOC, -nhingi, -yangka ABL, -ngarri COMIT, and the allomorph -wu of DAT (v. section 3.7). Of these, all but the ERG may be, and usually are, directly attached to the verb root; the ERG, however, must follow an Infinitive or Stem-forming Suffix (v. 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 K_{nf} and PP. However, as before, semantically, the non-finite clause appears to be 'objectified', and it is possible that an NP node should immediately dominate it. This is a matter for further investigation.

### 4.3 Phrase 'Complexes'

#### 4.3.1 Juxtaposed Phrases

Phrases may be juxtaposed to one another so as to form phrase complexes. The latter differ in terms of their internal structure from NPs and PPs as described in the preceding sections. A phrase complex must be distinguished from a phrase with another phrase embedded within it, in which case the embedded phrase fulfils some function in 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 (except possibly by intonation: this has not been investigated in detail). The following list of types therefore is not necessarily complete.

[1] Conjunction. NPs and PPs are conjoined by juxtaposition, without the use of a morpheme 'and'. Examples are (4-76) and

(4-81) [karntiwirri      yuwulu]      [yuwarni      kurnpu]  
           NP₁                                  NP₁                  NP₂                                  NP₂  
                  two                                  man                                  one                                  woman  
                  'two men and one woman'

As a rule there is a rise in pitch on the final syllable of the first conjunct, and a pitch fall throughout the second conjunct - see for example line (2) of Text 3.

As has already been mentioned, the number markers -yurru 'dual' and -yarnti 'many' have the phrase as 'domain'. They indicate the number of individuals referred to by a phrase, and may be used in the manner of word-level conjunctions within a phrase, as in (4-68). They cannot be used in the conjunction of phrases, indicating the number of a phrase complex.

There is evidence that the conjoined phrases form a single 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 (4-81) could be followed by wartpirrirri (go-they did-paucal) 'they (few) went', but not by wartji (go-he did), 'he went', or wartpirriyi (go-they did-du) 'they (two) went'.

It is possible that the following exemplifies a type of conjunction.

(4-82) yurru      ngarakkimi      kirili-ya      kirili-ya  
           web      he makes it      tree -LOC  
           '(the spider) makes a web from tree to tree'

[2] Disjunction. There is nothing resembling the disjunctive phrase of English, with its connective 'or'. Kuniyanti uses the indefinite enclitic -mi, as in:

(4-83) tawungkuwaangkinmiyi      jaji      maa-mi      ngaarri-mi  
           you two like it                                  what      meat-IND      stone -IND  
           'Do you two want meat or money?'

The final two d-words appear to be juxtaposed phrases. There is no evidence that together they form a constituent of the clause.

[3] Elaboration. Following Halliday (forthcoming) I use the term 'elaboration' in reference to the relation whereby one unit provides a re-statement of the other, further specifying it, or commenting on it (see also section 5.6.2 below). The following subtypes are identifiable:

(i) Identifying, in which the second phrase supplies an alternative designation of an entity, in order to facilitate its identification (this is the relation of 'equals'). For example,



(4-84) yanya      kartiya      welfare      ngarraki      jaliji  
 other      whiteperson           my      mate  
Fitzroy-ngarna  
 -DW

'Another whiteperson (from) Welfare, my mate (from) Fitzroy'.

A special case of the relation is 'listing', in which an NP or PP is followed by one or more conjoined NPs or PPs giving a total or partial list of the entities referred to by the first phrase. For example,

(4-85) kiti-yarnti      lampati      ngaangki      karingi      ngaangki  
 you(pl)-PL      WF      your      W      your  
 nginyji  
 you

'You lot: your father-in-law, your wife and you'.

Here, the initial phrase forms a complex not with a single other phrase, but with a phrase complex, of type [1]. Sentence (4-86) exemplifies a variant in which the members of the list are referred to in a word (instead of phrase) complex.

(4-86) ngiti      David-jurru      'We two, including David'.  
 we(R)      -DU

(Here, the second phrase is elliptical, with nganyi 'I' omitted from the Entity function (realized by a word complex).)

(ii) Clarification. Here the second NP specifies the first more precisely, to make the reference clearer. This is the 'that is' relation:

(4-87) maja      paplikaj-ju      maja      'the boss, the publican'  
 boss      -DAT

See also example (4-50).

(iii) Attribution. This is a second 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).

(4-88) is an example of the first type.

(4-88) junapaapara      kampa      nyarna      kurrula      nyamani  
 [name]      water      deep      billabong      big

'Junapaapara, a deep waterhole, a big billabong'.

There is no strong evidence that juxtaposed phrases of type [3] constitute together single clausal constituents. Therefore, where necessary, I will represent juxtaposition by three dots 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 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 relation with one another. For example, (3-49), and

(4-89) paplikaj-nhingi      jipirri      wartji  
                                          -ABL      downstream      he went

'He went down from the pub'

Presumably the syntagmatic relation in these examples is one of juxtaposition or apposition (as discussed in the preceding section) of the two units. The Adverbial and PP appear to mutually extend on one another, giving further information, of a different nature (PPs and Spatial Adverbials enter into different paradigmatic sets of oppositions). This appears to be a type of 'and', additive relation. Such Adverbials and PPs do not always occur next to one another. It is not clear at present what (if any) meaning difference correlates with the formal difference between continuity and discontinuity. It is not clear whether continuity should be taken to be a defining property of juxtaposition. (This problem will not affect the following discussion.)

In examples (3-19) and (4-89), either the Adverbial or PP can be omitted from the clause with no loss of grammaticality, only a reduction in specificity. The following examples suggest a closer connection between the two units.

(4-90) wayanti-ya      wilajka      warangkurru  
          fire   -LOC      around      they sit

'they sit around the fire'

(4-91) rirringki      kampa-ya      wartji  
          side                   water-LOC      he went

'he went by the side of the water'

Here it would seem that one unit does more than just add something new to the other (such as point of origin, or destination, or whatever, as in earlier examples). The PP may be omitted from these sentences. But if so, it appears that the location is understood: wilajka presupposes the side of something. If no location is mentioned, one would seem to be assumed anyway. The other relational type Adverbials of location (discussed above page 187) together with lanngarri 'on top of' and

papaapirri 'inside', apparently form constructions of this close-knit type.

To put this in a slightly different way, given rirringki, something must be presumed as the 'focus' of this relationship, whether stated or not. The Adverbial is inherently relational; by contrast, jipirri (cf. example (4-89)) 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, realizing a single role in the clause. By contrast, it seems to me that in the earlier examples, the Adverbial and PP independently realize clausal roles, and do not form a single constituent. However, the suggestion remains tentative, and requires further exploration.

Occasionally the two Adverbials lanngarri 'on top of, above' and papaapirri 'inside' occur in syntagms with NPs, instead of PPs, or in example (4-92).

(4-92) lanngarri            ngaalu            yutjiti  
                              shade            we put it

'We put (spinifex) on top of the boughshade'

In such examples, the case for analyses as a single constituent, with the NP complementing the Adverbial, is perhaps even stronger in (4-92), without lanngarri, ngaalu would of necessity occur in a LOC PP (ngaalu -ya).

The above should not be taken as a claim that whenever a spatial Adverbial and PP occur together in a clause, they must be syntagmatically related. In (4-93) it is unlikely that the directional Adverbial and the locational PP mutually expand on one another:

(4-93) ngalangalaya        papurrungku        kirrkirrwani  
         bank-LOC            down            it rolled

'It rolled down the bank'

(There is no suggestion that the bottom was actually reached, and there appears to be no evidence that the PP complements the Adverbial. A more accurate gloss might be 'It rolled downwards on the bank').

CHAPTER 5: THE CLAUSE5.1 Introductory Remarks

This chapter investigates the clause, which as mentioned in 3.1.1, is the highest ranking grammatical unit in Kuniyanti. Firstly, the internal constituency structure of the clause is analysed, in sections 5.2 to 5.4. The Clause is realized by a syntagm of units which may be of phrase rank, i.e. units of the types identified in the preceding chapters, NPs, PPs, and VPs; or non-ranking morphemes, Adverbials and Particles (v. section 3.1.2); or complexes of these units (as described in 4.3.1 and 4.3.2 above). As is the case for NPs (see 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 give a general description of the clause in these terms alone; the functions of the immediate constituents must be taken into account (cf. page 211 above).

As mentioned 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 of English (cf. e.g. Halliday 1970, and forthcoming), there are in Kuniyanti three primary types of function that a clausal constituent may bear, each of which contributes a distinct constituency structure to the clause. These metafunctions are the Ideational, Textual and Interpersonal (Halliday op.cit.),

(a) The Ideational meaning of a linguistic element is its expression of 'content'. This type of meaning is the representation of the world of experience, including phenomena (Experiential meaning), and the 'logical' relations between them (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 the clause to the text itself, and its extralinguistic context of occurrence. This type of meaning is discussed in section 5.3.

(c) Thirdly, Interpersonal meaning, which concerns the organization of the clause in its role as an interactive event involving the interlocutors in the speech situation. A preliminary investigation of this aspect of the meaning of the clause is undertaken in section 5.4.

Constructions involving combinations of clauses are investigated in sections 5.5 and 5.6. There are two main possibilities (cf. Huddleston 1965 and page 113 above).

(i) One clause may be embedded in, and come to function as a constituent of another clause, or of a phrase in another clause. Embedding is not itself a type of structure; it is a property of certain constituents entering into structures of a particular type, either clauses or phrases. The latter are, as we have seen, multivariate structures (e.g. Halliday 1965/81). Embedding is discussed in section 5.5.

(ii) The clauses may be juxtaposed to form unit complexes, here clause complexes, or sentences. These are univariate structures (Halliday 1965/81). In section 5.6 a preliminary attempt is made at identifying the range of logical type relations between the clauses of clause complexes.

## 5.2 The Clause as Representation

I will firstly describe some of the main aspects of the organization of the clause in its function of encoding and describing the world.

### 5.2.1 Clause Types

From the experiential point of view the clause may: (i) refer to a 'situation', or 'occurrence' of some type involving at least one participating entity or actant; (ii) assert a relationship between one entity and another, or between an entity and a quality; or (iii) assert the existence of some entity. Correspondingly, three clause types may be distinguished:

(a) A 'Situation' type clause which has an inherent* role Process, realized 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; that is, Participants are obligatorily referred to by bound pronominal forms in the VP, and/or by NPs and PPs in addition.

(b) 'Relational' clauses, which have two inherent roles, one of which always refers to an entity and is realized by an NP, and another which may refer to an entity, or to a quality or property.

(c) An 'Existential' clause, which has an inherent role making reference to an entity (referred to by an NP), which is claimed to exist.

In Kuniyanti, corresponding to most clauses of types (b) and (c), there is a Situation clause which has in addition an inherent VP.

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* I use the term 'inherent' in essentially the same sense as it customarily has in Systemic Grammar. It refers to roles or functions that necessarily occur in structures of a particular type. That is, the particular role must be realized by some linguistic expression, unless it has been ellipsed: the absence of a realizing expression means that it is taken to be understood what thing fulfils that particular role. As I employ the term, it need not necessarily refer to participant roles, as Systemic usage usually has it (e.g. Fawcett 1980:135-6). The reason for this departure from tradition will shortly become clear.

This section is organized in three parts. The first concerns non-Situation clauses, types (b) and (c); the second concerns Situation clauses in which the Situation is one of 'being' or 'existence', and which at the same time asserts either a relationship between entities (etc.), or the existence of an entity; and the third concerns the remainder of the Situation clauses - that is, clauses which refer to more 'active' processes, such as those of hitting, raining, seeing, behaving, etc.

#### 5.2.1.1 Non-Situation Clauses

##### 5.2.1.1.1 Relational Clauses

Relational (non-Situation) clauses consist of two obligatory constituents, one of which is an NP, the other an NP, PP, or ADV. These constituents are simply juxtaposed, without the use of a copula. Relational clauses are in a sense simply 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 types of complex identified in 4.3.1, it is clear that only the Elaborating mode is consistent with the simultaneous presence of a propositional nexus. This gives the two types of 'is' relation, frequently called the 'equative' and the 'ascriptive' respectively (Lyons 1977:469). I will refer to the corresponding clause types as Identifying and Characterizing respectively. In the first of these, the elaborating phrase 'identifies' the entity by 'equating' the two referring expressions; in the second, the elaborating phrase 'characterizes' the entity by 'ascribing' a (new) quality or property of it.

##### 5.2.1.1.1.1 Identifying Clauses

In Identifying clauses a relation of identity is set up between the referent of two (distinct) phrases.

(5-1)	[ngarraki	thangarnti]	[kuniyanti]
	NP	NP	NP
	my	word	
	'My language is Kuniyanti'		

(5-1) asserts that [ngarraki thangarnti] and [kuniyanti] may be identified, or equated. The phrases are coreferential, and provide alternate designations of a single entity (otherwise (5-1) would be tautologous).

In this particular example, Kuniyanti identifies the speaker's language: the speaker, who knew I was learning the language, identified his language by a designation he could safely assume that I could identify. It was clearly not used (in the situation) to identify the language Kuniyanti. Thus, Identifying clauses consist of two functions: an Identified (realized by [ngarraki thangarnti] in (5-1)) and an Identifier (realized

by [kuniyanti] in (5-1)). (The terms are used following Halliday 1969/76: 167.) (5-1) is typical. Both roles are invariably realized by NPs.

As mentioned above, the two NPs provide alternate designations of a single entity. They differ in their mode of referring. There are two main ways in which the modes may differ: through choice of a different mode of deictic reference, and/or by choice of a different mode of lexical reference - that is, by the choice of a different lexeme to realize the Entity role in the referring NP. In case only a different mode of deictic reference has been chosen, retaining the same lexical reference, the referring lexeme will normally be ellipsed from the second NP. Conversely, if only the lexical mode of reference has been changed, the deictic element is always ellipsed from the second NP, if it occurs in the first NP. In other words, the two NPs never have the same lexical Entity, or a Deictic of the same type.

Examples such as the following, which identify the entity as someone's possession, may be accounted for in this way.

(5-2)	[ngirntaji	riwi]	[ngirrangi]
	NP ₁	NP ₁	NP ₂ NP ₂
	this	camp	ours
	'This place is ours'		

In this example, ngirrangi realizes the Deictic role in the NP, from which the Entity role has been ellipsed. (There is no need to postulate a distinct type of 'Possessive Identifying' clause, as seems to be the case in English (Halliday forthcoming).)

The two alternate designations of the one entity are typically related together as Type (or 'Value' in the terminology of Halliday (forthcoming)) to Token. The 'type' is in general a more abstract designation than the 'token'. For example, in (5-1) the type is 'my language', and the token is Kuniyanti - Kuniyanti is an instance of the type; and in (5-2) the type is 'our (place)', the token, 'this place'. (In Halliday's (loc.cit.) terms, that it is 'ours' is a value or function of 'the place'.)

The NPs in Identifying clauses simultaneously realize one of the roles Identifier-Identified and one of the roles Type-Token. Both combinations Identified/Type, and Identified/Token are possible, as (5-1) and (5-2) show respectively. Following Halliday (1968:202), the first type will be referred to as 'decoding', and the second type is 'encoding'. Furthermore, each of the four combinations of these features may occur initially - i.e. realize the textual function of Theme (v. section 5.3.2). The possibilities are set out below, with examples.

Identified/Type		Identifier/Token	
ngarraki	thangarnti	kuniyanti	
		'My language is Kuniyanti' (5-1)	
Identified/Token		Identifier/Type	
ngirntaji	riwi	ngirrang	
		'This place is ours' (5-2)	
Identifier/Type		Identified/Token	
ngurntu		niyaji	yuwulu
someone		this	man
		'Who is this man?'	
Identifier/Token		Identified/Type	
ngunyu		ngaangi	jikinya
which		your	child
		'Which (one) is your child?'	

The first two orders above, in which the Identified is initial, are the most frequent. The reverse order occurs mainly in examples such as the two shown above, in which the Identifier is an Indefinite Determiner (and a referent is being sought for it), and sometimes when 'given', as in

(5-3) [nganyi]      [nyamani      kirrang      karrtiwirriyu]  
 NP      NP      NP      NP  
 I      big      your      two      -DAT  
 'I'm boss of you two'

Two subclasses of Identifying clauses deserve mention. Firstly, there is an 'Example' type, which is characterized by an initial Identified/Type, which refers to an indefinite class of things, of which the Identifier/Token provides an example.

(5-4) [yanya      kawil      [kulumangarri]      'Another fish is the catfish'  
 other      fish      catfish

(5-5) [yanya      kampangarnanyali]      [tiwiwi]  
 other      water-DW      -REP      short-necked turtle  
 'Yet another water dweller is the short-necked turtle'

A second quite different type is the Naming clause, in which the Type is the linguistic expression itself; that is, the element realizing the type provides a name, or designation for the token. Naming clauses always involve the associations of Identified and Token, and Identifier and Type. As a consequence, the usual order is for the 'name' to follow the referring expression. I encountered this type of clause a number of times in learning the language, especially when my teachers pointed out things to



me in picture books or in the environment and named them. Some examples are:

(5-6) [ngirntaji]      [lapawu      jika]      'This is a white flower'  
       this                white        flower

(5-7) [ngirntaji]      [mukulu]      'This is a grass seed'  
                               grass-seed

An Identifying clause of the Naming type may occur in teaching a non-native speaker names of objects; it may also be used, apparently, in less marked circumstances such as identifying personal names, and also relationship terms to be used between individuals. For example, after I had known my main teacher for some weeks, he told me his Aboriginal name in the clause [[nganyi] [nyayipari]]. In such circumstances, the second NP is used as a representative of itself, referring to itself rather than a non-linguistic entity. An association is set up between a non-linguistic entity (the flower, in (5-6), and the grass-seed in (5-7)) and a linguistic one, its name, or an appropriate designation for that entity. Naturally, clauses such as these may be ambiguous between this interpretation, and another interpretation in which the Type Nominal has cognitive significance to the hearer, and is understood referentially.

As distinct from all other Identifying clauses, Naming clauses have Situation clause agnates in which there is an inherent Identifier and Identified. Only one Verbal lexeme occurs in these clauses, kuwaj- 'to call (by) name'. For example,

(5-8) nginyji      kuwajkingka      ngumparna      'I call you 'husband'.  
       you                I call you        husband

#### 5.2.1.1.1.2 Characterizing Clauses

Whereas Identifying Clauses 'identify' an entity in terms of an alternative designation, Characterizing clauses 'characterize' an entity in terms of a property, quality, use, etc. That is, they add something new to the characterization of a thing. For example (5-9) characterizes the meat (referred to by NP₁) as rotten (NP₂).

(5-9) [ngirntaji]      maa]      [thuwurntu]      'This meat is rotten'.  
       NP₁                NP₁      NP₂                NP₂  
       this                meat        rotten

The identity of the meat is not in question. What is in question is a quality characteristic of the meat. Characterizing clauses thus consist of two inherent roles, an Attribute and a Carrier of that Attribute - these terms are used following Halliday (forthcoming); the Attribute is asserted as characterizing the Carrier.

Characterizing and Identifying clauses are not just logically distinct types; there are grammatical differences. The expression class that may realize Attribute overlaps with, but does not coincide with the expression class that may realize Identifier. For example, an NP with Pronominal Entity (e.g. [Nganyi] 'I') may realize Identifier, but not Attribute. Secondly, whereas in Identifying clauses either NP may realize Identifier or Identified (with the trivial qualification that, with the reversed order, the first NP will be full (it may have been elliptical), and the second NP may be elliptical (formerly full) - v. preceding section), in Characterizing clauses, this reversibility is not possible. Only one NP may be the Carrier; the other must be the Attribute. (Compare: in Identifying clauses, Type and Token are uniquely associated with the constituent NPs - one NP must be Type, the other must be Token, and the associations are not interchangeable.) Yet another difference is that Characterizing clauses have Situation clause agnates, which have a VP as well as the inherent Attribute and Carrier. The VP refers to a mode of 'being' of the Carrier concomitant with its possession of the Attribute - the semantic contrast between these two clause types will be detailed in 5.2.2.1 below. Identifying clauses have no such agnates.

The Carrier is as a rule realized by an NP making reference to some entity - a person, animal, or topographic feature (tree, river, etc.). It may also refer to a place. However, in many cases (under circumstances that are not as yet clear), a place is treated as a Location for the Attribute, and the Carrier is realized by riwi 'country'. This construction is invariably used in saying that a place is hot or cold:

(5-10) yiyiliya            riwi            purtpara  
       [place]-LOC    country        hot

'It is hot at Yiyili', 'Yiyili is hot'.

No instances of the type yiyili purtpara occur in the corpus. However, the Carrier (riwi) may be omitted: clauses such as yiyiliya purtpara do occur. I regard such clauses as elliptical (since riwi can always be added), and not as having a Locative PP Carrier.

However, I do not suggest this explanation for example (5-11), which described a flower with a red centre.

(5-11) pilika            thiwa            'The middle is red'  
       middle            red

This is for two reasons. Firstly, I know of no word which could be used to refer to the place, the centre of the flower, in the same way that riwi refers to the place in (5-10). And secondly, Spatial Adverbials are attested in NP roles, and it is not unreasonable to assume that pilika is fulfilling the role of Entity in the first NP of (5-11).

The construction just described 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 (5-282) below - rather than 'good in appearance'.

The Carrier usually precedes the Attribute. The main exceptions to this occur when the Carrier is added as an 'afterthought', and in 'questions' (cf. section 5.3 below). For example,

(5-12) jimantimi      nginyji      'You're good (?)'  
           good -IND      you

(5-13) jutu/      ngarraki      karingi  
           straight my      wife

'My wife is straight (i.e. of the correct subsection) for me(?)'

Afterthoughts are characterized by an intonation break (indicated by the slash in (5-13) at the grammatical nexus (see 5.3.2).

There are two main types of Characterizing clauses: [1] Ascriptive, in which the Attribute indicates a property or quality of the Carrier. Ascriptive Characterizing clauses usually translate into English as 'x is (a) y'. [2] Circumstantial, in which a location, origin, purpose, etc. is attributed of the Carrier. These clauses are usually translated into English as 'x is at/in/for/... y'. I will discuss the two types in order. [1] Ascriptive (5-9) to (5-13) are examples of Ascriptive Attributes. The Attribute is realized by an NP which typically consists of a Qualifier only, as the above examples show. Alternatively, there may be an Entity as well as the Qualifier, as example (5-14) below shows. It seems that the other NP- roles which precede Entity, especially the Deictic, are not realized in NPs which function as Attributes in Characterizing clauses. It is generally the case that there is an NP consisting of the same words as the Characterizing clause, and in the same order, in which there is a Qualifier realized by the constituent which realizes the Attribute in the full clause. E.g. to (5-9), there corresponds the NP [ngirntaji maa thuwurntu] 'this rotten meat'. The clause might be regarded as a fractured NP (v. section 4.2 above).

For a number of reasons it could not be maintained that the Attributive clause consists of a single NP (as Dixon 1972:71 suggests for Dyirbal). That there is a nexus within the clause follows from the fact that Propositional Modifiers typically mark this nexus by their position (cf. below 5.4.1). Secondly, reversal of the two 'joined' constituents does not have a semantic effect parallel to that of reordering constituents of the NP (on which see 4.1.2.2).

A large range of types of Ascriptive Attributes are identifiable on intuitive grounds. And this range is almost identical with the range of

meanings found between the Qualifier and the Entity in NPs. The only significant difference in expression classes that can fill the two functions would seem to be that exophoric Determiners and Number words, which frequently realize Qualifier, do not occur (in the data base) in Attribute roles (in Characterizing clauses) - though this may be an accidental omission, particularly in the second case.

However, at least two significant subclasses may be distinguished: Descriptives and Possessives. Possessives are identifiable by the fact that the Qualifier (in the NP realizing Attribute) is a definite referring expression, making reference to the owner of the Entity (which is the Carrier). Descriptive Attributes are those in which the Qualifier (again in the NP realizing Attribute) is realized by a non-referring expression. Thus compare the examples above, (5-9) to (5-13) with

(5-14) [Butcher]            [ngaluwinyi]            [Lanis-ju]  
           NP                    NP                    NP                    NP

'Butcher is Lanis' son/a son of Lanis'.

As for Identifying clauses, I do not distinguish a major class of Possessive Attributes in contrast to Descriptives, but see the two as subclasses of a single type, Ascriptive Characterizing Clauses. There is a further difference between the two: that is that only the latter have Situation-clause agnates in which the Process is realized by the Attribute (v. below 5.2.1.2.1).

In some cases a Descriptive Attribute (but not a Circumstantial Attribute) may take a circumstance as a type of complement. There appear to be two main possibilities. It may be a circumstance of Matter (v. 5.2.3.8), as in

(5-15) [nganyi]            [pinarri]            [niyajiyu]  
           NP            NP            NP            NP            PP            PP  
           I                    knowledgeable            that-DAT

'I know that' (lit. 'I am knowledgeable in that respect').

Alternatively, it may be a circumstance of Cause (v. 5.2.3.6). For example,

(5-16) pitiyarnti            thirrimili            kampanhingi  
           they    -PL            wild -CHAR            water    -ABL

'They're argumentative from grog'

[2] Circumstantial. A Circumstantial attribute does not describe a quality or property inherent in an entity, so much as it provides a extrinsic qualification of that thing, in terms of its relationship to other things in the world. Formally this distinction shows up in two main (interrelated) ways. Firstly, Circumstantial Attributes are realized by PPs or ADVs

and not NPs. Secondly, only for Descriptive Attributes are these agnate Situation clauses in which the Process takes the form of the Attribute (and the Attribute becomes "verbalized").

Note that there is potentially ambiguity in a number of instances. For example, a clause such as

(5-17) [niyaji            kurnpu]            [jikinyangarri]  
           this            woman            child -COMIT

is potentially ambiguous between the senses 'this woman is with child' (Descriptive), and 'this woman has a child' (Circumstantial). (See below page 244). The first, Descriptive reading comes if the PP realizes Qualifier in the NP realizing Attribute in the clause. The second, the Circumstantial reading, occurs when the PP directly realizes Attribute. In the first case, [jikinyangarri] enters into the paradigmatic set including patiji 'pregnant', (with which it is synonymous), nyamani 'big', etc.; in the second case, the paradigmatic set of realizes includes [tharrangarri] etc., but not patiji, nyamani, etc. Furthermore, it is only in the Descriptive sense that the Attribute may conflate with the Process.

The following are the main types, identified by the Postposition that occurs in the PP realizing Attribute.

(a) Locational. In this type a location is attributed of an entity: the clause asserts that the entity is at a particular location. (Contrast existential clauses, discussed in the next section.) The Attribute may be realized by either a Locative PP, by an Adverbial of Location, or by a complex of these two units. E.g.:

(5-18) [ngarraki            tharra]            [ngirntajiya]            'My dog is here'  
           my            dog            this            -LOC

(5-19) [karntiwirri            kirli            warlipirri]            [paapirri]  
           two            same            river            below  
           'The two rivers are below (the surface of the billabong)'

(5-20) [ngarraki            ngaarri]            [kilirniya]            [papaapirri]  
           my            stone            grass-LOC            inside  
           'My money is in the grass'

Locations are preferentially attributed of an entity within Situation clauses, and this correlates with the fact that Locative expressions rarely realize the Qualifier role 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 realized by DAT PPs. For example, (6-46) below, and

(5-21) [thangarla]            [munyjuyu]            [likirrwu]  
           toothbrush            tooth-DAT            clean-DAT  
           'Toothbrush is for cleaning teeth'

In contrast with the Locational Attribute just discussed, the Purposive Attribute typically occurs in a Characterizing Clause (there are no examples in Situation Clauses), and it is also frequently found as Qualifier of an NP. The Purposive Circumstantial Attribute and Possessive Ascriptive Attribute are often formally indistinguishable. But the distinction always shows up if the implicated thing - or the owner (respectively) - is referred to by a personal pronominal, which is necessarily in the Oblique form. The pronominal is followed by the DAT Postposition in Purposive circumstances (i.e. the pronominal is Entity) - see example (6-46), but not in Possessive Attributes.

(c) Associative. The Associative Attribute ascribes to an entity an association with some other entity. The Attribute is realized by a COMIT (-ngarri) PP. An example is one sense of (5-17) above. Clauses with an Associative Attribute generally translate into English as clauses of the type 'x has y', or 'x is with an entity y'.

The Associative Attribute is in a sense an inverse of the Possessive Ascriptive Attribute: in general, if an entity is an Associative Attribute of another entity, there is a corresponding clause in which the latter entity is a Possessive Attribute of the former. But where a COMIT PP is a Descriptive Attribute, there will be no such corresponding Possessive Attribute. For example, corresponding to the Associative interpretation only of (5-17) is there the Possessive Attribute.

(5-22) jikinya        niyajiyu        kurnpu        'The child is that woman's'

(d) Comparative. In this case the Attributive relation takes the form of a comparison, and the Attribute is realized by a phrase in constituency with the Enclitic -jangi SEM. For example,

(5-23) [kurnpu        ngurru]        [yuwulujangi]  
          woman        that        man        -SEM

'That woman is like a man'

(5-24) [Charlieyu        manili]        [[Bill-yu]        -jangi]  
                               nose

'Charlie's nose is like Bill's'

(Note that in (5-24), the PP [Bill-yu] realizes a Deictic role in an NP whose Entity (manili) has been ellipsed.)

(e) Source. The Source attributes an origin of the thing, and is realized by an Ablative -nhingi PP (even when a direction-from Spatial Adverbial is used (such as papirnali 'from the bottom'), it invariably occurs in a -nhingi PP). For example,

(5-25) [nganyi]            [liyarnalinHINGI]            'I'm from the west'  
           I                    from west    -ABL

(5-26) [niyaji            yuwulu]            [mulurrja-nHINGI]  
           this                man  
           'This man is from Mulurrja'

In the rather unlikely event that a bodily product (such as faeces, eggs, etc.) should be attributed to a particular individual, he is treated as the source of the product, never as the possessor - v. page 149 above).

#### 5.2.1.1.2 Existential Clauses

This relatively minor and infrequent clause type draws attention to the existence of an entity: more particularly its presence at a particular place or time. For example,

(5-27) [pilika]            [kampaya]            [yungku            nyamani            kirrapingarri]  
           middle                water-LOC            scrub                big                    long  
           'In the middle of the water is some big scrub'

This clause was uttered freely by a native speaker on being shown a photograph which he interpreted as showing an island within a large body of water. The purpose of the utterance was to draw attention to the existence of this island, not to attribute a location of it. (Otherwise, the island would have been referred to by an NP with ngirntaji 'this' as Deictic.)

As this example shows, Existential clauses normally consist of two functions: a (Spatial or temporal) Location, realized by a Locative PP, or Locational or Temporal Adverbial, or a 'complex' of the two: and an Existent, realized by an NP. Only the Existent is inherent; the Location, although frequently present, is not inherent. For example, (5-46) below and

(5-27) nya            kilarla            ngaangki            'Here! (This is) your tobacco'  
           here!            tobacco            yours

In this respect Existential clauses contrast with Relational clauses in general (which have two inherent roles), and Locational Characterizing clauses in particular, in which the Location is inherent. There are a number of other respects in which Existential and Locational Characterizing clauses differ. Firstly, the NP referring to the Existent is never omitted - it is never given, as may be the Carrier in the Locational Attributive clause. Furthermore, in the NP realizing the Existent the Deictic role is never realized: for its presence is compatible only with presumed existence. Secondly, ordering is far more variable in Existential clauses, where the Location precedes the Existent as frequently as it

follows it. In Characterizing clauses, the Location occurs clause-initially less frequently. And thirdly, although both Existential and Characterizing clauses have Situation clause agnates, the contrast between Situation and non-Situation clauses is quite different in each case. (See below 5.2.1.2.1 and 5.2.1.2.2.) Furthermore, Locational Characterizing (non-Situation) clauses are quite rare, whilst Existential non-Situation clauses are frequent.

The following two examples provide further illustration of these points; they may be contrasted with (5-18) to (5-20) above.

(5-28) laanti            kiriliya            karntiwangurru            jiriki  
           up                tree-LOC            many                        bird  
           'In the tree are many birds'

(5-29) karntiwangurru            piyinti            tuwuya            papaapirri  
           many                        bats                cave-LOC            inside  
           'There are lots of bats inside caves'

#### 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 the inherent Process, and a single inherent participant, which I will again call the Carrier. For example, the Attribute is inherent in

(5-30) [ngarraki            ngapu]            [kampi]            [pakiri]  
           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 [ngarraki ngapu pakiri] will mean 'my father is lying down'. (In the absence of cues to the contrary, it will normally be presumed that he is lying asleep. (See footnote on page 235 above on 'inherent'.))

Word order is relatively rigid in this clause type. The Carrier almost always precedes the Attribute which almost always precedes the Process. There are very few exceptions. (See examples in this section.)

The three lexemes paki- 'lie', warang- 'sit' and wara- 'stand' occur in this clause type. These Verbals have significant semantic content within this clause type, which is, furthermore, grammatically distinct from the verbless Characterizing clause. The two types are not synonymous, and the VP is not an optional, place-marking copula. In particular, this clause type makes reference to a Situation, which is a mode of 'being' or existence of the Carrier, concomitant with its carrying of the Attribute. Evidence for these claims is set out in some detail below.



(1) The choice between verbal and non-verbal clause is significant. In the first case, the clause describes a Situation in which the Attribute holds; in the second case, the Carrier is characterized by its possession of the Attribute. The distinction between characterizations and the engagement in a situation (of being) approximates but does not coincide with at least two other oppositions that might be evoked to characterize the difference between verbal and verbless attributing clauses. They are: (a) the difference between permanent and temporary possession of the Attribute; and (b) the difference between present and past possession of the Attribute (where these times may be with respect to either the speech-situation or the described events).

In many instances verbal clauses do show temporary, and/or past Attributes. For example,

(5-32) ngamu            pakingi  
          before        I lay

'I used to be (a good hunter)' (but I'm too old now)

and (5-38). Most Attributes referring to mental states also, predictably, usually occur in verbal clauses (see examples (5-65) and (5-102)). The choice of verbal clauses in circumstances such as these is, I suggest, determined by the fact that the Carrier cannot be characterized 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 characterized by the Attribute, but is not. To illuminate this distinction consider the following three examples.

(5-33) kilparli            tijpari            pakiyi            'I found it broken'  
          I found it        broken            it lay

(5-34) manyi            kulyingi            langa            yijkawu  
          v.food    he tasted it        salty            bad

'He tried it; it was salty and no good'

(5-35) yulajlimi            thirrkirlirni            pakiyi  
          I pulled it out        straight -SEQ        it lay

'I pulled (the wire) straight'

The temporal relation of the condition of the knife to the process of finding in (5-33) is parallel to the condition of the food in (5-34) 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 (5-33), the Attribute of the knife, being broken, is as permanent as any of the

Attributes illustrated in section 5.2.1.1.1.2 above. What (5-33) does is describe a situation a mode of 'being' of the knife when it was found. In other words, whereas (5-33) describes the circumstances, treating the condition of the knife as a Situation, (5-34) adds a characterization of the food: its mode of being is irrelevant. The point is that the situation described in (5-33) could equally well be described in the verbless clause [nayu tijpari] 'knife was broken'; and, like (5-34), this sentence would be rendered into English 'he found the knife; it was broken'. Similarly, in (5-35) the verbal Attributive clause makes reference to the Situation the wire was in as a result of the action.

To summarize, the speaker may (in certain cases) choose to treat an Attribute as a characteristic of the Carrier, or an aspect of its mode of being. This is a real choice, governed not only by external reality, but also by the way the speaker chooses to represent it. In a sense, the choice of Characterizing clause allows the speaker to move out of the role of recounting events and goes on, and to place his own interpretation or comments on them. Another way of putting it is that Characterizing clauses assert 'logical' type relationships between entities and qualities, whereas Attributive clauses of 'being' express 'experiential' (non-logical) meaning. Cf. the fact that the former resemble phrase complexes, the constituents of which are logically related. For example, the Nominal muyu 'sleep' normally occurs in Attributive Situation clauses with verb paki- 'lie' referring to the act of sleeping. There is however a single example in my corpus in which this word occurs in a non-situation clause:

(5-36) wartjiwirrangi                      pitiyurru                      muyu  
           he went up to them                they -DU                      sleep  
           'He went up to them. They were asleep'

In keeping with my remarks above, the second clause in (5-36) seems to be added as an afterthought, reminding the hearer of the fact that the two were asleep (a fact that had been mentioned previously). Similarly, in (5-34), it is an association of the Attributive 'salty' with the food that is made, presumably by the agent, as a result of his tasting.

(2) The choice of Verbal is meaningful. In case the entity (the Carrier of the Attribute) remains in a particular posture throughout the duration of time it has the Attribute, the choice of verb paki-, warang- or wara- depends on this posture.

paki- occurs if the entity adopts a reclining, or horizontal position: for example, fallen trees lie (e.g. rotten), people typically lie sick, or asleep (but they may also sit or stand).

wara- occurs when the position is vertical: this applies to trees, or people, which may stand tall, straight, crooked, etc.

warang- occurs if the posture is a sitting one, perhaps more precisely, the 'body' as a whole adopts neither a horizontal nor a vertical orientation. This is the posture usually adopted by birds (except those with long legs), and by rocks, etc.

Of the three lexical Verbals, paki- appears to be the least marked one, and is used in cases in which the entity adopts no particular mode, and is completely inactive in an 'abstract' situation of 'being'. Some examples are: (5-32) above and

(5-37) jiriki            yingingarri            pakiri  
bird                    name -COMIT            it lies

'The birds (all) have names'

(5-38) Billi            marnawa                pakiwirri  
                          his brother            they lay

'He and Bill were brothers'

paki-, that is, appears to have a general existential sense - i.e. existence in anything but an upright or sitting (rounded) posture. paki- covers senses such as 'remain' ('I ate them and only one remained'), 'exist as a result of a change' ('tadpole changes and frog results'), 'live' (see below 5.2.1.2.3), 'exist' (see below 5.2.1.2.2).

Perhaps this helps to explain the facts concerning 'mental qualities': the least active and most abstract (e.g. 'sleep' and 'know') typically occur with paki-. But tamarta 'blunt' and wangmarra 'mad' occur with warang- 'sit' in senses of 'be deaf (i.e. have blunt ears)', and 'be mad'.

(3) The 'expression class' that may realize Attribute may perhaps differ slightly depending on whether the clause is Situational or not. More importantly, there are principled tendencies relating the type of attribute to one or the other clause type as the most common mode of expression. As a general rule, the more 'concrete' the Attribute is, and the more it can be construed as an aspect of the mode of being of the Carrier, the more likely is it that the attributing clause will be Situational. This is particularly true of Locative circumstantial Attributes, and, to a lesser extent, of Associative circumstantial Attributes. In these two cases, there is a close physical association between the Carrier and the Circumstance.

(5-39) A: ngunyiya      ngaangki      karingi  
           which-LOC      yours            wife

B: paplikajja      warangji  
     pubs -LOC      she sits

A: 'Where's your wife?'      B: 'She's at the pub'.

For Locational Attributes, Situation clauses are the least marked option. Furthermore, there is a circumstantial Attribute of Extent which may occur in Situation clauses (cf. also below 5.2.3.1), but which does not occur in Characterizing clauses. For example,

(5-40) (paali)      tangkiyirra      pakiri  
           road      [place] -ALL      it lies

'(This road) goes to Giekie Gorge'.

On the other hand, if a quality is so inherent as to be completely inseparable from the entity, it can not contribute to the mode of being of the entity. Thus, qualities such as colour, size, and shape (at least where these are inherent qualities of the entity) are never found as Attributes in clauses with VPs. (They are, however, frequently found as Processes within VPs, in clauses referring to the inchoative situations of becoming a particular colour, shape or size.) The same is true when the Attribute is not an inherent quality, but is, rather, another entity which is related to the Carrier either as a more 'abstract' type of 'circumstance', of Purpose, Source/Origin or Comparison, or as a Possession. Clearly Attributes such as these cannot affect the mode of being of the Carrier in any significant way, and they are never (to the best of my knowledge) found in Attributive Situation clauses.

In between the limits imposed in the preceding two paragraphs, there are a number of descriptive Attributes of qualities which are neither defining of the object, nor extrinsic to it (either as purpose, use, origin, etc. or as location, association, etc.). These are the ones which commonly occur in both Situation and non-Situation clauses.

If we consider Attributes from the point of view of their characterizing potential, exactly the same pattern emerges: Locational, Direction to and Associative circumstances characterize an entity least, while inner defining qualities and extrinsic uses, likenesses, etc. characterize the entity most, leaving the same residue of more 'accidental', non-defining qualities.

These three criteria justify the claim that the lexical verbals paki-, warang- and wara- do not function as mere copulas, but as Processes in a distinct clause type, which concerns a mode of 'being'. These latter clauses are not just 'Relational', and it follows that there is no verbal copula.

It is now quite clear why it is Characterizing clauses, and not Identifying clauses, that have Situation clause agnates. If the lexical Verbals were merely copulas, there would be no reason why they should not occur in Identifying clauses to connect together the Identifier and the Identified. But the lexical Verbs are meaningful, and they indicate a mode of 'being' of an entity, which is clearly incompatible with the notion of Identification. There is no sense in which the Identified thing exists in the mode of the Identifier. Identification, like Characterization is a purely 'logical' relation (cf. discussion of (5-36) above).

In the next two subsections I outline two further clause types concerned with 'being'.

#### 5.2.1.2.2 Existential Modes

In the Existential Situation clause the existence of an entity in a particular mode of being is asserted. As for the non-situation clause agnates, the Existential Situation clause has an inherent role of Existent, and usually a Location (temporal or spatial). It has of course in addition an inherent Process, realized by one of the three basic Verbals paki- 'lie', warang- 'sit' and wara- 'stand'. The choice between the three depends on the factors already adduced: characteristic posture, and degree of activity. The three Verbals are illustrated in the following clauses:

(5-41) ngamu            yuwulumuwa            warangpirri  
before            man            -ON            they sat  
'Before there were only Aborigines'

(5-42) kupartiya            marlami            mayaru            warayi/            yard-muwa  
[place name]            no            house            it stood            -ON  
pakiyi  
it lay  
'At Kupartiya there was no house. There was only a yard'

As usual, paki- is the unmarked member of the triplet, occurring where the existent has no real posture, and is completely inactive. For example,

(5-43) ngarraki            thirri            nyamani            pakiringarra  
my            fight            big            it lies-on me  
'There's a big fight waiting for me'

See also:

(5-44) papirnali                      ngalwiriya                      thangarnti  
           from underneath            (head of crayfish?)-LOC            mouth  
           pakiri  
           it lies

'On the underneath of the crayfish is a mouth'

The second clause of

(5-45) yaniyaningi            kiripaala            ngarlutu            pakiringarra  
           right now            I'm finishing            three            it lies-on me

'I'm nearly finished (my cassettes), there are three left'

involves a slightly different sense of existence, 'remain'. The existence of the entity is assumed. It is the quantity of that entity in existence, or remaining after use, that is in question.

The semantic difference between the two types of Existential clauses is as follows. As mentioned in 5.2.1.2, the non-situational Existential clause draws attention to, or establishes the Existent. This is a possible mode of introducing a primary participant into a text - for example, one text concerning a particular young man started:

(5-46) yuwarni            pulka /            marlami            pulka /            yanungkunyali  
           one            old man            nothing            young            -REP  
           yuwulu  
           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 it. They typically describe background situations within a text. For example, (5-42) provided a description of the place kupartiya, which was not central to the development of the text. And neither the house nor the yard is an important participant in the text: neither is mentioned in the sequel. Here again the Situation and non-situation agnates contrast: the former describes some external phenomenon; the latter does not, but is rather a 'logical' relation. If Identification corresponds to the logical "equals" (=), Characterization to predication with a single variable (P(x)), the existential relation in non-situation clauses corresponds to the logical operator "there exists" ( $\exists$ ).

#### 5.2.1.2.3 Modes of Inhabitation

There is one further existential mode that will be discussed briefly, that is, that of inhabitation of, or living in, a niche. Clauses referring to situations of this type have three inherent roles: an Inhabitant, a Process, and a Location. The Process is either paki- 'lie', or warang- 'sit', in the available examples. As above, the choice between these Verbals does seem to be significant. (And it is likely that, if it is

culturally appropriate to talk of 'trees' as inhabiting a location, the Verbal wara- 'stand' would occur. There are no examples, however.)

Again, paki- appears to be the unmarked member of the opposition, carrying least specification of the process of being, and suggesting least activity, by comparison with warang-. In reference to fish, whose characteristic posture is horizontal, paki- is used. An example from a text concerning water-dwelling creatures is:

(5-47) kampaya            paapirri            pakiri  
           water-LOC        below                it lies

'(The fish) live below the surface of the water'

For human-beings and birds (whose characteristic posture is generally seen as sitting, rather than standing, in most circumstances), warang- is the unmarked choice:

(5-48) junjuwaya        warangjirri        'We live at Junjuwa'  
           -LOC                we sit

But contrast the following, in which the characteristic mode of living in a house is taken to be that of rest:

(5-49) yuwarniya        mayaru            pakuwurruyu  
           one -LOC        house                they (2) lie

'They live in one house'

It is clear that these clauses differ from both Attributive and Existential 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. Furthermore, they differ from situations of 'action' (next section) in that they have inherent Locations. When paki- and warang- refer to the processes of 'lying' and 'sitting', Locations are optional.

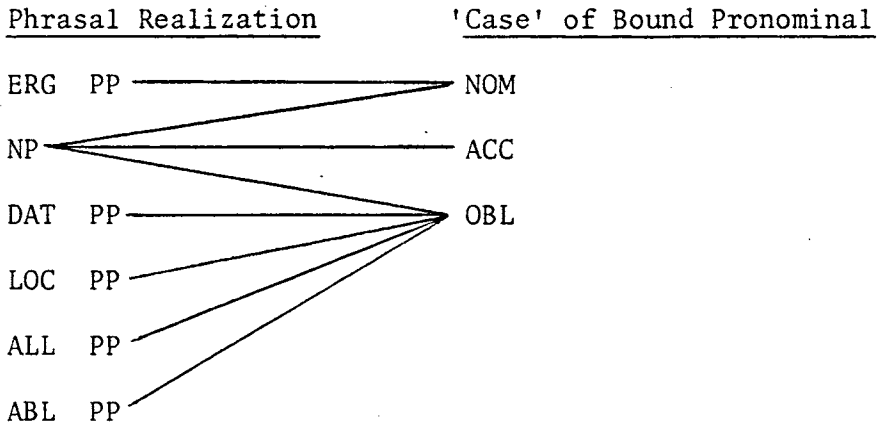
### 5.2.1.3 Situation Clauses (b): Modes of 'Action'

I now turn to clauses which refer to Situations other than those of modes of 'being'. As was mentioned earlier, such clauses have one inherent role which might be referred to as Process, and which is realized 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 realized by NPs and PPs, and have the additional property that they 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 realize participant roles, and those

which can, pair with a unique case form of the cross-referencing pronominal.* NPs, however, pair with each pronominal form. Figure 5-1 shows the major possibilities.

Figure 5-1: Pairing of Phrases 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 realizations of 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 realization of the inherent participants. They are:

- |          |   |                                                                 |
|----------|---|-----------------------------------------------------------------|
| 1 valent | { | <u>NP (Intransitive)</u> e.g. nganyi      wartngi      'I went' |
|          |   | I                                      I went                   |
| 1 valent | { | <u>ERG PP (Reflexive/Reciprocal)</u>                            |
|          |   | e.g. nganyi-ngka      milangarni      'I saw myself'            |
|          |   | I      -ERG      I saw myself                                   |
| 2 valent | { | <u>ERG PP + NP (Transitive)</u>                                 |
|          |   | e.g. nganyi-ngka      wayanti      jartli      'I lit a fire'   |
|          |   | -ERG      fire      I lit it                                    |
| 2 valent | { | <u>ERG PP + DAT PP (Middle)</u>                                 |
|          |   | e.g. nganyi-ngka      yikinya-yu      muwlanhi                  |
|          |   | -ERG      child -DAT      I looked for him                      |
|          |   | 'I looked for the child'                                        |

It follows from Figure 5-1 that the ERG PP must be paired with a cross-referencing NOM pronominal prefix, and the DAT must be paired with the Oblique pronominal enclitic. In Intransitive clauses, the NP

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* The facts of pronominal forms in the CC have been simplified 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.



(without 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 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 summarized:

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  
 DAT PP ————— OBL

Remarks:

(1) The Reflexive/Reciprocal construction in Kuniyanti is typologically unusual: in most Ergative languages in which the 'reflexive/reciprocal' is verbally encoded the one obligatory constituent is an unmarked or 'absolute' one (Edmonson 1978:646-7). It is normally only in those Ergative languages in which it is not verbally encoded that the inherent constituent is an Ergative one. But in the Pama-Nyungan languages to the south of Kuniyanti, Walmajarri (Hudson 1978:66), Wangkajunga (my field notes), Nyangumarta (Nash 1980:205), which also have the obligatory constituent in the Ergative, the Reflexive/Reciprocal is realized by an enclitic pronominal, and is not a feature of the verb.

(2) Unlike in a number of 'Ergative' languages, Ergative marking in Kuniyanti occurs on all phrase types, irrespective of person (cf. Dixon 1979). However, it is optional: in each of the clause types marked as having an ERG PP, the ERG Postposition may be omitted, and the participant role may be realized by an NP instead. But there is a strong correlation between inanimacy and the realization by an ERG PP. An inanimate in the appropriate role is almost invariably realized 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 '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 Dalaban (Capell 1962:111), Murinypata (Walsh 1976:405), Motu etc. (cf. Dixon 1979:71). That this is the case is 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 possible confusion as to the identity of the "Subject" and "Object". Furthermore, realization 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 (narratives in the first and third persons) showed that the relevant participant role was realized 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 realization 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, most likely 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 (1980:294-5) that foregrounding is associated with high transitivity, backgrounding, with low transitivity. It may be reasonable to see the clausal variants in which the NP occurs as 'less transitive' than those in which the ERG PP occurs. For the moment, however, this remains only a possible direction 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; and the 'option' (ERG PP or NP) will be assumed to lie outside of the strictly clausal transitivity system: i.e. the NP and PP will be assumed to be alternate realizations of a single role.

(3) Quite frequently phrasal reference to the participant does not occur: within continuous expository text, it is not unusual for clauses to consist of a VP only, or a VP together with phrases and words which refer to non-participant entities, qualities, etc. (v. 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 fully 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. (They generally translate into English sentences 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.* The alternative to this, that the participant roles are not

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* It follows that although a clause is as a rule 'replaceable' by its VP, it is not an endocentric construction. Compare Matthews (1981:148-9), Robins (1964:235), and cf. Blake (1983:145,163).

clausal but phrasal (i.e. VP) roles runs 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 Kuniyanti 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 (v. section 5.3.1).

(4) Occasionally another two-valent clause type occurs in which the inherent roles are realized by an ERG PP and a LOC PP, the latter being paired with the Oblique Pronominal enclitic. E.g.:

(5-50) nganyi-ngka      tharra-ya      yuwangiraanhi  
 I      -ERG      dog      -LOC      I exercise caution - of it  
 'I'm afraid of the dog (i.e. I act cautiously with respect to it)'

(5-51) ngaarri      jiriki-ya      ngirrliminhi  
 stone      bird      -LOC      I threw stone - at it  
 'I threw a stone at the bird'

In all such cases, there is an agnate clause in which a DAT PP occurs instead of the LOC: tharra-yu and jiriki-yu could occur instead in (5-50) and (5-51) 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 in differences in the extralinguistic reality referred to.

The four clause types identified above may be referred to as the transitivity types in Kuniyanti: the distinctions are concerned with the "direction" of the action. This is a highly abstract system, the features of which contextualize in different ways depending on the 'semantic' type of the clause (see page 262 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 categorized 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 Kuniyanti. Many, if not most Verbal roots occur in more than one of the four transitivity types. For example, the Verbal mila- 'see, look at' occurs in each of them:

(5-52) nganyi      milangiri      'I'm looking'  
 I      I see it

(5-53) nganyingka      milangarni      'I saw myself'

(5-54) nganyingka      yuwulu      milarla      'I saw the man'  
 man

(5-55) nganyingka      mawulyiyu      milarlimiwirrang  
 children-DAT

'I 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, every Classifier but one which can occur with two pronominal prefixes may occur in both Transitive and Intransitive constructions (v. sections 3.9.3.2.2 and 6.5.5). (The exception, -ARRI does, however, sometimes occur in Middle clauses.) For example, compare (5-54) with

(5-56) mirri            milaa            'The sun is shining'  
           sun            it sees

(5-57) mirringka        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), (5-48), (5-50) etc.). There are four exceptions: -ARNI₂ and -MARNI occur in Reflexive/Reciprocal clauses only, while -ANI and -PINTI 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 non-inherent 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 is in a sense a minor replica of the clause, making reference to the 'nucleus' of the Situation, including the participants (in pronominalized form), and there is an (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 'non-directed' and 'directed' actions. In the Intransitive clause, the sole inherent participant is simply engaged in a process, of himself. 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:* it is the entity through which the process is actualized, and comes into existence.

In the other three types, there is a '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 some-

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* I use the term 'Medium' following Halliday (forthcoming). Although 'Medium' is defined here in the same way as Halliday defines it for English, it does not have precisely the same designation in the two languages, primarily because of the differences in the way the two languages organize the clause semantically.

thing. 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 be in the control of an intentionally directing agency. This may be true of the paradigm cases, such as kart- 'hit, kill, fell', kaj- 'cut', etc., but even here the process 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 example

(5-58) waya-ngka	mirtmarni	'The wire is tangled up'
wire-ERG	it tied itself	

What this refers to is not any type of tangled mess of wire, but one that arose out of the Agency of the wire itself, and not by human agency. Tangled messes can be referred to in two ways: either by a clause such as (5-58), which is typically used in case the material is wire, or fishing line, which have the property of recoil. ((5-58) 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, recognizing an external Agency (cf. example (5-159)).

Finally, this interpretation applies also to cognitive processes, and processes of perception. It is clear that in Kuniyanti such processes are seen as active, directed from the experiencer or perceiver (through the agency of his perceptual organs); they are not seen as impinging on him from the outside (see examples of mila- 'see' above), even if 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 he is not the real or ultimate cause.

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 case there are two further possibilities: either the activity is directed from each single entity constituting the Agent 'set' back on itself (giving the 'reflexive' sense), or it is directed among the entities constituting the Agent 'set', if this has more than one member. Only one inherent participant role is involved in this process type, the Agent himself, and the Process ( $\searrow$ VP) is explicitly marked as directed back on itself by the choice of one of the two Classifiers -ARNI₂ 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 actualization 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 'hitting', 'carrying', 'cutting', 'chopping', and other such material processes, which are clearly actualized through the Goal. (If the Goal is missed, the process goes unactualized.) But the same also holds for processes of perception and cognition, such as mila- 'see, look at', tanyмили- 'hear, listen to', lingi- 'think about', etc.: the Goal must be actually perceived in order for the transitive process to be actualized.

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 'wink at', 'wave at', 'talk to', 'tell to', 'whisper to', 'do something to', '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 need not be found, etc.

The differences between the two possibilities may be more accurately described in the following terms. In the Transitive mode the Goal is a Medium, i.e. as above, something through which the process is actualized 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 actualized. In a few cases there are minimal pairs for this distinction. (5-54) and (5-55) are examples involving mila-, which in the Transitive mode requires that the process be actualized through the thing perceived, but which in the Middle mode does not require this actualization.

Other minimal pairs can be found, and more particularly, every type (b) Transitive clause (page 255 above) is agnate with a Middle clause. The Medium/Goal of the former corresponds with the non-Medium Goal of the latter:

(5-59) nganyingka      pulja      thulngliminhi  
I      -ERG      tharra      I kicked-on him

'I kicked the dog/ball'

(5-60) yanyangka      ngarraki { -yu }      thulngmingarra  
other-ERG      my -DAT/LOC      he kicked-at me

'Other (man) kicked at me'

The contrast in all such examples seems to be exactly the one proposed here, i.e. whether the process is actualized through the Goal or need not be. (5-60), but not (5-59) allows that the process may not have been

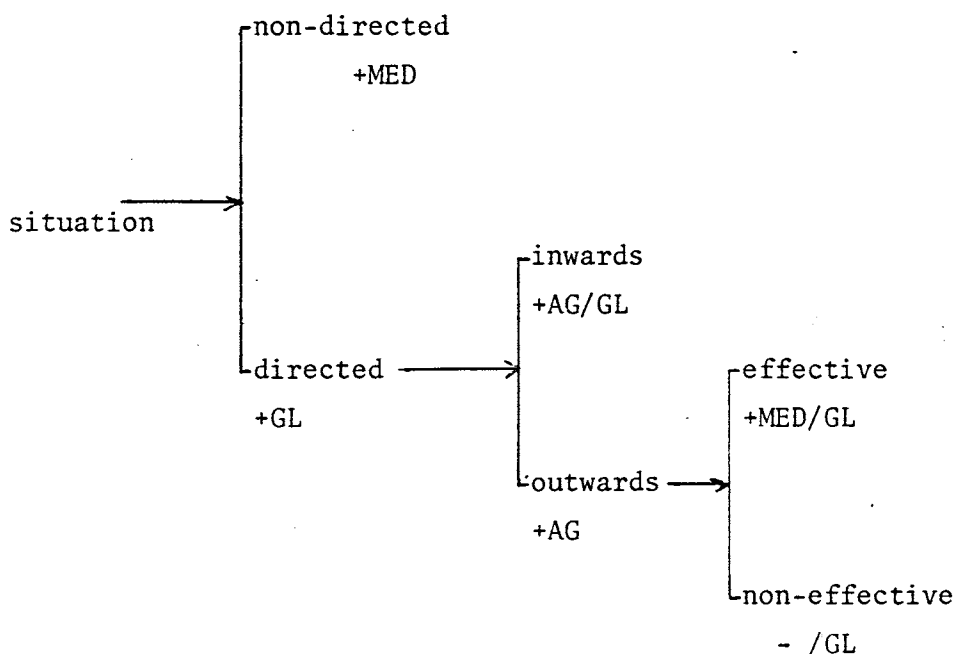
effective: the kick may not have connected.

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 - /GL

Moving away from the transitivity labels, the following system of Voice may be tentatively proposed.

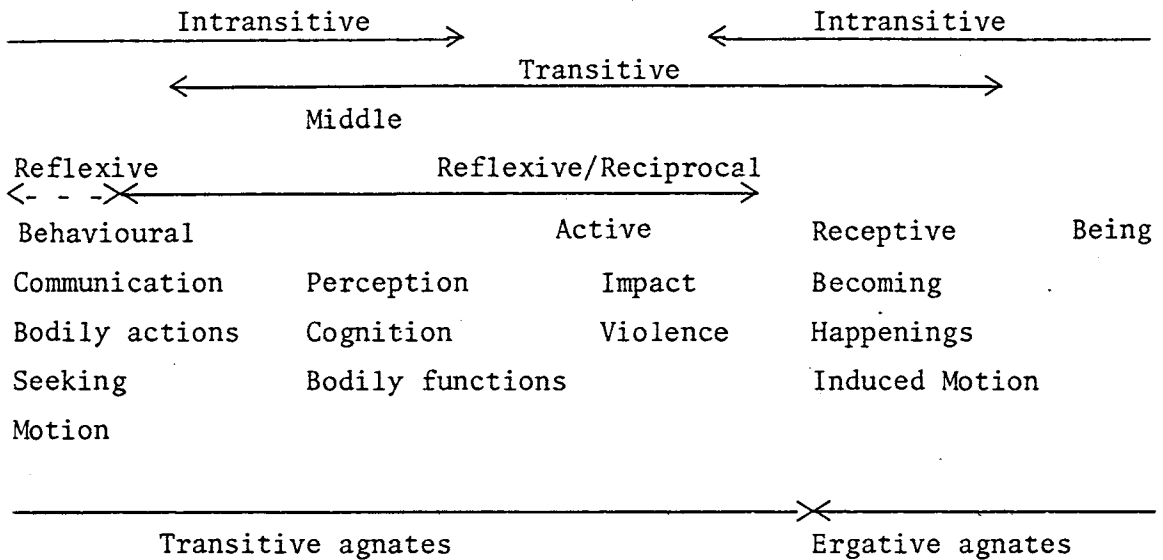
Figure 5-2: System of Clause Transitivity



It is clear that the situations of 'being' discussed in the last section are also describable in terms of this voice system. They are invariably non-directed processes, having a Medium which is the Carrier of the Attribute, the Existent, or the Inhabitant, in the respective modes of 'being'.

The four transitivity types are not distributed evenly across the semantic range of situation types in Kuniyanti, as Figure 5-3 indicates.

Figure 5-3: Transitivity and Semantic Type



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 or two inherent roles (Carrier, Attribute, Existent, etc.). Receptive Situations are those in which the Medium is an Undergoer semantically, and the Agent (if it occurs) is a Causer. They include situations of Becoming, in which the Process is realized by a Nominal (examples (5-61) and (5-62)), Happenings (exemplified in (5-63) and (5-64)), and Induced Motion (example (6-153)).

- Undergoer:NP  
 (5-61) nganyi nyamanilunti 'I got big'  
 I I got big
- Causer:PP Undergoer:NP  
 (5-62) nganyinka jikinya pinarrikmiila  
 I -ERG child knowledgeable-IT-I extend to him  
 'I'm teaching the child'
- Undergoer:NP  
 (5-63) nayu tijpinti 'The knife broke'  
 knife it snapped
- Undergoer:NP Causer:PP  
 (5-64) nayu tijjingi ngurntungka  
 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 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 situation of Becoming rather than Being may carry connotations other than the opposition between entering and being in a condition. Since the carrier in the Becoming situation, but not in the Being situation, is an Undergoer, the choice of this clause type may suggest the carrier to be more strongly affected by the process. Compare for example, the following two clauses.

(5-65) ngirrinyjila          warangjirri          'We were hungry (last night)'  
hungry                                  we sat

(5-66) nganyi                  ngirrinyjila-ngiri  
I'm hungry

"I'm stinking hungry" (Speaker's gloss).

The remaining non-being Situations have one participant which enacts or does the process, 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 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 (usually an animate) can always be a Medium. If he 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 yuwa- 'fear, exercise caution with respect to', thulng- 'kick', nyimij- 'wink', etc. But for the majority of clauses of this type, there is no Transitive agnate. This holds for communicative situations (Verbals jak- 'say, tell', jijak- 'speak', nyamnyam- 'whisper', etc.), seeking (Verbal muw- 'look for'), and motion (Verbals wart- 'go', kirra- 'run', etc.). Where there is no Transitive agnate, in 'inwards' directed action only the Reciprocal interpretation is allowed. In particular, this voice is available only when the Agent is non-singular. Thus,

(5-67) jijakjirri                  (ngiti)                  'We spoke'  
we spoke                                  we(R)

(5-68) jijakjirrinhi                                  'We spoke to him'

(5-69) jijakjirrarni                                  'We spoke together'

But for a singular Actor, only the first two options are available: e.g. jijakji 'he spoke', jijakjinhi 'he spoke to him'. To express 'he spoke to himself', 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 (5-52) to (5-55) above.

'Motion' has been included under Behaviourals since there may be a Middle agnate. For example, compare e.g. (3-85) with

(5-70) pulkangka            wartjiwirrangi            kuluwatiyurruyu  
           old man-ERG        he went-to them        initiands-DU-DAT

'The old man went up to the two initiands'.

(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 roles inherent in clause structure. These inherent roles define the minimal clauses, which may be classified by the types, and combinations of types, of the inherent roles. 'Minimal' clauses may be fleshed out with other, non-inherent roles, which fall into three main types. They are: "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 cross-referenced 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 non-Medium Goal, which is realized by a DAT PP and is in addition cross-referenced by an Oblique pronominal enclitic to the VP. But the Oblique enclitic also cross-references non-inherent roles in the clause. I define

an 'Affected' participant role as a non-inherent role which is realized by a PP and is 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 the three transitivity types except for Middle - i.e. Intransitive, Transitive, 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 realized by a LOC, DAT, ABL or ALL PP (never ERG, COMIT, or OR, in the corpus). Examples:

(5-71) murtu                    yutkutu-wirrangi                    niyajiyurru-ya  
 cicatrice                they put it-on them                this-DU-LOC  
 'They put cicatrices on the two'.

(5-72) mirtlimi-nhi                    thirru-yu  
 I tied it-for him                roo    -DAT  
 'I tied (a noose) for the kangaroo'.

(5-73) ngunyu-nhingi                tuwuya-nhi  
 which -ABL                    you got it-from him  
 'Which (person) did you get it from?'

(5-74) wartkurra-wirrangi                malngarri-yirra  
 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 process. Compare, for example, (5-74) with (3-2) in which the Distinction is an edifice - unaffected by the presence of the person; and compare (5-73) with

(5-75) ngunyunhingi                tuwuya  
 which    -ABL                    you got it  
 'where did you get it from?'

But DAT, LOC, ABL and ALL PPs with human referents are not obligatorily cross-referenced by Oblique pronominals. It is only when the human (or animate) is affected in some way by the process that a cross-referencing Oblique pronominal enclitic occurs. Compare for example the following minimal pair:

(5-76) lajanga-ngarra                ngarraki                timana  
 he rode it-on me                my                    horse  
 'He rode my horse for me'

(5-77) ngarraki                timana                lajanga                'He rode my horse'  
 my                    horse                he rode it

The first of these described the situation in which a jockey rode the person's horse for him in a race, and here the owner of the horse is affected as a type of beneficiary, on whose behalf the process was done. (5-77), on the other hand, is a plain statement that he rode my horse, and not to benefit me 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 appearance may be changed, as in (5-71). Other possibilities include that: he may benefit in some way from the process, as in (5-74); he may be disadvantaged by it, as in (5-72); the process may have been enacted on his behalf, as in (5-76); or he may be encumbered by it; as in

(5-78) Robin-ja      wartnginhi / warangnginhi  
                                  I went-on him / I sat-on him

'I went/sat with Robin'

More generally, he may experience strong emotions towards the situation, which may in turn influence his 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.

(5-79) tharrpurta      wartkiri-ngarra  
       WM                    he goes -on me

'My mother-in-law is going along (in my vicinity)'

Other such abstract senses of affect are illustrated in:

(5-80) pulupuluri-wirangi  
       he is clever-for them

'He's too clever for them (e.g. to catch)'

(5-81) marriyaliyu      kanypilngiraanhi  
       WM            -DAT      I'm shamed-on him

'I experience shame towards my mother-in-law'

It is clear from this that 'affected' covers both potentially and actually affected.

Relatively rarely an inanimate may be an 'Affected' participant.

Examples are:

(5-82) warrawutuya      tinpiti-nhi                    'They blocked the road'  
       road    -LOC      they blocked-on it

(5-83) lapirtlarri-nhi      mirlimirli      paki-ya  
       I put it on-on him      paper      bag -LOC

'I put (a stamp) on the envelope'

(5-84)	wayantiya	kampangarringka	putlarri-nhi
	fire -LOC	water-COMIT-ERG	I poured it-on him

'I poured the fire with water'

As these examples show, these inanimates are in some way 'affected', or changed by the process. Inanimates cannot be affected in the variety of ways humans can be - they have no feelings, etc. - and it is only when they are changed in appearance (as in (5-83)), state (as in (5-84)), 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 process, whereas the former does not. There is a clear common core of meaning (v. 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 Kuniyanti 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 a Range (following Halliday forthcoming), in order to maintain a terminological distinction from the participant Medium. An example is thangarnti 'words' in thangarnti jijakji '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 actualized and comes into being, but which is not central to the process. Like the Medium participant role, the non-participant Range realized 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 Kuniyanti, body-parts are treated as participants only in those cases in which the owner of the part cannot be seen as a participant in the process. 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 process is actualized through the body-part, but the owner of the part is seen as the one involved in the 'direction' of the activity.

They 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:

(5-85) (nganyi)            marla            tiriplunti            'I put my hand in'  
                                 hand            I entered

(5-86) murlu            nyimijji            'He winked his eye'  
      eye            he winked

(5-87) muwulu            kartnginpini            'He hit me in the face'  
      face            he hit me

In Reflexive/Reciprocal clauses, of course, the body-part must belong to the one inherent participant, the Agent, and represents the part of that entity through which the process was actualized (see also below page 269):

(5-88) marla            wirtpilingarni            'I bit my fingernails'  
      hand            I bit myself

(5-89) jajiyu            marla            ngalukjingarni  
      what-DAT            hand            you're repeatedly clenching yourself  
      'Why are you clenching and unclenching your fist?'

Note: that the body-parts in these examples are NPs, realizing 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 realized by a distinct NP. (That is, sequences such as nganyi marla do not constitute NPs - cf. page 210 above, and references mentioned there.)

(b) Instead of being actualized through a body-part, the process may be actualized through a (culturally determined) representation of an entity. In Kuniyanti, representations include names, footprints, shadows, and reflections. Exactly the same possibilities arise as discussed under (a). For example:

Intransitive -

(5-90) nganyi            lawakingiri            kurutu            kampaya  
      I            I'm white            reflection            water-LOC  
      'My reflection is white in the water'

Transitive -

(5-91) yingi            nyinnginyimi            'I forgot your name'  
      name            I lost you

## Reflexive/Reciprocal -

- (5-92) thinga wayakpilakini  
 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. For example,

- |        |             |              |        |            |
|--------|-------------|--------------|--------|------------|
|        | Agent:      | Goal/Medium: | Range: | Process:   |
| (5-93) | nganyi-ngka | yuwulu       | manyi  | ngangli    |
|        | I -ERG      | man          | food   | I gave him |
- 'I gave the man food'

(Cf. Rumsey 1982b:144).

(d) Some Reflexive/Reciprocal clauses may have a 'patientive' Medium, other than a body-part. For example,

- |        |            |         |                 |                      |
|--------|------------|---------|-----------------|----------------------|
|        | Agent:     | Medium: | Process:        |                      |
| (5-94) | nganyingka | makarta | yutjawilimarni  | 'I'll put on my hat' |
|        | I -ERG     | hat     | I'll put myself |                      |

(It would appear that, as distinct from the case in which the Range is a body-part ((a) above), the Range is inherent in (5-94).)

The Range of (5-94) clearly corresponds to the participant Goal/Medium of

- |        |            |              |          |                      |
|--------|------------|--------------|----------|----------------------|
|        | Agent:     | Goal/Medium: | Process: |                      |
| (5-95) | nganyingka | makarta      | yutli    | 'I put the hat down' |
|        |            | hat          | I put it |                      |

The hat fulfils the same role throughout as a patient, the thing that is placed. However, whereas in (5-95) the action is conceived of as directed towards the hat, in (5-94) it is directed towards the Agent himself, and the hat is treated as a Medium through which this self-directed action is actualized. The speaker might, alternatively, opt to treat the hat as the Goal and himself as Affected:

- |        |            |                |                         |
|--------|------------|----------------|-------------------------|
| (5-96) | puntiwarli | yutlingarra    | 'I put on the headband' |
|        | headband   | I put it on me |                         |

(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). For example,

- |        |            |               |                    |
|--------|------------|---------------|--------------------|
| (5-97) | thangarnti | jakmingarra   | 'He told me words' |
|        | word       | he told-to me |                    |

- |        |                    |         |  |
|--------|--------------------|---------|--|
| (5-98) | nayirrwiri         | kiningi |  |
|        | you'll take breath | breath  |  |
- 'Take a breath' or 'Take a spell'

(5-99) ngurrungka      yuwulu      karingiwa      kartpinga      thirri  
 that -ERG      man      wife -his      he belted him      fight

'That man belted his wife'

Such Mediums are the so called 'cognate objects' of traditional grammar - except that in Kuniyanti none of the Nominals are formally "cognate" with the Verbals. It must be noted, however, that it is not only non-participating Mediums which make reference to something which has no real existence outside of the process. (5-100) and (5-101) show such 'cognate' Mediums as participants in Intransitive and Transitive clauses respectively.

(5-100) yiwinti      yilijpani      'It rained'  
 rain      it rained

(5-101) yuwulungka      junpa      ngalanynga      'Man sang the song'  
 man -ERG      song      he sang it

It is not always easy to distinguish Ranges from Attributes. It seems that in some cases, as exemplified in (5-102) below, the NP might be either a Range or an Attribute:

(5-102) muyu      pakiyi  
 'He lay asleep', 'He was asleep', or 'He had a sleep'

The Range interpretation is the only one possible in

(5-103) muyu      nyamani      pakingi  
 big  
 '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 260 above. The only exception that I am aware of concerns processes of vocal communication, in which thangarnti '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 Kuniyanti transitivity types, there is a non-inherent, non-participant Agentive role which may, like the Range, occur in any of the four transitivity types. This role, which will be referred to as the Instrument, in order to distinguish it from the participant Agent, is always realized by an ERG PP. (By contrast, the participant Agent may be realised by either an NP or a PP - cf. page 256 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:

(5-104) marlangka      wirrijngarni  
           hand -ERG      I scratched myself  
           'I scratched myself with my hand'

(5-105) marlangka      mapanjinti  
           hand -ERG      he farewelled us  
           'He farewelled us with his hand (i.e. by waving)'

(5-106) murlungka      nyimijnyimijjingarra  
           eye -ERG      he winked - at me  
           'He winked his eye at me'

As remarked above (page 267), body-parts are rarely treated as participants. In general, directed action is seen as stemming from the individual himself - for a small class of exceptions see below page 349.

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 (5-107) and (5-108) 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 (5-107), particular effort must be directed through the ankles in order to walk on tip-toes. This may be contrasted with the more neutral thinga wartngi 'I went (on) foot' (see example (5-121)), in which thinga is presumably a Range through which the walking is actualized. No additional effort is involved over that required to keep the motion going.

(5-107) thinga      tumurtu-ngka      wartngi  
           foot      chest -ERG      I went  
           'I walked on tip-toes' (i.e. on the 'chest' of my feet)

Similarly, crouching on the haunches requires effort over just sitting:

(5-108) kimaningka      warangngiri      'I'm crouching on the haunches'  
           knee -ERG      I sit

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 264). An example in which this condition obtains is:

(5-109) jinalingka      nyakpini  
           spear -ERG      he speared him

This 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 identified in Kuniyanti: 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 Postposition in 3.7 above.) Circumstances are realized primarily by Adverbials and PPs (Ergative, Dative, Locative, Allative, Ablative, and Orientative), 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 LOC (-ya) PPs, or Spatial Adverbials of the locational type (e.g. Locative forms of the Cardinal directions, etc.). Any type of process can be located in space: processes of rest and being (for example, line (1) Text 1), processes of motion (example 5-110)), processes of violence (example (3-84)), and so on.

(5-110) walyarraya        wartngi        'I walked on the sand'  
           sand -LOC        I went

As discussed in section 4.3.2 PPs and Adverbials may be juxtaposed to form a complex unit together. In this way it is possible to make more precise the spatial relation of the situation with respect to the reference location - whether inside, on, behind, around, etc. (See examples (4-90) and (4-91) above.)

(b) In Direction there is a distinction between direction towards, and direction away from. The former is realized by ALL PPs (see page 151) and 'Direction to' forms of the Cardinal and Vertical Spatial Adverbials (page 134-135); the latter by ABL PPs (page 149-151) and 'Direction from' forms of these same Adverbials. In addition, both may be realized by the directional Adverbials (including minaluku 'towards here', etc. (see page 137-138), kintiwa and jipirri (page 136), and the general mikawa 'that way' (usually accompanied by a gesture indicating the way - page 130)), and by complexes of Adverbials and PPs.

Some Adverbials such as palngarna, panyangi 'outside' may occur in clauses of motion, indicating direction towards or direction from, with or without an appropriate Postposition, -yirra ALL₁ or -nhingi ABL₁ respectively.

(5-111) wartji            panyangi(-yirra)    'He went outside'  
           he went

(I am unable to specify the meaning difference - cf. page 228)).

There is one other way in which direction can be specified: in terms of the intermediate path taken between the termini. This is realized by a -pinyi (Orientation) PP, which refers to a salient feature on the path. For example:

(5-112) pulatipinyi      wartji  
dry -                      he went  
'He went along the dry path (beside the muddy road)'

(5-113) nganyi            rirringki            wartngi            patikpinyi  
I                      side                      I went  
'I went by the side of the paddock (i.e. by the fence)'

-pinyi may be attached to a Spatial Adverbial such as ngilmi 'east side' - ngilmipinyi 'via the eastern edge of'.

Direction does not imply motion, and a Direction may be specified for processes which do not involve movement of one of the participants. (3-87), (3-90) and (3-91) are some examples.

(c) Extent is normally expressed by one of the spatial Adverbials kraa 'short distance, near', or marnangurru 'a long way away, far' (see page 137). In at least one instance a Nominal, thiki 'short', was used in specifying distance covered:

(5-114) thiki            thithi            thayatlunayi  
short            going            I walked them (2)  
'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. marnangurrumi 'it is far?' In one instance the form nguniyajangi 'which-LOC-SEM' was used in requesting the distance to a river.

There are (to my knowledge) no exact units of spatial measurement native to Kuniyanti. (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 Kuniyanti speakers responded to my attempts to determine distance more accurately by comparison with known distances. Unfortunately there are no full Kuniyanti utterances expressing such comparisons available.

PPs are also used in expressing extent. These are either ALL₁ (-yirra) or ABL₁ (-nhingi) phrases depending on which endpoint is taken to be the origin. Examples are (5-40) above and

(5-115) papurrungku      kampayirra      kartpani  
down                      water -            it falls  
'The cliff extends down to the water'

### 5.2.3.2 Temporal Circumstances

Temporal circumstances are of two types (i) temporal location, (ii) temporal extent. These roles are typically realized by the Temporal Adverbials as discussed in 3.4.2, and less frequently, by PPs. There is very little overlap between the expression classes that realize Temporal and Spatial Circumstances. As far as I am aware, Temporal Adverbials never realize Spatial Circumstances, nor do Spatial Adverbials realize Temporal Circumstances.* The only common members are a few LOC and ABL PPs, such as mirriya 'sun-LOC', which normally means 'at dawn', but could presumably also mean 'at/on the sun'.

(i) Temporal location may be realized by a variety of Adverbials, as discussed in 3.4.2 above. In particular, they include the indefinite yaningimi (now/then -IND) 'at some time/when', and an expression will realize 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 realization is by one of the Temporal Adverbials, and/or by a LOC (-ya) or DAT (-yu) PP, depending on whether the time referred to is past or future. Examples are (3-37) and

(5-116) mirriya            pijngarni            'He arrived at dawn'  
sun-                    he emerged

(5-117) mungayayu            nganyi            mikangiringangki            parnpiri  
morning-DAT            I            I tell - to you            you'll return'  
'I'm telling you to return tomorrow'

Location after is by contrast never realized by a Temporal Adverbial, but is invariably realized by an ABL₁ (-nhangi) 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 ABL PP does not normally have an embedded 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' (v. page 123) may refer to previous situations (which are typically established in paragraph size extents of text), and the d-words niyinhingi and niyajinhingi frequently occur in texts to locate situations

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* However, Spatial Adverbials do occasionally occur as NP constituents with temporal meaning (cf. page 139) and occasionally occur in syntagms with Temporal Adverbials in expressions of time - e.g. [maningka thulngurru] (night through) 'through the night'.

with respect to the situations previously described. (See lines (27), (46), and (75) 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 nominalized (as in (5-118)), or a thing which represents the process (such as 'food' in (5-119), which 'represents' the process of eating.)

(5-118) niyinhingi            nartawurrarni            thirrinhinginka  
           that -ABL            they cried together            fight-ABL-ERG  
           'Then they cried together after fighting'

(5-119) yikanyi            wartjawinpirra            manyinhinginka  
           uncertain            they might take you            food -ABL -ERG  
           'They could take you after food'

(5-119) occurred in a situation in which I had been wondering when I'd 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. manyinhinginka belongs to an expression class including yaningimi.

(ii) Temporal extent may be realized by Temporal Adverbials such as yingki 'for some time' and yingkiyila 'for a short while', yilpa 'forever', etc. (v. 3.4.2 above). It may also be realized by an NP with an Entity such as wik 'week', kampa 'year' (<'water'), jaalinyi 'month', etc., or by the Adverbial thulngurru in combination with a time word.

(5-120) niyajija            warangji            yuwarni            wik  
           this-LOC            he sat            one  
           'He stayed there for one week'

(5-121) Lanis thinga            wartji            lanykiya            thulngurru  
           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 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.

(5-122) karrwarunhingi            wayanti            murrupka  
           afternoon -ABL            fire            it burns  
           'The fire is burning from/since yesterday'

(5-123) ngunyju            ngirntaji            warangkila            tinayawu  
           tobacco            this            I keep it            dinner-ALL  
           'I keep this tobacco til dinnertime'

'Time since' can 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 Adverbs wampa 'later', yaningi 'now', etc. (Similarly, 'time until' differs from 'time at' in reference to future time, although both may be realized identically by DAT PPs.)

### 5.2.3.3 Means

The Means refers to something by means of which an action is effected. It is realized by a -ngarri COMIT or -ngarringka COMIT + ERG PP, in clauses of undirected and directed action respectively. Examples are

(5-124) rope-ngarri        thutngani        'He climbed down with a rope'  
                                 he descended

(5-125) wupuwinayi                karurungarringka  
         he cooked them (2)        hot coals-  
         'He cooked the two (men) in coals'

Means contrasts with Instrument on the one hand, and Accompaniment on the other. There are minimal pairs such as (5-109) and (5-126) in which the spear may be treated as either an Instrument (realized by an -ngka PP), or a Means (realized by an -ngarringka PP).

(5-126) jinalingarringka        nyakpini        'He speared it with a spear'

However, I claim that the two expressions are not in free variation. The Instrument is generally an extension of the Agent (or action), 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 required on the part of the actor to use them. In using rope for climbing (5-124), horses for riding, legs for standing, etc., the Actor does not direct his efforts through these means, which assist him in the process. Use of the Instrument, as mentioned above (page 271), 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 very few situation types that there is a choice in treating something as a Means or Instrument. It follows from my remarks on page 264 above 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, kart- 'hit', nyak- 'spear,

pierce' (example (5-109) above), pilkurr- 'crack on skull', etc. For other directed action types, including e.g. all types of throwing, cooking, carrying, tying, etc., which do not involve impact, a non-body-part cannot be referred to in an -ngka 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. Melčuk (p.c.) 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 -ngarri (COMIT) and -ngarringka (COMIT + ERG) PPs (see below 5.2.3.5). That there is a distinction between Means and Accompaniment is shown by two main facts. Firstly, Means may be questioned by either yinikangarri (somehow-COMIT) 'how, by what/some means', or jajingarri(ngka) (something-(COMIT-ERG) 'with something/what'.

(5-127) A: yinikangarri      nyakpuwu  
           how    -COMIT      you'll spear it

B: jinalingarringka      nyakpuwu  
           spear

A: 'How do you spear it?'      B: 'With a spear'.

Accompaniment may be questioned by jajingarri(ngka), but not by yinikangarri. Secondly, Accompaniment in clauses of directed action need not be an accompaniment of the actor or doer (see below 5.2.3.5). Means must be used by the actor (not by a patient or undergoer). For Accompaniment PPs, but not for Means, there are agnate clauses in which the PP realizes 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, characterizing the way it was done, or (b) make a comparison with the quality of action by another individual. The Adverbial mika 'in that manner' is substitutable for Manner circumstantials:

(5-128) mika            mirtpa                            'Tie it up this way'  
                           you'll tie it

(5-129) mika            warangkiri            parntiyurru            talwurruyu  
                           he sits                    arm            -DU            they (2) are extended

'Diver-bird sits with wings extended'

(a) Quality is expressed either by an Adverb (v. 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

(5-130) ngaarri            wajlarri            thirrkirli            wajkilarrirni  
 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 realized by an NP - i.e. the ERG Postposition may not be omitted.) Examples are:

(5-131) jimantinyali            parwinti            mangarri            tukurrawani  
 good            -REP            he climbed            not            he was falling  
 'He climbed up well all the way; he didn't fall'

(5-132) wangmarra            wartji            'He walked madly'  
 mad            he went

(5-133) kartluni            wangmarrangka            'I hit him crazily'  
 I hit him            mad            -ERG

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 5.2.4).

We might recognize, in the following example, another type of Quality, Quantity. This indicates the 'size' or 'amount'; in other words, the extent to which the situation has progressed.

(5-134) wampa            ngarrja            nyamaniyawunti  
 later            little            he'll grow big  
 'When he has grown up a little'

(b) Comparison is indicated by -jangi SEM, which is encliticized to the NP referring to the entity with which the comparison is being made. In clauses of directed action, -jangi is followed by -ngka ERG. For example:

(5-135) kurnpu            thirri            kartpuwuna            yuwulu-jangi-ngka  
 woman            fight            (s)he 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.

(a) Comitative is expressed by PPs with Postpositions either -ya LOC or -ngarri COMIT. In the second case (only), when the thing accompanies



an Agent, the -ngarri PP is embedded in an -ngka ERG PP. The choice between LOC and COMIT depends on the relative status of the accompanying entity on an 'animacy' hierarchy (v. e.g. Silverstein 1976b:122). -ngarri occurs when the accompanying thing is of lower status than the accompanied; -ya occurs otherwise. When the accompanying entity is an adult human being, he is normally referred to in a LOC PP. For example,

(5-136) wartngi            Kevinja            'I went with Kevin'  
I went

(5-137) ngarrakiya            warangpiri            'Sit with me'  
my            -LOC            you'll sit

In examples such as these, the accompanied participant is normally less 'potent' in the process than the accompanying person, who is typically the leader, or driver of a vehicle.

It is normally only when an accompanying human is a child that he is referred to in a COMIT PP. For example, clauses such as (5-138) are frequent, but there are no such examples in which the -ngarri PP refers to an adult, or even an entity referred to by a free pronominal.

(5-138) jukungarri            wartjirri            'We went with the children'  
child-            we went

Likewise, accompanying inanimates and lower order animates (e.g. dogs) are invariably referred to in -ngarri PPs, and never -ya PPs. Examples are:

(5-139) manyingarri            wartngi            'I went with food'  
vegetable food            I went

(5-140) shanghai-ngarringka            marimaringa  
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 action is primarily directed is treated as the Medium/Goal, the other as an accompaniment. For example, it is primarily the tobacco that is chewed in (5-141), and the onions that are mixed around in (5-142).

(5-141) ngunyju            ngapkinyja            kawuntungarri  
tobacco            you eat it            ashes  
'You eat (sic) tobacco with ashes'

(5-142) pirlangarri            kininyparri            nyaati  
yam-            he mixed it            onion  
'He mixed onions with potatoes'

When the role is realized by a -ya PP, the two entities may be grouped together as a single participant set in an agnate clause. (5-136) could be expressed alternatively as (ngiti) wartjirriyi 'we (2) went'. The Adverbials mulpa 'as a group', and julu '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. (5-137) for example might be followed by julu warangpirri 'we'll sit together'.

Note: (5-137) is ambiguous between locational and accompanying interpretations. In the latter sense only, there is a corresponding clause with julu. Conversely, in the locational sense, Spatial adverbials such as yalawa 'nearby' could co-occur with ngarrakiya. (5-136) is of course not really ambiguous (but cf. (5-110)).

Grouping of the two entities into a single participant set is not normally possible when the accompanying thing is referred to in a -ngarri PP. I have never heard sentences such as wartjirri, grouping together a person and food as 'we', in a clause corresponding to (5-139). In this case, however, there may be a possibility of treating the accompanying entity as a Goal. Instead of (5-139), the speaker could have said manyi wartla 'I brought food'. Thus (5-138) would seem to correspond more closely to juku wartjirra 'we brought the children' than mulpa wartjirri '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 (v. above) than the accompanied, it is referred to in an NP with the Particle marlami 'nothing' (v. 6.4.2).

(5-143) wartngi            manyi            marlami            'I came without food'  
I went                v. 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) - (3-80) and (3-82) in section 3.6 above), and Adverbials such as tujku 'alone, by the self' (which normally occur with the Oblique pronominal). Sometimes these expressions are followed by Privative expressions such as liwaya marlami 'friendless'. For example,

(5-144) nhuwu            tujku            ngurluknga            liwaya            marlami  
his                self                he drank it  
'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 realized by a -nhingi ABL₁ PP. For example,

(5-145) panta            nangkanangkayi        yiwintinhingi  
           ground        it is spotted        rain        -ABL  
           'The ground is spotted from rain'

(5-146) kampanhingi        wangmarraarra        wartji  
           water -ABL        mad -Manner        he went  
           'He went along madly from grog'

It is difficult to pinpoint precisely the 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 realized by an ABL PP, they are distinguishable on at least two grounds. Firstly, the expression class which realizes 'Direction from' circumstances differs from that which realizes Resultative cause: the former includes Spatial Adverbials such as papirnali '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 realizations of Resultative causes. Secondly, the Indefinite corresponding to the Resultative cause is jajinhingi 'from something, what from', whereas ngunyunhingi '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:

(5-147) thithingka        rurrijpirrarnirri        kampanhingingka  
           going -ERG        they fought together        water -ABL -ERG  
           'They fought together from/as a result of grog'

As is the case of 'time after' (above, section 5.2.3.2), -nhingi is followed by -ngka (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 an ABL₂ (-yangka) PP realizes this role. The only examples of this type have a clause embedded in the PP - see below 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 realized by a PP with the Postposition -winyja. For example,

(5-148) kampa-winyja      riminylunti  
           water                I got thirsty  
           'I got thirsty for lack of water'

(5-149) manka            wangmarrawinti      kampawinyja  
           ear                he went mad            water-  
           '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 participant role of the situation in which it occurs but which is intended to be involved as an inner or participant role in a subsequent situation, enabled by the former situation (cf. Dixon 1977:260.) In this case the role is realized by a DAT (-yu) PP referring to the entity. For example,

(5-150) kirili            kajpa                    ngalinyayu  
           tree                you'll cut it            honey -DAT  
           'Cut the tree for honey'

(5-151) karla . . . . thangarnti-yu-muwa . . . . ngangjiluna  
           tobacco            mouth      -DAT-ON            I gave them  
           'I gave them tobacco only for words'

In (5-150) cutting the tree is a necessary preliminary to the ultimate goal of getting and eating the honey; and in (5-151), 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 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 Affected, and from the circumstance of Matter (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 wungulu 'for fun', (example (6-171)), kinyirri 'for/over women' (as in 'fight for/over women'), and

perhaps priyanti 'in revenge'. Furthermore a Purpose (but never an Affected) is sometimes another situation, in which case it is realized by a DAT PP (with Dat allomorph -wu - see 3.7) 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 in the VP.)

As shown on page 152 above, a -pinyi OR PP may indicate an ultimate purpose or goal at least in clauses referring to hunting and gathering. As explained there, when -pinyi is used, the thing sought 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 realized by a DAT PP. The fact that circumstances of Matter frequently occur circumstantially in Characterizing 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 Characterizing clauses. (These latter normally occur as Attributes - v. section 5.2.1.1.1.2.)

The main types of quality that are extended by Matter circumstances include those of value (e.g. good for something - example (5-279) below), knowledge and ignorance (examples (5-154)), 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 realize a role in the NP of itself - see example (5-282).

Situation clauses that may have circumstances of Matter include:

clauses of 'experiences' such as thirst,

(5-152) 

kampayu	riminykuwangiri
water-DAT	I'm getting thirsty

  
 'I'm getting thirsty for water'

(contrast (5-148));

clauses of communication, e.g.

(5-153) 

yankinnginti	warawutuyu/ngaarriyu
he asked me	road -DAT/stone-DAT

  
 'He asked me about/concerning the road/for money';

clauses referring to processes of thought, such as

(5-154) mikarlimi ngumurruyu ranpinti  
I thought cloud -DAT it went away

'I thought about the clouds (that) they would go'

(see also (5-277) below);

those referring to situations of getting someone to do something, in which typical Verbals are pala- 'send', ngimpirr- 'hurry up', and janyarr- 'to cry out to someone for, to "humbug"', example:

(5-155) palajila wayantiyu kajku  
I sent him fire -DAT cut-DAT

'I sent him to cut firewood';

and others, such as kul- 'try',

(5-156) kululjinga thangarntiyu jijakku  
he tried repeatedly word -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 realized by DAT PPs, is that the Adverbials wungulu 'fun', etc. belong to the expression class of the latter, but not of 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 (5-153), the PP ngarriyu might be a Purpose, or a Matter.

Circumstances of Matter may refer to situations as well as 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 realized by a LOC PP. Examples are:

(5-157) tharraya yuwangiraanhi  
dog -LOC I exercise caution - of it

'I'm afraid of the dog' (that it might do something to me).

(5-158) maa yutjingi tharraya tharrangka ngapkawu  
meat he put it dog -LOC dog -ERG he eats it-DEF

'He put the meat away from the dog lest the dog eat it'

(5-159) wayangarringka mirtjinmi nyirri kinkaliya  
wire-COMIT-ERG we tied it spinifex wind -LOC

kinkalingka wajkarruwu nyirri  
wind -ERG it throws it - DEF 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; they are normally optional in these other clause types. In contrast with circumstantials, Attributes do not modify the whole situation, and consequently they are not realized 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. Nichols 1978:114, and Halliday 1967:62). As in Situation clauses of Being, only non-inherent, and typically temporary qualities may be attributes 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 - v. page 250 above).

As a rule, Attributes modify participants, usually Agents and Mediums. (There are no examples available of Affected-attributes, but there would appear to be no reason why these could not occur.) They may however, modify non-participant Ranges, especially where the Range is a body-part of a participant entity. For example,

(5-160)	marla	palngarna	pakingi	'I had my hand open'
	hand	outside	I lay	

As was the case in Characterizing clauses and Attributive modes of Being, the Attribute almost always follows, not necessarily immediately, the participant it modifies, as can be seen from an inspection of the example below.

Both qualities and circumstances may be attributed of an entity in non-being Situation clauses. These correspond respectively to Ascriptive and Circumstantial attribution identified above.

[1] Ascriptive Attributes. There are four main types of Ascriptive Attributes, which may 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; or (d) a capacity in which a participant is involved in the situation.

(a) Descriptive attributes may be predicated 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 he was performing the act. In this case, the Attribute is realized by an ERG PP. The expression class of Agentive attributes overlaps considerably

with that of Manner circumstances (in transitive clauses), also realized by ERG PPs. However, that Agentive attributes and Manners are distinct follows from the fact that the expression class of the latter, but not of the former, includes Adverbials. In addition there is at least one example available in which the ERG PP can refer only to an Attribute:

(5-161) kaljiningka        wajkarri        jurtu  
           quick -ERG        it throws it        dust  
           '(Going) quickly (the car) throws up dust'

In this clause kaljiningka can refer only to the quality of motion of the vehicle; there is no suggestion that the cloud of dust is being thrown up quickly. The latter sense would be realized by the Adverb kaljini. 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 (5-132) 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,

(5-162) jurtu        wartkiri        nyamani  
           dust        it goes        big  
           'Dust storm is coming up big';

social status,

(5-163) jungkulungarri        kungku        wartkiri  
           bereaved        'taboo'        he goes  
           'He goes under a meat taboo';

mental qualities,

(5-164) tharrangka        kirranginpini        yuwa  
           dog -ERG        he ran me        fear  
           'Dog chased me frightened';

state of health,

(5-165) kampinyali        milarla        mangarri        pinyitiwinti  
           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:

(5-166) kampangka        yilijpinarri        jilngintingarri  
           water-ERG        it rained on them        wet        -COMIT  
           'The rain wet them through'



- (5-167) pulpangarrinyali      muyu      pakiri  
 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 realizing the Attribute may consist of a Numeral, indicating the senses 'alone', 'together', 'as a triplet', etc. For example,

- (5-168) yuwarni      wartngi      'I went alone'  
 one      I went
- (5-169) thutkuwirrani      ropeja      karntiwirrininyali  
 they started sliding      -LOC      two      -REP  
 'They started sliding down the rope together'

(b) The Resultative attribute refers to a quality, condition or state acquired by an entity as a result of the situation. 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 (i.e. in Happenings - v. 5.2.1.3). For example:

- (5-170) kurrumpa      kajkajla      purna      'I chopped the paper to bits'  
 paper      I cut it      piece
- (5-171) kalurrkpani      wayanti      purnpurnu  
 it fell      firewood      pieces  
 '(The tree) fell to pieces'

However, in one example, the Attribute is of a Range:

- (5-172) thaawuri      kajngarni      japiyapi  
 beard      I cut myself      very short  
 'I cut my beard short'

As these examples show, the Resultative attribute normally follows the VP.

Resultative attributes may be realized by NPs (as in examples (5-170) to (5-172) above), or by -yirra ALL PPs (but not by the other types of ALL PPs). Examples are

- (5-173) tuktuknga      kalypayirra      'He tapped (the apple) soft'  
 he tapped it      soft      -ALL
- (5-174) purrulungarni      pulatiyirra      'I rubbed myself dry'  
 I rubbed myself      dry      -ALL

(I am not aware of the latter type attributed of Undergoers in Intransitive clauses, where only the former type is attested - as in example (5-171) above.)

The distinction in meaning between the two possibilities, the NP and 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 (5-173) could be referred to by [manyi kalypa] 'soft food'. On the other hand, when the Resultative NP NP

Attribute is realized by an NP, that NP does not designate a quality of the original entity. Rather, it suggests that that entity has changed so radically as to require a new referring Nominal. The Nominal lexeme in Entity function in the phrase referring to the participant is no longer appropriate to that thing. For example, in (5-171), the resulting thing is no longer a tree; in (5-172), it is no longer a beard; and in (5-170), it is no longer suitable as paper. Compare

(5-175) kajkajla      lampalampartiyirra  
I cut it      little pieces -ALL

'I cut it into little pieces'

Here the resulting stuff might be referred to as [kurrumpa lampalamparti] 'little pieces of paper'. The suggestion is that the paper is not cut up as completely in (5-175) as in (5-170).

A correlate of this distinction is that attributes realized by the PP are normally approached by degrees. Those realized by NPs are often effected instantaneously - cf. also

(5-176) parrili      yarrajlimi      purnpurnu      yilpa  
bottle      I smashed it      pieces      for good

'I completely smashed the bottle to bits'

Otherwise, as in (5-172) above, the qualities are 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 under-goer or patient. These attributes do not occur with other situation types, such as those of Behaviour, or Being.

(c) In the third type - the conditional attribute - the Attribute is least involved in the situation. It indicates a condition that the entity is found in when the situation takes 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. Examples are:

- (5-177) thiki            katluni            'I left it short (half done)'  
           short            I left it
- (5-178) pijngarni            jimanti            'He arrived well'  
           he emerged            good
- (5-179) parnkiiyirri            maruwa            'We returned murderers'  
           we returned            murderer

For humans, it is frequently a social or age status:

- (5-180) nganyi            kulawati            ngurru            yutnginpiti  
           I            initiand            that            they put me  
           'As an initiand they put me there (in the bush)'
- (5-181) kurnpu            kalintha            nangpani            'The woman died young'  
           woman            young woman            (s)he died

In addition to being predicated of Mediums ((5-177) - (5-181)), a conditional attribute may be predicated of an Agent, as in (5-182), in which thithi 'motion, going' is a concomitant 'quality' of the Agents as they are arguing.

- (5-182) thithingka            rurriypirrarni  
           going -ERG            they argued together  
           'They argued together going along'

(thithingka is clearly 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. ((5-177) is only apparently a counter example. The preceding clause was mangarri kilpaali 'I didn't finish it' - the intended meaning 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 realized by an ABL PP. For example,

- (5-183) kiljirrikinhingi            kurnakjawani            wuku            pakiyawi  
           tadpole            -ABL            it will turn            frog            it will lie  
           'From a tadpole, it will turn into a frog'

With Extendible processes (v. above page 165), the suggestion is that the situation holds for all subsequent states or qualities of the entity.

Thus:

(5-184) mawulyinhinginka warrkumjawurra  
 children-ABL-ERG they work (Subjunctive)  
 'They want to work from children'

(5-185) mawulyi ngirntaji pinarrikmiwirrra  
 children this we'll teach them  
 lampalampartinhingi  
 little ones -ABL  
 'We want to teach these children from little ones'

(d) Capacity attributes, which indicate the role of a participant in the situation, are illustrated in the following three examples:

(5-186) ngurru warrkumkiri stockman  
 that he works  
 'That (man) works as a stockman'

(5-187) ngulyungulyungka kajlimi 'As a circumcisor I cut him'  
 "cutter" -ERG I cut it

(5-188) niyajiyurru kampayi jimarrilangi  
 this -DU boy friend-kin dyad  
 nyamaniwawurruyu  
 they (2) were getting big  
 'These two boys were growing up as friends together'

[2] Circumstantial Attributes. In Situation clauses other than those of being, the only circumstance attributed of entities appears to be the spatial circumstance of Location. Locational Attributes ascribe a location to the Medium (usually a Goal), as it is involved in the process. These Attributes typically occur in clauses referring to processes of holding and carrying. For example,

(5-189) kampa kalinyjawila bucketja  
 water I'll carry it -LOC  
 'I'll carry the water in a bucket'

(5-190) kurijkila marlaya 'I'm holding it in my hand'  
 I hold it hand-LOC

(5-191) manyi mirraya thirrangkaa  
 v.food head-LOC she carries it on 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 entity at, in, or on which the Medium/Goal is located.

The Location that occurs with the verb yut- 'put' in (5-192) would also seem to be an Attribute:

(5-192)	ngaarri	yutjingi	kilirniya
	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 pirntirriya 'on the plain', which would appear to be a Locational circumstance.

### 5.3 Some Aspects of the Textual Organization of the Clause

#### 5.3.1 Information

Following Halliday two major aspects of the textual organization of utterances are distinguished in Kuniyanti: (i) information, which is concerned with the given/new opposition, and (ii) thematization, which is concerned with the theme/rheme (or topic/comment) opposition (Halliday 1967, 1970, and forthcoming). Information and thematization impose distinct and independent structures on the utterance. As is the case in English, information structure is expressed (primarily) prosodically, by intonation features, and the thematic structure is realized through constituent order. This section is concerned with information; thematization is discussed in the following section.

As has already been remarked, Kuniyanti discourse is highly elliptical: given or retrievable information is typically ellipsed. There are few restrictions on either the class of constituent that may be ellipsed, or its experiential role in the clause. Propositional Modifiers (see below 5.4) are the only exception - they are never ellipsed. There are, however, differences in the types of constituent that tend to be ellipsed, depending on genre type. In monologues of the type investigated for the purpose of this description (v. section 1.10), ellipsis of nominal expressions (referring to entities involved in the situations) is common, whereas VPs are almost never ellipsed. Expressions referring to participants are especially prone to ellipsis, since they are cross-referenced by bound pronominals in the VP - the information conveyed by these pronominals facilitates the retrievability or recoverability of the identity of the participant. (A count over the fifteen texts investigated revealed that approximately one in five clauses had its full quota of nominal phrases (i.e. those referring to inherent participants). There were, however, only three or four instances in which a VP had been ellipsed - in each case the ellipsed VP belonged to the second clause of a type of 'correlative' construction (of the type exemplified in (5-247) below).)

On the other hand, in natural conversation there is a greater tendency for given VPs to be ellipsed. A conversational exchange such as the

following is by no means unusual:

- (5-193) A: kartluni 'I hit him'  
 B: ngur tungka 'Who (did)?' (B was rather deaf).  
 A: nganyingka 'I (did)'.

Kuniyanti texts are spoken as sequences of tone units, which carry the distinctive intonation contours. These tone units are typically set off and bounded on both sides by a short pause. Not every pause signifies the end of a tone unit, however. There may be pauses in which the speaker is collecting his thoughts, which are followed by material identified as being from the same 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, where the tone units are indicated by the slash '/'.

The tone unit does not coincide with any grammatical unit. Halliday's suggestion for English (Halliday 1967:200ff) would seem to apply equally to Kuniyanti: the tone units delimit information units into which the speaker packages his message. It may be that there is a natural (or 'unmarked') correlation between the clause and the information unit (ibid: 201). The clause is a minimal unit containing a propositional nexus, and information (in the sense used here) requires a nexus. The nexus need not, however, be a propositional one (contra Fronek 1983). There are at least two other major possibilities:

(a) It may take the form of an association between two entities, or an entity and an attribute. For example,

- (5-194) kampa        jumu        laanti        pakiri - /        ngarrangkarninHINGI  
           water        soak        up                it lies                dreamtime        -ABL  
           kampa↓/  
           water

'There was a soak up there, one with dreamtime associations'

(The horizontal bar indicates level tone, the arrows, rising and falling tones.) In the second information unit only the new part of the nexus finds expression linguistically. 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 in this example is an elliptical clause.

(b) The nexus may be an association between a linguistic constituent (or its referent) and a clausal or phrasal role. For example, in

(5-195) / <u>Ned Colin-ngka†</u> /	lajangangarra	yawarta‡/
-ERG	he rode it - on me	horse

'Ned Colin, he rode my horse'

the first information unit /Ned Colinngka/ associates the experiential role of Agent with the individual, Ned Colin. Alternatively, and/or concurrently, the associated role may be the textual one of Theme - see next section.

A clause is as a rule mapped onto a whole number (one, in the unmarked case - see above) of information units, each no smaller in size than a clausal IC. Maximal division does occur, but is relatively rare, at least for clauses with more than two ICs. An example is

(5-196) /karntiwirri	ngiti	yuwulu-yurru†/	parajjirrayi‡/
two	we(R)	man -DU	we two followed it
thinga‡/			
foot			

'We two men followed the footprints'

On the other hand, a single information unit may consist of two full clauses:

(5-197) /nganyi	jutunyali	wartngi	niyi	kilparli‡/
I	straight-REP	I went	this	I found him

'I went straight up and found him'

Only very rarely does a single information unit consist of parts of two clauses.

The rate of injection of information in a text can be controlled by the division into information units (cf. Grimes 1975:297). The rate is inversely proportional to the number of information units. Information is introduced slowly into (5-196), but rapidly into (5-197). Sometimes the rate of delivery is slowed down even further by dividing the message into two clauses and two information units. The first clause/information unit will usually state the matter in the starkest terms, to be followed, in the second clause, by an elaboration filling in the missing details. For examples, see lines (1), (6), and (23) of Text 1. In this way, not only is the rate of information delivery controlled, but each aspect can be made prominent in a 'natural' (or unmarked) way, without overloading any message unit (see below page 295ff).

It seems likely that two types of information unit should be distinguished, primary and secondary. Primary ones typically contain a propositional nexus, and in situational clauses, contain the VP; secondary units usually do not. Secondary units are characterized by less prominence, lower pitch throughout, and a smaller pitch movement than is the

case for primary units. This is the case in preceding examples such as (5-194), in which the second unit involves a smaller pitch movement, than the first, and has overall a lower pitch. Furthermore, secondary units typically occur together with primary ones, and it may be that a larger tone unit can be identified (a tonic 'sentence') consisting of a primary together with its secondary units.

Within each tone unit, one (or at most two) of the stressed (or stressable) syllables is usually particularly prominent. It is usually the most strongly stressed syllable of the unit, and there is often discernable pitch movement on that syllable. (Pitch movement elsewhere tends to occur between, rather than within, syllables.) Salience is indicated by a wavy line under the syllable.

There are different degrees of salience. Some salient syllables are extra specially stressed - this is particularly true for 'corrections' (the initial stressed syllable of ngajangi 'B_' in (5-217) below is more salient than the stressed syllable of marnawa 'B_+' which it corrects) - whilst others, particularly in secondary tone units are only slightly more 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; that is, the item which the speaker presents as the most newsworthy, and not recoverable from the preceding discourse (cf. Halliday 1967:204). It is always new in the given/new opposition. This does not mean 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 have suggested (e.g. Fronek 1983). The term 'new' applies to information, which (as I have mentioned) involves some sort of nexus. So, for example, an entity that the speaker may be sure is identifiable by the hearer, or even present in his consciousness at the time (cf. Chafe 1976:30) may be assigned the value of focal, and new, if it fulfils an unpredictable role in the present clause, or if, unpredictably, it plays a role in the clause. (See also Daneš, 1974:111.) For example, the identity of the two individuals referred to by pitiyurru 'they two' in line (5) of Text 1, is readily determined. (They must be two out of the three men on the hunting trip, excluding the speaker.) Indeed they may reasonably be assumed to be included among the things the speaker would presume to be in the forefront of the hearer's consciousness at this point of the text. However, pitiyurru has the salient syllable, and is the focus of the clause: the news-value is the particular and unpredictable association between these individuals and the event. (Note furthermore that the focus is not contrastive - cf. Chafe 1976:33ff, Fronek 1983:224ff.)



The salient syllable most frequently falls within the final clausal IC (i.e. phrase, Adverbial, or Particle) in the tone unit, as can be seen from an inspection of the three texts in Appendix 1. Attributive Being clauses are exceptional. In these clauses the Attribute, which usually precedes the VP, is invariably salient at the expense of the (final) VP. See for example the final tone unit in line (5) of Text 1. Any stressed syllable within the salient phrase may be given tonic salience, although there seems to be a tendency for salience to fall on the open-class lexical item, or 'head' of the IC. It is likely that salience placement within this phrase is semantically conditioned. It may for example distinguish phrase-level focus (cf. above page 228).

It follows from the preceding paragraph that the focus usually falls on the final IC in an information unit. This is, however, a tendency and not a grammatical rule. Any d-word in the information unit, regardless of its position, may be focal, and contain the salient syllable. It is hypothesized that the unmarked place for information focus (/tonic salience) is on the final IC in the information (/tone) unit. This placement of focus is unmarked in the following respect. The preceding material may be either given or new - in other words, this material is unmarked for either feature. It follows that an information unit with final focus may occur in either of the three contexts (which exhaust the possibilities), where the preceding material is: given, not given, or some given and some new. The focus is marked when it occurs elsewhere. Material following the information focus is positively specified as given or retrievable. (Furthermore, the placement of given information following the new, may be presumed to be a marked order - cf. Halliday 1970:163, Grimes 1975:285.) Evidence for this claim comes from at least three inter-related sources.

(1) Contrastive focus typically falls on a non-final constituent.

For example,

(5-198)	nginyji	lililuwa	wartpiri - /	nganyi
	you	<u>west</u> side	you'll go	I
	<u>ngirntangarri</u>	wartjawingi	↓/	
	this way	I'll go		

'You go via the west side; I'll go this way'

As is well known (v. e.g. Chafe 1976:33-4), 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. (Furthermore, the unknown entity, place, time process, etc. is usually one of a closed set of possibilities (Chafe loc.cit.). This is, however, irrelevant to the

present discussion.) In the case of (5-198), which is a direct quote from a text in which a head tracker is giving instructions to another tracker, it is reasonable to assume that there is a presupposition that each will go in some direction. Compare

(5-199) ngiti            katjinmarni            /            nganyi            papurrungku  
           we(R)            we left each other            I            downwards  
           wartngi / niyi            thaanungku            wartji /  
           I went            he            upwards            he went  
           'We split up; I went down, he went up'

As the preceding two examples show, the presupposed material (or a linguistic expression representing it in whole or in part) follows the focus. What is presupposed is of course given information, and is explicitly marked as such by its placement relative to the Focus. Being given, presupposed material may of course be ellipsed, resulting in a construction with unmarked focus - see line (38) of Text 1.

(2) The placement of Propositional Modifiers such as mangarri 'no, not', yikanyi 'uncertain', tharri 'mistakenly believed', etc., confirm this pattern. An immediately following marked focus is contrastive. For example,

(5-200) mangarri            thirrkirli            wartji            riwayirra / ngiwayi  
           not            straight            he went            camp -ALL            south  
           wartji            ngilayani            ngiwayinyali            wartji /  
                           east            south            -REP  
           'He didn't go straight to his camp; he went south, east, then south again'

comes from a text concerning a man who got lost in the desert. The immediately preceding text had established that he was starting back for home: it is presupposed that he was returning home, and wartji riwayirra constitutes given information. thirrkirli is thus a point of contrastive focus, and the following information unit provides a 'replacement' for it. The sense of contrastiveness involved here is thus slightly different to that under (1), since the 'replacement' need not come out of a closed set of options. For further discussion see 5.4.1 below.

(3) Kuniyanti does not distinguish declarative from interrogative moods, either formally (by morphology or syntax) or prosodically (v. section 5.4.1 below). Information requests use the indefinite Determiners jaji 'something', ngurntu 'someone', and ngunyu 'something' (v. section 3.3.1.2), as well as the Adverbials yinika 'somehow' and yaningimi (now-IND) 'sometime'. These indefinites are always the information focus in information requests. This is natural enough: it may reasonably be

expected that the speaker would single out the indefinite/unknown part of the utterance, the part he seeks elaboration of (v. below 5.4.1), as the most newsworthy. The indefinite word is, furthermore, typically a marked information focus: it is as a rule not final in an information unit (unless it is the only constituent in the unit). For example, see line (9) of Text 2, and

(5-201) ngurntungka            ngaarri            wirrpkinnya /  
           Someone-ERG            stone            you throw it

'Who are you throwing stones?'

The indefinite word is a marked focus since questions normally involve a presupposition that the predication holds true for at least one entity, place, time, etc. As before, this presupposition is naturally treated and specified linguistically as given information. In (5-201), the action was of course situationally obvious, as is also the case for line (9) of Text 2.

Note that by contrast, in "rhetorical questions", the function of which is not to elicit information, the indefinite is not normally focal. For example, the focus falls on the VP in

(5-202) jajiya                    kajkilangkirra  
           something-DAT            you (pl) have cut it

'Why have you cut it?'

The speaker was not merely seeking a reason why the addressees had cut the skin (of a bullock) which they had been instructed not to cut. Similarly, when the indefinite word is followed by either -wirri 'identity unknown' (v.6.3.6) or -ngarraya 'also, too' (v. 6.3.5), the resulting d-word is not normally a marked focus: the proposition is normally not presupposed (for some value of the indefinite). The resulting utterance closely approximates English clauses with indefinite 'someone/somewhere/something/sometime'. E.g.:

(5-203) ngurntungkawirri            muwngangangi  
           sometime - ERG -            he looked for you

'Someone was looking for you'

The main deviation from the above pattern comes from the indefinite yinika 'somehow' when it realizes the Process role in a VP (where it has the sense 'do something'). In about a quarter of the examples available (all elicited) the VP occurs finally as an unmarked focus. The problem here is of course that the presupposition, that something happened, is realized linguistically by the same item that realizes information focus. The presupposition cannot therefore be set off as given information. In practise, what happens in three out of four cases is that the focal VP is followed by a NP or PP. This phrase presents given information, the nexus between the phrase and its experiential role in the situation. This is the closest linguistic approximation to the presupposition. For

example,

(5-204) yinikawinmi                      yuwulu                      karntiwangurru  
                   they did something            man                        many  
                   'What did those men do?'

The discussion of information requests is readily generalized to questions as a whole. Requests of confirmation/disconfirmation (or polar yes/no questions) involve the assertion of a proposition, with the intention of eliciting the addressee's confirmation or disconfirmation. One part of the message, the part about which the speaker is least certain, is selected as the information focus; it frequently hosts the enclitic -mi -ma which indicates doubt or uncertainty of roughly the same type as found in the indefinite determiners (see section 6.3.8 below). Quite often, especially when it falls on a non-verbal constituent, the information focus is marked, and there is a presupposition that the process did occur at least for some entity, time, or place (etc.). For example, in

(5-205) A: karrwaru                      pijngarni /  
                   afternoon                      he emerged  
                   B: /marlami /                      jamuntu pijngarni /  
                                   nothing                      other day  
                   A: 'Did he come yesterday?'            B: 'No, the other day,'

A presupposes that he did arrive.

It may be thought that an interrogative mood could be defined by the placement of information focus on the indefinite word (in the case of information requests), or on the word to which -mi is attached (in the case of confirmation/disconfirmation requests). 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 (10) of Text 2, for example.

To summarize, Kuniyanti texts consist of a sequence of information units, each of which has an obligatory focus, which carries the most newsworthy item. In addition, the information unit may have up to two optional constituents, one which is unmarked for given or new, and another which is marked as given. They occur in the order:-

u. given/new	focus (new)	+given
--------------	----------------	--------

As a rule given information occurring finally represents a presupposed proposition, either in whole or in part.

### 5.3.2 Thematization

The other major component in the Textual metafunction, thematization, has the clause or clause complex (see 5.6.2.1.3 and 5.6.2.2 below) as its domain. The theme is Kuniyanti, as in English, is indicated by position: it comes first in the clause. From this perspective, the clause has the structure Theme^Rheme. Since the Theme is frequently chosen from the registry of given information (v. Halliday 1970:162, Daneš 1974:114ff), it is prone to ellipsis. There are thus a number of apparent exceptions to the ordering generalization. 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 has two main senses. It can mean both the starting point or point of departure of what the speaker has to say, and the subject matter, what the speaker is talking about (cf. Halliday 1967:212, and Daneš 1974:113). These two senses sometimes coincide, and sometimes don't. For instance, the first clause of the reply B in (5-206) below has Theme jamuntu 'other day', which serves as a convenient 'peg' on which to pin the clause - and indeed the whole of the reply. The speaker is not, however, talking about the other day.

- (5-206) A: niyaji            kawi            ngurntungka            ngangkingki  
           this            fish            someone-ERG            he gave it to you
- B: jamuntu            milayirra            wartji            kawipinyi            kurnpu  
       other day            we saw him            he went            fish -OR            woman
- wartji            niyingka            ngangnginti  
       he went            he -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, kurnpu, is thematic in the second sense: it is what the clause - in fact the whole utterance - is about.

Another type of Theme found in Kuniyanti is illustrated in

- (5-207) kurnpu            manili            thiki            'The woman has a short nose'  
           woman            nose            short
- (5-208) yuwulu            yingi            jawalyi  
           man            name            (subsection)
- '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 - v. above page 210.) The second and third words (/phrases) together constitute Characterizing clauses, the second word (/phrase) being characterized by the third. The first word (/phrase) bears no experiential role in the clause. But it estab-

lishes 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 (loc.cit.). It is the second word (/phrase) in each case that the clause is really 'about'; this constituent constitutes a second Theme of 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 (5-209) a possessive pronominal referring to the owner is required in the NP referring to the possessed entity.

(5-209) ngarraki      ngarranyi†/      ngaja      nhuwu†/      ngarraki  
           my                    M                    B-                                       my  
           nyanyi†/  
           MB

'My mother's brother is my uncle'

Topicalization is also used to establish a location, with respect to which a second location is established. For example,

(5-210) mayaru      Quanbun / niyinhinginka      lilingkaa      pirntirriya /  
           house                    that -ABL -ERG                    west                    plain -LOC  
           kartpini /  
           he hit him

'To the west of Quanbun homestead, on the plain, he killed him'

Topicalization is frequently used where embedding would be used in English. In examples such as (5-209) either embedding or topicalization may be used (but the latter predominates). But where the depth of embedding is greater, the latter only can be used (v. above page 226).

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. This phrase is typically (as in examples (5-209) and (5-210) above) thematic in the clause, in the sense that it is what the clause is about. That is, in the topicalization pattern there are two distinct types of Theme, the Topic and the Theme proper. The former invariably precedes the latter. The second Theme, or Theme proper, is enabled by, or established by the Topic.

It seems that Topics do not necessarily enable Themes, although they normally do. In

(5-211) ngurruyu      yuwulu      karingi      ngirntaji      nhuwu  
           that-DAT      man      W                    this                    her  
           tharra  
           dog

'This is that man's wife's dog',

the Topic [ngurruyu yuwulu karingi] 'that man's wife' enables the Rheme

[nhuwu tharra] 'her dog'. Compare also (4-72) above - in this example the enabled PP may, however, be interpreted as a second Theme (see below page 305).

One of the reasons for employing the topicalization 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 (6) 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 (5-210), and line (71) 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 characterized by a slight pitch rise in 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

(5-212) <u>yuwarningka</u> ↑/ one -ERG	yuwarningka one -ERG	<u>kartiyat</u> ↑/ whiteman	<u>Cherrabun Bore</u>
<u>warangji</u> ↓/ he sat	<u>kampa</u> ↑/ water	pampimnga-wirrang he pumped it-for them	
<u>purlumaniyu</u> ↓/ bullocks-DAT			

'There was a whiteman at Cherrabun Bore pumping water for cattle'

Another example is (5-195) above - Ned Colin was introduced for the first time in this clause.

Topical Themes are very frequently segmented (i.e. occur in their own information unit) - on the whole more frequently than is the case for other Themes. See sentences (5-209) and (5-210) above, and line (6) 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 - see again line (6) of Text 2.)

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:

(5-213) ngarraki my	yawarta↑/ horse	<u>saddle</u>	yutlinhi↓/ I put it-on him
------------------------	--------------------	---------------	-------------------------------

'My horse, I saddled it'

The phrase [ngarraki yawarta] ought to be in a syntagm with a DAT Postposition.

The intonation contour of a segmented Theme is, on rare occasions, falling, as for ngamu in

- (5-214) maja      mikamingarra+/  
boss      he told-to me      ngamu+/  
before      juntuwawinmi  
they were making camp  
  
karntiwangurrungka      papirri+/  
many      -ERG      below      racescourse      mikamingarra+/  
he told-to me  
  
'The boss told me "Already they're camping down at the race-course"'

The significance of the rising/falling contrast 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 (5-214) - cf. Kilham (1977:89).

Qualifying material may be interpolated (on its own intonation contour) between a segmented Theme and the remainder of a clause. Such interpolated material always occurs on a secondary, and falling, tone unit. An example is

- (5-215) maja+/  
boss      paplikajju      maja+/  
-DAT      boss      aa      Alec      Scott+/  
  
mikamingarra+/  
he said-to me  
  
'The boss, the publican, Alec Scott, 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, 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,

- (5-216) wajarrinHINGI      mawulyi      jirliwajangi /      niyaji  
boab      -ABL      little bits      sinew      -SEM      this  
  
witkurra      pirtiya /  
they rub it      leg-LOC  
  
'The fibres from the boab they rub on their legs'

As this example shows, reprise is normally used when the Theme is longer than usual (NPs of three words are rare). Compare

- (5-217) aa      ... ngurntu      yuwulu      niyi+/  
someone      man      that      wampa+/  
later      ... yanya ... /  
another  
  
Broudayu      marnawa+/  
-DAT      his o. brother      ngajangi+/  
his y. brother      jawalyi+/  
[subsection]  
  
ngila+/  
east      kijali+/  
dead      ngurntungurniya+/  
what's the place-LOC      Mable Downsja+/  
-LOC  
  
niyajingka      rurruP- /  
this -ERG      pull-



'Ah, who was it? Shit ... another ... Brouda's older brother ... younger brother, the jawalyi man who died at what's-it'called, Mable Downs, he pull-'

In fact, thematic reprise most frequently occurs in order to 'summarize' full clauses, as in line (71) of Text 1 and line (6) of Text 2. (See below section 5.6.2.2.2 for further discussion.)

Occasionally, the usual Theme[^]Rheme order, appears to be reversed, with the 'Theme' following the 'Rheme', and occurring in its own information unit, as in

(5-218) puruwanpirri            laanti↓/            yarrpanyi            yuwulu↓/  
 they were hiding            up            initiate            man  
 'They were hiding up, the initiates'

(5-219) wirrijjirranni            panta            wila↓/            karntiwangurrungka↓/  
 we dug it-on him            ground            O.K.            many            -ERG  
stockmenjurlu↓/  
 -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 extra-linguistic 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 represents a change of 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, (5-210), the Theme was a complex of these units. Word complexes, and phrase complexes of all types (see section 4.3 above) can be thematic.

It is not clear that the Theme must always be realized by a grammatical unit, or complex of grammatical units. Consider, for example, (5-220):

(5-220) yingi ... <u>number six</u> /	kartiyangka	kuwajkurra↑/
name	whiteman-ERG	they call it
<u>six furlong</u> ↓/	niyajiyangka	puluturrwinmi
	this -ABL	they started off
<u>yawarta</u> ↓/	<u>karntiwangurru</u> ↓/	
horse	many	

'(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 shows, this clause has a natural interpretation as a WH-cleft. These two facts suggest that the sequence kartiyangka kuwajkurra is a good candidate for Theme.

The constituent realizing the Theme of a clause usually realizes at the same time some other role in the clause, 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', niyajinningi (this-ABL) 'after this' and mikaya (thus-LOC) 'at that time' are frequently used as conjunctive elements. The first two are sentential conjunctions (see for example, lines (46), and (75) of Text 1, and line (3) of Text 3); the third normally conjoins clauses within a sentence. These connecting words are almost always thematic, providing a 'starting point' for the clause/sentence.

The Interpersonal role Propositional Modifier, realized by Particles and Temporal Adverbials (see next section), frequently combines with the textual role of Theme. For examples, see (5-200) above, and next section. Some Particles such as mangarri 'no, not' are invariably thematic, others, including yikanyi need not be, although they usually are. If not thematic, they are as a rule focal.

The experiential role of Actor (v. 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 characterized 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 main 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) that there is an established (given) participant in the registry of

the text that is a candidate for (ellipsed) Theme. A typical example is the third clause in line (6) 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 293) 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,

(5-221) niyajiya↑/      kampangka      kartpinini↓/      kartpinini  
           that-LOC      water-ERG      it hit them

kampangka↑/      yuwarni      kirrami↓/  
                           one                    he ran

'There, it rained on them, they were rained on, and one of them ran away'

The reverse order never occurs: 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 (5-218) and (5-219) above are thematic in the other sense - i.e. they are starting point Themes.

VPs do sometimes occur in circumstances such as:

(5-222) pakiyi      niyajiya /      pakiyi      mirri      pijngarninhi /  
           he lay      this-LOC      he lay      sun      it emerged-on him

'He camped there. He lay until dawn'

Here pakiyi serves as a (thematic) conjunction. It is suggested that, rather than the VP pakiyi being a conjunction in the clause mirri pijngarninhi, 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 can have more than one Theme. It seems that there will always be one experiential role which is thematic. In addition, there may be optionally a thematic conjunctive element or Propositional Modifier, or a Topic. There are certain ordering tendencies: textual Themes, conjunctions, invariably precede other types of Theme; Topics precede other types of Theme, except for textual ones; and experiential themes tend to be final. 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 (58) of Text 1 is a convincing example. The first tone unit, which consists of two nominal phrases, has the slight pitch rise 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 (5-212) above also have two experiential themes - an ellipsed one, ywarni kartiya 'one whiteman', (mentioned in the preceding clause), and an explicit one, kampa '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 (6) 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 frequently chosen from the registry of the given. However, this is not invariably the case, the 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 is presupposed that a situation occurred, or a relationship of identity or attribution obtains with respect to the Theme. Examples include the first clause of (5-217), and

(5-223) jajiwami                      ngappirrayi                      kinharntiyirringka+/  
           something-IND                      they (2) ate it                      you know-DU                      -ERG  
           'What is it that that pair have eaten?'

(5-224) / kartiya                      kartluni                      nganyingka+/  
           whiteman                      I hit him                      I                      -ERG  
           'It was the whiteman I hit'

(5-223) presupposes that they ate something; (5-224) that I 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 Kuniyanti versions.

A focal Theme may be singled out, and made more prominent by use of a deictic expression such as ngirntajiya 'this-LOC'. For example:

(5-225) ngirntajiya                      ngirntajiwami                      ngapkurra+/  
           this                      -LOC                      this                      -IND                      they eat it  
           'Here, maybe this is what they eat'

This example is a direct quote which comes from a text. 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 Kuniyanti does have a means of making a Theme unmarked Focus. This is effected by the employment of a pair of phrases in reference to the Thematic item. One expression occurs initially, in thematic position; the other, the information Focus, occurs finally, in its unmarked position. For example, yuwulu and pulkawulka 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

(5-226)	wanyjirri	ngarrakingka	yuwulu	kartpini
	river roo	my -ERG	man	he hit it
	<u>jamarra</u> /			
	male roo			

'A river kangaroo my son killed, a male one'

A special case of this construction occurs when the discontinuous pieces constitute together, experientially, a single phrase. For example, (4-15) above, and line (58) 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 Kuniyanti 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 unmarked Focus. This is because the material between the Theme and Focus, in the Kuniyanti construction, is unmarked for the values given/new (v. page 298). But the Theme must be new (since the same item is focal), and it follows that everything following the Theme must also be new.* This means that the clause involves no presupposition. This is the case in the examples cited. By contrast, it-clefts in English involve presuppositions.

Instead of occurring at different ends of a clause, a pair of phrases referring to the same thematic item may be juxtaposed, forming a type of complex Theme. Presumably the juxtaposed phrases may be logically related in any one of the ways mentioned in 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 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 entity (or whatever) is identified by a

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* That is, assuming (as would seem reasonable) that pre-Focal material, which is unmarked for given/new, is strictly ordered Given^New.

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'; and the Determiner in the Kuniyanti version does roughly the job of the indefinite 'one' in the English version. Examples are line (10) of Text 2, and

(5-227) ngurrungka          niyajingka          tuwunga  
           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.

(5-228) niyingka          kartpini          ngirntajingka /          ngurru  
           that-ERG          he hit him          this -ERG          that  
           yanya          kijali /  
           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 shows. Here the Determiner is the identifier, and Focal. In this case, the closest English equivalent is a clause such as 'This is the x that did/is y'.

#### 5.4 Remarks on the Interpersonal Organization of the Clause.

##### 5.4.1 Propositional Modification

A third aspect of the organization of the clause is its organization 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) to exchange 'goods and services' (Halliday forthcoming: Chapter 4). Kuniyanti does not distinguish formally between these two act types. There is no distinct 'Imperative' or any such related category either as a verbal category, or as a clausal category: e.g. a clause in the future tense may be used in either way, to exchange information, or to exchange 'goods and services' (v. section 6.5.1 below, and cf. Halliday, loc.cit.).

Simultaneously, the clause may be used in: (i) giving or offering and (ii) requesting or demanding. Again these are not distinguished formally (segmentally) in Kuniyanti. For example, there is no grammatically distinct class of 'questions' (as has already been mentioned - 5.3.1). Exactly the same forms are used in eliciting information as in giving information. (Cf. Halliday forthcoming: Chapter 4). As we have seen, the

enclitic -mi~-ma (v. 6.3.8) which is frequently found in requests of confirmation (i.e. 'yes' or 'no'), and the words ngunyu, ngurntu, etc. (v. 3.3.1.2) frequently found in information requests (i.e. 'which', 'who', etc.), 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 that 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 296 - 298 above). That is, the propositional content of the information request (5-223) above, jajiwami ngappirrayi kinharntiyirringka 'What is it that that pair have eaten?' is 'That pair have eaten something.'

In the case of requests of confirmation, as already 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 - including confirmation - seeking, involving (at least the pretense of) offering some information for comment, extension, etc., rather than direct probing - cf. Eades 1982.) The propositional content of the clause may include the element 'indefinite'. Thus, wartmawiri (go-INF-you'll 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.

A corresponding term for clauses used in the second major function of exchange of goods and services is the term proposal, following Halliday forthcoming. 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 either offering his assurance that it will be (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, here -wu (meaning 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, relational (non-situation) clauses do not occur as proposals, although Existentials may - see example (5-27) above; nor, in the present corpus at least, do situation clauses whose VPs are in 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 realized by a clause consisting of the following types of units: NP, PP, VP and 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

(5-229) nganyingka          manyi          wartla          'I brought food'  
           I            -ERG          food          I brought it

consists of the Proposition 'nganyingka manyi wartla'. The Propositional Modifier may be realized by a Particle or Adverbial. A clause such as

(5-230) mangarri          kilpawiti          panta  
           not            they found it          dirt  
           'They didn't find (any) dirt'

has constituency structure:

Propositional Modifier:	Proposition:
[mangarri]	[kilpawiti panta]
	K                                  K

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 Propositional Modifier are Interpersonal roles in the clause. This follows from the fact that the propositional content of the clause is that which contextualizes 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 hearer. The role 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 can 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: <u>mangarri</u> 'no', <u>marlami</u> 'nothing', <u>wumurla</u> 'no' (Avoidance style) Probability: <u>pirli</u> 'maybe'.
Subjective	<u>tharri</u> 'mistakenly believed'; <u>yikanyi</u> 'uncertain'; <u>minyjirra</u> 'truly'.
Expectation	Scalar: <u>winhi</u> 'just' ("nothing"); <u>murta</u> 'certainly'. Temporal: <u>ngamu</u> 'already' [before]; <u>wampa</u> 'still'; <u>wampawu</u> 'nearly, almost'; <u>yilpa</u> 'completely [forever]'; <u>yanningi</u> 'right now'; <u>yaniyaningi</u> 'already'. Frequency: <u>ngarrarni</u> 'always'

(The glosses given above are very approximate. For a more detailed discussion of the significance of these terms, see 6.4.)

Clearly most of these words do not have meanings of the 'modal' type. On the contrary, what is claimed is that they may play modal roles in the clause in which they occur.

The lexemes under 'Expectation' require some comment. 'Scalar' is used following McConvell (1983) in reference to the situation in which the expected is ranked with respect to the asserted. For example, in

(5-231)	winhi	tanymiliyirra,	mangarri	milayirra
		we heard it	not	we saw it

'We only heard it, we didn't see 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 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 - this might be seen as their unmarked function - but are also used in modifying propositions with respect to expectations. For example, ngamu 'before' normally occurs in contrast with other time expressions such as karrwaru 'afternoon, yesterday', e.g. in "frames" such as:

(5-232)	{	ngamu		karrikmi
		'before'		it finished
		karrwaru		
		'afternoon'		
		jamuntu		
		'other day'		

'(The rain) finished up before/yesterday/the other day...'

Such sentences constitute plain responses to information requests such as [yanningimi karrikmi] 'When did it finish?' It is presupposed that

'the rain stopped sometime'. However, ngamu may also occur in a contrasting set with mangarri 'no', yikanyi 'uncertain', etc.:

(5-233) { ngamu } karrikmi  
           { mangarri }  
           { yikanyi }

'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 [karrikmi], (i.e. '(the rain) has finished') is called to question for some reason. The clause [ngamu karrikmi] occurred in such a situation. The speaker 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, at which he uttered the clause. The point of this utterance was not to indicate when the rain stopped, but rather, that it had stopped. The first embodies a presupposition that the rain has 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 labelled 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 6.5.1.2.

Temporal Adverbials are not the only lexemes which may realize 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 realize the Interpersonal role, indicating the speaker's attitude towards the proposition, and an Experiential role of Manner, indicating the actor's subjective state as he engages in the action (e.g. 'think mistakenly', 'go uncertainly', 'think/talk correctly or truly' - see discussion of these terms in 6.4).

The lexeme that realizes the role of Propositional Modifier enters into a syntagmatic relation with a full clause: it has a single full clause, and no more (or 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,

(5-234)	ngarrarni	mangarri	pijpiyaniila kampurna I come early
	Propositional Modifier	Propositional Modifier	Proposition
	Propositional Modifier	Proposition	

'I never come (here) early'

(5-235)	wampa-nyali still-REP	mangarri	pijkuwarni it is emerging
	Propositional Modifier	Propositional Modifier	Proposition
	Propositional Modifier	Proposition	

'(The sand) is still not coming out (of the receding flood-water)'

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 (5-234) and (5-235) 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 realize 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 realized by mangarri 'no, not' (cf. below 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 thematization. Before discussing these I briefly mention two general tendencies in placement of Propositional Modifiers. (The following examples all involve the Particle mangarri 'no, not', the most frequently occurring Propositional Modifier. Similar examples can be found for other Propositional Modifiers.)

In Relational clauses (5.2.1.1.1) the Propositional Modifier precedes, usually immediately, the Attribute, of Identifier. In Situation clauses it invariably precedes the VP, again frequently immediately, except in Attributive Being Situations. In such clauses, the Propositional Modifier precedes, usually immediately, the Attribute, unless the latter follows the VP. Some illustrative examples, all involving the Particle mangarri 'no, not' are:

(5-236) mangarri kilpawiti panta  
 not they found it dirt  
 'They didn't find (any) dirt'

(5-237) nganyi mangarri ngangki ngumparna  
 I not your H  
 'I'm not your husband'

(5-238) nganyingka nyamani ngapla pitiyurrungka  
 I -ERG big I ate it they -DU -ERG  
 mangarri ngappirra  
 not they ate it  
 'I ate a lot, (but) they didn't eat much'

Propositional Modifiers rarely occur clause finally. Some, such as mangarri 'no, not', tharri 'mistakenly believed', and wumurla 'no, not' (Avoidance style) never occur finally. Others including yikanyi 'uncertain', and some of the Temporal Adverbs occasionally do occur finally. Most usually when 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,

(5-239) muyu pakimayi - / yikanyi↑/  
 sleep He-IND-he did 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 is clause-final. Since they express the speaker's angle on the proposition, they are natural points of departure (cf. Halliday forthcoming, 3.4). That is, for example, mangarri is thematic in (5-237) and the second clause of (5-238), 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

(5-240) mangarri yangpalangka kurnpu tuwunga↑/  
 young fellow-ERG woman he got him  
 'Young men didn't take wives'

It is clear that, in the text in which (5-240) occurred, which concerned the differences between marriage practices of pre-contact days and today, the main Theme is the negation, not the Agents or Goals. Compare on the other hand 'correlative' constructions such as

(5-241) ngurru            milawa                            nganyi            mangarri  
           that            you'll see him            I  
           milaanawu  
           you see me-DEF  
           'Look at him, not at me'

Here it would seem that the speaker is the most prominent Theme in the second clause.

I have already discussed (page 296) the circumstance 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 (5-200) above and the following:

(5-242) mangarri            nganyingka            kartluni,            yuwulungka  
           not            I            -ERG            I hit him            man            -ERG  
           kartpirrini  
           they hit him  
           'I didn't hit him, the men did'

(5-243) mangarri            ngurriya            yutli            ngirntajiya            yutli  
           not            that-LOC            I put it            this            -LOC            I put it  
           'I didn't put it down there; I put it down here'

(5-244) mangarri            niyaji            yuwulu            kirrapingarri            karingiwa  
           not            this            man            tall            wife -his  
           kirrapingarri  
           tall  
           'It's not this man who is tall, but his wife'

(5-242) involves a presupposition that someone hit the person under consideration; (5-243) involves a presupposition that I put the object somewhere; and (5-244) presupposes that someone is tall.

The above characterization of the 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:

(5-245) mangarri            niyingka            tijjingi            marlaya            murta  
           not            he            -ERG            he broke it            hand-LOC            certainly  
           tijpintinhi                            kurijjangka  
           it broke-on him            hold            -ABL  
           'He didn't break it; it really broke in his hand as he held it'

(5-245) 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 the asserted.

A second possibility is that the 'correlated' clause may involve a rather more specific process, one which more precisely characterizes the process as it applies to the new circumstance, manner, etc. Thus, in (5-246), although it is presupposed that the dead are put somewhere (for which the Verbal yut- could be used), in the correlated clause, a more specific lexeme is chosen, to refer to the placement of something within a cavity:

- (5-246) mangarri            kanarnaya            yutkutu            pantaya  
           not                    b.platform-LOC        they put them        dirt-LOC
- tirikkutu  
 they enter them
- 'They don't put them on a burial platform, they bury them in the ground'

Next to the 'correlative' constructions such as (5-244), (5-245), there is an alternative construction, which appears to be roughly synonymous:

- (5-247) mangarri            thirirli / jangku        kurijkurra /  
           not                    hard                    soft                    they hold it
- 'Not hard, soft they hold it'
- (5-248) A: jajiyu                    wartja  
           something-DAT            you took it
- B: mangarri            nganyinka,            ngurru            yanyangka  
           not                    I                    -ERG            that            other-ERG
- yuwulu            wartnga  
 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 (5-247) and (5-248) is to assume that mangarri x is an elliptical clause. These sentences would be regarded as 'reduced' correlative constructions of the type exemplified in (5-243 to (5-245) above.

Sometimes mangarri x follows the positive clause (instead of preceding it), in which case it seems to be added as a type of afterthought:

- (5-249) yaninginyali            wartpangarra /            mangarri  
           today    -REP            you'll bring it-to me        not
- mungaya /  
 tomorrow
- 'Bring it today, not tomorrow'
- (5-250) ngarrakimuwa            ngurlukla /            mangarri            yapja /  
           my                    -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 non-situation clauses), minor clauses may be characterized 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 pa 'come on, let's go' and nya 'here you are', and pay '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!', warawu 'youtch', etc. are used in exclamations.

Words from all classes except for Verbals may realize Minor clauses of these two types; Nominals are quite frequent in this function. In a Minor clause, a Nominal may be used as a Vocative - e.g. yuwulu! 'Man!'; the subsection terms are frequently used as vocatives, e.g. jawanti! 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, kirlingki 'penis' and nyaninyi 'vagina' are used at least today as rough equivalents to 'prick' and 'cunt'. Other than use in swearing, a Nominal Minor clause may be used, e.g. to draw attention to something, e.g. parlanyi! 'snake!' kampa! 'water/grog!'.

Another function that a Minor clause may serve is to modify the propositional content of a (usually) preceding clause. The Interjections yuwayi, yuwu 'yes', and Particles such as marlami 'nothing', mangarri 'not, no', etc. may realize such roles.

### 5.5 Non-finite Clauses

Non-finite clauses constitute a class of impoverished clauses, consisting of an obligatory non-finite Verb, sometimes together with an NP, PP, or Adverbial. The non-finite Verb ( $V_{NF}$ ) shows 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 (v.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, ngarak- can mean 'work on' or 'make, complete', depending on choice of Classifier. This distinction cannot be made in the non-finite Verb.

The non-finite Verb is, as just 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 - -mili CHAR or -kali GD (v. 3.12.1.1) - or Adverbials - -wa 'way' or -warra 'manner' (v. section 3.12.3.1); or
- (b) a Postposition, one of -ngka ERG, -nhingi ABL, -yangka ABL, -ya LOC, -ngarri COMMIT, and -wu DAT.

Stem forming suffixes and most Postpositions may be added to a Verbal stem. However, -ngka ERG must always follow on Infinitive, or a stem forming suffix; and -ya LOC usually follows the Progressive aspect marker.

The  $V_{nf}$  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 and -ya there are no examples at all which show such a sister constituent. However, I assume throughout that  $V_{nf}$  is dominated by a  $K_{nf}$  (non-finite clause) node, since there are examples of expanded clauses (usually only of 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 realizing some role in a finite clause, or in an NP. For example,

	ENTY:	QUAL:		
(5-251)	[thinga foot	wart-nhingi] go -ABL	pakiri-ngarra it lies-on me	pantaya ground-LOC
	'My footprint lies on the ground'			

	Carrier:		Attribute:	
(5-252)	[ngirrinyi] NP ₁ fly	NP ₁	[ [Emurlu K _{nf} eye	wirrikawu bung
	ngangji]-mili K _{nf} give-IT CHAR	NP ₂	NP ₂	

'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 realize 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 Nominalizations and Adverbializations

#### 5.5.1.1 -mili

Example (5-252) shows -mili in syntagm with a (part of a) non-finite clause. The whole construction of  $K_{nf} \wedge$  -mili is functionally a Nominal word. In (5-252) this word is the sole constituent of an NP realizing the Attribute in a relational clause, which characterizes an individual (the fly) by its habitual engagement in a process. In (5-253) the derived -mili Nominal is a Qualifier in an NP with an overt Entity.

	ENTY: N	QUAL: N		
(5-253)	[kurnpu	murniny-mili]		jakmingarra ...
	NP	NP		
	woman	fuck -		she told me
	'The promiscuous woman told me ...'			

The thing qualified or attributed on, as in examples (5-252) and (5-253), is usually the Actor in the non-finite clause, as might be expected from the fact that this morpheme indicates something in active association with an entity (v. page 192). (There is no cultural restriction on kurnpu being Agentive in the process murniny-.) However, in all available examples, the Actor phrase has been ellipsed. But there are examples in which Mediums and Manners have not been ellipsed:

(5-254)	[pulka][ [mawulyi ngap] mili]
	N $K_{nf}$ $K_{nf}$ N
	old man children eat -CHAR
	'The old man was a child-eater'

(5-255)	mikajangi-nyali [ [mayaarrayaarra	wart]-mili]
	N $K_{nf}$ $K_{nf}$ N	
	that-SEM -REP	fast go -CHAR
	'(I'm) also a fast walker, like that'	

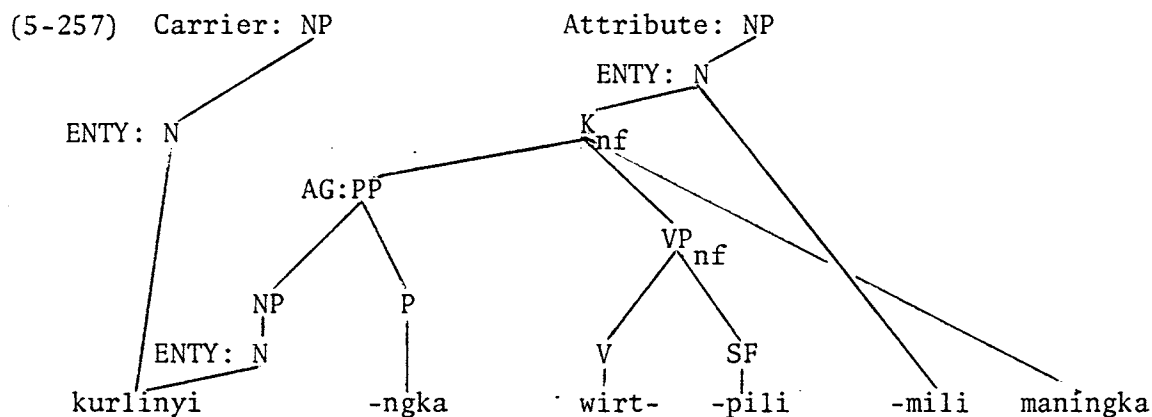
There is one problematical example, the analysis and interpretation of which remains uncertain:

(5-256)	kurlinyi-ngka	wirtpili-mili	maningka
	mosquito-ERG	bite -CHAR	night

This was given freely in response to 'Mosquitoes always bite at night'.

(Similar examples which I constructed involving ERG PPs were rejected by native speakers.)

If the 'single mother condition' is rejected, (5-256) might be analysed:



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 interpretation of (5-256) is mistaken. It could perhaps mean 'mosquito biting (time) is at nighttime' - more literally, 'mosquito biting is a characteristic of nighttime'. Should this interpretation prove justified, the claim made above for coreferentiality of the Carrier and Actor must be rejected. In any event, (5-257) provides further evidence of the clausal status of the unit -mili enters into constituency with.

#### 5.5.1.2 -kali~-(w)ali~yali

There are too few examples of -wali in syntagm with a clause to allow a general description. It may be presumed that it has similar properties, and functions as -mili. An example is

	Carrier: NP	Attribute:	
(5-258)	kurnpu	[ [wupkali] ]	'The woman is a cook'
	woman	NP N      N NP	
		cook-GD	

#### 5.5.1.3 -wa

In all available examples (which number over 100) -wa constructions consist of a single constituent, a Verbal stem, in syntagm with -wa. So it is not clear whether a full clause or just a Verbal is in syntagm with -wa. For convenience and consistency I will assume the former. As was suggested above (page 204), -wa indicates a 'way' or mode of being or action. -wa 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:

(5-259) parn-ka            wajlarrinhi            'I threw it back to him'  
           return            I threw it to him

When the entity is an Agent in the finite clause, -wa is followed by -ngka ERG:

(5-260) wart-ka-ngka        thirri            rurrijpirrarni  
           go-                    fight            they argued together  
           'They argued going along'

However, when this entity is an Actor/Medium either -warra (see next section) is used instead of -wa, or else -wa is followed by -ngka ERG. The choice depends on whether the non-finite clause indicates a manner of action, in which case -warra occurs, or an attribute, in which case -wangka occurs:

(5-261) warangkangka        pakiri            'He's sleeping sitting up'  
           sit-                    he lies

(5-262) mangarri            wara-angka        jijackingirrawu  
           not                    stand-            you're talking  
           'Don't stand talking'

-wangka clauses, of which (5-260) to (5-262) are typical examples, indicate secondary processes in which the Agent/Actor is involved while 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 (5-259), are typically resultative; they normally indicate a resulting condition of the Goal subsequent to the main process. -wa clauses also attribute on Ranges, where they are again typically resultative. For example,

(5-263) parn-ka            ngangjawinyji        'I'll give it back to you'  
           return            I'll give it to you

#### 5.5.1.4 -warra

It was suggested (page 205) that this suffix forms Adverbials from words of other classes, which indicate the Manner in which an action was done. As a rule, non-finite -warra clauses occur in Intransitive clauses:

(5-264) kalkalarra        wartji            'He went along laughing'  
           laugh-                he went

(5-265) nartaarra        wartji            'He went along crying'  
           cry-

There is a single example in which the -warra clause occurs in a main clause of directed action:



a Verbal stem, and so presumably also a clause,

- |         |                  |    |                    |             |                      |
|---------|------------------|----|--------------------|-------------|----------------------|
| (5-270) | [warlipirri]     | [  | [                  | [wilaj-pan] | ]-ngarri]            |
|         | NP               | NP | PP K _{nf} | V           | V K _{nf} PP |
|         | river            |    |                    | around-CTV  | -COMIT               |
|         | 'River is windy' |    |                    |             |                      |

(See above page 200.)

In Ungarinyin (Rumsey 1982:146ff) -ngarri is a regular marker of relative clauses, attaching to a finite form of the verb.

#### 5.5.2.4 -wu

-wu, the allomorph of the Dative that occurs on Verbal lexemes, forms a rather impoverished type of embedded Clause, which is frequently a Purposive:

- |         |                                                                         |                 |                 |                                |
|---------|-------------------------------------------------------------------------|-----------------|-----------------|--------------------------------|
| (5-271) | thangarnti                                                              | walmajarri      | jijak-ku        | wartjawurru                    |
|         | word                                                                    |                 | speak-          | they're going                  |
|         | 'They're going to talk Walmajarri'                                      |                 |                 |                                |
| (5-272) | kiningi                                                                 | ngartkimarni    | kampaya         | nyumpulwani                    |
|         | breath                                                                  | he takes breath | water-LOC       | he dives in                    |
|         | marnangurru                                                             | turluk-ku       |                 |                                |
|         | far                                                                     | come up-        |                 |                                |
|         | 'He takes a deep breath as he dives into the water to come up far away' |                 |                 |                                |
| (5-273) | kampa-ya                                                                | nyumpul-wu      | malapmingarni   |                                |
|         | water-LOC                                                               | swim-           | I did myself up |                                |
|         | 'I did up my hair for a swim in the water'                              |                 |                 |                                |
| (5-274) | tiwinyi                                                                 | wayanti         | jart-ku         | 'Tinder is for lighting fires' |
|         | tinder                                                                  | fire            | light           |                                |

These examples demonstrate fairly conclusively the clausal status of the constituent which -wu enters into syntagmatic relation with. However, it must be noted that the clause is in many ways reduced. Usually there is no constituent other than the Verbal stem. And only a subset of the possible clausal functions (as described in 5.2) have actually been encountered in the -wu 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 -wu 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, the respect in 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 -wu clauses as Attributes in Characterizing clauses are (5-21) above, and

(5-275) pirri [ [yutu-]-wu [kurrumpaya] ]  
 charcoal put 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. (5-276) shows a -wu clause attributing on an 'Existent' in an existential clause:

(5-276) nginyjingka paamangarraki manyi ngirntajiya  
 you -ERG you'll call out to me food this -LOC  
 ngapku  
 eat-DAT

'You'll call out to me "there's food here to eat"'

(Contrast ngirntaji manyi ngapku 'this food is to eat'.) However, I have no evidence that this non-finite clause type can attribute on a participant (or other entity) in a Situation clause. (See (ii) below).

(ii) (5-271) to (5-273) are examples of the second type of -wu 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 -wu clause indicates a situation about.

(5-277) ngirntajiya tawungkuwaalimi warangku  
 here -LOC I like it sit-

'I like to stay here'

(5-278) nganyi tawungkuwaalimi payalwu 'I like to swim'  
 I swim-

(5-279) to (5-281) exemplify Matter circumstances in Characterizing clauses.

(5-279) mangarri jimanti ngapku 'It's not good to eat'  
 not good eat-

(5-280) kampa payalwu yijkawu  
 water swim- bad

'The water is no good for swimming'

(5-281) nganyi mangarri pinarri karliyu ngarakku  
 I not knowledgeable boomerang- make-

'I don't know how to make a boomerang'

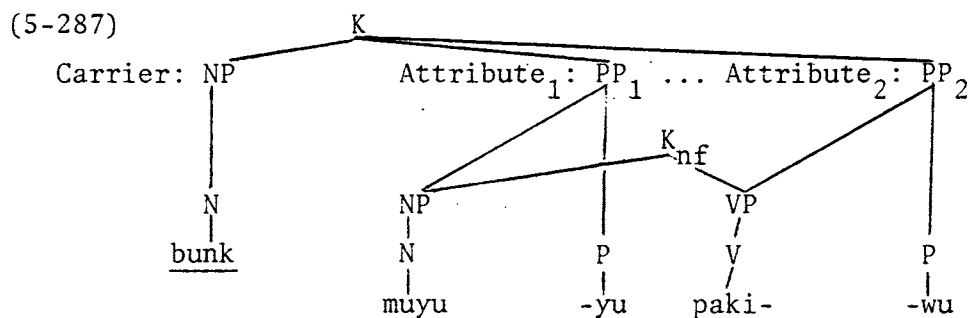
And in the following example, the circumstance occurs in an NP:

- |         |                                                            |                              |                        |                                                            |
|---------|------------------------------------------------------------|------------------------------|------------------------|------------------------------------------------------------|
| (5-282) | kilpayingi                                                 | CLAS:<br>[jurnanykarra<br>NP | ENTY:<br>riwi<br>place | QUAL ₁ :<br>[jurntu-yu] ...<br>PP            PP |
|         | he found it                                                | good                         | place                  | line                                                       |
|         | QUAL ₂ :<br>[wurrp-ku] ]<br>PP            PP NP |                              |                        |                                                            |
|         | throw                                                      |                              |                        |                                                            |
- 'He found a good fishing spot'

-wu clauses may be fractured. For example,

- |         |                              |                             |                    |                                           |
|---------|------------------------------|-----------------------------|--------------------|-------------------------------------------|
| (5-283) | <u>bunk</u>                  | paku-wu<br>lie -            | muyu-yu<br>sleep-  | 'A bed is for sleeping in!'               |
| (5-284) | marnti<br>fighting boomerang | thirriyu<br>fight-          | kartpu-wu<br>belt- | 'The fighting boomerang is for fighting!' |
| (5-285) | palajila<br>I sent him       | wayantiyu<br>fire-          | kajku<br>cut-      | 'I sent him to chop the firewood'         |
| (5-286) | niyingka<br>he -ERG          | wartjawina<br>he'll take us | riwiyu<br>camp-    | pinapinawu<br>show-                       |
- 'He'll take us to see the country'

My analysis of such examples is that there is a pair of juxtaposed PPs ([paku-wu] and [muyu-yu] in (5-283) within the main clause, parts of which still constitute a non-finite clause. That is, I reject the 'single mother' condition; this obviates the need for transformations, and allows all of the structure to be shown in a single tree. muyu is related both to paku- (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, summarized in the following tree.



By fracturing, a Nominal constituent of the embedded clause is made prominent in the main clause, by setting it 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 realizes an Attribute or Goal in the embedded clause as well, as in the examples above ((5-283) to (5-286)). (However, Ranges and Spatial circumstances (if realized by Adverbials) are sometimes fractured.)

It will be clear from the examples given so far that there are no constraints on coreference of major participant roles between the -wu clause and the main clause. In Attributive clauses the thing attributed on always (logically) plays some role in the -wu clause. This may be: Instrument, as in (5-275); Goal, as in (5-279); or Location, as in (5-287), 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 -wu clause, and either an Actor or Goal in the main clause (respectively examples (5-277) and (5-285).)

However, matters are more complicated than this. In (5-288) 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.

(5-288) ngimpirrjila            jajak-ku            thangarntiyu  
 I hurried him up        speak-            word        -DAT  
 'I hurried him up for a talk'

Surely it is not a monologue by the third person that is referred to, even though it was used to describe a 'language session' with a Kuniyanti speaker. If such a strict interpretation is insisted upon, the following example is sufficient to prove that the Actor of the -wu clause need have no role in the main clause. It also refers to my going to a language session.

(5-289) wartngi            thangarntiyu            jijaḱku            'I came for a talk'  
 I went            word-            talk-

(No one imagined that I would be monologuing.)

The natural interpretation of both (5-288) and (5-289) 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 "NPs" in the two clauses in these two examples. It is not even certain that there must be some shared entity between the two clauses. In (5-290), for example, there is some evidence that the embedded clause has actor timana.



(5-290) kaljini-yu      kirrakirra-wu      timana      ngamu  
 fast-                  run-                  horse          before  
 marurrawunmarni  
 they gathered together

'They are already meeting for the horse-races'

The fact that kaljini but not timana has been fractured from the embedded clause shows that the purpose of the meeting was the race ("speed"), not to race the horses. The latter sense would be conveyed by fracturing timana (v. above page 325). (Furthermore, the verbal kirrakirra- is not, to my knowledge, used in the context of directed action, 'to race something'.)

There are a number of instances in which a -wu clause appears at first to be independent. For example,

(5-291) mangarri      parnparn-ku /      yilpa      wartkiri /  
 not                  return-                  for good      he goes  
 'He can't return, he goes on for ever'

(5-292) mangarri      ngampirri      kijkij-ku /      yilpa      kartpirrini /  
 not                  again                  get up-                  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 -wu clauses above. In constructions of this type, the -wu verb, preceded by the negative Particle, indicates a strong degree of unlikelihood, or impossibility. It may be because of a social constraint (as in (5-291), referring to the fact that he will not return to the scene of the murder), or a physically determined disability (as in (5-292)).

A clue to the interpretation of this construction is afforded by the following example, in which the occurrence of the DAT Postposition on thirri suggests that the -wu clause is indeed embedded. (It appears that thirri has been fractured from the -wu clause.)

(5-293) marlami /      jikinyakirli /      mangarri      thirri-yu  
 no                  little-really      not                  fight-  
 kartpuwu /  
 belt-

'No, he's still too little to fight'

This suggests that the initial clauses of (5-291) and (5-292), set off by intonation, are (non-Situation) Characterizing clauses perhaps with the Carriers ellipsed. (5-292) might then be

(5-294) mangarri [ [ngampirri kijkij]-ku]  
 PP K_{nf} K_{nf} PP

(Compare example (5-256).)

The ellipsed Carrier might therefore be assumed to be the actor of the non-finite clause. More appropriate paraphrases for (5-291) and (5-292) might be then, 'he is not to return ...', and 'he is 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):

(5-295) parnlunti yilpa, niyaji mangarri ngampirri  
 I returned for good this not again  
 parnparn-ku  
 return-

'I came back for good, I can't go back (there) again'

A possible interpretation for this is that niyaji here is functioning much like "it" in English - 'it is not (for me) to return' (see above page 123-4 for a discussion of niyaji). A second possible example is

(5-296) mangarri tirripku riwi pilika  
 not camp- place half way  
 "We won't camp half-way" (speaker's gloss)

It is possible that riwi pilika is an NP (half-way place), and that (5-296) means more literally 'half-way is not the (right place) to camp'. (5-297) provides evidence of a different type: the initial relational clause is rewarded in the form of a Situation clause:

(5-297) nyamani warang-ku ngirntajiya karntiwangurru  
 big sit- this -LOC many  
 winhi warangkirri ngirntajiya  
 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 (5-291) - (5-293) may be due to the fact that the clause is Characterizing, and states a permanent association between the two major constituents.

5.5.2.5 -kuwaya and -ya

There are only a few examples of the Locative Postposition -ya directly following a Verbal stem, where it indicates a concomitant process that the Agent or Actor (depending on clause type) is engaged in. For example,

(5-298) *jijakkurrarni*                      *jutuk-ja*  
           they're talking together        straighten-LOC  
           'They're talking together straightening words'

(5-299) *warangngi*            *warrkumja*            'I sat working/at work'  
           I sat                      work -LOC

Far more frequent is the Verbal stem followed by -kuwaya, which would appear to be segmentable into -kuwa 'Progressive Aspect' followed by -ya LOC. For example

(5-300) *tanymiliyirrra*            *jijakkuwaya*            'We hear them talking'  
           we hear them                      talk-

In finite VPs, the Progressive -kuwa 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 (v. section 6.5.2). It usually occurs with Accomplishment Classifiers (v. section 6.5.5), and the 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 non-accomplishment Classifiers because its information is already carried in the (obligatory) Classifier, not because it is incompatible with these Classifiers.

-kuwaya and -ya clauses are 'conditional' attributes (v. 5.2.4); they indicate qualities (involvement in a process) that are 'incidental' to the involvement of the entity in the process. The -kuwaya 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) Locative clauses of (5-298) and (5-299) 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 Agent -

(5-301) *ngurrapkuwaya*            *thirringka*            *jakarntinginpiti*  
           shout-                      fight -ERG            they woke me up  
           'They woke me up yelling and arguing'

## Attributing a Goal -

- (5-302) mirrakkuwaya            paapirri            kilparli  
 lie (Avoid.style)            below            I found her  
 'I noticed her (i.e. my WM) lying below'

(It is generally the Goal of a clause of perception that is attributed on by a -kuwaya clause.)

## Attributing on Intransitive Medium - (5-299) and

- (5-303) warangkurru            jijakuwaya            'They're sitting talking'  
 they sit            talk-

## Attributing on an Affected:

- (5-304) mirrimuwa            pijngarniwirangi            purijkuwayanyali  
 sun -only            it emerged on them            dance -PROG -REP  
 'When the sun came up, they were still dancing'

Finally I remark that in no example is there a sister constituent for the non-finite 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 Infinitives5.5.3.1 -pari

The Infinitive -pari occurs with 'happening' type processes (v. page 262), and indicates that the Medium/Undergoer has undergone the process, which is accomplished and completed. Although the -pari happening is temporally prior to the main process referred to in the finite clause, the resulting state of the Medium still obtains. The -pari clause indicates a quality of its Medium, as it fills a role in some other unit, either phrase or clause. Examples are:

- (5-305) [ [pirti            ngaluk-pari]-ngka]            thulngliminhi  
 PP.K_{nf}            K_{nf}            PP  
 leg            bend            -ERG            I kicked him  
 'I kicked him bent-legged'

- (5-306) nayu            kilparli            tijpari            pakiyi  
 knife            I found it            break-            it lay  
 'I found the knife broken'

- (5-307) kirili            lalpak-pari            waraari            'The tree stands split'  
 tree            split            it stands

The 'Causer' (v. 5.2.13) is optional in this clause type, and may or may not be suggested in any particular instance. Example (5-305) suggests the Medium is a Goal, while in (5-307) the Medium is most naturally not a

Goal; (5-306) is equally open to either interpretation.

### 5.5.3.2 -mawu

The Infinite occurs with active process types (v. above page 262), indicating that the process is completed. Some examples are:

(5-308) lawurrmawu          warangngiri          'I sit hugging myself'  
hug-                          I sit

(5-309) yuwulu          ngirntaji          wantaj-mawu          wartkiri  
man                          this                          carry on shoulders-          he goes  
'This man is going along carrying (something) on his shoulders'

The types of process occurring with Infinitive -mawu are accomplishments, of a type that leave some resulting effect or state that forms a homogenous sequence with the accomplishment. Examples above illustrate this: lawurr- is an accomplishment, but it is possible for the resulting state to be held after the accomplishment; wantaj- is an accomplishment, meaning 'lift onto shoulders', the result of which may be a state of (having something) resting on the shoulders; etc. The resulting 'states' are characterized by the fact that they are readily maintained (by a small amount of effort) after their accomplishment. And effort (another process) is necessary to undo this state. E.g. the hug (5-308) is released by another action; it does not simply cease. (-mawu processes contrast with -warra and -wangka processes which are not accomplishments, and require continual effort to be maintained - they are easily 'stopped' by the actor 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 (5-310), (5-311), and possibly also (5-312). 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.

(5-310) jiljilk-mawu          nyawa          'A spotted tail'  
spot          -INF          tail

(5-311) yanya          mirt-mawu-nyali          pakiri  
other          tie -INF -REP          it lies

'The other (lace) is still tied up'

Thus, depending on the type of process, the thing qualified by the -mawu clause will be either an Agent or a Goal in the non-finite clause.



- (5-316) [ [parnti kut-mawu]-ngka] purijkurra  
 PP K_{nf} K_{nf} PP  
 arm shut up- they dance  
 'They dance holding hands'

The distinction made between Actions and Happenings is clausal: it does not divide the lexical Verbals into disjoint classes, 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 -pari and -mawu. The following pair shows this.

- (5-317) pilangkiti ngalukmawu pakiri  
 blanket fold- it lies  
 'The blanket is folded up'

- (5-318) marla ngaluk-pari-ngka ngulluni yuwulu  
 hand fold I punched him man  
 'I punched him with my clenched fist'

Whereas blankets require human agency to fold, hands do not require human agency to clench - they may clench involuntarily, or through disease. As a rule, -mawu clauses are active concomitant of the main action, whereas for -pari 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 realizing roles in (parts of) other finite clauses. They always occupy 'marginal' positions with respect to other finite clauses (v. 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 easily 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 generalization. This may occur 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 sometimes happens that this shared participant is referred to clause complex initially by an ERG PP:

(5-319) ngarlutungka      ngiti      warangjirri      kampa  
           three    -ERG      we(R)      we sat      water  
           ngurlukjirraarri  
           we drank it  
           'The three of us sat drinking'

This phenomenon, attested in other languages which show Ergative marking nominal elements, including Gugu Yimidhirr (Haviland 1979:154ff) and Ngaanyatjarra (McGregor 1979:118-9), may be referred to as 'Ergative hopping', following Haviland (loc.cit.). It is possible - but by no means certain - that in examples such as (5-319) the ERG Postposition is in constituency with the first finite clause. (It might be noted in this connection that the initial clause in such examples typically indicates a secondary action concomitant with the main action, referred to by the second clause.)

(iii) As a rule, a finite clause is uttered on its own 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 forthcoming). Clauses of a clause complex are not in any significant respect structurally distinct from independent clauses (but cf. page 349 below), and they (almost) always have the potential of independent occurrence. It is thus often difficult to determine the tactic relationship between a pair of clauses.

It is convenient, following Halliday (forthcoming, Chapter 7) to recognize 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. (b) Expansion, in which one clause expands on the other by extending, elaborating, or enhancing it. 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 1945/72:104) as was the case for nominal phrase complexes (v. section 4.3.1 above). This section is organized 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.

Actual 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 Projected Speech

Speech is normally reported as a 'direct quote', which provides a possible wording for the spoken utterance. That is, it represents the utterance as it might have been, might be spoken concerning the world; 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 in Appendix 1; examples of independent quotations occur in lines (30), and (49) of Text 1, line (10) of Text 2, and line (8) 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 ..."; however, a textual count showed approximately the same frequency of each order. Examples are, respectively, (5-320), and line (29) of Text 1.

(5-320)	mikamingarra	ngarakkila	<u>dillybag</u>	kartiya
	he told-to me	I make it		whiteman
	ngangjawili			
	I could give him			
	'She told me "I make dillybags to sell to whitepeople"'			

Sometimes the quoted clause is discontinuous, flanking the projecting clause on both sides - see for example line (48) of Text 1, and (5-325) below.

The relation between the projected and 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: the quotation clearly does not fulfil a similar role to thangarnti 'word' in thangarnti jijakji (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:

<u>mika-</u>	'say, tell, do'
<u>jak-</u>	'say, tell'
<u>jijak-</u>	'say, speak'
<u>yankin-</u>	'request, ask'
<u>kuwaj-</u>	'call (by) name, tell'
<u>paa-</u>	'shout out'
<u>jangi-</u>	'answer, reply'
<u>kamalk-</u>	'speak, say, tell' (Avoidance style)
<u>rurrij-</u>	'argue, swear'

This classification of speech act types is quite different from the classification I have proposed (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 rurrij- 'argue, swear', which normally occurs with exclamations and proposals. yankin-, for example, indicates either a request for information (a question), as in (5-321), or a request for action, as in (5-322):

(5-321) David-ju      yankinli      yuwulu      karntiwangurru  
                   -DAT      I asked him      man      many  
 thirri      kartpiwirrarni      tanymilimayuna  
 fight      they fought together      you heard them  
 'I asked David "Did you hear them fighting?"'

(5-322) yankinnginti      maa      wini      ngangpinti  
 he asked me      meat      maybe      you'll give it to 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. The only potential example available is

(5-323) mirrangka      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. 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 mika- 'say, do', jak- 'say', paa- 'shout out' and kamalk- 'say' (Avoidance style) occur in Intransitive projecting clauses. For example:

(5-324) mikawirriyi      ngarlurrja      wartkirri      parnjawirriyi  
 they (2) said      thrice      we'll go      we'll return  
 janungku      mikayi  
 [name]      he said

'They said "Butcher said "we'll be away three days"''

Another difference is that in clauses projecting proposals, the lexical verb is normally classified as an 'accomplishment' (v. 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

(5-325) mungayayu      nganyi      mikangiringangi      parnpiri  
 tomorrow      I      I'm telling you      you'll 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 of modification of the behaviour of others. There are only a few verbs occurring in this type of clause, including pala- 'send', ngimpirr- 'hurry (someone) up', and kilij- '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:

(5-326) palajila      wayanti      kajpangaŋgi  
 I sent him      fire      you'll cut it-for us (Incl)

'I sent him (saying) "cut firewood for us",' or

'I sent him to cut firewood'

(5-327) paljangka      ngimpirrjila      kampa      tuuwangangi  
 quick      I hurried him up      water      you'll get it for us  
 (Incl)

'I hurried him up: "get us water"'

(5-328)	kilijpitingarraki	mangarri	wartkingkirawu
	they blocked me	not	you're going

'They blocked me "don't go"'

The quote in such constructions may be replaced by an embedded -wu Purposive clause - contrast (5-327) with (5-288) above. (It appears that the same may hold true for proposals projected by clauses of communication. There is, however, only one example available; it involves the verb jijak- 'speak').

Note that there is no general 'factitive' verb 'make' in Kuniyanti: 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 wordings. For example, there are numerous instances in texts in which the speech of policemen and other white people is quoted by means of Kuniyanti clauses, with no suggestion that they spoke the language. Consider also (5-329), in which the thing demanded is referred to in the projecting (and not the projected) clause, which is not to say that it was not mentioned in the actual utterance.

(5-329)	ngurrungka	yuwulu	jakmingarraki	ngaarriyu
	that -ERG	man	he told me	stone-DAT
	ngangpinti	nganyi		
	you'll give me	I		

'That man demanded money of me "give me some"'

Kuniyanti direct quotation thus corresponds to both direct and indirect quotation in English. Each of the examples (5-319) to (5-325) above has an alternative translation as English indirect speech. For example, (5-329) 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 (5-330) and the first clause of (5-331), for example, represent - indirectly - the content of the communication. This is so whether or not the two clauses together constitute a single clause complex (or sentence).*

* In this connection it may be relevant to enquire whether (felicitous) responses to utterances such as (5-330) and (5-331) 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.

(5-330) yankinpa                      ngunyiiyirra                      wartkiri  
 you'll ask him                      where -ALL                      he goes  
 'Ask him where he's going'

(5-331) nginyji                      yinikama                                      mikamangarraki  
 you                                      you'll do something                      you'll tell 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 Kuniyanti, 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. In Kuniyanti, on the other hand, direct speech represents the sense of the utterance from the viewpoint of the speech act referred to, and, as previously mentioned ( page 338), makes no claims about its wording. Kuniyanti 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

(5-332) ngirntajiya                      wanyanpirrini /                      mikamingirangi /  
 this -LOC                      they left him                      he told 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 direct observation. (Note in addition that the reference point for spatial deixis has been shifted in the first clause of (5-332) to the speech situation referred to. It is 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 336 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 (per-

haps even obligatory) mode of expression. The main ones 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,

(5-333)	mikawinmi	palanginpiti	kilpanginyji	muyu
	they told me	they sent me	I found you	sleep
	pakingki			
	you slept			

'They told me that I'd 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. 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 (5-330) and

(5-334)	ngurrungka	yuwulu	yinikamingangki	ngunyyirra
	that -ERG	man	he did something-to you	where -ALL
	wartkiri			
	he goes			

'Where did that man tell you he's going?'

Although there is a direct quote corresponding to (5-330), 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 (5-334). The reported speech in this case cannot be represented from the viewpoint of the speech situation referred to. (5-331) is a special case, in which, however, the speaker and 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 quote for (5-331).

(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:

- (5-335) Lanisngka          mikamingarra          nginyjingka          mikaminhi  
                               -ERG          he told me          you          -ERG          you'll tell him
- Martinju          niyingka          tuwuyawina          nganyi          kintiwa  
                               -DAT          he -ERG          he'll get me          I          upstream
- munturrwinanyji          Mulurrjanhingi  
 he'll drive me          [name]          -ABL

'Lanis told me "tell Martin to come up and get me and take me from Mulurrja"'

- (5-336) jakmanhi          wartjawi          niyaji          palawa  
 you'll tell him          he'll go          this          you'll 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 or non-linguistic) 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 kamalk- '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 lexicalized with avoidance-style items. This is as might be expected, granted that more circumspection is necessary in face-to-face contact with the avoidance-kinsman than in reference to him (cf. section 1.5). For example,

- (5-337) kamalkmanhi          kirrpiwingarra          yilkawina  
 you'll tell him          he'll come-to me          he'll see me
- 'Tell him to come and see me'. (speaker to WMB)

- (5-538) ngaangki          ngalikanyi          kamalkmingarra          mungamungaya  
 your          S          he told me          tomorrow
- yilkawingka          ngalikanyparingka  
 he'll see you          S          -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), but this additional motivation does not always exist.

To summarize, 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 Projected 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 forthcoming, Chapter 7). It seems that projected thoughts are always propositions, and never proposals. (Contrast verbs such as pala- which seem to always project proposals - see page 337 above.) The generic verb mika- projects thoughts, and means 'think' in this context; lingi- 'think about (someone)' also, rarely, projects thoughts. But projected thoughts involving these verbs are far less frequent in Kuniyanti speech than they are in English. This is partly because Kuniyanti has the propositional modifying particles thaarri '(it was) mistakenly thought (that)' and yikanyi '(it is) uncertain (that)', which indicate subjective attitudes towards the proposition, and the verbal category of Subjunctive mood (see 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 Kuniyanti.

In directly quoted thoughts, as in direct speech, deictic categories are shifted to the reference point of the situation of 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 unrestricted pronominals occur in the quotation. Some examples are

- |         |      |            |            |           |           |
|---------|------|------------|------------|-----------|-----------|
| (5-339) | niyi | mikami     | thaarri    | yikanyi   | wartla    |
|         | he   | he thought | mistakenly | uncertain | I took it |
- 'He mistakenly thought "I took it sneekingly"', or  
 'He mistakenly thought he'd taken it sneekingly'



(5-340) nganyi            mikarlimi            thaarri            ngurrungka            yuwulu  
 I                    I thought            mistakenly            that -ERG            man  
 kartpini  
 he hit him

'I mistakenly thought "that man hit him", or

'I mistakenly thought that that man hit him'

(That the thought of (5-340) is directly quoted follows from the observations that (i) thaarri 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, most frequently, the import of reported thoughts is to compare and contrast the prior thought with the present reality. Indirect quotation does this explicitly. For example,

(5-341) mikarliminganki            thaarri            panyangi            wartkingki  
 I thought-of you            mistakenly            outside            you went

'I mistakenly thought 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 (5-342) are decidedly rare:

(5-342) mikarlimi            ngumurruyu            ranpinti  
 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 ranpinti, 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-), can also project thoughts. In this case, the projected clause represents a thought (concerning reality) that was perceived, or 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- projecting direct quotes are:

(5-343) yuwulungkanyali            milawinpirra            pulkawulkangka            aa  
 man -ERG -REP            they saw them            old men -ERG  
 ngamu            kirli            pulkawaari            karingi            ngangpata  
 before            same            he's getting old            wife            we'll give him

'The old men would see "he's getting old, we'll give him a wife"'

(5-344) milawirrayi                    ngirntajiya            ngirntajiwami            ngapkurra  
 they (2) 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 or 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 real-world situation. For example,

(5-345) ngappina                    milaluna  
 it burnt them                    I saw them

meant 'I saw that the fire had burnt them (up)', or 'I saw "the fire burnt them"' in the text in which it occurred (since the perceiver was not present at the time that they 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 (5-343) and (5-344).

### 5.6.2 Expansion

Two primary relations 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) subclausal expansion, in which one clause expands on a subpart of another, again by extending, elaborating or enhancing the subpart. As indicated above, both of these possibilities are realized by clause complexes in which the clauses are either paratactically or hypotactically related; embedding of finite clauses does not occur. Subclausal expansion is not (in general) distinguished morphologically from clausal expansion, and as a rule a clause complex which allows the former interpretation also allows the latter. (There are, however, numerous examples which allow only the latter interpretation.)

#### 5.6.2.1 Clausal Expansion

##### 5.6.2.1.1 Extension

There are two main ways in which one clause may extend on another: (a) it may add something new to it, or (b) it may replace it with something new. The offering of alternatives between entities is quite rare in Kuniyanti (cf. section 4.3.1). The same holds true of situations. As was the case for NPs, open disjunction of situations may be expressed through listing of some of the alternative possibilities, as in

- (5-346) yikanyi            mangarri            kartkuwaani            yikanyi  
 uncertain            not            it was falling            uncertain
- karrawulu            tijpinti            mangarri            milarla  
 leg            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'

It is clear that the relationship between the first two clauses is not one of alternation.

(a) Addition. In Addition, one Situation is simply added to another, without any indication of temporal, causal or other connections. Examples are

- (5-347) nganyi            jutunyali            wartngi            niyi            kilparli  
 I            straight-REP            I went            that            I found him
- 'I went straight up and found him'
- (5-348) nginyji            lililuwa            wartpiri            nganyi            ngirntangarri  
 you            west            you'll go            I            this -COMIT
- wartjawingi  
 I'll go
- 'You go the west way and I'll go this way'
- (5-349) kampaya            kirili            lumparranyka            jilwiti            thariti  
 water-LOC            tree            it floats            coolibah            heavy
- yilpa            takurrwani  
 for good            it sinks
- '(Some) trees float on the water, but the coolibah is heavy, and sinks'
- (5-350) yilijjana            marla            ngarlutiya            yaningi  
 it rained on us            hand            three -LOC            today
- ranpinti            kampa  
 it went away            water
- 'It rained on us fifteen days, and stopped today'

As (5-347) and (5-348) show, the situations referred to may well be related temporally either as successive or as simultaneous respectively. In the former case, the order of clauses (which are related by Addition) always reflects the temporal order. More generally, it would seem 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 (5-348), 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 ((5-351)), or is occasionally indicated by the Particle murta 'certainly' (as in (5-352)).

(5-351) 

kampayu	muwwirranhiyi	kilirniya	mangarri
water-DAT	they sought-for it	grass-LOC	not

  
 kilpawiti  
 they found it  
 'They looked for grog in the grass, but didn't find any'

(5-352) 

mangarri	ngaarriyu	muwlanhi	murta
not	stone-DAT	I sought-for it	certainly

  
 kilparli  
 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).

(b) Replacement. Here one clause is offered in place of or instead of another. The order of clauses is invariably Replaced[^]Replacing. The first, Replaced clause always refers to a situation that did not take place; the second clause indicates what happened instead. The Replaced clause is thus either negated by the Particle mangarri 'no, not', or by thaarri 'mistakenly believed', or its VP is in Potential Mode (indicating that it might have happened, but didn't). Some examples are

(5-353) 

mangarri	nyamnyamkingirawu	thirrirli	jakma
not	you're whispering	loud	you'll say it

  
 'Don't whisper, speak loudly'

(5-354) 

thaarri	nganyingka	kartluni	ngurrungka
mistakenly believed	I -ERG	I hit him	that -ERG

  
 yanyangka      kartpini  
 other-ERG      he hit him  
 'I thought I'd hit him, but really it was that other man who hit him'

(5-355) 

matikaya	wartngirni	thinga	wartngi
car -LOC	I could go	fast	I went

  
 'I wanted to go by car, but I went by foot'

As (5-353) 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

- (5-356) wampawu            kartkilunirni            thirru    niyi    thirru  
 almost            I might have hit him    roo            that
- pajkiwinti  
 he got up and went
- 'I nearly hit the roo, except that he got up and went'

Finally, I remark that the Replaced clause need not necessarily be asserted as not occurring:

- (5-357) yikanyi            wartpingirni            ngirntajiyanyali    winhi  
 uncertain            I might go            this -LOC    -REP    just
- warangpingirni  
 I might sit
- 'I'm not sure I'll go, instead I could just sit here'

#### 5.6.2.1.2 Elaboration

One clause may elaborate on the meaning of another by providing further characterization of it, either by (a) exposition or (b) clarification.

(a) Exposition. In exposition, the second clause restates the meaning of the first in other words, or from a different point of view. For example,

- (5-358) niyingka            yuwulungka            jakmingarraki    thangarnti  
 that -ERG            man    -ERG            he spoke-to me    word
- kuwajngina  
 he told me
- 'That man spoke to me, he told me words'

- (5-359) palawa            tharra            niyi            jurrama  
 you'll send it            dog            that            you'll chase it
- 'Send the dog away, chase it'

(b) Clarification. Here the second clause clarifies the meaning of the first by providing some additional information by way of explanation. For example,

- (5-360) ngitingka            katjinmarni            nganyi            papurrungku            wartngi  
 we    -ERG            we separated            I            down            I went
- niyi            thaanungku            wartji  
 he            up            he went
- 'We separated. I went down and he went up'

- (5-361) kampamuwa            ngurlukla            manyi            marlami            ngapla  
 water -ON            I drank it            food            nothing            I ate it
- 'I drank only water, I didn't eat food'

In example (5-165) above, the second clause is a clarification of a part of the first, the "secondary predication", namely the attribution of

sickness to the person concerned.

A slightly different type of elaboration was mentioned on page 293 above, in which the first clause stated the bare bones of the situation, the details being filled out in the following clause. This was done in order 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.

There are no morphological markers of the relations of elaboration. As a rule the clauses occur in distinct tone units, the first being characterized 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,

(5-362)	niyaji this	$\swarrow$ <u>ralwirrayi</u> ↑/ they plucked it	punpulu fur	$\swarrow$ <u>ralwirrayi</u> ↓/ they (2) plucked it
---------	----------------	-------------------------------------------------------	----------------	-----------------------------------------------------------

'They plucked it, they plucked out the feathers'

It is not clear as yet whether this intonation pattern systematically distinguishes elaboration from extension. In the latter case also, there is sometimes (but not always) a step rise on the final syllable of the first tone group.

#### 5.6.2.1.3 Enhancement

In enhancement, one clause qualifies the meaning of another by making reference to a situation circumstantial to the second. 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 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.

#### [1] Parataxis

(a) Temporal. Temporal relations may be indicated explicitly by means of the d-words niyinhingi and niyajinhingi 'after that, then', and by the enclitic -rni SEQ. The clauses always occur in the order of the situations they describe, the second enhancing on the first. For example,

(5-363)	yuwulu man	karntiwangurrungka many	-ERG	kartpuwurrarni they fought together
	niyinhingi then	nartawurrarni they cried together		thirrinhinginka fight -ABL -ERG

'Many men fought together and then they cried together afterwards'

(niyinhingi and niyajinhingi appear, however, to be most frequently used as

sentential, rather than clausal conjunctions - see the texts.)

(5-364) billycan          jitiplimi          papaapirrimi          milarla  
                                  I lifted it          inside          -SEQ          I saw it

'I lifted (the lid of) the billycan and then looked inside'

Another way of making explicit the temporal relationship between the clauses is by means of the temporal Adverbials ngamu 'before', yaningi 'now', wampa 'later, still', etc. (see section 3.4.2 above). An example is

(5-365) ngamu          takurrwani          mirri          maningkarni          parnkiyi  
                  before          it entered          sun          night          -SEQ          he returned

'The sun had already set; he returned in the nighttime'

The order of clauses need not reflect the actual order of the situations described: the individual referred to in (5-365) had already started on his way back when the sun set. Temporal Adverbials in Kuniyanti do not function as clause connectives; that is, ngamu, for example, does not function like 'before' in English 'before he got back the sun had set'.

(b) Manner. One clause may enhance another by indicating a manner, or a concomitant state or action of the Actor, while engaged in the primary situation. An example is

(5-366) mika          warangkiri          parntiyurru          talwurruyu  
                  thus          he sits          arm          -DU          they (2) 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 may have a characteristic structure, which does not occur in independent clauses (cf. page 334). The first clause of (5-367) describes concomitant action of the man's arms, and treats them as Agents. In independent clauses body parts may be non-participant Instruments only.

(5-367) parntiyurrungka          priminpinmarni          warangkiri  
                  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 (5-313) above. Manners are not, however, usually marked distinctively: there is not usually an Adverbial in the first clause making reference to the circumstantial situation:

(5-368) wartkiri          ngirriwanti          wirrinywirrinykiri  
                  he goes          across          he whistles

'He's going across whistling'

Example (6-97) 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.

(c) Apprehensional. Here one clause indicates an undesired consequence that would result unless the situation referred to by the other clause occurs. This is expressed in Kuniyanti by means of finite clauses without the use of a conjunctive element. The order is invariably that the clause expressing the evasive action occurs first, and is followed by the one referring to the undesired situation. The VP in the latter clause is always in the Definite Present form (see below 6.5.3.3). For example,

(5-369) ngarraki           yamati           katluni           ngurriya  
my                   coolamon        I left it        that-LOC

nirtkanuwungarraki  
it sticks-DEF-on me

'I left my car there lest it got bogged (in the mud)'

(5-370) kampa           wartpirra           kampawinyja       rajkirrawu  
water           we'll 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:

(5-371) mangarri       warangkingkirawu   mikingka       wirtpilingkawu  
not                you sit       -DEF       ant -ERG       it bites you-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 doesn't. Apprehension is, then, a type of purpose (Halliday, p.c.). 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 below section 6.5.3.3.)

The apprehensional relation itself is not signalled by the verbal form in the second clause, or even by the sequence of verbal forms between the two clauses. Compare for example (5-369) above and



(5-372) thulngliminhi            nangkirtluni            wampa            kartkinypuwu  
 I kicked-at him            I missed him            later            I hit you-DEF

'(Although) I kicked at him and missed, I'll definitely hit you shortly'

There are other expressions having a closely similar meaning. In (5-373) 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.

(5-373) mangarri            kartpingkuni            nganyingkarni  
 not            he'll hit you            I    -ERG -SEQ

kartjawuluni  
 I'll hit him-<SUBJ>

'He won't hit you lest I then hit him'

## [2] Hypotaxis

In hypotaxis, the enhancing clause always has a modalized VP, either in Subjunctive or Factitive mood (see section 6.5.4 below for a discussion of these categories), realized respectively by the Enclitics -ja and -wila. These two morphemes do not, however, signal the syntagmatic relation of hypotaxis: the clauses (forms) they occur in always have the potential of independent occurrence, and secondly, they also occur in paratactic complexes in which the relation is either Extension or Elaboration.

(a) -ja clauses. These subordinate clauses refer to conditions under which the situation described by the other occurred, would have occurred, will occur, etc. The clause expressing the condition, the antecedent, has a VP in Subjunctive mood. It generally precedes the consequent clause, and is usually characterized by a fall-rise intonation contour, which occurs on the final salient syllable of the tone group. For example,

(5-374) pulati            pakiyayi            / wartkilarni /  
 dry            it might 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):

(5-375) tuwuyarni            jiriki            wampanyali  
 he might have got it            bird            still -REP

warangjayi  
 it might have sat

'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 of conditional may be identified depending on the tense of the antecedent VP.

(i) Counterfactual conditionals occur when the Irrealis tense is chosen in the antecedent, as in examples (5-374) and (5-375) above. The antecedent is assumed, contrary to fact, and the consequent is asserted on the basis of this assumption. The VP in the consequent clause is always in the Irrealis Potential (for reasons that will become clear below, section 6.5.3.2). Both the antecedent and the consequent are contrary to fact; and for either of them, the situation may be assumed to have occurred when it didn't occur, or assumed not to have occurred when it did occur. Thus:

(5-376) parlanyi            milayaala                            mangarri            mutkilarni  
 snake                    I might have seen it                    not  
 mutkilarni  
 I might have stepped on it  
 'Had I seen the snake, I wouldn't have stepped on it'

(5-377) manyi            mangarri            ngapjaala                            mangarri  
 food                    not                    I might have eaten it                    not  
 kampi            pakingirni  
 sick                    I might have lain  
 'Had I not eaten the food, I wouldn't have been sick'

(ii) In Future Conditionals (unlike English - cf. Comrie 1982:143) the antecedent and consequent both occur in Future tense:

(5-378) thirru            kaljini            kirrayawumi                            mangarri  
 roo                    fast                    it might run                    not  
 nyakkuwawuluni  
 I'll be spearing it  
 'Should the kangaroo run quickly, I won't be able to spear it'

(iii) The Present Conditional always has the generic (non-time bound) sense, indicating the consequences that always result whenever the antecedent is satisfied:

(5-379) marnti                                            wajjawurrarri                            yilpa  
 fighting boomerang                            they might throw it                            for good  
 wartkiri            mangarri            parnkiri  
 it goes                    not                    it returns  
 'Should anyone throw the marnti boomerang, it will go right on, and not return'

(iv) Past Conditional. There are two possibilities here:

(a) The past can have the generic sense, referring to general truths, only this time, general truths that no longer hold (v. below section 6.5.1.1). For example,

(5-380)	puji if	tuwuyaya he may have got him	<u>yangpalangka</u> -ERG	<u>yangpala</u>
	kurnpu / woman	<u>niyaji</u> / this	mamu devil	kartkaruwu they hit him-DEF
	mangarri not	wangkayu / live-DAT		yilpa / for good

'Had a young man taken a young woman (for wife) they would have killed him dead'

(The consequent in this example is in the Definite Present mode, for reasons which will become clear in section 6.5.3.3.)

The Particle puji 'if' (cf. Rumsey 1982b:154) occurs but rarely in conditional constructions; the use of niyaji as in this example is even rarer - this is the only instance I have available.

(b) A subordinate clause in the Past Subjunctive may indicate a cause or reason for the occurrence of the main situation. This differs from the conditionals previously discussed in that both the 'antecedent' and 'consequent' are known to be true: the antecedent is assumed, consistent with the facts. Examples:

(5-381)	kampaya water-LOC	kartjawani he fell in-<SUBJ>	nyiminpani he drowned
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'(Because) he fell in the water, he drowned'

(5-382)	kangku saliva	pijngarningarra it emerged-on me	maa meat	milayaarla I saw it-<SUBJ>
---------	------------------	-------------------------------------	-------------	-------------------------------

'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 relation.

(b) -wila clauses. A clause in the Factive mood may function as a temporal circumstance of the main clause, indicating that the situation referred to in the main clause occurred when the situation referred to by the enhancing clause occurred. Furthermore, the -wila clause refers to a particular situation assumed to be known to or identifiable by the hearer (v. section 6.5.4.2) - contrast the situations referred to by Subjunctive clauses in examples (5-381) and (5-382) above.

As a rule the -wila clause occurs first, often displaying the fall-rise pitch contour mentioned above for the -ja clause. It establishes the time at which the main situation occurred:

(5-383) nganyi            ngirntajiya            pijkilalarni            mangarri  
 I                    this    -LOC            I had arrived            not  
 ngarrawangintimi  
 I was knowing them

'When I got here, I didn't know anyone'

(5-384) parnkilangi                    ngirntajinhingi            pilika            parlanyi  
 I had started back            this            -ABL            middle            snake  
 murtla  
 I stepped on it

'When I was going back, I stepped on a snake'

Occasionally, the -wila clause follows the main clause:

(5-385) yinikawinmi                    ngitiyurru            ngirntajinhingi  
 we'll do something            we(R)    -DU            this            -ABL  
 jijakkilayirri  
 we've been speaking

'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 and -wila 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 303 above).

#### 5.6.2.2 Subclausal Expansion

Kuniantyanti has no embedded relative clauses finite or non-finite. Finite clauses modifying constituents of another clause always occupy marginal positions with respect to the latter clause, either preceding or following it (cf. Hale 1976). (Non-finite clauses, as can be seen from section 5.5, cover at most a very restricted range of the functions usually associated with relative clauses.) Each of the three relations of expansion identified above as obtaining between the clauses of a clause complex are found between a clause and an immediate constituent of another clause.

##### 5.6.2.2.1 Extension

A clause may be an extension of a subpart of another clause, adding some new situation to it and thereby extending what is known about the subpart. The new situation qualifies the entity referred to by the subpart, by



(5-389)	yaningi	mungaya	niyi	tharra	milarla
	today	morning	that	dog	I saw it
	jamuntu	nganyi	wirtkinpinirni		
	other day	I	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 in a clause, typically the Focus. Frequently, but not necessarily (examples (5-389)), it is the final NP of the main clause, the unmarked Focus of that clause. Thematic entities may be qualified by extending clauses. It seems that if a thematic entity is to be extended in this way, it will also be Focal or tagged - see line (39) of Text 1.

The clausal constituent extended on is always an NP or PP referring to an entity, never a place. There seem to be no restrictions on the participant role of the entity in the main clause. Within the extending clause the entity may fulfil any participant role, it appears (Agent, Medium, and Affected). It need not even bear a role in the extending clause; for example, in (5-388), the entity fulfils a phrasal role.

#### 5.6.2.2.2 Elaboration

An expanding clause may elaborate on either [1] an entity, either a participant or non-participant (i.e. inner role), or [2] a place, i.e. any spatial circumstance, within another clause.

#### [1] Elaboration of an Entity

Here the relation between the clause and the constituent it expands is either (i) identification, (ii) clarification, or (iii) characterization.

(i) Identification. When the modifying clause occurs initially, it serves to establish the identity of an entity fulfilling a participant or inner role in the following clause (cf. 5.2.1 and 5.2.2 above). The entity established is frequently, but not necessarily, referred to by an endophoric determiner, niyi 'that' or niyaji 'this' initially in the second clause. This is the pattern I referred to above (section 5.4.2) as 'reprise'. Examples are (5-220) above, and

(5-390)	kurnpu	japurriyai	kampaya	niyingka
	woman	he waded-<FACT>	water-LOC	that-ERG
	ngangnginti	kawi		
	he gave me	fish		

'The woman who waded through the water gave me the fish'

Occasionally, instead of one of these Determiners, an open-class Nominal referring to the entity established occurs, as in the following example.

(5-391)	thangarnti	karntiwangurru	kurrumpaya	yutjiti
	word	many	paper -LOC	we put it
	thangarnti	pinarrikmiluna		
	word	I taught them		

'I taught 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:

(5-392)	jamuntu	kuwajkilangkingarraki	niyaji	thangarnti
	other day	you told it-<FACT>-to me	this	word
	nyinlimi			
	I forgot it			

'The words you told me yesterday I forgot'

It would seem reasonable to regard the initial 'relative' clause as thematic in the clause complex (cf. page 354 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 - i.e. 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:

(5-393)	kinharnti	yuwulu	jijakkirraanhi
	you know	man	we're speaking-of him
	wampikkuwaari		
	he's going inside		

'Than man who we're talking about is going inside'

(5-394)	ngarlutu	yawartangarri	wartkilawirrirri
	three	horse -COMIT	they few went-<FACT>
	jamuntu	purlumani	marurrwirra
	other day	bullocks	they mustered it

'The three men who came on horses the other day were mustering bullocks'

Another way of putting this is that the Theme of the primary clause is coreferential with something which is often also a Theme in the secondary clause (see examples (5-390) - (5-394) 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 example cannot realize an Attribute) - see examples above. (In this way Kuniyanti differs from other Australian languages such as Dyirbal (Dixon 1972:99ff), and Yidiny (Dixon 1977:385ff), in which there are such restrictions.) Furthermore, as the following example

illustrates, the entity established may be one of the set referred to by a participant NP:

(5-395)	kartiyayurru	pakilawurruyu	kurnpu	niyajingka
	whiteperson-DU	they (2) live-<FACT>	woman	this -ERG
	ngangnginti	nganyi		
	he gave me	I		

'The woman who lives with the whiteman gave it to me'

Here the NP [kartiyayurru kurnpu] 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 (5-392) 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 (5-394), the horsemen referred to had come up to me and my collaborator 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 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 registry 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 (5-206), 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,



(5-396) ngurrungka / kinharnti kurnpu wartkilayingangi  
 that -ERG you know woman he went-<FACT>-on us  
 mulurrjayirra / niyajingka parnnginarri karrwaru  
 -ALL this -ERG he returned me afternoon  
 maningka /  
 night

'That woman who went to Mulurrja with us brought me back last night'

The secondary clause may be regarded as interpolated here (cf. page 302 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, (5-396) does not exemplify Ergative hopping (cf. page 334), 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 that clause.)

(ii) Clarification. The secondary clause can clarify the identity of an entity in the main clause by referring to a situation that entity is known to have been involved in. Here the elaborating clause is added as a type of clarifying afterthought; it invariably follows the clause containing the elaborated entity. This construction resembles the tagged Theme discussed on pages 303 to 304 above. As expected, the 'tagged' clause has its VP in Factive mood:

(5-397) niyaji takurrwirrarri maruwangkanyali ngamu  
 this they put him murderer-ERG-REP before  
 thurrpurtkilawirrarni  
 they pulled him out

'They put him back (in the hole), the murderers who had taken him out before'

(The Agents in the first clause had been established in the preceding text, and the final clause serves to identify them uniquely.) Another example is:

(5-398) yuwulungka wartpirrayi ngarrangkarni yuwulu  
 man -ERG they (2) took it dreamtime man  
 warangkilawirri ngamungamunhingi  
 they sat (FACT) before-before-ABL

'The two men took (the fire), the men from the dreamtime'

Such clauses are 'defining relatives', and appear to normally modify the Theme of the primary clause.

(iii) Characterization. A following elaborating clause may specify more precisely an entity involved in the main clause, adding a specific characterization of it, describing it in more detail. I distinguish this from

(ii), 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 (ii), the elaborating clause follows the primary clause, and elaborates on its Theme. An example is:

(5-399) kalamutanhingi      kungulu      matikaya      pakiri  
          turkey      -ABL      blood      car -LOC      it lies  
          pulatiwinti      kungulu  
          it dried      blood

'There's turkey's blood on the car, dry blood'

## [2] Elaboration of a Place

The two main relations identified in [1], (i) identification and (ii) clarification also occur in elaboration on places. There are no examples of (iii) characterization. This is because, as distinct from entity elaboration, in place elaboration, the elaborating clause always occurs in Factive mood (see 6.5.4.2 below).

(i) Identification. Here the elaborating clause occurs initially, establishing a place. For example,

(5-400) kirliyanjali      ngamu      yurrilawinmi  
          same-LOC-REP      before      they started-<FACT>  
          niyajiyangkanyali      wartpirri  
          this -ABL₂ -REP      they went

'They left from the same place where they had started from before'

(5-401) pakilawurru      niyajinhingi      parnlunti  
          they lie-<FACT>      this -ABL₁      I returned

'I returned from where they're camping'

When there is no Determiner initial in the second clause, as in (5-402) below, it may be that the -wila clause provides a locational enhancement of the second clause (cf. temporal enhancement - page 353), rather than an elaboration of a subpart (a Locational circumstance). Whether or not this is so remains unclear at the present.

(5-402) mikingka      wirtkilanginpini      kajirni      ngapkina  
          ant -ERG      it bit me-<FACT>      sore-SEQ      it eats me

'It's sore where the ants bit me'

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 (71) 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.

(ii) Clarification. In this case the elaborating clause occurs finally, clarifying the place involved in the main clause, exactly as for [1](ii) above. Examples are

(5-403) kirliya            pakiyirri            palanyjaya            ngamu  
 same place            we lay            [name]-LOC            before  
 pakilayirri            purrungkunhingi            wartkilayirri  
 we lay-<FACT>            from the north-ABL            we went-<FACT>  
 'We camped at the same place we camped at and left before'

(5-404) pirrinhingi            pakiyirri            ngarrarni            milaalawurra  
 north -ABL            we lay            always            they see it-<FACT>  
 pamathitiwarrawarrangka  
 Bayulu mob            -ERG  
 'We camped on the north side, where the Bayulu mob always look  
 after (bullocks)'

#### 5.6.2.2.3 Enhancement

In enhancement the relationship between the clause and the clausal constituent it modifies is a circumstantial one of place. That is, the thing referred to by the modified constituent fulfils a spatial circumstantial role, 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 realization in that clause. (It is of course normally ellipsed in the following enhancing clause.) Furthermore, the enhancing clause is invariably in the Factive mood. The following examples illustrate these properties:

(5-405) yuwulu            pijngarningirangi            maningka            purrungu  
 man            he emerged-on us            night            from the north  
 kimangarna            yuwulu            wartkilawurru  
 bushmen            man            they go-<FACT>  
 'A man came up to us that night from the north, where Aborigines  
 still live in the bush'

(5-406) turnmi            kampinyi            jiljiya            ngilmangi  
 he covered it            egg            sandhill-LOC            to the south  
 warangkilaari  
 it stands-<FACT>  
 'He buried the egg in the sandhill that stands to the south'

(5-407) Postoffice      ngurru      laanti      mijin      mayaru  
                                  that      up      mission      house  
 waraalaari  
 it stands-<FACT>

'The (old) Post Office used to be up there where the Mission is'

In the three examples above the role borne by the modified constituent in the primary clause is a circumstantial one, though not necessarily a Location. As the following example shows, that constituent may bear a participant role instead:

(5-408) milayawa                      kintiwa      niyaji      nyayipari  
                                  you might see it      upstream      this      [name]  
 warangkilaari  
 he sits-<FACT>

'You might see upstream the (place) where Jack lives'

#### 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 together do not 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 (mentioned 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.

CHAPTER 6: TOPICS IN SEMANTICS6.1 Preliminary Remarks

This chapter is a preliminary investigation into the semantics of certain 'closed class' units, especially Enclitics (section 6.3), particles (section 6.4), and the major categories of the finite verb (section 6.5), which up to now have been given approximate English glosses only. Other closed system units - Stem forming suffixes, Postpositions, Pronominals, and Infinitives - have already been discussed in Chapter 3 above.

As in the preceding chapters, the objects of study is the linguistic sign, a form - meaning correlation. Meaning, as we have seen (v. page 259), 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, but the former imposes a classification on the latter. And reference must be studied in order to determine linguistic meaning. 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 - entities with no unique shape in terms of either phonological or lexical expression, established by means of contrast and complementary distribution. It is assumed in this chapter that morphemes, the ultimate linguistic constituents, are signs. The forms we are concerned with here are primarily phonological. The sign is an association between a phonological or morphophonological form and a meaning. Qualifications must 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, following Ellis (1966:80). (Other linguists have used terms such as 'core meaning' (McConvell 1983), 'grammatical meaning' (King 1983), and 'common denominator of meaning' or Gesamtbedeutung (Jakobson 1936, Waugh 1975).) The 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 are not 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/or extralinguistic.

Each context will engender a particular semantic interpretation, which must not, however, be confused with the meaning inherent to 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) has pointed out, many grammarians are content to delineate and catalogue the uses attributable to a particular form. There are a number of problems with this sort of approach (see op.cit.:103). From the perspective of this investigation, the major problem concerns the identification and delimitation of these meanings. Nothing seems to prevent the proliferation of meanings as more and more particular examples are taken into account: in this approach all meanings are accorded equal footing. But there is an additional problem for the linguist who is not a native speaker in establishing the intended referential meaning of the utterance (or subpart thereof), and its connotations. I have already discussed the problem in connection with the field methodology (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 remain room for misunderstanding (especially in the region of non-experiential meanings, which will take up a large section of the discussion of this chapter).

The problem with the approach I am criticizing 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 or explanation. (And I have already mentioned practical problems inherent in this methodology, at least in the field situation where I conducted my research.) 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 thereof 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 cross-checking 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 (unrepeatable) meaning tokens in specific utterances (cf. Ellis, 1966:81).

But the establishment of formal meaning requires more than an examination of contextual meanings. As a sign, the morpheme enters into paradigmatic relations with other signs, and it is the system of such relations that gives it linguistic 'value' (cf. de Saussure 1959/74:111ff). 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 assign English glosses to the morphemes, which glosses are frequently misleading, having unintended connotations. An attempt is made to give sharp formulations (and formalizations) of formal meanings. This enterprise achieves varying degrees of success (and depth) with different morphemes. 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.

## 6.2 Logical Modifiers

There are three Nominals which provide logical type modification of the Entity Nominal.

### [1] yapja

yapja is a non-specific determiner, translating into English as 'some', which makes reference to an unspecified set of things of the type indicated by the Entity Nominal. yapja may be used partitively, selecting a subset of a previously identified or delimited set:

(6-1) yiyiliya      karntiwangurru      yuwulu      yapja      ngarraki  
               -LOC            many                    man                    my  
 ngapu      yapja      ngarraki      marna  
 father            my                    brother

'There are lots of people at Yiyili; some are my fathers, some are my brothers'.

(6-2) yapja      marlaya      kitkitnginmi  
               hand-LOC            they stuck in me

'Some (of the prickles) stuck in my hand'.

Alternatively it 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) kartjaaluni      yapjangka      kartpiinpirrawu      nganyirni  
 I might hit him      -ERG      they'll belt me      I      -SEQ

'Should I hit her, someone will hit me'.

(6-4) ngarakpinmi      palyati      jimintngarringka      yapja      yuwulu  
 they made it      flat      cement-COMIT-ERG                    man  
 pijkurrarnuwu  
 they emerge-DEF

'They laid cement (around the jail walls) lest someone dug themselves out'.

yapja is unspecified for number, but as the examples show, when reference is made to human beings, the cross-referencing pronominal in the VP is typically plural (cf. ex.(6-84)), but singular in reference to inanimates. But number may be specified, by means of a co-occurring Numeral, as in e.g. yapja yuwarni yuwulaanyi (some one man-other) 'some other man' - that is, an indefinite single individual, of another type of person (e.g. from a different country.)

Kuniyanti has no term (either a word or an enclitic) explicitly indicating quantification 'all'. The number word karntiwangurru may be used in this sense, though it remains ambiguous with 'many' and 'most' (cf. 6.3.2 below). The same holds true for yapja, which can be used partitively in reference to an arbitrary subset of a 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 immaterial), as in

(6-5) yuwarni      limpa      kartpini      yapja      yuwurrwinmi  
 one      policeman      he hit him                    they ran away

'He shot one policeman, the others (the remainder) ran away'.

(6-6) ngitiyarntimuwa      warangjawirrirri      yapja      wartpingkirri  
 we(R)-PL-ON      we'll sit                    you (pl) will go

'We'll sit here, you others can go'



(Literally: 'We'll sit here, some (of us) you will go'.)

Here, yapja is glossed 'other(s)' in English. That is, 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, Kuniyanti indicates the undefined status of the sets, and leaves the set-theoretic relations unmarked. See also below page 369. 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 example in

(6-7) yapja        yuwulu        katlunpini        kintiwa        tangkuya  
                   man            I left them        upstream        [name]-LOC

'I left some (the remaining) people at Giekie 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 yapja. Thus:

(6-8) yapjangka        yuwulu        mangarri        jakpinmingarraki  
                   -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').

## [2] yanya

yanya is a comparative determiner indicating 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'.

The 'standard' is frequently an entity already established in the discourse. In a text describing fish, the speaker introduced a new type of fish in the clause

(6-9) yanya        kawi        kulumangarri        'Another fish is the catfish'.  
                   fish        catfish

Note also

(6-10) wayanti        ngurriya        ngapnga        yanya        purru  
                   fire            that-LOC        it consumed        north  
                   wayantinyali        ngapnga  
                   fire        -REP        it consumed

'A fire burnt over there (last night), and another one burnt in the north'.

But the 'standard' need not necessarily be mentioned in the earlier



(c) An implicit 'standard' is usually the correct thing that should be involved in the action. This may be seen as an aspect of (b), in which the active member is the inappropriate one. Example,

- (6-16) yanya            warawutu            purluppini            wangarrakpani  
                          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 the other. Thus comparative utterances such as

- (6-17) yanya            pirrinyiwurlu            thiwa            yanya            pirrinyiwurlu  
                          wasp                                    red  
 kurukuru  
 black  
 'One wasp is red, another is black'.

are the norm in Kuniyanti. Unlike English, a specific member is chosen as unique standard only when there is some compelling reason to do so. A second manifestation of this principle is that in 'reflexive/reciprocal' clauses, yanya can be used like the English 'each other':

- (6-18) yanya            wititi            kininyipinmarni  
                          cloud            they mixed up together  
 'The two clouds met up together'.

- (6-19) karntiwirri            yanyaya            jaalinyi            yanyayurrungka  
                          two                                    -LOC            moon                                    -DU-ERG  
 tuwuwinmarnirni  
 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 register which appears to cover the senses of both yapja and yanya:

- (6-20) tharri            ngirntajingka            wirrwalnginpini            yawinhinginka  
                          mistaken            this            -ERG            he hit me            other            -ERG  
 palija            wirrwalnginpini  
 man            he hit me  
 'I thought this man hit me, but it was really the other man'.

[3] wajarranyi.

wajarranyi describes something is differing in some respect from a reference item with which it is compared. For example,

- (6-21) yuwulu            warrmarla            wajarranyi  
                          man            desert people 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)	minyawu	wajarranyi	lamparti	tharra	nyamaninyali
	cat	different	little	dog	big -REP

'Cats are different, they're little; dogs are big'.

Similarity is expressed differently, by use of -jangi 'Semblative'; there is no Nominal which signifies the notion of likeness.

### 6.3 Enclitics

Enclitics were defined in section 3.8 as bound morphemes which do not as a rule enter into relations of constituency with the words to which they are suffixed: 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 to relate 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 partly determined by its scope (cf. McConvell 1983). In this section I discuss the 'Non-verbal' Enclitics (v. Table 3-1), that is, those which occur elsewhere than encliticized to verbal units. 'Verbal' Enclitics are discussed in sections 6.5.2 to 6.5.4.

#### 6.3.1 -rni

Kuniyanti speakers usually gave as glosses for sentences with -rni*, English sentences with 'next', or 'now' immediately following the English equivalent of the Kuniyanti word to which -rni was attached. Some examples are:

(6-23)	nganyi-rni	lantiwali	thutkiyawingani
	I	from above	I'll start descending

'(You've all slid down the rope), now I'll start descending'.

(6-24)	wampa	nyamaniyawunti	nganyi-rni	kartpinpinirni
	later	he'll get big	I -	he might hit me

'(Should I hit the child) when he's grown big, he might hit me'.

(6-25)	pirti	kalanyi	kajmi	nyawa-rni	kajkuwami
	leg	first	he cut it	tail	he cuts it

'First he cut the leg off, now it's the tail he's cutting'.

But -rni indicates more than mere succession of situations, which

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* This enclitic must be distinguished from the homophonous -rni Potential (v. section 6.5.3.2), which occurs in VPs. Although the two are in complementary distribution, they appear to have nothing in common semantically.

can be indicated in a number of ways, including simple juxtaposition, and use of niyinhingi 'after that, then'. -rni would not, for example, occur on nyanyi in (6-23) if the preceding text dealt solely with the speaker's previous exploits. It draws attention to some focal point whereby the situation contrasts with the preceding 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 -rni, in addition to marking the second process as subsequent to the first, indicates the goal of the process as 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 preceding text, respectively. That is, the sense of 'next' or 'now' implied by -rni applies 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 thing is. The 'succession' relation is not of situations, but of 'things' playing roles in the situations: firstly x was involved, now it is y. (The relation of event succession follows from this, but of course does not imply it.)

This may be summarized: the 'range' of -rni includes the full clause, but its 'focus' 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 occurs on Attributes, the comparison usually with a situation in which the 'opposition' Attribute held at a previous time:

		Attribute: NP		
(6-26)	langkakulu	kirlingirri-rni		pakiri
	hollow log	hole	-	it lies

'The hollow log is open now (it was blocked up with dirt before)'.

		Attribute: NP	
(6-27)	muyu-rni		pakiri
	sleep		

'He's asleep now (he was awake)'.

			Attribute: NP	
(6-28)	mikingka	wirtkilanginipini	kaji-rni	ngapkina
	ant -ERG	it had bitten me	sore-	it consumes 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) nyirri-rni            wampa            tutjawila  
          spinifex            later            I'll throw it on  
          'I'll put spinifex next (onto the boughshade)'.

nyirri 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 an appropriate way 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 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.

(6-30) niyi            matika            milawa,            nginyji-rni            kilangkingkarruwu  
          that            car            you'll see it    you            -            it will knock you  
          'Look out for that car, or it will hit you next'.

### 6.3.2 -nyali

This enclitic has the widest, and from an English perspective, the most unusual range of meanings of all of the enclitics. In this section I will first describe its range of meanings, and then go on to suggest a common, abstract meaning underlying all of them. In delimiting this range of meaning I do not mean to suggest that all of the meanings identified are 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.

(i) 'again'. As McConvell (1983) points out, there are two main senses of English 'again': repetition of a situation, and return to a former position or stage. (He shows that these are related - v. page 379 below.) -nyali occurs in both of these senses, when encliticized to Verbal stems in finite VPs:

(6-31) jamuntu            milangkirrinyayi            mila-nyali-yawingkirrinyayi  
          other day    I saw you two            I'll see you (2) again  
          'I saw you two the other day, and I will see you again (later)'.

The whole situation is repeated in (6-31), but in (6-32) there is only a return to a former position; the effect of -nyali is not to indicate a repetition of the going up process (the bird may have made a single swoop).

(6-32) lantiwali            wutulwani            thaanungku            tumpaj-nyali-winti  
          from the top    it swooped            upwards            it went up again  
          'The bird swooped down, and went up again'.

In the following example, which also exemplifies the return to a former position sense, -nyali is encliticized to the item referring to the repeated position (instead of the non-repeated process).

(6-33) niyi            parnpinti            ngiwawu-nyali  
           he            he returned            south

'He returned south again'.

Contrast the preceding example, where, if -nyali had been attached to thaanungku 'upwards', it would indicate that the whole situation (the going upwards) was repeated.

Presumably all lexical Verbals allow the first sense, repetition of the process. But not all will allow the second: for example, mila- 'see, look' could not be repeated in this way. It seems that only Accomplishments allow this 'return to a former position or state' sense, for obvious reasons. In fact, a proper subset of these processes only may be relevant: those for which a state, or location is achieved at the point of accomplishment. (I am grateful to Alan Rumsey for pointing this out to me).

However, -nyali has more general senses of repetition of processes than does English 'again', so might be predicted from their different syntactic potentials. Whereas the English 'again' normally has clausal scope, referring to the repetition of a whole situation involving all of the relevant non-process roles, -nyali may include the process only in its scope. The participants, or their respective roles, may differ from one situation to the next, (6-34) and (6-35) show a difference of roles of the respective participants:

(6-34) yuwarni-ngka            paamingarra            priyanti            paa-nyali-liminhi  
           one            -ERG            he called to me            in return            I called to him again

'One (man) called to me, and in turn I called back to him'.

(6-35) kartjayuni,            priyanti            kart-nyali-yunirni  
           he might have hit him            in turn            he could have hit him again

'Had he₁ hit him₂, he₂ would have hit him₁ back in revenge'.

And in

(6-36) pirti            tijka            yanya            pirti            tij-nyala-a  
           leg            he breaks it            other            leg            he breaks it again

'He breaks one leg, 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) mungayayu            pala-nyali-yawili  
           morning            I'll send it again

'Tomorrow I'll send a letter also'.

In all available examples, there is some continuity of participants (as in (6-35) and (6-36) where the Agent is the same) across the situations. It is not known whether some such continuity is necessary.

There is also a Particle ngampirri which frequently translates into 'again' in English - see 6.4.17. It is often followed by -nyali:

(6-38) nganyi            nyakkinpuwu            ngampirr-nyali  
I            he'll spear me

'I might be speared again (not necessarily by the same person)'.

(ii) 'too', 'also'. -nyali may be encliticized to a 'given' constituent, a 'quality' presumed to apply to some earlier established referent, in which case it is usually translated into English as 'too', 'also'. The given constituent is indicated to be applicable to a new entity, the theme of the clause (cf. section 6.3.5 below). For example:

(6-39) yuwulu            kampi            pakiri,            kurnpu            kampi-nyali            pakiri  
man            sick            he lies            woman            sick            she lies  
'The man is sick, and so is the woman'.

(6-40) thirru            kurrku-ya-nyali            pakiri  
kangaroo            hole            -LOC            he lies

'Kangaroos live in holes too' (given that dogs sleep in holes).

(iii) 'same'. This sense may occur when -nyali is encliticized to (a constituent of) an NP or PP with definite reference. The referent is claimed to be identical with a previously established entity.

(6-41) yikanyi            warangpurrurni            niyaji-ya-nyali  
uncertain            they might sit            this -LOC  
'They might sit at this same (place)'.

(6-42) nhuwu-nyali            yingi            kuwajkulakini            tiyatiya            mika-nyali  
his -            name            he calls himself            peewee            that-way  
'(The peewee) is called by the same name as his song, tiyatiya'.

(Note that (6-42) occurred in a text in which the identity of the bird had already been established. -nyali does refer back to the previous text, not forward to the occurrence of tiyatiya).

In

(6-43) yuwarni-ya-nyali            mayaru            warangjirri  
one            -LOC            house            we sit

'We live in the same house'.

it appears that a slightly different sense of 'same' is involved: the entity is not asserted as being identical with an already established referent. Rather, 'one and the same' seems to be the meaning intended.

(iv) 'all'. When encliticized to a Numeral, -nyali normally indicates



'all, the totality of a given or presumed set'. For example,

(6-44) karntiwangurru-nyali      pultukpirrani  
 many                                  -                                  they broke

'All (of the eggs) broke'.

(6-45) mirtlunmi      kartlunpinirri      ngarlutu-nyali  
 I tied them      I hit them                                  three      -

'I tied them up and killed all three'.

In fact, this meaning occurs when -nyali is attached to any Quantifier (whether or not it is a Numeral):

(6-46) riwi              mangarri              ngarraki-yu-miya      yarrangi  
 camp              not                                  my      -DAT-ON                                  our (U)

puju-yu-nyali  
 finish -DAT -

'This place is not only mine, it belongs to all of us'.

Note that the sense of 'all' covered by -nyali forms only a part of the range of English 'all': that is, 'all' of a given set of referents. Where the set is not given -nyali is not encliticized to the Quantifier. Thus Quantifiers such as karntiwangurru are ambiguous between the senses 'many' and 'all' (when the referent is not given).

(v) 'still'. -nyali sometimes translates as 'still' - cf. French encore, Italian ancora, and Spanish todavia, which all include some of the senses of 'again' and 'still'. A number of nuances can be distinguished depending on the constituent which it has in its scope. In this sense, -nyali always has a non-verbal constituent in its scope, which constituent indicates the particular focal respect in which the situation is continuing. This may be:

(a) Purely temporal; that is, the situation which obtains now also obtained before. For example,

(6-47) jikinya              pirrangi              mangarri              wartkiri              kirarriri  
 child                                  their                                  not                                  he walks                                  he crawls

wampa-nyali  
 still-

'Their child doesn't walk (yet); he still crawls'.

(b) A participant may be continuing to do, or to suffer a particular process:

(6-48) nganyi-nyali              milaana              mangarri              ngurru              milaa  
 I                                  -                                  he sees me                                  not                                  that                                  he sees him

'He's still looking at me, not at him'.

(c) A particular circumstance may continue to be applicable to the process:

(6-49) niyaji-ya-nyali      warawiri      'Keep standing there'.  
           this -LOC-            you'll stand

(d) Finally, a quality may continue to remain an attribute of a participant throughout a process:

(6-50) muyu-nyali      pakiyi      'He still slept'.  
           sleep-            he slept

(vi) 'always'. This sense is normally found when -nyali has an Attribute as its scope, the Attribute being asserted as applicable forever. For example:

(6-51) mangarri      kilpawayingi      marlami-nyali      parnpinti  
           not            he was finding it      nothing-            he returned  
           'He would never find anything; he would always return empty-handed'.

Rarely, -nyali occurs on ngampirri 'again' in this sense, indicating daily iterative occurrences of processes such as shaving. Thus:

(6-52) ngampirr-nyali      thirrajka      'He defecates daily'.  
                                   he defecates

(vii) 'throughout'. This is a very closely related sense to (vi) 'always', indicating the continued presence of an attribute throughout the duration of a process. For example,

(6-53) jimanti-nyali      pariwinti      mangarri      takurrawani  
           good -            he climbed      not            he fell in  
           'He climbed well all the way; he didn't fall'.

(viii) 'together'. This sense of -nyali is closely related to the 'all' sense above (i.e. (iv)), but carries the added nuance that the participants are considered to form a single group together with respect to their involvement in the situation. For example,

(6-54) tipajwarriwirraniyi      karntiwirri-nyali      kartpirraniyi  
           they (2) pushed each other      two            they two fell  
           'They pushed each other, and fell over together'.

This sense also occurs when -nyali has the process in its scope - see example (3-64) and

(6-55) ngurruyarnti      yilip-nyali-wirrirri      ngarraki-nhingi      riwi  
           that -PL            they snuck away      my            -ABL            camp  
           'They all snuck away together from my camp'.

(ix) 'precisely, exactly, just'. -nyali may indicate that a particular

entity, quality, or circumstance, and none other, is the one involved in the situation referred to. In this use, -nyali may have as its scope NPs, PPs, or ADVs. Examples:

(6-56) jijakji            minyawu-jangi-nyali  
he spoke            cat        -SEM-

'(The catbird i.e. babbler) made a noise exactly like a cat'.

(6-57) mangarri        yutkuwali        ngirnta        marla-ya-nyali        kurijkila  
not        I was putting it down this        hand -LOC-        I held it

'I haven't put it down, it's right here in my hand'.

(This sentence admits of another interpretation too: 'I haven't put it down, it's still in my hand'. The gloss given above is the most likely one in the context in which it occurred, where the location of the entity was topical.)

(6-58) niyaji-ya-nyali        pirntirri-ya        kartpirrini  
this -LOC-            plain        -LOC        they hit him

'They killed him right there on the plain'.

Just as in English, this sense of -nyali combines with yaningi 'then, now, at that time', 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) wartngiri        yaningi-nyali        'I'm going right now'.  
I go            now

(6-60) yaningi-nyali        thithiwalimi        'I'm going right now'.  
I'm going

(x) 'really'. A perhaps related sense of -nyali is a type of 'intensification', indicating that a property is held to a significant extent. The main difference from the last sense (ix) is probably that in this case it is a quality that is involved, whereas under (ix) it is (treated as) a thing. For example:

(6-61) minyjirra-nyali        warrampa        pijngarni  
true            flood            it emerged

'A really/truly big flood came up'.

(6-62) kuniyanti        yalawa-nyali        yutpinti  
close            he put them

'He (a mythical being) put the Kuniyanti people very close by'.

(xi) 'intensive'. Another sense closely related to the preceding two may be found when -nyali is encliticized to certain Temporal Adverbials. In this circumstance, it suggests that the time at which the process took place was right at the central or 'paradigm' point of temporal reference

of the Adverbial. For example, in

(6-63) mungaya-nyali      kijlunti      'I get up early in the morning'.  
           morning-                    I got up

reference is made to the early morning, shortly after sunrise, the paradigm reference of mungaya, which can however include the time up to about midday.

(xii) 'really', 'surprisingly'. There are just a couple of examples in which -nyali is encliticized to the Verbal word, apparently with the suggestion that it is surprising that the process occurred, at least with the present Actor. (However, it is not completely certain that this is the nuance of meaning that the speaker intended.)

(6-64) ngaarri            wajparriwirrangurru      tharrayu  
           stone            he threw it at them      dog-DAT

kart-nyali-winpini  
 he hit them

'He threw stones at the dog, and really/even hit them'.

(6-65) tharrangka      lurrup-nyali-wunarri  
           dog -ERG      he chases them

'The dog really chases (bullocks)' (which is surprising).

(xiii) 'just', 'only'. In one or two examples only, -nyali appears to have the sense 'only' or 'just':

(6-66) nganyi            wankalala      pilika-nyali  
           I                    I was tired      half way -

'I felt tired at only half way'.

(i) to (xiii) above cover the main senses of -nyali, so far as I have been able to distinguish them. There are, however, examples that do not fall neatly into any of the above categories. For example,

(6-67) niyaji            jikirrijla      mika-nyali      kalkalmi  
           this            I tickled him      that way-      he laughed

'I tickled him and made him laugh'.

(This could be interpreted e.g. as of type (ix) - 'I tickled him, and that's exactly (why) he laughed'. But it is not clear whether this was the sense intended.) Undoubtedly there are still further senses that I have been unable to identify and/or are not represented in the present corpus.

McConvell (1983) has suggested that again in English, and -rningan (for which the usual English gloss is 'again') in Gurindji are both characterizable in the following way:

(6-68) "again

Presupposition (P):  $S_2$  at a time before T.

Assertion (A):  $S_1$  at T.

where  $S_2$  is a subpart of  $S_1$  up to and including  $S_1$ ; the relation between  $S_2$  and  $S_1$  being defined by a set of scope rules." (op.cit.:4)

McConvell suggests that the differences in scope of these 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 delimited above. However, it is not clear that the presuppositions involved in the use of -nyali include full situations (referred to in clauses). Normally it would seem that only subparts of situations are presupposed by, and relevant to, the use of -nyali. For this reason, and secondly, lacking a set of scope rules, I propose a modification to (6-68) for the description of -nyali. In order to keep the two approaches distinct, I will use the term presumed (v. Rochester & Martin 1979:55 (footnote)) in reference to parts of situations, rather than presupposed, which will be reserved for full situations only. Thus -nyali typically relates the constituent in its scope to some presumed antecedent. (6-68) can be replaced by

(6-69) -nyali

Presumed:  $A_1$  at some time before T.

Asserted:  $A_2$  at T.

where  $A_1$  is a subpart (proper or improper) of  $A_2$ , and  $A_1$  and  $A_2$  are "subparts" (again proper or improper) of the situation, determined by the scope of -nyali.

It is clear that in general  $A_1$  and  $A_2$  are identical: for example, in (6-31),  $A_1$  and  $A_2$  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.

The main senses identified above are listed below:

- (i) 'again'; repetition of situation, back to a former state or position.
- (ii) 'too', 'also'
- (iii) 'same'
- (iv) 'all'

- (v) 'still'
- (vi) 'always'
- (vii) 'throughout'
- (viii) 'together'
- (ix) 'precisely', 'exactly', 'just'
- (x) 'really'
- (xi) 'intensive'
- (xii) 'really, surprisingly'
- (xiii) 'just, only'.

I will now attempt to show how this range may be explained as specific contextualizations of the general meaning, (6-69).

The main variables in the formula are: the scope of -nyali (which determines  $A_1$  and  $A_2$ ), the relation between  $A_1$  and  $A_2$ , and the time  $T$ . The scope of -nyali always includes the constituent to which it is attached. It may in addition include other constituents of the clause, up to and including the full clause. (I can distinguish scope only semantically; I know of no formal expression of it.)

In the two senses (i) 'again' and (v) 'still',  $T$  is the time of the situation described by the clause in which -nyali occurs. In sense (v), -nyali has as its scope the full clause, and  $A_1 = A_2 = \text{situation}$ . It is presumed that the situation obtained at some time prior to  $T$ , and it is asserted that the same situation obtains at time  $T$ , and by implication at all times in between. For the sense 'again', there are a number of possibilities:  $A_1 = A_2 = \text{situation}$  (as for 'still'), but with the added proviso that the situations are distinct;  $A_1 = A_2 = \text{process}$ ;  $A_2 = \text{process}$ ,  $A_1 = \text{former state}$ , and  $A_1$  is contained in  $A_2$ ;  $A_2 = A_1 = \text{former location}$ .

Note that this indicates that (6-68) requires a slight modification, at least as far as the English 'again' is concerned: 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.

There is a formal difference between (i) and (v), in that for (v), -nyali may not have the process only as its scope; and it must be encliticized to some non-verbal unit. As a rule, both senses are available only to 'extendible' processes; only the sense (i) 'again' is usually available for accomplishments.

Senses (vi) 'always' and (vii) 'throughout' may be accounted for exactly as for (v) 'still', i.e.  $A_1 = A_2 = \text{the situation}$ . The three senses emerge in different contexts as follows. Firstly, (v) contrasts

with (vi) and (vii) in terms of 'focus'. In sense (v), the focus is primarily on the Time T, it being taken for granted that the Assertion at time T, and the presumption at the earlier time guarantees the stability throughout the period (as in situations such as described in (6-47)). For (vi) and (vii), instead, the focus is on the time up to T. One or the other (T or time up to T) is 'focal' because of an expectation to the contrary: that is, the 'still' sense emerges when there is an expectation that the presumed state of affairs no longer holds at T; and the 'throughout', 'always' senses emerge where there is an expectation that the process did not occur throughout the time period (at the end points of which it is granted that the process did occur). The two different senses (vi) and (vii) arise depending on the nature of the situation referred to by the clause: (vi) occurs where there is a succession of regular iterations of a situation over an extended period of time (the whole being regarded as a single situation); and (vii) occurs where the whole is a single homogeneous situation.

It is now clear that -nyali has quite different functions used in sense (i) compared to its use in senses (v), (vi) and (vii). In sense (i), -nyali clearly has a textual function, associating a situation with another situation mentioned previously in the text, the latter situation (or part thereof) being the presumed  $A_1$ . It contributes to the maintenance of textual 'continuity', in the sense of Martin (1981). In the other three uses of the enclitic, however, it is quite possible that there is no reference to the Presumed  $A_1$ , and -nyali does not function as a discourse structuring device. Instead, the presence of -nyali is conditioned by expectations created by and in the speech situation, and it explicitly marks the expectation as false. It does not, however, compare the asserted with the expected, as do -muwa (v. 6.3.3), and -ngarraya (v. 6.3.5).

No change need be made to the characterization of (6-69). That -nyali has alternate functions of 'expectation modification' (in Halliday's terminology, an 'interpersonal' function (Halliday 1970:143)), and 'continuity' (a 'textual' function in Halliday's terminology (loc.cit.)) 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 1970/76. These same two senses occur for 'again' in English - Rumsey 1982b:131.)

The four senses (ii) 'too', 'also', (iii) 'same', (iv) 'all', and (viii) 'together', differ from the other four senses just described in the nature of the time T. Here T refers to speech-situation time, not the time of the described situations (or 'thesis' time). Thus, in (6-69), the 'Presumed' becomes ' $A_1$  at a time before now', the 'Asserted', is ' $A_2$  now'. In other words, 'what I assert now is (or includes) what I mentioned

before'. In the terminology of Halliday and Hasan (1976:241), (i), (v), (vi) and (vii) are external uses of -nyali (i.e. external to the speech-situation); and (ii), (iii), (iv) and (viii) are internal uses.

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  $A_2$ . This time relation is immaterial to these uses of -nyali.

The four internal senses can be distinguished as follows. Sense (ii) 'too', also' occurs when  $A_1 = A_2 =$  attribute or process associated with the Theme of the present (nyali) 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 -". Sense (iii) 'same' arises when  $A_1 = A_2 =$  a (given) referent. Roughly, "I've (or you've) mentioned this entity before (in some other connection)". The difference is one of scope. Senses (viii) 'together' and (iv) 'all' differ in precisely the same respect, the first having as its scope either the process or an attribute; the second, an entity.

But senses (ii) and (iii) contrast with senses (iv) and (viii) in exactly the same way that sense (i) contrasts with (v) - (vii): the former two have a discourse structuring role, focusing on the link between the present entity, process or attribute to one mentioned previously, whereas the latter two are used in contradicting expectations. -nyali occurs in these latter two senses only when there is an expectation to the contrary. Otherwise, the same experiential meaning can be conveyed without the use of -nyali. Senses (i) to (viii) may be set out as in Table 6-1.

Table 6-1: Senses of -nyali

	Continuity	Counterexpectative
External	(i) 'again' (Scope = Process, state or location, or situation).	(v) 'still' (Scope = state, location, or situation)
		(vi) 'always' (Scope = Attribute or Process predicated of Theme)
		(vii) 'throughout' (Scope = Attribute or Process predicated of Theme)
Internal	(ii) 'too', 'also' (Scope = Attribute or Process predicated of Theme)	(viii) 'together' (Scope = Attribute or Process predicated of Theme)
	(iii) 'same' (Scope = Entity)	(iv) 'all' (Scope = Entity)



Sense (xiii) may be grouped together with senses (v) to (vii): it satisfies the same conditions as (v) 'still' (cf. 'I got tired (while) still halfway'). The difference is that the situation does not obtain throughout the time interval, as it does for 'still'; only the location remains fixed. Part of (ix) 'precisely, exactly', exemplified in (6-57) and (6-58), is explicable in the same way: the focus of expectation is on the continuity of the location, the situation itself being immaterial.

The remaining subtypes of (ix) 'precisely, exactly', together with (x) 'really', and (xi) 'intensive' do not involve continuance of a location or quality in event time. It may be that the intensifying effect of -nyali in these uses derives from a comparison of the asserted with an independently existing 'ideal' or 'paradigm' value of reference of the lexical item (cf. Nominal reduplication). The time T in this case would be speech-situation time, and the preceding time, general time up until that point.

Finally, it is possible that sense (xii) 'surprisingly' is explicable as another specific contextualization of the counterexpectative-external sense. In the two examples of this sense available, the situation referred to involves repetitions of the action again and again. It would seem that what is surprising is not that the action occurred once or at all, but that it occurred repeatedly. Here -nyali does not forge a textual link with a previously mentioned situation, but rather has an interpersonal sense, indicating the unexpectedness of the repeated behaviour.

It seems then that the formula explains all attested senses of the enclitic, which senses depend on: the scope of -nyali, its function in the utterance (whether textual or interpersonal), the nature of the Time involved (speech-act or thesis), and finally, within the counterexpectative uses, the nature of the expectation (whether it is of non-continuity of the action, or whatever).

### 6.3.3 -muwa

Like -rni, this morpheme may be encliticized to any unit, except a Verbal one. Its domain always includes the word to which it is attached; it may extend to the phrase of which that word is a constituent.

Although I never heard a speaker using -muwa in a VP, one example which I constructed, ngurlukmuwala (drink-ON-I did it) was immediately accepted and understood to mean 'I only drank it'. Note that in Jaru -muwa (again meaning 'only') can be attached to preverbs (Tsunoda, 1981:208).

Very occasionally the form -miya is used instead of -muwa (see example (6-46)). This is certainly a borrowing from Bunaba, and was heard

only in the speech of one of the youngest speakers I worked with.

Unlike -nyali, from the English point of view -muwa is monosemous, with an invariant sense that is captured quite well in the gloss 'only':

(6-70) nganyi-ngka-muwa      milarla      'Only I saw it'.  
I      -ERG -      I saw it

(6-71) yuwulu      mirra-muwa      tampungkiri  
man      head -      it is exposed  
'Only the man's head is showing'.

(6-72) purlumani-ngarri-muwa      parnkiyirri  
bullock -COMIT -      we started back  
'We returned with bullocks only'.

As McConvell (1983) points out, the English word 'only' is an expectation modifier with two main senses: (a) the subset meaning, as exemplified in 'Only I saw it', in which the asserted Agent I is a subset of the set of individuals expected to play that role; 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. For example, 'I expected to see a lion; I only saw a native cat' (McConvell 1983:10).

Examples (6-70) to (6-72) above are of the 'subset' type: for example, in (6-70), it is asserted that I saw it, but expected that other people would have also. -muwa also has the 'scalar' sense:

(6-73) yaningi-muwa      pijngarni      'He's only just arrived (here)'.  
now      he emerged

Here 'now' is evaluated as less potent with respect to arrival than is 'before' or 'long ago'. The individual who had just arrived was not expected to be knowledgeable of the country, people and their customs; he is not a member of the group, and so does not rate highly in the eyes of the residents. Another example is:

(6-74) nhuwu      thangarnti      wila-muwa      klikkiri  
his      word      finish-      he goes klik  
'(The eagle's) language is just 'klik'.

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 the other birds have a rich variety of calls, the eagle might be expected to also; however, in fact, it has only 'klik'.

The encliticization of -muwa to wila 'finish', 'that's all' in (6-74) may be seen as a mode of avoiding the problem that -muwa cannot occur on Verbal units. The Particle winhi 'nothing' (as it usually glossed by

native speakers - see also below 6.4.7) is most frequently found in this function, where it is often followed by -muwa, usually indicating that the asserted process is evaluated as less potent than the expected. For example,

(6-75) winhi-muwa            tanymilila            mangarri            milarla  
           nothing-            I heard it            not            I saw it

'I only heard it, I didn't see it'.

For processes, the 'scalar' sense is the one which normally occurs (as in the preceding two examples).

The two senses, scalar and subset, are not always clearly separable, and there are ambiguous examples. For

(6-76) karntiwirri-muwa            ngurluklimi  
           two            I drank it up

'I drank only two (glasses of beer)'.

the scalar meaning would be likely (and intended) in case the speaker is contradicting what he believes to be the hearer's expectation, that he has had a lot to drink, where this is considered to be a bad state of affairs. On the other hand, the speaker may be merely contradicting the expectation that he had more than two; there is no suggestion that this situation is evaluated as bad.

For this reason I suggest that the two meanings 'subset' and 'scalar' are related, and are aspects of a single more general meaning, which is simply 'is less than', where the exact nature of this relation is not specified. The meaning of -muwa may be summarised as

Assertion  $y <$  Expectation  $x$

(where  $<$  symbolizes 'is less than'.) In the context of evaluation, 'is less than' becomes a ranking, giving the 'scalar' sense; otherwise, the subset sense 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 the expectation 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 relation: the assertion is '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 -muwa from occurring with Verbals. There are however occasional examples

which do not accord so well with English expectations. This is mainly due to different customary modes of expression of certain notions in the two languages, rather than to real differences of sense of -muwa:

(6-77) purijpirra            mirri-yu-muwa            'They danced til sunrise'.  
           they danced            sun    -DAT-

(6-78) wartkiri            wangmarra            thithi-muwa  
           he goes            mad            going  
           'He's walking along madly, up and down'.

As (6-78) shows, the customary mode of expression for aimless motion, or motion all over the place (e.g. by ants) is not 'up and down' as in English, but by the expression thithimuwa, literally 'going/moving only'. This acquires a contextual meaning 'going nowhere in particular'; that is, the assertion is that motion is engaged in, expectation is that the motion be directed towards a destination. But (6-77) does not have such a ready explanation. -muwa seems to have a sense 'right up to', apparently inverse to 'only': the expectation would appear to be less than the assertion, rather than the assertion less than the expectation. However, it may be that this sense can be explained along the lines of (6-78). That is, the suggestion is that they danced with no goal in mind other than reaching the sunrise. The interpretation given in the English gloss follows as a contextualization of this.

It is interesting that there is an exactly parallel Gurindji example to (6-77) in McConvell (1983:21), example (103). However, it seems that the Gurindji -rni 'only' has a more regular and extensive set of senses close to the 'even'/'right up to' sense (loc.cit.). (Much of this range is covered by the Kuniyanti -nyali.)

#### 6.3.4 -nyulu

-nyulu means 'etcetera' or 'and so on', and is apparently attached to Nominals only. Very few examples of -nyulu are available, and they show two main contexts of use.

(i) -nyulu may occur on the last Nominal of a list, in which case it means 'etc.':

(6-79) tiyatiya            -jalkarru-nyulu            'peewee, jabiru, etc.'  
           peewee            jabiru

(ii) It may be attached to an indefinite determiner, in which case it means roughly 'all kinds, types': jaji-nyulu 'all kinds (of animal).'

#### 6.3.5 -ngarraya

This enclitic, which may have as its scope an NP, PP or ADV (but never a VP), has two main senses. These are in complementary distribution

according to whether the NP, PP or ADV makes reference to a definite or indefinite entity, time place or whatever.

(i) When encliticized to an indefinite unit, -ngarraya may be glossed in English 'any' or 'some':

(6-80) ngurntu-ngarraya      mikawimi      'Anyone/someone may say'  
 someone-                      he'll say

(6-81) ngunyiya-ngarraya      riwi      milayawirra      panyangi  
 which-LOC-                      camp      they saw it<SUBJ>      outside  
 'They've seen it (the country they want) somewhere, outside'.

(6-82) manyi-ngarraya      ngappa  
 food                      you'll eat it  
 'Do you want to eat anything'.

(6-83) wampa-ngarraya      yikanyi      jakjawimingirangi  
 later                      uncertain      he might tell us  
 'Sometime (later) maybe he'll tell us'.

The sense of indefiniteness must be distinguished from two other types: the indefiniteness of the Indefinite determiners and the 'something/someone I don't know who sense', realized by the Indefinite determiner followed by the Enclitic -wirri (see next section). The indefinite plus -ngarraya 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, (6-80) 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 will in fact say to them that they can take the land. Similarly, (6-81), which comes from the same text, contradicts an implicit presumption that the speaker attributes to the white people in authority that the Bayulu people do not really want any land of their own.

On the other hand, the unmarked indefinite phrases (such as ngurntu 'someone', yapja 'some', etc.) and those followed by the enclitic -wirri 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' of English and -wirri vs -ngarraya of Kuniyanti (which on first glance appear equivalent). Roughly, English favours 'some x' 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 a given set. Neither of the English terms counters an

expectation or presupposition contrary to the statement of the clause itself, which is the only circumstance in which -ngarraya occurs. Otherwise, an indefinite determiner (or NP) will cover the meaning of 'some' and 'any'.

Exactly as predicted by the above remarks, -ngarraya occurs in negative clauses, having the meaning 'no one did/was involved in the role R in the situation. Thus:

- (6-84) mangarri            ngurntu-ngka-ngarraya            wartnginpirra  
           not                            someone-ERG                            they took me  
           '(I was walking along the road but) no one gave me a lift'.  
           (a lift might have been expected).

The following example shows a slightly different nuance of the same sense.

- (6-85) jungulmi            karntiwirri-ngarraya            kampayi            kajkuntimi  
           skin                            two                            boy                            they cut them

The most likely interpretation of the sentence (coming from a description of initiation) is 'they circumcise any (/some) two (or more) boys of the appropriate age', or 'they circumcise at least two boys (at a time)'. In other words, presumably, the speaker is correcting what he assumes may be my belief or expectation, that boys are circumcised individually.

(ii) When attached to a unit with definite reference, -ngarraya means roughly 'including x among other things'. It is usually glossed in English as 'too', 'also', but its meaning only partly coincides with that of these two English words. Some examples are:

- (6-86) nginyji-ngarraya            kunkutu            warrinkingki  
           you                            phlegm                            you were sick  
           'You were sick too' (i.e. as well as everyone else)

- (6-87) murlu-ngarraya            yilpa            pithawaami  
           eye -                            for good                            it's stiff  
           'His eye too is no good'. (i.e. as well as his leg)

In negative clauses, -ngarraya corresponds to 'either' in English translations; it is clear that exactly the same sense of the enclitic is involved. For example,

- (6-88) nganyi-ngarraya            marlami            tirippingi  
           I                            nothing                            I'll enter  
           'I can't go in either' (i.e. nor can anyone else)

In sense (ii), -ngarraya normally occurs on the initial marked focus of the clause, the following material being typically given. In (6-86) and (6-87) it was given that the situation held for some entity other than the one referred to by the word to which -ngarraya is attached, and

with which it contrasts. In other words, when -ngarraya is used, it is presumed that there is a similar situation involving another entity (such that it would be possible to describe the two situations together in a single clause, involving the conjunction of the entities). In addition, it would seem that -ngarraya contradicts an implicit expectation that the entities presumed to be involved in the 'given' situation are the total relevant set of entities actually involved. It asserts that there are more relevant entities.

-ngarraya clearly contrasts with two other morphemes which sometimes translate English 'too', the enclitic -nyali, and the free lexeme jurlu 'together'. Although -nyali also presumes another situation in its 'too' sense, it differs from -ngarraya in that it marks the presumed part of the situation (the process), indicating that this is repeated. There is no implicit expectation to the contrary (cf. discussion of sense (ii) in section 6.3.2). Compare for example the following pair:

(6-89) nganyi-ngarraya      pirripnginti  
 I                              it blocked me'  
 'My nose got blocked too' (as well as everyone else's).

(6-90) yuwulu      manili      pirripnyaliyingi      kunkuturngka  
 man              nose              it blocks him too      snot      -ERG  
 'His nose is blocked too' (as well as someone else's).

In both cases, it is presumed that there is at least one other person whose nose is blocked. The main difference between the two modes of expression lies in the expectations and presuppositions of the speech situation. (6-90) simply adds a new member to the sets (of people with a cold); (6-89) adds a new member in the face of an explicit belief (in the situation in which it occurred) that it was other people only, not the interlocutors, who had a cold. The speaker contradicted my belief with (6-89).

The Adverbial jurlu 'together' suggests that the things concerned are involved in the one situation together as a group (see page 280 for an example), and no other situation is presumed in its use.

It is possible to relate the two senses of -ngarraya together, as contextualizations of a single basic meaning. The following is a development of a proposal by McConvell for the treatment of a functionally similar enclitic, -payin*, in Gurindji (McConvell 1977:23). In each use of

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* -payin covers a larger range than -ngarraya, and this is related to its greater combinatorial potential: -payin may occur on verbal constituents (McConvell op.cit.).

-ngarraya an expectation is involved, but it differs in each case. In (i), the expectation is that the situation does not obtain; for (ii) the expectation is that a certain delimited non-null set of entities is involved. In each case, in effect, it is claimed that at least one more entity than expected is involved in the situation. This may be summarized

Assertion  $y >$  Expectation  $x$

This description neatly complements the description above of -muwa (page 385). In all available examples of -ngarraya, '>' is interpreted in what McConvell (1983:10) refers to as the 'subset' sense; unlike -muwa, -ngarraya does not seem to have the 'scalar' interpretation (loc.cit.).

#### 6.3.6 -wirri

This morpheme is normally encliticized to indefinite NPs/PPs (i.e. ones whose Entity is an Indefinite Determiner), where it indicates specifically that the identity of the referent is unknown to the speaker. The Indefinite Determiner itself (not followed by -wirri) 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 of the hearer (v. section 5.4.1). But when -wirri is encliticized, the Indefinite is never response-requesting. That is, not only is the identity of the referent unknown to the speaker, but it is immaterial:

(6-91)	ngurntu-ngka-wirri	kartpini
	someone-ERG	he hit him

'Someone (it doesn't matter who) hit him'.

The Indefinite followed by -wirri, rather than the Indefinite itself, corresponds closest to the senses the English indefinites 'someone', 'something', etc. Native speakers normally gave English glosses 'someone, I don't know who'.

A form -wini occasionally occurs on open-class Nominals, meaning roughly 'it could be a (Nominal)':

(6-92)	nyamnyamkiri	ngurntu	yuwulu-wini
	he whispers	someone	man-

'Someone is whispering, maybe it's a man'.

It is not clear whether -wini and -wirri are allomorphs, or contrast; there would seem to be sufficient commonality in meaning to suggest the former. However, there are not enough examples of either form to test the hypothesis.





(6-98) ngamu-jangi warangkilayirra  
before sit-FACT-(1R)N+A

'(We would like to be in a situation) like we had it before (when there were no white people)'

The focal point of these comparisons is of course not a resemblance of the processes (which is impossible, since -jangi does not occur in VPs), but some other element in the Situation: in (6-97) they do it like we do; in (6-98), the Situation the speaker would like now is like it was before white people arrived.

Finally, I remark that -jangi occasionally compares qualities of entities rather than entities as such:

(6-99) mika-jangi wartpa 'Bring another like this'.  
that way- you'll bring it

(6-99) 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 Adverbial mika is the appropriate word for reference to such abstracts - see pages 129-130.

#### 6.3.8 -mi ~ -ma

As mentioned above (page 154), -mi and -ma 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 -mi is encliticized to the expression referring to x:

(6-100) nginyji wart-ma-wiri 'You'll come?'  
you come-IND-FUT/(2sg)N/I

(6-101) nginyji-mi wartpiri 'You'll come?'

(6-102) kitiyarnti kawi-pinyi wart-ma-wingkirri  
you(pl)-PL fish-OK go-IND-FUT+(2pl)N+I  
'You'll go fishing?'

(6-103) kawi-pinyi-mi wartpingkirri 'You're going fishing?'

(6-104) kitiyarnti-mi kawipinyi wartpingkirri  
'You'll go fishing?' ('Is it your lot who'll be going fishing?')

In (6-100), the uncertainty is whether the hearer will come, or do something else; in (6-101), it is whether it is the hearer (as against anyone else) who will come. Similar remarks apply for (6-102) - (6-104). The remainder of the clause is presupposed (to the extent that this is possible - obviously in (6-101) and (6-104) the hearer need not be pre-

supposed as Actor, despite its pronominal reference in the VP) and remains fixed, as a frame within which to place an item contrasting with the -mi constituent.

This means that -mi~-ma is semantically related to the indefinite words jaji 'what', ngurntu 'who', yinika 'how, do what', etc. The difference is that -mi marks one possible filler of the role. As in the case for the indefinite words, the use of -mi often requests clarification from the hearer. That is, -mi often occurs in the context of eliciting information. (There is no grammatical system of interrogatives, at clausal or any other level - v. section 5.4.1.)

All classes of clausal constituents, including NPs, PPs, ADVs, VPs and Particles, can be the focus of indefiniteness, and may be followed by -mi. The focus may be a phrasal constituent: this is the case for VPs, where the focus is always on the Process itself - if any participant, time, or whatever of the process is in doubt, -mi will go onto a constituent realizing that function. However, the focus of uncertainty need not be the Entity of an NP:

(6-105) manyi            nyamani-mi            kurijkinyja  
           food            big                    you hold it  
           'You have plenty of food'.

There is one context in which -mi may arguably function as a root formative. The d-word yaningimi 'when, sometime' is obviously constructed from yaningi 'then, at that time' and -mi. Whereas -mi 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 ngurntu 'someone, who', etc.

There is one piece of formal evidence that provides support for the hypothesis of lexicalization of yaningimi. This comes from the fact that another instance of -mi may occur in the same clause:

(6-106) yaningimi            wart-ma-wiri  
                                   go-IND-FUT/(2sg)N/I

'When might you go?' or 'Maybe you'll go sometime'.

Otherwise, only one -mi may occur in any clause.

Note that in Bunaba there is an unanalysable lexeme for 'when' (Rumsey, p.c.). It looks as if yaningimi may be 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 (4-83) above. Two forms -wamiri and -wami, evidently built on -mi, are sometimes found in the expression of disjunction. (They are, however, never used as markers of doubt alone.) Example:

(6-107) wampa        parnkurrini        yaningi-wamiri        mungaya-wami  
 later        they're returning today -        tomorrow-  
 'They'll be returning later, today or tomorrow'.

It could be that the -wamiri ...-wami construction marks closed disjunction, as opposed to the open disjunction of (4-83). However, there are too few examples to be sure of this. (It is also possible that disjunction may be closed by means of another clause, explicitly stating that there are no further possibilities.)

### 6.3.9 -wu

-wu may be encliticized to any non-verbal distributional word, and to the verbal CC (in position 5 of formula F1, page 157); it may not be attached to the Verbal stem, as may -nyali and -ma. The common meaning running through all of its uses is the speaker's assertion: 'definitely x'. In the majority of examples, -wu 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 -wu is encliticized 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.

-wu frequently occurs in exclamations, marking the focal point of the message: it draws attention to the thing referred to by the constituent it is encliticized to. For example,

(6-108) karnanganyjawu        mikarlimiwirrange  
 emu-        I told them  
 'I told them "emus!"'

(6-109) mikarlimiwirrange        pirla        ngirntaji-ya-wu        wirrijpirrayi  
 I told them        yam        this        -LOC        they two dug them  
 'I told them "they dug yams over here!"'

In (6-108) the speaker draws the hearer's attention to the (presence of) emus. And (6-109) 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 -wu is cognate with the 'Exclamative' suffix -aw found in a number of Australian languages, including Alyawarra (Yallop 1977:37), Nyikina, Diyari and Kaitij (Stokes 1982:122).

-wu is sometimes found on Particles, usually forming exclamatory interjections, such as wilawu 'finished, OK, goodbye', which seems to be more emphatic than wila, which has the same experiential meaning. An example is:

(6-110)	mikayinmiwirrangi	marlamawu,	ngamu	nangpani
	we told them	nothing-	before	he died

'We told them "No good! He's already dead".'

#### 6.4 Clause Modifying Particles and Adverbials

##### 6.4.1 mangarri

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. The modified proposition may be in any tense or mood category. (In that respect Kuniyanti differs from many languages of the Kimberleys, including Ungarinyin (Rumsey 1982(b):89), Nyikina (Stokes 1982:280), and Miriwung (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 mangarri 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 order generalizations made above (section 5.4.1) apply to mangarri. The only thing that needs to be added on this is that occasionally two instances of mangarri are found in a single clause. (There are no examples of this phenomenon for other particles).

(6-111)	yaatiyarnti	ngarlutu	mangarri	kiriliyanyali
	we(U)-PL	3		tree-LOC-REP
	mangarri	warayarri		
	not	we(U) stood		

'We didn't stand by that tree again'.

(6-112)	mangarri	kanarraya	mangarri	pijkinyjawu
		dawn		you'll come!

'Don't come at dawn'.

It is probable that, as in non-standard English, the two negatives intensify the negation.

mangarri occurs in two other contexts. Instead of modifying a full proposition, mangarri sometimes appears to modify a single word referring to a scalable quality or quantity, as in

(6-113)	wartpirri	mangarri	marnangurru	kraa
	they went		far	close

'They went only a little way'.

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 Kuniyanti).

It may be that mangarri x can be accounted for as an elliptical clause, as was suggested above (section 5.4.1) for similar examples with non-scalars. Against this is the fact that in this use, mangarri x is invariably followed by the corresponding positive, and the two would appear to form a type of 'correlative construction'. Contrast example (5-249), where the correlation would seem to be with the preceding clause.

mangarri is also used as an Interjection, as a response to both confirmation and information-seeking assertions. In the first case, it indicates that the asserted proposition is false:

- (6-114) A: ngingji          jurlu          ngurlukjimi  
           you                too             you drank it
- B: mangarri          nganyi          marlami          ngurrayarnti  
                           I                without          that-PL
- yapjangka          ngurlukpirra  
           some-ERG          they drank it

A. 'You drank with them?'

B. 'No, not me. That other lot (only) drank'.

It seems that mangarri is used in this way only in indicating the falsity of a preceding positive assertion. Otherwise, marlami 'nothing' invariably occurs if the preceding assertion is negative (see next section).

The occurrence of mangarri in responses to information probes is rather unexpected. E.g.:

- (6-115) A: yinikaangkirrarrri  
           you(pl)are doing something
- B: mangarri          maa          ngapkirra  
                           meat          we eat it

A. 'What are you doing?'

B. 'No(thing), we're eating meat'.

- (6-116) A: jaji          kuwajkila  
           something I call him
- B: mangarri          niyi          kirli          juwurru          kantiyangi  
                           he            some                            WB
- kuwajpa  
           you'll call him

A. 'What do I call him?'

B. 'No(thing), He's juwurru; you call him brother-in-law'.

It remains unclear just what sense mangarri conveys here. In both circumstances, marlami 'without' occurs far more frequently than does mangarri.

#### 6.4.2 marlami

Kuniyanti has another word for expressing negation, marlami, which indicates that no entity, time, or place is involved. It corresponds to the

English words 'no', 'nothing', 'nowhere', and 'never', and is frequently glossed najing (<'nothing'). As distinct from mangarri, marlami never functions as a propositional modifier. It negates an entity or circumstance, and from this the clause itself may gain a negative force, as happens with the English words 'nothing', etc.

marlami has three main contexts of occurrence, which are not always distinguishable: (i) it may realize a phrasal role, (ii) it may realize 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 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 referent modification vs reference modification distinction mentioned earlier (page 218). In addition, the phrase in which it occurs may function either Attributively, 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 to follow the Entity Nominal, as exemplified in e.g. (4-33) and (4-70). Only rarely does it precede the Entity Nominal, as in

(6-117)	nginyji	pinarri	nganyi	marlami	matika
	you	know	I		car

'(As) you know, I have no car'.

In referential phrases, marlami typically precedes the Entity, and indicates that nothing of the type referred to by the Entity-Nominal was involved in the Situation; it clearly modifies the reference of the phrase. For example,

(6-118)	marlami	kampa	ngampirri	paaliya
		water	again	road-LOC

'There's no water again on the road'.

(6-119)	marlami	panta	tuwuirra
		dirt	they got it

'They got no dirt'.

Note: (6-118) and (6-119) may be contrasted with sentences such as (5-242) and (5-243) in which mangarri occurs in the same place in the clause. There is a sharp distinction in meaning. With marlami, there is no 'focus' on the following element, and no presupposition that the predicate holds true of anything (though 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 example:

(6-120) marlami      kampa      ngurlukkurra  
                              water      they drink it

'They drink no grog'!

(6-121) kampa      marlami      ngurlukla  
                                                              I drank it

'I drank no grog (yesterday)'.

(6-120) referred to a pair of teetotallers; (6-121) described the situation in which the speaker drank 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 paraphrase for (6-121): 'of grog, nothing did I drink'. (This is exactly the distinction between the two types of modification: in (6-121), but not in (6-120), marlami qualifies the amount drunk.) Compare also:

(6-122) marlami      pinyirti      maa      ngapkila      kalypa      ngapkila  
                              hard          meat      I eat it      soft          I eat it

'I eat no hard meat, I eat soft meat'.

(6-123) manyimuwa      ngapla      maa      marlami      ngapla  
v.food-ON      I ate it      meat                                        I ate it

'I ate only vegetables, no meat'.

The NP in which marlami occurs may have, instead of a Nominal referring to an entity, one referring to a property or quality, which it negates:

(6-124) waya      marlami      jutu  
                                                              straight

'The wire is not straight'.

(It is possible that, in the few examples of this type available, the property is 'nominalized', and jutu (in (6-124)) realizes Entity in its NP. If so, such examples could be paraphrased in the manner of '(the) wire has no straightness' (for (6-124)).)

The NP in which marlami occurs is subject to ellipsis and splitting, in the same way as other NPs. Sentences such as (6-125) and (6-126) are most naturally accounted for in this way: in (6-125), the Entity naliya has evidently been ellipsed, being given; and in (6-126), the phrase has been split.

(6-125) naliya      purtpara      marlami      ngurlukpila  
tea                  hot                                        I'll drink it

'The tea is hot. I won't drink any'.



(6-126) nganyi marlami kurijkila yawarta  
 I I hold it horse

'I haven't got a horse'.

It seems that marlami may also be the Entity in an NP, functioning as a clausal 'substitute', referring to a non-existent state of affairs. For example,

(6-127) ngirntiyarnti likiyawingkirrinnyayi jarri marlami  
 this lot you(2) could wait for me if  
 parnjawingkirriyi  
 you(2) will return

'You can wait for me. If nothing (i.e. if I don't come back) you can go back'.

This is presumably how marlami is used in

(6-128) marlamihingi kintiwarni wartjirri  
 -ABL upstream-SEQ we went

'From nothing (i.e. since we caught nothing) we went upstream'.

But marlami is not always used in this quantifying sense; it may also be used evaluatively. That is, the entity involved may be evaluated as 'nothing' or worthless, rather than non-existent. For example,

(6-129) marlami jijakpi turlu yijkawu  
 he'll talk bad

'He'll tell you nothing, he has a bad heart'.

allows that the individual concerned may talk, but only a little (and not well), because of his bad heart.

marlami is also occasionally found in VPs, as (a part of), the Process - see examples (3-101) and (3-102) above.

(ii) There are other occurrences in which marlami cannot be viewed as a phrasal constituent. For example, in the following two examples there is no NP containing marlami.

(6-130) marlami wartpi 'He can't walk'.  
 he'll go

(6-131) marlami wartjirri 'We didn't go'.  
 we went

It is suggested that in such examples marlami realizes a circumstantial role, of time or place, translating 'never' (or 'at no time') in (6-130), and 'nowhere' (or 'to no place') in (6-131).

At present this possibility remains hypothetical. It might be remarked that unlike mangarri, marlami 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.

(6-132) karntiwangurru marlami nganyi milaanpirra  
 many I they see me  
 'They don't see me'.

Secondly, the force of the negation seems to be more 'generalized' than for mangarri: that is, it indicates that the situation held for no time or place (within presumed limits) - as in the last example.

Thirdly, and related to the first point, there is no evidence that marlami 'modalizes' the proposition as does mangarri. As suggested above (section 5.4.1), clauses negated by mangarri occur in contradiction to the presuppositions and expectations of the speech-situation. And clauses that 'correlate' with them invariably supply the positive counterpart, what did happen. (See examples (5-200), (5-353) and (5-354).) But clauses negated with marlami 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 clause: it never indicates what did happen*, but provides an enhancing comment. Examples are:

(6-133) wajpali marlami pijngarni ngunyawirri warangkiri  
 whiteman he emerged somewhere he sits  
 'The whiteman hasn't come yet; I don't know where he is'.

(6-134) marlami milarla mangarri niyajiya warangji  
 I saw it this-LOC he sat  
 'I didn't see him; he wasn't there'.

(iii) marlami may also occur as an Interjection - i.e. as a minor clause by itself. Like mangarri it occurs initially in responses to requests for confirmation/disconfirmation, and in responses to requests of information. In the former case, marlami indicates the correct polarity of the preceding clause. (It does not affirm or deny the proposition asserted by that clause, as does ngajirta, the negative particle in Walmajarri - v. Hudson and Richards 1978:101). Thus:

(6-135) A: karrwaru pijngarni  
 afternoon he arrived  
 B: marlami jamuntu pijngarni  
 other day  
 A: 'He arrived yesterday(?)'  
 B: 'No, he arrived the other day'.

* Of course where marlami is a phrasal constituent a correlating clause may contrast the lack of something with the presence of something else, as in example (6-122).





(6-145) nginyjingka        wurrukjarringarra        thaarri        manungka  
you        -ERG        you startled me        devil-ERG

tuwungina  
he got me

'You startled me. I thought it was a devil who had grabbed me'.

(6-146) thaarri    nganyingka        kartluni        ngurrungka        yanyangka  
                  I        -ERG        I hit him        that    -ERG        other-ERG

kartpini  
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 thaarri occurs only with Past and Irrealis Potential VPs*. 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 mistaken thought, and in the past with respect to the time of utterance. For example,

(6-147) thaarri        thilmangka        pijkinyjarnirni  
                  early                    you could 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.

thaarri may also realize 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 mika-, in its sense of 'think' (but not in its senses of 'say' or 'do'). An example is

(6-148) mikarlimingaangki        thaarri        panyangi        wartkingki  
I thought of you                    outside        you went

'I thought that you had gone outside'.

It is clear that thaarri modifies the manner of thought, and that it does not modify the proposition expressed by either clause. As a Manner modifier, thaarri usually follows the VP of its clause. This contrasts with its usual pre-verbal position when in its role of Propositional Modifier.

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* 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.

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.

(6-149) mikarlimi            thaarri            ngumurru            ranpuntirni  
           I thought                            cloud                            it could go

'I thought the cloud would go (but it hasn't)'.

This construction, with the future potential, appears to be synonymous with clauses in which thaarri modifies a Proposition in the Irrealis Potential.

It should be noted that it is beliefs about propositions that thaarri 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. There are no examples like 'I hit him mistakenly'; instead the biclausal construction occurs:

(6-150) ^{K₁}[walanganginyipini] ^{K₁} ^{K₂}[nginyjirni kartnginyipini] ^{K₂} ^{K₃}[thaarri  
           ^{K₁}I mistook you                            ^{K₂}you -next I hit you  
           ^{K₄}[ngurru yanya yuwulu] ^{K₄} ^{K₃}  
           ^{K₄}that other man

'I mistook you, and hit you, thinking you were the other man'.

#### 6.4.5. yikanyi

Depending on context, yikanyi occurs in two apparently distinct senses. As a Propositional Modifier it indicates possibility, and is normally glossed 'maydbi' in the local variety of Kriol or English. Secondly, it occurs as a circumstance of Manner, in which case it usually indicates that the action was done sneakingly. In this use it is usually glossed jineg by native speakers. A single formal meaning is postulated, 'uncertain', to account for these two apparently distinct contextual senses. (Cf. Rumsey 1982(b):172-6.)

As a Propositional Modifier, yikanyi indicates an attitude of uncertainty of the speaker towards the proposition he is uttering; and as a circumstance of Manner, this word indicates that the actor performed the action in an uncertain manner: he was in a condition of uncertainty as he did it. That is, the modal Particle yikanyi 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, yikanyi 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 to make a definite assertion. If ever an enhancing clause is added to explain why the speaker does not make a plain unmodalized assertion, it always explains that the speaker did not see or hear (etc.) 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 English speaker, illustrated by 'he might have taken it, (likely) because I saw him there'. That is, yikanyi 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 yikanyi occurred in elicited Kuniyanti equivalent 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 (6-151) was given as an utterance I might make to the speaker, telling him that I might come to see him one night.

(6-151) yikanyi            maningka            wartjawingi  
                                 night                    I might come

'Maybe I'll come one night'.

The sense of likelihood 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

(6-152) yikanyi            Sargeant-ka            wartpangarra  
                                                                                 -ERG            he'll bring it-to me            '

'I'm unsure that the sargeant 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 more and more convinced that the authorities had forgotten him and would not bring him his new uniform for the races.

The point of this is that yikanyi itself does not evaluate the proposition as likely or unlikely. But as elsewhere, the fact that the







6.4.6 minyjirra

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. minyjirra is also occasionally found in the role of Propositional Modifier:

(6-158)	mangarri	wungulu	pakingiri	minyjirra	warrinngiri
	not	for fun	I live		I'm sick

'I'm not pretending, I'm really sick'.

Here, minyjirra 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 the other Particles indicating speaker attitudes, minyjirra occurs in clauses of speech in the sense of speak the truth (not - although it is unlikely that this is impossible - in the sense of 'actually speak'.)

(6-159)	minyjirra	jakmangarra	'Tell me truly'
		you'll tell-to me	

(Contrast ngirli jakmingarra 'he told me a lie'.)

In the following example, minyjirra appears to be an NP constituent:

(6-160)	minyjirra	warrampa	pijngarni	'A truly big flood came up'
	true	flood	it emerged	

There is a Verbal form minyjirran- 'believe, take notice of' which is clearly built on minyjirra (the final /n/ is a (perhaps meaningless) formative). Examples:

(6-161)	nganyingka	mangarri	minyjirrankuwaalimi	niyaji
	I -ERG	not	I'm believing	this

'I don't believe it'.

(6-162)	nganyi	minyjirrankuwaalimingangki
	I	I'm believing -on you

'I believe you/I'm taking notice of you (i.e. what you're saying).'

6.4.7 winhi

This Particle is an expectation modifier which usually translates into Standard Australian English as 'just, only'. (Native speakers, however, preferred to gloss it najing 'nothing' in their variety of English or Kriol.) It is a clause level counterpart of the Enclitic -muwa 'only, just' (discussed in 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 modifies expectations as to what situation will occur, and contains full clauses in its scope. Compare for example, the following pair:

(6-163) winhi            wartngi            thangarntiyu  
                          I went            word            -DAT  
                          'I only went for a talk'.

(6-164) wartngi            thangarntiyumuwa            'I went only for a talk'

In the first example there is an expectation that I might have done something more; in the second, that I might have had other purposes in mind.

The same formula Assertion  $x <$  Expectation  $y$  accounts for its meaning, only  $x$  and  $y$  are here situations, rather than Participants, or Manners, etc. That is, winhi evaluates the situation asserted to occur as 'less than' the situation expected to occur. Only the 'scalar' sense (v. above page 384) of 'less than' is possible here; the subset reading clearly cannot apply. Depending on the way the relation 'is less than' is understood, winhi may contextualize in a few different ways, at least from the Anglo-centric perspective.

(a) The occurring situation may be evaluated as less potent in some sense than the expected situation. Thus:

(6-165) mangarri            jижаккиррарни            winhi            milayirрарни  
                          not            we talk together            we look at one another  
                          'We're not talking, we're just looking at one another'.

(Here, of course, the second clause replaces the first (v. 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 is frequently followed by the enclitic -muwa, which perhaps intensifies its effect:

(6-166) wampawu            kartkinpinirни            winhimuwa            matnginmi  
                          nearly    he might have hit me            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 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:

(6-167) mangarri      kampi      nyamani      winhi      yalijmi  
 not                  sickness      big                  he's 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,

(6-168) winhi      rurrijkinya      mangarri      minyjirra  
                 I'm 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 he acts with purpose or intent. In this case, the use of winhi suggests that the action was done without reason.

(6-169) yapja      yuwulu      wartjawurrunhi      winhi      wirtkinpuwu  
                 some          man          he may go past him                  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 often occurs in responses to 'information questions', where the effect seems to be to counter presuppositions implicit in the question. (Cf. similar uses of mangarri 'not' and marlami 'nothing' mentioned in sections 6.4.1 and 6.4.2.)

(6-170) A: kitiyarntingka      yinikangkirriwirrangurru  
                 you-PL-ERG                  you're doing something-to them  
                 mawulyiyu  
                 children-DAT

B: winhi      kampaka      likirryirrra      mawulyi  
                 water-ERG we're 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, (6-170) 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 are 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 here appears to be to counter an apparent presupposition or expectation that something untoward was being done to the children.







contrast with. It can mean anything from 'right now', 'at this very instant', 'now, any or all the time from the beginning of the present speech situation to its end', 'today', to 'these days (as opposed to early days, etc.)'.

yaningi may also be used as a Propositional Modifier. For example, in

(6-180) wampanyali      marlaya      kurijka      yaninginyali      palayawi  
                  -REP      hand-LOC      he holds it      -REP      he'll send it

'He's still got (the letter) in his hand, (but) he'll send it directly'. (Speakers 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 provides more than a temporal location for the process, and contrasts with e.g. yikanyi 'uncertain', mangarri 'not', etc.

#### 6.4.12 yaniyaningi

This word is clearly a partial reduplication of yaningi 'now', and has a formal meaning predictable from this, 'right now, at the very time' - i.e. the reduplication has the effect of intensification.

yaniyanigi 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 (example (6-181)), or as of the time of the events described (example (6-182)).

(6-181) yiwintingka      yaniyaninginyali      katkuwaanpu      kiripaari  
                  rain      -ERG      -REP      it is leaving      it is finishing  
                  'Rain is just starting to finish up now'.

(6-182) manyi      yaniyaningi      ngapla      tuwa  
                  food      I ate it      door

kartpikartpingangarra  
 he knocked it 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 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,

(6-183) yaniyaningi      thangarnti      thikiwaari      kiripjawiti  
                  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





wampa appears to be functioning as a Propositional Modifier. The occurrence of wampa, that is, contradicts an implicit expectation that the situation located at the earlier time might have ceased to obtain now. (Cf. discussion of sense (v) of -nyali, section 6.3.2). In this context, wampa usually translates into English as 'still'.

In fact, it would appear that this interpersonal usage of wampa is far more frequent than the corresponding usage of ngamu and yaningi. Whereas in (6-83) wampa provides a temporal location of the situation, in (6-185) it is quite likely that the speaker is contradicting an assumption that he will not be meeting the addressee later on.

#### 6.4.14 wampawu

This Particle occurs only with VPs in Potential Mode, and indicates that although the process did not actually occur, it very nearly did. For example,

(6-188) wampawu        kartyanirni                    'She nearly fell'.  
                                she could have fallen

described a situation in which a woman tripped over on a stick and very nearly fell over. kartyanirni could be used to describe the same situation (see below 6.5.3.2); but wampawu suggests that the process very nearly occurred, and that there was a strong expectation at the time that it would. In (6-188), 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:

(6-189) wampawu        kartkulunirni        niyi        thirru        pajkiwinti  
                                I might have hit him that        roo        he 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 wampa 'later', plus the Definite Mode enclitic -wu. That this is not entirely improbable finds some support in the English construction 'Still, she could have fallen'. I cannot pursue the implications of this possibility here.

#### 6.4.15 yilpa

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,

(6-190) warangjawingi        yilpa        'I'll be staying (here) for good'.  
                                I might sit

The second sense is illustrated in:

(6-191) mangarri      kartpirrini      yilpa  
                                          they hit him

'They didn't hit him for good, i.e. they didn't kill him'.

(6-192) thinga      kajpinmi      yilpa  
                                          foot            they cut him

'(The doctors) cut his toe right off'.

#### 6.4.16 ngarrarni

ngarrarni indicates that the process referred to occurs habitually; it can be usually translated into English 'always':

(6-193) karrwaru      ngarrarni      pakingiri  
                                          afternoon            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 ngarrarni 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 ngarrarni is used only when there is an expectation to the contrary, an expectation that the proposition may not be an invariable truth. For example, in the context in which (6-193) was elicited, there was an expectation that the speaker might be available for an interview some afternoon. Thus it appears that ngarrarni is fulfilling the interpersonal role of Propositional Modifier in examples like (6-193).

The idea 'never' is not lexicalized, but may be expressed by placing a negated clause within the scope of ngampirri (i.e. 'always not P'):

(6-194) ngarrarni      mangarri      pijpiyaniila      kumpurna  
                                          not            I frequently come      early

'I never come early'.

#### 6.4.17 ngampirri

ngampirri 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. ngampirri contrasts in a number of interrelated ways with the enclitic -nyali which may sometimes be glossed 'again':

(i) The Particle is clause level, and indicates the repetition of the full situation, whereas -nyali indicates the repetition of part of a situation only. There were no examples of the 'back to a former place or position' sense, with ngampirri. 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



## 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), and 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 - being realized by morphemes in 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), nor indeed the 'Nuclear situation' (i.e. the part of the situation referred to by the VP alone) - cf. Lyons (1968:305), Fawcett (1980:47). Examples such as (6-201) make this clear. (And similar examples can be found for the other three categories.)

(6-201) karrwaru            pijyarnirni  
           afternoon        emerge-IRR+ARNI₁-POT

'He might have come yesterday (but didn't)'.

In this example, which is potential is that the process occurred at a particular time, yesterday. It is not claimed that just the process, or just the nuclear situation (here the person's arrival) were potentialities (cf. 6.5.3.2). Indeed, (6-201) could be uttered after the person's arrival earlier in the day (of the speech situation), in which case, however, the non-temporally located pijyarnirni could not be truthfully uttered.

The remaining system, that of Verbal classification, applies to and classifies the Process (realized by the Verbal stem), not the full situation (v. page 456 below).

### 6.5.1 Tense

Kuniyanti has a four term tense system, distinguishing Past, Present, Future and Irrealis. For details of the realizations of the tenses see 3.9.3.2.4. In this section I will firstly discuss the four tenses in order, delimiting the ranges of uses of each. I will then propose a semantic analysis of the system, the purpose of which is to account for this variety of uses, and to capture the nature of the oppositions between the members of the system. It is shown that the four members do in fact form a semantic system, a closed system of oppositions. Note, however, that this system does not signal purely temporal relations - see section 6.5.1.5.

#### 6.5.1.1 Past Tense

Past tense places the situation referred to as temporally prior to the time of the speech situation - or in the case of quoted speech,

temporally prior to the speech act referred to. The situation referred to may be a single and isolated occurrence - see most of the examples above, including e.g. (1-1), (3-100), (3-101), (3-102), (4-79) etc. - or it may be a characteristic or habitual occurrence in the past, which no longer obtains. For example,

(6-202) kampa            ngurluknga  
          water            he drank it

can refer to either a single event, 'he drank grog/water', or to a past characteristic action of the agent, 'he used to drink grog'. In the available examples the characteristic/habitual contextualization of the Past tense occurs only with 'extendible' processes (see above 3.9.3.2.1). In reference to characteristic or habitual repetition of accomplishments in the past, the Iterative stem formatives, either -ji -mi -pi -pili, or -wani -warri (3.12.2.1) occur; the new stem then refers to an extendible process, one which is susceptible to the characteristic/habitual interpretation (as well as the 'single occurrence' interpretation.) An example is:

(6-203) ngirntajiya    pijpiwanila  
          this    -LOC        emerge-IT-IT₁-(1sg)N+A  
          'I came here daily'.

The Past tense is also used 'generically' in the description not of actual or imagined situation instances, but in relating general truths about the past, with no specific incidents in mind. For example, the Past tense is used in relating general aspects of the culture and society of past times. Here, as distinct from the 'habitual' sense, accomplishment processes are not 'converted to' extendibles by the Iterative Stem forming Suffixes. An example from a text is

(6-204) kurnpu        liya        nyunpirra        kurnpuyarntingka  
          woman        west        they rubbed her woman-PL-ERG  
          'To the west (of the men) the women would rub the woman (to be married) (with ochre)'.

#### 6.5.1.2 Present Tense

The Present tense has a number of apparently dissimilar and unrelated uses, reminiscent of the English present tense. They include the following:

(1) Present time. In reference to situations concurrent with the speech time, the Present tense category is normally employed. There are two major possibilities. The process may be extendible, in which case the present time is referred to by Present tense alone. Examples are wartkila (go-PRES+(1sg)N+A) 'I'm taking it', milaala (see-PRES+(1sg)N+A)

'I see it/I'm looking at it', etc.

However, if the process is an accomplishment, as a rule present time is referred to by the Progressive aspect in combination with the Present tense. For example, nganguwaala (give-PROG-PRES+(1sg)N+TI) 'I'm giving it to him' (or 'I'm extending it to him'), pijkuwaarni (emerge-PROG-PRES+ARNI) 'it is emerging', etc. The reason for this is clear: accomplishments occur instantaneously, and have no temporal duration. It is the train of circumstances leading up to or following from the point of accomplishment that is ongoing, and may have temporal extent.

There is one exception in the corpus,

(6-205)	kirraari	paaliya	jurtu	wajkarri
	it runs	road-LOC	dust	he throws it

'(The car) is running along the road throwing up dust'.

Although the process waj- 'throw' is still an accomplishment, the accomplishment is not a single point, but an interval of time. This may be an example of the type found in sports reporting in English.

Alternatively, (6-206) may be used in referring to the same real-world situation.

(6-206)	yamatingka	jurtu	wajkuwaarri
	coolamon-ERG		he is throwing it

'The car is throwing up dust'.

(2) Future time. The present tense occasionally occurs in reference to future times, to situations as yet uninstantiated. In general it seems that the present carries a stronger commitment, or greater immediacy vis-à-vis the future. For example,

(6-207)	kirippinti	thithi	wartngiri
	it finished	going	I go

'It's finished, I'm going now'.

may be uttered before the speaker actually sets off. (Utterances of this type often occur in leave-taking, when the going is virtually certain.) (See also discussion of the Present Definite, section 6.5.3.3.)

(3) Characteristic or general sense. As is the case in English, Present tense can refer to situations characteristic of an individual or species. Here there is no bifurcation with respect to process type. As a consequence, the plain Present tense of an accomplishment typically has the generic interpretation. A number of more specific subtypes of this sense may be identified:

action characteristic of a species, animate or inanimate -

(6-208) pija            ngarakkimi            '(Birds) make nests'.  
nest            he makes it

(6-209) kiriliya        mirtka            thaanungku  
tree-LOC    he tries it    upwards  
'(The vine) climbs up trees'.

(6-210) marnti                            yilpa            wartkiri            mangarri            parnkiri  
[boomerang type]    for good            it goes            not            it returns  
'The marnti boomerang goes straight along, it doesn't return'.

actor is able to do the process -

(6-211) A: wartmaari  
          he goes?

B: wampanyali        kirrarriri  
   later-REP        it crawls

A: 'Does it walk?'                    B: 'It still crawls'.

action is socio-culturally appropriate -

(6-212) ngulyungulyu        kunkila  
cutter                    I don't converse with him  
'I don't talk to my circumcisor'.

process is what typically happens (in the appropriate circumstances) -

(6-213) ngiti            lanngarri            wartkiri            yuwulu            tharra  
we(R)            above            we go            man            dog  
  
papaapirri            thurrwunmu            yanya            pawartkunmu  
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; this sense is sometimes explicitly indicated by the use of ngarrarni 'always' -

(6-214) (ngarrarni)        kartpaa            'He (habitually) belts him'.  
          always            he belts him

(e) Hypothetical sense. The Present tense is sometimes used 'hypothetically', in the antecedent and/or consequent in an 'if-then' construction.

(6-215) mangarri            lawuwurrarri            yiwinti            nyamani  
not            they hug it            rain            big  
  
kartkanuwu  
it's falling-DEF  
'(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 mangarri wartkiri (not-he goes) has interpretations corresponding





a temporary restraint -

(6-219) mangarri       jijakpi       kanypiliri  
                          he'll talk     he's shamed

'He won't talk, he's ashamed'.

avoidance of unwanted consequences -

(6-220) mangarri       ngalarra       pakiwingi  
                          back           I'll lie

'I 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.

Note: An English sentence such as 'I can't walk' has two possible translations in Kuniyanti: mangarri wartngiri (not I-go) and mangarri wart-pingi (not I'll-go). The former indicates (here) that I do not have the general characteristic - I do not walk at all; the second, that I will not walk in the immediate future - due to some temporary disability. (The two Kuniyanti 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 a reported speech situation. There is one counterexample in the corpus:

(6-221) karnparni       jaayinhi       kurrkuya       yijkawu       tharra  
          water-SEQ    it lay-on him  hole-LOC       bad           dog  
  
          mangarri     niyajiya       pakiwi  
          not           this-LOC       he'll lie

'Then water lay in his hole. This was bad and the dog wouldn't lie there'.

(Note: this occurred in the narrative mode, not in describing currently relevant goings on.)

(b) Proposals. This unmarked mode of expressing a command to do something is by a clause with the Future tense. For example,

(6-222) thithi       wartpiri       'Go away!'.  
          going       you'll go

Other examples include (5-348) and (5-353). Commands to continue doing something are also expressed through the future tense, frequently in conjunction with a Temporal Adverbial such as wampa 'later'. Examples:

(6-223) pakiwiri       ngirntajiya       nganyi       pakingiri       lilingkanyi  
          you'll lie     the-LOC       I           I lie           west side

'You remain there, I'll lie on the west side'.

(6-224) wampa       kurijsa                   'Keep holding it!'.  
          later       you'll hold 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 of him. (The positive action would usually be explicitly indicated in a separate clause with second person actor.) An example is

(6-225) wampa            pakiwi            'Let him lie (don't get him up.)'  
                         he'll be

With a first person 'inclusive' actor, the claim may be a first person 'command'. This sense usually occurs in conjunction with the Interjection pa 'come on, let's go':

(6-226) pa            wartparra            'Come on, let's go'.  
                         we'll go

See also line (29) of Text 1.

Negative commands - that is, commands not to do something - are not as a rule expressed by negating a clause in the Future tense. Instead they are usually realized by the negation of a definite present clause (see 6.5.3.3 for details). There are just a few examples in the corpus in which a negated Future clause expresses a command -

(6-227) mangarri            wartpiri            warangpiri            'Don't go, sit'.  
                         not                    you'll go            you'll sit

(6-228) mangarri            mikamangarraki  
                         not                    you'll say to me  
                         'Don't tell me that word'.

It is unclear in what respect the two possibilities differ. As might be expected (cf. 6.1), native speakers claimed both modes of expression meant the same thing.

As well as expressing commands, the Future may be used in offers, as in

(6-229) nya            ngurlukpa            'Here, have a drink'.  
                         here            you'll drink it

and in granting permission - see e.g. line (49) of Text 1.

One further use of the Future in proposals must be mentioned. It is used in offering advice to the addressee as to how he might go about doing something. For example,

(6-230) A: yinika            ngawali            ngarakpa  
                         somehow    spear thrower you'll make it

B: mika            ngarakpa  
                         this way

A: 'How do you make a spear thrower?'.    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 instruction was and is normally given by way of example, not by a description of procedures.)

(c) Exclamations. The plain Future - but again, not the plain Past and Present tenses in the available data - sometimes occurs in exclamations, normally of the 'expletive' type. An example is

(6-231) panyangi        wartpi        thithi  
          outside        he'll go     going

"Let him go to fucking hell!" (speaker's gloss)

(Contrast the exclamations mentioned in 6.5.3.3 below.)

#### 6.5.1.4 Irrealis Tense

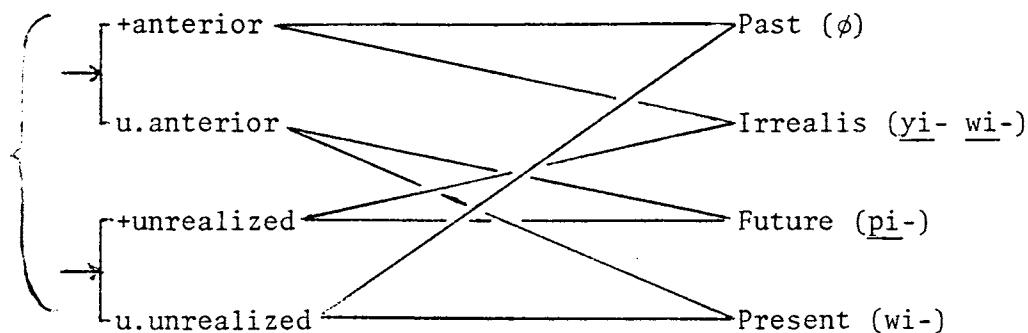
The Irrealis 'tense' does not have the privilege of independent occurrence: it must occur with either the Potential Mode (for discussion of this combination see section 6.5.3.2) or the Subjunctive Mood (this combination is discussed in 6.5.4.1). In both cases it specifies the unreal status of the situation at a past time.

Many languages of the Kimberley region - including Ungarinyin (Rumsey 1982(b):89ff.), Nyikina (Stokes 1982:276ff.), Miriwung (Kofod 1978:182), and apparently Walmajarri (cf. Hudson 1978:77ff. - Hudson does not, however, treat the opposition as one of mood), but not Bunaba (Rumsey p.c.) - have an opposition of realis vs. irrealis mood. Significantly, in all of these languages only the irrealis occurs in negative clauses (see above references, and page 395 above. (This does not, of course, hold true of Kuniyanti.)

#### 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.

Figure 6-1: Tense System



The first opposition concerns the time of the referent situation. It groups together the Past and Irrealis and opposes them to Present and Future. The only formal linguistic evidence I can adduce in support of this grouping is the observation that only the Past and Irrealis occur with the Particle tharri 'mistakenly believed' (v. 6.4.4). The grouping is effected by the feature [anterior] which is assumed to take on the values positive or unmarked.

Past and Irrealis tenses are positively marked as [+anterior]. They refer to situations that belong to the realm of the past with respect to the speech situation, or with respect to a speech situation referred to (cf. page 335 above). In the case of Past tense, the situation referred to is located in past time, and has been completed by the time of speaking. For the Irrealis, the situation referred to did not occur, but was either expected to occur (see 6.5.3.2) or hypothesized to occur (see 6.5.4.1) at an earlier time.

Present and Future are unmarked for their temporal relation to the speech situation - they are non-deictic. We have seen the use of Present tense in reference to situations ongoing at the present time (sense (1) in section 6.5.1.2), and to situations belonging to future time (sense (2) in 6.5.1.2). It is also used in reference to situations belonging to past time. One place where this happens is when the Present tense co-occurs with the Definite mode enclitic - see section 6.5.3.3 below, and also example (5-369). Thus, the Present tense does not indicate whether the situation described is before, after, or at the same time as the time of speaking. Although the Future tense is almost always used in reference to future occurrences, there is at least one example (6-221) in which the time referred to is anterior to the speech situation. This provides some evidence in support of the proposed feature analysis.

The second opposition concerns the 'reality' of the situation: either it is positively marked as [+unrealised], indicating that it is as yet unactualized, or unmarked for this feature. This opposition groups together the Future and Irrealis and opposes them to the Past and Present. The validity of this bifurcation finds morphological support in the fact that only the [+unrealised] tenses occur with the Potential mode (see 6.5.3.2), while only the [u.unrealised] tenses occur with the Factive mood (see 6.5.4.2). Furthermore (in the present data base at least), the only tenses occurring independently (i.e. without modal modification) in proposals are the [+unrealised] ones.

It is claimed that the Irrealis and Future are positively specified

as [+unrealized], as against the Past and Present, which are unmarked for this feature. As a rule, Future and Irrealis tensed VPs do refer to as yet unactualized processes. The Future is normally used in reference to processes that have not yet been entered into, which belong to the realm of future time (occasionally to past time, as just discussed). Irrealis is used only when (it is thought or supposed that) the process did not occur (see below sections 6.5.3.2 and 6.5.4.1).

But Future tense can be used in commands to continue doing something (see examples (6-223) to (6-225)). This would seem to contradict the claim that this tense specifies the process as [+unrealized]. I suggest that this apparent counter-example can be accounted for as follows. It is reasonable to suppose that such a command would be uttered only when the speaker presumes that the presently ongoing process will or might otherwise (i.e. unless he intervenes verbally) (shortly) cease. In other words, I suggest that it is a felicity condition (e.g. Lyons 1977:733) of commands to continue that the speaker presupposes that the process may cease. Otherwise, if the speaker has no doubt that the process will not, or may not continue - that is, if he regards it as certain that it will continue - uttering the proposal would be pointless, or at least infelicitous. In the latter case, we may say that the command invokes the presupposition or possibility that the process will not continue. Thus the process is viewed as unrealized not as of right now, but as of a future time.

I have claimed that the Present and Past tenses are unmarked for [unactualized]; that is, they convey no information as to whether the process is unactualized or not. This is borne out in the contextual meanings of the tenses discussed in sections 6.5.1.2 and 6.5.1.1 (respectively) above. As well as referring to processes which actually occurred or are occurring, these two tenses are used generically, in reference to types of processes that would or could go on now or in the past. No real or actualized process is being referred to. The generic sense is a contextualization of [+unrealized]. (Note that I would not claim that the habitual sense (often very close to generic) is anything but [-unrealized].) The present is also used in hypothetical senses (especially with the Subjunctive mood), and in reference to imminent, but as yet unactualized, processes (especially with the Definite mode).

The proposed feature system discriminates between the tenses in a semantically revealing way. Furthermore, I claim that the feature values of Figure 6-1 also constitute the total formal meaning of the tense categories. All of the other meanings discussed above (in sections 3.5.1.1

to 3.5.1.4) are contextualizations 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.)

### 6.5.2 Progressive Aspect

As a rule the Progressive Aspect, which has allomorphs -kuwa ~ -wa ~ -a (see 3.9.3.3 for details), usually occurs with accomplishment type Classifiers. It does not normally occur with the extendible Classifiers -A, and -ARNI₂, and occurs with -I only when -I replaces -PINTI, under conditions discussed on page 166.

There are just two or three examples in the corpus of the Progressive with the extendible Classifier -A: all involve the verbal ngap- 'eat' - e.g. ngapkuwaa 'he is eating'. And, as remarked in 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 on accomplishment process from a temporal perspective before its point of completion, but after it has entered into the train of circumstances that should eventually lead up to the point of accomplishment. 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 Progressive aspect typically refers to. For example,

(6-232) parrangka            parrangkawawani  
           winter            it's falling winter  
           (dry season)

'Winter (dry season) is coming'.

(6-233) yuwarniya            karntiwirrja            niminkuwayi  
           one -LOC            twice            it was healing up

'After a day or two (the wound) started to heal 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, (6-232) may refer either to the build up of summer,

or to (part of) its duration. Another example is provided by:

(6-234) karrikuwawingirni      ngarlurrja  
I could be absent              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 -PINTI, and -I (where it replaces -PINTI), 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 Verbal tawung- 'love, like', for example, invariably occurs with the Classifier -MI, and with the Progressive aspect in reference to the ongoing process of liking/loving someone or something: tawungkuwaalimi 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 - unless it is to temporally locate another process which occurred or will occur before the situation is completed. Examples are (6-178) above and

(6-235) yaniyaningi      parnkuwangi      ngarrakiya      riwi      yiwinti  
now                      I was returning      my      -LOC      camp      rain  
  
pijngarningarra  
it emerged-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 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 (6-232) and (6-233) with respect to (6-235)).

When the usual sense of the Progressive is modified by mangarri 'no, not', it is claimed that not only didn't the process occur, but it didn't even show signs of occurring. Thus where the choice is available, the



Progressive has the effect of 'strengthening' the negation. Thus, for example, the reply in (6-236) is more forceful than it would have been if the plain past tense occurred:

- (6-236) A: ngunyiya        yutji  
           somewhere      you put it  
 B: mangarri        yutkuwali  
           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 (6-235).) Depending on what the speaker takes to be the extent of the train, there are perhaps two major contextualizations.

(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:

- (6-237) ngurluklunayi      ngampirri      mangarri      ngurlukkuwalimi  
           I drank two        again            not            I was drinking it down  
           'I drank two, but then I drank no more'.

(b) Even though an attempt was made, the process showed no signs of occurring. E.g.:

- (6-238) lalangarra        wutijliminhi      jinalingarringka      mangarri  
           crocodile      I threw it at him      spear-COMIT-ERG      not  
           nyakkuwalimi  
           I was spearing it  
           'I threw spears at the crocodile, but missed'.

(c) The actor didn't even get a chance to do the action:

- (6-239) marlami        kaluyingi        kawi        mangarri  
           nothing      he found nothing      fish        not  
           nyakkuwawini  
           he was spearing 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 express, in Halliday's terminology (Halliday 1970/76), modulations, otherwise called 'deontic' modality. They are never used as modalities, otherwise called 'epistemic' modality (Halliday loc. cit.) - that is, they never indicate speaker's modifications of, or

attitude towards the proposition expressed by the clause (v. 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, realized by -nyji (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 or ought to occur. As I have said, the desirability lies in the speaker's assessment of the situation. Desire or intention is not imputed to the actor, (see e.g. (6-241)), although this sense may be present (though not asserted), especially if the actor is the speaker:

(6-240) manyi            ngappilanyji  
           food            I'll 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 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 in 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 - see section 6.5.2.3). For example,

(6-241) nginyjingka            thangarnti            tanymiliwanyji  
           you        -ERG            word                    you'll 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 contextualizes as a request. Thus, for example, (6-240) and

(6-242) thangarnti            kuniyanti            tuwuwilanyji            ngarrakingka  
           word                                       I'll get it-DESID            my            -ERG  
           milyilyi  
           brain

'I want to get Kuniyanti into my brain'.

may be used appropriately in requesting food and tuition 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 hearer. As is the case for the optative sense of the plain Future, the Interjection pa 'let's go' usually occurs. For example,

(6-243) pa                    wartparranyji  
           come on            we(U)'ll go-DESID  
           'Come on, we'd better go'.

It is difficult to pinpoint the difference in senses conveyed by the plain vs. Desiderative Future in the 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 (6-243) 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:

(6-244) jirripma                    thithi            thayatpa  
           you'll lift it up        going            you'll walk it  
           karrikpuminyji  
           he'll cease-DESID  
           'Lift up the child and carry it around so it will stop (crying)'.

(6-245) kirili            ngangpa                    milawanyji  
           stick        you'll give him        you'll see him-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 at least two reasons: it is in the actor's interest (but not necessarily the speaker's); or it is in the speaker's interest (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 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:

(6-246) parwingirni            milawilanyji  
           I could climb        I'll see it-DESID  
           'I might climb up so as to get a look'.

In addition, it would seem that examples above such as (6-240) - (6-242) 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 unrealized possibility, given the surrounding circumstances: it indicates that the situation could or might occur, or might have occurred in the circumstances, but didn't or hasn't (yet). 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 situation. 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 yikanyi - see 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 [+unrealized] tenses only, the Irrealis and the Future. I discuss these in order.

[a] Irrealis Potential. This combination indicates that in the speaker's estimation the situation could have happened - there were signs that it might have come into being - but it didn't. A number of specific senses may be identified, depending on the nature of the 'sign'. The main ones include:

(i) An unsuccessful attempt was made by the actor to perform the action:

(6-247)	pariyuntirni	marlami	pithami
	he might have climbed-POT	nothing	he got stiff
	'He tried to climb up, but couldn't; he was too stiff'.		

In case the attempt nearly succeeded, the Particle wampawu 'nearly' occurs - example (6-188).

(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 'corrections' 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 wampawu 'almost, nearly' normally occurs (see above 6.4.14). Examples are:

(6-248)	wampawu	kilangkinarrirni	
	nearly	it might have knocked me	
	'(The car) nearly knocked me'		
(6-249)	wampawu	kampaya	tingkilyanirni
	nearly	water-LOC	it might have immersed
	yalawa	tuwula	kampaya
	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 something intervened to prevent it. Example:

(6-250) kirrkirryanirni            palyjangkanyali            tuwula  
 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 from doing it:

(6-251) yanya            thangarnti            jakkilimirni            nyinlimi  
 other            word            I might have said            I forgot  
 'I was going to tell another story, but I've forgotten it'.

(v) An inanimate actor nearly effects the situation: (6-248), (6-249), (6-250), and

(6-252) wampawu            kirrayarni            warrampaka  
 nearly            run-IRR+I-POT            flood -ERG  
 'The flood nearly washed it away'..

(vi) Had some other situation occurred (which might have occurred), the unrealized situation would have. That is, as mentioned in section 5.6.2.1.3, the Potential Mode indicates the consequent of a counterfactual conditional. (5-374) is an example. In the following example, the antecedent condition is implicit. It was given in the preceding discourse.

(6-253) wartngirni            milaalarni  
 I might have gone            I might have seen him  
 '(Had you told me) I'd have gone and seen him'.

(vii) Under normal conditions the process would have occurred, but an unforeseen contingency prevented it:

(6-254) pulukungka            karingi            ngangyirni  
                                          -ERG            wife            he'd have given him  
 'P. 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 (so he could have done it). Normally speaking, there is an implicit suggestion that although it 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:

(6-255) jamuntu            wajkilarrirni            maa  
 other day    I might have thrown it            meat  
 'I should have thrown the meat out the other day'.

(6-256)	manyi	yankinnginti	wartkilarningangi
	food	I asked you	I might have brought it-for you
	marlami		
	nothing		

'You asked me for bread; I should have brought some for you'.

(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, thaarri '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 contextualizations of this category that have not yet appeared in the data base. They are all specific contextualizations of the general meaning that the process was a potentiality. The specific contextualizations, however, are likely to be of more significance to the interlocutors than this abstract meaning - and not all senses are glossed by native speakers in the same way (v. above page 20).

The Potential Mode has, as has been mentioned already, the full situation (referred to by the clause) in its scope, not just the Process (realized 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 mangarri '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.

(α) 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 potentiated:

(αi) The actor did not attempt to do it; he did it unintentionally, without trying. Example,

(6-257)	mangarri	niyipinyi	wartyirni	tarrkpani
	not	that -OR	he might have gone	he fell

'He didn't mean go that way (i.e. step on the glass); (but) he fell (on it)'.

( $\alpha$ ii) The situation would not have occurred had some other situation occurred. This is a counterfactual, the negative of (vi) above. See example (5-376).

( $\alpha$ iii) The situation occurred unnecessarily - it need not (and should not) have occurred. Example,

(6-258) mangarri            jakyimirni                    ngarranyiyu  
not                    he might have spoken            mother -DAT

'He needn't talk to his mother like that'.

( $\beta$ ) 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 contextualizations are:

( $\beta$ i) The actor did not even try to do the action, which did not occur. For example,

(6-259) mangarri            tuwuyarni  
                                  he might have got it

'He didn't try to get (the beer he'd dropped into the flooded creek)'.

(6-260) mangarri            wartyrirni                    pulka                    nhungjinga  
                                  he might have gone            old man                    by himself

'The old man wouldn't attempt to cross the flooded creek alone'.

( $\beta$ ii) The actor didn't even want to do it:

(6-261) mangarri            tiripyuntirni  
                                  he might have gone in

'He didn't want to go in (and he didn't)'.

( $\beta$ iii) The actor didn't nearly achieve his goal; he missed by a long shot.

(6-262) ngaarri            wajlarri                    mangarri                    kartkulunirni  
stone                    I threw it                    I might have hit him

'I threw the stone, but didn't nearly hit it'.

( $\beta$ iv) The actor didn't undertake the action because of other - personal or social - considerations:

(6-263) mangarri            ngangkilirni                    maa                    ngarraki  
                                  I might have given him            meat                    my

'I wouldn't give it to him; it's my meat'.

A comparison of the contextualizations reveals that two senses of the Potential are negated in each context. They are: sense (i), that the actor tried to do it, giving ( $\alpha$ i) and ( $\beta$ i); and sense (viii), that no convention or circumstance stood in the way of the actor doing the action, which gives rise to ( $\alpha$ iii) and ( $\beta$ iv). What is consistently negated is the potentiality of the situation, not its occurrence. ( $\alpha$ i) and ( $\beta$ i) deny that any attempt was made; ( $\alpha$ iii) and ( $\beta$ 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 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 contextualization 'didn't nearly occur, but really occurred with plenty of 'room', in addition to ( $\beta$ iii) 'didn't nearly occur, missed out 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,

(6-264) jarri            marlami            wartpingirni  
           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:

(6-265) wartpingirni            yaningiyu            'I could go soon'.  
           I could go                soon

(6-266) monday-muwa            wartpingirningangki  
           -ON                        I could go - to you

'I can only come on Mondays' (i.e. only on Monday am'I able to come - other days there is no lift available.)

Clauses with the Future Potential are frequently modified by Propositional Modifiers, primarily mangarri 'no, not', marlami 'nothing', and yikanyi '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 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

(6-267) mangarri        tirippingirni        nhuwu        ngurruyu        mayaru  
                          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 yikanyi '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:

(6-268) yikanyi        parnpingirni        mulurrjayirra  
                          I could return                                -ALL

'I might go back to Mulurrja (sc. if I can get someone to take me)'.

(6-269) ngaja        yikanyi        pijpuwarnirni        wampa,        mangarri  
                          younger B                                he could emerge        later  
                          nganyi        pinarri  
                          I                knowledgeable

'My younger brother might come soon, but I don't know'.

(6-269) 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 he has done, or should do something that he hasn't done. Thus:

(6-270) mangarri        jakjimirni        ngarranyiyu  
                          you could say        mother -DAT

'You shouldn't talk to your mother (like that)'.

(Compare (6-258) above.)

### 6.5.3.3 Definite Mode

The Definite mode is realized by the Enclitic -wu, 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 indefinite 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 (v. above 6.5.1.3). With each of the three tenses the Desiderative can occur in exclamations. As distinct from the 'expletive' type of exclamation mentioned earlier in connection with the unmodalized future tense, these exclamations are of a type that draws attention to the occurrence of situation - just as occurs when -wu is encliticized to nominal constituents, drawing attention to the existence of some entity or place (v. 6.3.9). Examples in the three tenses are, respectively:

- (6-271) kilpalawu                    'I found it!'  
           I found it-DEF
- (6-272) thithi            wartngirawu            'I'm going!' (farewell)  
           going            I go            -DEF
- (6-273) nginyji            wartpirawu                    'You can go!'  
           you                    go-FUT/(3sg)N+I-DEF

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 combinations with the Future; this combination is not restricted to exclamations, and shows an interesting range of uses.

(a) Firstly, in exclamations, the speaker may draw attention to a situation that is going on in the present time. For example, (6-272) 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 (6-272) might be uttered is just as the speaker is about to take his leave. And (6-274) refers to an imminent accomplishment:

- (6-274) kampaya            yimininykanuwu            'He'll drown in the water!'  
           water-LOC            he drowns-DEF

(b) Assertions. A clause such as (6-274) (and probably also (6-272)) may be uttered as an assertion, in which case the speaker merely states that the occurrence is imminent. The Present Progressive - yimininykuwaani

'he is (in the process of) drowning' - could be used to describe the same events (v. 6.5.2). But it would not carry the same sense of urgency as (6-274) - and would probably be unlikely as an exclamation. Secondly, by comparison with the 'future time' sense of the plain Present, the Definite present suggests that the situation is far closer to actualization and threatens to occur. Furthermore, the situation is usually seen as undesirable in some sense (as in (6-274), and see also examples below).

When a clause in the Definite present 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 he'll do it. For example,

(6-275) mangarri         wartkarruwu  
                          we go    -DEF

'We won't go', 'We don't want to go'.

(6-276) mangarri         tiripngirawu         mangarri         ngarraki         mayaru  
                          I go         -DEF                     my                     house

'I won't go in (there's 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, this would be to confuse the type of definiteness of the Kuniyanti category with that of the English word 'definite'. The definiteness at stake here, as mentioned above, is based on evaluation of circumstances: thus the preceding two sentences claim that the evaluation of the situations 'we are going', 'I am going inside' (respectively) as definite - that they are imminent (or 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 (6-275) and (6-276) is illusory: rather, it is a strong claim that is denied.

This analysis is further strengthened by an example of a slightly different type, which involves the generic sense, instead of present time sense of the present. The clause

(6-277) mangarri         milaawu  
                          he sees him-DEF

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 milaawu, '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 negated.

But the most frequent use of the Definite Present is in the 'lest' construction discussed in section 5.6.2.1.3. Another example is

(6-278) mirlimirliya         yutpiti                 wangarrakkanuwu  
                          paper    -LOC         we'll put it         it loses    -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 Definite Present, especially if it is undesirable. (The antecedent is in the Irrealis Potential.) For example,

- (6-279) tiripngirni                      wampa                      nirtnganuwu  
           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 Definite Present:

- (6-280) ngirrinyi                      tiripkuntuwu                      nirtkani  
           fly                              enter-PRES+PINTI-DEF                      stuck-PRES+ANI  
           'The fly goes in (the honey), and he's stuck'.

(c) Proposals. As a proposal, a clause in Definite Present with first person actor usually constitutes a threat.

- (6-281) nyakkinypuwu                      '(Careful) I'll spear you'.  
           I spear you-DEF
- (6-282) thulngliminhi                      nangkitluni                      wampa                      kartkinypuwu  
           I kicked-at him                      I missed him                      water                      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 behaviour appropriately, an undesirable (for him) 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:

- (6-283) matika                      milawa                      nginyjirni                      kilangkingkarruwu  
           car                              you'll 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 (6-274), the purpose may be to elicit intervention from the hearer - in this case, to help the person out of the water.

In proposals, the Definite Present most frequently occurs in negated clauses functioning as 'negative commands' - commands to desist from doing, and commands not to do. For example,

- (6-284) mangarri                      kumpurna                      pijkinyjarnuwu  
           not                              early                              you come                      -DEF  
           'Don't come early'.

(6-285) wilawu        katpu                    wayanti        mangarri  
 finish        you'll leave it        fire  
 kajkinyjawu  
 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. E.g.

(6-186) mangarri        maa        ngapkawu  
 not            meat        he eats it-DEF  
 'Don't let him eat it'.

(As above, the negative command involves the negation of a 'strong' possibility (that the situation will occur), not the evaluation of the situation as non-occurring.)

These uses of the Definite Present may be explained in terms of the analysis of the present tense presented in 6.5.1.5 above. 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, he does not assert a particular temporal or realization value for it - he does not assert it to be anterior or posterior to the present time, nor realized or unrealized as 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 act types, referring to imminent occurrences; generic, in assertions (see example (6-288)), and 'hypothetical' in conditional constructions (example (6-280)).

In accordance with a general principle that the speaker will normally make the strongest assertion consistent with the facts as he understands them, the speaker uses the Present Definite only if he believes the process not to be both realized (i.e. [-unrealized]) and [+anterior] - in which case Past tense would be used, or [+unrealized] and [-anterior] - in which case 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 (so belonging to the past), and that it is not a projection into the future. This explains why, as remarked in 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. Otherwise, if the situation to be avoided did not occur in the past, the

Present Definite clause may refer to it, the present being unmarked for the future [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 (cf. Halliday forthcoming, section 10.7). Where reference is 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 then 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/warning' and 'indirect command' uses.

#### 6.5.4 Mood

##### 6.5.4.1 Subjunctive Mood

The use of Subjunctive mood - realized 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, rarely in the 'real' tenses. It follows that the Kuniyanti 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 (v. 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 hypothesized, supposed, reckoned, wished, hoped, claimed, or whatever. In other words, the difference between an unmodalized clause and the clause in the Subjunctive is parallel to the difference between P and  $\dagger$ P (cf. Mendelson 1964:30, McCawley 1981:39), and -ja functions like the operator  $\dagger$ . In other words, 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, hypothesize, predict, hope, know, wish, declare, reckon, (etc.) that P', or 'let's suppose, hypothesize, assume, (etc.) that P'. This Interpersonal use occurs in Conditional hypotactic clause complexes, in which the antecedent clause - which refers to the hypothesized condition - occurs in Subjunctive mood (v. 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 hypothesizes, 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/proposes (it is hypothesized/believed/entertained/hoped (etc.) that P)). Compare the two uses, experiential and interpersonal, of the Particles yikanyi 'uncertain' and thaarri 'mistakenly believed' - v. 6.4.5, and 6.4.4 respectively.

In this section I will examine the contextual meanings of the Subjunctive in independent clauses, discussing each tense combination in turn.

[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 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 said, the speaker asserts a claim, hypothesis, or whatever, not a proposition.

(ai) 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 (v. section 6.5.1.3). The Subjunctive future is used where the speaker does not want to commit himself to the fact of the occurrence, but is content to predict the event. For example, (6-287) comes from a text in which the speaker told me what he expected I would do after I left him.

(6-287)	paplikajnhingi	ngilangu	palma	yuwarni
	-ABL	east	creek	one
	thutjawingkani			
	descend-SUBJ-you'll fall			

'From the pub you'll go east, and cross one creek'.

Another example is the second clause of the paratactic clause complex in example (6-180).

(aii) Truths. The Subjunctive Future can be used in reference to future certainties, to which, however, the speaker is unable and unwilling to put a definite temporal location. For example, the progression of seasons and their effects on rivers in the Kimberley region is something that everyone in the area takes for granted. That the rivers will flood, and later reduce to a fraction of the peak size is something that an individual can know with certainty - as much as anything can be known for certain. Of course, exactly when the events such as the one described in (6-288) will occur can't be known:

(6-288) warrampa            yawimpirriyawani            pirijja  
flood                    recede-SUBJ-it will fall            -LOC

'The river will eventually recede from the bridge'.

(aiii) Claims. The speaker may use the Subjunctive in making a claim about the future (concerning an event which is neither a truth, nor a prediction). For example,

(6-289) Ian            wartjawi                    thithi            'Ian will be going'.  
                         go-SUBJ-he'll be            going

I regard this sentence 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 be temporally unlocated, or located:

(6-290) yaningi            ngaarri            ngangjawangji  
                         stone                    give-SUBJ-I'll catch you

'(I claim that) I'm going to give you money now'.

(6-291) yaninginyali            muyu            pakiyawingani  
now            -REP            stop            lie-SUBJ-I'll fall

'I'm ready to go to sleep'

(aiv) Guesses or Suppositions. The speaker need not subscribe as strongly to the occurrence of the situation as to predict it: he may just guess, suppose, hope, or entertain it as a possibility, which need have no factual basis. (Cf. the Potential mode, which indicates an evaluation based on the surrounding circumstances - v. section 6.5.3.2). For instance,

(6-292) niyajiya            warangjawurrirri            yuwarniya            wik  
                         this-LOC            sit-SUBJ-they will be            one -LOC            week

'I guess/think they'll stay until next week'.

(b) Experiential. (bi) Desire. The actor may desire the situation to occur, but for various reasons be unable or unwilling to immediately engage in it. For example,



(6-293) Jackngka            milayawingka  
                               -ERG            see-SUBJ-he'll extend (to) you.

'Jack wants to see you'.

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 (48) in Text 1 could be interpreted either way, as can

(6-294) pithawaalimi            muyu            pakiyawingani  
                               stiff-PRES-I do            sleep            lie-SUBJ-I'll fall

'I'm getting stiff, and want to go to sleep'.

As usual, it need not be the actor who desires the situation:

(6-295) niyingka            wartjawina  
                               he -ERG            go-SUBJ-he'll take me

'I want him to take me'.

Negation of a clause in the Subjunctive usually suggests that there is no desire to do the action:

(6-296) mangarri            milayawinya  
                               not            see-SUBJ-I'll see you

'I don't want to see you'.

(bii) Attempt. There may be a suggestion that the actor will try to do the action. Thus:

(6-297) lampartingka            thaanungku            tuwuyawa  
                               child -ERG            upwards            get-SUBJ-he'll extend it

was given in response to 'the child will reach up and try to get it'.

(biii) Ability. In a couple of examples, the Particle yikanyi 'uncertain' calls to question the ability of the actor to effect the process.

For example,

(6-298) kulyawili                            yikanyi            tiripjawingi  
                               try-SUBJ-I caught it            uncertain            enter-SUBJ-I'll be

jarri            marlami            parnpingirni  
                               if            nothing            I could return

'I'll try. I'm not certain I'll be able to get in; if not, I'll be back'.

My explanation for this apparently unrelated sense of the Subjunctive is that the speaker is 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 Subjunctive mood, as well as Potential mode. The difference is that the Potential indicates that an evaluation has been made of the circumstances surrounding the situation, and other relevant facts or hypotheses, whereas the Subjunctive claims, asserts, hypothesizes, (etc.) the proposition that the situation might have occurred, when it didn't. There need be no evidence backing up the hypothesis - though presumably it will normally be something that is not logically impossible. For example, in uttering

(6-299) yuwulungka            marniwa            kartjayuni  
man    -ERG            his sister        he might have hit her

the speaker merely supposes that the man might have hit his sister ('I suppose he might have hit her'). But had the Irrealis Potential kartyunirni 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 - see example (6-299) 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 (v. section 5.6.2.1.3), or there is a suggestion that the supposed situation ought to have occurred - that the actor would have done better to have made sure he did the action. Thus:

(6-300) maa            thuwurntu            wajjaalarri            marlami  
meat            rotten            I might have thrown it        nothing  
'I could (and should) have thrown out the rotten meat, but didn't bother'.

(6-301) wartjaalangangi            nyinlimi  
I might have brought it-on you        I forgot  
'I could (and should) have brought you food, but I forgot to'.

(c) Desire. The actor may have wanted to engage in the action, but for some reason did not.

(6-302) ngapjaala            milarla            yanya            yuwulu            katluni  
I might have eaten        I saw it            other            man            I left him  
'I wanted to eat it, but saw the other man (whose food it was), and left it'.

(6-303) tiripjayunti            yuwayi            nirtkanuwu  
he might have entered        he was afraid        it bites him-DEF  
'He wanted to go inside but was afraid of getting stuck'.

In contrast to the Irrealis Potential, there is no suggestion in (6-302)

that I tried, or made any move towards eating the food, and no suggestion in (6-303) that any attempt or move towards 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 either the occurrence or 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 (5-377). 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. The following examples illustrate this for the experiential sense, denying actor's intention or thoughts:

(6-304) mangarri            kartjaaluni  
                                 I might have hit him

'I wouldn't hit him' (I had no intention of doing so).

(6-305) mangarri            tiripjaayunti                    yuwayi  
                                 he might have entered            he's afraid

'He wouldn't go in, he was scared'. (i.e. 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: i.e. the speaker denies that the proposition could be claimed, entertained, believed, or whatever. It is

(6-306) mangarri            wajjaawarri                    wampanyali  
                                 he might have thrown it            later -REP

kurijka  
he hold it

'He can't have thrown it away, (because) he's still got it'.

(Note the English gloss involves the 'internal' sense of 'because' - cf. Halliday and Hasan 1976:257.)

[3] Past Subjunctive. The Subjunctive occurs far less frequently in independent clauses in 'real' tenses. The present framework appears to provide a reasonable interpretation of the few examples available.

(a) Interpersonal. (6-307) comes from a story in which trackers came across a recently vacated dinner-camp. They assert (to the policeman)

(6-307) ngapjawirra                    ngamunyali  
eat-SUBJ-they extended it            before-REP

"They were eating here not long ago". (Informant's gloss).

It would seem that a reasonable interpretation of this utterance is that

the speaker is asserting here a claim to the validity of the proposition that they were eating at the spot a little while ago; he is not asserting the proposition 'they ate here a little while ago'. A more appropriate English translation might therefore be 'I reckon/I'm telling you/ it looks like (etc.) they were eating here a short while ago'. (6-307) is typical of the couple of examples available - the speaker has adequate evidence to the truth of the proposition, but he is not relating a sequence of events. Rather, he is vouching for the validity of the proposition.

Compare the effect of this modalization with the other possibilities: Propositional Modification by yikanyi of the Past tense - yikanyi ngappirra ngamunyali 'It's/I'm uncertain that they were eating here a while ago'; the Irrealis Subjunctive - ngapjayurra ngamunyali '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 be paratactic (not hypotactic).)

(6-308) pulka            wartjiwirrangi        muyu            pakiyawirri  
           old man        he went to them        sleep            sleep-SUBJ-they were  
           '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 snuck up on the two men when he believed they were asleep, in order to kill them. (He could not know they were asleep until he got close to them.)

[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. The speaker of (6-309) is hardly likely to be relating a story about the real world.

(6-309) yaati            ngarlutu            warangjawarrarri  
           we(U)            three                sit-SUBJ-we did  
           'We're all sitting here (I tell you)'.

(Contrast (6-318) below).

(6-310) was given in response to 'I walk hard', on one occasion only (on other occasions, expressions in the plain Present with the Adverb mayayaarra 'hard', or Characterizing clauses such as (5-255) occur).

(6-310) wartjangiri            'I walk hard'.  
           go-SUBJ-I am

I suggest that (6-310) might be better glossed 'I claim to walk' or 'I reckon I walk', the sense of 'hard' arising by implication, as it may for the English gloss. Compare the use of the irrealis category in the

habitual/generic sense in Mangarayi (Roper River, NT) - Merlan (1981: 196-8).

Unreal Subjunctive clauses may be proposed as well as asserted.

The effect of a proposed Future Subjunctive is, predictably, less direct and threatening than is the use of the plain (unmodalized) future. Proposing a wish or desire amounts to a request. Consider, for example, the turns in the reported dialogue of (6-311).

- (6-311) (i) nganyi            wartngiri            mikarliminhi            majayu  
           I                    I go                    I told to him            boss-DAT
- (ii) wartjawulunayi            ngarraki            yawarta  
       go-SUBJ-I'll extend it            my                    horse
- (iii) kay            wartpinayi            mikamingarra  
       O.K.            you'll take them            he told me
- (iv) nganyi            palyuwa            wartjawingi            maja            mikamingarra  
       I                    behind            go-SUBJ-I'll be            boss            he told me

- (i) "'I'm going", I told the boss'.  
 (ii) "'I might take the horses"'.  
 (iii) "'O.K., take them", he told me'.  
 (iv) "'I'll come behind", the boss told me'.

The speaker moves from his assertion to the effect that he's on his way, realized by the clause in Present tense (line (i)), to a wish or request that he take the horses, realized by the Future Subjunctive of line (ii). The addressee evidently interprets this as a request, in turn granting permission, by use of the Interjection kay 'O.K.', and the plain Future (line (iv)). He then switches to a Future Subjunctive (line (iv)), making a claim that he will be going too, or perhaps a temporally unlocated assertion (see above). See also Text 1 lines (48) and (49), and

- (6-312) mangarri            jitipangkinmi            ngitingkarni  
       not                    you were lifting it up            we(R)-ERG-SEQ
- kulyawiti  
           try-SUBJ-we'll connect it
- 'You lot couldn't lift it; 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 hypothesized, entertained, or whatever. By contrast, when a Future Subjunctive is proposed, it is an experiential sense of the Subjunctive that is invoked - typically (bi) Desire (above). If the Future is used in requesting, the Irrealis occurs in offers of permission, and in criticizing someone for non-action. In both 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:

- (6-313) kawiyirra      wartjawirri      jajinhingi      wiliwili  
 fish-ALL      go-SUBJ-you'll be      something-ABL      line  
 wartjaanyja  
 you might have taken it  
 'If you're going fishing, why don't you take my line?'

The second sense arises when there is no such constraint, and the person has failed to do something expected of him. Thus:

- (6-314) jajinhingi      kartjaanyjuni      ngarraki      tharra  
 something-ABL      you might have hit it      my      dog  
 'Why don't you hit my dog?'. or  
 'You should have hit my dog' (for 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), rebuking the addressee for failure to act competently. (6-315) 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.

- (6-315) mangarri      kurijjaanyja  
 not      you could have held it  
 'Can't you hold it (properly)?'.

Finally, I give an example of the Irrealis Subjunctive in a rhetorical question:

- (6-316) jajinhingi      yuwulu      tiripjaayunti  
 what -ABL      man      he might have entered  
 'Why doesn't (/won't) he go inside?'

#### 6.5.4.2 Factive Mood

As we have seen, the Factive mood, realized by the Enclitic -wila, occurs in a class of subordinated enhancing clauses of time which neatly complements the conditional subjunctive construction, (v. 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 (v. 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 ones 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 previously (e.g. 6.5.1.5), occurs with the [u.unrealized] tenses only (in all available

examples) - assigns 'factual' status to the proposition. It can be reasonably glossed in English as 'it is a fact that ...'. As is the case for the Subjunctive, there are two primary modes of usage.

(i) Interpersonal, in which the speaker asserts that the proposition expressed by the clause is a fact. Again the relation between the proposition and what is asserted is roughly the relation between P and  $\vdash P$ , and the speaker is making an assertion not about the world, but about a proposition (about the world).

(ii) Experiential, in which the factive status of the proposition is taken to be a part of the experiential meaning conveyed by the utterance. That is, the speaker asserts that someone (not usually himself) would or could assert that the proposition is a fact. In other words, the speaker asserts (someone asserts (it is a fact that ...)). As might be expected, it is the experiential use of the factive that predominates in the corpus (contrast again Subjunctive in which the interpersonal use predominates).

These two senses of the Kuniyanti Factive must not be confused with the familiar factive opposition in English between the interpersonal 'it is a fact that ...' and the experiential 'the fact that ...'. Rather, the corresponding experiential in Kuniyanti is 'x knows it is a fact that ...'. I have never encountered 'the fact that ...' as a sense of the Factive, or indeed of any other form or construction.

[1] Interpersonal. Some examples of interpersonal use are:

(6-317)	matika	mika	katkilawini	mangarri
	car	like that	leave-FACT-he hit it	not
	<u>drivimpirrini</u>			
	they drove it			

'It's a fact he left the car; they didn't drive it'.

(6-318)	A:	ngiti	yinikayirri
		we(R)	we do something
	B:	warankilayirri	
		sit-FACT-we(R)are	
	A:	'What are we doing?'	
	B:	'It's a fact we're sitting here'.	

(Compare example (6-309) above: in each case the speaker has chosen some mode of opting out of describing the self-evident).

The interpersonal sense of the Factive is reasonably common towards the beginning and end of narrative texts, especially - but not only - myths relating to the dreamtime. It seems that the early occurrence of a Factive clause may provide a starting point of setting for the story, which will elaborate on this perhaps 'topic' sentence. The following

occurred as the second and fifth sentences respectively in two texts, the first describing birds, the second a myth.

(6-319)	ngarrangkarni	ngamu	ngapungka	yutkilayingi
	dreamtime	before	father-ERG	put-FACT-he caught it
	jiriki	yingingarri	pakiri	
	bird	name -COMIT	he lies	

'It's a fact that our father's named the birds long ago'.

(6-320)	ngirntaji	pangarnu	wartkilayi	ngirnali
	this	goanna	go-FACT-he was	from south
	ngarrangkarni	yuwu	ngarrangkarni	
		yes		

'It's a fact that the goanna came from the south in the dreamtime'.

In each instance, the Factive clause was pivotal in the progression from introductory remarks to the main theme of the text. See also Text 3 line (6).

Late occurrence in a text draws attention to a permanent conclusion, and here the tense is typically present. Example:

(6-321)	tukurrwani	yilpa	warangkilaari
	he went in	forever	sit-FACT-he is

'He went into (his hole), and has been there since'.

(Interestingly, the main collaborator tended to favour offering satisfactory conclusions to texts, often ending them with a factive clause. However he showed 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!).

The dependent Factive clause of example (5-385) above - in which ngirntajinhingi 'this-ABL', appears to function as a type of 'complementizer' - is readily explicable as an instantiation of the interpersonal sense of the Factive - 'after it is a fact that we have spoken ...'.

[2] Experiential. The use of the Factive mood in clauses elaborating and enhancing Nominal and Adverbial constituents may exemplify the experiential mode of use. There the individual claimed to be able to make the assertion is typically the hearer: the speaker says in effect that the hearer knows that the situation occurred. Instead of qualifying the time, place, or entity by its involvement in another process, it is qualified by the (presumed) hearer's knowledge of the fact of its involvement in a process. That is, the time, place, or entity is qualified as "the one of which you know that the situation occurred with respect to". (Cf. section 5.6.2.2.2.)



The 'hearer orientation' of the Factive (cf. the 'speaker orientation' of the Subjunctive mood) is clearly manifested in the frequency of the Determiner kinharnti 'you know' in the phrase referring to the entity, as in example (5-396). But if the hearer orientation is the norm, it is not the only possibility. The most usual other possibilities seem to be either: (i) generic orientation, in which the thing (or whatever) is qualified by the fact that it is generally known that the situation occurred with respect to it; or (ii) speaker orientation. Presumably, the first of these is invoked in the enhancing place modifying -wila clauses, which, as indicated in section 5.6.2.2.3, do not necessarily contain a proposition assumed known to the hearer as a characterization of a particular place. The following is perhaps an example of (ii):

(6-322) nganyinka            milaala            waraalaari  
           I            -ERG            I see him            stand-FACT-he is  
           'I see the tree standing (there)'.

The experiential sense of the Factive can occur (rarely) in independent clauses, as in a couple of place names, and in reference to well known characteristics of individuals:

(6-323) tiyatiya            plirrijikilayi  
           peewee                            -FAC-PRES/(3,sg)N+I  
           'The (name of) place where the peewee went plirrij'.

(6-324) wartkilaari            parnparra  
           go-FACT-he is            slowly  
           '(As you know) she walks slowly'.

These examples clearly involve the generic orientation of the Factive.

#### 6.5.5 The Classifiers

There is a set of twelve Verbal Classifiers, obligatory in each finite VP (see 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 (page 165) to 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 429). Nine of the Classifiers identify the process as an accomplishment, the remaining three, 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 (see section 5.2.1.3). Two Classifiers, one from each 'aspectual' group, occur uniquely in Reflexive/Reciprocal clauses. A further three never

occur in Transitive clauses; they usually occur in Intransitive clauses, but may also occur in Middle clauses. 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 167).

Given these distinctions the Classifiers may be divided into six primary subsets, as shown in Table 6-2.

Table 6-2: System of Classifiers

	Reflexive/ Reciprocal	Never occur in Transitive clauses	
Extendible	<u>-ARNI₂</u>	<u>-I</u> 'be, go'	<u>-A</u> 'extend'
Accomplishment	<u>-MARNI</u>	<u>-PINTI</u> 'get' <u>-ANI</u> 'fall'	<u>-MI</u> 'effect' { <u>-PINI</u> 'hit' <u>-TI</u> 'catch' <u>-ARRI</u> 'put' <u>-ARNI₁</u> 'emerge' <u>-PIRLI</u> 'consume'

It is clear from this table that, as I have claimed, the Classifiers primarily classify processes (referred to by lexical Verbals), and clausal transitivity but secondarily, usually as a consequence of the classification of the process. -ARNI₂ and -MARNI are the exceptions. Similarly, the accomplishment-extendible opposition applies to processes and not full situations. That the Classifier classifies the process, 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 Classifier chosen in the Kuniyanti version being always -I. Clearly it is the extendible process 'walk' that is classified.

As has been mentioned before, the Classifiers do not divide the class of lexical verbs into disjoint classes. Most verbs may occur with at least two Classifiers, the combinations having contrasting meanings. Usually the verb will occur with Classifiers from alternate rows of Table 6-2, with an 'aktionsart' difference, or from alternate columns, with a 'transitivity' difference. Fewer verbs choose alternate Classifiers from within single boxes 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 5.2.1.3). Examples:

<u>paki-</u>	{	- <u>I</u> 'lie'
		- <u>ANI</u> 'lie down, fall to sleep'
<u>warrin-</u>	{	- <u>I</u> 'be ill'
		- <u>ANI</u> 'fall sick'
<u>lingi-</u>	{	- <u>A</u> 'think about'
		- <u>ANI</u> 'remember' (i.e. 'fall to thought')
<u>ngarak-</u>	{	- <u>A</u> 'work on constructing'
		- <u>MI</u> 'make, complete'
<u>mika-</u>	{	- <u>I</u> 'say, talk, think'
		- <u>MI</u> 'tell'
<u>kaj-</u>	{	- <u>A</u> , - <u>ARNI</u> ₂ 'cut', chop (self)'
		- <u>MI</u> , - <u>MARNI</u> 'cut off (self - e.g. finger)'
<u>yuwa-</u>	{	- <u>A</u> 'fear someone'
		- <u>I</u> 'exercise caution'
		- <u>PINI</u> 'be frightened by someone'
<u>mila-</u>	{	- <u>A</u> look at, see'
		- <u>I</u> 'be seeing/sighted'
		- <u>MI</u> 'glance at'
<u>ngurluk-</u>	{	- <u>A</u> 'drink'
		- <u>MI</u> 'swallow down in a gulp (e.g. medicine)'
<u>rurru-</u>	{	- <u>A</u> 'pull at'
		- <u>MI</u> 'pull out'
		- <u>PINTI</u> 'fall out'
<u>ngap-</u>	{	- <u>A</u> 'eat'
		- <u>PIRLI</u> 'consume completely'

There is a single unexpected and so far unexplained irregularity: the verb tuwu- 'get' occurs with -A, never with an Accomplishment type Classifier.

#### [1] Extendibles

- (a) -I 'be, go'
- (b) -A 'extend'
- (c) -ARNI₂ 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 -ARNI₂ which occurs only in Reflexive/Reciprocal clauses; and conversely all 'Reflexive/Reciprocal' clauses have -ARNI₂, when the process is 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 as LOC) PP, and the clause is Middle.

However, there are a significant number of examples in which -A occurs in Intransitive and Middle clauses. These include among others (5-50), (5-56) and (5-351). 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, which does not extend out from him. Processes of the former type need not of course be 'directed' effectively from an Agent to a Goal, while processes of the latter type, actualized 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 muw- '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 jijak- 'speak', nyimij- 'blink, wink' - are totally located within the behavior.

The main processes classified by -A which occur in Intransitive clauses are: mila- 'look at, see', muw- 'direct gaze (at)', and ngap- 'consume'. mila- and muw- (in Intransitive clauses) refer to looking in a direction at nothing in particular. (Contrast the very rare collocation of mila- with -I (and also of tanyмили- 'listen' with the same Classifier), which refers not to looking in a direction, but to the general ability to see.) Moreover mila- and ngap- 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-, 'to blow (of the wind)', which occurs with -A in Transitive clauses, having the sense '(wind) blows something (e.g. a leaf)'. But in Intransitive clauses riny- occurs with -I, and has the sense '(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 inter-

pretation. This involves the derived Verbal stem p*ij*-p*i*-wani - (emerge-IT-IT,-) 'to emerge or arrive at a place successively day after day', which like all stems involving -p*i*, occurs with -A.

-A classifies the process as one in which 'activity' emanates from an actor (Medium or Agent), which is as a rule an 'active' participant in the process (even if 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'.

## [2] Accomplishments

(d) -PINTI 'get'

(e) -ANI 'fall'

These two Classifiers were distinguished (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 'passive'.

The semantic contract between -PINTI and -ANI can be explained in most general terms as follows. -PINTI 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 actualized process is an extension of its 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 an Agent need be an ultimate cause. 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 actualization.) -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. -PINTI 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; the active or dynamic part of a -PINTI 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 can refer to the

time subsequent to the point of accomplishment of an -ANI, but not a -PINTI process. - see section 6.5.2, especially example (6-234).

In the case of processes involving motion, -ANI typically indicates the direction of motion as downwards from a point. Examples are kart- 'fall', thut- 'descend', yut- '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 the marked state of affairs. For instance, nyumpul- 'immerse in water' collocates with -ANI, referring to the process of diving under the water surface. This may refer to a 'surface dive', beginning and ending in the water; this process is accomplished once the point of origin (the water surface) is left. -PINTI processes of motion are typically upwards towards a point. Examples include turluk- 'arise', pajki- 'get up and go', par- 'climb upwards', etc. -PINTI processes are accomplished once the endpoint has been reached. The opposition between -ANI and -PINTI in this context is brought out in the contrast between paapirri 'below', which is classified by -ANI, and laanti 'up', classified by -PINTI. The former may refer to any drop of water level in a river, without suggesting that the lowest point is reached; the latter may refer only to a rise of water level that reaches at least a local peak.

But both -ANI and -PINTI may refer to horizontal motion, and here -ANI normally refers to 'leaving' - e.g. lurru- 'turn off', talurr- 'slip', etc. - whereas -PINTI refers to 'reaching' - e.g. parn- 'return, get back', tirip- 'enter, go in' (contrast takurr- 'fall in' (e.g. into a hole - and by extension of the sun setting) which is classified by -ANI), yilip- 'sneak away' (successful only after a certain point has been reached), etc. Furthermore, there are a couple of examples in which -ANI refers to processes in which the motion is initially upwards, such as jarrk- 'jump up, or across'. Here of course the process is accomplished as the ground is left (not 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, -PINTI 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 progres-

sion, but this does not affect the general point. The process is treated as though there is a progression.) The same applies to processes of change of state referred to by verbs and classified by -PINTI: they are processes which typically show signs of occurring before they are actually accomplished. Examples include lalpak- 'split', langkirr- 'tear', tij- 'snap', (which all involve progression of the disjunction through the Medium), nyil- 'get an erection', etc.

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 warrin- 'fall ill', nang- 'die', puru- 'hide', paki- 'lie down, fall to sleep', wangarrak- 'get lost', ngalung- '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 -PINTI, carrying predictable differences of meaning. For example:

<u>pultuk-</u>	{	<u>-ANI</u> 'fall busted' (e.g. as for an egg dropped on the ground).
	{	<u>-PINTI</u> 'get busted' (e.g. as of an egg busting as a result of being hit, or eventually bursting through time).
<u>yulaj-</u>	{	<u>-ANI</u> 'fall undone' (e.g. of own accord)
	{	<u>-PINTI</u> 'come undone' (e.g. as a result of someone pulling at a shoelace).
<u>rarriny-</u>	{	<u>-ANI</u> 'fall thirsty' (e.g. from lack of water)
	{	<u>-PINTI</u> 'get thirsty' (e.g. for water, or alcohol).

(The examples given are attested senses in the corpus.)

Compare also the following:

{	<u>warrin-</u> / <u>-ANI</u>	'fall ill'
{	<u>kampi-</u> / <u>-PINTI</u>	'get sick'
{	<u>thatharr-</u> / <u>-ANI</u>	'stop'(suddenly and unpredictably)
{	<u>muku-</u> / <u>-PINTI</u>	'cease' (of wind - usually by degrees)
{	<u>ting-</u> / <u>-PINTI</u>	'cease'(of water flow, again usually by degrees).

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 Classifier. They are of the order of aspectual distinctions, not process distinctions - contrast the three examples of the last paragraph.

(f) -ARNI₁ 'emerge'

This Classifier is definitely attested in combination with three Verbal lexemes only, pij- 'emerge, come out', kurla- 'lift out', and thurrpurt- 'lift out'. Each of these processes involves the emergence of something, the Medium, which was formerly obscured from view.

pij- (which may be cognate with the Western Desert pij- 'go, move, walk'), in combination with -ARNI₁ refers to the emergence of something at a particular location (i.e. arrival) or its moving into view out of an obscuring medium (as in the rising of the sun). The lexeme also occurs with -MI, in reference to boring holes through something, and -A in reference to bringing something up to a place.

kurla- and thurrpurt- 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 jirrip- 'lift up', most of which occur with -MI; cf. also kurla-wani- which is classified by -A meaning 'to arouse someone from sleep by continual prodding etc.'

(g) -ARRI 'put'

This is the only Classifier which always occurs in Transitive clauses. It classifies the process as involving putting, or 'placement' of an object, 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 50). There are two main possibilities:

(i) The object may be placed in a new location, for example, tat- 'put up', takurr- 'insert', puru- 'hide', ngalarr- 'roll onto back', and parn- 'return'.

(ii) The object may be moved, and placed in a new orbit. Verbs of this type are waj- 'throw', yurruk- 'spew up', kilang- 'knock over', kininy- 'mix', and tumpuk- 'split'. We may also include here processes such as rarriny- 'hang up', and pantik- 'hang up', in which the object is both placed in a new location, and 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 the Agent. Examples include panak- 'dry out', pilyik- 'break', thatharr- 'stop, bring to rest', and jaa- 'soak (through) in water (to induce a change of condition), leech'. Also included are a few processes in which the existence of the Medium is affected. This entity may be brought into existence - e.g. kurrk- 'make a hole',



jart- 'make a fire' - or put out of existence - e.g. puju- 'finish up'. Note that nearly all of these Verbals occur with -ANI rather than -PINTI, if and when they occur in Intransitive clauses, as expected.

(h) -TI 'catch'

It is 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.

-TI almost always occurs in clauses of 'directed action'. talyarr- 'slip on something', which occurs in an Intransitive clause, is the only exception I'm aware of. Furthermore, the 'directed action' clause is almost always Transitive. This generalization admits two exceptions only, involving the Verbals kilij- 'prevent someone from e.g. fighting', and karlu- '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 (v. 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 kul- 'taste, try', nyunung- 'move something (e.g. grass) by direct contact', ying- 'crush (e.g. a beetle)', and pirrip- 'block up', kirip- 'use, finish something up'. The connection between the Agent and Goal need not be a physical one. It may involve a perceptual connection - for example, kilpa- 'notice, catch sight of', wap- 'catch scent of', and minjirran- 'take notice (cognizance) of'.

Alternatively, the Goal may be connected to something else as in puj- 'put a light to', 'catch (it) alight', lamaj- 'bring up to', ngaluk- 'to double something back', ngamul- 'flatten to the ground', ngang- 'give', yut- 'put down', and tilarr- 'spread out'. (At this point, it is not worth identifying and systematizing 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, (classified by -TI) lamaj- may 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: pala- 'send (away)', tij- 'snap an object into two pieces', kij- 'remove', and luw- 'push away'. (Contrast tij- / -A 'snap, break, but not into distinct

pieces', and luw- / -A 'push along'.)

(i) -PINI 'hit'

'Hit' is an inadequate gloss for this Classifier in as much as only about two-thirds of the attested Verbals occurring with -PINI involve 'hitting', and many that involve the notion of hitting are not classified by -PINI. What -PINI indicates is that the process is realized 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 -TI, the accomplished connection is the one between the Agent and something else, usually the Goal: where this connection is involved in a -TI process, it is really the Actor establishing the connection of the Goal with himself (e.g. as in kilpa- 'find'), not of himself to the Goal.

Like the preceding two Classifiers, -PINI occurs predominantly in Transitive clauses. There are perhaps two exceptions. The Verbal roots turluk- 'rise up to surface of water', and also, apparently, yilij- 'rain down (heavily)', occur with -PINI, in Intransitive clauses. In both cases the process satisfies the general semantic characterization suggested above: there is straight line motion (upwards or downwards), connecting the water surface in a single point in the case of turluk- (contrast turluk- / -PINTI 'stand up'), and the ground in a multitude of points in the case of yilij- (contrast yilij- / -ANI 'rain to fall'.)

The verbs of 'hitting' that are classified by -PINI all involve hitting at a single point through action directed straight at the Goal. Included are such processes as kart- 'hit, kill', ngul- 'punch', pilkurr' 'crack on the skull', nyak- 'pierce', pilyik- 'break a surface with a point',* and panangkarr- 'snatch'. Excluded are such processes as laj- 'slap', thulng- 'kick', and mangkarr- 'stab' (the latter presumably is excluded by virtue of the fact that the arm (like the leg in 'kick') 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 kirrra- 'chase someone away (by moving threateningly towards)', and yuwa- 'to scare someone (by the same means)'; and (ii) processes involving the meeting of the Agent and Goal at a point: jalpa- 'meet up',

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* Recall that pilyik- also occurs with -ARRI (see (g) above). In describing the action of a bird breaking an egg with its beak, -PINI was used; -ARRI was used in description of a situation in which an egg was broken by being thrown onto the ground.

marraj- 'pass someone' (going same or opposite directions), marurr- 'gather up', and kat- 'leave (someone)'.

In most cases the action moves towards the Goal (or thing directed at), but with kat- 'leave', and sometimes marraj- 'pass' and turluk- 'arise', it may go in the opposite direction.

(j) -PIRLI 'consume'

-PIRLI is known to occur with three lexical Verbals only, ngap- 'eat, consume', the corresponding Avoidance style term ngirij-, and murlak- 'ripen or cook completely, from murla- 'ripe, ready for consumption'. It indicates that the process completely affected the Goal/Medium: that the item was completely consumed, or completely ripened. An example (from a text) is

(6-325) wayantika            ngappinpirli  
           fire -ERG            eat-(3pl)A+PIRLI  
           'The fire consumed them completely'.

(k) -MI 'effect'

(1) -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, -TI, -PINI, -PIRLI and -ARRI of Transitive and Middle clauses. In other words, the fine distinctions of process types in accomplishments are neutralized in Reflexive/Reciprocal voice. In Reflexive/Reciprocal voice, 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 box 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,

<u>yilka-</u> (Avoidance style)	{	-MI	'take a look, glance at'
		-TI	'notice, catch sight of'
<u>tij-</u>	{	-MI	'break, not necessarily into pieces'
		-TI	'snap into pieces'
<u>kirip-</u>	{	-MI	'finish up something'
		-TI	'finish with'
<u>nangkit-</u>	{	-MI	'miss' (e.g. something thrown)
		-PINI	'miss' (e.g. hitting)

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 the more specific Classifier. For example, in the everyday lexicon there is a Verbal root kilpa- 'find', standing against mila- 'see'. The former occurs with -TI, with the sense 'notice, catch sight of', while the latter occurs with -MI (and -I, -A), never with -TI. Compare the Avoidance style yilka- above. The potential of the Classifier system is exploited to a greater extent in the Avoidance style than in the everyday style. This is presumably why wutij- 'throw spear' and ngirr- 'throw stone', for example, do not occur with -ARRI as might be expected, because there is a Verbal waj- referring to the process of throwing in general.

There are a number of apparent idiosyncracies in the matchings of Verbal lexeme and Classifier. For those lexemes classified uniquely by -MI, the processes 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- / -ARRI 'throw', ngirr- / -MI 'throw stone', and wutij- / -MI 'throw spear'. waj- refers to the process of putting something into an orbit, and is invariably accomplished when that entity enters its orbit. ngirr- and wutij- 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 wutij- and ngirr- typically occur in clauses referring to throwing spears or stones at things, in which the thing 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 kart- 'hit, kill', and nyak- 'pierce' are Classified by -PINI, but thulng- 'kick', and mang-karr- 'stab' occur with -MI and not -PINI. It turns out that thulng- refers to the process of kicking out the foot or leg, and does not require connection with a Goal. Furthermore, in the processes of kicking and stabbing, the action does not normally proceed along a straight line path, as is the case of -PINI processes. Instead, it normally describes an arc.

-MI also partly overlaps in significance with the two single valent Classifiers of the middle box on the bottom row of 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 Classifier, which were distinguished in Table 6-2 above in terms of the clause types they may occur in. The one group, including -MI, -TI, -PINI, etc., is positively specified as involving an 'active', participant ('actor' Medium or Agent). The other group - consisting of -ANI and -PINTI - 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 -PINTI. These include a number of processes of mental/physical states or 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 active control, or he is more actively involved in it. For example, thirri- 'anger', ngirrinyjila- 'hungry' (among others) occur with both -PINTI and -MI, in the latter case typically with the Progressive aspect, referring to the processes of increased agitation. With -PINTI 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 (3-83), and (5-269) above.

Contrast also the possibility of choosing the extendible -I with the Progressive, at least of ngirrinyjila-, as in ngirrinyjilawangiri '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.

There are, however, a few unpredictable pairings.

(1) A couple of verbs (e.g. parn- 'return', par- 'climb' classified by -PINTI refer to typically active processes of motion reaching a goal. Because of the restricted range of occurrence of -PINTI, 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 parn- and par-, the Verbals palpirr- and pawart- occur. These latter occur only with non-singular Mediums, and are Classified by -MI only. They are in complimentary distribution with parn- and par-.

(2) In just a couple of cases a lexeme occurs with -MI where -PINTI is expected: pupup- 'swell up (e.g. of a lump)', and pitha- '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 box of Table 6-2) indicates that the process is active, while the other set leaves this unspecified. This can be captured in the feature [active], which can take on the values positive or unmarked.

It is also clear that -ANI and -PINTI positively specify the process as not extending from the Medium but is entirely immanent. The other Classifiers (except for -ARRI) do not indicate whether or not the process extends out from the 'actor'. (About a quarter of an 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). A smaller proportion of processes classified by the type.) This can be captured by the feature [non-extensive], which like [active] takes on values + or u (unmarked).

The two sets of Classifiers may be characterized as follows:

[+nonextensive] u.active	- <u>ANI</u> , - <u>PINTI</u>
u.nonextensive +active	- <u>MI</u> , - <u>PINI</u> , - <u>TI</u> , - <u>ARRI</u> , - <u>ARNI</u> ₁ , - <u>PIRLI</u>

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 of the sets have in face positive semantic content. Furthermore, recognition of these two features allows -MARNI to be characterized in a natural way as +nonextensive  
+active. (This feature specification correctly indicates the relative markedness of -MARNI with

respect to the other accomplishment Classifiers.)

It is 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 -PINTI, -ANI and -MI, -TI, -PINI, etc. in the accomplishments, suggested by Table 6-2 does not obtain. -I and -A appear to be in privative opposition, marked respectively as [-extensive] and [+extensive].

[u nonextensive  
[+active]] fully characterizes -MI. The remaining five Classifiers containing this feature specification each have in addition a positive semantic feature as follows:

<u>-ARNI</u> ₁	[+emergence of Medium]
<u>-ARRI</u>	[+placement of Goal/Medium]
<u>-TI</u>	[+juncture/disjuncture of Goal and another entity].
<u>-PINI</u>	[+straight-line action of Agent on Goal]
<u>-PIRLI</u>	[+consumption of Medium]

It must be assumed that each Classifier is unmarked for each feature for which it is not positively specified. This follows from the fact that the characterizations they impose are not mutually exclusive, as has been remarked on in various places above.

-PINTI 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 -PINTI 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, 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. E.g. it might be expected that -TI would classify thalik- 'attach spear to woomera'; however, -MI only 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 with n distinct meanings, to predict which meanings are associated with which root-Classifier pairings.



APPENDIX 1: TEXTS

This Appendix contains three texts selected from the corpus used in the textual study of section 5.3 (see above page 21). They are all unedited versions of spoken texts.

The texts are divided into tone units, indicated by slashes, and sentences, which correspond to the numbered lines. Supra-segmental features are indicated by the same symbols as used in 5.3. In addition, the colon (:) indicates (non-phonemic) vowel length, and three dots (...) indicate a pause within a single tone unit.

Text 1

This text was recorded 'on site', at a 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 (79) is the Fitzroy Crossing ration station, the events must have occurred sometime between end of the Second War and 1951 - v. Kolig 1981:23). This story was told by Jack Bohemia in 1982.

- (1) / ngirntajiya walyarraya pakiyirri+ / ngarlutu yuwulu  
 this -LOC sand -LOC we lay three men  
 pakiyirrirri+ /  
 we lay

Here, on the sand we camped, there were three of us Aborigines.

- (2) ...a... wiliwili... jurntu+ / yutjiti+ / ngarlutu jurntu  
 um fishing line fishing line we put it three  
yutjiti+ /

Um, we put in fishing lines, three lines we set.

(wiliwili and jurntu are both used in reference to fishing lines. It is not clear in what respect the terms differ).

- (3) mirtjinmi+ / lalangkarrayu+ /  
 we tied it crocodile-DAT

We tied up the lines (to a tree) for crocodiles.

- (4) maningka pakiyirri:- /  
 night we lay

We camped the night.

- (5) mungaya+ / milawawinmi pitiyurrungka+ / nganyi muyu pakingi+ /  
 morning they were looking they -DU -ERG I asleep I lay

In the morning, (while) the (other) two were looking (at the lines), I was sleeping.

- (6) ...a... rirrwinpirrayi↓/ ngarlutu rirrwinpirrayi-/  
 um they (2) pulled them in three  
 Um, they pulled them in, the three lines.
- (7) yuwarni kalanyi rirrwirrayi:-/ kartpirriniyi↓/ yanya  
 one first they pulled it they hit it other  
rirnyaliwiti-/ kartpirrini↓/ yanya↓/ ngampirrinyali  
 they pulled it again again -REP  
rirrwiti↓/ kartpirrini↓/  
 they pulled it  
 They pulled in one (crocodile) first, and killed it; they pulled  
 in another, and killed it, and again they pulled in another, and  
 killed it.
- (8) jingirnali wantajpirrayi↓/  
 from the west they (2) carried it  
 They brought them back from the west.
- (9) wantajpirrayi:: ngirntajiyayu↓/  
 this -ALL  
 They brought it back here.
- (10) mun...ngany... / nganyinka manyi wupila↓/ naliya↓/  
 I -ERG food I cooked it tea  
 I was cooking the breakfast, tea.
- (11) wayanti jatjiti↓/ nyamani↓/  
 fire we lit it big  
 We lit a fire, a big one.
- (12) kurrku kirra:pingarri manyjiyinmi↓/ wili↓/  
 hole lo—ng we made it finish  
 We dug a lo—ng hole.
- (13) lirri kajpirrayi: wili↓/  
 guts they cut it finish  
 They cut out its guts.
- (14) mirlinyulu tuwuwaniwirrayi:: wili↓/  
 liver - etc. they (2) got it  
 The (other) two got out the liver etc.
- (15) lirri ngapayirri↓/  
 guts we were eating  
 We were eating the guts.
- (16) wupiyirra:: lirri ngapjirra↓/  
 we cooked it we ate it  
 We cooked the guts and ate them.

- (17) jilywiri↑/ wuppitiyi↑/ ngapnga↑/ kurrkuya↑/  
 guts they (2) cooked it it cooked hole-LOC  
 They (the other two) cooked it: it cooked in the hole.
- (18) ngamani...yurru↑/ ngarlutu niyiyarnti kirtpirrini-/ kurrkuya↑/  
 big -DU three that -PL they left it hole-LOC  
 Two big ... the three (crocodiles) they left in the (cooking) hole.
- (19) kirtpirrini: wili↑/ ngapnga↑/  
 it cooked  
 They left them, and let them cook.
- (20) likayirra↑/ likayirra:: lanykiya↑/ tinaya↑/ murlakpirli↑/  
 we waited midday dinner-LOC it cooked  
 We waited. We waited til midday, dinner, when it had cooked.
- (21) kurlawirrarri↑/ yutpiti palngarna-/  
 they lifted it out they put it outside  
 They lifted it out and put it aside.
- (22) wampa kunyjirra:: kawirlawani↑/  
 later we waited it got cold  
 We waited until it got cold.
- (23) kajkajjirra:: thikiyikiyirra kajkajjirra:↑/ wili↑/  
 we chopped it up little pieces - ALL we chopped it up  
 We chopped it up. We chopped it to little pieces.
- (24) thikiyikirmi pakiwirri↑/  
 -SEQ they lay  
 Now they lay in little pieces.
- (25) ngapjirra↑/ ngapjirra:: wili↑/  
 We ate and ate, and stopped.
- (26) yapja mikanyali pakiyi-/  
 some like that-REP it lay  
 Some still remained.
- (27) niyinhingi warangjirri:↓/ wampa ngapjirra niyaji  
 then we sat later/still we ate it this  
walwarrangka↑/  
 crocodile  
 Then we sat, still we were eating the crocodile.
- (28) walwarrangka ngapjirra: wili↑/ kiripjiti↑/  
 we finished it  
 We ate the crocodile, and finished it up.

- (29) mikawinmingarrakiyi thirru . jukpanmawu↑/ lilingku niyi-/  
 they said - to me kangaroo we'll hunt roos to the west that  
 ngaarri↓/  
 rock

They said to me "Lets go hunting roos to the west, at that hill".

(juk- refers to a method of hunting kangaroos in which the animal is chased towards a group of hunters hiding and waiting with spears.)

- (30) yuwu↑/  
 yes

"Yes" (I replied)

- (31) jinali mirnmirtjirra:: wili↓/ pinyitijirra↓/  
 spear we tied it hard -ALL

We tied up spears, tightly.

- (32) wijjirra: japirri↓/  
 we rubbed it sharp

We rubbed them sharp.

- (33) wijjirra wili jaap- / ngurntungurnu... japirri↓/ wijjirra:  
 we rubbed it what's it called sharp

wili↓/

We rubbed them sh... what's it called? Sharp. We rubbed them.

(The speaker almost said jaapala (Kriol, from English 'sharp') in the first tone unit, but quickly corrected himself.)

- (34) lilingku↑/ jukjinmirri niyi- / lilingku ngaarri↑/ marliwa  
 to west we hunted it that to west rock [name]

ngaarri jurlku↓/  
 round

We hunted them in the west at that hill, Marliwa, the round hill.

- (35) nginyjingka jurrawawu↑/ mikayinminhi karntiwirringka↓/  
 you -ERG you'll chase them we told him two -ERG

"You chase them", we two told him.

- (36) niyi wartji liya↓/  
 he he went west

He went west.

- (37) niyajiyangka wirrpnga ngaarri- / jurranga↓/  
 this -ABL he threw it stone he chased it

From there he threw stones, and chased (the roos).

- (38) ngiti ngirnta pilika warangjirriyi- / niyi... lililuwa↑/ nganyi  
 we this middle we sat he west side I

ngilingiliwa↓/  
 east side

We sat in the middle, him on the west end, me on the east.

- (39) warangjirri::↓/ milarla-/ niyingka parawu nyakpini-/  
 I saw it he -ERG female roo he speared it  
jakarrangka yuwulu jakarrangka↓/ nawunka pakiyirrinhi↓/  
 [subsection term]-ERG man -ERG bereaved we lie-on him  
pamathitiya↓/  
 Gogo -LOC

We sat. I saw him spear a female kangaroo, the jakarra man, who we are bereaved of at Gogo.

(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 - v. Dixon 1980:28-29.)

- (40) nyakpini↑/ parawu↓/  
 He killed a female kangaroo.
- (41) nganyingka jawangari nyakluni↓/ nyamani↓/  
 I -ERG male roo I speared it big  
 I speared a male kangaroo, a big one.
- (42) likayirrayi::-/ niyi yanya yuwulu pijngarni↑/ yanya  
 we waited that other man he emerged other  
jakarranyali↓/  
 -REP  
 We waited for the other man to come, the other jakarra man.
- (The information that the second of the two is also a jakarra man is non-defining.)
- (43) wantajjirra:: ngirntajiyayu↓/  
 we carried it this -ALL  
 We carried them up to here.
- (44) niyajiya wupiyirrarri walyarraya-/ purrungku↓/  
 this-LOC we cooked it sand -LOC to the north  
 We cooked (the kangaroo) here, on the sand, to the north.
- (45) wupiyirrarri:: wili↓/  
 We cooked them, O.K.
- (46) niyinhingi warangjirri↑/ kunyjirra:: kurlayirrarri↓/  
 then we sat we waited we lifted it out  
 Then we sat; we waited and lifted them out.
- (47) thikiyikiyirra kajkajpirrayi:: wili↓/  
 little pieces-ALL they chopped it up  
 They chopped it up into little pieces.

- ((48) mikamingirangi↓/ ngirnta wartjawilawirangi↓/ ngiwawu↓/  
 he said - to us this I'll take it - to them to south  
pulkawulkayu↓/ yanyangka jakarrangka mikamingirangi↓/  
 old men -DAT other-ERG -ERG he said - to us  
pamathitiyirra↓/  
 Gogo -ALL  
 He said to us "I could take this to the old man at Gogo", one of  
 the jakarra men said.
- ((49) yuwu wartpawirangi↓/  
 yes you'll take it - to them  
 "Yes, take it to them" (we told him).
- ((50) kajkajjinmi: pakiya takurrwinarrirri wili↓/ nyamani  
 we chopped it bag-LOC they inserted it big  
bag↓/  
 We cut it up and put it into a bag, a big bag.
- ((51) ngiwawu wantajmawu wartji↑/ ngiti ngirntajiyanyali  
 to south carry -INF he went we this -LOC -REP  
warangjirri↓/  
 we sat  
 He went south carrying it, while we stayed here still.
- ((52) wartngawirangi ngiwawu::-/ pamathiti ... pijnga↓/  
 he took it - to them he brought it  
 He took it south, and brought it to Gogo.
- ((53) pulkawulka ngangpintirri↓/  
 old men he gave them  
 He gave it to the old men.
- ((54) niyajiya pakiyi↓/ mungaya parnkiyi↓/  
 this-LOC he lay morning he returned  
 He stayed the night, and returned next morning.
- ((55) ngiti ngirntajiya pakiyirri↓/ likayirrayi↑/ pijngarni↓/  
 we this -LOC we lay we (2) waited he emerged  
 'We stayed here and waited until he arrived.
- ((56) wawanyi↑/ wawanyi yawunjirra-/ ngiyi...ngu...nguwawu↓/  
 goanna we belted it south to south  
 We belted goannas to the south.
- ((57) yawunjirra: wili↓/  
 We belted them, right.
- ((58) nganyingka parawu↑/ karntiwirri nyaklunpini  
 I -ERG female roo two I speared them  
wanyjirriyurru↓/  
 river roos -DU  
 Me, it was two female river kangaroos I speared.



- (70) wartjirri kintiwa:↓/  
we went upstream  
We went upstream.
- (71) bridge ngurru ngila pakilaari↓/ niyinhinginka  
that east it's a fact it lies that -ABL -ERG  
mirnalukumirnaluku-/ niyajiya nyakluni nganyingka  
this side - (reduplicated) this-LOC I speared it I -ERG  
yuwarni↓/  
one  
A little bit this side of the bridge, there I speared one.
- (72) kintiwa wartjirri yalawanyali↓/ bridgenhinginka kintiwaa-/  
upstream we went close -REP -ABL -ERG upstream side  
niyajiya warangjirri ngaalu↓/  
this-LOC we sat shade  
We went upstream a little way, and on the upstream side of the  
bridge we sat in the shade.
- (73) wupiyirrarri: wili↓/  
We cooked (the roos).
- (74) kintiwa↑/ karrwaru wartjirri:↓/ paplikajja pijjirrami↓/  
afternoon we went pub -LOC we emerged  
Upstream, in the afternoon we went, and arrive at the pub.
- (75) niyinhingi pakiyirri-/ piti / ngiti kintiwa marrajanyali  
then we past -WA -REP  
wartjirri↓/  
we went  
We went upstream right past (the pub).
- (76) manyi ngangjinpirra niyajiya↑/ japa manyi ngangjinpiti↓/  
food they gave us this-LOC supper they gave us  
They gave us food, supper there (at the ration station?)
- (77) ngapjirra wili↓/  
we ate it  
We ate it.
- (78) kintiwa wartjirri↑/ ngila... policestationjayu↓/ niyajiya  
we went east -ALL  
pakiyirri↓/  
We went east to the policestation, where we stopped.
- (79) ngiti mayarurni↑/ nganyi mayaruyarni tiriplunti↓/  
we house-SEQ house-LOC-SEQ I entered  
warrkumja↓/  
work -LOC  
We, house now ... I went into the station to work.



- (80) yilpa warrkumjirri↓/ karntiwirrinyali tiripjirri ngiti  
for good we worked two -REP we entered

karntiwirri↓/

For good we worked, the two of us.

- (81) niyi yanya ngiwawu parnpinti↓/ pamathitiyirra↓/ ngiti  
that other to south he returned -ALL we

yilpa warangjirri niyajiya↓/  
for good we sat this-LOC

The other one went south to Gogo, but we stopped there for good.

## Text 2

The following is a short version of a traditional myth about fire, told by Dave Lamey in 1982 for inclusion in a school reader.

- (1) yuwulu karntiwa kirnajpirri pulkawulka↑/  
man many they sat old men

There were lots of old men sitting around.

- (2) warangpirri↑/ maatiya nyamaniya kampa pijngarniwirrangit↑/  
they sat cold-LOC big -LOC water it emerged - on them

They sat; in the very cold time rain came.

- (3) maati↓/ pilankiti marlami↓/ majurru marlami↓/ kaliku marlami↓/  
cold blanket without matches calico

winhi warangpirri yuwulu↓/ ngamu ngarrangkarni↓/  
only they sat man before long ago

It was cold. They had no blankets, no matches, no tents. People just had nothing.

- (4) niyajiya warangpirri↑/ palngarna↓/  
this-LOC they sat outside

They sat around in the open.

- (5) kampangka yiljipina↓/ karntiwa↑/ maati tijjiwina↑/  
water-ERG it rained on them many cold it broke them

It rained on everyone, and made them cold.

- (6) niyajiya↑/ yuwarni lamparti yuwulu↑/ yingi↑/ jilnginti↓/  
this-LOC one little name [name]

niyajangka wartjiwirrangit↑/ tutujiwirrani-/ maati-/  
this -ERG he went up to them they were shivering cold

yuwuluyarntingka↑/ pulkawulkangka parntanyiparntanyingka↓/  
old men -ERG old women -ERG

There, a little man called Jilnginti came up to them, who were all shivering with cold, the old men and women.

- (7) niyinka tuwungarniwirrangit↓/  
that-ERG he got it - on them

He took it from them.

- ((8) kintiwa yalawanyali kirraringa↑/ tuwuya tirippinti↓/  
upstream close -REP he ran away with it cave-LOC he entered  
He ran a little way upstream with it and went into a cave.
- ((9) mikawinmi palyuwa↑/ ngirntiya wayanti ngurntuka  
they said behind this -LOC fire someone-ERG  
kirraringa↑/  
he ran away with it  
They said behind "Who's run off with the fire?"
- ((10) pukangka kinharntikawami↑/ kintiwa kirraringa  
child-ERG you know-ERG-maybe upstream he ran away with it  
niyajiyirra↓/  
this -ALL  
It was that child you know, he ran off upstream with it to this place.
- ((11) palyuwa pirlajpinminhi↑/ niyajiya tuwuya kintiwa↑/  
behind they followed him this-LOC cave-LOC upstream  
nhinnhinpirra kirilingarringka-/ kurlartangarringka↓/  
they poked around stick-COMIT-ERG spear -COMIT -ERG  
They followed behind and poked up into the cave with sticks, with spears.
- ((12) kintiwa niyaji nyakpiwirra↑/ wayanti  
upstream this they pierced him iteratively fire  
kintiwanyali warangnga↓/  
upstream-REP he held it  
They pricked him again and again (but) he still held the fire up in the cave.
- ((13) yilpa niyaji warangji paapirri↓/ wila↑/  
for good this he sat inside finish  
He stayed for good inside (the cave). That's all.

### Text 3

Text 3 is a short humorous story about pumping water for a thirsty bull in the early days. The speaker is Mervin Street, perhaps the youngest fluent speaker of the language. This story was recorded in 1982.

- (1) niyinhingi ngirntaji thangarnti↑/ julang jijakji↓/  
that -ABL this word [name] he said  
ngarrakinhingi↑/  
my -ABL  
Now that Frank has told his story, it's my turn.

- (2) papirri ngirnta pirnpurniya↓/ paajathngarna wumparra↓/  
below this [name] -LOC [name] [name]

warangpirri↓/ pampimpirra kampa↓/ purlumaniyu↓/  
they sat they pumped it water bullock-DAT

Below here at Pirnpurni, Paaajathngarna and Wumparra were living, pumping water for bullocks.

- (3) niyinhingi↑/ yuwarni nyirraji wartji kampayu↓/  
one bull he went water-DAT

Then a bull came up for water.

- (4) yuwarningka↑/ kampa pampimnga↓/

One of them was pumping water.

- (5) pampimnga: niyaji nyirraji warayi↑/  
this bull he stood

He pumped, while the bull stood there (drinking).

- (6) well ... ngirntajinka↑/ pampimkilanga kampa↓/  
this -ERG it's a fact he was pumping it

This one was really pumping water.

- (7) warami warami warami niyaji nyirraji-/  
he stood

It stood and stood and stood, the bull.

(This is the only instance in the entire corpus of wara- with a Classifier other than -I.)

- (8) ngirntaji↑/ ngunyunhingi nyirraji ngirntaji↑/ juwurlu  
this something-ABL stomach

nyamani↓/ wartji↓/  
big he went

"Where did this bull come from, with the big stomach?"

- (9) ngirnta pitawayi↓/ wayarrmi↓/ pampimhingi  
this he was getting stiff (he left off?) pump -ABL

kampa↓/  
water

He was getting stiff (and left off?) from pumping water.

(The meaning of wayarrmi is uncertain. On playing back this tape, I was informed 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 warr- 'leave off, forget'.)

- (10) paaminhi -/ yanyayu↓/ nginyjingka now↓/ pampimjawa  
he called - to him other-DAT you -ERG you can pump it

ngirntajiyu nyirrajiyu↓/  
this -DAT bull -DAT

He called out to the other one "You now, you can pump water for this bull."

- ((11) well niyingka↑/ mikaminhi↓/ nginyjingka nyirraji↑/  
 he -ERG he told - to him you -ERG  
thangarnti kartpuwu↓/ juwurlu nyamani niyaji nyirraji↓/  
 mouth you'll hit it stomach big

Well, he said "(Why don't) you hit the bull in the mouth! It's got a big stomach."

- ((12) katpiyawani↑/ yapjayu↓/ purlumaniyu↓/  
 it will leave some-DAT bullock-DAT

"Let it leave some for the other cattle."

- ((13) well niyinhingi wila↑/ thangarnti ngarraki↓/  
 that -ABL word my

Well that's all of 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 thesis (e.g. pronominals), and a few terms for things not found in the region. The vocabulary is organized into semantic domains following the model of Sutton and Walsh op.cit. Items are glossed by one or two English words, 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.

NominalsA. Body Parts and Products

head	<u>mirra</u>
brain	<u>milyilyi</u>
hair of head	<u>yamparra</u>
grey hair	<u>pulka</u>
face, forehead	<u>muwulu</u>
eye	<u>murlu</u>
nose	<u>manili</u>
ear	<u>manka</u>
cheek	<u>ngirrirli</u>
jaw	<u>karli</u>
chin	<u>limimi</u>
mouth	<u>thangarnti</u>
lip	<u>marliwiti</u>
moustache	<u>ngunyjungunyju</u>
beard	<u>thaawuru</u>
tooth	<u>minyju</u>
tongue	<u>thalanyi</u>
saliva	<u>kungkutu</u>
neck (exterior)	<u>wiliwi, wirnkarri</u>
throat	<u>karntakarntati</u>
back of neck	<u>jaapi</u>
shoulder	<u>lawati</u>
armpit	<u>karri, karrwi</u>
arm	<u>parnti</u>
hand	<u>marla</u>
finger nail/toenail	<u>miljarnti</u>
back	<u>wirla</u>
upper back	<u>winyjirrki</u>

chest	<u>tumutu</u>
heart	<u>tulu</u>
rib	<u>walampu</u>
breast	<u>kamu</u>
navel	<u>jinyjili</u>
hip	<u>mirali</u>
lungs	<u>kawu</u>
liver	<u>mirli</u>
stomach (internal)	<u>munta</u>
stomach (external)	<u>juwurlu</u>
guts	<u>lirri, jilywiri</u>
urine	<u>yilaa</u>
penis	<u>kirlingki</u>
testicles	<u>ngalyati</u>
semen	<u>thaaliya</u>
pubic hair	<u>ngurrurntu</u>
vagina	<u>nyaninyi</u>
buttocks	<u>marnpa</u>
faeces	<u>ruwu</u>
thigh	<u>pirti</u>
knee	<u>kimani</u>
calf	<u>jawurlu</u>
ankle	<u>lingkali</u>
foot	<u>thinga</u>
body	<u>karajpi</u>
cicatrice	<u>murtu</u>
sweat	<u>juwati</u>
sore	<u>kaji</u>
boil	<u>tiki</u>
blood	<u>waarri</u>
bone	<u>kuji</u>
fat	<u>minka</u>

#### B. Human Classification

person, Aboriginal, man	<u>yuwulu</u>
baby, child	<u>puka, juku</u>
boy (preinitiate)	<u>kampayi</u>
old man	<u>pulka</u>
girl	<u>marlara, kalinta</u>
woman	<u>kurnpu</u>

old woman	<u>parntanyi</u>
widow	<u>kalara</u>
doctor	<u>jalngangurru</u>
white person	<u>kartiya, maringarri</u>
policeman	<u>limpa, mirnmirtkali</u>
poor fellow	<u>pukalangi</u>
husband	<u>ngumparna</u>
wife	<u>karingi</u>
son (of man)	<u>ngaluwinyi</u>
son (of woman)	<u>ngalinyi</u>
mother	<u>ngarranyi</u>
father	<u>ngapu</u>
older brother	<u>marna</u>
younger brother or sister	<u>ngaja</u>
older or adult sister	<u>marni</u>

#### C. Language, Mythology and Ceremony

language	<u>thangarnti</u>
name	<u>yingi</u>
fighting ground	<u>parawuru</u>
song	<u>junpa</u>
red ochre	<u>pilyji</u>
yellow ochre	<u>karntaarra</u>
ghost	<u>pirilirri</u>

#### D. Human Artefacts

camp	<u>riwi</u>
hut	<u>wirinyi</u>
path	<u>paali, kaali</u>
boomerang	<u>karli</u>
digging stick	<u>kananyi</u>
club	<u>muwurru</u>
spear (generic)	<u>jinali</u>
fighting spear	<u>thankinti</u>
woomera	<u>ngawali</u>
coolamon	<u>yamati</u>
fishing net	<u>rampurra</u>
shield	<u>karruna</u>
axe	<u>jamayina</u>
knife (European)	<u>nayu</u>
fire saw	<u>kurru</u>

E. Food, Cooking and Fire

meat	<u>maa</u>
vegetable food	<u>manyi</u>
fire	<u>wayanti</u>
ashes (cold)	<u>kawuntu</u>
charcoal	<u>pirri</u>
flame, light	<u>tili</u>
smoke	<u>wanki</u>

F. Water

water	<u>kampa</u>
mud	<u>kalamanta</u>
creek	<u>jarlangka</u>
river	<u>warlipirri</u>
rain	<u>yiwinti</u>

G. Elements

sky	<u>pirrinyi</u>
cloud	<u>ngumurru</u>
thunder	<u>naya</u>
lightening	<u>jimiluru</u>
wind	<u>kirnkali</u>
star	<u>warta</u>
moon	<u>jaalinyi</u>
sun	<u>mirri</u>
shade	<u>ngaalu</u>
daytime, midday	<u>lanykiya</u>
night	<u>maningka</u>
ground, dirt	<u>panta</u>
hill, rock	<u>ngaarri</u>
pebble	<u>ngarrali</u>
sand	<u>walyarra</u>
dust	<u>jutu</u>
hole in ground	<u>kurrku</u>

H. Mammals

echidna	<u>minaji</u>
possum	<u>jampiyinti</u>
kangaroo (generic)	<u>thirru</u>
tail	<u>nyawa</u>
dingo	<u>marranyi</u>



tame dog	<u>tharra</u>
flying fox	<u>kinyma</u>
horse	<u>timana, yawarta</u>

I. Reptiles

crocodile	<u>lalangkarra</u>
bluetongue	<u>lumuku</u>
goanna (generic)	<u>wawanyi</u>
snake (generic)	<u>parlanyi</u>
watersnake	<u>jungkurra</u>

J. Birds

bird	<u>jiriki</u>
egg	<u>kampinyi</u>
feather	<u>pinkiti</u>
emu	<u>karnanganyja</u>
brrolga	<u>kurralka</u>
pelican	<u>mayarta</u>
bustard	<u>kalamuta</u>
scrub turkey	<u>wirntuwu</u>
bower bird	<u>jurrkina, jujkana</u>
peaceful dove	<u>marrawi</u>
topnot pigeon	<u>parlara</u>
peewee	<u>tiyatiya</u>
butcher bird	<u>kurrangkul</u>
crow	<u>wangkiri, wangkana</u>
willywagtail	<u>jintiwirryni</u>
sulphur crested cockatoo	<u>palnganyja</u>
black cockatoo	<u>kirramala</u>
kite hawk	<u>puluku</u>
eagle	<u>karnpirra</u>
spoonbill	<u>jatiyati</u>
diver bird (cormorant?)	<u>karrangkarrang</u>
black duck	<u>lawarla</u>

K. Marine Life

fish	<u>kawi</u>
catfish	<u>kulamangarri</u>
barramundi	<u>palka</u>
crayfish (cherrabun)	<u>jarrampa</u>
shell	<u>jarrja</u>

mussel  
 pearlshell  
 frog

ngawaya  
pinyjawinyja, jakuli  
jirraki

L. Insects and Spiders

termites  
 lice  
 bee  
 ant(generic)  
 antbed  
 sugarbag, honey  
 fly  
 butterfly  
 grubs (witchetty)  
 scorpion  
 spider (generic)

kuraturutu  
nyangki  
wita  
miki  
ngawaku  
ngalinya  
ngirrinyi  
malimali  
lakarnti  
milaluwa  
paarnti

M. Plants

tree, stick  
 leaf  
 scrub  
 root  
 flower  
 grass  
 waterlily  
 red gum  
 paperbark  
 yam  
 bindi-eye (burr)  
 spinifex

kirili  
yimarrarra  
yungku  
yirrali  
jika  
kilirni  
karringarri  
pilirnti  
kurrumpa  
pirla  
paka  
nyirri

N. Physical Qualities

one  
 two  
 three, a few  
 many  
 black  
 white  
 red  
 big  
 small  
 long

yuwarni  
karntiwirri  
ngarlutu  
karntiwa, karntiwangurru  
kurukuru  
lapawu, lawakimana  
thiwa  
nyamani  
jikinya, lamparti  
kirrapingarri

short	<u>thiki</u>
straight, right	<u>jutu</u>
straight (as of line)	<u>thirrkirli</u>
sharp (point)	<u>jalkutu</u>
blunt, deaf, blind	<u>tamarta</u>
rotten	<u>thuwurntu</u>
raw (meat)	<u>kurnka</u>
hot (weather)	<u>purtpara</u>
cold (weather)	<u>maati</u>
wet	<u>kiyi</u>
dry	<u>pulati</u>
soft	<u>kalypa</u>
hard, strong	<u>pinyiti</u>
light (weight)	<u>rampurra</u>
heavy	<u>thariti</u>
new	<u>yanungku</u>
old	<u>ngamunhingi</u>
hungry	<u>ngirrinyjila</u>
thirsty	<u>ngayirla</u>
sated with food	<u>juwurlungarri</u>
sick	<u>kampi</u>
dead	<u>nganyanti, kijali</u>
fat	<u>karrirnti</u>
thin, skinny	<u>larrpi</u>
asleep	<u>muyu</u>

O. Non-physical Qualities

good	<u>jurnanykarra</u>
bad, stupid	<u>yijkawu</u>
clever	<u>pinarri</u>
frightened, cautious	<u>yuwa</u>
insane	<u>wangmarra</u>
ashamed	<u>kanypili</u>
wild, angry, fight	<u>thirri</u>
secret	<u>tarruku</u>

P. Verbs of Motion

go, walk	<u>wart-</u>
run	<u>kirrar-</u>
climb up	<u>par-</u>
climb down, descend	<u>thut-</u>

fall	<u>kart-</u>
sit down, put	<u>yut-</u>
stand up	<u>turluk-</u>
go away	<u>kirt-</u>
return	<u>parn-</u>
turn around/over	<u>kurnak-</u>
swim	<u>payal-</u>
dive into water	<u>thingkil-</u>
enter	<u>tirip-</u>
emerge, arrive, rise (of sun)	<u>pij-</u>
jump	<u>jarrk-</u>
dance	<u>purij-</u>
chase	<u>jurra-</u>
search for, look for	<u>muw-</u>
follow	<u>purlupu-</u>
pass by	<u>witak-</u>

#### Q. Verbs of State

be sitting	<u>warang-</u>
be standing	<u>wara-</u>
be lying	<u>paki-</u>
be burning	<u>murrup-, ngap-</u>
float	<u>lumparrany-</u>
wait	<u>lika-</u>
go out (of fire), extinguish	<u>palip-</u>

#### R. Verbs of Vocalization and Thoughts

speak	<u>mika-, jak-, jijak-</u>
cry, weep	<u>narta-</u>
ask for something	<u>yankin-</u>
shout	<u>paa-, ngurrap-</u>
laugh	<u>kalkal-</u>
sing (song, or person)	<u>ngalany-</u>
dream (of someone)	<u>kuni-</u>
teach someone	<u>pinarrik-</u>
learn	<u>pinarri-</u>
promise	<u>yak-</u>

#### S. Bodily Functions

see, look	<u>mila-</u>
hear	<u>tanymili-</u>

smell it	<u>wap-</u>
lick	<u>nginung-</u>
bite	<u>wit-</u>
swallow it	<u>niyik-</u>
consume, eat, burn	<u>ngap-</u>
drink	<u>ngurluk-</u>
vomit	<u>yuruk-</u>
die	<u>nang-</u>
urinate	<u>nhar-</u>
defecate, void, eject	<u>thirraj-</u>
wake up	<u>kij-</u>
ache	<u>wurlurl-</u>

#### T. Verbs of Impact and Violence

hit, kill, fell	<u>kart-</u>
pierce	<u>nyak-</u>
kick	<u>thurlng-</u>
dig, scratch	<u>wirrij-</u>
break it	<u>tij-, karung-</u>
cut it	<u>kaj-</u>
bathe	<u>nyumpurl-</u>
tie up	<u>mirt-</u>
rub	<u>purr-, nyin-</u>
squeeze	<u>jany-</u>
cover it	<u>turn-</u>
make	<u>ngarak-</u>
cook	<u>wup-</u>

#### U. Verbs of Holding and Transfer

take it, get it, catch it, fetch it	<u>tuwu-</u>
give it	<u>ngang-</u>
put down	<u>yut-</u>
throw	<u>waj-</u>
hold	<u>kurij-</u>
carry	<u>kaliny-, wart-</u>
leave it	<u>kat-</u>
lose it, leave accidentally, forget	<u>nyin-</u>
push along	<u>luw-</u>
hang up (on peg)	<u>thart-</u>
hide it	<u>puru-</u>

find it kilpa-

V. Locationals, Directionals and Temporals

north	<u>puwurru</u>
south	<u>ngiyi</u>
east	<u>ngila</u>
west	<u>liya</u>
far	<u>marnangurru</u>
near, closeby	<u>kraa, yalawa</u>
up, above	<u>laanti</u>
down, below	<u>paapirri</u>
this side	<u>ngirntangarringka</u>
other side	<u>ngurrungarringka</u>
ahead	<u>wilangajarri</u>
behind	<u>palyuwa</u>
now, today	<u>yaningi</u>
later on	<u>wampa</u>
before, already	<u>ngamu</u>
long ago, dreamtime	<u>ngarrangkarni</u>
yesterday	<u>karrwaru</u>
tomorrow	<u>mungayayu</u>

W. Interjections

yes	<u>yuwu, yuwayi</u>
no	<u>marlami, mangarri</u>
come on	<u>pa</u>
O.K., you can go	<u>kaj</u>

## 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 of 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 (3.9.3.2); INF indicates Infinitive. SF indicates Stem forming suffix. EN indicates Enclitic. Suffixes and Enclitics restricted to the VP are denoted VSF and VEN respectively. P indicates Postposition. [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 <u>); 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.

<u>-a</u>	CL	<u>-A</u> 'extend' - 3.9.3.2.1, 6.5.5.
<u>-a₁</u>	CL	<u>-I</u> 'go, be' - 3.9.3.2.1, 6.5.5.
<u>-ani</u>	CL	<u>-ANI</u> 'fall' - 3.9.3.2.1, 6.5.5.
<u>-arni</u>	CL	<u>-ARNI₁</u> 'emerge' - 3.9.3.2.1, 6.5.5.
<u>-arni</u>	CL	<u>-ARNI₂</u> Extendible, Reflexive/Reciprocal - 3.9.3.2.1, 6.5.5.
<u>-arri</u>	CL	<u>-ARRI</u> 'put' - 3.9.3.2.1, 6.5.5.
<u>-i</u>	CL	<u>-I</u> 'go, be' - 3.9.3.2.1, 6.5.5.
<u>-iny-</u>	PF	(2sg)A - 3.9.3.2.2.
<u>-ja</u>	VEN	Subjunctive mood - 6.5.4.1.
<u>jan-</u>	PF	(1U)A - 3.9.3.2.2.
<u>-jangi</u>	EN	Semblative, 'like' - 6.3.7.
<u>jarr-</u>	PF	(1U)N - 3.9.3.2.2.
<u>ji-</u>	PF	(2sg)N - 3.9.3.2.2.
<u>-ji</u>	VSF	Iterative - 3.12.1.2.
<u>jin-</u>	PF	(1R)A - 3.9.3.2.2.
<u>-jinga</u> (*)	SF	'emphatic/self' - 3.6.
<u>jirr-</u>	PF	(1R)N - 3.9.3.2.2.
<u>-kali</u>	SF	'good at doing' - 3.12.1.1.
<u>-ki</u>	VSF	Inceptive - 3.12.2.1.
<u>-kirrangi</u>	VEN	(2pl)O - 3.9.3.6.
<u>-kuwa</u>	VEN	Progressive aspect - 3.9.3.3, 5.5.2.5, 6.5.2.
<u>-langi</u> ~ <u>-langu</u>	SF	kin-dyad - 3.3.2, 3.12.1.1.

<u>li-</u>	PF	(1sg)N - 3.9.3.2.2.
<u>-ma</u>	VEN	Indefinite - 6.3.8.
<u>-ma,</u>	CL	<u>-MI</u> 'effect' - 3.9.3.2.1, 6.5.5.
<u>-marni</u>	CL	<u>-MARNI</u> Accomplishment, Reflexive/Reciprocal - 3.9.3.2.1, 6.5.5.
<u>-mawu</u>	INF	'-en/-ing' - 5.5.3.2.
<u>-mi</u>	EN	Indefinite - 6.3.8.
<u>-mi</u>	CL	<u>-MI</u> 'effect' - 3.9.3.2.1, 6.5.5.
<u>-mi</u>	VSF	Iterative - 3.12.2.1.
<u>-mili</u>	SF	'characterized by' - 3.12.1.1
<u>-muwa</u>	EN	'only' - 6.3.3.
<u>ng-</u>	PF	(1sg)N - 3.9.3.2.2.
<u>-ngangki</u>	VEN	(2sg)O - 3.9.3.6.
<u>-ngangi</u>	VEN	first person dual inclusive Accusative and Oblique - 3.9.3.6.
<u>-ngarna</u>	SF	'inhabitant, dweller of' - 3.12.1.1
<u>-ngarra(ki)</u>	VEN	first person singular Oblique - 3.9.3.6.
<u>-ngarraya</u>	EN	'too, else' - 6.3.5.
<u>-ngarri</u>	P	Comitative - 3.7.
<u>ngim-</u>	PF	(2sg)A - 3.9.3.2.2.
<u>ngin-</u>	PF	(1sg)N - 3.9.3.2.2.
<u>-ngirrange</u>	VEN	(1R)O - 3.9.3.6.
<u>ngk-</u>	PF	(2sg)N - 3.9.3.2.2.
<u>-ngka</u>	P	Ergative - 3.7.
<u>ngki-</u>	PF	(2sg)A - 3.9.3.2.2.
<u>ngkin-</u>	PF	(2pl)A - 3.9.3.2.2.
<u>ngkirr-</u>	PF	(2pl)N - 3.9.3.2.2.
<u>-nhi</u>	VEN	(3sg)O - 3.9.3.6.
<u>-nhingi</u>	P	Ablative - 3.7.
<u>-nyali</u>	EN	'again, repeated' - 6.3.2.
<u>-nyji</u>	VEN	Desiderative mode - 3.9.3.5, 6.5.3.1.
<u>-nyulu</u>	EN	'etc.' - 6.3.4.
<u>-pan</u>	VSF	Continuative - 3.12.2.1
<u>-pari</u>	INF	'-en/-ing' - 5.5.3.1.
<u>-pati</u>	SF	'your [kin relation]' - 3.3.2, 3.12.1.1.
<u>-pi-</u>	PF	(3pl)A - 3.9.3.2.2.
<u>pi-</u>	PF	Future tense - 3.9.3.2.4.
<u>-pi ~ -pili</u>	VSF	Iterative - 3.12.2.1.
<u>pin-</u>	PF	(3pl)A - 3.9.3.2.2.
<u>-(p)ini</u>	CC	<u>-PINI</u> 'hit' - 3.9.3.2.1, 6.5.5.



<u>-pinti</u>	CL	- <u>PINTI</u> 'get' - 3.9.3.2.1, 6.5.5.
<u>-pinyi</u>	P	Orientated ('through, via, alongside') 3.7.
<u>-pirli</u>	CL	- <u>PIRLI</u> 'consume' - 3.9.3.2.1, 6.5.5.
<u>pirr-</u>	PF	(3p1)N - 3.9.3.2.2.
<u>-pirr-</u>	PF	(3p1)A - 3.9.3.2.2.
<u>-(p)u</u>	CL	- <u>PINI</u> 'hit' - 3.9.3.2.1, 6.5.5.
<u>-ri-</u>	PF	(3p1)N - 3.9.3.2.2.
<u>-ri-</u>	PF	(3p1)A - 3.9.3.2.2.
<u>-rni</u>	EN	'next, now' - 6.3.1.
<u>-rni</u>	VEN	Potential mode - 3.9.3.5, 6.5.3.2.
<u>-rri~ -rru</u>	VEN	paucal - 3.9.3.7.
<u>-ta, ~ -ti</u>	CL	- <u>TI</u> 'catch' - 3.9.3.2.1, 6.5.5.
<u>-(w)a (*)</u>	VEN	Progressive Aspect - 3.9.3.3, 5.5.2.4, 6.5.2.
<u>-wa</u>	SF	'way' - 3.12.3.1, 5.5.1.3:
<u>-wa</u>	SF	'his, her, their kin relation - 3.3.2, 3.12.1.1.
<u>-(w)ali</u>	SF	'good at doing' - 3.12.1.1.
<u>-wangku</u>	SF	'someone associated with the place' - 3.3.5.
<u>-wanhi</u>	VEN [C]	(3sg)O - 3.9.3.6.
<u>-wany</u>	SF [C]	'other, different' - 3.12.1.1.
<u>-warni</u>	VSF	Iterative - 3.12.2.1.
<u>-warnu</u>	SF	'all members of the subsection' - 3.3.2, 3.12.1.1.
<u>-warra</u>	SF [C]	Manner - 3.12.3.1, 5.5.1.4.
<u>-warrawarra</u>	SF	'everyone associated with the place' - 3.5.5.
<u>-warri</u>	VEN [C]	paucal - 3.9.3.7.
<u>-warri</u>	VSF	Iterative - 3.12.2.1.
<u>wi-</u>	PF	Present tense - 3.9.3.2.4, 6.5.1.2.
<u>wi-</u>	PF	Irrealis tense - 3.9.3.2.4, 6.5.1.2.
<u>-wila</u>	VEN [C]	Factive mood - 3.9.3.3., 6.5.4.2.
<u>-winyja</u>	P	'for lack of' - 3.7.
<u>-wirrangi</u>	VEN	(3p1)O - 3.9.3.6.
<u>-wirri</u>	EN	'identity unknown' - 6.3.6.
<u>-wu</u>	VEN	Definite - 3.9.3.5, 6.3.9, 6.5.3.3.
<u>-wu</u>	P	Dative - 3.7.
<u>-ya</u>	P	Locative - 3.7.
<u>-yali</u>	SF	'good at doing' - 3.12.1.1.
<u>-yangka</u>	P	Ablative - 3.7.
<u>-yarnti</u>	P	Plural - 3.7.
<u>-yarrangi</u>	VEN	(1U)O - 3.9.3.6.

<u>-yayu</u>	P	Allative - 3.7.
<u>yi-</u>	PF	Irrealis tense - 3.9.3.2.4, 6.5.
<u>-yi</u>	VEN	'dual' - 3.9.3.7.
<u>-yila</u>	SF	'un-/-less' - 3.12.1.1
<u>-yirra</u>	P	Allative - 3.7.
<u>-yirri</u>	P	Dual - 3.7.
<u>-yu</u>	VEN	'dual' - 3.9.3.7.
<u>-yu</u>	P	Dative - 3.7.
<u>-yurru</u>	P	Dual - 3.7.

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