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ANINDILYAKWA PHONOLOGY AND MORPHOLOGY

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A dissertation submitted in fulfilment
of the requirement for the degree of
Doctor of Philosophy.

Department of Anthropology

University of Sydney

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In Memory of

TAPINKUTA YANTARRNGA

who preferred non-Aboriginals to call her

MRS. KATIE HERBERT

wife of Edward Herbert and mother of

Betty, Richard, Jessup, Joseph and Terrence.

ACKNOWLEDGMENTS

I am deeply indebted to the Warnindilyakwa people in the Umbakumba township for the free access they have given me to their language and culture. I am grateful to the elders who offered me clan affiliation and placement in a family as sister to one of the (then) matriarchs. Their wisdom in giving me a personal name, the derivation of which is 'father's sister', allowed me easy access to both male and female members of the community.

Many friendships have been forged in my years of residency at Umbakumba. Tapinkuta (Katie) Yantarrnga with whom I worked almost daily for five years was much more than a language assistant--she became my friend, mentor and linguistic colleague. The other Aborigines who deserve special mention are Katie's two sisters, Tapitakuma (Mariya) and Tapinkanga (Elizabeth) Yantarrnga, Tungmalbudiya (Mabuda) Mamarika, Talinjawayina (Stella) Yantarrnga, Wakaba Bara, Tumerrikiringka (Mary) Wurrawilya, Arthur Bara, Narijanga (Alec) BaraBara, Mangkwuta (Jack) Wurrawilya and Phillip Wurrawilya.

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ABBREVIATIONS & CONVENTIONS

:	vowel length in data, between subject and object in derivations, and between literal meanings for stems
+	morpheme boundary
#	precedes the object morpheme
-	precedes the suffix or clitic in gloss
=	extended meaning
[]	encloses phonetic transcription, conjunctive feature specifications in phonological rules, and extra information in translations
/ /	encloses deep structure representation
{ }	encloses disjunctive feature specifications in phonological rules and deleted segment/s in derivations
()	encloses optional segment/s
==>	rewrites as
-----	in charts: obligatory absence
∅	zero morpheme
ABL	ablative
ACC	accusative
ALL	allative
ALP	alienable possession
ANG	Angurugu communict
ASSIM	assimilation
ASP	aspect
ASR	adjectiviser
BENE	benefactive
C	consonant
CAUS	causative
CDR	consonant de-rounding
CofR	change of referent
COM	comitative case
comp.act	completed action
cont.act	continuing action
CSL	causal, reason
DIMIN	diminisher
DU / du	dual
EM	empty morph
ENG	English language
ETC	et cetera in the Number suffix
exc(1)	exclusive
fem	feminine
FF	flip-flop rule
GDR	gender
GP	Gupapuyngu language
HAPL	haplology rule
hfem	human feminine
hmasc	human masculine
INALF	inalienable possession
inc(1)	inclusive
INCH	inchoative
INTENS	intensifying
KPOSS	possessive case for kinship
LOC	locative case
LPRG	pergressive case for location
MA	modern Anindilyakwa
masc	masculine gender
MK	Makassan language

NCL	noun class / nominal prefix nucleus ???
NEV	negated actual aspect
NG	Nunggubuyu language
n-hfem	not human feminine
NPIP	non-past imperfective aspect
NPTNS	non-past tense
NON-SG / Nsg	non-sg non-singular
NSR	nominaliser
NTR	pause-final or word-medial neutralisation
OBJ	object
ODU	dual object
OPL	plural object
ONsg	non-singular object
PIP	past imperfective aspect
PL / Pl	plural
POSS	possessive case
PRF	perfective aspect
PRIV	privative
PROP	propriative
PTNS	past tense
PURP	purposive case
QM	question clitic
R	rounded
RECP	reciprocal
REDUP	reduplication
REFL	reflexive
SDEL	morpheme-final CV deletion
SDU	subject dual
SF	stem formative
SG/ Sg	singular
SNsg	non-singular subject
SPL	subject plural
TA	traditional Anindilyakwa
TNS	tense
TPRG	pergressive case for time
tri	trial
TRM	terminative
TSR	transitiviser
UK	Umlakumba communict
V	vowel
VBK	vowel backing
VCL	verb class
VFR	vowel fronting
VLW	vowel lowering
VRD	vowel rounding

Numbers refer to the first, second and third persons or the noun class in the prefixes and to the verb class in the suffixes. For Noun Class 3:1, the absence of any overt marking of number indicates plurality in all prefixation except the object prefix in the verb which is always non-singular. For Noun Classes 3:2 to 3:5, the absence indicates singular.

The deep structure high central vowel phoneme /ɨ/ is represented by i in all data except that between phonetic brackets.

The rewrite arrow ==> between two forms of the same morpheme within the deep structure (enclosed in slash brackets) avoids having to use multiple lines for word derivations.

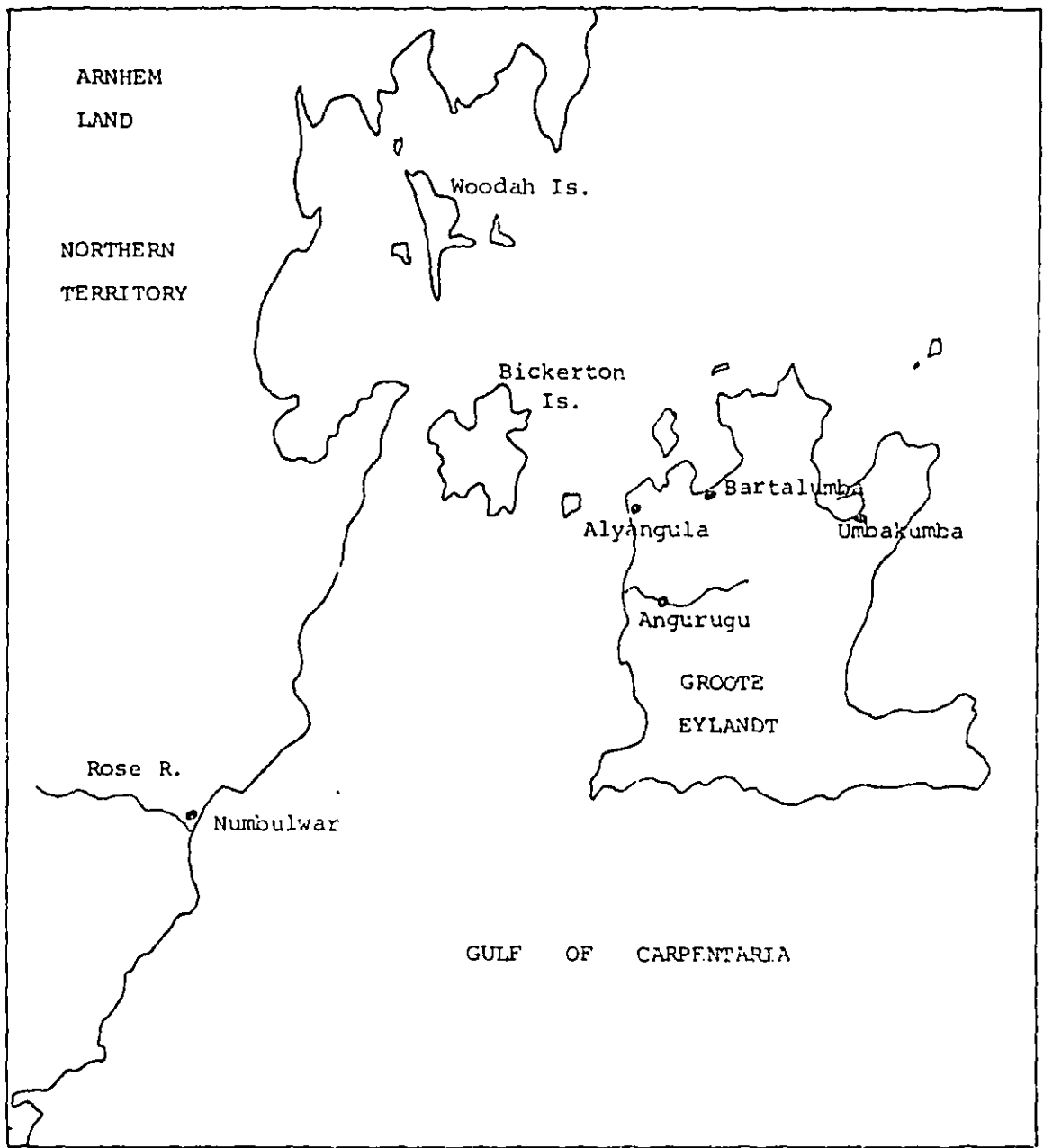
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PHONOLOGICAL RULES

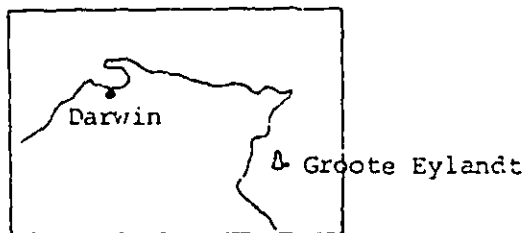
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GROOTE EYLANDT, NORTHERN TERRITORY

(approx. 800 sq. miles)



1.1 Language identification

Anindilyakwa [enintilyakwa] is the language spoken by over 1,000 Warnindilyakwa Aborigines on Groote Eylandt, Northern Territory. In the Australian language families, it is placed in the Groote Eylandt Family (Oates 1970:15) or the Andilyaugwan Family (Wurm 1972:117). As Yallop (1982:40) reports, Anindilyakwa and Nunggubuyu "are similar in grammar and possibly share the distinction of being the most grammatically complex Australian languages. They are diverse in basic vocabulary, however, and are therefore allocated to separate families". My research bears this out but there are many more cognates than previously recognised. The Warnindilyakwa refer to the Nunggubuyu and their language as the Yingkwira. The root of this name refers to the north-west monsoonal trade winds (the direction in which they live), and the prefix indicates a personified masculine being from the Dreamtime. In the traditional story about Yantarrnga or Central Hill (see Text) and other stories, the journeys begin on the mainland to the northwest.

Ceremonial interaction traditionally involved Aboriginal tribes from Rose River to Elcho Island. Inter-marriage still occurs between the two groups by negotiation but, in the olden days, wives were stolen by raiding parties as far south as Borroloola. Intermittent contact with other nations has occurred for at least two to three centuries. Traders from Macassar, a port in southern Celebes (Republic of Indonesia), used the trade winds to facilitate the collecting of trepang and tortoise shell (MacKnight 1972:283). The Macassan language was probably Bugi (Cole 1971:7) and about forty

words were borrowed and adapted into the Anindilyakwa phonological and morphological systems. The Japanese were also encountered but there seems to be little record of actual trading. Information (personally collected) only involves the exchange of vegetable foods for rice.

Regular contact with Europeans began when Fred Gray settled at Umbakumba in about 1938. He acted as liaison between the Aborigines and the officials at Port Langdon Flying Boat Base, established on the shore of Umbakumba Lagoon. At the request of the Australian government after World War II, Fred and Marjorie Gray operated a school, dispensary and gardens. From 1958-66, Umbakumba was administered by the Church Missionary Society (Anglican). It was then under the jurisdiction of the Department of Aboriginal Affairs until the self-development policy led to the formation of the Umbakumba Community Council in the 1970's. The township of Angurugu began in the 1940's after an earlier settlement at Emerald River where CMS established a home for part-aboriginals from the Roper River area. Their administration extended to meet the needs of the whole community and continued until self-development.

The Warnindilyakwa live primarily in two townships today, viz., Umbakumba with approximately 300 people and Angurugu with approximately 700. A few live at Alyangula (a mining town operated by the Groote Eylandt Mining Company, a subsidiary of Broken Hill Proprietary) and others at Numbulwar and Darwin. In 1922, Norman Tindale (1925/6:64) liberally estimated the population of the Groote Eylandt Archipelago to be little more than three hundred. Of the twelve local groups (Turner 1974: 8), the Mamarika or Amagula are recognised as the "original owners" of the land and the language. The names of the local groups, with some additions, are used as surnames. The five main surnames at Umbakumba are Mamarika, Yantarrnga

(Wurrawakwa), Bara, BaraBara and Wurrawilya. Aboriginal names were used by non-aboriginals until about the 1960's when teachers demanded that English names be given. Not all young Aboriginal parents know their childrens' Aboriginal names nowadays but these are recorded on birth certificates.

The Groote Eylandt Aborigines speak English with varying degrees of competency. Only a small number in the two Aboriginal townships can find work as teachers, health workers, shop assistants, office staff, carpenters, mechanics and labourers. A few others are employed in the mining town in public relations and as equipment operators, as well as some of the above activities.

1.2 Techniques for data collection and analysis

Analysis is based on data collected during about six years of residency between 1974 and 1981 (five and a half years at Umbakumba and the remainder at Angurugu). I was employed by the Northern Territory Department of Education as linguistic adviser in the bilingual education programs on Groote Eylandt and at Numbulwar. My involvement with the Numbulwar language began in 1966 and continued intermittently until 1979. In 1982, I edited the Gupapuyngu dictionary compiled by Beulah Lowe et al.

From the outset, I encouraged the Umbakumba community to teach me what they felt was valuable and to correct any errors. They continue to take an interest in the accuracy and comprehensiveness of my data. While the detailed checking has been done in my own home every effort has been taken to work in their homes and on impromptu trips to more remote areas of the island. As language work has often been done at the instigation of the Aborigines themselves there have been some very late night sessions, especially during the wet season.

Interested Aborigines would gather around whenever I visited the Aboriginal homes and younger English-speakers would act as translators for the more complex cultural or linguistic information being provided by the older generation. The men have been mostly interested in vocabulary items for flora and fauna and in their lexical meaning; the women have offered similar data but took great interest in the linguistic structure and the accuracy of English translations.

Language assistants were encouraged to think of themselves as part of the process of gathering and analysing the data. This led to the documentation of comments which proved invaluable in later analysis and to the discussion of specific linguistic problems. For example, my first assistant (an eighteen-year-old) commented on the habitat of one noun class of plants and this helped me to discern the semantic criterion for the most marked of the two non-personified classes. Another literate, middle-aged assistant was competent in writing consonants but extremely frustrated at having to guess at how to write the four vowel graphemes. I set up a framework for checking high vowel allophones in the stressed penultimate syllables and she converted all vowels to the basic allophone (irrespective of environment) and commented, "See, they're all the same."

Texts used in the research and analysis are traditional, historical or modern narratives recorded on cassette tapes (with or without an audience), original or translated stories hand-written by Aboriginal literates, reports from conferences, expositions, exhortations and news from the local paper. In the traditional stories, narrators usually act as unseen observers of the event or activity and much of the story uses the equivalent of a past continuous tense (apart from specific discourse features). For this reason, there is a high percentage of such structures and somewhat

awkward free English translations in the textual examples. The written texts displayed greater accuracy in syntactic features than did some of the oral texts.

Elicitation was the only technique by which the extensive prefixation could be obtained because relatively few forms occur in the large number of texts. Language assistants were very competent in checking prefix sets in paradigmatic lists using the same root. Translated stories were checked for grammatical acceptance and accurate free translations by at least one person other than the author. I used a question and answer technique for other elicited data whereby language assistants could choose their own answers.

Idiomatic meanings are not always explained throughout the thesis because they are based on detailed cultural information. Most can be observed by comparing the literal gloss with the free translation. The cultural information will be documented in the forthcoming Anindilyakwa Encyclopaedic Dictionary and volume of texts.

1.3 Overview

The theoretical approach in this thesis is eclectic and comes from a background in Tagmemics, Transformational-Generative and, to a lesser extent, Systemic models. The most appropriate model (with modifications) has been chosen in handling different aspects of the analysis, e.g., the Chomskyan transformational-generative model for phonological rules. The thesis is a description of the Anindilyakwa language, rather than a theoretical discussion.

There are two major divisions--the phonological (see Section 2) and the morphological (see Sections 3-8). The morphological system is reduced to the minimal number of allomorphs by the positing of a phonological system with only two deep structure vowels. Without such an analysis, the morphological system is difficult to perceive

because of the number of phonetic variants for each root and affix.

1.3.1 Phonological

The analysis of the Anindilyakwa phonological system in this dissertation supersedes that in the Master of Arts thesis (Leeding 1979). An increased knowledge of the morphological structure provided new insights into the phonology and led to a complete re-write. The morphological information and added data resulted in the establishment of a two-vowel system (identified since 1975 but not adequately attested). The morphophonemic analysis is greatly expanded but the spectrograms in the MA thesis are not reproduced here.

Anindilyakwa has thirty-two consonants which distinguish six points of articulation. The apico-alveolar consonants mostly occur in loanwords or through the loss of retroflexion. The consonants are analysed in terms of peripheral versus non-peripheral, with only the peripheral consonants being rounded. Such rounding is a prerequisite to the positing of only two deep structure vowels. Pre-nasalised stops are analysed as single, complex phonemes. (See Section 2.2.)

The two deep structure vowels are the high central /ɨ/ and the low central /a/. Six phonetic features (high, low, peripheral, laminal, round and tense) separate the large inventory of vowel allophones. The consonants carry a very high functional load and condition the vowel allophones via rules for fronting, rounding, backing and lowering. Generally speaking, a contiguous laminal consonant fronts the vowels and a contiguous rounded consonant backs and rounds the vowels. As the phonological rules for fronting and rounding are iterative vowel harmony often occurs in the longer words. (See Section 2.3.)

The word-final vowel is neutralised to the low vowel /a/,

resulting in almost all words in the language ending with /a/. The word-medial, morpheme-final vowel is neutralised to the high vowel /ɨ/. (See Section 2.1.) Conversely, a low vowel occurs at morpheme boundaries between two similar consonants to prevent deletion of the first syllable (see Section 2.3.2.4).

The distribution of consonants and vowels is described in terms of the syllable. Up to fourteen syllables can occur in a lexical word but there are some restrictions in the positioning of certain syllable types. Loanwords are frequently recognised by their unusual consonant sequences. (See Section 2.4.)

Frequent truncation of the multi-morphemic words in Anindilyakwa does occur even though words average five to eight syllables. Most shortening is systematic and due to the application of the phonological rules for vowel and syllable deletion, coalescence and initial-segment dropping. (See Sections 2.5 and 2.10.) Metathesis of syllables, and to a lesser extent, consonants or vowels, often reduces the number of reduplicated syllables because of the subsequent application of the Haplology Rule (see Section 2.5.2.1). Regressive assimilation of the nasal to the following stop is very common across morpheme boundaries but occasional unsystematic assimilation occurs progressively (see Section 2.7). Fortition of peripheral nasals and laminal consonants to obstruents is conditioned by the preceding consonant (see Section 2.12).

There is a noticeable loss of retroflexion from the nasal /rn/ which has been observed during the last fourteen years. This loss is neutralising some contrasts in lexical words and is increasing the occurrence of the alveolar nasal. Such loss of retroflexion is not occurring with other retroflexed consonants. (See Section 2.11.)

Another very common feature of Anindilyakwa is the

reduplication of roots or stems. It is analysed in relation to the syllable rather than the phoneme because the system is more readily discernible in larger "chunks". Reduplication denotes intensity or plurality depending on the word class. (See Section 2.8.)

A systematic analysis of the suprasegmental features has yet to be undertaken. Syllable prominence (lexical word stress) usually falls on the penultimate syllable but can vary according to its position of the word in the larger phonological unit. Timing/rhythm is more important than word stress and is maintained by deletion or insertion of syllables. (See Section 2.13.)

1.3.2 Morphological

Anindilyakwa is a multiple-classifying prefixing language. It has seven word classes which can be distinguished by their internal morphological structure. These classes are nouns, adjectives, personal pronouns, demonstratives, verbs, adverbs and particles. The distinctions are made by (a) the presence or absence of prefixation, (b) separate sets of roots, and (c) differences in the derivational suffixation or the presence of inflectional case clitics. Concord in the noun phrase is expressed through its nominal prefixation and this is also in agreement with the subject/object prefixation in the verb.

1.3.2.1 Nouns and adjectives

Nouns are distinct from adjectives mainly because of (a) the presence of a nominaliser or possession marker; (b) the restriction in the number of nominalising prefixes; and (c) the affixing of the adjectival modifier and not the noun head within the noun phrase. Both, however, are marked by the same set of nominal classifiers and take the same derivational and inflectional suffixation. (See

introduction to Section 3.)

Within the Nominal Prefix Nucleus, three distinctions for first, second and third persons are marked on all adjectives and common nouns. There are four distinctions for number, viz., singular, dual, trial and plural. The trial number was traditionally paucal. An additional plural number morpheme can optionally follow the nominal nucleus. Gender can be marked more than once in the same word and is frequently redundant for human classifications. The person prefixes incorporate a contrast between human masculine and non-human masculine, versus human feminine and non-human feminine. The additional gender morphemes which follow the nucleus has a change of focus in that it marks human feminine as opposed to all other non-human, feminine animates or inanimates. (See Section 3.3.1.)

One of the most interesting discoveries is the semantic criteria upon which to base the noun classes which are part of an over-all gender system. They fit into a hierarchical system of binary oppositions in which the highest rank is that of Personified (human or classified as human or powerful during the Dreamtime) versus non-personified. The Personified further divide into the grammatical categories of human versus non-human, masculine versus feminine, and singular versus non-singular. The semantic concepts of lustre or luminosity, and visibility are used to distinguish the two Non-personified noun classes. (See Section 3.3.2.)

A second significant discovery is the semantic nature of the noun and adjective roots. Noun Roots are body parts, usually of humans but, at times, more directly related to non-human animates. Shape Adjective roots describe shapes and are related to the shapes of body-parts; and a second set of adjective roots describe the physical characteristics or human attributes. Thus concrete objects

can be described in terms of their appearance, i.e., one or more of their predominant characteristics. The same roots and stems are used for both nouns and adjectives. Three different roots form the maximal number in any given word but the last two roots are always a compound stem; a compound stem consists of two different roots; and the minimal form is a single or a reduplicated root. (See Section 3.1.)

Nouns are divided on the basis of their morphological structure into basic, derived, kinship and adverbial. The derived nouns are formed from verb, adjective or adverb roots by the addition of a preceding nominaliser or possession morpheme. All (except kinship nouns) take a restricted number of nominal classifiers. Proper, common and abstract nouns all can occur in Anindilyakwa. Adjectives are divided into basic, derived and interrogative; all take the full set of nominal classifiers. The derived adjective has an adjectiviser preceding a verb or adverb root. (See Section 3.2.)

Nominal suffixation is restricted to number morphemes which distinguish dual from plural, and possession. The marking of number is frequently redundant with Personified prefixation but marks the non-singular in the Non-personified classes. The possessive suffixation denotes general possession or kinship possession. The seven morphemes for kinship possession distinguish person, number and gender. (Note: It is the Possession nouns that focus on inalienable versus alienable possession). (See Sections 3.4.1 and 3.2.3.3.)

The noun phrase is inflected by five peripheral case clitics but is unmarked for nuclear cases other than Dative. The adjectival modifier takes the case-marking clitic when a noun is the head of the phrase. The peripheral case clitics for Locative, Ablative, Pergressive, Allative, Comitative can be adjoined to all word classes, except particles. The noun phrase is not inflected for Nominative and

Accusative cases and it is therefore controversial as to whether a grammatical case function can be posited. There is no specific Dative case-marker on the indirect object but the noun phrase or pronoun is inflected by other case clitics or purposive mood. Multiple case-marking does occur but its analysis is not included in this thesis, pending further investigation. (See Section 3.4.3).

1.3.2 Pronouns and demonstratives

Personal pronouns are a closed set of twenty-two free forms which differentiate person, number and gender. Pronouns consist of the nominal gender system (analysed as the Nominal Prefix Nucleus) plus a stem formative. (See Section 4.1.)

Demonstratives consist of the nominal prefix nucleus followed by a demonstrative root. Additional number morphemes, resembling those in the verbs, indicate dual versus plural number. These are a closed, but very numerous, set. Semantic parameters for the six demonstrative roots differentiate the realis (visible) from the irrealis (not visible, unseen or hypothetical). Distance from the speaker and/or addressee is indicated in the three realis demonstratives. One irrealis interrogative and some adverbial demonstratives occur. (See Sections 5.1 and 5.2.)

Derivational suffixation for pronouns does not occur in other word classes. There are three suffixes which modify the meaning of the pronoun. Another Change of Referent suffix found only on pronouns indicates a change of dramatic personae in discourses and is also one of the forms used for the indirect object. One of the realis demonstratives indicates anaphoric reference when there is no change in the dramatic personae. The peripheral case clitics are attached to pronouns and demonstratives; the derivational Number morphemes are found only on the demonstratives. (See Sections 4.2 and 5.4.)

1.3.3 Verbs

The Anindilyakwa verbs are very complex morphologically and their internal structure equates with or substitutes for a clause or sentence. The verb root occurs only in the final position in a compound(ed) stem. The noun and adjective roots can precede the verb root in agreement with the object of a transitive verb or the subject of an intransitive verb. The former involves alienable possession of a body part by the patient or goal of the action, not the animate in the subject; the latter involves inalienable possession by the animate/inanimate possessor in the subject. (See Sections 6.1 & 6.2.)

The five stem formatives are the Transitiveiser, Inchoative, Causative, Reflexive and Reciprocal. The Reciprocal is more often marked by the number suffix which indicates non-singularity of the subject or object. There are many pairs of intransitive verb roots which have a transitivised counterpart. The Inchoative and Causative suffixes verbalise an adjective root or compound stem (and very occasionally that of a noun). The Reflexive or Reciprocal stem formatives co-occur with intransitive prefixation. (See Section 6.2.2.)

The deep structure forms of the verb prefixes are very similar to those for nominals. The distinction between human masculine and non-human masculine is, however, neutralised in the verbs. The prefixation is cross-referenced in agreement with the subject and object. A hierarchical system operates within the verb prefixation and results in an object preceding a subject. The descending order of this hierarchy is from (a) first to second to third person, (b) third person non-singular to third person singular, and (c) Personified singular to Non-personified singular. If the subject is not outranked the normal subject-object order prevails. (See Section 6.3.)

Five different sets of verb prefixes indicate Actual, Negated Actual, Potential, Imperative and Hortatory moods. The Infinitive verb is also marked by a distinctive set of nominal prefixes which only show agreement with the subject. The Interrogative mood is distinguished from some of the above only by intonation.

The subject and object prefixes can be followed by morphemes which indicate duality and plurality of an intransitive subject or a transitive object. The number prefix can optionally co-occur with a number suffix indicating non-singularity of the subject or object. A Benefactive morpheme optionally precedes the verb stem and is cross-referenced with the animate in the noun phrase in the indirect object and not the inanimate object of the verb.

Verbs are suffixed for tense and aspect. The combined past and non-past tenses arbitrarily assign a verb root to a particular verb class. Tense is not always marked and some tense distinctions have been neutralised, probably through the loss of retroflexion. Only one verb class follows verb roots affixed by a stem formative and this classification supersedes that of the same (unsuffixed) root. The low functional load for tense is probably due to the fact that the aspect suffixation also incorporates tense. Completive aspect is unmarked, but past non-completive and non-past non-completive morphemes are commonly affixed to the verbs. (Note: Past and non-past participial structures, e.g., 'I saw him sleeping/asleep', occur in Anindilyakwa and appear to be distinguished by the co-occurrence of specific mood prefixes and aspect suffixes. This analysis awaits further investigation.) (See Section 6.4.)

The peripheral case clitics can occur on the verb with the same meaning as for the noun phrase but three of them also function as subordinators. (See Section 3.4.3 and 8.1.2.)

1.3.4 Adverbs and particles

Adverbs are a separate word class from particles because they can take peripheral case-marking. The analysis of particles includes the modal or non-modal clitics. Both word classes are small closed sets. (See Chapters 7 and 8.)

Adverbs are divided into three groups: locative, progressive and manner/time. The locative and progressive adverbs are described in terms of binary oppositions which denote a contrast between speaker-oriented and environment-oriented. Many of the words which function as time adverbs have the same morphological structure as nominals (see Section 3.2.6). The derivations of the adverb roots and stems have been difficult to determine and await further field work. Some of the interrogative adverb roots are related to those in the demonstratives and adjectives but do not have any nominal prefixation.

There are six free form particles which indicate co-ordination between independent clauses. The seven subordinating conjunctions are free forms or clitics and conjoin dependent and independent clauses or two noun phrases. Three of the case clitics are used for such subordination. Five free form particles and one clitic modify the action of the verb or convert it into an interrogative. The remaining particles are interjections or are clitics which denote intensification or termination of an episode in the discourse.

Anindilyakwa is one of the few languages in the world that distinguishes only two vowel phonemes by tongue height. Consonants carry a much higher functional load than the vowels but consonant clusters are not frequent or complex when compared with neighbouring Aboriginal languages. Rounding versus non-rounding is distinguished in the peripheral consonants but not the non-peripheral. The rounded and laminal consonants, generally speaking, condition the numerous vowel allophones.

The features which condition vowel allophones could only be posited after morpheme boundaries had been established. The morphological analysis revealed that segments which are the conditioning factors in the deep structure can be deleted in the surface structure of certain words. Neutralisation of the vowel contrast word medially and finally in the surface structure also obscures the identity of conditioning factors in the deep structure. The phonological system most clearly observed in the reduplication of roots or at morpheme boundaries. It is described in terms of deep structure morphemes which always end in a vowel.

A phonological word or unit of vocabulary (apart from a few one-syllable particles) consists of two to fourteen syllables because almost all words are multi-morphemic. Primary stress usually falls on the penultimate syllable. A phonological word can consist of one or more lexical words and is identified by the final vowel /a/.

The main difficulty in analysing the phonology is not in recording the phonetic data but in making decisions within the phonological domain. Even though a few minimal pairs of words occur

for phonetic contrasts in the vowels, phonetic variation in the vowels is extensive. The problem is resolved by focussing on the morphemes, rather than the multi-morphemic words.

In linguistic literature where phonological systems with vowels distinguished only by tongue height have been discussed, the languages of the North-west Caucasus have been a focal point in linguistic literature for many years. Trubetzkoy, in his 1939 analysis of Adyghe (and possibly Abkhaz and Ubykh), posits that three short vowels are rounded or fronted by labialised or palatalised consonants, respectively; and that variations are dependent on the environment and not a part of the vowel itself (Hockett 1955: 84ff). Anderson (1978: 49) reports that "the reduction of the short vowel system to two elements, /a/ and /ə/ defined essentially as by Colarusso, is agreed on by virtually all investigators". The analysis in this paper shows that Anindilyakwa has a similar phonological system.

Some languages in Papua New Guinea and Nigeria also have vowel systems which distinguish three vowels on the basis of tongue height. Pike (1964:31) states that the predominant conditioning factors of these three vowels are palatalised or labialised consonants. Allophones of the high vowel as opposed to a composite non-high (i.e. mid and low) vowel correlate with those of the two vowels in Anindilyakwa. The feature of reduplication which is crucial in identifying rounded consonants and neutralised vowels in Anindilyakwa is stated to be one of the criteria for establishing labialised peripheral consonants in Dobu (Lithgow 1977: 75-79). The Nigerian language, Higi, is said to have a three-vowel system with allophones across the vowel chart, conditioned by complex rounded or laminalised consonants (see Mohrlang 1972) but these vowels can be further reduced to two by morphological rules.

In Australia, there is at least one other language family which distinguishes only two phonemic vowels by tongue height, viz., the Arandic dialects in the Alice Springs area (see Koch 1984: Kaytej, Morris (personal communication): Alyawarra). From my own experience (supported by Breen 1979), it is also probable that Tiwi (Bathurst Island) has or had a two-vowel system. Kaytej has a contrast between rounded and unrounded for all consonants; Anindilyakwa has the same contrast between peripherals only; and Tiwi has the contrast in peripheral consonants but with traces of the system for non-peripheral consonants. These languages, together with Anindilyakwa, are in three different geographical areas and are separated by intervening languages which do not have two-vowel systems.

Anindilyakwa has minor communict differences between speakers who reside at Umbakumba or Angurugu (see Section 2.2.3.1). With intermarriage and movement because of employment, regional variants are now found in both communities. The Aborigines, however, still associate the variants with the specific community. The older generation also still identifies words which originated in Makassarese or Nunggubuyu. Segments that did not occur in Traditional Anindilyakwa were assimilated into the phonological and morphological systems but, in the last decade or so, later borrowings from English vary from the original to assimilated pronunciations (Leeding 1984b). Nunggubuyu loanwords are often not assimilated at Angurugu where the language co-exists with Anindilyakwa.

2.1 THE PHONOLOGICAL WORD

A phonological word can consist of one or more lexical words. The pause-final demarcative feature (NTR.2) of the phonological word is the neutralisation of the final high or low vowel to the low vowel

/a/.¹ A lexical word can be the minimal representation of a phonological word. Examples of the Pause-final vowel neutralisation in the phonological word consisting of more than one lexical word are as follows:

narrikpa nakina
[nefikpinakina]
'He threw it.'

yimwarntakıwapwa yakina
[yim^waŋtak^wuwap^wiyakina]
'that blue-tongue lizard'

arakpwiwiya akina apwırtha alharrkpwılhalhaka
[arakp^wuwıyakınap^waŋta (pause) a]a^wk^wu]a]a^wka]
'A long time ago that whale was very thin.'

The citation or surface forms of almost all lexical words in Anindilyakwa end in /a/. The very limited number in which the word-final vowel is not neutralised to the low vowel fall into the following categories:

(i) interjections and vocatives

yakayı	[yaká ^r ı]	'ouch!'
kartıyı	[kaŋı́:]	'watch out!'
ngwayı	[ngwe ^r ı]	'stop staring!'
ngarntayı	[ŋaŋta ^r ı]	'mother!'
naratjawı	[naŋatja ^v ı]	'Naratja!'

(ii) shortened forms of personal names

thalhi	[t̥alı]	'Talıpiyantja'
napi	[nepi]	'Napingkikalkuma'

Footnote 1: Hale (1973:422) proposes a lowering rule to handle a corresponding difference in a word-medial /u/ and a word-final /a/ in Lardil which is spoken in the islands east of Groote Eylandt. A final high vowel or the absence of any vowel can, however, occur word-finally in Lardil.

(iii) loanwords

tjingwilili	NG	tjingwurlirli	'Carissa shrub'
tingkiyi	ENG	dinghy	'small boat'

(iv) baby talk

yimi	for	yima	'excreta'
amimi	for	angamwina	'breast milk'
tjitjitji	for	wirratjitja	'bird (gen.)'

The pause-final neutralisation to the low vowel /a/ can also be clearly seen in word-final position in comparison with cognates in other neighbouring languages.

arrirra	NG	ariri	'wind'
tjiwirra	MK	tjorra	'book'
thingaya	NG	ngayi	'widow'
ngaya	NG	ngaya	'I'
ngarnta	GP	ngaarnti	'mother'
angwira	NG	ngura	'fire'
anitja	MK	anisi?	'alcohol'
lipwanga	MK	lipangi	'bait'
awirikwa	NG	wuruku	'swamp'
mwalhamwikwa	GP	thamukku	'canoe'
mwikayiwa	GP	kay?wu	'dillybag'

The word-medial demarcative feature (NTR.1) is the neutralisation of the morpheme-final vowel to the high vowel /ɨ/ (except for a high vowel fronted by Vowel Fronting Rule 1). In the deep structure (underlying representation), a morpheme always ends in a vowel, not a consonant. The following examples show this neutralisation in words with reduplicated roots or in the contrast

between a citation and a suffixed form of a word.

angalya	/a + ngalya/	'home country'
angalyiwa		'to home'
yikwithikwitha	/yi + kwitha + twitha/	'chest'
yikwithikwithimwantja		'on the chest'
thimwarrngimwarrnga	/tha + mwarrnga + mwarrnga/	'cricket'
thimwarrngimwarrngilhangwa		'cricket's'
mwiyarrrmiyarrrma	/mwa + yarrrmi + yarrrmi/	'thin [rope]'
mwiyarrrmiyarrrmikwiya		'two thin [ropes]'

2.2 CONSONANTS

In Modern Anindilyakwa (MA) there are thirty-two contrastive consonants: eight stops, eight nasals, eight homorganic pre-nasalised stops, four laterals, two rhotics and two semi-vowels, as shown on Table 1. The unrounded consonants contrast at six points of articulation but the rounded consonants contrast at only two points. Non-peripheral consonants are unrounded but peripheral consonants divide into two symmetrical sets on the basis of rounding.

In Traditional Anindilyakwa, the alveolar series was not part of the phonological system. The alveolar phonemes /t/, /n/, /nt/ and /l/ occur only in loanwords; the phoneme /n/ also occurs in affixes where there is evidence of a loss of retroflexion (see Section 2.11.2). Flap /rr/ usually has an apico-alveolar articulation but, in the operation of phonological rules, functions as a member of the laminal series. The retroflexed lateral /rl/ occurs in only one loanword at Umbakumba and in about six loanwords at Angurugu.

TABLE 1: CONSONANT CONTRASTS

	PERIPHERAL				NON-PERIPHERAL			
	LABIAL		DORSAL		APICAL		LAMINAL	
	bilabial		velar		alv	retr	dent	pal
	+R	-R	+R	-R				
Stops	pw	p	kw	k	t	rt	th	tj
Nasals	mw	m	ngw	ng	n	rn	nh	ny
Pre-nasalised stops	mpw	mp	ngkw	ngk	nt	rnt	nth	ntj
Laterals					l	rl	lh	ly
Rhotics and Semi-vowels	w					r	rr	y

Peripheral consonant contrasts

apwarta	'agile'
apa	'any?'
amwalya	'body fat'
amapa	'song'
ampwaka	'later on'
amwamparrkwa	'ten'
akwalya	'fish (gen.)'
akalya	'untrue'
angwalha	'Mud Crab'
angapwa	'that'
angkwapwikwapwa	'taboo'
angka	'other'
awa	'liver'

Non-peripheral consonant contrasts

thirrapwata	'blade spear'
amwarta	'grass'
mwatha	'ear'
yaratja	'Gould's Goanna'
anana	'this'
amwakarna	'spear shaft'
yinhanha	'fingernail'
anyarrngwa	'tame'
nipwalanta	'white man'
angwarnta	'stone'
thilhantha	'Little Rock-wallaby'
alhikwantja	'dance'
thimpwala	'cloth'
mwarliwiya	'Emu'
akwalha	'several'
alya	'slime'
arakpwa	'already'
arrakpa	'outside'
ayakwa	'speech'

In Traditional Anindilyakwa, very little free variation occurs between consonant phonemes within morphemes, especially those that carry the lexical meaning. It seems to me that this is a necessary correlate of the high functional load for consonants. In MA, such variation occurs in loanwords because some of the younger generation do not assimilate foreign sounds into the Anindilyakwa phonological system.

2.2.1 Consonant features

Feature oppositions for consonants are modifications of those proposed by Dixon (1980: 180ff). His terms proved to be a concise way of identifying the consonants but extra terms have been added where necessary. Table 2 lists the phonological features for each consonant.

Five features for point of articulation and one for manner of articulation are the only ones necessary for the operation of vowel allophony rules because the vowels are fronted or backed primarily by the tongue or lip position of the contiguous consonant. The six features are as follows:

- ± peripheral
- ± laminal
- ± retroflex
- ± dental
- ± round
- labial/dorsal

The following features for the manner of articulation are used in the morphophonemic rules:

- ± obstruction
- ± partial passage of air
- ± side passage of air
- oral/nasal

The term rounding is used in this paper in preference to labialisation so that one term covers the same feature in both consonants and vowels. Labio-velar is used to distinguish rounded and unrounded velar consonants. This adopts Ladefoged's suggestion (1971:59ff) that, in cases of double articulators with two equal

TABLE 2: CONSONANT FEATURES

	pu	p	mu	m	apu	ap	ku	k	ngu	ng	ngku	ngk	t	nt	rt	nt	th	nth	tj	ntj	o	rn	nh	ny	l	rl	lh	ly	r	rr	w	y
± obstruction	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
± peripheral	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
± laminal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
± retroflex	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
± dental	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
± partial passage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
± side passage	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
± round	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
oral	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
nasal	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
labial / dorsal	l	l	l	l	l	l	l	l	l/d	d	l/d	d	l/d	d	l/d	d	l/d	d	l/d	d	l/d	d	l/d	d	l/d	d	l/d	d	l/d	d	l/d	d

degrees of stricture, the action of the lips be regarded as secondary articulation and an additional place of articulation added.

2.2.2 Obstruents

2.2.2.1 Stops

Stop phonemes (other than pre-nasalised stops) are usually voiceless and unaspirated. Spectrograms (Leeding 1979: 56-61) indicate, however, that word-medial stops following a vowel or nasal can be voiced up to a maximum of 40% of their duration. The stop in the pre-nasalised stop complex can also be voiceless or have a voiced onset.

The unrounded labial stops occur phonemically only as the last consonant in a morpheme in the deep structure. In the surface structure, phonetic realisations are created by the Consonant De-rounding Rule (see Section 2.5.3).

Any variation between an obstruent and another consonant is rare, occurring mostly in regional variants or in loanwords. In the latter, the consonant varies between the original pronunciation or one which has a feature of the original.

mwithiyalya	~	ANG	mwitjiyalya		'beach'
mirritjina	~	ANG	mititjina		'medicine'
pwirrpwila	~	ANG	pwitpwila	ENG football	'ball'
thilingana	~	ANG	yilingana	MK tje?la	'salt'
rtakirtaka	~		takitaka		'duck'

A sequence of two identical stops occurs in a few words, most of which are unassimilated loanwords. The first consonant is unreleased and triggers the fortis articulation of the second. In both Traditional and Modern Anindilyakwa, the sequence [ppw] can

freely vary with the heterorganic di-cluster /kpw/, i.e., the first consonant assimilates to the point of articulation of the second. Some Warnindilyakwa speakers are aware of the variation between [kpw] and [ppw]. The di-cluster can be pronounced as a single stop [pw] by younger speakers who are unaware of the reduction.

napɪpa [nepɪpa ~ ne^pɪ^ppa] 'mother's brother'

NG napɪpa GP ngappɪppɪ

yakayɪ [yaka:^ɪ ~ ya^kka:^ɪ] 'ouch!'

GP yakkayɪ

thakatjarrarra [t̪akatjaɾaɾa ~ taka^{t̪}tjaɾaɾa] 'nut sp.'

yilharrpa [yil̥eɾpa ~ yil̥eɾ^ppa] 'Liviston Palm'

Compare:

athɪkwalyi(kɪpwa [a^{t̪}wkalyɪk^wa ~ a^{t̪}wkalyɪ^pw^wa] 'Crinum Lily'

/a + thɪk{w}ɪ + alyɪ(k)pwɪ/

3:4 lips eat

nalyɪpwarna [nalyup^wana] 'he ate'

/n{ɪ} + alyɪ{k}pw{ɪ} + arnɪ/

3:3 eat TNS

2.2.2.2 Prenasalised stops

There is some evidence for analysing pre-nasalised stops as two consonants: (a) heterorganic di-clusters do occur within morphemes and as the first CC of a reduplicated stem; (b) a morpheme break occurs between the nasal and the stop where Vowel Deletion and Nasal Assimilation Rules generate a homorganic nasal-stop sequence; and (c) a pre-nasalised stop does not usually occur in word-initial position as in Alawa (Sharpe 1972: 16) because the nasal elides.

The decision to analyse the prenasalised stops as single complex phonemes is, therefore, somewhat arbitrary but it emphasises the special nature of these segments. It is based on the following:

(i) the correlation of the single and pre-nasalised stops in the syllable-onset position: A root begins only with a single consonant or a homorganic nasal-stop sequence but not with a heterorganic di-cluster. The latter do occur at the beginning of a reduplicated stem but only as a result of the operation of the Syllable or Vowel Deletion Rules, e.g., -ngpwatja in Section 2.8.4.

(ii) the simplification of the phonological rules: The rules for allophony, distribution, haplology and reduplication would be much more complex if the nasal closure of the syllable had to be specifically noted. Under the present analysis, the prenasalised stops simply fit into the onset of the statistically-frequent CV syllable.

(iii) the occurrence of word-initial prenasalised stops: The complex unit can occur in word-initial position when a syllable is deleted. The nasal is syllabified. Such occurrences are, however, very rare.

yinthiyi	[yɪnt̪i. ~ nt̪i]	'oh, I'm sorry!'
yintha	[yɪnt̪a ~ nt̪a]	'let me see!'
yintja	[yɪnt̪ja ~ nt̪ja]	'it's my turn!'
wimpwa	[ump ^w a ~ mp ^w a]	'but'

(iv) the absence of an epenthetic (non-phonemic) vowel: There are no instances of an epenthetic vowel intervening between the nasal and the stop of a prenasalised stop owing to a change in the stress/rhythm pattern. This is in contrast with a quite frequent insertion of an epenthetic vowel between heterorganic consonants consisting of a continuant and stop, e.g.,

ayilhkpwiyilhkpa [a^ɪ yil^hk^wiyil^hk^wa ~ a^ɪyil(ɪ)p^wiyi^luk^wa]
 'dry country'. (Note: In TA, the alveolar precedes a consonant
 and the lamino-dental occurs between vowels.)

(v) the syllabification of words: Some native speakers place the
 homorganic nasal-stop sequence within a morpheme as a unit in
 the syllable-onset but insert a syllable break in between two
 heterorganic consonants. This distinction was very obvious in
 literacy classes.

Variation does not occur between a prenasalized stop and its
 nasal counterpart. Free variation is, however, recorded in precise
 speech between a prenasalised stop and its stop counterpart. Some
 Aborigines only accept the longer form as correct for literature.

mwamwintjawitjawa	[m ^w am ^w i(ŋ)tja ^w witja ^w a]	'Striated Pardalote'
angkapwirra	[a(ŋ)kapwu ^ɾ a]	'who?'
mwiyampwana	[m ^w iya(m)p ^w ana]	'what?'

2.2.3 Continuants

2.2.3.1 Laterals and rhotics

The flap /rr/ usually has apico-alveolar articulation but it
 can be lamino-dental when conditioned by a lamino-palatal consonant,
 e.g., [lyi^ɾilyi^ɾa] 'tasselled'. The flap is regarded as a laminal
 consonant for two reasons: (i) the flap functions with laminal
 consonants in its conditioning of vowel allophones; and (ii) in TA,
 there was no set of apico-alveolars.

In Traditional Anindilyakwa, the lamino-dental lateral has two
 allophones: lamino-dental [lh] in the syllable onset and apico-
 alveolar [l] in the syllable-coda.

lhaka	[_h laka]	'is it ready?'
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angwalha	[aŋwa _l a]	'Mud Crab'
apwalhkaya	[ap ^w alka ^h ya]	'upwards'

In Modern Anindilyakwa, the lamino-dental /lh/ contrasts with its alveolar counterpart because of the introduction of unassimilated consonants in loanwords. The alveolar /l/ occurs in both the syllable-onset and the syllable-coda but contrasts with the lamino-dental in only syllable-onset position.

alha	[a _l a]		'an itch'
apwalkaya	[ap ^w alka ^h ya]		'upwards'
kwilinga	[kwulɪŋa]	MK guling	'rudder'
napwalitja	[nap ^w alitja]	NG naapalitjung	'owner'
yilkwa	[yulkwa]	NG yiriku	'Toad-fish'

Regional variation between the two laminal laterals, /lh/ and /ly/, is not systematic but only seems to occur in the initial syllable of some of the first roots in the compound stem. The contrast between the two laminals is maintained in all other data. The Umbakumba community now uses both pronunciations in almost every instance but will still identify the phonemes as belonging to one of the two Groote Eylandt communities.

alyingatjirrɪrra	ANG	alhingatjirrɪrra	'long'
alyarrathatha	ANG	al'harrathatha	'dusk'
thilyapwirnta	ANG	thilhapwirnta	'frog'
alyarrngwalyilya	ANG	alharrngwalyilya	'night'
alyimwilyimwintjirratha	~	alhimwilhimwintjirratha	'Black-tipped Cod'

Retroflexed /rɭ/ occurs in one loanword at Umbakumba and in a few other loanwords at Angurugu. In cases where the original segment is not used, there is a choice between one of its major features,

i.e., an alveolar /l/ or retroflex /r/, often in free variation.

amwarrala ~ amwarrara	AN ¹ mwarrarila		'Large Egret'
	GP marrariak		
lamwa ~ ramwa	NG rlama	GP lama	'blade spear'
arltja	NG arltja	GP tjaarik	'Freshwater Snake'
mwarliwya		GP marliwya	'Emu'

The laterals vary from their nasal counterparts in at least two ways.

ahimwa	~ anhimwa	'mangroves'
apwilyirra	~ amwinyirra	'smooth'

The variation between the lateral or rhotic phonemes and the lamino-palatal consonant /y/ in the following words is baby talk:

[yitja ¹ ya]	for yitjarra	'Silver Gull'
[a ¹ yukwutjila]	for ayikwitjiya	'small'

2.2.3.2 Nasals

There is some evidence that, in traditional Anindilyakwa, the allophones of the lamino-dental nasal were similar to those of the lamino-dental lateral. The dental nasal only occurs in the syllable-onset and only the alveolar nasal occurs in the syllable coda preceding a stop.

ahimwa	[an ^u m ^w a]	'mangroves'
mwanpwa	ARCHAIC mwanimpwa	'eye'

In Modern Anindilyakwa, the apico-alveolar retains its pre-consonantal position but contrasts with the lamino-dental nasal in the syllable onset. The most unusual feature is that the apico-alveolar

nasal does not occur in lexical roots. In the suffixation and in the word-medial gender morphemes, the alveolar is the result of a loss of retroflexion and can freely vary with the retroflexed nasal /rn/. The loss of retroflexion in the last five years has accelerated and is causing increasing variation between the retroflexed nasal /rn/ and the apico-alveolar nasal /n/ (see Section 2.11.2). In TA, the word-initial nasal may not have been retroflexed as is the case in other Aboriginal languages (e.g. Warlpiri) where neutralisation occurs. The following examples illustrate the alveolar nasal word-initially and in the affixation.

nirikpwitjina	'he jumped'
naningwapwa	'good [man]'

Variation between the retroflexed nasal /rn/ and an apico-alveolar nasal /n/ also occurs in the syllable-coda in loanwords. With the loss of retroflexion, the alveolar nasal sometimes assimilates to the point of articulation of the following consonant.

kwirnkwirna ~ kwinkwirna	NG kirnkirn	'Turrum Fish'
	GP kirn?kirn	(NG: catfish)
yiwirnpwirna	NG yiwurnpirna	'Silver Bream'
yirntjirra ~ yintjirra	NG wirntjitu	'Golden Trevally'
yimpwalmwa	NG yurnpalmi	'Turban Shell'

The assimilation of nasals to the point of articulation of the following stop is a common feature between morphemes (see Section 2.7.1). The assimilated nasal can vary with the unassimilated phoneme. Some Aborigines consider only the unassimilated form as correct for literature even though they may use both. Some of the

younger generation are aware of only the assimilated variant. Both variants are, however, considered to be phonemic in this analysis.

alyingpilyingparrnga	~ alyimpilyimparrnga	'lungs'
mwaningpwatja	~ mwanimpwatja	'seaweed sp.'
nanikwimarntjarrka	~ nanikwimantjarrka	'younger brother'

The apico-alveolar /n/ frequently occurs in the syllable-coda as the shortened form of the sequence /rrng/ or /rng/. See Cerebralisation (Section 2.5.2.3) for a fuller discussion.

2.2.4 Rounded consonants

Lip rounding may be sequential (long) or simultaneous (very short), the latter being easy to see but hard to hear. (See Leeding 1979: 64-78 for spectrograms.) Sequential rounding occurs consistently when the next syllable begins with an unrounded consonant; simultaneous rounding usually occurs when the next syllable begins with a rounded consonant but is found elsewhere. The rounding of labials is probably simultaneous because both the consonant and its rounding have the feature 'labial'. (The symbol [w] is written on the line for sequential rounding and above the line for simultaneous.)

ampwimwa	[amp ^w um ^w a]	'bland'
akwingwa	[ak ^w uŋwa]	'fresh water'

Very few minimal pairs exist for the rounded versus unrounded peripheral consonants because of the multi-morphemic nature of lexical items. Compare the following pairs of examples in which the minimal contrast is often in the morphemes, rather than the words.

m ^w am ^w ukwa	[m ^w am ^w ukwa]	'spirit's eye'
m ^w am ^w ika	[m ^w am ^w ika]	'bandicoot's nest'
angwirnta	[aŋwun̩ta]	'ankle'
angirnta	[aŋɪn̩ta]	'chin'
a ^k walya	[a ^k walya]	'fish (gen.)'
/a kw{1} + alya/ 3:4 NSR eat		
a ^k alya	[a ^k alya]	'untrue'
/a + {k1} + kalya/ 3:4 ASR tell a lie		
angkwilyimwitha	[aŋkwilyim ^w ɪt̩a]	'complete'
/a + ngkwɪ + lyimwitha/ 3:4 NSR complete		
angkipwarrngwarrngwa	[aŋkip ^w aŋŋwaŋŋwa]	'heavy'
/a + ngki + pwarrng{wɪ} + warrngwɪ/ 3:4 ASR REDUP heavy		
nirakiwirrana	[nɪrak ^w uwurena]	'he threw it [fish]'
/nɪ + raka + wirr{a} + anɪ/ 3:3(1) neck-shaped throw + TNS		
nirakiwirrana	[nɪrək ^w uwurena]	'he threw it [rope]'
/nɪ + rakɪ + wirr{a} + anɪ/ 3:3(1) elongated throw TNS		
nɪpwatjanga	[nɪpwatjɛŋa]	'he hit it'
/nɪ + Ø + pwatj{a} + ɛŋa/ 3:3(1) 3:4 hit TNS		
nɪpakina	[nɪpəkina]	'he drank it'
/nɪ + Ø + p{1} + aka + nɪ/ 3:3(1) 3:4 drink CAUS TNS		

The contrast between the pronunciation of labial stops in English and their pronunciation in loanwords assimilated into the Anindilyakwa system is obvious even to native English speakers with no linguistic training.

pwayi	[p ^w oi]	'boy'
pwapwa	[n ^w b p ^w a]	'Bob'

pwai	[p ^w oi]	'ball'
ɪpwayanthana	[kup ^w aɪyentəna]	'he will buy it'

Assigning rounding as the feature of the consonant rather than the vowel is based on the fact that it is the vowel that varies within the morpheme and not the consonant. (See Section 2.3.2 for rules conditioning vowel allophones.)

yipwɪratha	[yɪp ^w ur̥aɬa ~ yup ^w ur̥aɬa]	'Agile Wallaby'
athalyimwa	[aɬalyum ^w a ~ aɬalyim ^w a]	'river'
apwapwɪrna	[ap ^w ap ^w uɲa ~ ap ^w ap ^w ɲa]	'many'
amwariɪmwiɾra	[am ^w aɬim ^w uɾa ~ am ^w aɬum ^w ɾa]	'with grass'
akwarrirrikpa	[akweɾeɾikpa ~ akwaɾeɾikpa]	'turtle pole'
nɪwarrwɪrthana	[nuweɾwɪr̥təna ~ nuwaɾwɪr̥təna]	'he liked work'
angampa	[aŋɛmpa ~ aŋɛmpa]	'(place) named'
yathirrngwana	[yɑɬɪr̥ŋwɑna ~ yɑɬɪr̥ŋwɑna]	'big'

It has been suggested by linguists in the Arandic area that, historically, rounded consonants have been generated by the vowel [u]. While such analysis is not in focus in this thesis some linguists may be interested in the fact that (a) whereas all consonants have rounded and unrounded counterparts in the Arandic languages (and possibly traditional Tɪwɪ), only the peripheral consonants are rounded in Anindilyakwa; and (b) the deep structure vowel /a/ is often contiguous to a rounded peripheral consonant within a morpheme; and (c) there is an absence of the phonetic allophone [u] between unrounded consonants. It would, therefore, appear to be more difficult in this language to account for an historical absence of /u/ between unrounded non-peripheral consonants, the presence of a rounded peripheral stop preceding an unrounded low vowel, and the strange distribution of the proto-phoneme ,

2.2.5 Prosody of rounding

The rounded peripheral consonants in Anindilyakwa can be clearly shown to contrast within the morphemic unit. The following sets of examples list the co-occurrence of rounded and unrounded consonants which are common throughout this language. The presence or absence of rounding on these consonants in citation is always consistent.

mwamwika	'bandicoot's nest'
mwamwikwa	'spirit's eye'
mwamwarika	'SE trade wind'
mwamwirikwa	'road'
mwangwiyiwanga	'shark (gen.)'
yapwangwa	'water snake sp.'
ayangiyanga	'Jungle Shrub'
amwanthangwa	'truly'

There is, however, evidence of an additional prosodic feature of rounding which is not considered to be phonemic. Such rounding occurs only in a syllable with an initial velar consonant, /k/ or /ng/. The rounding of the whole syllable is conditioned regressively by a following, not a preceding, rounded consonant.

A morpheme-initial rounded peripheral consonant can optionally round the preceding morpheme-final syllable consisting of a velar consonant and high vowel. The rounding of the consonant is simultaneous. Most speakers vary in their pronunciation and this is reflected in their spelling. Even though the contrast between a unrounded velar and its rounded counterpart is neutralised in the surface structure the deep structure form is readily identified in paradigms. The following pairs of examples contrast the prosodic

feature of rounding with its absence.

nawirrakirithana	[nawuʔak _ɪ ɾaʔena]	'they cut it'
nawirrakiwartanga	[nawuʔak(w)uwaʔaŋa]	'they killed it'
anganthingilhangwa	[aŋaŋtɪŋɪlɤŋwa]	'from a sharp [axe]
anganthingimwirra	[aŋaŋtɪŋ(w)um ^w uɾa]	'with a sharp [axe]
mwalhamwikwiwa	[m ^w a _ɪ lam ^w uk ^w uwa]	'towards the canoe'
alhi _ɪ kiwa	[a _ɪ hi _ɪ (w)uwa]	'towards the foot'

Within the morpheme, very few words have the necessary sequence of two peripheral consonants separated by a high vowel. In almost all the data, the presence of a rounded vowel or offglide indicates that the velar consonant is rounded in the deep structure. There are, however, two words in which this rounding has not been recorded before a velar stop. The first velar is tentatively analysed as unrounded with prosodic rounding. (Note that there is no way to do a similar test for velar nasals because the offglide does not precede that consonant.)

angakipwa	[aŋak(w)up ^w a]	'over there'
nakimwarna	[nak(w)um ^w aŋa]	'he put it down'

A prosodic feature of rounding can occur at morpheme boundaries when the intervening vowel is a low vowel and the following consonant is usually /w/. In contrast with the above, not all speakers seem to use this feature.

arngkawira	[aɾŋka ^w uɾa ~ aɾŋk ^w _ɪ uɾa]	'forever'
mwakawilyapwa	[m ^w aka ^w wilyapwa ~ m ^w ak ^w _ɪ wilyapwa]	'steps'
pwingkawa	[p ^w uŋka ^w a ~ p ^w uŋk ^w _ɪ a]	'boss'
ngawa	[ŋa ^w a ~ ŋ ^w _ɪ a]	'enough'

ngangwa [ŋaŋwa ~ ŋ^wɔŋwa] 'father'

2.2.6 Approximation of articulation

An approximation of the lamino-palatal /ly/, labio-velar /ngw/ results in phonetic variants /y/ and /w/, respectively. These variants retain the features of laminalisation and rounding that condition the contiguous vowels. In word-initial position, /y/ and /w/ are very frequent but /ly/ and /ngw/ only occur in the imperative mood of a verb and in loanwords. Such approximations are not found in precise recorded speech and are, therefore, not considered to be phonemic.

lyangkiwamwina	[lyɔŋkuwɔmina ~ yɔŋkuwamwina]	'nod your head!'
lyalyinga	[lyɔlyiŋa ~ yɔlyiŋa]	'knife'
ngwirrkwiya	[ŋ ^w uɾkwiya ~ wuɾkwiya]	'go hunting!'

The word-initial /w/ is often only an approximation when the next consonant is round and the intervening vowel is high. The language speakers are consistent in saying that this consonant is articulated and is therefore always written.

wipwirra	[(w)up ^w uɾa]	'like'
wikwara	[(w)ukwaɾa]	'hook it!'
wimwiya	[(w)um ^w wiya]	'pick it up!'
wiwirtana	[(w)uwuɾtana]	'climb it!'
wingwirthana	[(w)uŋwuɾtana]	'swallow it!'

Other approximants appear to have achieved phonemic status because both forms occur in precise speech and are acceptable to Aborigines for literature.

angwarnta ~ awarnta [a(ŋ)waŋta] 'stone'

warnantja ~ warantja	[waɾ(n)aɳtja]	'quickly'
aninthilyakwa	NG nuntirɪa:ku	(language name)
ayakwa		'speech'

2.3 VOWELS

There are two deep structure phonemic vowels, a high central /ɪ/ [ɪ] and a low central /a/, distinguished by only tongue height. Each of the two phonemic vowels has a rich inventory of allophones.

angwarnta	[aŋwaɳta]	'stone'
angwirnta	[aŋwɪɳta]	'ankle'
angwarra	[aŋwaɾa]	'smoke'
angwirra	[aŋwɪɾa]	'strongly'
akana	[akena]	'but'
akina	[akina]	'that [fish]'
yaya	[yɛɪya]	'footstep'
yɪya	[yɪya]	'and the next'
mwamwangpwalha	[m ^w am ^w aŋp ^w aɳa]	'five [canoes]'
mwamwingpwa	[m ^w am ^w ɪŋp ^w a]	'hair'
mwakarra	[m ^w akaɾa]	'thigh'
mwikirra	[m ^w ikiɾa]	'Rush Spike root'
thangapwa	[t̪aŋap ^w a]	'that [woman]'
thingaya	[t̪ɪŋaɪya]	'widow'

A contrast exists between a high vowel, a low vowel and the absence of any vowel. It is not possible, therefore, to reduce the vowel system to one phoneme as has been suggested for other two-vowel languages (see Anderson 1978 and Breen 1977).

narringka	[naɾɯŋka]	'it saw'
arrangkwirra	[aɾaŋkwuɾa]	'grass sp.'
arrngka ~ anka	[aɾŋka ~ anka]	'hip'
amwaringka	[am ^w aɾɯŋka]	'edible root'
thirangka	[tɾɾaŋka]	'Spotted Tree'
amwarngka	[am ^w aɾŋka]	'a laugh'
alhitha	[a _h ɪt̪a]	'prepared paint'
nilhathana	[ni _h ɪt̪ena]	'he was sated'
alhthapirra	[a _h ɪt̪epiɾa]	'empty [grass]'

2.3.1 Vowel features

The feature oppositions presented by Dixon (1980:184ff) are adopted with some modifications because of the nature of this language. The features [+peripheral] and [+laminal] are used for [+back] and [+front], respectively, and are preferred because they highlight the close association between consonants and vowels. A consonant and a vowel allophone within a syllable often share the same feature, e.g., [+laminal], [+peripheral] or [+round]. The feature could, therefore, be considered to be a prosody of the syllable rather than a property of each segment.

TABLE 3: FEATURES OF VOWEL ALLOPHONES

	i	ɪ	æ	e	ɨ	ɘ	a	ɤ	u	o	ɔ
± high	+	+	-	-	+	-	-	+	+	-	-
± low	-	-	+	-	-	-	+	-	-	-	+
± peri	-	-	-	-	-	-	-	+	+	+	+
± lamin	+	+	+	+	-	-	-	-	-	-	-
± round	-	-	-	-	-	-	-	-	+	+	+
± close	+	-	-	+	-	-	-	-	-	+	-

The vowel allophones [e] and [i] can be tensed in stressed syllables between lamino-palatals, i.e., they are of slightly longer duration than other vowels.

Vowel allophones are posited on the basis of four types of rules which operate within the morpheme and across morpheme boundaries:

FRONTING

ROUNDING which also adds the feature [+ PERI]

BACKING

LOWERING

The allophones are conditioned by similar environments on two different parameters:

- (a) regressive conditioning by the following syllable or consonant
- (b) progressive conditioning by the preceding consonant within the syllable.

Regressive conditioning takes precedence over the weaker progressive conditioning. The term, progressive, indicates that the conditioned segment follows the conditioning element; regressive means that the conditioned segment precedes it (Gleason 1975:83). The term, basic, refers to the allophones [a] and [ɨ].

The range of allophones for any one phoneme extend from front to back and segmentation into only three positions (front, central or back) is difficult. For example, the low vowel contiguous to /y/ varies between the low central [a], the low and mid front [æ] and [e] but is frequently articulated between these three cardinal vowel allophones [æ̠]; the high back unrounded vowel [ɯ] varies from the

back position to one closer to the central [ɨ]. Segmentation is further complicated by the fact that phonetic transcription for a vowel that occurs between an unrounded and a rounded consonant depends on a rather subjective impression of what is the peak of the vowel nucleus. Too many phonetic distinctions lead to too much complexity in allophonic rules and too few lead to an inability to assign phonemic versus phonetic status to a vowel.

For ease of identification, only the allophones in focus are included at each stage of the discussion. The allophonic variants are discussed in Section 2.6.1 Interaction of Rules. The feature [-high] implies [+low] unless otherwise stated; the omission of brackets indicates a deep structure form.

2.3.2 Vowel allophony

Vowel allophones are generated by phonological rules for Fronting, Rounding, Backing and Lowering. The most "powerful" of these rules are those for fronting and rounding.

2.3.2.1 Fronting

The fronting rules operate on the deep structure vowels, /a/ and /ɨ/ and produce the fronted allophones [æ] and [ɪ], respectively. Two of the rules function within the morpheme and across morpheme boundaries but the third rule is restricted to the morpheme-final vowel.

The High Vowel Fronting Rule 1 affects the deep structure morpheme-final vowel except when the last consonant is a rounded peripheral or a retroflexed consonant. The rule is obligatory and can operate only the once. All deep structure morphemes end in a vowel.

HIGH VOWEL FRONTING RULE 1: MORPHEME-FINAL /ɨ/ ==> /i/

$$\begin{array}{c} \text{V} \\ [+high] \end{array} \Rightarrow \begin{array}{c} [+lamin] \\ / \end{array} \begin{array}{c} \text{C} \\ [-round] \\ [-retro] \end{array} +$$

i.e., a high vowel is fronted preceding a morpheme break when the preceding consonant is not rounded or retroflexed. The morpheme break can occur within or at the end of a word.

The first three examples illustrate the occurrence of the fronted allophones in the few Anindilyakwa words that end in a high vowel. The final examples contrast the non-fronted and fronted allophones word-medial positions.

kartiyi	[kaɨi:]	'watch out!'
thalhi	[t̪aɨi]	(personal name)
tjɪŋkwɪliɪli	[tjɪŋkwɪliɪli]	'Carissa Shrub'

Compare the following pairs:

yɪwamwitha /yɪ + wamwi + tha/	[yɪwam ^w uɨa]	'fly sp.'
yɪmwɪrntarrmitha /yɪ + mwɪrnt{aka} + arrmi + tha/	[yɪm ^w uɨt̪eɾmiɨa]	'land snail sp.'
arakpwitha /arakpwi + tha/	[arakp ^w uɨa]	'already'
yɪwapitha /yɪ + wapi + tha/	[yɪwepiɨa]	'ant sp.'

Vowel Fronting Rule 2 generates the high front allophone [ɪ] and low front allophone [æ] which are conditioned by the following syllable with a high front vowel created by the High Vowel Fronting Rule 1. The rule is obligatory and iterative within the morpheme but is optional (though common) across a morpheme boundary to preceding syllables. (Note: A front vowel is tensed, not fronted, by st...

VOWEL FRONTING RULE 2: /ɪ/ ==> [i]; /a/ ==> [æ]

V ==> [+lamin] / (C) [-round] [-retro] [V] [+lamin]

i.e., a vowel is fronted when the following syllable consists of an unrounded consonant, other than retroflexed, and a front vowel.

thimwirra [t̪imɪʔa] 'Torres Strait Pigeon'

DEEP STRUCTURE ==> tha + mwirri
 VFR.1 ==> tha + mwirri
 VFR.2 ==> tha + mwirri
 CDR ==> tha + m{w}irri
 NTR.1 ==> thɪ + mirri
 VFR.2 ==> thɪ mirri
 NTR.2 ==> thɪ mirra
 3:2(ii) fat

amwapa [emepa] 'song'

DEEP STRUCTURE ==> a + mwapi
 VFR.1 ==> a + mwapi
 VFR.2 ==> a + mewpi
 CDR ==> a m{w}epi
 VFR.2 ==> e mepi
 NTR.2 ==> e mepa
 3:4 sing

yilharrpa [yilɛʔpa] 'Liviston Palm'

DEEP STRUCTURE yi + lharrpi
 VFR.1 ==> yi + lharrpi
 VFR.2 ==> vi + lherrpi
 NTR.2 ==> yi lherrpa
 3:3(ii) visible

The following pairs of examples show the contrast between a non-fronted allophone and a fronted allophone. Note the effect on the second word in each pair by the Vowel Fronting Rule 1 operating on the final deep structure vowel.

ngantjikwapwa /ngantja + kwapwi/	[ŋa ^h ntjɯkwap ^h wa]	'me, too'
wirriwapa /wirra + wapi/	[wu ^h ɯwepa]	'Red-winged Parrot'
amwiramwa /a + mwiramwi/	[am ^h u ^h ɯram ^h wa]	'whispered'
akwantjirama /a + kw{i} + antjiramɪ/	[akwa ^h ntjɯɾi ^h ɛma]	'gum from a tree'
apwirra /apwirra/	[ap ^h u ^h ɾa]	'the, '
apwirra /a + p{w}irri/	[epɪ ^h ɾa]	'raincloud'
thimwantha /tha + mwantha/	[t ^h ɪm ^h wan ^h ta]	'Great-billed Heron'
yimwantha /yɪ + m{w}anthɪ/	[yɪm ^h ɛn ^h ta]	'turtle (gen.)'
thimwakpwilha /tha + mwakw{i} + pwilha/	[t ^h ɪm ^h wak ^h wp ^h ɯ ^h ɪla]	'Australian Pelican'
thimwakpa /tha + m{w}akpi/	[t ^h ɪm ^h ɛkpa]	'generous'
angwarrihangwa /{a} + angwarra + hangwi/	[aŋwa ^h ɾi ^h ŋwa]	'from smoke'
aningwarripwirra /{a} + ani + ngw{i} + arri{ki} + p{w}irri/	[anɯŋwe ^h ɾɪpɪ ^h ɾa]	'anything'

The contrast between the non-fronted allophone preceding a retroflexed nasal and the fronted allophones preceding an alveolar nasal is often very obvious in words where the two consonants freely vary.

athirrngwana ~ athirrngwana 'big'
 [at̪iŋwana ~ at̪iŋwena]
 {a} + athirr{ka} + ŋwa(r)inɪ/

Most of the fronted allophones result from the operation of vowel Fronting Rules 1 and 2 but both the high and low vowels can be fronted in restricted environment preceding a syllable consisting of a laminal consonant and low vowel. The fronting of the low vowel in such environments is rare.

The morpheme-final high vowel can be fronted preceding a lamino-palatal consonant. There is only one word, to date, where this rule is applied preceding /y/ within a three-syllable morpheme. It is regarded as an exception until further data is found or possible re-analysis of the morpheme.

HIGH VOWEL FRONTING RULE 3: /ɪ/ ==> [ɪ]

$$\begin{array}{c} \text{V} \\ [+high] \end{array} \Rightarrow \begin{array}{c} [+lamin] \\ / \end{array} \begin{array}{c} \text{C} \\ [+lamin] \\ [-dental] \end{array}$$

i.e., a morpheme-final high vowel is fronted preceding a morpheme-initial lamino-palatal consonant.

thakwilyanthatha	[takwilyant̪ata]	'feathers'
/tha + kwi + lyanthatha/		
mwinyathirra	[m(w)ɪn̪at̪iŋra]	'bitumen, tar'
/mwi + nyathirra/		
thitjariwa	[t̪it̪jaŋuwa]	'Little Friar Bird'
/tha + tjariwa/		
thathiyara	[t̪at̪iyara]	'girl'
/th{a} + atha + yara/		
angwiyangkitharrpwa	[aŋwiyank̪it̪ar̪pwa]	'short arm'
/a + ngwiyangka + tharrpwi/		

The fronted low vowel allophone [æ] can occur in free variation with [a] preceding a laminal consonant and low vowel but only when the preceding consonant is laminal or alveolar. This

allophone is found frequently between two lamino-palatal consonants but is optional and rare elsewhere. It occurs both within the morpheme and across morpheme boundaries.

LOW VOWEL FRONTING RULE 4: /a/ ==> [æ]

$$V \begin{matrix} [+low] \end{matrix} \Rightarrow \begin{matrix} [+lamin] \end{matrix} / \begin{matrix} C \\ [-per] \\ [-retro] \end{matrix} \begin{matrix} C \\ [+lamin] \end{matrix}$$

i.e., a low vowel is fronted between a laminal or apico-alveolar consonant and a laminal consonant.

yinhanha	[yɪnæŋa ~ yɪnana]	'fingernail'
athalyimwa	[atɔlyim ^w a ~ atɔlyum ^w a]	'river'
ayarrka	[a ^j ya ^r ka ~ a ^j ya ^r ka]	'hand'
thakatjarrarra	[tɔkatjæ ^r æ ^r a ~ tɔkatja ^r a ^r a]	'nut sp.'
nathirrapwa	[næ ^t ɪ ^r ap ^w a ~ næ ^t ɪ ^r ap ^w a]	'some [men]'
anatja	[enæ ^t ja ~ enatja]	'he'

The Low Vowel Fronting Rule 5 generates a transitional high front offglide when the low vowel precedes a lamino-palatal consonant (irrespective of the following vowel). It is obligatory only when preceding /y/ but is rare preceding /tj/, /ly/ and /ny/.

LOW VOWEL FRONTING RULE 5: FRONTED OFFGLIDE

$$V \begin{matrix} [-high] \end{matrix} \Rightarrow V \begin{matrix} [-obst] \\ [+lamin] \end{matrix} / \begin{matrix} C \\ [+lamin] \\ [-dental] \end{matrix}$$

i.e., a high front offglide co-occurs with a low vowel preceding a lamino-palatal consonant.

angalhatja	[aŋa ^j la ^t tja ~ aŋa ^j latja]	'it'
mwiyatja	[m ^w iyæ ^t tja ~ m ^w iyæ ^t tja]	'oar'
-mwantja	[m ^w a ^f ntja ~ m ^w a ^f ntja]	(locative)

thiwalya	[t̥uwa ^ɪ lyɑ ~ t̥uwa ^ɪ lyɑ]	'Bush Stone Curlew'
ayarrka	[a ^ɪ ya ^ɪ rka]	'hand'

Regressive fronting also occurs as a high front offglide of the low vowels [a] and [æ/e] which vary with [a^ɪ] and [æ^ɪ/e^ɪ], respectively. The offglide occurs in the same environment as in Vowel Fronting Rule 2.

apwina /a + pwini/	[e ^ɪ pina ~ epina]	'it's not here'
aka /{a} + aki/	[e ^ɪ ka ~ eka]	'tree (gen.)'
angka /a + ngki/	[æ ^ɪ ŋka ~ æŋka]	'other'
ana /{a} + ani/	[e ^ɪ na ~ ena]	'this'
athirra /{a} + athirri/	[e ^ɪ t̥i ^ɪ ra ~ e ^ɪ t̥i ^ɪ ra]	'hole'

The offglide has also been recorded at lexical word boundaries within the phonological word.

thikwirrkwa yingirakpwini^ɪmwa
[t̥ukwɪr^ɪrkwa^ɪyɪŋɪrək^ɪpwini^ɪmwa]
'The brolga played the didjeridu.'

2.3.2.2 Rounding

There are four vowel rounding rules. The first and second rules round the contiguous high vowel; the third rule rounds the low vowel; and the fourth rule generates a rounded offglide on the low vowel. Generally speaking, the high vowel is rounded by one contiguous rounded peripheral consonant but the low vowel is rounded only when both contiguous consonants are rounded.

The High Vowel Rounding Rule 1 generates regressive rounding of a vowel by a rounded peripheral consonant.

HIGH VOWEL ROUNDING RULE 1: /ɨ/ ==> [u]

$$\begin{array}{c} V \\ [+high] \end{array} \quad ==> \quad [+round] \quad / \quad \begin{array}{c} C \\ [+round] \end{array}$$

i.e., a high vowel is rounded when it precedes a rounded peripheral consonant. An intervening consonant can also co-occur.

athinipwa	[a _ɨ ɨnup ^w a]	'soon'
athalyimwa	[a _ɨ ɨalyum ^w a]	'river'
thikwa	[t _ɨ ɨkwa]	'maybe'
	[enika _ɨ ɨuwa]	'new'
wirriwari wari	[wu _ɨ ɨwatuwa _ɨ ɨa]	'Beach Spinifex'
yimwirngwa	[yum ^w u _ɨ ɨŋwa]	'Wild Prune'
yilhkwa	[yul _ɨ ɨkwa]	'Coucal Pheasant'

High Vowel Rounding Rule 2 rounds the non-fronted high vowel which follows a rounded consonant. Attempts to unite Vowel Rounding Rules 1 and 2 revealed that such a rule would be too strong and would generate a rounded vowel where it does not occur, e.g., angwiyangka [a_ɨɨwiyangka] 'lower arm'; awitja [a^wu_ɨɨtja] 'mist'. If only one rule is posited the deep structure high unrounded vowel would be rounded and then need to be de-rounded again by re-iteration of Fronting Rule 3. This seems to me to be unnecessary and uneconomical when the additional feature [-front] in the Rounding Rule 2 blocks any further operations. Rounding rules are ordered after those for fronting.

HIGH VOWEL ROUNDING RULE 2: /ɨ/ ==> [u]

$$\begin{array}{c} V \\ [+high] \\ [-front] \end{array} \quad ==> \quad [+round] \quad / \quad \begin{array}{c} C \\ [+round] \end{array}$$

i.e., a high non-fronted vowel is rounded when it follows a rounded peripheral consonant.

angpwirtha	[aŋp ^w ur̥t̥a]	'White Waterlily'
mwamwika	[m ^w am ^w u ^k a]	'bandicoot's nest'
apwirimpwa	[ap ^w ur̥ump ^w a]	'blister'
a ^k wi ^h angwa	[ak ^w u ^{t̥} aŋwa]	'near'
angwirnta	[aŋ ^w ur̥nt̥a]	'ankle'
yiningkwirra	[y ⁱ n ⁱ ŋ ^k wu ^{r̥} a]	'Fern-leaved Grevillea'
awirikwa	[awu ^{r̥} uk ^w a]	'swamp'

The Low Vowel Rounding Rule 3 differs from the above rule in that a low vowel is rounded only when both contiguous consonants are rounded peripherals.

LOW VOWEL ROUNDING RULE 3: /a/ ==> [ɔ]

$$\begin{matrix} V \\ [-\text{high}] \end{matrix} \Rightarrow \begin{matrix} [+round] \end{matrix} / \begin{matrix} C \\ [+round] \end{matrix} \begin{matrix} C \\ [+round] \end{matrix}$$

i.e., a low vowel is rounded when it occurs between two rounded consonants.

The allophone [ɔ] most commonly occurs within a morpheme but, in some cases, varies with [a] at morpheme boundaries.

ngantjikwapwa	[ŋa ⁱ nt ^j uk ^w ɔp ^w a]	'me, too'
a ^k wi ^h angwawa	[ak ^w u ^{t̥} aŋ ^w ɔ ^w a]	'to the water'
yiwamwa	[y ^w ɔ ^w m ^w a]	'house fly'
apwapwirna	[ap ^w ap ^w u ⁿ a ~ ap ^w ɔ ^w p ^w u ⁿ a]	'many'
yimwawira	[y ⁱ m ^w a ^u wu ^{r̥} a ~ y ⁱ m ^w ɔ ^u wu ^{r̥} a]	'moon'
mwawir ⁿ angkaya	[m ^w a ^u wu ^{r̥} aŋka ⁱ ya ~ m ^w ɔ ^u wu ^{r̥} aŋka ⁱ ya]	'stone axe'

Compare the following pairs:

ampwaka	[amp ^w aka]	'later on'
mwapwakwa	[m ^w ɔ ^w p ^w ɔk ^w a]	'Burton's Legless Lizard'

nampwilya	[namp ^w ilya]	'he stayed'
wampwilya	[wamp ^w ilya ~ wɔmp ^w ilya]	'stay!'
wiwapawilya	[yuwepa ^w wilya]	'ants'
athiwapwawilya	[a ^u tuwɔ p ^w ɔwilya]	'today'
anhingawa	[a ^u ŋɪŋa ^w wa]	'for food'
akwingwawa	[ak ^w uŋ ^w ɔwawa]	'for water'
alharrngkwartirtarra	[a ^u la ^r ŋkwa ^t ɪ ^t ɪ ^r a ^r a]	'hot things'
alnarrngkwawarriya	[a ^u la ^r ŋk ^w ɔ ^w a ^r iya]	'bad things'

A transitional high back rounded offglide occurs with a low vowel preceding a dorsal consonant (excluding nasals). The allophones [a] and [ɔ] vary with [a^w] and [ɔ^w], respectively. The offglide is optional but very common preceding /w/.

LOW VOWEL ROUNDING RULE 4: ROUNDED OFFGLIDE

$$V \begin{matrix} [-\text{high}] \\ \end{matrix} \quad \text{===} \quad V \begin{matrix} [-\text{obst}] \\ [+per1] \\ [+round] \end{matrix} \quad / \quad \begin{matrix} C \\ [+round] \\ [+dorsal] \\ [-nasal] \end{matrix}$$

i.e., a high back rounded offglide occurs with a low vowel preceding a dorsal consonant, other than a nasal.

akwa	[a ^w kwa ~ akwa]	'and'
yawa	[ya ^w wa ~ yawa]	'yes'
athalyimwawa	[a ^u ɪlyum ^w ɔwawa]	'to the river'

In loanwords, the co-occurrence of a contiguous rounded vowel and consonant is maintained. The pronunciation of the vowel in the stressed English syllable is retained and the consonant assimilated into the Anindilyakwa system.

tjɪtwa	[tʃukwa]	'sugar'
tjawikwa	[tja ^u :kwa]	'chalk'
rapwitja	[ɾap ^w itja]	'rubbish'
compare:		
tjɪpwa	[tʃup ^w a]	'soap'
tjɪpa	[tʃɪ ^p pa]	'sheep'
pwalangwa	[p ^w alangwa] MK balango	'anchor'

2.3.2.3 Backing

The deep structure high vowel is backed primarily by retroflexed or unrounded dorsal consonant. The low vowel in the environment has been recorded occasionally as backed by one of older women but is not considered to be a systematic change.

The High Vowel Backing Rule generates the high back unrounded allophone [ɯ]. As the rule is optional this allophone varies from with the high central unrounded allophone [ɨ].

HIGH VOWEL BACKING RULE: /ɨ/ ==> [ɯ]

$$\begin{array}{c} \text{V} \\ [+high] \end{array} \Rightarrow [+peri] \left/ \begin{array}{c} \text{C} \\ [-round] \end{array} \right. \left\{ \begin{array}{c} \text{C} \\ \left[\begin{array}{l} -round \\ dorsal \end{array} \right] \\ [+retro] \end{array} \right\} \begin{array}{c} \text{V} \\ [-laminal] \end{array}$$

i.e., a high vowel is backed when it occurs between an unrounded consonant and a syllable consisting of an unrounded dorsal retroflexed consonant and a non-front vowel.

angirnta	[aŋɯnt̪a ~ aŋt̪nt̪a]	'chin'
alɪkɪra	[a _ɮ ɯkkɯɾa ~ a _ɮ t̪kɪɾa]	'house'
nirringka	[nɪ ^r ɯŋka ~ nɪ ^r t̪ŋka]	'he saw it'
thingira	[t̪ɯŋɯɾa ~ t̪t̪ŋɪɾa]	'white clay'

The above allophones are in complementary distribution with

high back rounded vowels that are conditioned regressively by a rounded dorsal consonant. In the latter, rounding of the vowel includes backing.

athika	[a _ɣ ɪka]	'Hardyhead'
thikwa	[t _ɣ ɪkwa]	'maybe'
anganthinga	[aŋaŋt _ɣ ɪŋa]	'sharp'

2.3.2.4 Lowering

The two vowel lowering rules for the high vowel generate the mid central allophone [ə] and the mid back rounded allophone [ɔ], primarily by a following retroflex or flap /rɾ/. Both allophones are infrequent and freely vary with [ɪ] and [u], respectively. A third lowering rule occurs only at morpheme boundaries and largely prevents haplology.

The High Vowel Lowering Rule 1 generates the allophone [ə]. It is conditioned primarily by a following retroflexed or lamino-palatal /rɾ/. The rule is optional and infrequently applied. It occurs in both stressed and unstressed syllables.

HIGH VOWEL LOWERING RULE 1: /ɪ/ → [ə] /

$$\begin{matrix} V \\ [+high] \end{matrix} \Rightarrow \begin{matrix} [-high] \\ [-low] \end{matrix} / \begin{matrix} C \\ [+retro] \end{matrix}$$

i.e., a high vowel is lowered to a mid central vowel preceding a retroflexed consonant.

amwirtha	[am ^w əɾɪta]	'brown'
thilhirrinta	[t _ɣ ɪɪɾəɾɪnta]	'Carpet Python'
angirnta	[aŋəɾnta]	'chin'
apwapwirna	[ap ^w ap ^w əɾna]	'many'
niwirtana	[nuwəɾtana]	'he climbed it'

A mid central allophone [ə] can also be posited as an allophone of zero when it occurs as a transition between a flap /rr/ or alveolar /l/ and another consonant. This vowel is unstressed and so short that the phonetic quality is hard to determine--it could be a high central unrounded allophone preceding an unrounded consonant or a high back rounded vowel preceding a rounded consonant.

mwarngwirtha	[m ^w a ^{r̥} ŋ ^w ɪ ^{r̥} θa]	'Bush Currant'
athirrpwira	[a ^{t̪} ɪ ^{r̥} p ^w ɪr̥a]	'level'
arrngka	[a ^{r̥} ŋka]	'hip'
mwilhkwa	[m ^w u ^{l̥} kwa]	'stomach'
awarrwalya	[a ^w a ^{r̥} walya]	'shadow'
mwarrnga	[m ^w a ^{r̥} ŋa]	'a sleep'

The High Vowel Lowering Rule 2 must be preceded by High Vowel Rounding Rule 2 in a stressed syllable. This rule operates on the allophone created by the rounding rule. The preceding consonant is almost always a dorsal consonant but there are occasional instances where the preceding consonant is a bilabial stop (not, to date, a bilabial nasal).

HIGH VOWEL LOWERING RULE 2: [u] ==> [o]

$$\begin{array}{c} \text{V} \\ [+high] \\ [+round] \end{array} \Rightarrow \begin{array}{c} [-high] \\ [-low] \end{array} / \left\{ \begin{array}{c} \text{C} \\ [+retro] \\ [+partp] \\ [-sidep] \end{array} \right\} \begin{array}{c} \text{V} \\ [-lamin] \end{array}$$

i.e., a high rounded vowel is lowered when the following syllable consists of a retroflex or rhotic consonant and a low vowel.

yangwirra	[yaŋkwofa]	'house fly'
apwingwirra	[ap ^w uŋwofa]	'silly'
wirrawilya	[wofawilya]	(clan name)

yimwawira	[yim ^w b ^u woŋa]	'moon'
yikwirna	[yukwoŋa]	'Baler Shell'

The Low Vowel Lowering Rule 3 affects a morpheme-final vowel that occurs between two consonants that share the same phonological feature, viz., peripherals or laminals. Unlike other rules, it is applied to the surface structure following the operation of the Word-medial Neutralisation Rule 1. In the light of the statement of Colarusso (Anderson 1978: 49) about the fundamental nature of a two-vowel system, the high vowel /ɨ/ can be considered to be "the shortest path that permits an interval of sonorant voicing" between two consonants and the low vowel /a/ "the longest path permitting an interval of sonorant voicing...pulling the tongue down". It seems to me that the longer path is chosen to separate two similar consonants at morpheme boundaries to prevent syllable deletion or other coalescence (see Section 2.5). The rule results in variation between the high and low vowel in a morpheme-final position in which only the high vowel occurs elsewhere.

HIGH VOWEL LOWERING RULE 3: [+] ==> [a]

$$\begin{array}{c} \text{V} \\ [+high] \end{array} \Rightarrow \begin{array}{c} [-high] \\ [+low] \end{array} / \left\{ \begin{array}{c} \text{C} \\ [+per_{11}] \\ [+lamin_2] \end{array} \right\} + \left\{ \begin{array}{c} \text{C} \\ [+per_{11}] \\ [+lamin_2] \end{array} \right\}$$

i.e., the morpheme-final high vowel following a peripheral or laminal consonant is lowered when the next morpheme-initial consonant is a peripheral or laminal, respectively.

Compare the following sets of examples in which the first word shows the normal word-medial morpheme-final neutralisation but the others illustrate the application of the above rule.

thimwirntakakina /lha + mwirntak{a} + akini/ 3:2(ii) PL that	'those [frogs]'
mwamwirntakakina /mwa + mwirntak{a} + akini/ 3:5 PL that	'those [canoes]'
mwamwirrarra /m(w)a + {w}i + rrarri/ 3:5 INALP forked	'Fringe-eyed Flat-head'
thimwawirtiwiri /tha + mwi + wirtiwiri/ 3:2(ii) INALP REDUP: ?alone	'Wedgetailed Eagle'
amwartiwa /a + mwarti + wi/ 3:4 greer ALL	'to the grass'
a /aniwa + wi/ 3:3(i) ALL	'to him'
akwalyiŋgwa /a + kw + i + iyi{pw} + lhangwi/ 3:4 NS eat ABL	'from the fish'
yiniŋgwalhangwa /a + ni + mw{1} + alhiwalya + lhangwi/ 3:3(ii) n-hfem INALP REDUP: wide ABL	'from Yinimaliwalya'
yiniŋgwalhangwa ~ yiniŋgwalhangwa /yi + {a}ni + mwi + alyi{pw} + lhangwi/ 3:3(ii) n-hfem INALP lips POSS	'Rainbow Bee-eater'

When the consonants are identical the vowel /a/ always occurs but there is free variation elsewhere between the high and low vowel.

mwawirrakipwina ~ mwiwirrakipwina	'those [canoes]'
mwapwikwarimwawiya ~ mwipwikwarimwiya	'three big [canoes]'
mwangalhatja ~ mwingalhatja	'it'
mwarrngakwiya ~ mwarrngikwiya	'two nights'
akamwirra ~ akimwirra	'with a stick'

Variation between the high and low vowel is common preceding the Allative case-marking clitic and can follow any consonant. It is not caused by dissimilation or by agreement with the morpheme-final deep structure vowel. Not every speaker uses both variants but, for some words, the variation is heard throughout the community. The most common usage is placed first in the following examples.

akwingwawa	~	akwingwiwa	'to water'
arrakpawa	~	arrakpiwa	'to the outside'
mwathiwa	~	mwathawa	'to the ear'
angalyiwa	~	angalyawa	'to home'
alhikirawa	~	alhikiriwa	'to the house'

2.3.3 Deep structure vowels

The morpheme-final deep structure vowel can be identified in much of the data but there are problems because of the Word-medial and Pause-final Neutralisation Rules 1 and 2, e.g., ngarra- (1st inclusive plural prefix); lhika 'to foot-walk'; arti 'to shout'; ani 'he'. The basis upon which they are making these decisions has not been identified and the nature of the vowel following rounded peripheral and retroflexed consonants still remains uncertain in individual words. Some solutions are discussed in this section.

2.3.3.1 Prefix-final

A deep structure high or low vowel could be posited in the mono-syllabic word-initial Nominal Classifier mwV- because there is no evidence for one or the other in this position. In the surface structure of corresponding word-medial object morphemes, however, the morpheme-final vowel is /a/ (one of the two exceptions where the Word-medial Neutralisation Rule does not operate). The deep structure vowel is therefore considered to be a low vowel in both word

positions. The decision is further supported by the Nungg equivalent mana.

nimwarringka /ni + mwa + rringka/ 3:3(1) 3:5 see	[numwa ^ɻ iŋka]	'he saw it (can)
mwirirpwa /mwa + rirrpwi/ 3:5 back	[m ^w urir ^ɻ pwa]	'human back'

The deep structure vowel in the word-initial Nominal Classifiers 3:2 nga- and 3:3 ni- can be established through their similarity with their word-medial counterparts. The object prefixes (a)nga ~ and (a)ni-, retain a contrast between the high and low vowels in the surface structure and the latter morpheme has the anticipated fronted allophone in the first vowel.

nangarringka /n{ɪ} + anga + rringka/ 3:3 3:2 see	[naŋa ^ɻ iŋka]	'he saw her'
ngaihatja /ngalh{a} + atja/ 3:2 CofR	[ŋa _ɪ atja]	'she'
nanirringka /n{i} + ani + rringka/ 3:3 3:3 see	[neni ^ɻ iŋka]	'he saw him'
nipwikwaya /ni + pwikwaya/ 3:3 coming	[nup ^w ukwa ^ɻ ya]	'this approaching [man]'

The deep structure vowel in the word-initial Nominal Classifier 3:2 tha- can be identified in the corresponding word-medial Genitive prefix atha-. The non-fronting of the initial vowel indicated by the underlying final vowel is /a/.

thathiyara /th{a} + atha + yara/ 3:2 hfem young	[tath _ɪ iyara]	'girl'
---	---------------------------	--------

thɪkwitja
/tha + kwitji/
3:2 small

[tɪkwitja]

'Black-faced Cuckoo-
shrike'

The non-human masculine Nominal Classifier yɪ- does not occur word-medially as an object morpheme in the verb prefix (the distinction between the human masculine ni- and non-human masculine yɪ- is neutralised). If the deep structure morpheme-final vowel is considered to be a high vowel on the basis of symmetry the phonological rules generate the correct allophones.

nɪpwina
/ni + p(w)inɪ/
3:3(11) that unseen

[nɪpɪna]

'that unseen'

yɪpwina
/yɪ + p(w)inɪ/
3:3(11) that unseen

[yɪpɪna]

'that unseen'

yɪŋwa
/yɪ + ŋwi/
3:3(11) (call)

[yɪŋwa ~ yuŋwa]

'Torresian Crow'

2.3.3.2 Root- or suffix-final

The identity of the deep structure high or low vowel following a root-final or suffix-final rounded peripheral consonant has not been found in evidence in the surface structure. Both vowels can follow a rounded consonant within the morpheme and the phonological rules will generate the correct allophones irrespective of the nature of the vowel. With a lack of any real evidence from the surface structure, the vowel is tentatively being considered to be a high vowel. Cognates with Nunggubuyu and Gupapuyngu also support a deep structure high vowel in this position because the vast majority of words have a corresponding high vowel in the surface structure. The morphological structure of the few cognates that do have a low vowel (first three words in the second set below) indicates that the words are borrowings

from Anindilyakwa. A few Anindilyakwa speakers who have attempted to identify the final vowel have consistently given the high vowel.

thi: wirirrkwa	GP kurturrkku	'Brolga'
alhamwikwa	NG lhamuku	'cane'
	GP thamukku	
akwingwa	NG kuku	'fresh water'
yimpwalhmwa	NG yurnpalmi	'Turban Shell'
wirmwa	NG wirami	'to fly'
mwalhiwa	NG malhiwu	'Razor Shell'
alhawithawarra	NG lhaawu	'story'
yilpwa	NG wulpuru	'Smartweed yam'
thingalhiwa	NG ngalhuwa	'Hawksbill Turtle'
anikathiwa	NG kathuwa	'new'
aningkwirakpwa	NG nungkwurtaapa	'old'
lamwa	NG rlaama GP lama	'blade spear'

The identity of the deep structure vowel following a retroflexed consonant do not appear to be predictable from the surface structure. Anindilyakwa speakers, however, have supplied a contrast for some roots, e.g., warti: 'hit; angwira 'firewood'. Further research is needed to cover all data and to try to discover the criterion upon which they are making the decision. Cognates with neighbouring languages also indicate that both Anindilyakwa vowels should be possible in the deep structure.

yimwawira	NG yimawuru	'Red Emperor fish'
yirntirnta	NG yirnti	'Strychnine Tree'
	GP yurntirtrti	
mwakarta	GP makkarti	'sea'
akwirikwirta	NG kurtukurtu	'sacred'

angwira	NG ngura	'fire'
lharrwira	NG atharrwara	'afternoon'

A deep structure high or low vowel can follow a retroflexed consonant within a morpheme. In some shortened roots, the word-final vowel can thus be identified as a low vowel. Compare the paired examples below.

wingwirntithathiya	'spear its ankle!'
/wi + ngwirnti{rrka} + thathiya/	
2Sg ankle spear	

angwirnta	'ankle'
/a + ngwirnti/	
3:4 ankle	

yimwirntakakina	'those [snakes]'
[yimwun ^h ta ^h akakina ~ yum ^h in ^h ta ^h akakina]	
/yi + mwirntak{a} + akini/	
3:3(11) PL that	

yimwirnta	'head lice'
[yimwun ^h ta ~ yum ^h in ^h ta]	
/yi + mwirnta/	
3:3(11) many	

Pending further investigation, the vowel /i/ has been used until deep structure vowels can be accurately identified. The choice is arbitrary except where there is evidence to the contrary.

2.3.4 Homographs

Homographs occur in a few pairs of words in the surface structure (and orthography). Phonetically, the word-medial vowel allophones [a] and [e] contrast because of the application of Vowel Fronting Rules 1 and 2. The vowel in the word-final syllable, however, is neutralised in the surface structure by the operation of the Pause-final Neutralisation Rule 2. The ambiguity arises only in written data and this is resolved by the context for minimal pairs or by other morphemes in multi-morphemic words.

The lack of contrast in the spelling of surface structure forms of words is shown in the following pairs of examples. The list is comprehensive but not exhaustive. (Note: For an explanation of the metathesis in the last example see Section 2.9.3.)

athirra /{a} + athirri/	[e _n iʔa]	'hole'
athirra /{a} + athirra/	[a _n iʔa]	'some'
karra /karrɪ/	[keʔa]	'oh, you're hurt!'
karra /karra/	[kaʔa]	'do you agree?'
mwarra /mw{i} + a{ya}rri/	[meʔa]	'blood'
mwarra /mw{i} + arra/	[m ^w aʔa]	'Soap Tree (wattle)'
akiwa /{a} + aki + wa/	[e ⁱ kuwa]	'disc for balancing loads on the head'
akwa /akwɪ/	[akwa]	'and'
arra /{a} + arri/	[eʔa]	'vomit'
arra /a + rra/	[aʔa]	'forehead'
nirrakpwatja /ni + rrak{i} + pwatja/ 3:3(i) elongated hit	[niʔekp ^w atja]	'he hit the snake'
nirrakpwatja /ni + rrak{a} + pwatja/ 3:3(i) forehead hit	[naʔakp ^w atja]	'he hit his forehead'
wangkirratja /w{i} + angkirr{i} + atja/	[wæŋkiʔa ^t tja]	'listen!'
wangkirratja /w{i} + angkarra => angkirr{a} + atja/	[wæŋk ⁺ aʔa ^t tja]	'run!'

Stokes (1981: 151-7, 174-5) bases her analysis of two low vowels on the above contrasts in the surface structure. This, however, necessitates the positing of freely varying phonemes throughout a sizable proportion of the data. In testing the orthography in which both /a/ and /e/ are written, the fluent writers had at least 40% error in spelling the two vowels as against 10% random error for the consonants (Leeding 1984a.) Later testing showed that the literates have no problems in reading or writing only the vowel /a/ and no greater problems in handling the homographs than we do in English (i.e., sometimes they were re-read).

2.4 DISTRIBUTION

2.4.1 Syllable structure

The syllable types can be incorporated into one formula, (C)V(C)(C), in which the vowel nucleus is obligatory and the onset and coda are optional.

V	a.rra	'forehead'
VC	arr.ngka	'hip'
VCC	arrk.pwilha	'Tussock Grass'
CV	na.ra	'no'
CVC	mwang.mwa	'brains'
CVCC	thi.mwa.ngkarrk.pwa	'Wild Plum'

The syllables, V, VC, VCC, are found only word-initially and the vowel is always /a/. The most frequent syllable, CV, is the only one which occurs word finally. The syllables, CVC and CVCC, occur word initially and medially. Syllable boundaries have been established quite arbitrarily in order to provide the simplest way of analysing the patterns.

The distribution of consonants within the syllable is as

follows: (a) all consonants occur in the syllable-onset; (b) only unrounded consonants occur as the single syllable-coda within morphemes; and (c) in TA, only /rk/ and /rn/ occur as the complex syllable-coda but, in MA, /lh/ is added. Words and morphemes begin with any consonant or the vowel /a/.

Table 4 lists the permitted consonant clusters within and across morpheme boundaries but is divided into two sections to highlight the differences between Traditional and Modern Anindilyakwa. In TA, the initial consonant of a di-cluster is a continuant, /lh/, /rr/, /r/ and /ng/, or an obstruent /t/ and /kw/. The di-clusters with the lateral /lh/ are not common. The only heterorganic clusters with peripheral segments have the maximum distance between the points of articulation, i.e., dorsal and labial. In MA, the traditional system has been extended to other laterals and nasals in loanwords.

lhpw	alh + pwilhirra	'slippery [grass]'
lhkw	mwiyalhkwa	'starfish'
lhk	apwalhkaya	'upwards'
lhth	napwalh + thatha	'he carried it on a belt'
lhtj	alh + tjirrirra	'tall [grass]'
rpw	apwiyarpwiwa	'four'
rmw	amwarmwarra	'a sore'
rmpw	awarmpwiwarmpwa	'Venus Shell'
rngkw	mwirngkwirra	'Round Yam'
rngk	amwarngka	'a laugh'
rth	mwawirtharra	'Woollybutt Tree'
rtj	artja	'Green Tree-frog'
rrpw	yingarr + pwantja	'Limpet Shell'
rrp	yilharrpa	'Liviston Palm'
rrmw	nilharrmana	'he chased it'

TABLE 4: DISTRIBUTION OF CONSONANT CLUSTERS

1ST SYL CODA	2ND SYL ONSET	PERIPHERAL											NON-PERIPHERAL			
		pw	p	mpw	m	mpw	mp	kw	k	ngw	ng	ngkw	ngk	w	th	tj
TRADITIONAL																
lh		x				x									x	
r		x		x								x			x	
rr		x		x		x					x				x	
rrk		x														
rrng		x					x									
ng		x														
k		x														
kw		x														
MODERN																
l		x		x											x	
lk		x														
n		x														
rn																
t		x														

rrm	ayarrmiyarrma	'thin'
rrmpw	akwilharrm + pwitjana	'adjacent things'
rrkw	yarrkwī + mwarnta	'Venus Shell'
rrk	ayarrta	'hand'
rrngw	alyarr + ngwalyilya	'night'
rrng	thimwarrnga	'cricket'
rrngkw	alharrngkwilharrngkwalha	'dangerous things'
rrngk	arrngka	'hip'
rrth	nalharrrtjanga	'they crowded together'
rrtj	yimwirr + tjingwa	'drab'
rrkpw	mwangkarrk + pwa	'Pandanus Palm'
rrngpw	nilhamwarrng + pwitjana	'he slept well'
rrngmw	mwarrrng + mwirtha	'Bush Currant'
ngpw	ang + pwilyiwa	'sickness'
ngp	alhangangpa	'which two?'
ngmw	yīng + mwing + mwarnta	'Snake-necked Tortoise'
ngm	alyangma	'top'
kpw	akpwa	'buttocks'
kp	alhangakpa	'those two'

The consonant di-cluster /kpw/ contrasts with /kpw/ at morpheme boundaries when an intervening vowel has been deleted (see Section 2.5.1). The vowel allophones that precede the dorsal consonants indicate that this contrast is maintained.

nirikpwitjanga	[n ^h ɪ ^h ruk ^h witjanga]	'he jumped'
/ni + rikw{i} + pwitjanga/		
3:3(i) body	jump	
alhakpwikwaya	[a ^h ɛ ^h k ^h wukwa ^h ya]	'those two coming'
/a + lhak{i} + pwikwaya/		
3:4 DU	coming	

arrakpwalhiwalha	[aʔakpʷa]uwa]a]	'wide forehead'
/a + rra	+ pwalha + walha/	
3:4	forehead REDUP	wide
arrakpwalhiwalha	[eʔekpʷa]uwa]a]	'thick [wire]'
/a + rra	+ pwalha + walha/	
3:4	elongated REDUP	wide

The distribution patterns shown above pertain to Traditional Anindilyakwa. Other consonant clusters can be identified as originating in neighbouring or foreign languages because the source languages have systems in which such clusters are common. The clusters conform to the TA system in which a lateral or a nasal continuant is the first consonant. The original pronunciation sometimes varies with the assimilated form. (Note: The Nunggubuyu syllable Cu is the same as the Anindilyakwa syllable Cw.)

lpw	mwapwalpwa	NG mapalku	'string'
	angalpwiya	NG arnngalpiya	'Black Catfish'
lp	yilwipanta	NG yingkuripant:	'Ba . . . undi'
lmw	awirmwarra ~ awilmwarra	NG wulmuwarra	'boomerang'
	yimpwalmwa	NG yurnpalma	'Turban Shell'
lkw	alkwa	NG warlku	'crab sp.'
	yilkwa	NG yirlku	'Toadfish'
	mwilkwa	NG murlku	'stomach'
lng	mwiwalgara	NG walngari	'Cooktown Salmon'
ltj	thiwaltja	NG arltja	'Water Python'
lkpw	ayil(k)pwilkpwa	NG wulpulk	'dry place'
npw	mwanpwakwa ~ mwampwakwa	NG manpa	'string decoration'
	yiwinpwirna	NG yiwunpirna	'Silver Bream'
nkw	pwankwitja		'Whale Shark'
rnkw	kwirnkwirna ~ kwinkwirna	NG kirnkirn	'Turrum'
rnk	mwarnkimwarnka	GP marnkimarnki	'sorcery tool'

rnth	amwirtha	NG murn	'shoulder'
	amwirthikwa ~ amwintikwa		'Catfish Eel'
	kwirthirra ~ kwinthirra		'Olive Python'
rntj	yirntjirra	NG wirntjitu	'Bludger Trevally'
	mwarntja	NG marn	'brood cells'

It is also interesting to note that some Nunggubuyu di-clusters consisting of a retroflex and stop correlate with a retroflex plus prenasalised stop in Anindilyakwa. As the Nunggubuyu clusters are not homorganic, the following words are also considered to be loanwords.

rmpw	mwarmpwarmpwirra	NG marnparmpurru	'Rock Fig'
	amwarmpwarmpwina ~ amwarnparmpina	NG amarnparmpina	(place name)
	amwarnparmpwina		
rngk	mwirngkirra	NG mirnkirra	'sinker'
	narngkiyarra	NG narnkiyung	'father-in-law'

2.4.2 Lexical word structure

A lexical or content word is a unit of vocabulary which carries semantic meaning and is listed in a dictionary. The number of syllables in the lexical word in Anindilyakwa varies from one to thirteen, with at least two more syllables added by inflectional suffixes. The morphemic structure is illustrated by the derivations.

kwa 'come here!'

nga.rri.mwi.rnti.mwi.rnta.ki.lha.lhi.ka.ni.mwi.rra
 /ngarra + mwirnta{ka} + mwirntaka + lha + lhik{a} + ani + mwirra/
 1IncP1 REDUP SPL REDUP go TNS PIP
 'We all were keeping on going.'

yi.rri.pwi.kwi.mwi.ngkw1.mwi.ngkwa.tha.y1.ni.mwi.pwa.pwa
 /yirra + pwikwi + mwingkwa + mwingkwath{a} + aya + ni + mwi + pwapwi/
 1ExcP1 TRI REDUP dig SNsg TNS PIP CSL
 'because we three (excluding addressee) were keeping on digging...'

The frequency of words with varying lengths differs as to whether the dictionary or texts are used for the frequency count. The number of words in the dictionary corpus is approximately 3,000 and in the texts approximately 2,000. The percentages are as follows:

	Dictionary	Texts
1 to 2 syllables	4.0%	14.2%
3 to 7 syllables	91.1%	78.1%
8 to 14 syllables	4.9%	14.2%

The above percentages are skewed between the dictionary and texts because (a) 10 % of the 14.2% of di-syllabic words in the texts are repetitions of two conjunctions; (b) the addition of verb suffixes and clitics in the texts often adds one or more syllables which then place the word in a higher category than for the dictionary. The only mono-syllabic words are interjections. The traditional di-syllabic Anindilyakwa words amount to only 2.4% of the 4% shown for the dictionary whereas all except a few names in the texts were traditional words.

2.5 COALESCENCE AND REDUCTION

The most striking impact when hearing Anindilyakwa for the first time is the frequency of long words and the consistency of a rhythmic stress pattern based on di-syllabic and tri-syllabic feet. Segments and syllables, however, are deleted or reduced to make the words as short as possible while retaining the essential shape of each morpheme.

Deletion and Coalescence Rules occur across morpheme boundaries and are, therefore, applied after allophonic rules operating within the morpheme. The Word-medial Neutralisation Rule is irrelevant

because the vowel elides. Reduction rules mostly occur within the morpheme after the application of allophonic rules. Only the deep structure forms are shown in the first three subsections for brevity and clarity (the Word-medial Neutralisation Rule will need to be applied to generate some surface forms).

2.5.1 Vowel deletion

The Vowel Deletion Rules follow Vowel Fronting Rule 1 and Word-medial (morpheme-final) Neutralisation Rule 1. This ordering of rules is necessary in order to create a fronted allophone of the initial deep structure vowel /a/, as shown in the derivation below.

VOWEL DELETION RULE 1

[V] ==> Ø / + [V]

i.e. a morpheme-final vowel is deleted when followed by a morpheme with an initial vowel.

angkalya [ɛŋkalya]

'wet'

DEEP STRUCTURE a + ngkɪ + alyɑ

VFR.1 a + ngkɪ + alyɑ

VFR.2 e + ngkɪ + alyɑ

VDR.1 e ngk{ɪ} alyɑ

arimwa

'big'

/[a] + arimwi/

3:4 big

thathimwayarrka

'female gift-giver'

/th{a} + atha + mw{i} + ayarrka/

3:2(i) hfem INALP hand

nawinyampathina

'he got angry'

/n{i} + awinyampɪ + tha + ni/

3:3(i) liver:hard INCH TNS

Vowel Deletion Rule 1 also operates at lexical word boundaries within the phonological word.

kampwa angalyimwantja 'and thus at home'
 [kampʷaŋalyumʷaŋtja]

kilhiakatja arakpwa arriparrɪpawa 'I will go to the
 [kɪʰkaʔtja arakpeʀɪpeʀɪpaʷa] bush'

Vowel Deletion Rule 2 generates heterorganic stop clusters consisting of peripheral consonants with the maximum distance between the points of articulation.

VOWEL DELETION RULE 2

$$\begin{matrix} \text{V} \\ \left[\begin{array}{c} +\text{high} \end{array} \right] \end{matrix} \Rightarrow \emptyset \quad / \quad \begin{matrix} \text{C} \\ \left[\begin{array}{c} +\text{obstr} \\ +\text{oral} \\ \text{dorsal} \end{array} \right] \end{matrix} \quad + \quad \begin{matrix} \text{C} \\ \left[\begin{array}{c} +\text{peri} \\ +\text{oral} \\ \text{labial} \end{array} \right] \end{matrix}$$

i.e., a morpheme-final high vowel is deleted between a dorsal stop and a labial stop.

The second word in each of the following pairs of words illustrates the deletion of a vowel at the boundary between two morphemes. The vowel is only deleted if the resultant sequence of consonants is permissible within the morpheme.

akɪlyarrpa /a + kɪ + lyarrpɪ/ 'not heavy'
 3:4 ASR light

akpwitha /a + k{i} + pwitha/ 'strong'
 3:4 ASR strong

nirikwitharrpwa /ni + rikwi + tharrpwi/ 'short-bodied'
 3:3(i) body short

nirikwpwitjanga /ni + rikwi + pwitjanga/ 'he jumped'
 3:3(i) body jump

alhakana /a + lhak{a} + ani/ 'these two'
 3:4 DU here

2.5.2 Syllable deletion

A reduction in the number of syllables in a word is quite common in Anindilyakwa despite the frequency of long words. This is analysed as four different types of reduction or coalescence. Haplology and Morpheme-final CV deletion delete a whole syllable; Cerebralisation and VCV reduction delete and coalesce a consonant and vowel across syllable boundaries. Syllable deletion is regressive and elides in both stressed and unstressed syllables.

2.5.2.1 Haplology

Haplology is a common feature of the language which has many identical syllables within morphemes and in long (multi-morphemic) words because of reduplication. There is no change in meaning with the reduction in the number of syllables. Where the Haplology Rule is optional the full form is usually given in elicited data but both forms are frequent in daily speech and appear to be accepted by the Aborigines for literature. Haplology occurs within the morpheme and across morpheme boundaries.

Haplology Rule: where the initial consonants of two syllables have identical or similar manner of articulation, the first syllable may elide. The intervening vowel is almost always a high vowel, viz., either the deep structure vowel or the vowel derived by the Word-medial Neutralisation Rule.

(1) variant forms

When the Haplology Rule operates within a lexical root, it is usually optional--thus the full form of the word varies with

its shortened form. All dotted syllables below are stressed.

alyarrngwa(lyi)lyya	'night'
angwitji(rri)ra	'deep'
alhingatji(rri)rra	'long'
mwamwirri(nyi)nya	'Paper Berry'
tha(ka)ka	'his [woman]'
wairna(rna)	'these [people]'
mwa(ma)ma	'this [canoe]'
ani(ngwi)ngarrkwima	'spikeless [ray]'

The above examples show the application of the Haplology Rule where the consonants are identical. Elision is much rarer when the consonants only share the manner of articulation.

aninthilyakwa	[é(ni)ntjilyakwa]	(language name)
yiningwimwapwalhpwa	[yiniŋwimwápwalpwa]	'bat (gen.)'

The same type of reduction can occur between lexical words within the phonological word. Two syllables have been found to elide, as in the last example.

yakwitjina	nakina
[yakwitjinakina]	
'there he ...'	
nanikilhawirrakwatjiyatha	thakina
[nenkilaŋwara'akawitjiyatakina]	
'He could bring her back.'	
aniwa	niwilyapwa
[éniwilyápwa]	
'he, the one [man]'	

(ii) fused forms

When the Haplology Rule operates across morpheme boundaries it is usually obligatory. Many of the reduced forms are fused

compound stems but the morphemes are identifiable within the substitution sets.

warningwangwima		'fatherless'
/warni + {ngwi} + ngwangwi + mi/		
3:1	ALP	father PRIV
wiki harrkatja		'set fire to it!'
/wi + {ka}ki + lharrka + tja/		
3:1	tongue-shaped	send ISR
wingkitjikina		'he lifted it'
/wi + ng{ki} + katjikini/		
3:1	ASF	hold
angkwapwikwapwi		'taboo area'
/a + ng{kw}i + kwapwi + kwapwi/		
3:4	NSR	REDUP sacred
ngamwantja		'where...at?'
/nga{mpwi} + mwantja/		
	where?	LOC
yiniwingkwirra		'its cheek'
/yi + {a}ni + {mwi} + mwingkwirra/		
3:3(11)	n-hfem	INALP cheek

In the following examples, the full form occurs in the monomorphemic adverb but only reduced forms in multi-morphemic words.

warnantja		'quickly'
alhi kwantja		'dance'
/a + lhi{a} + wa{rna}ntja/		
3:4	foot	quickly
ar kwantjirra		'good at hunting'
/a + ri{wi} + wa{rna}ntja + rra/		
3:4	body	quickly SF

There is a further situation in which a CVC sequence with two similar consonants appears to coalesce. The first syllable is always very short and unstressed. The last consonant in the first syllable is always a peripheral with a potential for rounding and the initial consonant of the second syllable is always the semi-vowel /w/. The intervening vowel elides and the phonetic rounding of the coalesced

consonant is sequential. The reduced form is not considered to be phonemic because (a) the full form always occurs in precise speech, (b) the Aboriginal speakers insist that, however much reduced, the vowel is always pronounced, and (c) the stress pattern does not alter. The following examples illustrate the reduction of a syllable within lexical and phonological words.

amwiwara [am^wuwaɾa ~ amwaɾa]
 /a + m(wi) + waɾi/
 3:4 INALP ???
 'pronged spear'

thakwiwarriwarra [tak^wuwaɾuwaɾa ~ takwaɾuwaɾa]
 /th{a} + a{ni} + k(wi) + warriwarra/
 3:2(ii) n-hfem NSR REDUP: turn
 'electric fan'

ningiwarritjina [niŋuwaɾitjina ~ niŋwaɾitjina]
 /ning(i) + warra + tja + ni/
 1ExcSg turn TSR TNS
 'I started it [engine].'

nirikwiwarrikwina [niɾiɾkwuwaɾukwuna ~ niɾiɾkwaɾukwuna]
 /ni + ri{k(wi)} + warra + kwa + ni/
 3:3(i) body turn CAUS TNS
 'He turned it around.'

ngarritjarrikwa wirraɾina
 [ŋaɾitjeɾukwuɾakina]
 'We finished it.'

Such coalescence is accepted where fusion has occurred between two roots, thus forming a compound stem.

angkipwarrngwarrngwa 'heavy'
 /a + ngki + pwarrng{wi} + warrngwa/
 3:4 ASR REDUP root

amwartilhangwiwiya [-lanwuwiya ~ -lanwiya] 'over the grass'
 /amwarti + lhang{wi} + wiyi/
 grass ABL TPRG

2.5.2.2 Morpheme-final CV deletion

The application of the Vowel Deletion Rule 2 in some positions would generate unacceptable consonant clusters. At such boundaries,

the syllable elides. The application of the Morpheme-final CV Deletion Rule is most easily observed in reduplicated roots or substitution sets.

MORPHEME-FINAL CV DELETION RULE

$$\begin{array}{c} \text{C} \\ [+peri] \\ [+oral] \\ [dorsal] \end{array} \begin{array}{c} \text{V} \\ [+high] \end{array} \implies \emptyset \quad / \quad \begin{array}{c} \text{C} \\ \left\{ \begin{array}{l} [+obstr] \\ [+peri] \\ [labial] \end{array} \right\} \\ \left\{ \begin{array}{l} [+lamin] \\ [-nasal] \\ [+obstr] \\ [oral] \end{array} \right\} \end{array}$$

i.e., when a CV sequence consisting of a velar stop and high vowel occurs preceding a root-initial rounded labial stop or nasal or a lamino-palatal or lamino-dental stop, the CV sequence is deleted. (The velar nasal in a homorganic nasal-stop sequence is retained in order to identify the morpheme. A prenasalised consonant does not occur in root-initial position.)

Such syllable deletion is obligatory in some instances and optional in others. The obligatorily reduced forms seem to belong mostly to the nominal word class whereas the optional presence or absence of the syllable is largely found in the verbs. The deleted syllable is identical with the Nominaliser *kwi-* and may be optional because its occurrence on a first order noun root is redundant. For convenience, the following examples are divided into two groups:

(i) variant forms

The full and reduced forms of a word usually occur when the first of the two roots is part of a large substitution set.

amwintjirr(ki)mwilhimwilha 'spotted skin'
 /a + mwintjirr(ka) + mwilhimwilha/
 3:4 skin rough

wilhakpwa(ki)tjiriya /wi + lhakpwa(ka) + tjiriya/ 3:1 leg push	'push the leg over!'
mwalh(ka)thaka /mw{a} + alhka + thaka/ 3:5 wing cook	'cook the wing!'
mwalh(pwi)thirriwama /mw{a} + alh{ka} + thirriwama/ 3:5 wing bury	'bury the wing!'

If the deletion of the syllable results in an uncommon CC sequence the first consonant in the di-cluster can be deleted.

For example:

wimwingkwi(rr)thirriwama /wi + mwingkwi(rr){kwi} + thirriwama/ 3:1 cheek bury	'bury the cheek!'
wimwilyi(rr)tharriya /wi + mwilyirr{ka} + tharra + yi/ 3:1 breast spear TNS	'spear the breast!'

(11) fused forms

Only the reduced form occurs when the second root of a verb or nominal is obligatorily bound by the adjectiviser or nominaliser, or where the meaning is idiomatic. Compare the following sets of words in which the first word shows the non-deleted form of the first root.

wingkilharritja /wi + ngki + lharritja/ 3:1 ASR drop	'drop it!'
wingpwatjina /wi + ng{ki} + pwatjini/ 3:1 ASR smell	'smell it!'
wingwingwina /wi + ng{ki} + mwingwini/ 3:1 ASR throw from	'throw it away!'
warningmwa /warni + ng{ki} + mwi/ 3:1 ASR knowledgeable	'knowledgeable'

nilyangkiyamwina /ni + lyangka + yamwini/ 3:3(i) head speak	'he decided'
nilyangmwanthikwina /ni + lyang{ka} + mwanthikwini/ 3:3(i) head be honest	'he was honest'
yilyangmwirra /yi + lyang{ka} + mwirra/ 3:3(i) head PROP	'Ark Shell'
amwintjirrkawirrimwalya /a + mwintjirrka + wirrimwalya/ 3:4 skin smooth	'smooth [bark]'
amwintjirrngakpwirna /a + mwintjirr{ka} + ngakpwirna/ 3:4 skin tidy	'smooth [bark]'
thirikw:tharrpwa /tha + rikwi + tharrpwi/ 3:2(ii) body short	'short [dress]'
thiritjamiyama /tha + ri{kwi} + tjamiyami/ 3:2(i) body elongated	'thin [woman]'
wilyingarrkirithana /wi + lyingarrka + rithani/ 3:1 liver cut	'cut the liver up!'
wilyingarrtjalhana /wi + lyingarr{ka} + tjalhani/ 3:1 liver carry	'carry the liver!'

In most instances, the form of each word is consistent but there are words in which the speakers apply either Vowel Deletion Rule 2 or the Morpheme-final CV Syllable Deletion Rule. Such variation is not possible if it would produce a non-acceptable CC sequence, e.g., kwmw. Examples of the resultant variation within the same word are as follows:

nimwirnta(k)pwilhirra /ni + mwirntak{a} + pwilhirra/ 3:3(i) PL blunt	'careless [man]'
--	------------------

mwalyikarr(k)pwilyirra		'tracks'
/mwa + lyikarrk{a} + pwilyirra/		
3:5	heart	smooth
ngarı(kw)pwatjiya		'hit her back!'
/nga + rikw{1} + pwatjiya/		
3:2(1)	back	hit
alharrngkwilharr(ng)mwirntirra		'well-kept things'
/a + lharrngkwı + lharrng{kwi} + mwirntirra/		
3:4	REDUP	things care for

2.5.2.3 Cerebralisation

Cerebralisation occurs between a rhotic /r/ or /rr/ and alveolar or velar nasal. Some of the resultant forms are fixed but others freely vary.

When the prefix rra- (non-singular) precedes the morpheme rra- (masculine) in the pronouns, the flap /rr/ and the alveolar /r/ coalesce to form a retroflexed nasal /n/ with the loss of the intervening vowel. The coalescence takes place after the application of the Word-medial Neutralisation Rule. Compare the following pairs of words in which the first shows the deep structure unit.

ningkwirringa	/ningkwı + rra + nga/	'you two [women]'
	2Sg Nsg Fem	
ningkwirna	/ningkwı + rra ==> r{ri} + ni/	'you two [men]'
	2Sg Nsg Masc	
apwirringa	/apwi + rra + nga/	'they two [women]'
apwirna	/apwi + rra ==> r{ri} + ni/	'they two [men]'

The same type of coalescence also occurs when the morpheme rra- (non-singular) precedes the Gender morpheme anı- for 'not human feminine'. Rare occurrences of the full form are used by the older generation in variation with the coalesced form. Compare the following:

naningkwarpa /n{1} + ani + ngkw{1} + arpw1/ 3:3 n-hfem NSR wound	'adult man'
yarningkwarpa ~ yirraningkwarpa /yirr{a} + ani + ngkw{1} + arpw1/ 1ExcPl n-hfem NSR wound	'we men'
ngarniyarringka ~ ngarraniyarringka /ngarr{a} + ani + yarringka/ 1IncPl n-hfem ???	'we older men'
warnikwapwirra /wirr{a} + ani + kw1 == kwa + pwirra/ 3:1Pl n-hfem NSR split	'they, the people of the opposite moiety'

The coalescence is confirmed in the following examples where the first nasal is retroflexed and the second is alveolar. (See Section 2.8 for Reduplication Rules.)

ngarniniyiwangkwa /ngarni + {a}n1 + yiwangkwi/	'we older men'
ngarningkwiningkwarpa /ngarningkwi + ningkwarpw1/	'we men'

The di-clusters /rrng/ and /rng/ can be reduced to a retroflexed /rn/ or an alveolar /n/. It would seem that, because of the free variation between /rn/ and /n/, the cerebralisation process has been followed by loss of retroflexion (see Section 2.11).

awarrngkanyarra ~ awarnkanyarra ~ awankanyarra	'rather angry'
yiwarrngkwitja ~ yiwankwitja	'joey'
arrngka ~ anka	'hip'
nilhamwarrngpwitjina ~ nilhamwanpwitjina	'he slept well'
alharrngkwilharrngkwalha ~ alhankwilhankwalha	'sharp things'
wilhangarngkwithaka ~ wilhangarnkwithaka	'cook the head!'

In the following examples, the sequence /rng/ is reduced to a

retroflexed nasal /rn/ but, following the application of the Morpheme-final CV Syllable Deletion Rule, a vowel is inserted between the two contiguous nasals. Compare the last two examples with the first example which is representative of the usual morpheme shape.

arngakwira	/arnk{a} + awiri/ times single	'forever'
arningkwiwaya	/arnka + ngkwɪ + waya/ ===> arn{gk}ɪ ngkwɪ waya ===> arnɪ ngkwɪ waya times NSR ?follow	'tomorrow'
arningkwiwiya	/arningkwaya + wiya/ ===> arningkwɪ{waya} + wiya tomorrow TPRG	'in a few days'

When a morpheme-final CV sequence consisting of a retroflexed nasal and high vowel is followed by an alveolar nasal, the vowel normally elides and the consonants coalesce to form a retroflexed nasal. Only one example has been observed to date.

nalyipwarina	[nalyup ^w aɾina ~ nalyup ^w aɾa]	'he ate it'
/n{ɪ} + Ø + alyipwar(ɪ) + nɪ/ 3:3(1) 3:4 eat TNS		

2.5.2.4 VCV reduction

When a VCV sequence is composed of two identical high vowels with an intervening semi-vowel, the sequence optionally reduces to a single vowel. This vowel is lengthened in a stressed syllable.

tjiwirra	[tjuwura ~ tju:ʔa]	'book'
yiwi	[yu:]	'yes'
wirrilhiyiwa	[wuʔiɭiyuwa ~ wuʔiɭi:wa]	'Common Sandpiper'
mwangiyiwanga	[m ^w aŋiyuwaŋa ~ m ^w aŋiwaŋa]	'shark (gen.)'
kartiyi	[kaʔi:]	'watch out!'

When a VCV sequence consists of a low vowel followed by a semi-vowel and high vowel, the sequence coalesces to a lengthened glide. Stress which normally falls on the penultimate syllable falls on the word-final glide.

wiwayitjina	[uwa ^ɨ yitjina ~ uwa ^ɨ :tjina]	'open it!'
mwarriwayitja	[m ^w a ^ɨ uwa ^ɨ yitja ~ m ^w a ^ɨ uwa ^ɨ :tja]	'grass sp.'
mwayikwarra	[m ^w a ^ɨ yukwa ^ɨ ~ m ^w a ^ɨ :kwa ^ɨ]	'Mauve Convolvulus'
yakayi	[yaka ^ɨ :i ~ yaka ^ɨ :]	'ouch!'
tjaya ~ tjayi	[tja ^ɨ ya ~ tja ^ɨ :]	'scram!'
awiringkwarrkwa	[awu ^ɨ ɾuŋkwa ^ɨ ~ a ^ɨ :ɾuŋkwa ^ɨ]	'Slender Barracuda'
awirintja	[awu ^ɨ ɾiŋtja ~ a ^ɨ :ɾiŋtja]	'orange'
kawikwinata	[ka ^ɨ :kwunata]	'coconut'
yawa ~ yawi	[ya ^ɨ wa ~ ya ^ɨ :]	'yes'

2.5.3 Consonant de-rounding

The rounding of a peripheral consonant can be deleted within the morpheme and at morpheme boundaries. De-rounding of the consonant usually follows Vowel Fronting Rule 2 (Section 2.3.2.1). The syllable that fronts a vowel can also deround the preceding peripheral consonant which, of course, is part of the same syllable.

CONSONANT DE-ROUNDING RULE

$$\begin{array}{c} C \\ [+round] \end{array} \Rightarrow \begin{array}{c} [-round] \end{array} \Big/ \begin{array}{c} C \quad V \\ [-round] \quad [+lamin] \\ [-retro] \end{array}$$

i.e., when a rounded consonant precedes a syllable consisting of a non-rounded, non-retroflexed consonant and front vowel [i] or [ɨ] the rounding is optionally deleted. This syllable is always preceded by a vowel (usually [+laminal]). (Note: The underlying vowel that conditions the de-rounding can be deleted in the surface structure.)

The Consonant De-rounding Rule operates most frequently at the morpheme boundaries but it is not obligatory. Vowel Fronting Rule 2 only rarely fronts the vowel preceding the de-rounded consonant but it is more likely to affect the vowel preceding labial consonants.

mwingka /m(w)a + ngki/	[m(w)ɨŋka]	'another'
mwiŋyangmwa /m(w)ɨ + nyangmwi/	[m(w)ɨŋjɨm ^h wa]	'siphonophore'
nɨyamwina /nɨ + yam(w)ɨ + ri/	[nɨyam ^h wa ~ nɨyemina]	'he said'
apwilyarra /a + p(w)ɨ + lyarri/	[ap(w)ɨlye ^h ra]	'visible'
wirripwikwaningapwa /wirripwik(w){i} + ani + ngapwi/	[wu ^h ɾup ^h wuk(w)ɨnɨŋap ^h wa]	'three good people'
warnikwikpawhaka /warnɨ + k(w)ɨ + t{i} + pawhaka/	[wa ^h ɾuk(w)ɨkp ^h at ^h waka]	'Honeyeater'
thathingwiyalhakwa /th{a} + atha + ng(w)ɨ + yalhakwi/	[t ^h at ^h ɨŋ(w)ɨye ^h akwa]	'local [woman]'
angwamwina /a + ng{w}ɨ + am{w}ɨni/	[aŋemina ~ eŋemina]	'breast milk'
warningwamwiyarra /warnɨ + ngw{i} + am{w}ɨyarri/	[wa ^h ɾun(w)ɨmɨye ^h ra]	'oldtime residents'

Within the morpheme, the de-rounding of the consonant is obligatory but the Consonant De-rounding Rule applies only to the rounded labial consonants, as shown in the following examples. The Vowel Fronting Rule 2 usually operates on the vowel preceding the de-rounded consonant.

amwinta /{a} + am{w}inti/	[aminta]	'nose'
amwapa /a + m{w}api/	[emepa]	'song'
apwinga /{a} + p{w}ingi/	[epina]	'anthill'
ngampwirrkiringka /ng{a} + amp{w}irrkɨ + rringka/	[ŋæmpɨrki ^h ɨŋka]	'look at Stingray!'

akwiwirmwika [ak^wuwi^rmika] 'a whistle'
 /a + kwi + wirr{k₁} + m{w}ik₁/

The de-rounding of peripheral consonants is irregular when a root or stem with an initial low vowel follows a morpheme-final syllable /kw₁/. The rounded velar in this position is well-established on the basis of a large corpus of data in which the root or stem begins with a consonant. When the morpheme-initial /a/ is followed by a lamino-palatal consonant (including /rr/) the rounding is deleted in almost 90% of the data but this high percentage of de-rounding is not maintained preceding other consonants. The approximate percentages are as follows: 65% of data when preceding lamino-dentals; 45% of data when preceding retroflexed or peripheral consonants. Most individual words show free variation between /k/ and /kw/ in the last two categories. No explanation is available for the irregularity but it indicates that the laminal consonants are a significant factor in consonant de-rounding.

akwarrnga [aka^rŋa] 'teeth'
 /a + k{wi} + arrnga/

m^wamwikalyangpwitja [m^wam^wukalyanp(w)itja] 'Fire Bean'
 /mwa + mwi + k{wi} + alyangpwitja/

thakathithamwa [taka^ti^tam^wa] 'needle'
 /th{a} + a{tha} + k{wi} + athithamwa/

m^wakwathamwirra [m^wak(w)atam^wu^ra] 'necklace'
 /mwa + k(w){i} + athamwirra/

akwartjitjarra [ak(w)artjitja^ra] 'raked area'
 /a + k(w){i} + artjitjarra/

yinikwapwirra [yini^kap^wu^ra] 'Scrub Fowl'
 /yini + k{wi} + apwirra/

yinikwampwarrngarna [yinu^k(w)amp^wa^rŋaⁿa] 'fish sp.'
 /yini + k(w){i} + ampwarrngarna/

thakwingaringara [taku^wunaruⁿa^ra] 'Bush Stone-curlew'
 /th{a} + a{tha} + kwi + ngaringara/

yinikwarrmwingkwartha	[yɪnək(w)ar̩m ^w uŋkwat̩a]	'hermit crab'
/yɪ + {a}nɪ + k(w){ɪ} + arr{kwi} + mwingkwartha/		
alhingkwaliwa	[a _l uŋkwa _l uwa]	'Star Liniment tree'
/a + lhingkw{ɪ} + alhiwi/		
mwi ^h arrngkwimgwa	[m ^w u _l ar̩ŋkwimg ^w a]	'smelly thing'
/mwa + lharrngkwi + ng{kɪ} + m ^w /		

The irregularity in the de-rounding of the velar consonant can also be illustrated in the paradigm for second person pronouns.

ningkwilhangwa	[nuŋkwu _l angwa]	'yours'
/ningkwɪ + lhangwɪ/		
ningkwatja	[nuŋkwatja]	'to you'
/ningkw{ɪ} + atja/		
ningkwanana	[nuŋkenena]	'this you'
/ningkw{wɪ} + anani/		
ningkwakina	[nuŋkakinna]	'that you'
/ningkw{wɪ} + akini/		
ningkwangampwa	[nuŋkangamp ^w a]	'which you?'
/ningkw{wɪ} + angampwɪ/		

2.6 Phonological rules

Many of the vowel allophony rules are optional and cause an enormous amount of free variation in the data. As this is not always obvious in the preceding section it is set out below. Some phonological rules are strictly ordered but others with unique environments would still operate from several positions. Rule ordering is discussed now in order to prepare the reader for rules discussed in Sections 2.6 to 2.12. Given the morphological complexity of Anindilyakwa words it has been extremely difficult to find data which does not preempt a rule that is given later.

2.6.1 Interaction of allophonic rules

Variation between the vowel allophones is exceedingly common in Anindilyakwa and the words which do not vary stand out as

"exceptions". Stokes (1981:153) regards the variation in the high vowel as a "continuum" but, with the above analysis for allophony, the presence of individual allophones can be accounted for.

2.6.1.1 Single allophones

Variation between vowel allophones does not occur in three situations, viz., (i) where no allophonic rule operates; (ii) when only one rule can be applied; and (iii) when the vowel is positioned between two compatible environments. Such examples are comparatively few in number. (Note: Deletions in the curly brackets are discussed in the following section.)

(i) absence of any rule

The surface structure vowels are identical with the deep structure vowels /a/ and /i/ when the phonological rules cannot be applied.

thangapwa /th{a} + angapwɪ/	[t̥aŋap ^w a]	'that [woman]'
angalya /a + ngalya/	[aŋalya]	'home country'
arrirra /a + rriɾra/	[a ^{r̥} r̥a]	'wind'

(ii) single rule

When the high vowel is followed by a rounded peripheral consonant the only allophonic rule that operates is Vowel Rounding Rule 1 (except when the preceding syllable is the Nominal Classifier /yi/). Conditioning is regressive and the preceding consonants do not condition the vowels.

athalyimwa /a + thalya + mwi/	[a ^u ɬalyum ^w a]	'river'
----------------------------------	--	---------

arikwa /a + rikwi/	[aɾukwa]	'raw'
thitjiningkwa /tha + tji{kwi} + ningkwa/	[t̪it̪jinuŋkwa]	'Short-beaked Echidna'
yilharrpiwa /yi + lharrpi + wa/	[yileʔpuwa]	'to the palm'

Vowel Rounding Rule 1 or Rule 2 could be said to operate when both contiguous consonant environments are rounded. But, alternatively, only the following environment could be regarded as necessary to condition the vowel, as in the above examples. Vowel Rounding Rule 3 which operates between two rounded consonants has only one allophone when the preceding consonant is a rounded dorsal consonant.

amwɪkwa /a + mwɪkwɪ/	[am ^w ukwa]	'live coals'
akwingwɪmwa /a + kwɪngwi + mwɪ/	[ak ^w uŋ ^w um ^w a]	'with fresh water'
yangwingwa ~ yangwangwa /y{i} + angwingwi ~ angwangwi/	[yaŋ ^w uŋwa ~ yaŋ ^w uŋwa]	'Pike Eel'

When the following consonant is a lamino-palatal consonant Vowel Rounding Rule 2 cannot operate because it requires a non-front high vowel for its operation. This means that only the fronted allophone of the high vowel generated by Vowel Fronting Rules 2 and 3 can occur in this position.

awitja /a + witji/	[awitja]	'fog'
amwakwilya /a + mw{i} + akwilyɪ/	[am ^w akwilya]	'its skin'
mwamwinya /mwa + m(w)inyi/	[m ^w am ^w inya]	'firefly'
wiya /wiyi/	[wiyɪ]	'here it is'

angwiyangkitharrpwa [aŋwiyanki^hta^hpwa] 'short-armed'
 /a + ngwiyangka + tharrpwɪ/

(iii) two compatible rules

In the following examples, the compatible Vowel Fronting Rules 1 and 2 are both operating. The obligatory co-occurrence of these two rules ensures that the deep structure word-final vowel (whether high or low) can always be identified by the of the penultimate vowel.

lyangmana /lyangm{ɪ} + anɪ/	[ly ^h aŋmənə]	'go first!'
yinitjirra /yɪ + {a}nɪ + tjirri/	[yɪnɪtʃi ^h rə]	'rocky outcrop'
arrɪparrɪpa /{a} + arrɪp{ɪ} + arrɪpɪ/	[e ^h rɪpe ^h rɪpə]	'bush'
aka /{a} + akɪ/	[æ ^h kə]	'tree (gen.)'
athirra /{a} + athirri/	[e ^h t ^h i ^h rə]	'hole'
arrakpa /arrakpɪ/	[e ^h rəkpa]	'outside'
mwiyatja /mwa + yatjɪ/	[m ^w ɪyæ ^h tʃə]	'oar'

2.6.1.2 Multiple allophones

Variation between allophones is very common in Anindilyakwa. The number in any one environment can vary from one to four allophones (excluding [+tense]). The high frequency of allophonic variants is due to (i) the optionality of some rules and (ii) the co-occurrence of different rules.

(i) optional rules

Free variation between two allophones occurs when the phonological rule is optional. One example for each of the

following rules is given (in order) below: Vowel Fronting Rule 3, Vowel Offglide Fronting Rule 5, Vowel Rounding Rule 2, Vowel Offglide Rounding Rule 3, Backing Rule 1, and Vowel Lowering Rule 1.

tjarrangwa /tjarrangwi/	[tja _ɹ ŋwa ~ tja _ɹ ʔŋwa]	'horse'
ngalhatja /ngalh{a} + atja/	[ŋa _ɹ latja ~ ŋa _ɹ l _ɪ tja]	'she'
yimwithirngwa /yi + mwi + thirngwi/	[yim ^w tu _ɹ ŋwa ~ yim ^w tu _ɹ ŋwa]	'Blue Catfish'
akwalya /a + kw{ɪ} + alya/	[akwalya ~ a ^w kwalya]	'fish (gen.)'
alhika /a + lhika/	[a _ɹ ika ~ a _ɹ wka]	'foot'
arntirnta /{a} + arntirnti/	[a _ɹ t _ɹ ŋta ~ a _ɹ t _ɹ ŋta]	'heart'

In the following examples, the three different vowel allophones in the one position are created by the optional application of Vowel Rounding Rule 2 or Vowel Lowering Rules 1 or 2. The three allophones freely vary.

alhapwira [a _ɹ ap ^w u _ɹ a ~ a _ɹ ap ^w o _ɹ a ~ a _ɹ ap ^w ə _ɹ a] /{a} + alhapwiri/	'tree bark'
thimwingkirra [t _ɹ um ^w ŋkwu _ɹ a ~ t _ɹ um ^w ŋkwo _ɹ a ~ t _ɹ umŋkwa _ɹ a] /tha + mwingkwi + rra/	'Blue-winged Kingfisher'

The following derivation illustrates the interaction of optional fronting and rounding rules which produce multiple allophones. Note that, while Vowel Fronting Rule 2 can be iterative, it does not have to be applied beyond the penultimate syllable in a morpheme. Some Anindilyakwa speakers appear to be consistent in that they have not been recorded as

applying this rule iteratively, as in the following derivation.

wirratjitja				'bird (gen.)'
[w ^h /u ^h atjitja ~ wu ^h atjitja ~ wu ^h atjitja ~ wu ^h atjitja]				
DEEP STRUCTURE	warra	+	atjitja	
VFR.1	=== warra	+	atj+titj	
VFR.2 (twice)	=== warra	+	a/a ^h titjti	
VFR.5	=== w ^h irra	+	a/a ^h /a ^h /a ^h titjti	
NTR.1	=== w ^h irra	+	a/a ^h /a ^h /a ^h titjti	
VRD.2	=== w ^h /urra	+	a/a ^h /a ^h /a ^h titjti	
VDEL.1	=== w ^h /urr{a}		a/a ^h /a ^h /a ^h titjti	
NTR.2	=== w ^h /urr		a/a ^h /a ^h /a ^h titjti	
	3:1		winged	

Vowel Fronting Rule 2 is usually applied across a morpheme boundary to the Nominal Classifying prefix /a/, resulting in just one allophone. In very precise speech, there is an occasional utterance which retains the basic allophone [a]. The two allophones are shown below.

angampa	[eŋ ^h mpa ~ aŋ ^h mpa]	'place named'
/a + ngampi/		
alyangma	[ely ^h ŋma ~ aly ^h ŋma]	'southeast'
/a + lyangmi/		
amwapa	[emepa ~ am ^h epa]	'song'
/a + m(w)api/		

(11) two different rules

When the Nominal Classifiers /y^h/ or /n^h/ precede a morpheme-initial rounded peripheral consonant (excluding /w/) the fronted allophone [i] is retained and varies with the rounded allophone [u]. Note that Vowel Rounding Rule 1 can follow the operation of Vowel Fronting Rule 1 because it operates on any high vowel. The most common allophone preceding a rounded

peripheral velar consonant is [u] in all words but yingwa 'Torresian Crow'; the most common allophone preceding a rounded peripheral labial consonant is [ɨ].

nɨpwɨkwaya [nɨpwɨkwɨya ~ nɨpwɨkwɨya] 'that one coming'
/nɨ + pwɨkwaya/

yɨmwɨrralya [yɨmwɨʔalya ~ yɨmwɨʔalya] 'Green Tree-ant'
/yɨ + mwɨ + rralya/

yɨkwɨrrangina [yɨkwɨʔangina ~ yɨkwɨʔangina] 'Channel-billed
/yɨ + kwɨ + rrangi + nɨ/ Cuckoo'

yɨngwɨrrmwa [yɨngwɨʔmwa ~ yɨngwɨʔmwa] 'Saratoga Fish'
/yɨ + ngwɨrrmwɨ/

There are also a few examples with free variation between [ɨ] and [u] following /y/ or /n/ and preceding the consonant di-cluster /kw/ in which the intervening high front vowel has been deleted. The fronted allophone is conditioned by Vowel Fronting Rule 2 and the rounded allophone by Vowel Rounding Rule 1.

mɨyɨɨlkwa [mɨyɨɨlkwa ~ mɨyɨɨlkwa] 'starfish'
/mwa + yɨɨk{ɨ} + wɨ/

anɨngkwa [enɨngkwa ~ enɨngkwa] 'pronged spear'
/a + nɨngk{ɨ} + wɨ/

The Consonant De-rounding Rule is optional and the presence or absence of the consonantal rounding determines whether Vowel Front Rule 2 can be applied to that syllable. This leads to variation in the allophones of the preceding vowel, as shown in the following derivation.

nɨyapwɨtjapwana 'he separated it'
[nɨyapwɨtjapwɨna ~ nɨyapwɨtjapɨna ~ nɨyepɨtjapɨna]

DEEP STRUCTURE nɨ + yapwɨ + tjapwɨ + anɨ

VFR.1 ==> nɨ + yapwɨ + tjapwɨ + anɨ

VFR.2 ==> nɨ + yapwɨ + tjapwɨ + enɨ

VDEL.1	===	n1	yapwɪ	tjapw{ɪ}	en1
CDR	===	n1	yapwɪ	tjap{w}	en1
VFR.2	===	n1	yapwɪ	tjep	en1
CDR	===	n1	yap{w}ɪ	tjep	en1
VFR.2	===	n1	yepɪ	tjep	en1
NTR.2	===	n1	yepɪ	tjep	ena
			3:3(1) REDUP	separate	TNS

The vowel Fronting Rule 2 frequently provides the environment in which the Consonant De-rounding Rule operates. Vowel Fronting Rule 2 can then operate iteratively. This iteration often produces harmony in a sequence of fronted allophones within a word, as in the above and the following derivations.

akwilyangpwirrarra [akwilyaŋp^wɪrɛrɛ^ɛ ɛkɪlyɛŋpɪrɛrɛ^ɛ] 'forked'

DEEP STRUCTURE		a	+ kwɪ	+ lyangkɔ	+ pwɪ	+ rɛrɛrɪ
VFR.1	===	a	+ kwɪ	+ lyangkɔ	+ pwɪ	+ rɛrɛrɪ
VFR.2 (twice)	===	a	+ kwɪ	+ lyangkɔ	+ pɪ	rɛrɛrɪ
CDR	===	a	+ kwɪ	+ lyangkɔ	+ p{w}ɪ	rɛrɛrɪ
NTR.1	===	a	+ kwɪ	+ lyangkɔ	+ pɪ	rɛrɛrɪ
SDEL		a	+ kwɪ	+ lyang{kɪ}	pɪ	rɛrɛrɪ
VFR.2 (twice)		a	+ kwɪ	lyæŋg	pɪ	rɛrɛrɪ
CDR	===	a	+ k{w}ɪ	lyæŋg	pɪ	rɛrɛrɪ
VFR.2	===	æ	kɪ	lyæŋg	pɪ	rɛrɛrɪ
NTR.2	===	æ	kɪ	lyæŋg	pɪ	rɛrɛrɪ
			3:4 NSR	head	EM	forked

Consonant De-rounding almost always seems in some words but not in others. This appears to be unpredictable except to say that de-rounding and the subsequent application of Vowel Fronting Rule 2 is most likely to occur when the conditioning high vowel

is morpheme-initial, i.e., the allophone [æ]. Contrast the following pairs of examples.

angwipwina [aŋ^wup^wina ~ aŋ^wupina] 'sky'
/a + ngwi + p(w)ini/

angwamwina [eŋ^wamina ~ aŋ^wamina] 'breast milk'
/a + ng{w} + am{w}ini/

apwiyakarpiya [ap^wiyakar^wiya] 'three'
/a + pwi + yarkpwi + yi/

apwina [epina] 'this'
/a + p{w}ini/

wirringiwartikwiya [wu^ruŋuwa^tukiya] 'two female dogs'
/wirringa + warti + k{w}iyi/

nyirrngmwina [ni^riŋmina ~ nu^riŋm^wuna] 'blow your nose!'
/nyirrngm(w)i + ni/

2.6.2 Ordering of rules

The phonological rules in Anindilyakwa operate within the morpheme and across the morpheme boundaries. Some phonological rules operate in environments which are unique and could be placed in more than one position. Such rules have been ordered with others having the same function, e.g., fronting or lowering. Some vowel fronting rules are iterative and can operate up to three times within a word, depending upon whether the application of another rule results in a compatible environment. Rules are discussed below in their order from first to last.

Reduplication Rules for single morphemes and some multi-morphemic units other than compound stems operate immediately on the deep structure. (Note: Reduplication of other multi-morphemic units is ordered later.)

For the most part, vowel allophony forms the first major group in the ordering of phonological rules. The rules for fronting (Section 2.3.2.1) precedes all other vowel allophony rules. Strict

ordering is required in some instances: Fronting Rule 1 must precede Fronting Rule 2; and Fronting Rules 2 and 4 must precede Fronting Rule 5. Fronting Rules 1-4 must precede the optional Consonant De-rounding Rule (Section 2.5.3) which operates in the context of a fronted vowel segment, not an offglide. Vowel Fronting Rule 1 operates only once, i.e., on the morpheme-final vowel in the deep structure. Vowel Fronting Rule 2 is iterative and operates cyclically with the Consonant De-rounding Rule. The rules operate in the following order:

High Vowel Fronting Rule 1: morpheme-final /ɪ/ ==> [i]
 Vowel Fronting Rule 2: /ɪ/ ==> [i] and /a/ to [æ]
 High Vowel Fronting Rule 3: /ɪ/ ==> [i]
 Low Vowel Fronting Rule 4: /a/ ==> [æ]
 Consonant De-rounding Rule
 Low Vowel Fronting Rule 5: [a ~ æ] ==> [a' ~ æ']

The Word-medial Neutralisation Rule 1 (Section 2.1) has the effect of raising the morpheme-final low vowel /a/ in the word-medial position. This rule must follow the High Vowel Fronting Rule 1 because all morpheme-final vowels except the fronted vowel neutralise to a high central vowel which is not fronted. This rule is somewhat arbitrarily placed after all the above rules because they interact so closely and can be iterative. This placement allows Rounding Rules to operate on the neutralised vowel.

Consideration was given to placing the rounding rules for vowel allophony before those for fronting because it would simplify the consonantal features in Vowel Fronting Rule 1 by deleting [-round] and would block the operation of other fronting rules. Such ordering would, however, cause some occurrences of the unrounded high vowel to be rounded and then de-rounded again. This seems to me to be illogical and unnecessary when the present ordering allows unrounded vowels to maintain this distinctive feature throughout operations.

For the remainder of the vowel allophony rules, strict order is required in that: Fronting Rules 1 to 3 must precede Rounding Rule 2; Rounding Rule 2 must precede Lowering Rule 2; and Rounding Rule 3 must precede Rounding Rule 4. Rule ordering for the remaining vowel allophony is as follows:

High Vowel Rounding Rule 1:	/ɪ/	==>	[u]
High Vowel Rounding Rule 2:	/ɪ/	==>	[u]
Low Vowel Rounding Rule 3:	/a/	==>	[ɔ]
Low Vowel Rounding Rule 4:	[a]	==>	[a ^u]
High Vowel Backing Rule:	/ɪ/	==>	[ɯ]
High Vowel Lowering Rule 1:	/ɪ/	==>	[ɛ]
High Vowel Lowering Rule 2:	[ɪ]	==>	[o]

All the preceding rules except Vowel Fronting Rule 1 can be applied again wherever the following rules provide a compatible environment (e.g., after Progressive Assimilation). None of the following rules are iterative.

There are three rules which are context specific and which could be placed at various points. Placement at this point is based on similarity to allophony rules and to keep permutations to a minimum. There is no advantage in deferring these operations until after deletion or reduction rules because their environments are different. The three rules are: the High Vowel Lowering Rule 3 (Section 2.3.2.4), Prosodic Rounding (Section 2.2.5), and the VCV Reduction Rule (Section 2.5.2.4). The ordering of these rules is flexible because of their unique environments. The Lowering Rule must precede the Haplology Rule because otherwise it blocks the latter's application; VCV Reduction must follow vowel allophony rules because allophones in the surface structure often could not be generated after the reduction. There is no set order for each item listed below.

High Vowel Lowering Rule 3:	[ɪ]	==>	[a]
Prosodic Rounding			
VCV Reduction Rule			

The Vowel Deletion and Morpheme Final CV Deletion Rules cannot precede those for vowel allophony because the deleted segments condition preceding vowels. These rules operate only on the morpheme-final syllable and their ordering is fixed: Morpheme-final CV Deletion Rule must precede Vowel Deletion Rule 2 because otherwise the vowel would already be deleted. These two rules create the sequence of consonants necessary for the operation of the Assimilation (Section 2.7) and Fortition Rule (Section 2.12).

Morpheme-final CV Deletion Rule
Vowel Deletion Rule 2
Assimilation

The Reduplication Rules for single morphemes operate on the deep structure but, when applied to compound stems, must be applied after the vowel and syllable deletion rules. There is the occasional example in which Vowel Deletion Rule 2 is applied after reduplication and prior to either Fortition or Coalescence of two lamino-palatal consonants.

Fortition must follow Vowel Deletion Rule 2 and Morpheme-final CV Deletion Rule because a consonant does not otherwise occur in morpheme-final position. Metathesis is always ordered before Haplology. Haplology (Section 2.5.2.1) must follow Metathesis of two syllables (Flip Flop Rule 1, Section 2.9) and Assimilation. Metathesis and Haplology can precede or follow Fortition. The other two Flip Flop Rules are placed here for convenience, their only restriction being that they must follow Word-medial Neutralisation.

Fortition
Metathesis (Flip Flop Rules 1-3)
Haplology Rule

There are four remaining rules which are applied after all the above rules. Vowel Deletion Rule 1 (Section 2.5.1) must be ordered

after both Metathesis (Flip Flop Rule 1) and Initial-segment Dropping Rules (Section 2.10); the Cerebralisation Rule must follow Vowel Deletion Rule 1 because the vowels must elide prior to consonant coalescence. Pause-final Neutralisation Rule 2 which neutralises the contrast between the high and low vowels by lowering the word-final high vowel must follow the Haplology and Metathesis Rules.

Initial-segment Dropping Rule
 Vowel Deletion Rule
 Cerebralisation
 Pause-final Neutralisation

2.7 ASSIMILATION

Regressive and progressive assimilation occurs at morpheme boundaries, the former being frequent and systematic but the latter being only found in isolated instances.

2.7.1 Regressive

A nasal assimilates to the point of articulation of the following stop at morpheme boundaries, thus changing a potential heterorganic sequence of nasal plus stop to a homorganic nasal-stop sequence. This Regressive Assimilation occurs after the application of the Syllable Deletion and Vowel Deletion Rules.

angwiyanthirrpwira	[aŋwiyant̪ ^h ɪr̪p̪wɪɾa]	'straight arm'
DEEP STRUCTURE	a + ngwiyangka + thirrpwirɪ	
VFR.3	==> a + ngwiyangka + thirrpwirɪ	
NTR.1	==> a + ngwiyangkɪ + thirrpwirɪ	
VRD.1	==> a + ngwiyangkɪ + thirrpwuri	
SDEL	==> a ngwiyang{kɪ} thirrpwuri	
ASSIM	==> a ngwiyanh thirrpwuri	
NTR.2	==> a ngwiyanh thirrpwura	
	3:4 lower arm	straight

Compare the following sets where the first word exemplifies a morpheme with an unassimilated nasal in contrast with morphemes with the assimilated nasal.

angwiyangk ^w iyita		'straight arm'
/a + ngwiyangka + wiyiti/		
3:4	lower arm	straight
angwiyantjirri ^r ra	[aŋwiyantjiri ^r ra]	'long arm'
/a + ngwiyang{ka} + tjirri + rra/		
3:4	arm	long SF
mwarngkirringka		'look in [his] eye!'
/∅ + mw{a} + arngkw ⁱ + rringka/		
2Sg 3:5	eye	see
mwarpwatja	[m ^w a:mp ^w a:tja]	'hit [his] eye!'
/∅ + mw{a} + arng{kwi} + pwatja/		
2Sg 3:5	eye	hit
wingkilharritja		'drop it!'
/wi + ngki + lharritja/		
3:4	ASR	drop
wintjalhitja	[wi ⁿ tjalhitja]	'poke it out!'
/wi + ng{k ⁱ } + tjalhitja/		
3:4	ASR	poke out
naniyarringka		'old man'
/n{i} + ani + ya:ringka/		
3:3(i)	n.hfem	old
nantjarrngalyilya	[n ^a ntja:ŋalyilya]	'boy'
/n{i} + an{i} + tjarr{mi} + ngalyilyi/		
3:3(i)	n.hfem	small tread on

Regressive assimilation, in the data below, follows the reduction of the consonant di-cluster to a nasal (see Section 2.5.2.3) and the application of the Morpheme-final CV Syllable Deletion Rule (see Section 2.5.2.2). A word derivation is given for the first example, followed by two pairs of words illustrating the full and reduced morphemes.

wilhangantjalhana					'carry its head!'	
DEEP STRUCTURE	wɪ	+	lhangarngka	+	tjalhanɪ	
VFR.1	==>	wɪ	+	lhangarngka	+	tjalhanɪ
VFR.2 (twice)	==>	wɪ	+	lhangarngka	+	tjelhenɪ
VRD.2	==>	wu	+	lhangarngka	+	tjelhanɪ
SDEL	==>	wu	lhangarn{ka}	tjelhenɪ		
ASSIM	==>	wu	lhangany	tjelhenɪ		
		3:4	head	carry		

wingarngkirithana 'cut the shoulder!'
/wɪ + ngarngka + rithanɪ/

winganthirriwarna 'bury the shoulder!'
/wɪ + ngarng{ka} + thirriwarnɪ/

alharrngkwawirriariya 'bad things'
/a + lharrngkw{i} + awirriariya/

alhantjirriarra 'long things'
/a + lharrng{kwi} + tjirriarra/

Regressive assimilation of the nasal in the Gender morpheme ani- (non-human.feminine) occurs when it precedes the Inalienable Possession morpheme mwɪ-. This process is systematic but restricted to words with the nominal classifying prefixes a- or mwa-. The assimilation is often followed by the Haplology Rule (see Section 2.5.2.1). A word derivation is given for the first example and this is followed by substitution sets.

mwanwilharrngkwangwiramwa						'Pink Hibiscus'					
DEEP STRUCTURE	mwa	+	ani	+	mwɪ	+	lharrngkwɪ	+	angwirɪ	+	amwɪ
ASSIM	==>	mwa	amwi	mwɪ	lharrngkwɪ	angwirɪ	amwɪ				
HAPL	==>	mwa	a{mwi}	mwɪ	lharrngkwɪ	angwirɪ	amwɪ				
VDEL.1	==>	mw{a}	a	mwɪ	lharrngkw{i}	angwir{i}	amwɪ				
NTR.2	==>	mw	a	mwɪ	lharrngkw	angwir	amwa				
		3:5	n-hfem	INALP	things	fire	PROP				

yinimwamwiwa /yɪ + {a}ni + mw{ɪ} + amwiwɪ/	'egg'
a(mwa)mwamwiwa /{a} + ani + mw{ɪ} + amwiwɪ/	'round [berry]'
mwa(mwa)mwamwiwa /mw{a} + ani + mw{ɪ} + amwiwɪ/	'round [yam]'
nanimwakwiya /n{ɪ} + ani + mw{ɪ} + akwiya/	'his skin'
mwamwakwiya/ /mw{a} + a{nɪ} + mw{ɪ} + akwiya/	'its skin'
amwakwiya /{a} + a{nɪ} + mw{ɪ} + akwiya/	'its skin'
anikiyalhɪha /{a} + ani + tɪ + yalhɪha/	'shy'
mwamwikwiyalhɪha /mwa + mwɪ + kwɪ + yalhɪha/	'crab sp.'
mwamwɪpwiyakatja ~ mwanipwiyakatja /mw{a} + ani ==> amwɪ + pwɪ + yakatja/	'friends'

The demonstrative pronoun deep structure root, akani 'this', is irregular. The variant anani is formed by regressively assimilating the second CV syllable.

amwirntakakana ~ amwirntakanana /a + mwirntak{a} + akani ~ anani/ 3:4 PL this	'these'
anana /{a} + anani/ 3:4 this	'this'

Regressive (partial) assimilation also occurs in the language name itself. The prenasalised velar stop is partially assimilated to a prenasalised lamino-dental stop even though a vowel intervenes before the following lamino-palatal lateral.

aninthilyakwa /{a} + ani + ngkwi ==> nthi + lyakwi/ 3:4 n-hfem NSR speak	(language name)
--	-----------------

2.7.2 Progressive

Progressive assimilation is unsystematic and is, therefore, rare. In three of the third person singular demonstrative pronouns, the two variants are both the result of progressive assimilation in the root, *akani* 'this'. The final CV syllable in the root assimilates to the preceding syllable; and the first CV syllable assimilates to the preceding syllable which is the nominal classifying prefix. (Note that the vowels are changed in accordance with Fronting Rule 4.)

<i>yakaka</i> ~ <i>yayaka</i>	[<i>yakaka</i> ~ <i>yæ^hyaka</i>]	'this [sr...]
<i>nakaka</i> ~ <i>nanaka</i>	[<i>nakaka</i> ~ <i>nenaka</i>]	'this [n...]
<i>thakaka</i> ~ <i>thathaka</i>	[<i>takaka</i> ~ <i>tataka</i>]	'this [woman]

The lateral in the suffix *-lhangwa* can optionally assimilate to the final nasal in the preceding root. The Haplology Rule (see Section 2.5.2.1) is then applied and the first syllable elides. Aborigines do not use the assimilated form in literature and, for reason, it is regarded as sub-phonemic. It may well be that, with more diversified literary styles, the two forms will appear (as has happened in English contracted forms, e.g. 'don't, it's').

<i>mwiringwanilhangwa</i>	[<i>m^wurungwenanwa</i>]	'from the jungle'
	<i>mwurungweni</i> + <i>lhangwa</i>	
ASSIM	==> <i>mwurungweni nangwa</i>	
HAPL	==> <i>mwurungwe{ni} nangwa</i>	
<i>apwapwiri:lhangwa</i>	[<i>ap^wap^wurana^w</i>]	'from many'
	<i>apwapwurni</i> + <i>lhangwa</i>	
ASSIM	==> <i>apwapwurni rnangwa</i>	
HAPL	==> <i>apwapwu{rni} rnangwa</i>	

The first person possessive pronoun is usually coalesced to nganyangwa but at least one Aborigine spells the word as ngayinangwa, showing that the underlying representation is known. The CVC sequence drops the intervening vowel and the consonants coalesce and assimilate to a nasal. The pronoun, /ngantja/ 'to me', adopts the coalesced nasal as its base. (For Fortition, see Section 2.12.)

nganyangwa			'mine'
		ngaya + lhangwa	
VDL	==>	ngay{ʔ, + lhangwa	
COALESCENCE	==>	nga lhangwa	
ASSIM to NASAL	==>	nga nyangwa	

There is an isolated case of progressive assimilation which follow the application of the Morpheme-final CV Syllable Deletion Rule. The root-initial consonant assimilates to the point of articulation of the preceding consonant.

mwantjalhthahana	[mʷaŋtja]ta[ena]	'carry its stomach!'
/mw ₁ a} + antjalh{ka} + tjalhani	==> thahani/	
3:5 stomach	carry	

2.8 REDUPLICATION

Reduplication is regressive and occurs in all word classes except particles. The rules are applied mostly to single roots but, to a lesser extent, to prefixes and multi-morphemic parts of words. In verbs and adverbs, the reduplication signifies intensity of the action or state; in nominals, it indicates intensity or plurality. The reduplication is obligatory in some nouns but optional in all other word classes. The reduplicated form for each word is almost always constant.

Anindilyakwa has many lexical roots consisting of sequences of identical syllables which pattern in the same way as reduplicated sequences, e.g., athatha 'holey'; lhalha 'shallow'; arngkirnka 'eye'; yikwithikwitha 'chest'. Wherever two identical syllables occur in such morphemes the Haplology Rule can operate.

Reduplication rules operate on the deep structure forms of the morphemes. Sommerstein (1977: 200) states that "many phonological processes can be expressed with greater generality if the syllable and its boundaries are allowed to be mentioned in their statement". The syllable is used here in preference to sequences of consonants and vowels because the rules are thus simplified and the overall system more apparent. Because all morphemes in Anindilyakwa end in a vowel the final consonant is dropped when a closed syllable would otherwise conclude the reduplicated portion.

In the following examples, the arrow <====> indicates the regressive nature of the reduplication (not "rewrite"). The reduplicated form of a word includes all syllables shown on both sides of the arrow. In the examples, the reduplicated portion is underlined.

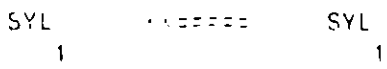
2.8.1 Consonant-initial morphemes

The rules for reduplication of consonant-initial morphemes have been posited on the basis of the number of syllables. Roots and reduced compound stems can be reduplicated. Roots in Anindilyakwa have one to three syllables.

2.8.1.1 Mono-syllabic

Mono-syllabic reduplication can occur in a morpheme which consists of a single consonant-initial syllable, as shown in Rule 1A.

REDUPLICATION RULE 1A: CONSONANT-INITIAL MONC-SYLLABIC MORPHEMES



i.e., in morphemes of one syllable, that syllable reduplicates.

angkalya / angkingkalya 'wet / very wet'

DEEP STRUCTURE	a	+ ngk+	+ alya	
REDUP.1A	==> a	+ ngk+	+ ngk+	+ alya
VFR.1	==> a	+ ngk1	+ ngk1	+ alya
VFR.2	==> e	ngk1	ngk1	alya
VOEL.1	==> e	ngk1	ngk{1}	alya
	3:4	REDUP	ASR	wet

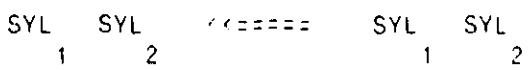
nipakinimwa
 /n1 + p1 + p{1} + aka + n1 + mw1/
 3:3(i) REDUP drink CAUS TNS PIP
 'He was keeping on drinking.'

nikikamwarra
 /n1 + k1 + k{1} + amwarra/
 3:3(1) REDUP ASR front
 'very ignorant [man]'

2.8.1.2 Di-syllabic

The common pattern for reduplication of di-syllabic roots which begin with a consonant is shown below.

REDUPLICATION RULE 1B: CONSONANT-INITIAL DI-SYLLABIC MORPHEMES



i.e., in roots consisting of two syllables, both syllables reduplicate. (The final vowel of the reduplicated portion is neutralised to a high vowel by NTR.1.)

thimwarrngimwarrnga
 /tha + mwarrnga + mwarrnga/
 3:2(ii) REDUP black
 'cricket (gen.)'

nilharrngkwilharrngkwithakina
 /ni + lharrngkwɪ + lharrngkwɪ + thakə + ni/
 3:3(1) REDUP things cook TNS
 'He cooked many things.'

thathikwiyangpiyangpa
 /th{a} + athə + kwɪ + yangpɪ + yangpɪ/
 3:2(i) hfem NSR REDUP speak
 'loquacious [woman].

There are a few examples in which an alternative pattern for the reduplication of the morpheme occurs (7.4% of 202 words with reduplication of a consonant-initial di-syllabic root). Only the first syllable is reduplicated when the root begins with a simple stop, viz., /pw/, /kw/, /th/ or /tj/. In accordance with the Anindilyakwa system for each morpheme to end in a vowel, the syllable-final consonant of the reduplicated part is dropped. In some instances, the reduplication of only the first syllable reduces a sequence of syllables with complex consonant clusters.

apwipwirrngkwiwilyarra
 /a + pwɪ + pwirrngkwɪ + wilyarra/
 3:4 REDUP river middle
 'very middle of the river'

nikwikwirtanamwa
 /ni + Ø + kwɪ + kwirt{ɪ} + an{ɪ} + amwɪ/
 3:3(1) 3:4 REDUP hook TNS NPIP
 'He is keeping on catching fish.'

nitjitjiranimwa
 /ni + Ø + tʃɪ + tʃir{ɪ} + anɪ + mwɪ/
 3:3(1) 3:4 REDUP push TNS PIP
 'He was keeping on pushing it.'

warnikwitjitjingwa
 /warnɪ + k(w)ɪ + tʃɪ + tʃingwɪ/
 3:1 NSR REDUP die
 'Barn owl'

atjitjirrkiwilyarra
 /a + tʃɪ + tʃirrki + wilyarra/
 3:4 REDUP bone middle
 'very middle of the river'

The above examples illustrate a consistent feature in the

reduplication of stop-initial roots but there are a few other random examples in which only the first syllable is reduplicated.

nimwimwirngkinimwa
 /nɪ + mwɪ + mwɪrŋka + nɪ + mwɪ/
 3:3(1) REDUP understand TNS PIP
 'He was keeping on understanding.'

nimwimwinganimwa
 /nɪ + Ø + mwɪ + mwɪŋ{a} + anɪ + mwɪ/
 3:3(1) 3:4 REDUP smell TNS PIP
 'He was keeping on smelling it.'

yikwirriŋrithangwa
 /yɪ + kwɪ + rɪ + rɪθa + ŋa/
 3:3(1) NSR REDUP scratch TNS
 'Green Sawfish'

ngarrilhalhikani:::wa ~ ngarrilhalhikani:::wa
 /ngarra + lɪ ~ lɪ + lɪk{a} + anɪ + wɪ/
 1IncPl REDUP go TNS cont.act
 'We were keeping on going.'

2.8.1.3 Tri-syllabic

The most common pattern for the reduplication of tri-syllabic roots which begin with a consonant is as follows:

REDUPLICATION RULE 1C: CONSONANT-INITIAL TRI-SYLLABIC ROOTS

SYL SYL <==== SYL SYL SYL
 1 2 1 2 3

i.e., in roots of three syllables, only the first two syllables reduplicate. (The final vowel of the reduplicated portion is neutralised to a high vowel by NTR.1.)

nimwalyangkanimwa / nimwalyimwalyangkanimwa
 'he was playing' / 'he was keeping on playing'

DEEP STRUCTURE		nɪ		+ mwalyangka	+ anɪ	+ mwɪ
REDUP.1C	==>	ni	+ mwalya	+ mwalyangka	+ anɪ	+ mwɪ
VFR.1	==>	ni	+ mwalya	+ mwalyangka	+ anɪ	+ mwɪ
VFR.2	==>	nɪ	+ mwalya	+ mwalyangka	+ enɪ	+ mwɪ
NTR.1	==>	ni	+ mwalyɪ	+ mwalyangkɪ	+ enɪ	+ mwɪ

VRD.1	===	nu	mwalyu	mwalyangk	enu	mw1
VRD.2	===	nu	mwalyu	mwalyangk	enu	mwu
VDEL.1	===	nu	mwalyu	mwalyangk{t}	enu	mwu
NTR.2	===	nu	mwalyu	mwalyangk	enu	mwa
		he	REDUP	play	TNS	PIP

The following examples illustrate this reduplication in various word classes. The dropping of the morpheme-final consonant/s is shown in the last two examples.

n1lhaw1lhaw1rath1n1mwa
 /n1 + lhaw1 + lhaw1 + tha + n1 + mw1/
 3:3(1) REDUP bring INCH TNS PIP
 'He was keeping on returning.'

mwingw1ningw1nak1w1lyarra
 /mwa + ng(w)1n1 + ng(w)1naka + w1lyarra/
 3:5 REDUP knee middle
 'the centre of a sand dune'

n1mwarnt1mwarntarrkan1mwa
 /n1 + mwarnta + mwarnt{arrka} + arrk{a} + an1 + mw1/
 3:3(1) REDUP hand pull TNS PIP
 'He was keeping on pointing.'

mwlh1k1lh1k1arrk1w1lyarra
 /mwa + lh1ka{rr} + lh1karrka + w1lyarra/
 3:5 REDUP ?heart middle
 'the centre line on a road'

n1y1k1y1karrng1namwa
 /n1 + y1ka{rr} + y1karrnga + n{1} + amw1/
 3:3(1) REDUP gasp TNS NPIP
 'He is keeping on gasping.'

As in the consonant-initial di-syllabic roots, there are some rare examples (1.4% of the tri-syllabic corpus) for which an alternative pattern for the reduplication of the morpheme occurs. In noun roots, this type of reduplication only occurs in loanwords. Only the first syllable is reduplicated when the root begins with a simple stop, viz., /pw/, /kw/, /th/ or /tj/. There is also one example in which only the first syllable is reduplicated in a root which begins

with a lamino-palatal nasal.

wirripwipwingkawa
 /wirra + pwɪ + pwingkawi/
 3:1 REDUP Mk captain.
 'bosses'

nithithirrintinimwa
 /ni + thi + thirrinti + ni + mwi/
 3:3(1) REDUP descend TNS PIP
 'He was keeping on descending.'

yingitjtjirapwina
 /yinga + Ø + tji + tjirap(w)i + ni/
 3:2(1) 3:4 REDUP pour TNS
 'She was pouring it out.'

ninyinyirrngmwanimwa
 /ni + nyi{rrng} + nyirrngwi + ni + mwi/
 3:3(1) REDUP sneeze TNS PIP
 'He was keeping on sneezing.'

2.8.2 Vowel-initial morphemes

When the first syllable of a morpheme is a vowel two patterns emerge with considerable frequency. The reduplication rules still operate according to the number of syllables but the root is divided in two different ways. One pattern operates from the first consonant (simply ignoring the initial V syllable) and its reduplicated portion could be regarded alternatively as an infix.

2.8.1.2 Di-syllabic

The most frequent type of reduplication for vowel-initial di-syllabic roots operates with Reduplication Rule 1B. Whether the morpheme begins with a consonant or vowel is irrelevant in most data.

nangkankirnamwa					'he is keeping on fetching it'
DEEP STRUCTURE		nɪ	+ angka	+ rni	+ amwi
REDUP. 1B	==>	nɪ	+ angka	+ angka	+ rni + amwi
VFR. 1	==>	ni	+ angka	+ angka	+ rni + amwi
NTR. 1	==>	ni	+ angki	+ angki	+ rni + amwi

VRD.2 ===> n1 + angk1 + angk1 + r11 + amwu
VDEL.1 ===> n{1} angk{1} angk1 r1{1} amwu
NTR.2 ===> n angk angk1 r1 amwa
 3:3(1) REDUP fetch TNS f IP

nanganginamwa

/n{1} + Ø + ang{a} + anga + n{1} + amw1/
3:3(1) 3:4 REDUP bite TNS NPIP
'He is keeping on biting it.'

ngarrarrkarrkinimwa

/ngarr{a} + Ø + arrk{a} + arrka + n1 + mw1/
1ExcP1 3:4 REDUP pull TNS PIP
'We were keeping on pulling it.'

There is, however, reduplication of only one syllable in some di-syllabic morphemes which begin with a V syllable. This alternate pattern is quite rare and can be found in variation with the one above. Reduplication Rule 1A only needs to be modified to account for the non-reduplicating morpheme-initial syllable, as stated in Rule 2A.

REDUPLICATION RULE 2A: VOWEL-INITIAL DI-SYLLABIC MORPHEMES

SYL SYL ===== SYL
 1 2 2

i.e., the first V syllable is ignored and the second consonant-initial syllable reduplicates. (The final vowel of the reduplicated portion is neutralised to a high vowel by NTR.1.)

wirrathitharimwiyiya

'big women'

DEEP STRUCTURE wirra + atha + arimw1 + wiy1
REDUP.2B ===> wirra + a tha + tha + arimw1 + wiy1
VFR.1 ===> wirra + a tha + tha + arimw1 + wiy1
VFR.2 ===> wirra + a tha + tha + arimw1 + wiy1
NTR.1 ===> wirr1 + a th1 + th1 + arimw1 + wiy1
VRD.1 & 2 ===> wurr1 + a th1 + th1 + arumwu + wiy1
VDEL.1 ===> wurr{1} a th1 th{1} arumwu wiy1

NTR.2 ===> wurr a th+ th arumwu wɪya
 3:1 REDUP hfem big PL

nangkingmwathina 'he kept on stealing'
 /n{1} + a ngkɪ ng{kɪ} + mwatha + mwɪ/
 3:3(1) REDUP: unspec steal PIP

napwɪpwɪrangkinɪmwa 'he kept on searching'
 /n{1} + a pwɪ pwɪ + rangkɪ + nɪ + mwɪ/
 3.3.(1) REDUP ??? search TNS PIP

Variation between the two patterns in this sub-section has been accepted in the following example by some of the language speakers. It is anticipated that such variation will be found in other words with further checking.

narrkarrkinɪmwa ~ narrkɪrrkinɪmwa
 /n{1} + Ø + a rrka (a)rrka + nɪ + mwɪ/
 3:3(1) 3:4 REDUP:pull TNS PIP
 'He was keeping on pulling it.'

2.8.2.2 Tri-syllabic

Reduplication Rule 1C also operates on tri-syllabic roots with an initial vowel, i.e., there is no distinction between the consonant- and vowel-initial morphemes. This is one of two patterns but by far the most frequent, covering 60.6% of the 94 vowel-initial corpus.

niwalhkaɪhkayanamwa 'they are keeping on standing'

DEEP STRUCTURE	nɪwa	+ alhkaya	+ anɪ	+ amwɪ
REDUP.1C	===> nɪwa	+ alhka	+ alhkaya	+ anɪ + amwɪ
VFR.1	===> nɪwa	+ alhka	+ alhkaya	+ ani + amwɪ
VFR.2	===> nɪwa	+ alhka	+ alhkaya	+ eni + amwɪ
VRD.2	===> nuwa	+ alhka	+ alhkaya	+ eni + amwu
VDEL.1	===> nuw{a}	alhka{a}	alhkay{a}	en{i} amwu
NTR.2	===> nuw	alhka	alhkay	en amwa
	3:1	REDUP	stand	TNS NPIP

ampwampwilyimwa 'two at a time'
 /[a] + ampw{i} + ampwilyi + mw1/
 3:4 REDUP two PROP

nalyalyipwarnimwa 'he was keeping on eating'
 /n{1} + aly{i} + alyipw{1} + arn1 + mw1/
 3:3(1) REDUP eat TNS PIP

narrngarrngalhanamwa 'it keeps on itching'
 /n{a} + arrng{a} + arrngalh{a} + an{i} + amwi/
 3:4 REDUP itch TNS NPIP

amwikernarnarra 'Turkey Bush'
 /a + mwi + k{w1} + arn{a} + arnarra
 3:4 INALP NSR REDUP necklace

The following examples illustrate the deletion of the syllable-final consonant at the end of the reduplicated portion of the root. Note that the preceding vowel is subsequently deleted by the Vowel Deletion Rule.

akwarrarikpa 'turtle pole'
 /a + kw{i} + arri{k} + arrikp1/
 3:4 NSR REDUP throw

yingarrarrangpwinamwa
 /ying{a} + arr{a} + arrangpw1 + n{1} + amw1/
 3:2(ii) REDUP propagate TNS NPIP
 'She [the turtle] is keeping on laying eggs.'

In the second alternative, reduplication begins to operate on the first consonant-initial syllable (similar to Reduplication 2A), i.e., it ignores the initial V syllable. Rule 2B has the same system as Rule 1B in that both the consonant-initial syllables are reduplicated. The rule applies to 28% of a corpus of 94 vowel-initial morphemes.

REDUPLICATION RULE 2B: VOWEL-INITIAL TRI-SYLLABIC MORPHEMES

SYL	SYL	SYL	<<=====	SYL	SYL
1	2	3		2	3

i.e., the first syllable consisting only of a vowel is ignored. In the remaining di-syllabic portion, both syllables reduplicate. (The

final vowel of the reduplicated portion is neutralised to a high vowel by NTR.1.)

wirrarimwa / wirrarimwirimwa				'big [dog] / big [people]'
DEEP STRUCTURE	warra		+ arimwa	
REDUP.2B	===·	warra	+ a rimwa + rimwa	
NTR.1	==>	warri	+ a rimwa + rimwa	
VRD.1 & 2	==>	wurri	+ a rumwu + rumwu	
VDEL.1	==>	wurr{+}	a rumwu rumwu	
NTR.2	==>	wurr	a rumwu rumwa	
		3:1	REDUP	big

arakwirakpwawiya				'a very long time ago'
/a rakwi rakpw{1} + awiya/				
REDUP already		TPRG		

The same type of exceptions preceding stops (including prenasalised stops) occur as in the reduplication of the consonant-initial di-syllabic morphemes, i.e., only the first consonant-initial syllable is reduplicated. When the first syllable of the di-syllabic part is closed, the consonant is deleted in the reduplicated portion.

napwipwingkartjinimwa				
/n{i}	+ a p{w}i	p{w}ingk{i}	+ artja + ni + mwi/	
3:3(i)	REDUP:	hump-backed	stand	TNS PIP
'He was keeping on stooping down.'				

nathithirranimwa				
/n{i}	+ Ø	+ a thi	thirr{a} + ani + mwi/	
3:3(i)	3:4	REDUP:	spear	TNS PIP
'He was keeping on stabbing it.'				

natjitjarrinimwa				
/n{i}	+ Ø	+ a tja	tjarra + ni + mwi/	
3:3(i)	3:4	REDUP	wash	TNS PIP
'He was keeping on washing it.'				

nimwarntjirntirrkpwatjanimwa				
/ni	+ mw{a}	+ a rnti{rr}	rntirrk{a} + pwatj{a} + ani + mwi/	
3:3(i)	3:5	REDUP	scrotum	hit TNS PIP
'He was keeping on hitting the plum tree.'				

nampipirrarinimwa
 /n{i} + a mpi mpi{rrkw1} + rrari + n1 + mwi/
 3:3(i) REDUP ?eye-shaped slow TNS PIP
 'He was keeping on waiting.'

A tri-syllabic vowel-initial morpheme can be reduplicated in its entirety. Only two examples have been found but similar multi-morphemic constructions are described in the next sub-section.

narrakparrakitjinimwa
 /n{i} + arrakp{i} + arrakpi + tja + n1 + mwi/
 3:3(i) REDUP spit TSR TNS PIP
 'He was keeping on spitting.'

arriparripa 'bush, scrub'
 /{a} + arrip{i} + arrip{/
 3:4 REDUP ?throw

atjiwatjiwa 'Rock Fern'
 /atjiw{i} + {a} atjiwi/
 REDUP 3:4:fern

apwiyapwiya 'tree sp.'
 /apwiy{i} + {a} apwiy{/
 REDUP 3:4:visible

2.8.3 Multi-morphemic

The reduplication of united morphemes operates under one of the Reduplication Rules above. Two syllables reduplicate in all but three cases in which all three syllables reduplicate. There are two morphological structures to which stem reduplication is commonly applied: reduced compound stems, the combination of a root/stem and a preceding grammatical morpheme, viz., Nominaliser, Adjectiviser, Gender or Possession prefix, or a root plus inflection.

A consonant-initial multi-morphemic unit is reduplicated by Reduplication Rules 1A, 1B, or 1C. Reduplication Rule 1C operates on units of three or more syllables. When a compound stem or a root plus inflection is reduplicated the reduplication occurs after the morphemes are united. The first derivation illustrates the

reduplication of a compound stem consisting of two roots.

aritjiritjirra 'native bee sp.'

DEEP STRUCTURE	a	+ rɪkwa	+ tjirra
VFR.1	===	a	+ rɪkwa tjirra
VFR.2	==>	a	+ rɪkwa tjirra
SDEL	==>	a	+ rɪ{kwa} tjirra
VFR.2	==>	a	+ rɪ tjirra
REDUP.1C	===	a + rɪtjɪ	+ rɪ tjirra
NTR.2	==>	a rɪtjɪ	rɪ tjirra
		3:4 REDUP	body long

awantjiwantjirra 'bristles'

/a + wantjɪ + wang{ka} tjirra/
3:4 REDUP ?head: long

alyingpwilyingpwirra 'grass sp.'

/a + lyingpwɪ + lying{kwi} p{w}irra/
3:4 REDUP hair: wide

nilhantharrkina / nilhanthilhantharrkinimwa

/nɪ + lhanthɪ + lhan{gka} tharrka + nɪ + mwi/
3:3 REDUP head ?send TNS PIP
'He thought.' / 'He was keeping on thinking.'

ngarrirrakpwatjanimwa / ngarrirrakpwirrakpwatjanimwa

/ngarra + rrakpwɪ + rrak{a} pwatj{a} + anɪ + mwi/
1IncPI REDUP forehead:hit TNS PIP
'We were knocking.' / 'We were keeping on knocking.'

thimwamwintjarrmwintjarrmwa 'grasshopper'

/tha + mwa + mwintjarr{mwi} + mwin{tjirra} tjarrmwi/
3:2(11) INALP REDUP skin: thin

The reduplication of the stem-initial heterorganic consonant di-cluster presents a problem because Anindilyakwa syllables do not begin with this consonant sequence elsewhere. It does, however, only occur in this one very restricted environment where a vowel intervenes in the deep structure and the first morpheme is always a mono-syllabic CV syllable. As reduplication occurs prior to all other rules (except for the reduplication of a compound stem) Reduplication Rules

1B and 1C apply, with reduction of both parts of the reduplication being reduced later. The fronted vowel must be present in the reduplicated portion in order to generate the correct morpheme-final fronted vowel, as shown in the following derivation. (Note: This apparent reduplication of a stem-initial heterorganic consonant di-cluster appears to provide a strong basis upon which to divide the prenasalised stop into two distinct phonological segments (see Section 2.2.2.2). Such a consonant sequence is, however, in the surface structure not the deep structure where the consonants are separated by a vowel.)

akpwiringka / akpɨkpwiringka				'dry' / 'very dry'
DEEP STRUCTURE	a	+ kɨ	+ pɨɨ	+ rɨŋka
REDUP.1B	==> a	+ kɨ pɨɨ	+ kɨ	pɨɨ + rɨŋka
VFR.1	==> a	+ kɨ pɨɨ	+ kɨ	pɨɨ + rɨŋka
VFR.2	==> e	kɨ pɨɨ	kɨ	pɨɨ rɨŋka
VFR.5	==> e ^ɨ	kɨ pɨɨ	kɨ	pɨɨ rɨŋka
CDR	==> e ^ɨ	kɨ p{w}ɨ	kɨ	pɨɨ rɨŋka
VRD.2	==> e ^ɨ	kɨ pɨ	kɨ	pɨu rɨŋka
SDEL	==> e ^ɨ	k{ɨ} pɨ	k{ɨ}	pɨu rɨŋka
NTR.2	==> e ^ɨ	k pɨ	k	pɨu rɨŋka
	3:4 REDUP	ASR	EM	dry

akwingpwingpwatja 'perfume'
 /a + kwi + ngpwi + ng{kwi} pwatja/
 3:4 NSR REDUP unspec smell

ningpwitjinimwa / ningpwingpwitjinimwa
 /ni + ngpwi + ng{kɨ} pwitji + ni + mwi/
 3:3 REDUP ASR: lick TNS PIP
 'He was licking it.' / 'He was keeping on licking it.'

nirtarrkinimwa / nirtirntarrkinimwa
 /ni + ∅ + rnta + ng{kwi} rtarrka + ni + mwi/
 3:3 3:4 REDUP NSR: grab TNS PIP
 'He was grabbing it.' / 'He was keeping on grabbing it.'

y1(ng)mwingmwarnta
 /y1 + ngmwa + ng{w1} mwarnta/
 3:3(11) REDUP ALP: flipper
 'Snake-necked Tortoise'

Reduplication of vowel-initial multi-morphemic units is quite rare but operates on the same types of morphological structure as the consonant-initial units. The application of the Reduplication Rules 2A or 2B follows the uniting of the morphemes, i.e., the initial vowel is ignored in the reduplicated portion.

warrantjantjinyirra 'Azure Kingfisher'
 /wirra{a} + antj{1} + antja{lhka} nyirra/
 3:1 REDUP stomach: soft

aningkwiningkwirakpwa 'very old [fish]'
 /[a] + a ningkw1 + n1 ngkw1 rakpw1/
 3:4 REDUP n-hfem NSR: long ago

nakpwatjanimwa ==> nakpwikpwatjanimwa
 /n{1} + a kpwa + k{1} pwatj{a} + an1 + mw1/
 3:3 REDUP ASR: hit TNS PIP
 'He was stripping the bark off.' / 'He was keeping on stripping the bark off.'

nangmwathina ==> nangmwingmwathina
 /n{1} + a ngmwa + ng{kw1} mwatha + n1/
 3:3 REDUP NSR: steal TNS
 'He stole.' / 'He kept stealing.'

Reduplication of all three syllables can occur occasionally when the morphological structure consists of a grammatical morpheme plus a root or a root plus inflection.

amwirapa / amwiremwirapa 'Stringybark / many Stringybarks'

DEEP STRUCTURE	a		+ mwɨ	+ rapɨ
REDUP.1C	==>	a	+ mwɨ rapɨ	+ mwɨ rapɨ
VFR.1	==>	a	+ mwɨ rapɨ	+ mwɨ rapɨ
VFR.2	==>	a	+ mwɨ repɨ	+ mwɨ repɨ
VRD.2	==>	a	+ mwu repɨ	+ mwu repɨ
SDEL	==>	a	mwu re{ɔɨ}	mwu repɨ

NTR.2	===>	a	mwu re	mwu	repa
			3:4 PEDUP	INALP	???
nɪyamwɪntʃamwɪna 'he kept saying'					
DEEP STRUCTURE		nɪ		+ yamwɪ	+ nɪ
VFR.1	===>	nɪ		+ yamwɪ	+ nɪ
VFR.2	===>	nɪ		+ yamwɪ	nɪ
CDR	===>	nɪ		+ yam{w}ɪ	nɪ
VFR.2	===>	nɪ		+ yemɪ	nɪ
REDUP	===>	nɪ + yemɪnɪ		+ yemɪ	nɪ
COALESCENCE	===>	nɪ + yemɪn{i}		+ yemɪ	nɪ
HARDENING	===>	nɪ yemɪn		tʃemɪ	nɪ
NTR.2	===>	nɪ yemɪn		tʃemɪ	na
			3:3 REDUP	say	TNS
wɪrrɪmɪwɪnɪmwɪnɪŋka 'strangers'					
/wɪrra + m{w}ɪnɪ + m{w}ɪ				nɪŋkɪ/	
3:1	REDUP	INALP:n-h.fem	other		

Reduplication of all three syllables in a tri-syllabic free form word has also been recorded. This could be considered as simply the juxtaposition of two nouns except that (a) the suffixation in the first example applies to the whole, and (b) the unit in the second example has not yet been found in isolation. The reduplicated units in each of the following words consist of more than one morpheme.

yarrɪŋkwɪyarrɪŋkwɪwɪyɪ					'a few weeks ago'
/yarrɪŋkwɪ + yarrɪŋkwɪ + wɪyɪ/					
REDUP		yesterday		TPRG	
yalhɪnɪyalhɪna 'upright sides'					
/yalhɪnɪ + y{i} alhɪnɪ/					
REDUP		3:3(ii): ???			
mwɪlharrɪmwɪlharra 'too much gravel'					
/mwɪlharra + mw{a} alharra/					
REDUP		3:5: few and small			

akwingwakwingwa /akwingw{1} + a kwingw1/ REDUP 3:4:water	'lots of water'
anhinganhinga /anhing{a} + {a} anhinga/ REDUP 3:4:food	'fruit-bearing tree'
arningkwarningkwaya /arningkw{1} + {a} arningkw1waya/ REDUP 3:4:tomorrow	'a few days ahead'

2.8.4 Choice of reduplication rules

The reduplication in any given lexical word is usually constant but, in the following sets of examples, there is a choice of free form adjective, verb stem or the application of different Reduplication Rules. The reason appears to be avoidance of homophones.

ningpwatja /n1 + Ø + ng{k1} + pwatja/ 3:3 3:4 ASR to smell	'he smelt it'
angpwatja /a + ng{k1} + pwatja/ 3:4 ASR to smell	'smelly'
angpwingpwatja /a + ngpwa + ng{k1} pwatja/ 3:4 REDUP ASR to smell	'Bickerton Violet'
angpwatjangpwatja /angpwatj{a} + a ng{k1} pwatja/ REDUP 3:4:ASR: to smell	'Boronia'
akwingpwingpwatja /a + kw1 + ngpwi + ng{k1} pwatja/ 3:4 NSR REDUP ASR: to smell	'perfume'
thangpwatjangpwatja ~ thangpwatj1mwirra /th{a} + angpwatj{a} + a ng{k1} pwatja + mwirra/ 3:2 REDUP 3:4 ASR to smell PIP	'Beach Stone-curlew'

The overall pattern of the language is for only one rule to be applied in each word but some variation has been recorded in the choice of morphological units.

yingkingpwiringka /yi + ngki + ng{ki} + pwiringka/ 3:3(ii) REDUP ASR dry	'very dry'
--	------------

angpwingpwiringka 'very dry'
 /a + ngpwɪ + ng{kɪ} pwɪringka/
 3:4 REDUP ASR: dry

wiringayingaya 'widows or widowers'
 /wirra + ngaya + ngaya/
 3:1 REDUP want

wirraathingaya 'widows'
 /wirra + a thɪ tha + ngaya/
 3:1 REDUP hfem want

yampwakampwatjirrirra 'football'
 /y{ɪ} + ampwak{ɪ} + ampwa{kɪ} + tjirri + rra/
 3:3(11) REDUP round long SF

yampwimpwitjirr(rrr)rra 'football'
 /y{ɪ} + a mpwa mpwa{kɪ} + tjirr(rrr) + rra/
 3:3(11) REDUP round long SF

The reduplication of two morphemes in the same word has only been found in the following example. (Note: The verb root, lhika 'to go', is probably irregular because of its counterpart noun root, alhika 'foot'.)

yirrimwirntimwirntakalhalhikaniwa ~ yirrimwirntimwirntakilhilihikaniwa
 /yirra + mwirnta{kɪ} + mwirntak{a} + (a)lhɪ + (a)lhik{a} + ani + wa/
 1ExcPl REDUP PL REDUP go TNS ALL
 'we, a very large group, kept on going towards [it]'

2.9 METATHESIS

Metathesis of syllables, consonants, and vowels can occur in Anindilyakwa. The metathesis of syllables in reduplicated roots is always accompanied by the Haplology Rule.

2.9.1 Syllables

Syllable metathesis can occur in the second order di-syllabic reduplicated adjective roots. It always co-occurs with the Haplology Rule and thus reduces the number of syllables to three. The initial consonant of the deep structure root is always a continuant.

FLIP FLOP RULE 1: SYLLABLES

SYL SYL SYL SYL ===== SYL {SYL} SYL SYL
 1 2 1 2 1 2 2 1

i.e., in reduplicated roots, the two syllables in the second root metathesise and the second syllable of the first root is deleted.

The syllabic shape of the single morpheme is identifiable from data with only the single root, as shown in the first example in each pair of words below. Flip Flop Rule 1 is preceded by Word-medial Neutralisation Rule 1 and followed by the Haplology Rule (Section 2.5.2.1) follows it, thus creating a tri-syllabic morpheme. Two word derivations are included within the pairs of words.

alyarrngantha 'sharp/hot things'
 /a + lyarr{ngkw1} + ngantha/
 3:4 things sharp

anganthinga 'sharp'

DEEP STRUCTURE		a		+ ngantha
REDUP.1B	====>	a	+ ngantha	+ ngantha
NTR.1	====>	a	+ nganth+	+ nganth+
FF.1	====>	a	+ nganth+	+ nth+nga
HAPL	====>	a	+ nga{nth+}	+ nth+nga
		3:4	REDUP	sharp

amwirrkwpwalya 'soft-fleshed'
 /a + mwirrkw{i} + pwalya/
 3:4 breast soft

awalyiwa 'ripe, cooked'
 /a + walyi + walyi ==> {lyi}wa/
 3:4 REDUP soft

mwalhamwikwa 'canoe'
 /mw{a} + alha{kpwa} + mwikwi/
 3:5 leg salty (=sea)

mwikwimwika 'deep sea'
 /mwa + mwikwɪ ==> kwɪ{mwɪ} + mwɪkwɪ/
 3:5 REDUP salty (=sea)

nanikwiyalhiya 'shy [man]'
 /n{i} + ani + kwɪ + ya{lhɪ} + yalhi ==> lhiya/
 3:3(1) n-hfem NSR REDUP be shy

In the following word, Flip Flop Rule 1 can be applied with other rules to produce a tri-syllabic morpheme, i.e., with a deep structure form nyingwi 'soft'. The single root, however, is ngwinyɪ. There are two alternatives in coping with this word: (1) regard the word as an exception to the Flip Flop Rule; or (11) accept the possibility of the metathesised root as an irregular single root. The latter is shown in the glosses below.

amwingwinya 'soft'
 /a + mwɪ + ngwinyɪ/
 3:4 INALP soft

anyingwinya 'nasal septum'
 /a + nyɪ{ngwɪ} + nyingwɪ ==> ngwinyɪ/
 3:4 REDUP soft

mwanyingwinya 'Sand Fig'
 /mwa + anɪ + nyɪ{ngwɪ} + nyingwɪ ==> ngwinyɪ/
 3:5 n.hfem REDUP soft

wirranyingwinyamwa 'Eastern Curlew'
 /wirra{nɪ} + nyɪ{ngwɪ} + nyingwɪ ==> ngwinyɪ/
 3:1 REDUP soft

There is one remaining stem in which the surface structure form can only be generated if the Word-medial Neutralisation Rule is not applied. It stands out from all other data as the only one with the vowel /a/ in the middle syllable. Given that Anindilyakwa does not favor homonyms (wɔlyɔ), the only option is to regard this morpheme as being irregular. (Note: If this analysis is correct it provides evidence that a deep structure vowel /a/ can follow /w/ in morpheme-final position.)

thitjangpwilyiwa					'Butterfish'
/tha + tjang{ka} + pwɪ + lyiwa/					
3:2(11)	?head	EM	flat		
apwirangpwilyiwalya					'roof'
/{a} + apwirang{ka} + pwɪ + lyi{wa} + lyiwa == walyi/					
3:4	buttocks	EM	REDUP	flat	
angakpwilyiwalya					'flat-topped mound'
/a + ngak{a} + pwɪ + lyi{wa} + lyiwa == walyi/					
3:4	thigh	EM	REDUP	flat	

2.9.2 Consonants

Metathesis occurs between the consonants in two contiguous CV syllables but is found only in isolated examples. The intervening vowel is high and, in most cases, a lateral or rhotic consonant is involved. The two consonants exchange places and the vowel allophones adjust to the new environment. (The order of syllables in the deep structure can be ascertained from the occurrence of the morphemes in other words.)

FLIP FLOP RULE 2: CONSONANTS

$$[C_1 V C_2] \Rightarrow [C_2 V C_1]$$

i.e. the two consonants on either side of the vowel exchange places.

(Note: In almost all cases the vowel is high.)

napwiriwaka	~	napwiwiraka	'he undressed'
[nap ^w uruwaka	~	nap ^w uwuraka]	
yiniyarriwarna	~	yiniyawirrana	'Northern Quoll'
[yiniye ^r uwa ^{na}	~	yiniyawu ^r ana]	
mwipwilyirra	~	mwipwirriya	'Small-leaved Paper-
[m ^w up ^w ilyira	~	m ^w up ^w urilya]	bark'
yimpwalhirra	~	yimpwarriha	(name)
[yimp ^w alira	~	yimp ^w arila]	
nirikwilyiwakana	~	nirikwiwilyakana	'he went in circles'
[n ^r ukwilyuwakana	~	n ^r uk ^w uwilyakana]	
thimwarrangpwathilyiwa	~	thimwarrangpwathiwalya	'Mangrove Monitor'
[t ^m wa ^r anp ^w atilyuwa	~	[t ^m wa ^r anp ^w atuwalya]	

The metathesis usually occurs within the same morpheme, as in the above examples. There are, however, a few other words in which the metathesis is more remote, i.e., in different morphemes.

awilyikarra ~ awirrikalya 'distant p'ace'
 [awilyikeŋa ~ awirrikalya]

amwiningka [eminingka] 'strange'
 /animwiningka ==> am{w}iningka/

There are two words in which the last syllable of the Gender morpheme ani- metathesises with the Inalienable Possession marker mwi-.

amwiningka	[eminingka]	'strange, different'		
DEEP STRUCTURE	a + ani + mwi + ngki			
VFR.1	==> a + ani + mwi + ngki			
VFR.2 (twice)	==> a + eni + mwi + ngki			
CDR	==> a + eni + m{w}i + ngki			
FF.1	==> a + emi + ni + ngki			
VDEL.1	==> {a} emi ni ngki			
NTR.2	==> emi ni ngka			
	3:4	INALP	n-hfem	other

amwanitharra [amweniŋaŋa ~ emeniŋaŋa] 'fish fin'
 /{a} + ani mwi ==> am(w)ani + tharra/
 3:4 n-hfem INALP ???

2.9.3 Vowels

Metathesis of vowels has been observed in only about twenty words. It is not restricted to any one word class but occurs most frequently in the verbs. Flip Flop Rule 3 often results in dissimilation in a sequence of three vowels. The symbol V₁ represents a low vowel and V₂ a high vowel.

FLIP FLOP RULE 3: VOWELS

$$\begin{array}{ccc} [V & C & V] \\ 1 & & 2 \end{array} \quad \rightleftharpoons \quad \begin{array}{ccc} [V & C & V] \\ 2 & & 1 \end{array}$$

i.e., the vowels on either side of the consonant exchange places.

Methathesis can occur in a verb root in which the last consonant is usually a rhotic but, in isolated cases, is a lamino-palatal. The two vowels metathesise after the application of the Word-medial Neutralisation Rule (see Section 2.1). In the following examples, the first variant is the unsuffixed form and the second variant is the irregular metathesised form.

-kwarra ~ -kwirana 'to hook'

DEEP STRUCTURE		kwarra	+	ana
VFR.1	====>	kwarra	+	ana
VFR.2	====>	kwarra	+	ena
FF.2	====>	kwarra	+	ena
VRD.2	====>	kwura		ena
VDEL.1	====>	kwur{a}		ena
NTR.2	====>	kwur		ena

-angkarra ~ -angkarrina ~ -angkarratja 'to run'

DEEP STRUCTURE		angkarra	+	atja
NTR.1	====>	angkarrra	+	atja
FF.2	====>	angkarrra	+	atja
VDL.2	====>	angkarr{a}		atja

-anthaya ~ -anthiyamwa 'to look at'

DEEP STRUCTURE		anthaya	+	amwa
NTR.1	====>	anthayai	+	amwa
VRD.2	====>	anthayai	+	amwu

VDEL.1	===	anthɨy(a)	amwu
VFR.3	===	anthɨy	amwu
NTR.2	===	anthɨy	amwa

A similar type of metathesis occurs in one very common noun but is not discernible without the division into morphemes.

thɨtharrngka				'adult woman'
DEEP STRUCTURE		tha	+ atha	+ arrngka
NTR.1	===	thɨ	+ athɨ	+ arrngka
METATHESIS	===	thɨ	+ ɨtha	+ arrngka
VDEL.1	===	th{ɨ}	ɨth{a}	arrngka

2.10 INITIAL-SEGMENT DROPPING

Syllable-initial semi-vowels are dropped word-initially and word-medially. In some cases, this is phonologically conditioned but in others the variation is not predictable.

2.10.1 Semi-vowel /y/

The dropping of the word-initial semi-vowel /y/ is phonologically conditioned. It can be deleted when the following consonant is a laminal. A sub-phonemic glottal stop has been heard in the absence of the laminal. Anindilyakwa speakers have confirmed that there is an optional dropping of the semi-vowel.

INITIAL-CONSONANT DROPPING RULE

$$\begin{array}{c} \text{C} \\ [+lamin] \\ [-obstr] \\ [-peri] \end{array} \implies \emptyset \ / \ \# \quad \begin{array}{c} \text{V} \\ [+high] \end{array} \quad \begin{array}{c} \text{C} \\ [+lamin] \end{array}$$

i.e., the word-initial /y/ is optionally dropped when the next consonant is a laminal and the intervening vowel is high. When the

next consonant is /y/ the dropping of the initial /y/ is almost categorical.

yitjarra	[(y)itjaʃa]	'Silver gull'
yilyarra	[(y)ilyaʃa]	'pipe'
yiyikwutjiya	[(y)iyukwutjiya]	'small [snake]'
yiya	[(y)iya]	'and'
yilharrpa	[(y)il _h erpa]	'Liviston Palm'
yinhanha	[(y)in _h ana]	'fingernail'

The morpheme-initial /y/ is also dropped optionally in six adverbs, four of which have a following laminal consonant. Such initial-dropping is apparently restricted to adverbs because a similar deletion in nominals would change the Nominal Classifier to that of another class.

(y)antjarrikina	'that way'
(y)alhakwa	'here'
(y)akwitjina	'there'

The semi-vowels /y/ and /w/ are dropped in the first morpheme in a few reduplicated roots. To date, this has only been observed in five words.

ayiwaya	'weak'
/a + {w}aya + waya/	
3:4 REDUP weak	
thaya	'Green Tree Snake'
/tha + {w}aya/	
3:2(ii) weak	
yarriwarra	'Leatherskin'
/y{i} + {w}arra + warra/	
3:3(ii) REDUP wriggle	
arngkarriyarra	'sour'
/[a] + arngk{a} + {y}arri + yarri/	
3:4 eye REDUP sour	

The dropping of a morpheme-initial /y/ has been observed in the following pair of words and adverb. Reduplication is irregular.

naniyarringka /ni + ani + yarringka/	'older man'
thitharringka /tha + atha + {y}arringka/	'adult woman'
yangmwangmwintjilhangwa /yangmw{1} + {y}angmwintj1 + lhangw1/ REDUP be quiet POSS	'purposelessly'

2.10.2 Vowel /a/

Vowels have a low functional load. The root-initial vowel /a/ is dropped in some occurrences of a morpheme. In most cases only one form occurs for each particular word but there is some variation with older speakers of the language.

mwirirrpwa /mwa + {a}rirrpwi/ 3:5 back 'human back'	/	warnimwarirrpwa /warni + mw{1} + arirrpwi/ 3:1 INALP back 'their human backs'
narimwa /n{1} + arimwi/ 3:3(i) big 'big [man]'	/	nakakirimwa /n{1} + akak{a} + arimwi/ 3:3(i) ??? big 'clever [man]'
mwiramparrpwirra /mwa + (a)ramparr{ki} + p{w}irri/ 3:5 flat	~	mwaramparrpwirra wide 'flat and broad'

The above free variation should not be confused with the use of two roots which contrast in only the initial vowel /a/. The overall semantic concept can be common to both roots. This /a/ contrast indicates their placement in a different word class. For example, the interrogative adverb, ngampwi- 'where?', contrasts with the interrogative demonstrative pronoun, angampwa 'which?, what?'

ngampwilhangwa /ngampwi + lhangwɪ/ where? ABL	nakina	'Where is that [man] from?'
ngampwiwa /ngampwi + wɪ/ where? ALI	kɪlhɪkatjamwa	'Where are you going to?'
angampwa /{a} + angampwɪ/ 3:4 what?	akina	'Which [place] is that?'
ninganɪmwalhɪ ⁴ a /ning{a} + anɪ + mw{ɪ} + alhɪka/ 1ExcSg n-hfem INALP foot		'my tracks'
nɪlhɪkana /nɪ + lhɪka + anɪ/ 3:3 foot-walk TNS		'he went'
nɪlhalhɪkaniwa ~ nɪlhɪkaniwa /nɪ + lhɪ + (al)hɪk{a} + anɪ + wɪ/ 3:3 REDUP foot-walk TNS ALL		'he kept on going'

When the Nominal Classifier yɪ- is followed by the Gender morpheme anɪ- for non-human.feminine the vowel /a/ is deleted. This is systematic but the regular form has occasionally been recorded in adjectives and verbs from older speakers.

yɪnɪkiyalhɪha ~ yanɪkiyalhɪha /yɪ + (a)nɪ + kɪ + yalhɪha/ 3:3(ii) n-hfem ASR shy		'shy [snake]'
naningkwarpwa /n{ɪ} + anɪ + ngkw{ɪ} + arpwi/		'man'
yɪningkwarpwa /yɪ + {a}nɪ + ngkw{ɪ} + arpwi/		'male [animal]'
anɪkwarrnga /{a} + anɪ + k{wɪ} + arrnga/		(place name)
yɪnɪkwarrnga /yɪ + {a}nɪ + k{wɪ} + arrnga/		'Baburra ceremonial ground'

2.11 LOSS OF RETROFLEXION

There are phonemic units which vary only with respect to retroflexion. The variation involves the loss of the retroflexed

phoneme /r/ preceding another consonant in a lexical root, or a change from the retroflexed phoneme /rn/ to the alveolar /n/ in a grammatical root or affix. This variation is regarded as language change for the following reasons:

- (i) the older generation uses the retroflexed forms much more frequently than the younger generation.
- (ii) there was no series of alveolars in TA and, except for nasals in MA, it is still a series with a very low functional load.
- (iii) it is possible that, in the TA system, the retroflexed nasal occurred intervocally with an alveolar allophone in word-initial position. Such a system correlates with that of some other Aboriginal languages (Dixon 1968: 167) and is consistent with the present pattern of variation.

2.11.1 Retroflexed rhotic

The loss of the retroflexed consonant results in simplified consonant clusters. The full form is no longer frequently in use by either generation or in precise spe

amwa(r)mwarra	'a sore'
a(r)ngkawira	'once'
a(r)ngkaywaya	'Tamarind fruit'
wa(r)tharra	'spear it!'
wa(r)tjiyinga	'stand up!'
wa(r)tjirrana	'wash it!'

The consonant closure of the initial syllable is sometimes deleted preceding the reduplicated part. This seems to me to be a reduction because of the co-occurrence of complex consonant clusters.

Note that reduplication begins with the first consonant rather than the first syllable-initial consonant, probably to avoid ambiguity with the morpheme ngki- (unspecified).

a(ngki)rngkawira ~ a(rngki)rngkawira
 /{a} + a(r)ngkirngk{a} + awiri/
 3:4 eye alone
 'once in a while'

a(ngki)rngkiwilyarra ~ a(rngki)rngkiwilyarra
 /{a} + a(r)ngkirngka + wilyarra/
 3:4 eye middle
 'middle of a house'

yingartji(r)tjarranimwa
 /ying{i} + 0/ + a rtji (r)tjarra + ani + mw1
 3:2 3:4 REDUP: wash TNS PIP
 'She kept on washing it.'

2.11.2 Retroflexed nasal

The loss of retroflexion in the nasal is wide-spread throughout several word classes. The retroflexed and alveolar nasals are often in free variation but, in some cases, one or more words in a paradigm now have a complete loss of the retroflexion.

(1) in the affixation

The following examples illustrate the loss of retroflexion in the masculine gender prefixation and the tense suffixation.

masculine gender affixes

The masculine dual is marked in the nominals and pronominals by the prefix ni- but the nasal is retroflexed by the Cerebralisation Rule following the non-singular morpheme rra-. The loss of retroflexion was noted in some pronouns in 1974 but there has been a further loss since that time in similarly structured personal pronouns.

yiniwa						'we'
/yirra	ni	=>	yirni	=>	yini	+ wi/
1ExcPl	MascDu					SF

ningkwirniwa ~ ningkwiniwa 'you'
 /ningkwɪ ni => ningkwɪ(r)ni + wi/
 2Sg MascDu SF

apwirniwa ~ ap(w)ɪniwa 'they'
 /apwirra ni => apwi(r)ni + wi/
 3:1 MascDu SF

The loss of retroflexion in the above word apɪni- [epɪni] (3rd masculine dual) neutralises the contrast between this personal pronoun and the demonstrative pronoun which means 'that not visible (Noun Class A)'. Only the context resolves the ambiguity.

tense suffix

The retroflexed nasal in the tense suffix occurs with only seventeen verb roots out of a corpus of about six hundred. In eleven verb in which a rounded peripheral is the last consonant in the root, only the retroflexed nasal has been recorded; in the remaining six examples, the alveolar and retroflexed nasals vary freely, the former being the most frequent.

nilhikana ~ nilhɪkarna 'he went'
 niyarriwana ~ niyarriwarna 'he went past'
 niyakina ~ niyakirna 'he removed it'
 nipwirtirtɪkwina ~ nipwirtirtɪkwɪrna 'he carried it on a belt'

The same variation occurs in nominals which are derived from verbs.

yiniyarriwana ~ yiniyarriwarna 'Northern Quoll'
 athirrngwana ~ athirrngwarna 'big'

(ii) in the roots

In the demonstrative pronoun root, the alveolar nasal is much more frequently used than its retroflexed counterpart.

demonstrative root a(na)ni ~ a(rna)rnɪ

ningarna ~ ningana 'this (1st sg.)'
/ning{a} + a(r)ni/
1Sg this

warnarna ~ warnana 'these [dogs]'
/warn{ɪ} + a(r)ni/
3:1Pl this

anana ~ ana 'this [fish]'
/a + anani/
3:4 this

A retroflexed or alveolar nasal rarely occurs in a root.

Variation has been found only in the following root.

wingarningkirringka 'look at the spear!'

aningkwa 'spear'

thimwarninhangwa ~ thimwaninhangwa 'Spotted Eagle-ray'
/tha + mw{ɪ} + arning{kwɪ} + thangwi/
3:2(11) INALP spear POSS

Similar variation has been observed in loanwords. The retroflexed nasal is the one most frequently used by all age groups.

pwapwilikarna ~ pwapwilikana NG papirlikan 'sheet iron'

pwarnimpirra ~ pwanimpwirra NG parnumpil 'Morning Star'

pwarnampwila ~ pwanampwila GP panang? 'wool'

2.12 FORTITION

Heath (1984:58-65) posits a "productive pattern" for the fortition and lenition of consonants in Nunggubuyu. A similar pattern involving peripheral or laminal consonants operates in Anindilyakwa but it is not as systematic. The change almost always takes place in the manner of articulation of the morpheme-initial consonant of a root. Fortition is phonologically-conditioned.

2.12.1 Progressive fortition

Progressive (rightward) hardening of a peripheral nasal or a lamino-palatal consonant can occur following a velar nasal or stop. The nasals, /mw/ and /ngw/, are hardened to their stop counterparts, /pw/ and /kw/, respectively; the lamino-palatal /y/ is hardened to its stop counterpart /tj/. The velar does not always occur in the surface structure. (Note that the hardening occurs after the deletion of the deep structure vowel in some instances.)

amwalya /a + mwalya/ 3:4 soft	'body fat'
amwirrkwpwalya /a + mwirrkw{1} + pwalya/ 3:4 breast soft	'soft'
amwirtha /{a} + amwirtha/ 3:4 cook on coals	'brown/black'
angpwirtha /a + ng{kwi} + pwirtha/ 3:4 NSR cook on coals	'Yellow Snowflake Water- lily'
thimwirra /tha + m{w}irri/ 3:2(i1) wide	'Torres Strait Pigeon'
alhingakpwirra /a + lhingaka + p{w}irri/ 3:4 torso wide	'wide-bodied'
yamwina /Ø + yam{wi} + ni/ 3:4 do TNS	'do it!'
yamwintjamwina /Ø + yamwin{1} + tjamwini/ 3:4 REDUP do	'keep doing it like this!'
niyawitha /ni + yawi + tha/ 3:3(i) carry INCH	'he was carried'

nilyantjawitha /ni + lyang{ka} + tjawitha/ 3:3(i) head be carried	'he was carried on the head'
yimwirntangirringirra /yi + mwirnta{ka} + ngirringirra/ 3:3(ii) PL REDUP:dangerous	'Blady Grass'
thimwarngkirra /tha + mwarng{ka} + kirra/ 3:2(i) spirit dangerous	'mean, stingy [woman]'
<p>In some words, there is no nasal conditioner in the surface structure. The Nominaliser which precedes a verb root may have been deleted from the adjectives derives from such roots. It seems as if once the two allomorphs for each root are established they can be chosen at random for use in other words. The choice does avoid ambiguity, as in reduplicated forms (Section 2.8.4).</p>	
amwirtha /a + mwirtha/ 3:4 cook on coals	'brown/black'
apwirtha /a + pwirtha/ 3:4 cook on coals	'sea mammals, etc.'
yilyarrpwantha /yi + lyarr{ka} + p{w}antha/ 3:3(ii) ?body fat wound by spearing	'Western Brown Snake'
nipwantha /ni + \emptyset + p{w}antha/ 3:3(i) 3:4 wound by spearing	'he wounded it'
thiyakirrarra /tha + yaka + rrarri/ 3:2(i) chest happy	'happy [woman]'
thitjakawara /tha + tjak{a} + awara/ 3:2(i) chest sad	'sad [woman]'
niyatha /ni + yatha/ 3:3(i) emerge	'[man] freed from taboo' (returning from the ceremony)

nɪtjathana 'he emerged'
 /nɪ + tɟath{a} + anɪ/
 3:3(1) emerge TNS

Progressive fortition also occurs in the morpheme-initial laminal consonant /y/ in the second root of two reduplicated roots. It could be considered to be regressive lenition in agreement with the regressive nature of reduplication (Section 2.8). Either root can be used singly in other words, as shown below.

ayapwɪtɟapwa 'separate'
 /a + yap(w)ɪ tɟap(w)ɪ/
 3:4 REDUP separate

nɪyapwɪtɟapwakɪna 'he divided it'
 /nɪ + ∅ + yap(w)ɪ tɟap(w)ɪ + kɪ + nɪ/
 3:3(1) 3:4 REDUP separate CAUS TNS

ayapwa 'intervening shelf'
 /a + yap(w)ɪ/
 3:4 separate

The adjective root, yɪkwɪ 'small', also illustrates progressive fortition in reduplicated roots and the choice of various morphemic forms in words other than the one with the conditioned phoneme, viz., yɪkwɪ, the hardened tɟɪkwɪ and the metathesised kwɪtɟa. The following derivation demonstrates the phonological rule ordering.

ayɪkwɪtɟɪyɪa		[a ^ɪ yukwutɟɪyɪa]		'small (sg.)'
DEEP STRUCTURE		a + yɪkwɪ + yɪkwɪ + yɪ		
VFR.1	==>	a + yɪkwɪ + yɪkwɪ + yɪ		
VFR.5	==>	a ^ɪ yɪkwɪ + yɪkwɪ + yɪ		
VRD.1 & 2	==>	a ^ɪ yukwu + yukwu + yɪ		
FORTITION	==>	a ^ɪ yukwu + tɟukwu + yɪ		
FF.1	==>	a ^ɪ yukwu kwutɟu + yɪ		
HAPL	==>	a ^ɪ yu{kwu} kwutɟu + yɪ		
VFR.3	==>	a ^ɪ yu kwutɟɪ yɪ		
NTR.2	==>	a ^ɪ yu kwutɟɪ ya		
		3:4 REDUP	small	?SF

yiwarrngkwitja /yɪ + warrng{ka} + k{w}ɪtjɪ/ 3:3(11) DIMIN small	'joey'
ayakwitjamwa /a + ya{ka} + kwitj{ɪ} + amwɪ/ 3:4 chest small PROP	'jealous'
amwingk .Ja /a + mwing{kwiɾrkwi} + kwitjɪ/ 3:4 cheek small	'too tight'
arngkitjikwirra /{a} + arngka + tjɪkwɪ + rra/ 3:4 eye small SF	'Green Plum'
amwirntakitjika /a + mwirntaka + tjɪk{w}ɪ/ 3:4 Pl small	'small things'
ayɪkwayɪwa /a + yɪkw{ɪ}) + aya + wɪ/ 3:4 small SNsg SF	'small (pl.)'

Hardening of the lamino-dental consonant /lh/ to its counterpart /th/ does occur in a few random examples. As for other examples in this sub-section, the phonological conditioning for the Progressive Fortition can only be observed in some words.

alhalhipwina ~ athathipwina /alhalha ~ athatha + p{w}ɪnɪ/ this side that unseen	'on that side'
yɪɾɪkwitjɪlhangwa /yɪ + rɪ{kwi} + kwitjɪ + lhangwɪ/ 3:3(11) body small POSS	'Brindled Bandicoot'
thimarningthangwa /tha + mw{i} + arning{kɪ} + thangwɪ/ 3:2(11) INALP pointed (=spear) POSS	'Spotted Eagle-ray'
alhakpwa /{a} + alhakpwa/ 3:4 leg	'leg'
amwalhakpwa /a + mw{i} + alhakpwa/ 3:4 INALP leg	'fish's tail'
mwamwithakpwa /mwa + mwɪ + thakpwa/ 3:5 INALP leg	'boat stern'

alhika		'foot'
/a + lhika/		
3:4	foot	
athikalyipwa		'Crinum Lily'
/a + thik{a} + alyipwa/		
3:4	foot eat	

Similar hardened and lenited consonants have been found between the Anindilyakwa root and its Nunggubuyu cognate. The first two examples illustrate the variants /tn/ and /lh/; the third example /w/ and /pw/; and the last example /ngw/ and /kw/ (with the second syllable in Anindilyakwa being lenited).

amwathangkwa	NG lhangku	'meat, flesh'
lharrwira	NG atharrwara	'afternoon'
awirikwi-	NG mwapuruku	'swamp'
akwingwi-	NG kuuku	'fresh water'

In Anindilyakwa pronouns and demonstratives, a word-initial rounded peripheral consonant /w/ has a hardened counterpart in word-medial position. In the second singular pronoun, the change can be considered to be hardening because the word-medial (morpheme-medial) /kw/ follows a velar nasal but /w/ occurs word-initially. Alternatively, it could be lenition of the word-initial /w/ after the first syllable is dropped. In the third person plural prefixation, there is no criterion upon which to establish whether the variation between /w/ and /pw/ is hardening or lenition. (Note: The same change is also reflected in the Nominal Classifiers.)

ningkwiwa		'you (sg.)'
/ningkwi + wi/		
2Sg	SF	
wingatja		'(you sg.) hit it!'
/[ningk]wi + ngatja/		
2Sg	hit	

ningkwirriwa /ningkwirra + wɪ/ 2Pl SF	'you (non-sg.)'
wirringatja /{ningk}wirra + Ø + ngatja/ 2Pl 3:4 hit	'(you non-sg) hit it!'
wirrakina /{a}{p}wɪ + rr{a} + akɪnɪ/ 3Pl Nsg that	'those'
apwirriwa /apwɪ + rra + wɪ/ 3Pl Nsg SF	'they'

2.12.2 Regressive fortition

Hardening of the morpheme-initial consonant can occur in one of two reduplicated roots. Rightward hardening of the morpheme-initial /y/ has been discussed in the previous section but leftward hardening has also been observed. Leftward hardening could be said to be in accord with the regressive nature of reduplication. In current data, the only examples involve the rounded peripheral /w/ being hardened to the obstruent /pw/, and the lamino-palatal semi-vowel /y/ to /tj/.

angkipwarrngwarrngwa /a + ngkɪ + pwarrng{wɪ} + warrngwɪ/ 3:4 ASR REDUP heavy	'heavy'
--	---------

apwayɪwaya ~ apwayawa /a + pwaya + waya/ 3:4 REDUP weak	'blunt'
---	---------

Compare:

ayarrmiyarrma /a + yarrmi + yarrmi/ 3:4 REDUP thin	'thin'
--	--------

thimwamwintjarrmwintjarrma /tha + mwi + mwintjarr{mi} + mwin{tjirrka} tjarrmi/ 3:2(ii) INALP REDUP skin thin	'grasshopper'
--	---------------

aritjamiyama /a + ri{kwi} + tja{rr}mi + ya{rr}mi/ 3:4 short body REDUP thin	'short and thin'
---	------------------

alhingətjamiyama 'long and thin'
 /a + lɦinga{ka} + tja{rr}mɨ + ya{rr}mɨ/
 3:4 large torso REDUP thin

2.13 SUPRASEGMENTALS

Anindilyakwa is a stressed-timed language. The di-syllabic and tri-syllabic foot within the phonological word takes approximately the same amount of time in pronunciation. The rhythm is maintained by lengthening vowels in shorter words and coalescence in longer words.

2.13.1 Timing/length

The timing of words in relation to the number of syllables varies according to the number of syllables. Citation forms of lexical words by the same speaker also vary according to the context within the recorded list.

2	syllables	400 - 450	msecs
3	"	450 - 950	msecs
4	"	650 - 1100	msecs
5 - 8	"	750 - 1300	msecs

The length of a syllable in a two-syllable word can be twice that in an eight-syllable word. Citation forms of two-syllable words, therefore, have a lengthened vowel in the first syllable which is reduced when the same word co-occurs with others within the phonological word. No minimal pairs which contrast by length have been found.

A suprasegmental feature consisting of length and very high pitch is used as a stylistic device to indicate continuity of action. It falls on the penultimate syllable of a verb or the conjunction /pwiya/ 'and then' and frequently co-occurs with reduplication of the verb root (see Section 2.8).

pwí::ya narrathithirraŋga (pause) narrathithirraŋginwi:::wa
 'And then they caught [and] they were keeping on catching them.'

yirriwirrakalhihikaní:::wa
 'They kept on walking'

The same feature is used when speaking to another person from a distance. The very high pitch enables the voice to carry. The final vowel is lengthened or a high vowel added to carry the feature.

naratjawi	[náratjá ^u :::]	'Naratja!'
napipayi	[népɪpæ ⁱ :::]	'uncle!'
yɪwi	[yu:::]	'yes!'
yangkwirrangwayi ~ [yaŋkwuŋraŋwá ⁱ :::]	yangkwirrangwawi ~ yaŋkwuŋraŋwá ^u :::]	'[come] here!'

A reduction in the number of syllables or segments occurs in narratives. In addition to reduction by the application of Coalescence Rules and the Haplology Rule (Section 2.5), any word-final vowel can elide to maintain the stress/rhythm pattern if the resultant consonant cluster is an acceptable sequence. The first consonant of the resultant cluster has a delayed release.

nɪmwɪnɪŋkarrŋga mwɪrɪrrpwa
 [nɪm^wɪnɪŋkáŋg:m^wɪrɪrrpwa]
 'He broke his back.'

kátjɪŋwa kəmpɪrɪra nənɪkɪlɪhəwɪrrəkwa^tjɪyathə thakɪna
 [kátjɪŋ:kəmpɪrɪra nənɪkɪlɪhəwɪrrəkwa^tjɪyathəⁿakɪna]
 '...so that he could bring her back.'

2.13.2 Stress

Stress is a feature of the phonological word and changes on the minimum lexical unit according to its suffixation and position in the phonological word. A stressed syllable differs from an unstressed by a slight increase in intensity and length and a very slight rise in pitch. (Stress might better be defined as syllable prominence.)

Primary stress falls on the penultimate syllable in multi-syllabic words. More than one stressed syllable can occur in each word. Variant patterns for stress occur because maintaining the rhythm and timing is of greater importance than stress itself.

alɬikɪra	[áɬkɪra]	'house'
alɬikɪrawa	[áɬkɪrɔ́wa]	'to the house'
nɪɬikɪna	[nɪɬikéna]	'he went'
nɪɬikɪnɪmwa	[nɪɬikenúmwa]	'he was going'
anhinga	[áɬɪŋa]	'vegetable food'
yɪnɪmwanhinga	[yɪnumáɬɪŋa]	'Red Wild Apple'

Stress falls on the first and penultimate syllables in most of the data. In words with an even number of syllables, the stress falls on alternate syllables, i.e., on the first syllable of each disyllabic foot.

artja	[á:rtja]	'digging stick'
thilyapwirnta	[tɬɪvanwúnta]	'frog'
wɪrrarɪmɪrɪmɪwɪwɪ	[wúɾarúmwɪwɪwɪwɪ]	'big'
yɪmɪrntakananɪ	[yɪmwúntakenéna]	'these'

In words of three syllables, the common pattern is for stress to fall on the penultimate syllable. Stress can alternatively fall on the initial syllable if that syllable contains the low vowel /a/ and is followed by an open syllable with a high vowel.

anana	[enéna]	'this [fish]'
yinipa	[yinípa]	'red ochre'
ningkalya	[niŋkálya]	'wet [man]'
yampirrkwa	[yámpirrkwa ~ yámpírřkwa]	'Venus Tusk-fish'

angpwirtha	[áŋp ^w ur̥ta ~ ɔŋp ^w úr̥ta]	'yellow Waterlily'
alhika	[á ^h ika ~ a ^h ika]	'foot'
angpwitha	[éŋp ^w ɪta ~ ɛŋp ^w ɪta]	'strong'

In longer words with an uneven number of syllables, two patterns emerge. The most frequent pattern retains the initial and penultimate stress. The first foot is tri-syllabic and following feet are di-syllabic.

mwalhilihiyanga	[m ^w á ^h il ⁱ liyáŋa]	'gum blossom'
yipwilyipwilya	[yí ^p wilyup ^w ílya]	'Bynoe's Gecko'
yalkirangkwirra	[yá ^k ir̥aŋkwur̥a]	'Mangrove Jack'
mwingarniyantha	[m ^w úŋaŋiyáŋta]	'False Trumpet Shell'
ningkwirripwikwirriwa	[níŋkwur̥ip ^w úk ^w ur̥úwa]	'you three'
wirriyangpwilyangpwirna	[wú ^r iyáŋp ^w ílyáŋp ^w úna]	'ant sp.'
warnikwiringiringanthika	[wáŋukwur̥íŋir̥íŋaŋt̥íka]	'Honeyeater'

The second pattern occurs in words with a high vowel in the initial syllable and the low vowel in the second syllable. The low vowel attracts the stress. Free variation occurs between the two patterns.

[yím ^w áŋp ^w ur̥úŋwa	~ yim ^w áŋp ^w ur̥úŋwa]	'hornet'
[t̥úm ^w ap ^w ur̥ák ^w ur̥átja	~ t̥um ^w áp ^w ur̥ák ^w ur̥átja]	'rock-monitor sp.'
[t̥úm ^w ám ^w ur̥kwúnám ^w ur̥a	~ t̥um ^w ám ^w ur̥kwúnám ^w ur̥a]	'Spotted Python'

Exceptions to the above patterns occur irrespective of the number of syllables when the anti-penultimate syllable contains the low vowel /a/ and the penultimate syllable is open and has a high vowel. Stress falls on the first or second syllable, according to the above rules, but subsequently falls on the first syllable of each following di-syllabic foot. This maintains the rhythm within the word

but shifts the stress to the ante-penultimate syllable. Except for a few common words with the clitic, -amwi(rra), there is free variation with the more frequent counterpart above.

akwirrangina	[ákwuřaŋína ~ ákwuřaŋína]	'shark sp.'
atjwatjiwa	[átjuwatjúwa ~ átjuwátjuwa]	'Rock Fern'
mwingarikwa	[m ^w úŋařukwa ~ m ^w uŋářukwa]	'fishing line'
ningilhiakatjamwirra	[níŋilíka ^t tjámmuřa]	'I am going'
yimwaltjanamwirra	[yúm ^w altjénammuřa ~ yum ^w áltjenám ^w uřa]	'Rainbowfish'
akwithihikatjingwa	[ákwutí ^t katjúŋwa ~ ákwutí ^t katjúŋwa]	'gate'

Some consonant-initial suffixes with three syllables have a preferred stress on the penultimate syllable. This can result in a tri-syllabic foot preceding the penultimate word stress.

mwamwirikwi + lhangwiya	[m ^w ám ^w uřukwu ^l ŋwíya]	'along the road'
ngarrikpwihi + tjingwina	[ŋář ^t k ^w í ^t itjuŋwína]	'we strained'

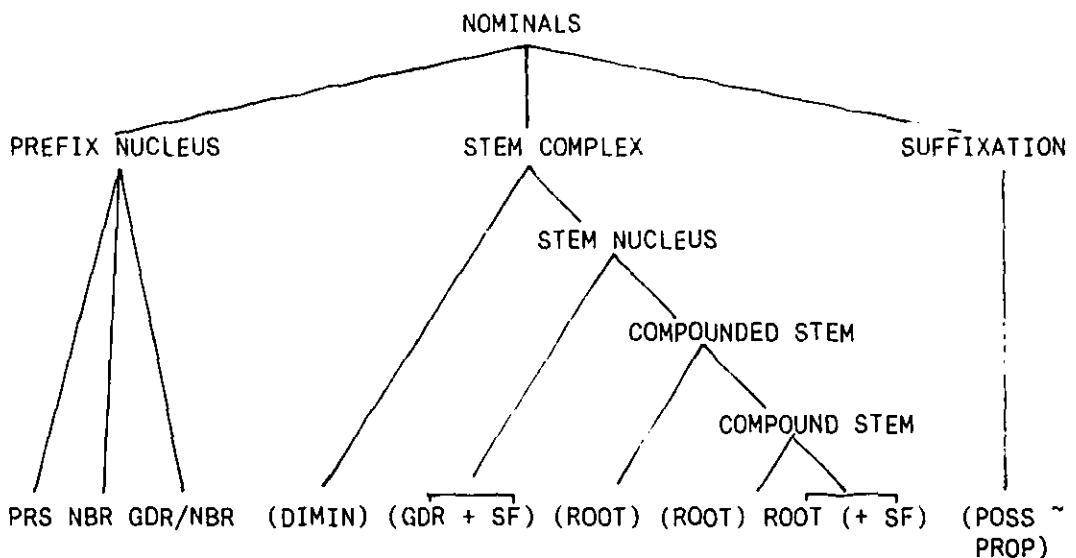
The intensifying and terminalising suffixes, -aki and -tha, are stressed on the final syllable and the first syllable of the preceding di-syllabic feet.

yawaka	[yáw ^a ká]	'yes'
athirngwarnaka	[át ^t ř ^w áŋ ^a ká]	'very big'
angalyitha	[aŋály ^t á]	'home'
athiwapwawiyitha	[át ^t uwó ^w íy ^t á]	'just for a day'

Nouns and adjectives are grouped together under the term 'nominals' to indicate the similarity in their morphological structure. The structure of nominals has been divided primarily into a prefix nucleus, stem complex and suffixation. The prefix nucleus is identical for both nouns and adjectives but the stem complex consists of grammatical features or morphemes which are not identical in the two word classes.

Table 5 diagrams the composite structure of the nominals. The only obligatory categories are the Prefix Nucleus and a single root. The Nominal Prefix Nucleus classifies for first, second and third persons, four distinctions in number, and two in gender. The composition of the roots in the Stem Complex is: (a) a root which can be single or reduplicated; (b) a compound stem consisting of two different roots (one of which can be reduplicated) or of a root plus stem formative; and (c) a compounded stem consisting of three

TABLE 5: STRUCTURE OF NOMINALS



different roots, the last two of which form a compound stem elsewhere in the data. The Diminisher is associated with the lexical root, not the prefixation; the Gender morphemes and the stem formatives for deriving nouns and adjectives function as a unit; and inflectional suffix is either Possessive or Proprietary.

There are, however, differences significant enough to posit two word classes. In Dixon (1980:490), similar differences are reported for the Diyari language:

'Perhaps the strongest set of grammatical criteria for distinguishing nouns from adjectives apply in Diyari: (i) only adjectives can take the inchoative verbalising suffix; (ii) nouns and adjectives take different intensifiers; (iii) nouns are subcategorised for gender; (v) adjectives follow nouns.'

Anindilyakwa nouns and adjectives differ because of the following criteria (placed in the same order as those above and not necessarily related to their importance):

- (i) The inchoative and causative verbalising stem formatives are almost always suffixed to an adjective. There are, however, one or two exceptions in which a noun has been similarly marked.
- (ii) Nouns and adjectives take the same intensifiers but the intensifying clitic occurs more often on adjectives. The adjective root can be diminished whereas this is not possible for a noun root.
- (iii) Some nouns are marked by the Nominaliser (ng)kwj- in contrast with some adjectives which are marked by the Adjectiviser

(ng)ki-. These stem formatives, together with a Possession morpheme in the same position, almost always require a preceding Gender morpheme for human feminine versus non-human.feminine. (Note: One or two exceptions with Gender categorisation are tentatively placed under Adjectives because of their lexical meaning.)

(iv) Word order in the noun phrase is flexible but, when an Adjective modifies an overt noun, it takes the peripheral case markers. (Note: This statement is dependent on an analysis permitting two noun phrases in apposition.)

(v) Adjectives take the full set of nominal classifiers for first, second and third persons. Proper nouns take only one third person classifier for each lexical item; Common nouns take only a limited number of third person nominal classifiers.

The noun and adjective distinction can also be applied to the roots. Shape Adjective roots have a final ki, the same form as the Adjectiviser; some noun roots have a final syllable kwi, the same form as the Nominaliser. Both these sets of roots can occur in all three positions in the compounded stem (sometimes with modification). Two other sets of adjective and noun roots are not overtly marked and can only occur in the final position of a compound stem.

Anindiyakwa nouns are divided into two groups on the basis of their internal morphological structure, viz., Basic, Derived and Adverbial. Anindiyakwa adjectives are divided into Basic, Derived and Interrogative.

3.1 Nominal roots

Noun and Adjective roots can be distinguished in Anindiyakwa.

The noun roots are body parts and the adjective roots divide into two sets, viz., shape and general.

3.1.1 Adjective roots

Adjective roots fall into two sets which can be identified by their position in the stem complex and by their morphological structure. Both roots can occur individually but first order roots are marked by a stem formative when occurring in word-final position. Reduplication of the root or a combination of two different adjective roots are quite common.

3.1.1.1 Shape adjective roots

The first order adjective root can be identified by its final syllable ki- which has the same shape as the Adjectiviser. Twenty-eight roots have been isolated and meanings established for all but five of these. The semantic concepts involve shape and visibility.

Some of the identified shades have been found to be related to body parts. For example, the shape adjective root, ngangki 'chest-shaped' or 'concave' is related to the Bodypart noun root, ngarngka 'shoulder' and is used for some shells; ampwirrki 'eye-shaped' or 'oval three-dimensional' is related to mwirmpwi 'eye' and is used of fruit and knobs.

The adjective roots for visibility refer to the visible and invisible, such as times of day, speech and emotions. These also can be related to body parts, e.g., warrki ~ walhki 'emotions' is also used as a crossreference for 'chest'; yarrki 'vocal' is associated with yalhki 'throat'. (Note: Phonemic variation between /rr/ and /lh/ is known to occur preceding the velar stop.) The following examples illustrate the use of shape adjective roots in the first

position in a compound stem.

ampwirrkitharrpwa /a + amp{w}irrki + tharrpwi/ 3:4 oval (egg-shaped) short	'short, eggshaped [knob]'
mwingarniyantha /mwa + ngarni{ngki} + yantha/ 3:5 pointed ???	'False Trumpet Shell'
ayarrkiwiyita /a + yarrki + wiyita/ 3:4 vocal straight	'straight talking'
amwakakilyiwa /a + mw{' + akaki + lyiwa/ 3:4 INALP tongue-shaped smooth	'Black Pomfret fish'

The Shape Adjective roots can occur as the only root in a word but the stem formative wi is usually added. The final adjectivising syllable ki may elide or the root-final vowel may be deleted to form a rounded peripheral consonant. The following pairs of examples show the contrast in roots in the first and second positions.

angangpwilya /a + ngang{ki} + pwilyi/ 3:4 concave (chest-shaped) ???	'armpit'
angangiwa /a + ngangki + wi/ 3:4 concave SF	'thorax front'
ampwirrkitharrpwa /{a} + amp{w}irrki + tharrpwi/ 3:4 oval (eye-shaped) short	'short and rounded'
mwampwirrkwa /mw{a} + amp{w}irrki + wi/ 3:5 oval SF	'Cooktown Ironwood'
ayalhirampwalhpwa /a + yalhci + rampwalhpwi/ 3:4 tubular (=neck-shaped) flat	'flat paperbark'
mwiyalhkwa /mwa + yalhk{i} + wi/ 3:5 tubular SF	'starfish (gen.)'

arrkpwilya	'burial place'
/[a] + arrk{i} + pwilyi/	
3:4 forked ???	
mwarra	'wave'
/mw{a} + arr{k} + wi/	
3:5 forked SF	
mwingarniyantha	'False Trumpet Shell'
/mwa + ngarni{ngki} + yantha/	
3:5 pointed ?head	
aningkwa	'spear'
/a + {ngar}ningk{i} + wi/	
3:4 pointed SF	

In the following data, the Shape Adjectives occur as the only root in common nouns. The final syllable *ki* (which conditions preceding fronted vowels, Section 2.3.2.1) is deleted but there is an absence of the stem formative. The root sometimes has a secondary meaning.

athirra	'hole, mouth'
/a + thirr{k}/	
3:4 mouth-shaped	
yayarra	'vein'
/yi => ya + yarr{k}/	
3:3(ii) forked	
mwarra	'blood'
/mw{a} + arr{k}/	
3:5 forked	
apwinga	'anthill'
/[a] + ap{w}ing{k}/	
3:4 humpbacked	
aki	'firewood'
/[a] + a{k}ki/	
3:4 tongue-shaped	

Some of the Shape Adjective roots have variant forms in which the deletion is occasionally similar to phonologically-conditioned reductions, viz., loss of retroflexion (Section 2.11.1), initial-segment dropping (Section 2.10).

mwiningkiningkiwilyarra /mwa + ningki + ningki + wilyarra/ 3:5 REDUP pointed middle	'centre point of a sand dune'
yayarra /yi ==> ya + yarr{k}i/ 3:3(ii) forked	'vein'
mwarrpwira /mw{a} + arr{ki} + pwira/ 3:5 forked hollow	'scorpion'
yarrarra /y{i} + arr{ki} + arr{k}i/ 3:3(ii) REDUP forked	'forked stick'
arampwarrpwirra /a + ramp{w}arr{ki} + p{w}irri/ 3:4 flat (back-shaped) wide	'blackboard'
amwampwarrkwa /a + m{wi} + amp{w}arrk{i} + wi/ 3:4 INALP flat SF	'ten'
ampwirrkamwamiwa /{a} + amp{w}irrk{i} + amwami + wi/ 3:4 round (scrotum-shaped) round SF	'football'
mwampwirrmwirtha /mw{a} + amp{w}irrk{i} + mwirtha/ 3:5 round (scrotum-shaped) brown	'dirty plate'

The Shape Adjective roots do not reduplicate when in the first position in a compound stem. There is, however, one example of a reduplicated root in second position.

mwarntaningkwiningkwa /mw{a} + arnta{ka} + ningkwi + ningkwi/ 3:5 elbow REDUP pointed	'Smilax Vine'
---	---------------

3.1.1.2 General adjective roots

The adjective roots which occur in the second position in a compound stem are a separate set with semantic concepts such as size, mass, tactility, colour, number, and other physical states. A second

order root is one that cannot be placed in the first position of a compound stem. The first four examples illustrate the occurrence of these roots in the second position in a compound stem.

alharrngkwalha	'sharp things'
/a + lharrngkw{i} + alha/	
3:4 things sharp	
alhingatjirra	'long, tall'
/a + llinga{ka} + tjirri/	
3:4 torso long	
thimwarngkithatha	'spotted dragon sp.'
/tha + mwarngka + thatha/	
3:2(ii) eye spotted	

Some of the General Adjective roots are used as the only root in proper or common nouns. In such data, only one Nominal Classifier is used with the root and the meaning is extended. No stem formative occurs because there is no change to their normal word-final position.

thikwitja	'Black-faced Cuckoo-shrike'
/tha + kwitji/	
3:2(ii) small	
yiwapa	'red ant sp.'
/yi + wapi/	
3:3(ii) red	
wirriwarta	'doq'
/wirra + warti/	
3:1 long-haired	
mwalharra	'gravel, small stones'
/mw{a} + alharra/	
3:5 few & small	
alha	'coral'
{a} + alha/	
3:4 sharp	
alya	'slime, moss'
{a} + alya/	
3:4 wet	
amwarta	'grass'
/a + mwarti/	
3:4 green	

amwalya 'body fat'
 /a + mwalya/
 3:4 soft

angwinya 'pus'
 /a + ngwinyi/
 3:4 soft

The reduplication of the second order adjective root is very common (except for colour). It indicates an intensifying of the characteristic. Only one root can reduplicate in each word. Some of the General Adjective roots are obligatorily reduplicated when they do not co-occur with a different root in the stem. The following examples compare the use of the reduplicated root in the adjectives and the single root in the nouns.

amwintjirr(kwi)mwilhimwilha 'coarse-skinned'
 /a + mwintjirr(kwi) + mwilha + mwilha/
 3:4 skin REDUP coarse

angarrmwilhimwilha 'metal rasp'
 /a + ngarr{ka} + mwilha + mwilha/
 3:4 ear REDUP coarse

mwamwilha 'nostril hair'
 /mwa + mwilha/
 3:5 coarse

awalyiwa 'ripe'
 /a + wa{lya} + walya ==> lyiwa/
 3:4 REDUP soft

yinimwawalyiwa 'White Gum flower'
 /yi + {a}ni + mwi ==> mwa + walyiwa/
 3:3(ii) n-hfem INALP REDUP:soft

awarrwalya 'shadow, shade'
 /a + warr{ka} + walya/
 3:4 teeth soft

ayikwitjiya 'small'
 /a + kwitji ==> yi{kwi} + kwitji + ya/
 3:4 REDUP small ??

yirikwitjilhangwa 'Brindled Bandicoot'
 /yi + ri{kwi} + kwitji + lhangwi/
 3:3(ii) body small POSS

angkipwarrngwarrngwa	'heavy'
/a + ngki + pwarrng{a} + warrng{a} + wi/	
3:4 ASR REDUP heavy SF	
yingakpwarrnga	'Cut-leaved Palm'
/yi + ngak{a} + pwarrnga/	
3:3(ii) thigh heavy	
anganthinga	'sharp'
/a + ngantha + ngantha ==> {ntha}nga/	
3:4 REDUP sharp	
mwilyarrngantha	'burning hot sand'
/mwa + lyarr{ki} + ngantha/	
3:5 invisible sharp	

Reduplication of a single root does not occur if the root already consists of reduplicated syllables. There is usually a sense of plurality (non-singularity) or intensification in such roots.

alyingarrathatha	'Scallop Shell'
/a + lyingarr{ka} + athatha/	
3:4 heart spotted	
yinyinya	'bristleworm'
/yi + nyinyi/	
3:3(ii) ringed/scalloped	
wirratjitja	'bird (gen.)'
/wirr{a} + atjitji/	
3:1 winged	
akwirara	'sweet'
/a + kwi + rara/	
3:4 NSR sweet	

3.1.2 Noun roots

Noun roots are the names of body parts. There are two other types of roots which morphologically fit under noun roots but semantically are more like adjectives, viz., the numerality morphemes and the diminisher.

3.1.2.1 Bodypart noun roots

The Bodypart noun roots which occur in the first position in a compound stem have a final syllable kwi similar to that for the Nominaliser. About eighty of these roots have been isolated and most of their meanings ascertained through their use within the compound stems in verbs. The roots (with a few exceptions) are usually human body parts but are occasionally the body parts of a non-human animate.

A Bodypart noun root is used to describe a prominent physical feature in many of the names for flora and fauna. For example, lhingaka 'human torso, human body' is used for a large tree trunk or the body of a large fish; alhpwilhka 'shoulder blade or wing' can refer to long sleeves or long grass. Many of the concepts expressed in the compound stems are not easily understood by those unfamiliar with Aboriginal culture.

The following examples illustrate the Bodypart noun root as the first root. The second root can be a single or reduplicated root.

thimwirrkwpwalya /tha + mwirrkw{i} + pwalya/ 3:2(ii) breast soft	'silky dress'
yingarrampwilya /yi + ngarr{ka} + ampwilya/ 3:3(ii) ear paired	'centipede'
alhingkwamwarta /a + lhingkw{i} + amwarta/ 3:4 hair (=foliage) green	'Billabong Tree'
yilyangmwilhimwilha /yi + lyang{ka} + mwilha + mwilha/ 3:3(ii) head rough rough	'Estuarine Stonefish'
yimwintjirrkimwilhimwilha /a + mwintjirrka + mwilha + mwilha/ 3:3(ii) skin REDUP rough	'very rough-skinned'

The Bodypart noun roots sometimes have an extended meaning. In other instances, they refer primarily to the body part of a reptile or

bird. Some of the more interesting connotations, together with exceptions, are listed below.

lharrngkwi 'unspecified body parts' is glossed as 'things'. It is used when a specific description is not required or desired.

alharrngkwimgwa 'smelly things'
/a + lharrngkwi + ng{ki} + mwi/
3:4 things ASR to smell

alharrngkwilharrngkwitharpwa 'many short things'
/a + lharrngkwi + lharrngkwi + tharrpwi/
3:4 REDUP things short

alhka is used for the human 'shoulder-blade' or 'wing of a bird'. It frequently denotes feathers in its reference to grass or other items which are composed of strips or strands.

alhtjirrirra / mwalhtjirrirra 'long grass / rope'
/{a} / mw{a} + alh{ka} + tjirri + rra/
3:4 / 3:5 wing long SF

alhpwarrirra 'sliced bread'
/{a} + alh{ka} + pwarra + rra/
3:4 wing split SF

mwalhkirarikatja 'rain-forest'
/mw{a} + alhka + rarikatja/
3:5 wing fasten

mwarntaka refers primarily to the flipper of a turtle and is different from the root for the human hand. It is related to the root, arntaka 'elbow'.

yimwarntakiwapwa 'Blue-tongued Lizard'
/yi + mwarntaka + wapwa/
3:3(ii) flipper ???

yimwarntakirampwalhpwa '[wallaby] pouch'
/yi + mwarntaka + rampwalhpwi/
3:3(ii) flipper flat

mwarntakirriyarra 'Long Yam'
/mw{a} + arntaka + rriyarri/
3:5 elbow forkec

a(k)pwirra 'buttocks, tail' often also refers to the tail of a reptile, a road or a vehicle.

apwirrakiwiyita 'straight [table-top]'
/{a} + apwirra + wiyita/
3:4 tail straight

mwapwirrawilya 'Mauve Convolv^{ous}'
/mw{a} + apwirra{ka} + wilya/
3:5 tail one
(with one long aprot)

mwapwirrkwi 'short legs' describes short-legged human beings, birds and reptiles. In some instances, the word is better glossed as 'legless'.

thimwapwirrkwaratja 'rock-monitor sp.'
/tha + mwapwirrk{wi} + aratja/
3:2(ii) short leg goanna

wirrimwapwirrkwatja 'praying mantis'
/wirra + mwapwirrk{wi} + watja/
3:1 short leg brush away

ngathaka 'long nose' has only been recorded with reference to fish, shells, trees and grass.

thingathiyalhiwa 'Long-nosed Trevally'
/tha + ngatha{ka} + yalhi + wi/
3:2(ii) long-nosed shy SF

thingathiringwana 'grass sp.'
/tha + ngatha{ka} + ringwani/
3:2(ii) long-nosed ???

kwiwakwi ~ kwikwi refers to mwikwikwiwarnantha which is a large bag in the abdomen which contains the faeces. It could be the rectum but, as it is referred to as "the second stomach", is more likely to be the large colon. The word has also been used of sea animals with large stomachs, viz., a shark, dophin or dugong; a smelly mattress or blanket; a waterhole or the sea; and a stone.

akwiwakwitharrpwa	'small swamp'
/a + kwiwakwi + tharrpwi/	
3:4 colon short	
akwiwakwitjira	'small stick'
/a + kwiwakwi + tjira/	
3:4 colon young	
akwiwapwirra	'flat and wide'
/a + kwiwa{kwi} + p{w}irri/	
3:4 colon wide	

The Bodypart noun roots usually occur in the first position in a compound stem but, like the Shape Adjective roots, can occur in stem-final. The roots are optionally adjoined by the stem formative *rra* or *wi*. The stem formative *wi* may be the same as in the pronouns where it is added to the prefix to form a free form pronoun (Section 4.2.1) but could also be a variant form of the Propriative suffix *mwɪ* ~ *pwɪ* which occurs in the same position on nouns (Section 3.4.1.2). The vowel *and*, where applicable, the semi-vowel /w/ preceding the stem formative *wɪ* is deleted, probably because its presence would overlap with the noun plus Locative case marker. The examples are divided into three sets to illustrate each stem formative and to compare the stem formative *wɪ* with the Propriative suffix.

yipwirngkwipwirngkwirra	'Tripod-fish'
/yi + pwirngkwi + pwirngkwi + rra/	
3:3(ii) REDUP spine SF	
thimwingkwirra	'Blue-winged Kingfisher'
/tha + mwing{kwirr}kwi + rra/	
3:2(ii) cheek SF	
alyikwirra	'paperbark'
/a + lyi{pwirr}kwi + rra/	
3:4 lips/tongue SF	
yipwarngkwa	'mullet'
/yi + pw{i} + ai ,k{a} + wi/	
3:3(ii) EM eye SF	

thingarrkwa 'sea urchin'
 /tha + ngarrk{a} + wi/
 3:2(ii) ear SF

mwilharrngkwa 'White Berry Rush'
 /mwa + lharrngk{wi} + wi/
 3:5 things SF

Compare:

mwangkwirrkwa 'Pandanus fruit'
 /mw{a} + angkwirrk{wi} + wi/
 3:5 scrotum SF

mwangkarrkpwa 'Wild Plum'
 /mw{a} + angkarrk{a} + pwi/
 3:5 hip PROP

The Bodypart noun root can occur as the only root in a noun. The final syllable *ka* or *kwi* is deleted but the stem formative is not added. In some instances, the remaining portion of the single root is identical with that in the compound stem but in others there are minor differences. Both forms have the same meaning in the following list. (Note: Consideration was given to analysing the root-final syllable *kwi* as prosodic rounding conditioned by the preceding rounded syllable but this will not account for its presence in other roots, e.g., *lyingkwi* 'head hair'.)

BOUND FORM	FREE FORM	MEANING
a(k)pwalhka-	akpwalha	'abdomen'
angkarrka-	arrngka	'hip'
arntaka-	arnta	'elbow'
lhakpwaka-	alhakpwa	'leg'
lyangarngka-	aringka	'head'
lhirraka-	alhika	'foot'
lyikpwirrkwi-	alyalyikpwa	'lips'
mwingkwirrkwi-	amwingwirra	'cheek'
mwinharrka ~ mwilharrka	amwinha	'urine'

mwirngka-	mwirnga	'spine'
lhangarngka-	aringka	'head'
ngirntarrka-	angirnta	'chin'
ngwirntirrka-	angwirnta	'ankle'
ngwinaka-	yina	'knee joint'
ripwirrkwi-	mwirirrpwa	'body, back'
rraka-	arra	'forehead'
yamwirrkwi-	ayarmwirra	'upper arm'

There are some examples where the free form and the incorporated root differ slightly in form and/or meaning.

BOUND FORM		FREE FORM	
lyarrka-	bone	ayarrka	'hand'
yalhki-	throat	ayakwa	'speech'
yarrki-	forked	yayarra	'vein'
		yarrarra	'forked stick'
kaki-	tongue-shaped (= fire)	aka	'firewood'
apwingki-	humpbacked	apwinga	'anthill'

Bodypart noun roots consisting of three syllables have shortened forms. Such deletions usually omit or reduce the medial syllables. Some are irregular to prevent ambiguity with another root.

FULL FORM	SHORT FORM	
ripwirrkwi-	rikwi-	'body, back'
lyikpwirrkwi-	lyikwi-	'lips, tongue'
mwingkwirrkwi-	mwingkwii-	'cheek'
lhangarngka-	lhangkwii-	'head'
angkarrrka-	arrka-	'hip'

mwilyirrkwi-	mwirrkwi-	'breast'
alhpwilhka-	alhka-	'shoulder blade'

The long and short forms of the above roots freely vary in the verbs but, in the nominals, the shorter forms are obligatory in specific words.

nirikwitharrpwa /ni + ri{pwirr}kwi + tharrpwi/ 3:3(i) body short	'short-backed'
amwirrkwpwalya /a + mwi{lyi}rrkw{i} + pwalya/ 3:4 breast soft	'soft-breasted'
nilyangpwirna /ni + lya{ngar}ng{ka} + pwirna/ 3:3(i) head many	'ignorant'
yarrkimwarnta /y{i} + a{nga}rrka + mwarnta/ 3:3(ii) hip to point	'Venus Shell'

Reduplication of the Bodypart noun root indicates plurality and usually occurs when the noun root precedes an adjective root. In most instances, more than one such body part occurs in humans, e.g., paired body parts such as ears and eyes, complex body parts such as hair or spine, or culturally-specific ones such as the two stomachs (the second one is called the 'little stomach' and is part of the intestines).

alhingkwilhingkwiwilyarra /a + lhingkw{i} + lhingkw{i} + wilyarra/ 3:4 REDUP hair (=foliage) middle	'middle of dense foliage'
alharrngkwilharrngkwiwarra /a + lharrngkw{i} + lharrngkw{i} + warra/ 3:4 REDUP things torn	'remnant'
apwipwirngkwilyimwitha /a + pwi{rngkw{i}} + pwirngkw{i} + lyimwitha/ 3:4 REDUP spine (=bone) be complete	'[whole] skeleton'

wirrantjantjinyirra 'Azure Kingfisher'
 /wirr{a} + antj{alhka} + antja{lhka} + nyirra/
 3:1 REDUP stomach soft

mwarpwarpwirra 'Strangler Fig'
 /mw{a} + armpwi + arn{taka} + pwirra
 3:5 REDUP elbow PROP

angwirrkwpwingwirrkwpwirra 'Devil Ray'
 /a + ngwirrkwpwi + ngwirrkw{i} + p{w}irri/
 3:4 REDUP mouth wide

The only pair of examples, to date, where the reduplicated root contrasts with the same single root, are as follows:

alhingpwirra 'Flat Grass'
 /a + lhing{kwi} + p{w}irri/
 3:4 hair wide

alhingwilhingpwirra 'Silk Grass'
 /a + lhingp{w}i + lhing{kwi} + p{w}irri/
 3:4 REDUP hair wide

3.1.2.2 Numerality

Most of the numerals occur as General Adjective roots but the plural allomorphs, wirraka ~ mwirntaka, functions as a noun root. This root fills the same positions in the compound stem as Bodypart noun roots. It functions elsewhere as a Number prefix (see Section 3.3.1.3).

The plural allomorphs can precede another numeral General Adjective root, as in the following examples.

thiwirrwilya
 /tha + wirr{aka} + wilya/
 3:2(ii) PL one
 'rainbow' (Lit: one multi-faceted item)

yimwirntangirringirra
 /yi + mwirnta{ka} + ngirra + ngirra/
 3:3(ii) PL REDUP dangerous
 'Blady Grass' (Lit: having many very dangerous parts)

ngarrimwirntakawira ~ ngarriwirrakawira 'we, the one set'
 /ngarra + (mwirntaka ~ wirraka) + wira/
 1ExcP1 PL alone

amwirntakitjika 'collection of small
 /a + mwirntaka + kwitji ==> tjik{w}i/
 3:4 PL small items'

amwirntamwilhka ~ awirramwilhka
 /a + (mwirnta{ka} ~ wirra{ka}) + mwilhka/
 3:4 PL looked after
 'intact items' (Lit: many looked-after)

nimwirntakpwilhirra
 /ni + mwirntak{a} + pwi + lhirra/
 3:3(i) PL EM slippery
 'careless' (Lit: many slippery [fingers])

The plural morpheme, mwirntaka and its hardened counterpart pwirna, can also function as the only single or reduplicated root. As in Bodypart noun roots, the final syllable is deleted and the optional stem formative rra adjoined. The extended meaning of the morpheme is 'many'.

apwapwirna 'many'
 /[a] + apwi ==> apwa + pwirna/
 3:4 REDUP PL

yimwirnta 'head lice'
 /yi + mwirnta/
 3:3(ii) PL

wirramwirnta 'dog ticks'
 /wirra + mwirnta/
 3:1 PL

yiningarnimpwirna 'Venus Tusk-fish'
 /yi + {a}ni + {ngwi} + ngarning{ki} + pwirna/
 3:3(ii) n-hfem ALP pointed many

There is one other numeral which is a noun root. The numeral root, ampwaka 'hands and feet', appears to have the meaning of 'paired body parts' in the verbs. In the nominals, its shortened form means 'a pair' or 'two'.

ampwilyimwa 'pair, two'
 /[a] + ampwa{ka} + wilyi + mwi/
 3:4 paired one PROP

ampwampwimwa 'two by two'
 /[a] + ampw{aka} + ampwa{va} + mw1/
 3:4 REDUP pair PROP

ampwawira 'few'
 /[a] + ampwa{ka} + wira/
 3:4 paired one

3.1.2.3 Diminisher

The comparison between a pair of similar items is frequently indicated by the use of the Diminisher warrngka which precedes the stem nucleus. Its allomorphs are warrngka, wanka and the less frequent warnka. The final syllable identifies this morpheme as a noun root. (See Section 8.2.2.1 for the particle which also acts as a diminisher.)

The Diminisher decreases the lexical meaning of adjective (but not noun) roots in the compound stem. In effect, it decreases largeness and increases smallness.

niwarrngkingpwitha 'strongish'
 /ni + warrngka + ng{ki} + pwitha/
 3:3(i) DIMIN ASR swell (=strong)

awarrngkirampwarrpwitha 'almost flat and wide'
 /a + warrngka + ramp{w}arrp{w}irri/
 3:4 DIMIN flat:wide (e.g. bark sheet)

awarrng(ki)kwilyathatha 'rather pretty'
 /a + warrng(ka) + kwilyathatha/
 3:4 DIMIN skin:spotted

awarrngkilyarrngantha 'warm, tepid'
 /a + warrngka + lyarrngantha/
 3:4 DIMIN invisible:sharp

niwarrngkaningapwa 'not really good'
 /ni + warrngk{a} + aningapwa/
 3:3(i) DIMIN good

awarrngkilyikarrkpwitha 'slightly unpleasant
 [taste]'
 /a + warrngka + lyikarrkpwitha/
 3:4 DIMIN liver:strong

awarrngkapwiyiya 'blurry'
 /a + warrngk{a} + apwiyiyi/
 3:4 DIMIN not visible

thawarnkanyarra ~ thawankanyarra 'teasing'
 /tha + warrngka ==> wa(r)nk{a} + anyarri/
 3:2(i) DIMIN hard

niwanpwitjingwa 'a bit tired'
 /ni + wanka + pwi + tjingwa/
 3:3(i) DIMIN EM tired

thiwankartarra 'feverish'
 /tha + wank{a} + artarra/
 3:2(i) DIMIN hot

mwiwankwinyirra
 /mwa + wank{w}i + nyirri/
 3:4 DIMIN soft
 'whimpers' (e.g., a truck that stops and starts)

Size is not compared in three degrees as in English (big, bigger, biggest) but in paired relationships. Each unit in a pair of antonyms is diminished, i.e., big versus slightly big, and small versus slightly small. Note that when largeness is diminished it becomes smaller but when smallness is diminished it increases in size.

arimwa /{a} + arimwi/ 'big'
 3:4 big

awarrngkarimwa /a + warrngk{a} + arimwi/ 'biggish'
 3:4 DIMIN big

ayikwitjiya /a + yikwitjiya/ 'small'
 3:4 small

awarrngkiyikwitjiya /a + warrngka + yikwitjiya/ 'smallish'
 3:4 DIMIN small

amwiyarra /a + m{w}i + yarri/ 'for a while'
 3:4 INALP forked

awarrngkamwayarra 'for a fair while'
 /a + warrngk{a} + am{w}iyarra/
 3:4 DIMIN temporary

Reduplication of the Diminisher is very rare. It increases the intensity of the reduction.

mwiarrngkiwarrngkithirrpwira
 /mwa + warrngka + warrngka + thirrpwira/
 3:5 DIMIN DIMIN straight
 'not quite straight' (e.g., leaves of the Whistling Casuarina Tree)

The Diminisher is often optional in the adjectives but is obligatory in some of the (idiomatic) nouns.

thiwanthira	/tha + wan{ka} + thira/ 3:2(ii) DIMIN ???	'Restless Fly-catcher'
thiwankirrariya	/tha + wanka + wirrariya/ 3:2(ii) DIMIN bad	'Osprey'
yiwarrngkwitja	/yi + warrng{ka} + kwitji/ 3:3(ii) DIMIN small	'joey'

3.2 NOMINAL STEM COMPLEX

The Nominal Stem Complex consists of a compound stem with two or three different roots, preceded by an optional Gender morpheme and the stem formatives for Nominalisation, Adjectivisation and Possession. The various combinations of grammatical categories within the stem nucleus and the nature of the elements within the compound stem leads to the positing of different types of nouns and adjectives. These are discussed within this sub-section.

3.2.1 Basic nouns

The Basic Noun consists of an obligatory Nominal Prefix Nucleus and a single or reduplicated noun root. These are few in number and are often the names of body parts. Two different Bodypart noun roots (except the Numerative plural) cannot co-occur.

arnta	/a + arnta/ 3:4 elbow	'elbow'
angwirnta	/a + ngwirnti/ 3:4 ankle	'ankle'
mwirirrpwa	/mwa + rirr{ki} + pwi/ 3:5 human back PROP	'human back'

yilyakwa	/yi + lyakwa/ 3:3(ii) speech	'native bee'
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Some bird names consist of the Nominal Prefix Nucleus followed by a single or reduplicated root which is onomatopaeic.

NAME	BIRD CALL	
yitjarra	tjarr (=atchoo)	'Silver Gull'
yikwirrkwa	kwirrkwi kwirrkwi	'Tawny Frogmouth'
thipwithakpwitha	pwithak pwithak	'Pied Oystercatcher'
thikwirirrkwa	kwirirrk	'Brolga'
thirrkpwa	thirrk	'Masked Plover'
mwamwinyi	mwinyi	'Swamp Hen'
yiwikpwa	pwi pwi pwi pwi pwi	'Coucal Pheasant'

The Basic noun can consist of a plural noun root and a Bodypart noun root.

amwirntathikwirra		'Catfish Eel' (Lit: many-tongued)'
/a + mwirnta{ka} + thikwi + rra/		
3:4 PL	tongue SF	

3.2.2 Basic adjectives

A Basic adjective consists of an obligatory nominal prefix nucleus and a compound stem. The compound stem may be realised by a single or reduplicated root, or a noun root followed by an adjective root or two different adjective roots.

The following examples illustrate the occurrence of a single or a reduplicated root. Note that some of the reduplicated roots are reduced by metathesis and haplology.

arimwa	{a} + arimwi/ 3:4 big	'big'
--------	--------------------------	-------

natjara	/n{i} + atjara/ 3:3(i) young	'mean, unsharing'
mwingka	/m{w}a + ngki/ 3:5 other	'another'
niyarriyarrma	/ni + yarrmi + yarrmi/ 3:3(i) REDUP thin	'thin'
wirrarimwirimwa	/wirr{a} + arimwi + arimwi/ 3:1 REDUP big	'big [people]'
awalyiwa	/a + lyiwa ==> wa{lyi} + lyiwa/ 3:4 REDUP smooth	'ripe'
thinganthinga	/tha + nga{nthi} + nganthe ==> nthinga/ 3:2(ii) REDUP sharp	'sharp'

An adjective stem, consisting of two different adjective roots, often permits a description of two significant physical features.

ampirrkitharrpwa	/a + amp{w}irrk{a} + tharrpwi/ 3:4 scrotum-shaped short	'short and round' (e.g., little finger)
yirrakwirra	/yi + rrak{i} + p{w}irri/ 3:3(ii) elongated wide	'long and wide [branch]'
arrwirra	/a + arr{ki} + p{w}irri/ 3:4 forked wide	'any' (e.g., anywhere)
alharrkiwilyapwa	/a + lharrki + wilyapwa/ 3:4 invisible one	'distant [country]'
niwarrikawarriya	/ni + warrk{i} + awarriya/ 3:3(i) chest untidy (=bad)	'sad'

Compound stems with a Bodypart noun root and an adjective root are considered to be basic adjectives because they take the full set of nominal classifiers and can be modifiers in the noun phrase.

nilyangpwirna /ni + lyang{ka} + pwirna/ 3:3(i) head many	'ignorant' (Lit: many-headed)
nimwarngkampwilyimwa /ni + mwarngk{a} + ampwilyimwa/ 3:3(i) spirit two	'two-faced'
niyarrkpwilhirra /ni + yarrk{i} + pwi + lhirra/ 3:3(i) vocal EM blunt	'lispng'
alharrmpwirna /a + lharrng{kwi} + pwirna/ 3:4 things many	'neat'
thimwirrkwpwalya /tha + mwirrkw{i} + pwalya/ 3:2(i) breast soft	'soft-fleshed'
angwirrkwirampwalhpwa /a + ngwirrkwi + rampwalhpwa/ 3:4 mouth flat	'flat-bottomed'
thilharrkpwilhalha /tha + lharrk{a} + pwi + lhalha/ 3:2(i) bone EM shallow	'emaciated, thin'

Either the Bodypart noun root in the first position or the General Adjective root in the second position can be reduplicated, but not both in the same word.

amwintjirrkimwilhimwilha /a + mwintjirrk{a} + mwilha + mwilha/ 3:4 skin REDUP rough	'very rough-barked'
alyikarrpwaripwara /a + lyikarr{kwa} + pwara + pwara/ 3:4 liver/heart REDUP light	'light, not heavy'
mwitjitjirrkwiwilyarra /mwa + tji{rrka} + tjirrk{a} + wilyarra/ 3:5 REDUP ?heart middle	'very middle [of the sea]'
arngkirngkithirrpwira /{a} + arngkirngka + thirrpwira/ 3:4 eye (=house) straight	'straight-sided [house]'

3.2.3 Derived nouns

Nouns are derived by the Nominaliser or the two Possession

morphemes which precede the compound stem. These morphemes are usually preceded by a Gender morpheme. To facilitate the understanding of the analysis for derived nouns the Gender morphemes are described first.

3.2.3.1 Gender

The Gender prefix consists of two separate morphemes, atha- (human.feminine) and ani- (non-human.feminine), which follow the Nominal Prefix Nucleus in some nouns and adjectives. The shapes of these morphemes are similar to their counterparts in the Nominal Prefix Nucleus, i.e., the feminine Nominal Classifier 3:2 tha- and the human masculine Nominal Classifier ni- drop the morpheme-initial /a/ in word-initial position.

Both morphemes occur in the first and second person. The morpheme, atha- (human.feminine gender), only co-occurs with the third person Nominal Class 3:2; the morpheme ani- co-occurs with all other third person Nominal Classes.

ninganipa /ning{a} + ani + {kwi} + pi/ 1ExcSg n-hfem NSR drink	'I, the living male'
kwirranipwiwakwitha /kwirr{a} + ani + pwi + wakwitha/ 2P1 n-hfem NSR be silly	'you silly males'
wirrathipwiwakwitha /wirr{a} + atha + pwi + wakwitha/ 3:1P1 hfem NSR be silly	'silly females'
naningkwilyikpwa /n{i} + ani + ngkwi + lyikpwi/ 3:3(i) n-hfem NSR lips	'male descendant'
thathingkwilyikpwa /th{a} + atha + ngkwi + lyikpwi/ 3:2(i) hfem NSR lips	'female descendant'

In non-human feminine Nominal Class 3:2(ii), the two Gender

morphemes can occur. The choice of morphemes usually distinguishes human feminine from inanimates or animates that are classified as feminine but are not human. The older Anindilyakwa speakers consider the use of the non-human.feminine morpheme to be "correct" for the latter categories but free variation does occur between the two allomorphs. Compare the following pairs of examples:

thathingkwirakpwa /th{a} + atha + ngkwi + rakpwi/ 3:2(i) hfem NSR comp.act	'well-known [woman]'
thaningkwirakpwa ~ thathingkwirakpwa /th{a} + ani ~ atha + ngkwi + rakpwi/ 3:2(ii) n-hfem hfem NSR comp.act	'old [clothing]'
thathipa /th{a} + atha + {kwi} + pi/ 3:2(i) hfem NSR drink	'living female [person]'
thanipa ~ thathipa /th{a} + ani + {kwi} + pi/ 3:2(ii) n-hfem NSR drink	'living [bird]'
thanikwiyalhiya ~ thathikwiyalhiya /th{a} + ani ~ atha + k{w}i + yalhiya/ 3:2(ii) n-hfem hfem NSR shy	'shy [lizard]'
thanipwiwakwithikwiya ~ thathipwiwakwithikwiya /th{a} + ani ~ atha + pwi + wakwitha + kwiyi/ 3:2(ii) n-hfem hfem NSR be silly DU 'two silly [animals classified as feminine]'	

The non-human.feminine Gender morpheme ani- is used as the citation form for a group consisting of both men and women.

warnimwamwalya
/wi{rra} + ani + mwi ==> mwa + mwalya/
3Pl n-hfem INALP body fat
'Aboriginal race, all mankind'

warninthilyakwa
/wirr{a} + ani + ngkwi ==> nthi + lyakwa/
3Pl n-hfem NSR speak
'Anindilyakwa speakers'

Redundancy in the marking of gender occurs when a Gender morpheme co-occurs with its corresponding Nominal Classifier 3:2(i) feminine or 3:3(i) masculine or its corresponding dual Gender/Number morpheme.

thathipwiwakwitha	'silly female'
/th{a} + atha + pwi + wakwitha/	
3:2(i) hfem NSR be silly	
nanipwiwakwithikwiya	'two silly males'
/n{i} + ani + pwi + wakwitha + k{w}iyi/	
3:3(i) n-h.fem NSR be silly DU	
yirringathimwalhikakwiya	'feet of us two silly females'
/yirring{a} + atha + mw{i} + alhika + k{w}iyi/	
1ExcFemDu hfem INALP foot DU	
yananimwalhikakwiya	'feet of us two silly males'
/yi{rra}n{i} + ani + mw{i} + alhika + k{w}iyi/	
1ExcMascDu n-hfem INALP foot DU	

There are some phonologically-conditioned allomorphs of the Gender morphemes. Cerebralisation and Regressive Assimilation operate under the phonological rules in Sections 2.5.2.3 and 2.7.1, respectively. Vowel and syllable deletion are specific to the interaction of a Gender morpheme with another contiguous morpheme.

(i) cerebralisation

The full and reduced forms can occur in free variation but the reduced form is by far the most frequent.

kwirraningkwarpwa ~ karningkwarpwa	'you adult men'
/kwirr{a} + ani + ngkw{i} + arpwi/	
2Pl n-hfem NSR wound	
wirraningmwa ~ warningmwa	'knowledgable men'
/wirr{a} + ani + ng{kwi} + mwi/	
3Pl n-hfem NSR pick up	
ngarnikiyalhiya	'we shy people'
/ngarr{a} + ani + ki + yalhiya/	
1IncPl n-hfem ASR shy	

(ii) progressive assimilation

The Gender morpheme ani- assimilates to amwi- following the Nominal Classifier 3:5 mwa-. The two forms may be in free variation or the assimilated morpheme may be deleted by the Haplology Rule (see Section 2.5.2.1). Only the assimilated occurs between two rounded labial nasal consonants.

mwanikwapwalhmwingkwa ~ mwamwikwapwalhmwingkwa
/mw{a} + ani ==> amwi + kw{i} + apwalhmwingkwi/
3:5 n-hfem NSR wear on the abdomen
'belt'

mwanipwiwakitha ~ mwamwipwiwakwitha
/mw{a} + ani ==> amwi + pwi + wakwitha/
3:5 n-hfem NSR become silly
'silly [shark]'

mwa(mwa)mwamwiwa
/mw{a} + ani ==> amwi ==> amwa + mw{a} + amwiwa/
3:5 n-hfem INALP round
'Round yam'

mwamwikirra
/mw{a} + ani ==> a{mwi} + mwi + k{w}irri/
3:5 n-hfem INALP name
'its name'

(iii) vowel deletion

Vowel Deletion is irregular in that the morpheme-initial vowel is deleted in the second morpheme and not the morpheme-final vowel in the first morpheme (Cf. Section 2.5.1). This irregularity occurs at the morpheme boundary between the Nominal Classifier 3:3(ii) yi- and the Gender morpheme ani-. It prevents ambiguity with a similar combination for the first person inclusive singular, yani-. Compare the following pairs of examples:

yanimwawarrwalyikwiya
/y{a} + ani + mw{i} + awarrwalya + k{w}iyi/
1IncSg n-hfem INALP shadow DU
'the shadows of you and me'

yinimwawarrwalyikwiya
 /yi + {a}ni + mw{i} + awarrwalya + k{w}iyi/
 3:3(ii) n-hfem INALP shadow DU
 'the shadows of two non-human male [kangaroos]'

yanikathiwa
 /y{a} + ani + k{wi} + athiwi/
 1IncSg n-hfem NSR new
 'you and me, the newcomers'

yinikathiwa
 /yi + {a}ni + k{wi} + athiwi/
 3:3(ii) n-hfem NSR new
 'crescent moon'

(iv) syllable deletion

The surface representation of the Gender morphemes is quite often realised by its initial vowel /a/ when the final syllable is deleted preceding a Nominaliser, Adjectiviser or Possession morpheme. This contrasts with the morpheme-final neutralised high vowel in the prefixation preceding the Gender morpheme. Such syllable deletion is similar to that discussed under Haplology (Section 2.5.2.1) but extends the scope of what will elide. The full and the shortened forms vary in a few words. The short forms occur most frequently in the Personified Noun Class 3:2 THA (66% of data) and in the Non-personified Noun Class 3:5 MWA (75% of data). No shortened forms have been recorded for the Noun Class 3:1 WIRRA and only one or two for Noun Class 3:3 NI and YI. The presence or absence of the Gender morphemes with Noun Class 3:4 A can only be identified within the full prefix paradigm. The following examples show the variation between the full and shortened forms.

tha(thi)kwiwarrkiwarrka 'spider (gen.)'
 /th{a} + atha + kwi + warrka + warrka/
 3:2 hfem NSR REDUP weave

na(ni)kwiripwiripwika 'Macassan male'
 /n{i} + ani + kwi + rip{w}i + rip{w}iki/
 3:3(i) h-hfem NSR REDUP eat raw fish

a(ni)kwilyingka 'body painting'
 /{a} + ani + kwi + lyingki/
 3:4 n-hfem NSR paint the body'

In the following examples, only the shortened form occurs.

thakwilyingatjanga 'star'
 /th{a} + a{tha} + kwi + lyingatjanga/
 3:2 hfem NSR pop out

thakwiyawiyawitha 'Great Bower-bird'
 /th{a} + a{tha} + kwi + yawa + yawitha/
 3:2(i) NSR REDUP collect

mwakwi... 'broom'
 /mw{a} + ani => a{mwi} + kwi + lyangpwarra/
 3:5 n-hfem NSR sweep

mwakwaparamwa 'Shark Ray'
 /mw{a} + ani => a{mwi} + kwi + aparamwa/
 3:5 n-hfem NSR feel for the unseen

thakpwitha 'right-handed
 [fema e]'
 /th{a} + a{tha} + k{i} + pwitha/
 3:2(i) hfem ASR swell (=strong)

nakawarriya 'left-handed [male]'
 /m{wa} + a{ni} + k{i} + awarriya/
 3:3(i) n-hfem ASR untidy

thamwapwimwirra 'Olive Python'
 /th{a} + a{tha} + {mwi} + mwapwi + mwirra/
 3:2(i) hfem INALP legless PROP

thamwarikwa 'beetle sp.'
 /th{a} + a{tha} + mw{i} + arikwa/
 3:2(i) hfem INALP raw

The Gender morphemes are reduplicated to indicate plurality.

In the last three examples, the Gender morpheme is reduplicated together with the following morpheme (see Section 2:8 for Reduplication Rules).

wirraniniyarringkawiya ~ warniniyarringkawiya 'old men'
 /wirr{a} + anini + yarringka + awiyi/
 3:1(i) REDUP:n-hfem aged PL

yirrithitharringkawiya 'we old women'
 /yirra + {a}thitha + {y}arrngka + awiyi/
 1ExcPl REDUP:hfem aged PL

aninginingapwa 'good [things]'
 /{a} + aninga + {a}ni + {ngwi} + ngapwa/
 3:4 REDUP n-hfem ALP good

anipwinipwingwaya 'Wild Gardenia'
 /{a} + anipwi + {a}ni + pwi + ngwaya/
 3:4 REDUP n-hfem NSR ???

yiningkwiningkwarpwawiya
 /yi + ningkwi + {a}ni + ngkw{i} + arpwi ==> arpwa + wiyi/
 3:3(ii) REDUP n-hfem NSR wound PL
 'adult male goannas'

The occurrence of two Gender morphemes does not always indicate reduplication. The nominal classifier and gender marker have been added to the stem nucleus of another adjective. Such constructions are not frequent.

thathinipwiwakwitha ~ thanipwiwakwitha 'silly [animal]'
 /th{a} + atha + {a}nipwiwakwitha/
 3:2(ii) hfem silly

ningathiningkwirakpwa 'I, the old one'
 /ning{a} + atha + {a}ningkwirakpwa/
 1ExcSg n-hfem old

kwirraniningkwira 'you, Nunggubuyu'
 /kwirr{a} + ani + {yi}ningkwira/
 2Pl n-hfem NW wind

Morphologically, a Gender morpheme precedes the Nominaliser, Adjectiviser, Inalienable and Alienable Possession morphemes (see the following section).

warningkwilyikpwa
 /wirr{a} + ani + ngkwi + lyikpwi/
 3:1Pl n-hfem NSR lips
 'descendants'

wirringathikwiyakatja
 /wirring{a} + atha + kwi + yakatja/
 3:1FemDu hfem NSR stay together
 'friendly women or girls'

yathimwathirrakwiya
 /y{a} + atha + mw{i} + athirra + kwiyi/
 1IncDu hfem INALP mouth du/tri
 'the mouths of us two females'

ningkwaningwathinipwawiya
 /ningk{wi} + ani + ngw{i} + athinipwawiva/
 2Sg n-hfem ALP soon
 'you, the oldest male offspring'

ningkwathingwathinipwawiya
 /ningk{wi} + atha + ngw{i} + athinipwawiya/
 2Sg hfem ALP soon
 'you, the oldest female offspring'

Semantically, the Gender morphemes seem to be related primarily to humans and the words can be grouped into the following semantic categories, viz., human attributes, age (maturity) levels, kinship terms. There is, however, less frequent but often idiomatic usage of the same morphological structures with inanimate items.

(i) human attributes

The human attributes are usually realised as adjectives. It is in this group that the primarily human attribute is extended to the non-human animate or inanimate. Compare the following sets:

naningapwa 'good [male]'
 /n{i} + ani + {ngkwi} + ngapwi/
 3:3(i) n-hfem NSR good

aningapwa 'good [thing]'
 /{a} + ani + {ngkwi} + ngapwi/
 3:4 n-hfem NSR good

ngarningkwirakpwa
 /ngar{ra} + {a}ni + ngkwi + rakpwi/
 1IncPl n-hfem NSR comp.act
 'we long-term residents, we who have stood for a long time'

yiningkwirakpwa 'full moon'
 /yi + {a}ni + ngkwi + rakpwi/
 3:3(ii) n-hfem NSR comp.act

thaningkwirakpwa 'old [clothing]'
 /th{a} + ani + ngkwi + rakpwi/
 3:2(ii) n-hfem NSR comp.act

yathikathiwa
 /y{a} + atha + k{i} + athiwi/
 1IncSg hfem ASR be new
 'you and I, the two female newcomers'

yinikathiwa 'crescent moon'
 /yi + {a}ni + k{i} + athiwi/
 3:3(ii) n-hfem ASR be new

mwanikathiwa 'new [truck]'
 /mw{a} + ani + k{i} + athiwi/
 3:4 n-hfem ASR be new

There appears to be a lack of consistency in the marking of human attributes for gender. For example, only one word in a pair of antonyms may be marked.

aningapwa 'good'

awirrariya 'bad'

nimwakpa 'generous'

nimwarngpirra 'mean, greedy'

(ii) age levels

The Aborigines do not count the years but do distinguish various maturity levels, mostly in relation to physical development/appearance and ability. Two examples for each of the male and female maturity levels are:

kwirripwikwantjarrngalyilya
 /kwirripwikwi + an{i} + tjarr{ngkwi} + ngalyilyi/
 2Tri n-hfem ?things tread on
 'you three boys'

naningkwarpwa 'adult male, man'
 /n{i} + ani + ngkw{i} + arpwi/
 3:3(i) n-hfem NSR wound

thitharrngka 'adult female, woman'
/tha + {a}tha + arrngka/
3:3(i) hfem hip

ningkwathiyara 'you, the girl'
/ningk{wi} + atha + yari/
2Sg hfem young

Gender morphemes are not used in angariya 'baby or toddler' whose sex is only indicated by the Nominal Prefix Nucleus. No gender classification appears to be incorporated until there are taboos connected with males and females (e.g., when a brother and sister must sit on opposite sides of the fire and not be left alone in the camp).

Ordinal number is also marked by the Gender morphemes and primarily appears to refer to time or order of one's birth. It is, however, also used for position in a linear sequence.

naningwathinipwawiya
/n{i} + ani + ngw{i} + athinipwawiya/
3:3(i) n-hfem ALP soon
'first-born son'

aningwathinipwawiya
/{a} + ani + ngw{i} + athinipwawiya/
3:4 n-hfem ALP soon
'the beginning of a story'

mwaningwathinipwawiya
/mw{a} + ani + ngw{i} + athinipwawiya/
3:5 n-hfem ALP soon
'the first [canoe to be made]'

thathikwapwiyarpwawatha
/th{a} + atha + kw{i} + apwiyarpwawatha/
3:2(i) hfem NSR become four
'fourth female'

(iii) kinship terms

The occurrence of the Gender morphemes with kinship and relationship terms is not systematic.

wirringathikwarrangpwitja
/wirring{a} + atha + kw{i} + arrangpwitji/
3:1FemDu hfem NSR propagate
'mother's brothers' daughters'

nanikwangkwarrka
/n{i} + ani + kw{i} + angkw{i} + arrka/
3:2(1) n-hfem NSR dau's son KPOSS
'my daughter's son'

ningkwanipwingakpa
/ningk{wi} + ani + pwi + ngakpi/
2Sg n-hfem NSR make
'you, the oldest living progenitor'

kwirranikwarpwirra
/kwirr{a} + ani + kw{i} + arpwi + rra/
2Pl n-hfem NSR wound SF
'you men of the opposite moiety'

3.2.3.2 Nominalisation

Nominalised nouns in Anindilyakwa are derived mainly from verb roots or stems (over 100 examples) but can be derived from roots or stems in other word classes. The Nominaliser, *ngkwi* ~ *kwi*, immediately precedes the stem. The maximal structure for these derived nouns is: Nominal Prefix Nucleus, a Gender morpheme, and the simple root or compound stem. The Gender morphemes appear to have a grammatical, not a semantic, function. It usually occurs with human or non-human animate nouns and very rarely with inanimate nouns.

The Nominaliser, *ngkwi*- ~ *kwi*- is identical with the final syllable on some Bodypart noun roots and may be the last syllable of the noun root, *lharrngkwi* 'unidentified body-parts, things'. The allomorph *ngkwi*- is the less frequent allomorph, occurring in about twenty words. The use of each allomorph remains constant within the particular word. There is a rare phonologically-conditioned allomorph *pwi*- which can replace or occur in free variation with *kwi*- preceding the initial continuant of a compound stem (usually a peripheral nasal).

thathikwiyangpiyangpa /th{a} + atha + kwi + yangpi + yangpi/ 3:2(i) hfem NSR REDUP speak	'loquacious woman'
naningkwarpwa /n{i} + ani + ngkw{i} + arpwi/ 3:3(i) n-hfem NSR wound	'adult man'
winanipwiyakatja ~ winanikwiyakatja /wini + ani + pwi ~ kwi + yakatja/ 3:1MascDu n-hfem NSR stay together	'married couple'

3.2.3.2A Of verb stems

The verb stem is usually uninflected in the derived nouns. The uninflected single or reduplicated roots are illustrated in the following examples.

nanikwirripwiringka /n{i} + ani + kwi + rripwiringka/ 3:2(i) n-hfem NSR REDUP: look	'male doctor'
thathikwawiyapa /th{a} + atha + k(w){i} + awiyapi/ 3:2(ii) hfem NSR enter	'clothes'
aningkwalyipwa /{a} + ani + ngkw{i} + alyipwi/ 3:4 n-hfem NSR eat	'harpoon'
thathipwingakpa /th{a} + atha + pwi + ngakpi/ 3:2(i) hfem NSR make	'female progenitor'

Compare the following sets:

wirrathikwilyingka /wirr{a} + atha + kwi + lyingkwil/ 3:1(i) hfem NSR paint the body	'female dancers'
mwamwikwilyingka /mw{a} + ani => amwi + kwi + lyingkwil/ 3:5 n-hfem NSR paint the body	'liniment'
anikwilyingka /{a} + ani + kwi + lyingkwil/ 3:4 n-hfem NSR paint the body	'bark painting'
mwamwikwitjingwa /mw{a} + ani => amwi + k(w)i + tjingwi/ 3:5 n-hfem NSR die	'fighting stick'

warnikwitjitjingwa 'Barn Owl' (Lit: those
 /wirr{a} + ani + kwi + tji{ngwi} + tjingwi/ causing death)
 3:1(ii) n-hfem NSR REDUP die

akwirrirra 'thorn'
 /a + kwi + rrirra/
 3:4 NSR leave a mark

Nouns can be derived from inflected verbs. The inflection is usually a tense or aspect suffix but can be reflexive or causative.

yinikwarrpiyamwa
 /yi + {a}ni + k{wi} + arrpiy{a} + amwa/
 3:3(ii) n-hfem NSR extract NPIP
 'caterpillar' (Lit: that which is extracting leaves)

yinikwampwarrngarna
 /yi + {a}ni + kw{i} + ampwarrng{a} + arni/
 3:3(ii) n-hfem NSR sit TNS
 'Tusk-fish' (Lit: that which sits)

akwiyangma
 /kwi + kwi + lyangka + lyangka + ka/
 3:4 NSR REDUP lead CAUS
 'Blue-ringed Octopus' (Note: The root is lyangka 'head')

thakwiripiripika
 /th{a} + a{tha} + kw + ripiripika/
 3:2(i) hfem NS REDUP: cause to eat raw fish
 'Macassan woman' (Lit: the one caused to eat raw fish)

akwirakirakatjingwa
 /mwa + raka + tjingwi/
 NCL NSR REDUP to lie on the back REFL
 'mattress' (Lit: that which keeps laying itself on the back)

akwithithikatjingwa
 /a + kwi + thitha + ka + tjingwi/
 3:4 NSR shut CAUS REFL
 'gate' (Lit: that which causes itself to shut)

The only other inflectional suffix which has been found in derived nouns is the Ablative clitic, lhangwi- ~ thangwi-.

akwingwantjinamwilhangwa
 /a + kwi + ngwantja + n{i} + amwi + lhangwi/
 3:4 NSR stop TNS NPIP ABL
 'traffic lights' (Lit: the one at which we are stopping from)

mwamwikwingampilhangwa

/mw{a} + ani ==> amwi + kwi + ngampi + lhangwi/

3:5 n-hfem NSR bathe ABL

'boat, swimming apparel' (Lit: that from which we bathe, that which is associated with bathing)

aningkwamwilyathangwa

/{a} + ani + ngkw{i} + mwilyi ==> mwilya + thangwi/

3:4 n-hfem NSR hum ABL

'Turban shell' (Note: The verb root is used for the noise made by a spinning top. The shell may have been a children's toy.)

There are some irregular derived nouns in which the Nominaliser does not occur. The first consonant of the verb root or stem is usually a bilabial peripheral consonant (see Section 2.5.2.2 for Morpheme-final CV Syllable Deletion Rule).

apwirtha

/{a} + apwirtha/

3:4 cook on coals

'sea mammal'

arwapa

/a + m{w}api/

3:4 sing

'song'

mwapwina

/{mwa} + m{w}api + ni/

3:5 sing

'wattle (5 sps.)'

mwanpwa

/m{wa} + wirmpwi/

3:5 cover partially

'eye'

mwingarikwa

/mwa + ngarikwi/

3:5 fish with a line

'fishing line'

alhikira

/a + lhikira/

3:4 build

'walled house'

yalyilya

/y{i} + alyilyi/

3:3(ii) hang down

'Little Red Flying-fox'

thiyiwa

/tha + yiwa/

3:2(ii) follow

'Hairy Caterpillar'

wirriwartiwarta

/wirra + warti + warti/

3:1 REDUP hairy

'Beach Spinifex'

Derived nouns also incorporate compound verb stems, i.e., those which consist of a noun or adjective root plus a verb root. In all but one or two such words, the Nominaliser and Gender morphemes do not occur, seemingly replaced by the noun root.

yakwimwintjithathitjingwa
 /y{i} + a{ni} + kwi + mwintjathatha + tjingwi/
 3:3(ii) n-hfem NSR spot the skin REFL
 'spotted goanna' (Lit: that which spots its own skin)

ayangkwilyimwitha 'mainland'
 /a + yangkwi + lyimwitha/
 3:4 head be complete

arntiwarra 'walking stick'
 /[a] + arnta{ka} + warra/
 3:4 elbow shake

thingwintjapwana 'dolphin'
 /tha + ng{w}in{ingkw}i + tjap{w}{i} + ani/
 3:2(ii) nose separate TNS

angakartjiyinga 'sandhill'
 /a + ngak{a} + artjiyi + nga/
 3:4 thigh stand TNS

alhpwilhpwarra 'sliced bread'
 /[a] + alhpwilh{ka} + pwarra/
 3:4 wing split

3.2.3.2B Of nominal stems

The Nominaliser can precede a compound adjective stem consisting of a Bodypart noun root and an adjective root. This derives a noun from an adjective.

akwikwiwakwitharrpwa 'waterhole'
 /a + kwi + kwiwakwi + tharrpwi/
 3:4 NSR colon short

yikwilyangpwarrarra 'forked stick'
 /yi + kwi + lyang{ka} + pw{i} + arrarri/
 3:3(ii) NSR head EM forked

A free form noun or adjective can form the root of another noun. These nouns can be marked by the Nominaliser. Compare the

following pairs of examples in which some of the incorporated nominals are in reduced forms:

aningapwa /{a} + ani + {ngwi} + ngapwi/ 3:4 n-hfem ALP ?quiet	'good'
ningkwaningapwa /ni + ngkw{i} + aningapwi/ 3:3(i) NSR good	'show-off'
alyalyikpwa /{a} + alyalyikpwi/ 3:4 REDUP:lips	'lips'
warningkwilyikpwa /wirr{a} + ani + ngkwi + lyikpwi/ 3:1(i) n-hfem NSR lips	'descendants'
yiningkwira /yi + {a}ni + ngk{wi} + wira/ 3:3(ii) n-hfem NSR curved	'NW monsoonal winds'
akwilyarrkaningkwira ~ akwaningkwira /a + k{wi} + lyarrk{i} + aningkwira/ 3:4 NSR invisible NW wind	'monsoon season'
akwapwikwapwa /a + kwapwi + kwapwi/ 3:4 REDUP sacred	'sacred'
thingkwapwikwapwa /tha + ng{kwi} + kwapwikwapwi/ 3:2(i) NSR sacred	'taboo-ed female'
wirrawilya /wirr{a} + awilyi/ 3:1 one	(clan name)
thathikwawilya /th{a} + atha + kw{i} + awilyi/ 3:2(ii) hfem NSR (clan name)	'Cone Shell (owned by Wurrawilya)'

Suffixes can be affixed to nouns derived from nouns, viz., the Comitative and Locative case clitics, and the possessive suffix. (Note: The latter may be the Ablative case-marker but possessive is more logical semantically and morphologically in this context.)

yiningkwarrimwirra /yi + {a}ni + ngkw{i} + arri + mwirra/ 3:3(ii) n-hfem NSR yellow COM	'Elegant Sea-snake'
aningkwarrimwantja /{a} + ani + ngkw{i} + arri + mwantja/ 3:4 n-hfem NSk yellow LOC	(place name)
yiningkwirathangwa /yi + {a}ni + ngk{wi} + wira + thangwi/ 3:3(ii) n-hfem NSR alone POSS	'Lace Monitor'
angkwilyingarrkalyithangwa /a + ngkwi + lyingarrk{a} + alya + thangwi/ 3:4 NSR liver wet POSS	'Little Blue Shark'

The following pairs of nouns derived from another free form noun or adjective do not include the Nominaliser. These are common, rather than proper, nouns and have been given for flora and fauna which otherwise would be nameless. The semantic concept is that the second in each pair resembles the first in the physical feature named in the additional noun or adjective root.

yampwimpwa /y{i} + ampwa + ampwa NCL REDUP pair	'Pincushion Plant'
alhingkwempwimpwa /a + lhingkw{i} + ampwimpwa/ NCL hair (=foliage) Pincushion Plant	'Cobbler's Peg'
mwangkarrkpwa /mw{a} + angkarrk{a} + pwi/ 3:5 hip prop	'Wild Plum'
amwingkwimwangkarrkpwa /a + mwingkwi + mwangkarrkpwa/ 3:4 tears (=juice) Wild Plum	'nectarine'
yinimwapwikwalha /yi + {a}ni + {mwi} + mwapwi{rrkwi} + kwalha/ 3:3(ii) n-hfem INALP short-legged ???	'Scallop Shell'
angankimwapwikwalha /a + ngangki + mwapwikwalha/ NCL concave Scallop Shell	'Mangrove Oyster'
angarrathatha	'red (pock-marked) cliff'

/a + ngarr{ka} + athatha/
3:4 ear spotted

thimwilyingarrathatha 'holey red dress'
/tha + mwilyi{rrkwɪ} + ngarrathatha/
3:2(ii) breast red cliff

akwirraka 'hard'
/a + kwi + rraka/
3:4 NSR ???

alhingakikwirraka 'hardwood'
/a + lhingaka + kwirraka/
3:4 torso hard

aningkwarpwa 'adult man'
/n{i} + ani + ngkw{i} + arpwi/
3:3(i) n-hfem NSR to wound

yiningkwarpwithangwa 'Rainbow Bee-eater'
/yi + {a}ningkwarpwi + thangwi/
3:3(ii) adult male POSS

mwaningkwarpwa 'white (male) flesh of
the Cycad nut'
/mw{a} + aningkwarpwi/
3:5 adult male

3.2.3.2C Of adverb stems

An adverb can occur as the root of a derived noun but these are very rare and tend to be common rather than proper nouns. The Nominaliser is only known to occur in the one example; in other data, the same reductions (as above) occur with single roots and compound stems.

aningkwirakpwa
/{a} + ani + ngkw{i} + arakpwa/
3:4 n-hfem NSR comp.act
'old [thing]'

thathingkwirakpwa
/th{a} + atha + ngkw{i} + rakpwi/
3:2(i) hfem NSR comp.act
'long-term female resident, well-known female'

mwiyarrawa
/mwa + yarrawa/
3:5 inside
'Red Kurrajong Shrub' (Note: Flowers blossom on bare stalks.)

alharrngkwarrakpa
/a + lharrngkw{i} + arrakpi/
3:4 things outside
'exposed things'

mwilharrngkwarrakpa
/mwa + lharrngkw{i} + arrakpi/
3:5 things outside
'outer deck of a ship or house boat'

thimwangpwantjirra
/tha + mwang{kwi} + pwa{rna}ntja + rra/
NCL hand quickly SF
'quick female worker'

alhikwantja
/a + lhik{a} + wa{rna}ntja/
3:4 foot quickly
'a dance' (Lit: that which is quick-footed)

wirrilhikwilhikwantja
/wirra + lhikwi + lhikwantja/
3:1 REDUP dance
'white ants' (Lit: those which dance)

3.2.3 Possession

There are two types of possession which are indicated by markers which precede the compound stem, i.e., in the same position as the Nominaliser above. Inalienable Possession is marked by *mwj-* and Alienable Possession by *ngwi-*. It precedes a single or reduplicated noun, adjective or adverb root, a compound adjective or noun stem, or a free form noun, adjective or adverb. The Gender morphemes are optional but usually occurs with human or non-human animates.

3.2.3.3A Inalienable possession

The Inalienable Possession marker *mwj-* is similar in shape to the Propriative suffix *-mwirra* in which *rra* is a word-final stem formative. Inalienable Possession is very common in Anindilyakwa, both for possessed body parts and for the species names of flora and fauna.

There are two ways to express possession in Anindilyakwa: (a)

by the internal Possession markers or (b) by the derivational suffix -lhangwi in the Possessive noun phrase (see Section 3.4.1.1). The preferred construction for possession of a body part is, however, expressed by the Inalienable Possession marker. Compare the following pairs:

ningkwanimwalhika		'your tracks'
/ningkw{i} + ani	+ mw{i} + alhika/	
2Sg	n-hfem INALP foot	

ningkwilhangwa	alhika	'your foot'
2Sg-POSS	foot	

ngarnimwawarrwalya		'our shadows'
/ngar{ra} + {a}ni	+ mw{i} + awarrwalya/	
1IncPl	n-hfem INALP shadow	

ngakwirrilhangwa	awarrwalya	'our shadows'
1IncPl-POSS	shadow	

In the following examples, the Inalienable Possession morpheme occurs with a single Bodypart noun root. This is the most frequent type of such possession, as seen in the following paradigms. (Note: The phonological rules for Vowel Lowering, Haplology and Regressive Assimilation (Sections 2.3.2.4, 2.5.2.1 and 2.7.1) have been applied in the ensuing data.)

nanimwathangkwa		'his flesh'
/n{i} + ani	+ mw{i} + athangkwa/	
3:3(i)	n-hfem INALP flesh	

yinimwathangkwa		'its flesh'
/yi + {a}ni	+ mw{i} + athangkwa/	
3:3(ii)	n-hfem INALP flesh	

mwamwathangkwa		'its flesh'
/mw{a} + ani =>	a{mwi} + mw{i} + athangkwa/	
3:5	n-hfem INALP flesh	

amwathangkwa		'its flesh, meat'
/[a] + mw{i}	+ athangkwa/	
3:4	INALP flesh	

warnimwiyatja 'their wings'
 /wir{ra} + ani + {mwi} + mwiyatja/
 3:1(ii) n-hfem INALP shoulder-blade

ninganimwiyatja 'my shoulder-blade'
 /ning{a} + ani + {mwi} + mwiyatja/
 1ExcSg n-hfem INALP shoulder-blade

amwamwiyatja 'its wing'
 /{a} + ani ==> a{mw} + mwi ==> mwa + mwiyatja/
 3:4 n-hfem INALP shoulder-blade

nani(mwa)mwalya 'Aboriginal man'
 /n{i} + ani + mw{i} + amwalya/
 3:3 n-hfem INALP body fat

yinimwamwalya 'its body fat'
 /yi + {a}ni + mw{i} + amwalya/
 3:3 n-hfem INALP body fat

amwamwalya 'true word'
 /a + mw{i} + amwalya/
 3:4 INALP body fat (=true)

The Inalienable Possession nouns can also be used for specific items and have been lexicalised. Most are idiomatic and have only one form for each meaning.

thathimwaringka 'dress bodice'
 /th{a} + atha + mw{i} + aringka/
 3:2 hfem INALP head

thathimwayarrka 'female gift-giver'
 /th{a} + atha + mw{i} + ayarrka/
 3:2 hfem INALP hand

amwamwiyarrka 'fin'
 /{a} + ani ==> amwi ==> amwa + mwi + yarrka/
 3:4 n-hfem INALP hand

In the following examples, the Inalienable Possession marker occurs with a single adjective root.

yinimwamwiwa
 /yi + {a}ni + mw{i} + amwiwa/
 3:3 n-hfem INALP round
 'egg' (Lit: the one possessing round-ness)

yinimwingangiwa
/yi + {a}ni + mwi + ngangki + wi/
3:3(ii) n-hfem INALP concave SF
'the front of the chest' (Lit: the chest's concave part)

thathimwikwa
/th{a} + atha + {mwi} + mwikwi/
3:2(ii) hfem INALP salty
(waterhole name) (Lit: the one possessing saltiness)

yinimwanhinga
/yi + {a}ni + mw{i} + anhinga/
3:3 n-hfem INALP edible
'Red Wild Apple'

thathimwalyirra
/th{a} + atha + mw{i} + alyirra/
3:2 hfem INALP oily
'dye from a red dress'

The compound stem in an Inalienable Possession noun can consist of a noun root in the first position and an adjective root in the second. Only the following examples have been noted. Reduplication indicating plurality or intensity has been found only in two of the compound stems listed below.

yimwalyarrkpwirra 'Trough Shell'
/yi + mwa + lyarrk{a} + p{w}irri/
3:3(ii) INALP bone (=spine) wide

mwamwalharrkpwirra 'spear'
/mwa + mwa + lharrk{a} + p{w}irri/
3:5 INALP bone (=spine) wide

amwantjantjingirra 'joint fluid'
/a + mw{i} + antjantja{lhka} + ngirra/
3:4 INALP REDUP: stomach dangerous

thimwamwintjarrmwintjarrma 'grasshopper'
/tha + mwi => mwa + mwintjarr{mi} + mwin{tjirrka} + tjarrmi/
3:2(ii) INALP REDUP skin thin

Some nouns consist of an adjective root or a compound adjective stem. There is no overt stem formative preceding the root or stem. Until further information is obtained from the Groote Eylandt Aborigines, these words are considered to be possessed nouns because

the morphological structure is more consistent with that for possession than nominalisation.

thikwitja /tha + kwitji/ 3:2(ii) small	'Black-faced Cuckoo shrike'
amwalya /a + mwalya/ 3:4 soft	'body fat, flesh'
mwamwilha /mwa + mwilha/ 3:5 rough	'nostril hair'
nilharrwiriwira /ni + lharr{ki} + wira + wira/ 3:3(i) invisible REDUP alone	'hermit'
mwiyarriya /mwa + ya{rri} + yarri ==> rriya/ 3:5 REDUP forked	'bird's nest'
arngkitjikwirra /{a} + arngka + tjikwi + rra/ 3:4 eye small SF	'Green Plum'
yilyangmwilhimwilha /yi + lyang{ka} + mwilha + mwilha/ 3:3 head REDUP rough	'Estuarine Stonefish'
wirrawimwinyi /wirr{a} + awi + mwinyi/ 3:1 EM (bird call)	'duck (gen.)'
arngkayiwaya /{a} + arngk{a} + ayiwaya/ 3:4 eye REDUP:weak	'Tamarind fruit'
wirrilyangpwilyangpwirna /wirra + lyangpwi + lyang{ka} + pwirna/ 3:1 REDUP head many	'ant sp.'
yimwarntjimwarntjirra /yi + mwarntji + mwarn{taka} + tjirri/ 3:3(ii) REDUP hand long	'Rainbow Bee-eater'

The only inflectional clitic found to date is the optional Proprietary suffix, *-mwirra* 'having'.

nanimwamwalyimwirra ~ nanimwalyimwirra /n{i} + ani + mw{i} + amwalya + mwirra/ 3:3(i) n-hfem INALP body fat PROP	'adult man'
--	-------------

3.2.3.3B Alienable possession

Alienable Possession indicates that something is possessed but not as the integral part of a whole. With one or two exceptions, the item possessed has separate identity or is only temporarily possessed. The term possession seems to be too strong in some cases and the concept associated with more applicable in general. The Alienable Possession marker can occur with a single noun root or compound stem, a single adjective root or compound stem, or a free form noun, adjective or adverb.

The following examples illustrate the occurrence of *ngwi-* with a single Bodypart noun root or an adjective root. Reduplication (multi-morphemic) has only been found in the one example listed below.

yiningwalya /yi + {a}ni + ngw{i} + alya/ 3:3(ii) n-hfem ALP wet	'Saccostrea Oyster'
yiningwinya /yi + {a}ni + {ngwi} + ngwini/ 3:3(ii) n-hfem ALP soft	'pus, boil'
mwaningwalhitha /mw{a} + ani + ngw{1} + alhithi/ 3:5 n-hfem ALP shiny	'daytime'
yiningwirnta /yi + {a}ni + {ngwi} + ngwirnti/ 3:3(ii) n-hfem ALP ankle	'scar' (Lit: ankle-shaped lump)
aningwimwantha /{a} + ani + ngwi + m{w}anthi/ 3:4 n-hfem ALP flipper (=turtle)	'turtle harpoon'
yingmwimgmwarnta /yi + ngwmwa + ngw{i} + mwarnta/ 3:3(ii) REDUP ALP flipper	'Snake-necked Tortoise'

A compound stem has only been found in the two examples listed. The first is a noun stem and the second an adjective stem.

warninganimpalhikpwa 'dingo'
 /wirr{a} + ani + ng{wi} + nganimp{i} + alhikpwi/
 3:1 n-hfem ALP pointed lips

yiningwaningpwirna
 /yi + {a}ni + ngw{i} + {ng}aning{ki} + pwirna/
 3:3(ii) n-hfem ALP pointed many
 'Chequered Rainbow-fish'

The Alienable Possession marker quite often precedes a free form noun or an adjective. The Nominal Classifiers, *mw-* and *yi-*, have been dropped in the last two examples, respectively.

mwaningwakwalya mwikayiwa 'fish net'
 /mw{a} + ani + ngw{i} + akwalya/
 3:5 n-hfem ALP fish

warningwamwiyarra 'ancestors'
 /wirr{a} + ani + ng{wi} + am{w}iyarri/
 3:1 n-hfem ALP bush shelter

yiningwimwapwalhpwa
 /yi + {a}ni + ngwi + mwapwalhpwa/
 3:3(ii) n-hfem ALP peanut tree
 'bat (gen.)' (Note: It resembles the tree's black pods)

mwaningwangwinyampa
 /mw{a} + ani + ng{wi} + angwinyampi/
 3:5 n-hfem ALP angry
 'war vehicle' (Note: Any vehicle loaded with fighting men.)

yining(w)akwarta 'White-breasted Sea Eagle'
 /yi + {a}ni + ngwi + akarta/
 3:3 n-hfem ALP sea

thathiningkwira 'Olive Shell'
 /th{a} + atha + {ngwi} + ningkwira/
 3:2(ii) hfem ALP NW wind

The following words illustrate the Alienable Possession morpheme preceding an adverb or its stem. The meanings of these Alienable Possession nouns are harder to comprehend than some of the above.

mwarningwarrawa
 /mw{a} + ani + ngw{i} + arrawa/
 3:5 n-hfem ALP inside
 'bottom teeth'

yiningwampwaka
/yi + {a}ni + ngw{i} + ampwaka/
3:3(ii) n-hfem ALP later
'Burrowing Clam' (Lit: the one possessing slowness)

naningwathinipwawiya
/n{i} + ani + ngw{i} + athinipwawiya/
3:3(i) n-hfem ALP soon
'first y in a line' (Lit: the one possessing early-ness)

ngarningwaritjilhangwa
/ngarr{a} + ani + ngw{i} + aritjilhangwi/
1IncPl n-hfem ALP after
'we, the last ones'

The Privative suffix, -m₁ ~ -pi 'not having', co-occurs with the Alienable Possession morpheme. The semantic connotation can be expressed by the English suffix "-less", meaning 'without'. There is thus an absence of the item identified by the noun or adjective which is alienably possessed.

aning(w)akwingwima
/{a} + ani + ngw{i} + akwingwi + mi/
3:4 n-hfem ALP water PRIV
'waterless [e.g., place]'

warningarntima
/wirr{a} + ani + {ngwi} + ngarnta + mi/
3:1(i) n-hfem ALP mother PRIV
'motherless [e.g., children]'

naningwiyakirrarrima
/n{i} + ani + ng{w}i + yakirrarrri + mi/
3:3(i) n-hfem ALP happy PRIV
'unhappy man'

yiningwithimpwalhima
/yi + {a}ni + ngwi + thimpwala + mi/
3:3(ii) n-hfem ALP clothing PRIV
'unspotted [e.g., goanna]'

thathiningkwarpwima
/th{a} + atha + {ngwi} + ningkwarpi + mi/
3:2(ii) hfem ALP adult man PRIV
'widow'

The only inflectional suffixation that has been found with the Alienable Possession marker is the Locative case clitic which

indicates the stationary position of the possessor (identified in the prefixation) in relation to the place referred to in the root or stem. In the first two examples the suffix is obligatory but in the last two it is optional.

thathingwimwamwawirimwantja /th{a} + atha + ngwi + mwamwawira + mwantja/ 3:2 hfem ALP sun LOC	'Brown Tree Snake'
naningwakarrngimwantja /n{i} + ani + ngwi + akarrnga + mwantja/ 3:3 n-hfem ALP teeth LOC	'male dentist'
aningwimwakartimwantja /{a} + ani + ngw{i} + mwakarta + mwantja/ 3:4 n-hfem INALP sea LOC	'saltwater fish'
aningwakwingimwantja /{a} + ani + ngw{i} + akwingwi + mwantja/ 3:4 n-hfem ALP freshwater LOC	'freshwater fish'
aningwimwikwimwikwimwantja /{a} + ani + ngwi + mwikwimwikwi + mwantja/ 3:4 n-hfem ALP deep sea LOC	'Blue-ringed Octopus'

3.2.4 Derived adjectives

An adjective can only be derived from a verb. The Adjectiviser, *ngki-* ~ *ki-*, precedes the verb root or stem. The maximal structure for these derived adjectives parallels that for the derived (nominalised) nouns, i.e., an obligatory Nominal Prefix Nucleus, an optional Gender morpheme, and a simple root or compound stem. The Gender morphemes only occur in six adjectives which are primarily human attributes. (Note: The fronted vowel [i] precedes the Adjectiviser, created by Vowel Fronting Rule 2 (see Section 2.3.2.1). This contrast is maintained even if either of these two morphemes are deleted.)

The Adjectiviser is identical with the last syllable of Shape Adjective roots which occur first in a compound stem. It is also identical with the adjective root, *ngki* 'another (unspecified)',

which occurs in the second position of a compound stem. The two allomorphs do not usually vary freely in the same word (see the last example for the only known exception).

angmwa		'putrid'
/a + ng{ki} + mwa{tja}/		
3:4 ASR	smell	
akalya		'untrue, fictional'
/a + {ki} + kalya/		
3:4 ASR	tell a lie	
akiwarra		'torn-off [part]'
/a + ki + warra		
3:4 ASR	wriggle	
mwikpwiringka	~ mwingpwiringka	'dry'
/mwa + k{i} ~ ng{ki} + pwi + ringka/		
3:5 ASR	EM breathe on heavily	

In derived adjectives, it is usually the Adjectiviser that is reduplicated, indicating intensification. Reduplication can, however, be multi-morphemic, beginning with the Adjectiviser.

angkingkalya		'very wet'
/a + ngk{i} + ngk{i} + alyi{pwi}/		
3:4 REDUP ASR	eat	
nikikamwarra		'very ignorant'
/ni + ki + k{i} + amwarra/		
3:3(i) REDUP ASR	wander around	
thikpwiringka		'very dry'
/tha + kp{w}i + ki + pwi + ringka/		
3:2(ii) REDUP ASR EM	breathe on heavily	

The Gender morphemes are only found in what appears to be five adjectives which primarily refer to attributes of human animates, e.g., 'knowledgable', 'unknowledgable', 'good', 'unknown (new)', and 'alive'. Two similar words with a Gender morpheme, 'known (old)' and 'shy', are marked by the Nominaliser and are therefore nouns; the antonym 'bad' does not have a Gender morpheme. The final vowel in the

Gender morpheme, atha- [at], indicates that the following syllable does not generate a front vowel (as per Vowel Fronting Rule 2); the final fronted allophone in the Gender morpheme, ani- [eni[~] en], can be considered to be another instance in which the morpheme-final fronted vowel does occur following alveolar /n/ (see Section 2.6.1). This evidence leads to the tentative conclusion that the Nominaliser is found in the following data and that the formal distinction between noun and adjective does not correlate with the semantic.

naningmwa /n{i} + ani + ng{kwi} + mwi/ 3:3(i) n-hfem NSR pick up	'knowledgable [man]'
thathingpwalha /th{a} + atha + ng{kwi} + pwalha/ 3:2(i) hfem NSR play	'ignorant [female]'
yiningapwa /yi + {a}ni + {ngkwi} + ngapwa/ 3:3(ii) n-hfem NSR be quiet	'good [animal]'
nanikathiwa /n{i} + ani + k{wi} + athiwi/ 3:3(i) n-hfem NSR ???	'unknown [male]'
nanipa /n{i} + ani + {kwi} + pi / 3:3(i) n-hfem NSR drink	'alive, living'

The Adjectiviser has a third variant aki- [ki] which is found in the words for 'left-handed' and 'right-handed'. Unless these words are considered to be random exceptions, the only possible explanation for the presence of an initial /a/ is that it is a shortened form of the Gender morphemes. Such an analysis parallels similar deletion in derived nouns but, in opposition to the analysis in the previous paragraph, would establish Gender morphemes preceding the Adjectiviser. The glosses give derivations which include the Gender morpheme preceding the Adjectiviser for comparison with those preceding the Nominaliser (see Section 3.2.3.2).

thakalyarra	'left-handed [female]'
/th{a} + ak{a} + alyarra/	
3:2(i) ASR left	
thakawarriya	'left-handed [female]'
/th{a} + ak{a} + awarriya/	
3:2(i) ASR untidy	
mwakpwitha	'right-handed [road]'
/mw{a} + ak{i} + pwitha/	
3:5 ASR swell (=strong)	

Unlike nouns derived from verbs, there are many derived adjectives in which the Adjectiviser does not occur preceding a single verb root. In some cases, the deletion of the Adjectiviser preceding a root-initial nasal is consistent with the Morpheme-final CV Syllable Deletion Rule (see Section 2.5.2.2).

amwirtha	'brown, black'
/a + mwirtha/	
3:4 cook on coals	
amwirntatha	'cold'
/a + mwirntatha/	
3:4 be cold	
thimwingkwirtha	'clean'
/tha + mwingkwirtha/	
3:2 scavenge	
angwirntitja	'broken'
/a + ngwirntitja/	
3:4 crumple	
wirranarrngwa	'tame'
/wirra + nyarrngwi/	
3:1(ii) sit quietly	
thirikwa	'raw'
/tha + ri{pi}k{i} + wi/	
3:2(ii) eat raw SF	
mwilyirrkwa	'calm'
/mwa + lyirrkwi/	
3:5 erase	

The presence of the Adjectiviser preceding a compound stem is optional but not frequent. The Adjectiviser has been recorded only in

compound stems consisting of a bodypart noun root plus descriptive adjective root. Compare the first two examples with those following.

akpwilhkwiwirrariya /a + k{i} + pwilhkwi + wirrariyi/ 3:4 ASR head hair bad	'treeless [plains]'
akpwalhkalya /a + k{i} + pwalhk{a} + alya/ 3:4 ASR abdomen wet	'wet [ground]'
alhingatjirrirra /a + lHINGA{ka} + tjirri + rra/ 3:4 torso long SF	'long, tall'
yimwirrtjingwa /yi + mwirr{kwi} + tjingwi/ 3:3(ii) breast die	'drab'
thithirrngakpwirna /tha + thirr{aki} + ngakpwirna/ 3:2(ii) mouth make	'roomy [dress]'
ayangmwintjawiya /a + {l}yang{ka} + mwintjawiya/ 3:4 head pinch	'muted, quiet'
ninyakpwitha /ni + nyak{a} + pwitha/ 3:3(i) chest swell (=strong)	'brave'

Most single and reduplicated verb roots are uninflected in the derived adjectives. There are, however, a few examples with compound stems in which the verb inflection does occur, as shown in the examples below.

nanikapwiyakarpwiyatha /n{i} + ani + k{i} + apwiyakarpwiya + tha/ 3:3(i) n-hfem ASR three INCH	'third'
nilyangmwanthikwina /ni + lyang{ka} + mwanthikwi + ni/ 3:3(i) head make honest TNS	'honest'
mwikpwilhkwirakayina /mwa + ki + pwilhkwi + rakayi + ni/ 3:5 ASR breast lie facing upwards TNS	'smooth [sandhill]'

In some adjectives, the recurring partial pwi- follows the Adjectiviser but precedes a verb or adjective root and a compound stem. The only possible solution is that this syllable is an empty morph because the new stem consisting of the empty morph plus adjective root can be preceded by another root. The Adjectiviser has not been recorded in some words and this could be due to the operation of the Morpheme-final CV Deletion Rule (Section 2.5.2.2).

akpwilyirra	'smooth'
/a + k{i} + pwi + lyirra/	
3:4 ASR EM erase	
apwilhalha	'shallow [water]'
/a + {ki} + pwi + lhalha/	
3:4 ASR EM shallow	
nilharrkpwilhalha	'thin [male]'
/ni + lharrk{a} + pwi + lhalha/	
3:3(i) bone (=ribs) EM shallow	
akilyangpwarrarra	'forked stick'
/a + ki + lyang{ka} + pw{i} + arrarri/	
3:4 ASR head EM forked	
awarrngkipwirampwalhpwa	'almost flat [country]'
/a + warrngka + pwi + ram{pwarrki} + pwalh{ka} + pwi/	
3:4 DIMIN EM flat abdomen PROP	

3.2.5 Kinship nouns

Kinship nouns are distinguished from other nouns by a separate set of roots and possessive suffixes. Their prefixation marks the person, number and gender of the referent and the suffix indicates the person number and gender of the propositus or possessor. The morphological structure of Kinship Nouns is not regular and may have originated on the mainland, perhaps from the Nunggubuyu language.

The following examples illustrate Kinship nouns which consist of the Nominal Prefix Nucleus (see Section 3.3.1), a kinship noun root, and the Kinship Possession suffix (see Section 3.4.1.3). Kinship nouns do not differ from other nouns in their prefixation.

napanyingwa /n{i} + ap{i} + anyingwi/ 3:3(i) MB 1Nsg	'he, our mother's brother'
kwirraparrka /kwirr{a} + ap{i} + arrka/ 2Pl MB 1Sg	'you, my mother's brothers'
ningkwiwapwathikpwa /ningkwi + yapw{i} + athikpwi/ 2Sg older Sx 3FemSg	'you, her older sister'
wirriyapwanikpwa /wirra + yapw{i} + anikpwi/ 3:3(i) older Sx 3MascSg	'they, his older sisters'
kwirripwikwingwarringpwa /kwirripwikwi + ngw{i} + arringpwi/ 2Tri father 3Nsg	'you three, their fathers'
yirripwikwangwanikpwa /yirripwikwi => yirripwikwa + ngw{i} + anikpwi/ 1ExcTri father 3MascSg	'we three, his fathers'

There are fourteen pairs of Kinship nouns in which the root is the same but there is a change of gender indicated by the Nominal Prefix Nucleus. These include all "in-law" and most siblings in a cross relationship.

narngkwiyanikpwa /n{i} + arngk{w}iy{a} + anikpwi/ 3:3(i) parent-in-law 3MascSg	'he, his father-in-law'
tharngkwiyathikpwa /th{a} + arngk{w}iy{a} + athikpwi/ 3:2(i) parent-in-law 3FemSg	'she, her mother-in-law'
napwirraringpwa /n{i} + apwirr{a} + arringpwi/ 3:3(i) offspring 3Nsg	'he, their son'
thapwirraringpwa /th{a} + apwirr{a} + arringpwi/ 3:2(i) offspring 3Nsg	'she, their daughter'
thingkwarrka /tha + ngkw{i} + arrka/ 3:2(i) MM(B) 1Sg	'she, my mother's mother'
ningkwarrka /ni + ngkw{i} + arrka/ 3:3(i) MMB 1Sg	'he, my mother's mother's brother'

thiyarrngwanyingwa		'she, our brother's
/tha + yarrngw{i}	+ anyingwi/	daughter's daughter'
3:2(i)	niece's offspring 1Nsg	
niyarrngwanyingwa		'he, our brother's
/ni + yarrngw{i}	+ anyingwi/	daughter's son'
3:3(i)	niece's offspring 1Nsg	

There are two related Kinship Nouns which are structured in the same way as the Alienable Possession nouns but which have a kinship root not found elsewhere.

naningwiyarrka		'my husband'
/n{i} + ani + ng{w}i + y{a} + arrka/		
3:3(i)	n-hfem ALP spouse 1Sg	
thathingwiyarrka		'my wife'
/th{a} + atha + ng{w}i + y{a} + arrka/		
3:2(i)	hfem ALP spouse 1Sg	

There are also four pairs of Kinship Nouns which are prefixed in the same way as derived nouns, i.e., the Nominal Prefix Nucleus is followed by a Gender morpheme. These, however, are followed by a further distinction for gender which is specified only in these words, viz., kwi (masculine gender) and ya (feminine gender). The words all, refer to siblings.

nanikwimwarntjarrka		
/n{i} + ani + kwi + mwarntj{a} + arrka/		
3:2(i)	n-hfem masc ygr sibling 1Sg	
	'he, my younger brother'	
thathiyamwantjarrka		
/th{a} + atha + ya + mwarntj{a} + arrka/		
3:2(i)	hfem fem ygr sibling 1Sg	
	'she, my younger sister'	

nanikwiwana		
/n{i} + ani + kwi + w{a} + ani/		
3:3(i)	n-hfem masc brother's child 2Sg	
	'he, your brother's son'	

thathiyawana
/th{a} + atha + ya + w{a} + ani/
3:2(i) hfem fem brother 2Sg
'she, your brother's daughter'

nanikwangkwanikpwa
/n{i} + ani + kw{i} + angkw{i} + anikpwi/
3:3(i) n-hfem masc dau's child 3MascSg
'he, his daughter's son'

thathiyangkwanikpwa
/th{a} + atha + y{a} + angkw{i} + anikpwi/
3:2(i) hfem fem dau's child 3MascSg
'she, his daughter's daughter'

ninganikwimwarntjana
/ning{a} + ani + kwi + mwarntj{a} + ani/
1IncSg n-hfem masc ygr bro 2MascSg
'I, your younger brother'

warnikwimwarntjarrka
/wirr{a} + ani + kwi + mwarntj{a} + arrka/
3:1(i) n-hfem masc ygr bro 1sg
'they, my younger brothers'

There are only six terms in Anindilyakwa which are not set into masculine:feminine pairs with the same root, viz., thirntirrka 'my mother'; ningwarrka 'my father'; thingwijarrka 'my father's sister'; naparrka 'my mother's brother'; nawiwarrka 'my older brother'; thiyapwarrka 'my older sister'. All of these are important teaching relationships within the culture.

The Kinship Nouns usually refer to human animates but are also used for non-human animates. The usage is mainly in traditional stories but also relates in a more limited way to domesticated animals, including the wallaby. The kinship term is sometimes classificatory, e.g., a wallaby's older brother can be an older male in the group whose fur is no longer shiny.²

yawarringpwa
/y{a} + aw{a} + arringpwi/
3:3(ii) older bro 3Nsg
'it (wallaby), their older brother'

mwirntathikpwa 'it [shark], her mother'
 /mw{a} + {a}rnt{a} + athikpwi/
 3:5 mother 3FemSg
 mother'

wirrapwirranikpwa 'it [dog], his son'
 /wirr{a} + apwirr{a} + anikpwi/
 3:1(ii) son 3MascSg

There are some examples of reduplication in the Kinship Nouns which indicate plurality. If a Gender morpheme occurs, it reduplicates; if a Gender morpheme does not occur the root reduplicates.

warningwiyarrka 'they, my husbands'
 /wirr{a} + a ni ni + ng{w}i + y{a} + arrka/
 3:1(i) REDUP:n-hfem ALP spouse 1Sg

wirrathithingwiyana 'they, your wives'
 /wirra + a thi thi + ng{w}i + y{a} + ani/
 3:1(i) REDUP: hfem ALP spouse 2Sg

Compare the following:

wirrarntathikpwa 'they, her mothers'
 /wirr{a} + arnt{a} + athikpwi/
 3:1(i) mother 3FemSg

wirrirntirntarrngpwa 'they, their mothers'
 /wirra + {a} rnti rnt{i} + arringpwi/
 3:1 REDUP: mother 3Nsg

wirriyapwiyapwana 'they, your older sisters'
 /wirra + yapwi + yapw{i} + ani/
 3:1(i) REDUP sister 2Sg

The Locative case clitic -mantja can replace the Possessive suffix. The semantic connotation is not known.

Footnote 2: It is difficult to know whether there was an extensive system of kinship for domesticated animals because only a few hunting dogs were kept from 1974 to 1981. The dogs were removed by agreement with the Aborigines for health reasons and all bitches killed at birth. The situation had radically changed in 1987 with large numbers of dogs and cats in the community. No attempts were made to name my relationship to the dogs (as happened with the Guurindji at Wave Hill) but conversations included many references to the blood relationships between the dogs.

wirringarrngwilhimwantja /wirring(a) + arrngwilha + mwantja/ 3:1FemDu dau-in-law LOC	'they two, her daughters- in-law'
winathangmwantja /wi{rri}ni + athang(a) + mwantja/ 3:1MascDu marriageable LOC	'they two, MMB's children'

Almost all the Kinship Nouns retain the prefix in their Vocative forms but the following words delete the prefix. Many of the forms, however, are cognates with Nunggubuyu or Gupapwingu.

ngarnta ~ ngarntawi ~ ngarntayi	'mother'
ngangwa ~ ngangwawi ~ ngangwayi	'father'
ngamwa ~ ngamwawi ~ ngamwayi	'father's mother'
thangkwa ~ ngangkwa ~ ngangkwayi	'mother's mother'

The Vocative suffix, -ayi ~ -awi (with high pitch and length on the first vowel), is commonly used with the Kinship Nouns. In most nouns, only the suffix is deleted but some also have a change in the form of the root. The changes are not systematic. Compare the following pairs.

nangantjamwintjarrka	'he, my mother's father'
nangantjamwintjayi ~ nangantjamwayi	'hey, MF!'
thathingwiarrka	'she, my wife'
thathingwayi	'hey, wife!'
nanikwapwitjarrka	'he, my son's son'
nanikwampwinyayi	'hey, son's son!'
thingwiarrka	'she, my father's sister'
thingwawayi	'hey, father's sister!'

naparrka	'he, my mother's brother'
napipayi	'hey, mother's brother!'

3.2.6 Adverbial nouns

Time and locative words are considered to be adverbial nouns, a sub-type of nouns, because there are some similarities to nouns in their internal morphological structure. Their syntactic function, however, is that of an adverb. Heath (1984:154) offers a similar formal analysis for Nunggubuyu.

The nominal prefixation on adverbial nouns is restricted to Nouns Classes 3:4 and 3:5 but this is a semantic rather than a morphological restriction. The grammatical features related to nominals, such as reduplication, diminishing and case inflection, are incorporated into Adverbial Nouns but there are syntactic differences in the way they cannot act be modified by a demonstrative; (b) adjectival modifiers are restricted mainly to numerals (not descriptive adjectives); and (c) there is an absence of the derivational suffixation for nominals.

mwarngkirngkiwilyarra	'midnight, midday'
/mw(a) + arngkirngka + wilyarra/	
3:5 eye middle	

kilhikatja	lharrwirimwirra
1ExcSg will go	afternoon-COM
'I will go this afternoon [or any one in the future].'	

ngarningka	yirrampirrarina	<u>awarrngkamwiyarra</u>
again	1ExcPl waited	/a + warrngka + amwiyarri/
		3:4 DIMIN long time

yanthilhangwa	nimwarithinimwa	mwakarta
until	3:4 was increasing	3:5 sea
'We waited for a little while longer until the tide rose.'		

3.2.6.1 Time

The morphological structure for two sets of Adverbial Nouns involve compound stems similar to those found in nouns and adjectives.

In the first set, the adjective root, lyarrki ~ lyarrki, is used in words referring to dusk or evening when people and things can still be seen quite clearly, night when it is very dark, and the seasons. The root, therefore, may alternatively refer to visibility or intangibility. In the first position in the second set, the noun root is probably arngka 'eye' with an extended meaning of 'times'.

alyarrthatha /a + lyarr{ki} + thatha/ 3:4 visible spotted	'sunset, dusk'
alyarrmwirtha /a + lyarr{ki} + mwirtha/ 3:4 visible brown	'night time (not pitch dark)'
alyarrngwalyilya /a + lyarr{ki} + ngwalyilya/ 3:4 visible tread on	'evening, moonlit night'
arngkawira /{a} + arngk{a} + awira/ 3:4 times alone	'once, one day, forever for always'
arngkiwilyapwa /{a} + arngka + wilyapwa/ 3:4 times one	'for a long time'
arngkitharrpwa /{a} + arngka + tharrpwa/ 3:4 times short	'for a short time'
arngkapwapwirna /{a} + arngk{a} + apwapwirna/ 3:4 times many	'often, every day, continuously'

In the following words, the first root may be a variant form of the root, arngka 'eye', but there is an alternative analysis as a derived (nominalised) noun. The Time Progressive case clitic, -wiyi, is obligatory in the second example.

arningkwaya /{a} + arni + ngk{wi} + waya/ 3:4 n-hfem NSR little while	'tomorrow'
---	------------

arningkiwiya 'day before yesterday'
 /{a} + arni + {ngkwi} + ngki + wiya/
 3:4 n-hfem NSR other TPRG

The adverbial noun, amwiyarra(pwa) 'for a long time', consists of the Noun Class-marker a-, the Inalienable Possession marker mwi-, and probably the adverb root yarrapwi 'this way'. (Note: The actual semantics is not known.)

naraka amwiyarrapa kiwapwirangka wirrakina
 not 3:4 for a long time 3:1 would search 3:1 those

thakiniwa
 3:2(i)-ALL
 'They did not look for her for very long.'

Reduplication of the first root indicates plurality or intensification, as shown in the following examples. (Note the loss of retroflexion.)

a(r)ngki(r)ngkawira
 /{a} + arangka + {a}rngkawira/
 3:4 REDUP once
 'sometimes, once in a while' (Lit: once repeated)

arningkwarningkwaya
 /{a} + arningkw{a} + arningkwaya/
 3:4 REDUP tomorrow
 'two days ahead'

angkingkiwiya
 /{a} + angka + ngkiwiya/
 3:4 REDUP two days ago
 'about two weeks ago'

The following sentences illustrate the usage of the above Adverbial Nouns within Anindilyakwa syntax (see Section 3.4.3 for the analysis of case clitics.)

pwiya alyarrathatha yirringinilharrmwanga
 then 3:4 dusk 1ExcFemDu+3:3 chased
 'And then we two women got clams at dusk.'

pwiya kampwa alyarrngwalyilyimwantja nalharrwirthimwantja
 then therefore 3:4 evening-LOC 3:4 darkened-LOC

ningilhirakina angwira ngayiwa
 1ExcSg+3:4 build 3:4 fire 1ExcSg
 'And then last evening when it was dark I built a fire.'

arngkawira yingwa yakina niwanpwitjingwa
 3:4 one day 3:3(ii) crow 3:3(ii) that 3:3 got a bit tired

arakpwa nakpwirangkimwilhangwa anhingawa
 comp.act 3:3 was hunting-ABL 3:4 food-ALL
 'One day Crow grew a little bit tired from hunting for food.'

arngkapapwirnilhangwa wirringalhakina
 3:4 often-ABL 3:1FemDu those

narringilhikanimwa narringwirrkwinimwa yimwirntarrma
 3:1FemDu were going 3:1FemDu were hunting 3:3(ii) snail
 'Often Brolga and Emu went collecting snails.'

arningkwayiwiya kilhikatjamwa ningana
 3:4 tomorrow-TPRG 1ExcSg will be going 1ExcSg this
 'I will be going tomorrow.'

There are three adverbial nouns which do not appear to have the anticipated nominal prefixation. The second root in the word, lharrwira 'afternoon', is the same as in mwamwawira 'sun' and yimwawira 'moon', both of which are nouns. The anticipated Anindilyakwa prefix would be the Noun Class 3:4 prefix a- which does occur in the Nunggubuyu cognate, atharrwara. The first root is probably lharr{ki} 'visible' and the second is wira 'alone' (possibly 'curved').

arngkapwapwirnilhangwa lharrwira ningampanimwirra
 3:4 often-ABL 3:4 afternoon 3:3 was swimming

akiniwa akwingwa
 3:4 that-ALL 3:4 freshwater
 'And so he was swimming in the freshwater [creek] all afternoon.'

lharrwiriwiya ngalhatja nimwangkarrinimwa angarripa
 3:4 afternoon-TPRG 3:5-CofR 3:5 was running this way
 'During the afternoon it [canoe] was coming this way.'

The word, wirtarriya 'morning', refers to the post-dawn period from sun-up (about 6 a.m.) to when the sun is in the 2 o'clock position'. The derivation has not been resolved but the root appears to be rtarriya, a variant of rarriya 'bad', and may refer to the fact that this time of day is not good for hunting.

arakpwa yirriwirratjawithiyina yirrakina
 comp.act 1ExcPl rode 1ExcPL those

wirtarriya arakpwa mwakina tiraka
 morning comp.act 3:5 that 3:5 truck
 'Next morning we all rode in that truck.'

wirtarriyawiya nilhawirrathina
 morning-TPRG 3:3 returned
 'He returned early this morning.'

The other two Adverbial Nouns are yarringkwa 'yesterday' and pwiwawiya 'pre-dawn (light but before sunrise)'. The derivations are not known but the prefix in the first word is the same as for 'moon'. (Note: 'yesterday' ends at dawn). The whole noun reduplicates in this adverb. No examples are available from texts for the second word.

yarringkwa ngayiwa ningitjingwinimwa angpwilyiwa
 3:3(ii) yesterday 1ExcSg 1ExcSg was sickening 3:4 sickness

akana ninganingapwathinamwa
 however 1ExcSg am becoming well
 'Yesterday I was sick; however I am getting better.'

yarringkwiyarngkwiya nakina nilhikana amwathirrawa
 3:3(ii) yesterday-PL-TPRG 3:3(i) that 3:3 went 3:4 waterhole-ALL
 'Two days ago he went to the waterhole.'

The co-occurrence of two adverbial nouns is restricted semantically to two point-time or specific temporal words (Dixon 1980:283), the use of which pinpoints the time more exactly.

kimwingkwathinamwa aka amwikayarra arningkwayimwantja
 1ExcSg will be digging 3:4 tree 3:4 roots 3:4 tomorrow-LOC

lharrwira
 3:4 afternoon
 'I will dig the tree roots out tomorrow afternoon.'

pwiya arngkawira lharrwirimwantja mwarliwiya ngalhilhangwa
 then 3:4 one day afternoon-LOC emu 3:2(ii)-POSS

waritjira nalhawirrathina wirrakina
 3:1 offspring 3:1 returned 3:1 those
 'Then one day, in the afternoon, Emu and her children returned.'

Adverbial nouns which are the names of periods during the day or night can be the head of a noun phrase and modified by an adjective or demonstrative. The most common modifiers are numerals or the adjectives, angki 'another' and am(w)injingki 'different'. Some such noun phrases may have arisen from contact with the English language and its culture. Thus there is no distinction in the noun phrase to indicate whether the timing is in the present, past or future.

naraka kingiwarrina mwampwilyimwamwantja mwamwawira
 not-INTENS 3:2 would move 3:5 two-LOC 3:5 sun
 'She did not move for two days.'

mwiwilyapwimwantja mwamwawira ngarningka
 3:5 one-LOC 3:5 sun again

ayikwitjiyawa angwarnta
 3:4 small-LOC 3:4 stone
 'Again one day Bat was looking for small pieces of stone.'

kingilhatjamwirra yiwilyapwamwantja yimwawira
 3:2 will be going 3:3(ii) one-LOC 3:3(ii) moon
 'She will be going for a month.'

ningilhatkana mwingkiyathiwya mwarrnga
 1ExcSg went 3:5 another-PURP-DU 3:5 night
 'I went for two nights.'

a(mwinj)ngkimwantja pwiratayimwantja kingitjarrikuwa
 3:4 different-LOC Friday-LOC 3:2+3:4 will finish
 'She will finish it next Friday week.'

amwiningkiyatha tjanta nanimwamwirikatjiwamwa
 3:4 different-PURP 3:4 week 3:3+3:3 was helping

nipwina naningkwarpwa mwangwiyiwangilhangwa
 3:3(i) that unseen 3:3(i) man 3:5 shark-ABL
 'Last week that man saved him [Roy] from the shark.'

kilhatjamwa ampwikwampwiwa angkimwantja pwiratayi
 1ExcSg will be going Umbakumba-ALL 3:4 another-LOC Friday
 'I will be going to Umbakumba on Friday week.'

The adjective, akwalha 'some', can also mean 'sometimes', as shown in the following example.

<u>akwalhimwantja</u> 3:4 some-LOC	angwirrirtha 3:4 magpie	nanikwiyangkilhapanamwa 3:3+3:3 is asking
mwakiniyatha 3:5 that-PURP	mwakawarrmatjinga 3:5 raft	yingwawa 3:3(ii) crow-ALL

'Sometimes Magpie is asking Crow for [a lend of] the raft.'

In Modern Anindilyakwa, English time words are used nowadays whenever there is a need to be very specific about a period of time. These loanwords are often given the English pronunciation but there is also a continuum through to total adaptation into the Anindilyakwa phonological system. The Anindilyakwa spelling is used for such words in MA upon the choice of the Aborigines themselves and those who use the English pronunciation have no trouble in spelling the words correctly (see Leeding 1984b).

Some English loanwords vary with "engineered" traditional Anindilyakwa words to cover the same English semantic concept. The terms involve an superficial addition to the Anindilyakwa concept of time but some traditional semantic concepts are still basic to the meaning or usage of the words, e.g., the English loanword 'week (seven days)' may be used but it refers to seven nights or seven sleeps; time adverbs are used to indicate the time it takes to travel (as against English measurements); and any day begins at dawn not midnight. The following list shows that the introduced items generally refer to days of the week, month and year.

(awilyapwa) tjanta ~ wiyika	one week
(awilyapwa) kwiritjimwitja	one year, Christmas
tinilhangwa ~ mwarngkirngkiwilyarra	midday, dinnertime

tjimwakawi		mid-morning, smoko, tea break
tjantiyi	~ tjantayi	Sunday
mwantiyi	~ mwantayi	Monday
tjiwitiyi	~ tjiwitayi	Tuesday
wantiyi	~ wantayi	Wednesday
titayi	~ ayikwitjiyimwantja	Thursday
pwiratiyi	~ pwiratayi	Friday
tjarritiyi	~ awirrariyimwantja	Saturday

The derivation of ayikwitjiyimwantja 'Thursday' is ayikwitjiya 'small' and -mwantja (Locative case); the derivation of awirrariyimwantja 'Saturday' is awirrariya 'bad' and -mwantja (Locative case). (Note: No explanation by the Aborigines as to the origin of these terms has yet been obtained.)

pwiyā	pwiratayī	arningkwaya	ngarna	arakpwa
then	Friday	tomorrow	1IncPl these	comp.act

akilhikatjamwa	ampwikwampwiwa
1IncPl will be going	Umbakumba-ALL

'And then on Friday afternoon we will be going to Umbakumba.'

tjiwitayimwantja	yirrilhikanimwa	ngarningka	yilhirriwa
Tuesday-LOC	1ExcPl were going	again	(name)-ALL

'Last Tuesday we were going again to Yilhirra.'

nilhawirrathina	arakpwa	ayikwitjiyimwantjimwantja
he 3:3 returned	comp.act	Thursday-LOC

pwiratayī	wirtarriyawiyā	yirrilhawirrathina	arakpwitha
Friday	morning	1ExcPl returned	comp.act-TRM

'He returned on Thursday and during Friday morning we returned.'

3.2.6.2 Location

There are a small number of Adverbial Nouns which indicate location. These consist of a nominal classifier and a compound stem similar in morphological structure to those for nominals. The nominal

classifiers are restricted to the only two Noun Classes (3:4 and 3:5) which can refer to the topography. The first root is a Bodypart noun and the second is the adverb root, angalhipwa 'on that side', or the adjective root, warra 'portion'. When the words are not suffixed the meaning is the same as expressed by the Locative case clitic -mwantja (stationary in space). The Allative and Ablative case clitics can occur.

arngkangalhipwa /{a} + arngk{a} + angalhipwa/ 3:4 eye that side	'on the other side of a house'
ayangangalhipwa /a + yang{ka} + angalhipwa/ 3:4 head that side	'on the other side of freshwater'
amwirakiwarra /a + mwiraka + warra/ 3:4 nape curve portion/	'on the other side of land'
ayakiwarriwa /a + yaka + warra + wa/ 3:4 chest portion ALL	'to the other side of freshwater'
mwilhikarrkiwarrilhangwa /mwa + lhikarrka + warra + lhangwi/ 3:5 heart portion ABL	'from the other side of a road'

Some adjectives can be used idiomatically to indicate location. The adjective, angki- 'another (unspecified)', is used for the expression 'a long way away' or, in its suffixed forms, 'to or from a distant [area]'. Its only nominal classification in this context is in agreement with the noun, angalya 'place', but this noun does not appear in the surface structure. (Note: It contrasts with the noun phrase, angka angalya 'another place'.) This adverbial noun does not show any referential agreement through its prefixation and functions as an adverb. It is obligatorily suffixed by a peripheral casemarker and can be reduplicated.

nangkarrina yakina ngawa angkiwa
 3:3 ran 3:3(ii) that cont.act far away-ALL

 mwanipwapwa yakina akwithangwa angwirimwantja
 CSI. 3:3(ii) that near 3:4 fire-LOC
 'He ran to a long way away because he [was] too near to the fire.'

niwangkirrayina angkiwiya
 3:1 ran far away-TPRG
 'They ran for some time to a far distant [place].'

yingilhikana yingilhirkpwirriwarna ngarningka arripwatja
 3:2 went 3:2 crawled again that way

angkiwiyangkiwa awirikwa
 REDUP:far away-ALL 3:4 swamp
 'Again she crawled that way, a long way away to the swamp.'

The adverbial noun, arripirra 'anywhere and everywhere, in all directions', consists of two roots, viz., arri{ki} 'forked' and p{w}irri 'wide'. Only the nominal classifier for Noun Class 3:4 occurs in its locative role. (Note: As for angki-, this compound stem takes the full set of nominal classifiers when functioning as a derived noun.)

niwampirpwitjanga akwingwa nayapwarrinimwa
 3:4 jumped 3:4 water 3:4 was crossing

 mwamwithangkwiilhangwiya akwa arripwirra
 3:5 sandhill-LPRG and everywhere
 'The water poured out and was running over the sandhill and everywhere.'

Adverbs for the compass points and directions are noticeably absent in Anindilyakwa, together with the typically Aboriginal system of identification by such terms, e.g., 'take the northern biscuit' or 'I want to sit under the eastern tree'. The focus in Anindilyakwa is on the prevailing winds which are important totemically and ceremonially, e.g., yiningkwira ~ pwarra 'NW monsoonal wind'; angwirntirra ~ mwamwarika 'SE trade winds'. Such names (and one other) can be used to refer to people living in those directions.

warningkwira
 /warni + {ngwi} + ningkwira/
 3:1 ALP NW wind
 'Nunggubuyu tribe' (who live to the northwest)

wirrakina warnimwamwalya niwampwilyamwirra alyangma
 3:1 those 3:1 people 3:1 are living in the east
 'Those people are living in the east.' (Lit: on top)

3.2.7 Interrogative adjectives

There are two interrogative adjectives in Anindilyakwa. These are classified as adjectives, and not nouns, because they accept the full set of nominal classifiers and often modify a noun within the noun phrase. The interrogative is cross-referenced in agreement with its noun referent and takes the same suffixation as other adjectives, viz., number, possession and peripheral case-marking.

3.2.7.1 Interrogative adjective: amwiyampwana

The interrogative adjective, amwiyam(p)wani [æ.miyepena ~ am^{wiyapena}] 'what?, which?', consists of three morphemes. The root yampwani may be the verb 'to ask'. If so, the preceding syllable mw is the short form of one of the noun or adjective roots (not the Inalienable Possession morpheme). (Note: The Noun Class 3:4 prefixation is used if the appropriate classifier is not known.)

amwiyampwanithangwa ana
 3:4 what?-POSS 3:4 this
 'What is it?' / 'Which sort is this one?'

nimwiyapana ningkwilhangwa napwirrana nanimwikirra
 3:3(i) what? 2Sg-POSS 3:3(i)-KPOSS 3:3(i) his name
 'What is your son's name?'

amwiyampwana akina warka niwarthanamwa
 3:4 what? 3:4 that 3:4 work 3:3+3:4 is working
 'What work is he doing?'

{mwa}mwiyanikwiya ningkwimwangayinthimwa
 3:5 what?-DU 2Sg+3:5 were wanting
 'Which two [trucks] were you wanting?'

yimwiyampwanimwirriwiya yarnarna yarimwirimwiwiya
 3:3(ii) what?-ETC 3:3(ii) these 3:3(ii) REDUP:big-PL
 'What sort of reptiles are these big ones?'

{mwa}mwiampwanilhangwiya ningkwilhikanimwa
 3:5 what?-LPRG 2Sg were going
 'Along which [road] were you going?'

3.2.7.2 Interrogative: a(r)mpwarrngarna

The interrogative adjective, a(r)mpwarrngarni 'how many?', 'how much?', questions the quantity or counting the number of people, places or things. It is prefixed by the full set of nominal classifiers. The optional retroflexion is rarely heard but has been written by one of the older Aborigines. The retroflexion assists in the identification of the first root as arngka 'eye' (adverbial meaning 'times') in which the nasal assimilates to the following root-initial consonant after deletion of /ka/ (Section 2.5.2.2). This root may be incorporated in the interrogative because of a cultural concept which links 'eye-shaped' and 'egg-shaped'--turtle eggs were one of the few things traditionally counted. The second root, pwarrngarni, is similar to that for 'heavy'.

wirrapwarrngarna wirrawana
 3:1 how many? 3:1 brothers-KPOSS
 'How many brothers have you?'

ampwarrngarna akwingwa awirikwimwantja
 3:4 how many? 3:4 freshwater 4 swamp-LOC
 'How much water is in the freshwater swamp?'

ampwarrngarnimwantja argaiya niwampwilyamwirra
 3:4 how many?-ABL 3:4 place 3:1 are staying
 'How many places are they staying at?'

mwampwarrngarnilhangwiya mwithalyimwa ningkwilhikanimwa
 3:5 how many?-LPRG 3:5 river 2Sg were going?
 'How many rivers were you going through?'

yampwarrngarniwiya yakina ningkwiwamwantja
 3:3(ii) how many?-PL 3:3(ii) that 2Sg-LOC
 'How many have you got?'

The first root can be reduplicated. The resultant

interrogative questions how many times an action has been or is to be repeated. This use of arngka 'eye' to question the 'number of times' correlates with its use in the time Adverbial Nouns (see Section 3.2.6.1). There is no agreement with any other word in the clause and the verb is usually suffixed for imperfective aspect. This interrogative is only prefixed by the noun classifier for Noun Class 3:4 and, therefore, may be an interrogative noun.

arngkampwarrngarna	ningkwana	ningkilhikanimwa
3:4 how many times?	2Sg this	2Sg were going
'How many times were you going?'		

arngkamowarrngarnimwirriwiya	nakaka	kinapwirangkamwa
3:4 how many times?-ETC	3:3(i) this	3:3(i) will be hunting

yiningwingwangpwiwa
3:3(ii) two-handed animals-ALL

'How many times will you be going hunting for four-legged animals, etcetera?'

arngkampwarrngarnilhangwa	nimwiwarrinimwa
3:4 how many times?-ABL	3:5 was starting
'How many times was it [truck] starting?'	

arngkampwarrngarnimwirripwina	ningkwana	ningkingwathinimwa
3:4 how many times?-COM-QM	2Sg this	2Sg were crying
'How many times have you been crying?'		

3.3 NOMINAL PREFIXATION

The nominal prefixation consists of Nominal Prefix Nucleus and an optional Gender morpheme. The former is a complex unit which further sub-divides into person, number and gender. The Number morphemes are sometimes redundant but also acts as a pluraliser for some nominal classes; the Gender morphemes are sometimes semantically redundant. One of the more unusual features of Anindilyakwa is the prefixing of nominals for first and second persons as well as³ third person.

All nominals in Traditional Anindilyakwa were obligatorily prefixed but there are some loanwords in Modern Anindilyakwa which are

not marked by any prefixation.

3.3.1 Nominal prefix nucleus

The Nominal Prefix Nucleus is a set of eighteen prefixes which classify nominals and pronominals according to person, number and gender. The grammatical categories that are distinguished are:

person	PSN	first, second and third
gender	GDR	human feminine, human masculine
number	NBR	singular, non-singular
inclusion	inc	including addressee/s
	exc	excluding addressee/s

Third person is further sub-divided into nominal classes based on semantic categories.

The deep structure morphemes in the grammatical categories for person, number and gender are shown in Table 6. Anindilyakwa differs from other Aboriginal languages in that there are singular forms which cannot be considered to be number-neutral. The human feminine and masculine forms tha- and ni-, respectively, can only be used for one individual. For two or more human beings, the prefix changes to the plural wirra which can be furthered marked to indicate feminine or masculine dual. The nominal prefix, yi 'you and I' is analysed as first person inclusive singular because it contrasts with all other non-singular forms in the absence of the non-singular morpheme rra-. The combination of the non-singular person prefix ya- and the absence of the Number morpheme for plural seems to me to indicate that this prefix is perceived as a single paired unit (speaker and addressee).

TABLE 6: DEEP STRUCTURE MORPHEMES OF THE NOMINAL PREFIX NUCLEUS

	PERSON	NUMBER	GENDER/NUMBER
NON-SINGULAR			
1ST INCL	nga	rra non-sg	nga hfem
EXCL	ya		ni hmasc
2ND	kw1		
3RD 3:1	w1		pwikw1 tri
SINGULAR			
1ST INCL	ya		
EXCL	ninga		
2ND	ningkw1		
3RD 3:2(i) HFEM	tha		
3:2(ii) NONH-FEM	tha		
3:3(i) HMASC	n1		
3:3(ii) NONH-MASC	yi		
3:4	a		
3:5	mwa		

The morpheme-final vowel in the deep structure morphemes has been identified by the following criteria:

- (i) The Word-medial Neutralisation Rule (NTR.1) cannot be applied within a morpheme. The deep structure morpheme-medial vowel is recognisable in the non-reduced form, even though this may be neutralised later, viz., ya as in the pronominal form yakwi (1st person); the final syllable of ninga as in the first syllable of ngarra (1st person).
- (ii) the phonetic quality of the vowel which precedes the morpheme-final syllable indicates that the deep structure has a final high or low vowel, e.g., ninga [niŋa] (1st person); the vowel preceding ra in all non-singulars.
- (iii) The use of the high vowel following /y/ is based on symmetry with its counterpart ni and this results in a contrast between yi (3rd person non-human masculine) and ya (1st person). The decision to use the high vowel following rounded consonants is arbitrary (see Section 2.3.4.2).
- (iv) The occurrence of the deep structure morpheme elsewhere in the surface structure. Nominal Classifiers tha- and ani- have corresponding Gender forms atha and ani, respectively; Class 3:5 classifier has an object form mwa.

The surface structure composite forms (excluding trial) are shown in Table 7 (on next page). The morpheme-final high vowels are created by the Word-medial Neutralisation Rule (NTR.1) which operates on all morphemes except a- (Nominal Class 3:4). The surface structure of the human masculine dual forms results from the operation of the Haplology Rule and the Consonant De-rounding Rule (see Sections

2.5.2.1 and 2.2.3.2). Note that all deep structure morphemes occur in the surface structure of the human feminine dual.

TABLE 7: NOMINAL PREFIX NUCLEUS (SURFACE STRUCTURE)

PERSON/NUMBER/GENDER			NOMINAL NUCLEUS
1ST	INCL	PL	ngarri-
	EXCL	PL	yirri-
2ND		PL	kwirri-
3RD	3:1	PL	wirri-
1ST	EXCL	HFEM DU	yirringi-
	EXCL	HMASC DU	yini-
2ND		HFEM DU	kwirringi-
		HMASC DU	k(w)ini-
3RD		HFEM DU	wirringi-
		HMASC DU	wini-
1ST	INCL	SG	yi-
1ST	EXCL	SG	ningi-
2ND		SG	ningkwi-
3RD	3:2	SG	thi-
	3:3(i)	SG	ni-
	3:3(ii)	SG	yi-
	3:4	SG	a-
	3:5	SG	mwi-

The following derivations illustrate the application of the phonological rules.

yirringi-

1st exc fem dual

DEEP STRUCTURE ya + rra + nga
 NTR.1 ==> yɨ rɨɨ nɨɨ
 1st Nsg hfem

k(w)ini-

2nd masc dual

DEEP STRUCTURE kwɨ + rra + nɨ
 VFR.1 ==> kwɨ + rra + nɨ
 VFR.2 ==> kwɨ + rre + nɨ
 VRD.2 ==> kwu + rre + nɨ
 HAPL ==> kwu {rre} nɨ
 VFR.2 ==> kwi nɨ
 CDR ==> k(w)ɨ nɨ
 2ND Nsg hmasc

3.3.1.1 Person

First, second and third person morphemes occur as first order prefixes. There are, however, irregular forms in each category.

In the first person, three different but related person markers occur. The first person exclusive singular is ninga; its first syllable is dropped in the non-singular prefixes, presumably to shorten the Nominal Prefix Nucleus to three syllables; the first inclusive ya- is the shortened form of the pronoun person prefix, yakwi- (non-singular).

ningarimwa /ning{a} + arimwi/ 1ExcSg big	'big me'
ngarrarimwirimwa /ngarr{a} + arimwirimwi/ 1IncPl REDUP:big	'big us'
yarimwirimwa /y{a} + arimwirimwi/ 1IncSg REDUP:big	'big you and me'

In the second person, kwi is found in both the singular ningkwi- and the non-singular kwirri-. The latter may possibly be a reduction from a proto form ningkwirri to ngkwirri- in which the first syllable is dropped and the initial nasal deleted.

ningkwarimwa /ningkw{i} + arimwa/ 2Sg big	'big you'
kwirringarimwa /kwi + rra + ng{a} + arimwi/ 2Nsg Nsg hfem big	'you, the two big females'

The third person divides into five noun classes which are described in detail in Section 3.3.2.

3.3.1.2 Number

The Number category is a second order prefix. Singular number is unmarked for first person, second person, and for all third person nominal classes except 3:1. The non-singular prefix *rra-* is marked on first person, second person, and the third person inherently-plural Nominal Class 3:1. Compare the two sets of examples below:

ningarimwa /ning{a} + ∅ + arimwi/ 1Sg Sg big	'big me'
ningkwarimwa /ningk{wi} + ∅ + arimwi/ 2Sg Sg big	'big you'
mwarimwa /mw{a} + ∅ + arimwi/ 3:5 Sg that	'big [canoe]'
ngarrarimwa /nga + rr{a} + arimwi/ 1IncPl Nsg big	'big us'
kwirrarimwa /kwi + rr{a} + arimwi/ 2Nsg Nsg big	'big you'

The third person human feminine and human masculine Nominal Classes 3:2(i) and 3:3(i) are inherently singular. Their non-singular counterparts 3:3(i) transfer to the non-singular prefixation for all three persons.

narimwa /n{i} + arimwi/ 3:3(i) big	'big man'
tharimwa /th{a} + arimwi/ 3:2(i) big	'big woman'
wirrarimwirimwa /wi + rr{a} + arimwirimwi/ 3:1 Nsg REDUP:big	'big men'

The non-singular counterparts of the inherently-singular non-human Nominal Classes 3:2(ii), 3:3(ii), 3:4 and 3:5 do not transfer to non-singular prefixes. The non-singular for these Nominal Classes is not marked in the Nominal Prefix Nucleus but by a different set of Number morphemes (see the following sub-section).

From this point onwards throughout the thesis, the Person and Number prefixes will be shown as a unit in the deep structure, i.e., between slash brackets, and labelled as plural as in Table 7. There is actually a "semi-deep" level in which the two are combined and the resultant unit then modified for trial and dual. The term, non-singular, does not highlight the distinction between plural, trial and dual with the addition of the Gender/Number morphemes.

3.3.1.3 Gender/Number

The gender category is a third order prefix which follows the non-singular Number prefix in all three persons. Two distinctions are marked: (a) human feminine or human masculine gender, both of which incorporate duality; and (b) trial number which is not marked for gender.

The human feminine dual is marked by the prefix nga-; the human masculine dual by the prefix ni-. This follows the Number morpheme for non-singular and, in effect, reduces that number to two.

yirringarimwa	'we two big women'
/yirra + ng{a} + arimwi/	
1ExcPl hfem big	

kwirringarimwa	'you two big women'
/kwirra + ng{a} + arimwi/	
2Pl hfem big	

winarimwa	'two big men'
/wi{rra} + n{i} + arimwi/	
3:1 hmasc big	

The trial number prefix pwikwi- is used in Modern Anindilyakwa for three animates but has only been observed when a speaker is being very specific (otherwise, the plural is used). (Note: In Traditional Anindilyakwa, the morpheme was probably paucal, as evidenced by its usage in a story by an older speaker for three to five persons.) The trial morpheme follows the non-singular Number morpheme but does not. It can, however, co-occur with either of the non-singular Number suffixes viz., -wiyi (dual) or -wiyi (plural). A reduplicated root or stem often co-occurs with the trial prefix. The four non-singular prefixes marked by trial number are:

ngarripwikwithithiyara
 /ngarra + pwikwi + {a}thitha + yara/
 1IncPl Tri REDUP:hfem young
 'we three young girls'

yirripwikwiyikwitjakwiya
 /yirra + pwikwi + yikwitjiya + wiyi/
 1ExcPl Tri REDUP:small PL

yirripwikwathitha.angka
 /yirra + pwikwi + athith{a} + arrangka/
 1ExcPl Tri REDUP:hfem hip
 'we three small women'

kwirripwikwiyikwitjiyakwiya
 /kwirra + pwikwi + yikwitjiya + k{w}iyi/
 2Pl Tri REDUP:small DU

kwirripwikwaningkwarpwa
 kwirra + pwikw{i} + ani + ngkw{i} + arpwi/
 2Nsg Tri n-hfem NSR wound
 'you three small men'

wirripwikwalhakana	wirripwikwiwarta
/wirra + pwikwi + alhak{i} + ani/	/wirra + pwikwi + warti/
3:1 Tri DU this	3:1 Tri xlong-haired

'these three dogs (Lit: long-haired ones)

The trial marker also follows non-human Nominal Classifiers for 3:2(ii), 3:3(ii), 3:4 and 3:5. This morphological structure contrasts with the one immediately above in that there is an absence of the non-singular prefix rra-. Here the animates or inanimates are viewed as

single entities which are only temporarily grouped together and do not form a permanent cohesive set which would be classified as 3:1. (Note: In Anindilyakwa, non-human animates can be pluralised by a change in the Nominaliser, e.g., yaka yitjarra 'this Silver Gull' and wirrakina wirritjarra 'those Silver Gulls'.) The four additional trial forms are:

t^hipwikwarimwirimwa
 /tha + pwikwi + arimwirimwa/
 3:2(ii) Tri REDUP:big
 'three big [Rock-wallabies]'

yipwikwingmwa
 /yi + pwikwi + ng{ki} + ngmwi/
 3:3(ii) Tri ASR putrid
 'three putrid [Baler Shells]'

apwikwarimwakwiya
 /a + pwikw{i} + arimw{i} + kwiyi/
 3:4 Tri big DU
 'three big [fish].'

mwapwikwaningapwawiya
 /mwa + pwikw{i} + ani + ngapwi ==> ngapwa + wiyi/
 3:5 Tri n-hfem good PL
 'three nice [fish].'

3.3.1.4 Number

The plural Number allomorphs, mwirntaka ~ wirrakaka, optionally follow the Gender/Number prefix in the Nominal Prefix Nucleus. In the nominals, it could be said to be another number distinction for Gender/Number but in the erbs it follows the trial, pwikwi-. It also is not part of the personal pronoun nucleus (Section 4.1.1) whereas all other Gender/Number morphemes are. The plural Number morpheme is not very common in nominals but very common in the demonstratives (see Section 5.3). The allomorph, wirrakaka, is associated with Nominal Classifier 3:1 wirra- and the allomorph, mwirntaka, with the hardened adjective root pwirna 'many'. Their function is to show plurality with reference to the nominal classifiers. In the Personified Noun Classes, it is redundant but, in

the Non-personified, it is one of the ways to indicate plural number.

wirriwirrakaningapwa /wirra + wirrak{a} + aningapwa/ 3:1 PL good	'many good people'
yimwirntakikwalha /yɪ + mwirntaka + kwalha/ 3:3(ii) PL some	'some [goannas]'
mwiwirratjirra /mwa + wirra{ka} + tjirri/ 3:5 PL long	'lined-up [yams]'
amwirntamwiramwa /a + mwirnta{ka} + mwir{a} + amwa/ 3:4 PL hollow PROP	'whispered words'

The plural number morpheme can be reduplicated but this is not very frequent. The reduplication indicates a very large number.

awirriwirrakithirrpwira /a + wirr{aka} + wirraka + thirrpwira/ 3:4 REDUP PL straight	'straight [sticks]'
--	---------------------

3.3.2 Noun classes

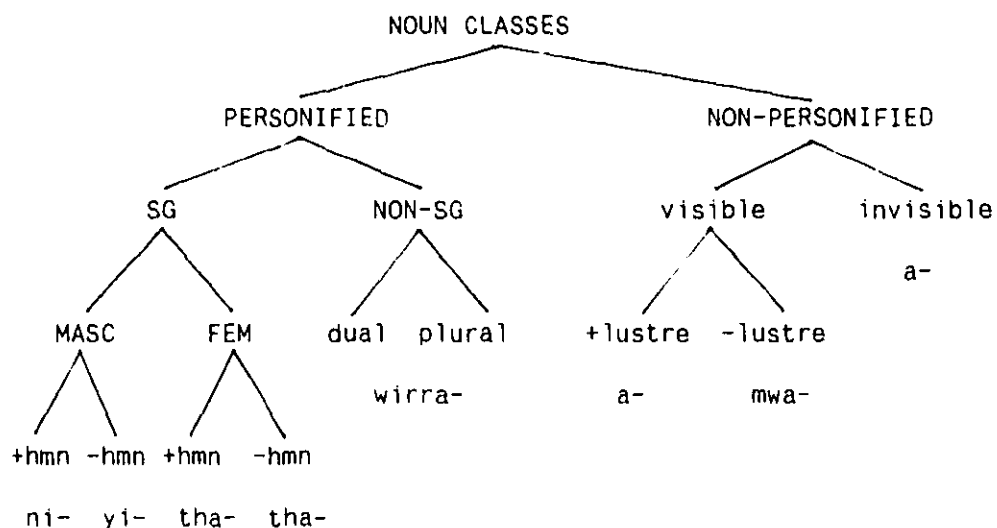
In Section 3.3.1, the full set of nominal classifiers for first, second and third persons were discussed. In this section, the semantic nature of the third person noun classes is described in detail.

All nominals in Traditional Anindilyakwa were obligatorily prefixed by one of the nominal classifiers but there are some borrowed nouns in Modern Anindilyakwa which are unmarked internally for class (see Section 3.3.2.3). A noun can refer to a specific individual item, a major generic class (e.g., winged creatures, hard-shelled animates), or a semi-generic higher level grouping of ten or more similar species.

The classification system for third person nominals is realised

by a set of prefixes which can be analysed as a hierarchical network of binary oppositions. The semantic domains of these noun classes are based on the world view or logic of the Aboriginal culture which often does not parallel that of Western culture. Table 8 diagrams the hierarchical nature of the Anindilyakwa noun class system and indicates the prefix associated with each class.

TABLE 8: NOUN CLASSES



The highest rank is the division into Personified and Non-personified categories. Only the Personified category is classified according to number and gender. The WIRRA Class is different from the other noun classes in that it includes the non-singular but genderless forms of the singular Personified noun classes, rather than a separate semantic domain.

The nouns in the Non-personified category are always singular-- they cannot be pluralised by prefixation. As evident from Table 8, the visible category is further sub-divided into two classes on the semantic basis of lustrous versus lustreless. The term, lustrous (in preference to bright, shiny, silvery, dazzling white), is used because

it most adequately describes the Anindilyakwa concept of the reflection of light or mirror-like images; the term lustreless (in preference to dull, opaque, creamy, drab, dark, greyish) is used because the concept is one of not being able to reflect light or to mirror an image. Thus an item can be classified as lustrous (Class 3:4 A) or lustreless (Class 3:5 MWA) irrespective of whether it is white, black or any other colour.

The Nominal Classifiers for third person classify all animates and inanimates into five basic noun classes. Three of these are further divided into pairs of sub-classes to indicate their close relationship and to maintain divisions where there are differences in the morphological system. Sub-classes (i) and (ii) are human and non-human, respectively. The noun classes and their classifiers are listed below (the notation preceding the colon indicates third person):

PERSONIFIED CLASSES:

- | | | |
|---------|-------|---|
| 3:1(i) | WIRRA | two or more human animates |
| 3:1(ii) | WIRRA | spirits, pairs/flocks/colonies of non-human animates; inanimates in clusters (totems) |
| 3:2(i) | THA | human feminine animates |
| 3:2(ii) | THA | non-human animates classified as feminine; inanimates with supernatural power |
| 3:3(i) | NI | human masculine animates |
| 3:3(ii) | YI | non-human animates classified as masculine; inanimates with supernatural power |

NON-PERSONIFIED CLASSES:

- | | | |
|-----|-----|--|
| 3:4 | A | invisible items and visible items with a lustrous appearance (animate and inanimate) |
| 3:5 | MWA | visible items with a lustreless appearance |

The morphological differences between the human and non-human sub-classes of the Personified noun classes are as follows:

- (i) In sub-class (i), the singular, dual and plural can be marked by only a change of prefix.

naningkwarpwa		'a man'
winingkwarpwa		'two men'
warningkwarpwa		'many men'
thitharringka		'a woman'
wirringathitharringka		'two women'
wirrathitharringka		'many women'

- (ii) In sub-class (ii), singular, dual or plural is not marked by a change in the prefixation but by suffixation within the noun phrase.

arimwa	akwalya	'a big fish'
arimwik{w}iya	akwalya	'two big fish'
arimwawiya	akwalya	'many big fish'

- (iii) The trial marker pwikwi- follows the non-singular wirra- prefix for human animates but is added to the singular prefixes for non-human animates. (Note that the difference in structure denotes a contrast between an interacting group and three single but temporarily grouped items.) Compare the first example below with the other two:

wirripwikwarimwirimwakwiya	wirrathitharringka
/wirra + pwikw{i} + arimwirimwi + k{w}iyi/	3:1 women
3:1 Tri REDUP:big DU	
'three big women'	

apwikwarimwirimwakwiya		akwalya
/a + pwikw{i} + arimwirimwi + k{w}iyi/		3:4 fish
3:4 Tri	REDUP:big	DU
'three big fish'		
yipwikwarimwirimwawiya		yaratja
/yi + pwikw{i} + arimwirimwi + wiyi/		3:3(ii) goanna
3:3(ii) Tri	REDUP:big	PL
'three big goannas'		

3.3.2.1 Personified noun classes

The Personified noun classes consist mainly of human or non-human animates but do include some inanimates with supernatural power derived in the Dreamtime or "creation" era. The non-human animates act rationally or in a human-like role in the traditional stories, i.e., they speak, think, evaluate, fight with implements, change their own appearance, etc; the inanimates retain their supernatural power and are still associated with totems, ceremonies, poisons or sickness. The structural dichotomy of Personified and Non-personified supersedes the usual Western conventions of animate and inanimate.

The Personified noun classes take precedence over or outrank the Non-personified noun classes. Classification according to the semantic domains of the presence or absence of lustre would place some of the following items in the Noun Classes 3:4 A or 3:5 MWA but they are classified as (non-human feminine) Noun Class 3:2(ii) THA, (non-human masculine) 3:3(ii) YI, or (non-human non-singular) Noun Class 3:1 WIRRA.

thimwikwimwirra		'Cowry Shell'
/tha + mwikwi + mwirra/		
3:2(ii) salty	PROP	
yimwawira		'moon'
/yi + mw{i} + awira/		
3:1(ii) INALP	alone	
wirripwirrkpwa		'Pleiades stars'
/wirra + pwirrkpwi/		
3:1(i) ???		

yilyangmwilhimwilha
/yɪ + lyang{ka} + mwilha + mwilha/
3:2(11) head REDUP rough

'Estuarine Stonefish'

The cultural importance of the pairing of masculine and feminine is evident in the traditional Dreamtime stories where the dramatic personae are often one male and one female, e.g., yiningwimwapwalhpwa akwa thiwirrawilya 'Bat and Rainbow'; thimwarrngimwarrnga akwa yilyakwa 'Cricket and Bee'; thingarrpwiya akwa yimwarntakwiwapwa 'Crocodile and Blue-tongue Lizard'. The Aborigines refer to the pairs, at least in English kinship terms, as husband and wife or mates, or brother and sister.³ Conversely, some animates are said to "have no mate", e.g., yinipwirimwirra 'Chinaman-fish'. The following pairs are representative of some for which no traditional Dreamtime story has been recorded. Each pair of words provides a contrast within closely related species or things.

yilyampwarra	'Caspian Tern (3 sp.)'
thangarninyimwirra	'Little Tern (4 sp.)'
yingakarpwiyarrkpa	'Barramundi Cod'
thirnarra	'Honeycomb Cod (7 sp.)'
yipwiratha	'Agile Wallaby'
thilhantha	'Little Rock-wallaby'
yimwawira	'moon'
(thi)mwamwawira	'sun'

Footnote 3: The Warnindilyakwa Aborigines also refers to non-human animates as brothers, sisters, brother and sister, friends or mates. e.g., the Seven Sisters, or yikpwa akwa yirimpwa 'Coucal Pheasant and Silver Gull'. Alternatively, they are referred to as "having the same skin". The same terms of reference apply to the relationship between a person and his/her totem.

3.3.2.1A Noun Class 3:1 WIRRA

The non-singular Personified Noun Classes 3:1(i) human and 3:1(ii) non-human are both prefixed by *wirra-*. This class is predominantly animate and consists of items which form an interacting pair or group. The human sub-class 3:1(i) can be further marked for number and gender (see Section 3.3.1.3); the non-human sub-class 3:1(ii) cannot be so marked. Some of the non-human animates live or forage in pairs as well as in small or large groups.

The nominal in Class 3:1(i) is always human and non-singular. The following examples are divided into three sets--the second set having prefixes that are reduced by Cerebralisation (Section 2.5.2.3) and the third set showing the dual and trial forms.

wirathitharringka	'women'
wirrawilya	(clan name)
wirrawiwarrka	'my brothers'
wirathithitjarrka	'my female avoidance relatives'
wirrapwilhorratha	'parents of two sons'
wirranikapwirra	'members of the opposite moiety'
wirranyingwinyamwa	'people with holes in their nasal septum'
warningkwarpa	'men'
warnimwamwalya	'Aborigines'
warninthilyakwa	'Anindilyakwa speakers'
warningkwira	'Numbulwar people'

The following examples illustrate the dual prefixation and

the agreement within the noun phrase:

<u>wirringiyakwirrarra</u>	<u>wirringatharringka</u>	'two happy women'
<u>wirringarimwakwiya</u>	<u>wirringathithiyara</u>	'two big girls'
<u>winitjakwiwara</u>	<u>winapwalitjakwiya</u>	'two sad male owners'
<u>winiyikwitjiyikwiya</u>	<u>winantjarrngalyilya</u>	'two small boys'

The non-singular wirra- prefix for Noun Class 3:1(ii) is used predominantly for a pair or group of interacting non-human animates but also for a few inanimate lexical items. When one member of the pair or group is isolated it still retains the same prefix to identify it as a representative of the larger group.

The noun class is restricted to spirits, a few land mammals, birds, insects or marine life. The inclusion of spirits in this noun class indicates that they are regarded as being part of a group. This may be because of their association with deceased people. The frightening evil spirits are also described as having shapes similar to humans.

wirrangalya	(name of two spirit beings like mermaids)
wirramwikwa	'evil spirits'

The land or marine mammals in Noun Class 3:1 WIRRA all live in family-like groups or colonies. All known terms are given below.

wirriwarta	'dog (gen.)'
warningkwarra ~ warningwanimpwalhipwa	'dingo'
wirramwalhkwa	'Black Flying-fox'
wirranthintha	'mouse (gen.)'
wirriyangkwirrapwirna	'Water-rat'

The twenty or so birds in the WIRRA Noun Class forage in pairs, small groups or flocks of thirty or more, or live in colonies. The generic term, wirratjitja 'winged creatures', fits into this noun class.

wirrawimwinya	'ducks (4 sp.)'
wirrilharrkwarpwa	'Nankeen Night Heron'
warningwangwirakpwa	'Glossy Ibis'
warnikwitjitjingwa	'Barn Owl'

The ten terms for insects are seen in colonies or in small or large groups. The generic terms, wirrimwilyitja 'butterfly' and wirrilhikwikiwilya 'white ants, termites and borers', fall into the WIRRA Class. The word wirriyampa refers to WIRRA Class insects that fight, e.g., stick insect and praying mantis.

wirringmwa	'cockroach'
wirramwirnta	'dog ticks'
wirrimwilyingarrathatha	'red tick (sp.)'
wirriyangpwilyangpwirna	'orange ant (sp.)'
wirrimwiyapiya	'praying mantis'
wirrimwapwirrkwatja	'stick insect'
warningwimwiyarrawapwa	'beetle that feeds on the Kurrajong shrub'

The eight WIRRA Class terms for marine life are commonly found in schools and not separately. E.M. Grant (1982) makes such comments as: "abundant", "very common" or "in large groups in tidal pools". The noun, wirrangwinyampa 'soldier crab' (Lit: 'the group that is angry'), is probably a translation of the English name but the concept

of plurality for these, the only crabs seen in one large group, is included in the noun.

wirrapwartja	'Surf Parrot-fish'
wirriwartiwarta	'Guam Scorpionfish' (5sp.)
wirranimwalyikwa	'Purple Tusk-fish'
wirrawirimpwa	'butterfish'

The only two shellfish classified as WIRRA are found in very large numbers within the same area. (These are included under animate because they were eaten. The Aborigines refer to the edible ones as "shellfish" and the inedible ones as "shells".)

wirriwartiwarta	'Chocolate Date Mussel'
wirrirawirawarra	'Lined Nerite'

The following inanimate items are the only ones recorded to date in the 3:1(ii) WIRRA Noun Class. Their inclusion in this nominal class can be explained as follows:

- (i) associated with the Dreamtime or spirits

The word wirramwikwa has a primary meaning of 'ghost or spirit of a dead or dying person' but has related secondary meanings of (a) a firestick which is alight, (b) a whirlwind or willywilly or (c) a cramp in the leg. (Debris scattered by the whirlwind must not be picked up because it would cause the person to become sick and perhaps die; the cramp only seems to refer to a leg cramp while swimming and this can result in death.) The word, wirrawapwarriwa 'spirits' tracks', is also classified because of its association with wirramwikwa.

wirripwirrkpwa 'Pleiades (a group of seven stars)' are referred to as the "Seven Sisters" who have dwelt in the sky since the Dreamtime.

The two place names, to date, are probably the present symbols or habitat of a group of Dreamtime beings. The first name refers to an area with lots of large red rocks; the second place name has a root which means 'spirits of dead people'.

wirriwarrakpwathana (place name)

wirrawirrinamwirrimwantja (place name)

(ii) physical appearance

The three plants always cover a large area. The waterlilies also have multiple leaves and (edible) roots; the Beach Spinifex has connected tussocks of grass; and the Fire Vine (used for ceremonial bands) has clusters of three small (edible) berries. The latter have male and female flowers.

wirrayangkwirra 'Blue Waterlily'

wirriwartiwarta 'Beach Spinifex'

wirrimwilyalya 'Fire Vine'

(iii) indeterminate gender

There are two traditional words where the non-singular WIRRA classification (unspecified gender) is used and not the masculine or feminine gender prefixes. The Nouns, wirrakalhka 'human foetus' and wirringampwa 'premature baby', fit into the non-human 3:1(ii) Noun Class because they are used for both the singular and non-singular. (The words are used when the foetus is still blind--the human masculine and feminine classifiers are used when the baby is well-formed and likely to

live.)

The Dreamtime classification of YI non-human masculine Class for yimwithirrngwa 'Blue Catfish' appears to hold for only the local fish. Its mainland counterpart, wirrimwithirrngwa, is placed in the genderless WIRRA Class.

3.3.2.1B Noun Class 3:2 THA

Noun Class 3:2 is divided into two sub-classes: 3:2(i) human feminine and 3:2(ii) non-human feminine. Both are singular and marked by the same prefix tha-. Note that the non-singular counterpart of Noun Class 3:2(i) is Noun Class 3:1(i).

The following examples show the type of lexemes included in Noun Class 3:2(i):

thathiyara	'girl'
thathiyiwangkwa	'older woman'
thingwiyarra	'my father's sister'
thingaya	'widow'
thalhawithawarra	'girlfriend'
thathikapwirra	'woman of X moiety'

The personal names of women (except for loanwords) all fall into this noun class. Some names are associated with the names of Dreamtime women, e.g., thingaiha (name of a Dreamtime woman and the associated Red Sandhill but now also a white woman's personal name); some are synonymous with that of a non-human animate classified as feminine in the Dreamtime era, e.g., a woman's name thalhantha is from thilhantha 'Rock Wallaby'. The origin of others is not known but names seem to be re-cycled after a long period of non-use.

thingkwiyaya	(Dreamtime name)
thapwinkwitha	'Katie Herbert'
thalhintjawayina	'Stella Yantarrnga'
thipwirmpwaiha	'Polly Mamarika'

Noun Class 3:2(ii) consists of the feminine beings in the Dreamtime who are now manifested as non-human animates and of inanimate items associated with those beings or which have a supernatural power causing pain, sickness or death. It includes all types of non-human animates (except sharks, crabs, crayfish) and a few inanimate items.

There are two land mammals and nine marine mammals in the THA Noun Class, including six (sting)rays with spikes which can cause a lot of pain.

thilhantha	'Little Rock-wallaby'
thithiningkwa	'Short-beaked Echidna'
thingintjapwana ~ thilharriringwa	'dolphin'
thiningkwilhangwa	'Dugong'
tharalharra	'Long-tailed Ray'

Noun Class 3:2(ii) includes about twenty-five reptiles (snakes, lizards and goannas) and one marine turtle. The semi-generic term, thilyapwirnta 'all greyish-coloured frogs' fits into this noun class.

thingarrpwiya	'Estuarine Crocodile'
thirangka	'Spotted Tree Monitor'
thaya	'Green Tree Snake'
thamwapwimirra	'Olive Python'
thingalhiwa	'Hawksbill Turtle'

There are about forty birds in Noun Class 3:2(ii), many of which are among the larger species.

thimwingwirra	'Blue-winged Kingfisher'
thimakwilha	'Australian Pelican'
thakwiyawiyawitha	'Great Bower Bird'
thikwirirrkwa	'Brolga'
thimirra	'Torres St. Pigeon'
thimwarrkingwirra	'White-breasted Wood Swallow'

The eighteen Noun Class 3:2(ii) insect and spider names cover a very varied group of insects, some of which are totems and some which bite or sting. The generic term, tha(thi)kwiwarrkiwarrka ~ thathikwimwayarrkiyarrka 'spider', falls into this noun class.

thimwamwintjarmwintjarmwa	'grasshopper'
thimwingarniyantha	'dragonfly'
thimirmwara	'sandfly'
thininha ~ thimwatja	'mosquito sp.'
thiringkarrka	'ant sp.'
thimwikwimwirra	'Rhincocerus Beetle'

There are about about twenty fish and five miscellaneous marine creatures in Noun Class 3:2(ii).

thamwapwirna	'Coral Cod (8 sp.)'
thingathimwaratja	'Leatherskin (4 sp.)'
thinimpa	'Little Tuna'
thilyimpa	'squid'
thiwathirra	'jellyfish sp.'

Quite a few inanimates are included in Noun Class 3:2(ii) but they fall into two categories, as follows:

(i) associated with supernatural power

The four celestial items are larger individual phenomena mentioned in traditional Dreamtime stories.

thakwiringiringanthika	'Venus'
thiwarriwarra	'Jupiter'
thiwirrawilya	'rainbow'
(thi)mwamwawira	'sun'

A few place names which are considered "sacred" are associated with the presence of a woman in the Dreamtime era.

thathimwikwa	(named hole at Scott Pt.)
thirrangwirrimwantja	'Marble Point'
thingalha	'The Red Sandhill'
thithiwa	'Castle Rock'

There are some isolated instances of items which cause sudden sickness or pain (always attributed to supernatural causes and not physical). The actions in the first two examples are taboo.

thimwikwimwikwa 'Cowry Shell (gen.)', if eaten, are said to cause sores.

thimwarrnga 'seaweed sp.', if walked through, is said to cause extreme thinness or body odour.

thinyinya 'pteridium' and white things in the sea that sting

the eyes. These are probably linked with supernatural power. The pterigium usually occurs on men/boys who are the only ones allowed to have it removed.

About thirteen arboreal items are associated with the presence of spirits (via use in mortuary rites or ceremonies), are poisonous or cause sickness (infections from thorns or cutting edges of leaves). All except one fruit is not eaten but a few have edible roots).

thirnthirnta	'Large-berried Shrub'
thikwikwarnantha	'Wild Kapok Tree'
thathikwalyangpwitja	'Flat-pod Bean'
tharara	'Holly-leafed Pea-plant'
thingathiringwana	'Giant Spear Grass'

The seventeen terms for shells fall into three family groups: Cowry, Cone and Volute shells. All are totems. None were eaten.

thimwikwimwirra	'Cowry Shell (gen.)'
thingathimwarna	'Murex Shell (gen.)'
thathikwawilya	'Cone Shell sp.'

(ii) associated with a THA Class animate

An inanimate item can be classified as Noun Class 3:2(ii) if it is associated specifically with a feminine animate. The terms are names for body parts or items which have a (prominent) physical feature in common.

thingira 'white clay' was used in the Dreamtime era to paint the Sulphur-crested Cockatoo and Little Corella, thiwathirra.

thimwingwirratha 'areas on a woman's body that have raised veins which occur during pregnancy, viz., above the breasts, around the hips, behind the knees'.

thakwilyanthatha 'ceremonial headband made of wool or string'. This may be classified because it was worn by a man when he went to claim his bride or because it is made from wool (Class 3:2).

karripa 'turtle shell' only refers to the shell of the THA Class thingalhiwa 'Hawksbill Turtle' which was traded with the Macassans. The turtle, itself, is associated with a taboo for women--they cannot eat its flesh during childbearing years.

tharrawirikwika 'lymph glands in the neck' is named after the 'Peaceful Dove'. A person's swollen neck resembles a dove's neck when it is calling.

thiwirrawilya 'rainbow' is the present manifestation of the multi-coloured mythological 'sea snake' of the same name.

thirimpa 'mole, wart, tadpole' is named after the 'Rough-skinned Ray' because all three are regarded as similar in shape to the ray. The word has recently been used for 'male sperm' because it is small and its shape in photos or drawings is the same as that of a tadpole.

thimwingarniyantha 'Banded Helmet Shell' is named after the similarly-shaped 'dragonfly'.

thimwamwawira 'watch, clock' is named after mawamwawira 'sun'. The association is probably one of identifying time periods when the sun is shining, rather than shape.

thakwiwarkiwarka 'needle' is the generic term for 'spider'. Other synonyms have been placed in the same noun class, viz., nitila ~ tjarra 'sewing needle'; thakathitharra 'sewing or syringe needle'.

thingarrkwa 'spike' of thitjiningkwa 'echidna' is also used for a spear, the head of which consists of two stingray barbs (not always from THA Class rays) and for a 'Sea Urchin' that has long spindles. The word also refers specifically to the spike of the thirimpa ray or non-specifically to any needle (Class 3:2(ii)), to the prongs of a spear (Class 3:4), or to sharply-pointed leaves (Classes 3:2(ii), 3:4 and 3:5).

3.3.2.1C Noun Classes 3:3 NI and YI

Noun Class 3:3 is divided into two sub-classes and each has a different prefix. The noun class is prefixed by ni- for human masculine and by yi- for non-human masculine. Both are singular. The non-singular human masculine counterpart of Noun Class 3:3(i) is Noun Class 3:1(i) but Noun Class 3:3(ii) is pluralised only by suffixation.

The following examples illustrate the human masculine Noun Class 3:3(i).

nankingwarpwa	'adult male'
nanikwimwayartha	'boy at puberty'
nantjarrngalyilya	'boy'
nangariya	'baby boy'
ningwarrka	'my father'
napwalhitja	'male owner'
natharringkamwa	'married man'
nalhawithawarra	'boyfriend'

nimimpa		'blind man'
nimwarnkartamwa		'sorcerer'
nanikapwirra		'man of X moiety'

The name of a man or a Dreamtime personality is often prefixed by *ni-*. Men's names correspond with the name of the non-human animate--the former being prefixed by *ni-* and the latter by *yi-*. In traditional stories, the two names may occur in free variation or the human masculine Noun Class 3:3(i) prefix is used during the Dreamtime activities and the non-human masculine Noun Class 3:3(ii) for the present non-human form.

naningwakwingakpwa		'name of a Dreamtime man'
nimpwalhirra	~ yimpwalhirra	'name of Dreamtime man'
nikpwa	~ yikpwa	'Coucal Pheasant'
nipwiratha	~ yipwiratha	'Agile Wallaby'
nimwawira	~ yimwawira	'moon'
naningwimwapalhpwa	~ yiningwimwapalhpwa	'bat (gen.)'
naratja	/ yaratja	'man's name / goanna'
namw:wankwitja	/ yiwankwitja	'man's name / joey'
nangkalyikwa	/ yalyikwa	'man's name / rain'

In Traditional Anindilyakwa, no change of gender is possible, i.e., the gender of a Dreamtime being always stays the same. In the last decade, the Dreamtime classification has sometimes been changed to the opposite gender when translating from an English gloss. For example, the traditional classification for thiwirrawilya 'rainbow' is the feminine 3:2(ii) Noun Class but, when one story-teller translated "he, the Rainbow Man" as niwirrawilya, it was changed to the masculine 3:3(i) Noun Class.

Noun Class 3:3(ii) consists of masculine beings from the Dreamtime who are now manifested as non-human animates or inanimate items that are associated with those beings or that have supernatural power causing pain, sickness or death. This noun class includes a large number of all types of non-human animates except frogs but only a few inanimates.

All but the two of the larger individual land mammals are classified as YI Class. The semi-generic generic terms, yiningkwarpwa 'adult male turtles and goannas' and yiningwingwangpwa 'edible land animals and reptiles' fall into this noun class.

yikwingpwa	'Rock Ringtail Possum'
yalyilya	'Little Red Flying-fox'
yinyarriwarna	'Northern Quoll'
yirikwitjilhangwa	'Brindled Bandicoot'

There are nineteen Noun Class 3:3(ii) terms for reptiles and all but one of the six marine and one land turtles. Four generic terms fall into this category: yaratja 'goanna', yimwantha ~ yilharrkira 'turtle' and yingarna 'snake'.

yimwarntakiwapwa	'Blue-tongued Lizard'
yingkarm	'Striped Skink'
yayarranthangwa ~ yilharrpwantha	'Western Brown Snake'
yimwapwathikwana	'Death Adder'
yiningpwirna	'Elegant Sea-snake'
yantha(k)pwithingwirra ~ yimwiarraka	'Green Turtle'
yimapwirrkwira	'Leathery Turtle'
yingmwingmwarnta	'Snake-necked Tortoise'

About twenty-four terms for birds are included in the YI Noun Class, some of which are called "brothers" or the "same skin".

yikwirakwira	'Spotted Nightjar'
yimwakpirra	'Royal Spoonbill'
yingwa	'Torresian Crow'
yirimpwa ~ yitjarra	'Silver Gull'

Most of the thirty or so terms for insects and grubs in Noun Class 3:3(ii) have been identified as totems. Groote Eylandt Aborigines call some brothers, e.g., yangkirrangkwirra and yimwirntarrma 'snail (two different species)'.

yangkwirra	'house fly'
yimwirntarrma	'snail'
yarrnga	'leech'
yilhamwa	'water beetle'
yilyakwa	'bee'
yimwakimwakina	'hornet'
yimwirnta	'head lice'
yimwirralya	'Green Tree-ant'
yinanga	'witchetty grub'
yingarrampwilya	'centipede'

The majority of the marine life fits into Noun Class 3:3(ii): fifty-eight fish, five sharks, three rays, about thirty shells or shellfish, as well a few miscellaneous marine animates. The word, yangkwawa '(mythological) whale', is also included.

yakarra	'Purple Cod'
yikwirrirrthangwa	'Green Sawfish'

yilyangwilhimwilha	'Estuarine Stonefish'
yiningwapwitjakpwa	'Pikey Bream'
yikalyamwirra	'White Shark'
yimwirrpwingwa	'Zebra Shark'
yilyanga ~ yingwapwarra	'Common Shovel-nosed Ray'
yimwirnirna ~ yimwarpirra	'Fantail Ray'
yimwathiwaya	'stingray sp.'
yarrkwimwarnta	'Venus Shell'
yikwirna	'Baler Shell'
yilhikarintja	'Worm Shell'
yiningwampwaka	'Burrowing Clam (4 sp.)'
yinikarmwingkwartha	'small hermit crab'
yimwanta	'crab sp.'
yapwingwirra	'Sea Wasp Jellyfish'
yarrimwilya	'coral sp.'
yingwilha	'trepang'
yininya	'tristletworm'

Noun Class 3:3(ii) includes quite a number of inanimates which can be identified as being:

(i) associated with the Dreamtime

The following are present manifestations of celestial beings from the Dreamtime era. The word, yarringkwa 'yesterday', is YI Class probably because of its association with the moon--yesterday ends at daybreak, not midnight. The term, yipwilyipwilya 'thunder and lightning', is also the name of the Gecko lizard--its present manifestation.

yalyikwa 'rain'

yiniyarra	'SE trade winds'
yiningkwirra	'NW monsoonal winds'
yipwilyipwilya	'thunder/lightning'
yimwawira	'moon'
yikwira	'star'

Four topographical features and one place name are associated with "sacred places", e.g., cave paintings are in the sandstone ridges; the dancing ground or "place of footprints" is the site of the Barra Clan ceremonies or ritual fights.

yiningilya	'sandbar'
yinipa	'red ochre'
yinitjirra	'sandstone ridge'
yinikaya ~ yinikanga	'dancing ground'
nimwiningkakwilharrinamwantja	(sandhill name)

(ii) associated with the supernatural

Twenty or so body parts or functions are associated with supernatural power, poisons or sickness (infections). For example: clippings from fingernails or hair are used in sorcery; the lymph glands in the groin draw the poison from an infected leg; certain body parts are connected with the creation of life, its sustenance and its aging process or with the chest, e.g., *tipiya* 'tuberculosis'.

yinhanha	'fingernail'
yikwira	'grey hair'
yakika	'scrotum'
yiwarra	'vagina'
yiraka	'trachea, oesophagus'

yayarra	'vein, tendon'
yiningwinya	'fontanelle'
yingampwa	'gland in the groin'
yikwithikwitha	'chest'
yingamwina	'abscessed breast'
yiningwirnta	'cicatrice'
yiningwinya	'abscess'
yimwa	'excreta'
yarrtha	'nappy rash'

There are two arboreal items which are poisonous and seven associated with sorcery or ceremonies.

yimwirirra	'Crab's Eye'
yiwara	'Snake Vine'

yimwiritangirringirra 'Blady Grass' was used to wrap a mentally ill person before ceremonial smoking.

yirarringantja 'White Paperbark' and yirmwa 'Ghost Gum' are locations for sorcery: a voodoo type representation of a person can be cut into the trunk and ceremonially speared or a person's intimate clothing (also see above) can be placed under the roots and "sung".

yimwinthingwa 'Cypress Pine' has needles which are burned for smoking the vagina yiwarra.

yirtha 'Lawyer Vine', yingakpawarrnga 'Short Cut-leaved Palm' and yilharrrpa 'Liviston Palm' are/were all used for ceremonial armbands.

yilhamwara 'orchid (5 sp.)' was used for making to glue to attach the ochres or clay when painting people ceremonially or painting barks.

yarrarra 'forked stick' supported the burial platform.

yinkwampwa 'bark of Broad-leaved Paperbark' was used for the neck adornment worn during the mourning period (probably holding the bones of the deceased relative).

(iii) associated with another YI Class animate or inanimate

There are about ten trees whose membership in this noun class appears to be due to their association with bees, yilyakwa. (The much sought-after honey is located by watching for the bees and a substance that falls from the hive to the bottom of the tree.) The bees collect the nectar, humans suck the "honey" from the flowers, or the leaves are tied to make a container for carrying the honey. (The three species of native bees do not sting.)

<u>yiningwirra</u>	'Fern-leaved Grevillea'
<u>yilharrikirra</u>	'White-flowered Mangrove'
<u>yinarrpwa</u>	'Salmon Gum'

Two wooden artifacts are named or classified in agreement with the noun class of the tree from which they are made; one wooden artifact adopts the same name as a body part with the same shape.

yilyarra 'Macassan pipe' is the same name as the Pipe Bush;
yiraka 'didjeridu' is the same name as the trachea.

yikarpwa ~ yimwangala 'woomera' is preferably made from the wood of tjangawila 'Red Ash'.

3.3.2.2 Non-personified noun classes 3:4 and 3:5

The Non-personified is divided into visible and invisible (never visible). The former is further sub-divided semantically into lustrous versus lustreless. Noun Class 3:4 A incorporates the invisible and the lustrous items; Noun Class 3:5 MWA involves the lustreless items. Both Noun Classes are inherently singular.

The invisible items in Noun Class 3:4 are all inanimate and could be said to be related to the wind. They fall into two categories:

(i) language and human noises

There are about twenty terms that are associated with human and vocal. The generic terms, ayakwa 'word, speech, language', amapa 'song', all fall into this category. The word, alhikwantja 'dance', may be in this noun class because of its association with singing or the feet.

aninthilyakwa	(language name)
alhawithawarra	'story'
amwarngka	'laugh'
amwithilya	'cough'
akarrngarra	'burp'

The generic term, akirra 'name', and non-personalised (ceremony) names are included as well as the terms for Dreamtime (the era when topographical items are said to be named), dream and taboo.

amwirntiwirrariya	'Mardayina ceremony'
anikarrnga	'Dreaming (country)'
aningwarrakpakwiya	'Dreamtime'
akwilyangpwirarrka	'dream'
angkwapwikwapwa	'taboo'

(ii) associated with wind

There are several terms for winds, seasons and some sicknesses that are placed in the Class. The citation form, arrirra 'wind or body pulse', fit into this noun class. (The physical sign of death is the cessation of breathing--a dead person is said to "have lost his/her wind".)

amwarrpwa	'east wind'
angwirntirra	'SE trade winds'
akwiningkwira	'wet season'
akwimwalhilhiyanga	'season whene the mwalhalhiyanga blooms'

Some of the following words are in Noun Class 3:4 presumably because of their association with a body part, viz., aringka 'head', amwantjantjingirra 'joint fluid'.

angpwilyiwa	'sickness'
akpwarra	'headache'
apwitjapwirra	'aching joints'

All visible items are classified according to their appearance. The semantic basis for this classification only became evident when

the majority of non-human animate and arboreal items were individually identified and attention focussed on the common factor in the appearance or habitat. Further evidence was provided by the comments from many of the Groote Eylandt Aborigines (including even young teenagers) who have often remarked that, for example, "it grows in the sand or on a sandhill near the beach"; "it has black bars on its back"; "it's a very shiny fish"; "that fish shines in the dark"; or "it's green like the grass".

In the visible categories, the two Noun Classes contrast those items whose lustrous surfaces reflect light (A Class) and those items whose surfaces do not normally reflect light (MWA Class). The former is associated with daytime or light and the latter with nighttime or and darkness.

The visible category covers only the few animates that are not personified but most of the inanimate items. Even though few in number, all types of non-human animates (except for land mammals and reptiles) fall into these Noun Classes.

The four Noun Class 3:4 and the six Noun Class 3:5 birds are classified according to the shiny or dull feathers on their backs or mantles. When trying to identify the birds from pictures the first question asked by the older women was about their habitat (land or sea birds). Research showed that, while a large part of the 3:4 data corresponded with foraging or nesting in the inland soil (Noun Class 3:4) versus the coastal sandy areas (NounClass 3:5), the semantic opposition was not satisfactory because some closely related species in different noun classes live in the same area. Other Aboriginal comments on the appearance led to the present classification of lustrous versus lustreless.

akpwarra

'Spangled Drongo'

amwarrira (loanword)	'Large Egret, Little Egret' (4 sp.)
angwirrita	'Australian Magpie'
mwawilhpwirta	'Pied Cormorant, Little Pied Cormorant' (3 sp.)
mwilyangma	'Pied Heron, White-necked Heron' (3 sp.)
mwamwintjawitjawa ~ mwawiripwiripwa	'Striated Pardalote'
mwalyirrnwilya	'Red-collared Lorikeet'

There are four Noun Class 3:4 and nine Noun Class 3:5 insects or grubs classified by the lustrous or lustreless appearance of their backs (or wings).

alhikwingarrangpwilya	'centipede'
angalhiwa	'white-scale insect'
aritjiritjirrirra	'bee sp.'
atjikamwa	'moth sp.'
mwamwinya	'firefly'
mwarripwira	'scorpion'
mwartawa	'Bull Ant'

The thirty-four Noun Class 3:4 fish are described by Grant (1982) as "brilliant silver, gleaming black or white, greenish silver, bright golden yellow, coppery brown/bronze or pretty coloured". The whole fish is usually lustrous but there are some where only the lower sides or a prominent feature is lustrous. The seven lustreless MWA Class fish are described by Grant as having markings, such as "dusky crossbars, dark-edged fins, black blotches or dark vertical bands";

the Aborigines offered the information that the fish have "black bars or bands". These MWA Class fish are usually lustreless, i.e., creamy or greyish (sometimes when dead) and have dark vertical bars or blotches along the back or dorsal fin. (Note: The semantic notions, edible versus inedible and freshwater versus saltwater habitats, were investigated but found to be inapplicable).

arnayingwirra	'Long-tailed Catfish, Eel'
alhkirra	'Oxeye Herring'
amwarta	'Freshwater Long-tom'
amwatharrngwa	'Barracuda'
arrantha	'Painted Sweetlips'
amwikwana	'Cook's Soldier-fish'
mwamirrarra	'Qld. halibut (14 sp.)'
mwingintjapana	'Broad-barred Mackerel' (3sp.)
mwantjawarra	'Mouth Almighty Fish' (freshwater)

There are three terms for Noun Class 3:4 sharks (only one of which has been identified) and four terms for Noun Class 3:5 sharks. The generic term, mwangiyiwanga 'shark', appears to have been used for the name of a specific shark in the Dreamtime story about Umbakumba Lagoon but is now used in a more general way for sharks whose backs (as pictured or described by Grant) are not a bright, silvery colour but creamy white or slate grey.

angkilyingarrkalyithangwa	'Little Blue Shark'
amwarikwa	'Banded Wobbegong'
atja	'Black-tip Shark'

mwatja	'Black-tip Shark'
mwilhapwirakwa	'Graceful Shark'
mwingwarra	'Hammerhead Shark'

The one Noun Class 3:4 and the one Noun Class 3:5 ray have a lustrous and lustreless belly, respectively. The latter has three names for the different sizes and the three are referred to as "brothers". The terms are:

angwirrkpwirrkpwirra		'Pigmy Devil Ray'
mwangpwarna	juvenile)	'Common Shovel-nosed Ray'
mwakapwiramwirra	adult)	
mwanikarmwingkwartha	large adult)	

Approximately forty-five shellfish are included in Noun Class 3:4 but only six in Noun Class 3:5. The overall group is regarded here as "shellfish" because so many are or were eaten (with a contact history of fifty years it is hard now to get full information on everything that was eaten). The classification of almost all shells as Non-personified Noun Class 3:4 shells may simply be due to the fact that most shells are shiny on the outside but there is a greater likelihood that the common lustrous quality of the aperture or inner lining of A Class shells is the deciding factor. (Note: Most of the Noun Class 3:5 shells have a residual brown skin on the outside of the shell but this needs further checking with the Aborigines themselves.) The generic term for shell is athithira.

ararikwirra	'Ostrea Oyster'
athamwiya	'Top Shell'
amwirntiyarra	'Violet Snail Shell'
alyangmwily:ngmwirra	'Ark Shell'

mwalhiwa	'Razor Shell (2 sp.)'
mwingarniyantha	'Giant Whelk (3 sp.)'
mwingwawa	'Pyramid Trochid'

Nine other crustaceans are classified by their lusted appearance and five by their lustreless appearance. There is, however, one pair of crabs which are called brothers, viz., mwangmwa 'Ghost crab' and mwanipwarrpa (identification unknown); and another pair of sand crabs, mwangwirninya, are regarded as having a male and female relationship, viz., the Red Spot Crab is the female and a similar blue one is the male. The term, mwamwikwiyalhilha, refers to any crab that is "shy", i.e., it lives in the rocks.

angwalha	'Mud Crab'
amwilyingwirra ~ amwingangpwilya	'King Prawn'
amwingwirra	'Coral Crayfish'
mwanyinganyangwiwa	'crab sp.'

Celestial terms fall into Noun Classes 3:4 and 3:5. The Noun Class 3:4 words for 'dusk' and 'evening' cover the periods when there is enough light from the sun or moon for people and things to be identified; the term for 'night' is only used when there is no moonlight and it is too dark to identify anything. The examples are ordered to show the oppositions in the two noun classes.

angwipina	'sky, clouds'
amwintjirrpwithatha	'rain clouds'
awitja	'fog'
alyarrathatha	'dusk, twilight'
alyarmwirtha	'evening'

awarriwalya	'shade'
akwapwarraka	'electric light'
mwiwimpwirra	'(myth.) clouds'
mwarrakwa	'meteor'
mwarrnga	'night, a sleep'
mwarngkirngkiwilyarra	'midnight'
mwamwikayarra	'rays at sunset (dark bands)'

All four words relating to 'fire' are A Class, including the general term angwira 'fire or firewood'. This may be due to the association with light or with the general term, aka 'wood'.

amwarnina	'ashes'
amwikwa	'live coals'
angwarra	'smoke, steam'

The majority of the body parts are included in the Non-personified noun classes, i.e., approximately thirty-five in Noun Class 3:4 and twenty-five in Noun Class 3:5. All body parts are visible under certain conditions, i.e. when animals are dissected. The A Class body parts are the organs that have a shiny appearance (e.g., heart, liver or lungs) or the shiny areas of the skin (e.g., nose, face, shinbone or buttocks); the MWA Class body parts are those organs or bones that are creamy or dull in appearance (e.g., brains, stomach or spine) or the lustreless areas of the skin that are recessed or covered by hair (e.g., lower back, leg calf, ear or penis). The examples below are ordered to show opposites wherever possible.

akarr	'teeth'
ayamwa	'body hair'
ayantha	'upper back'
alhakpwa	'leg (knee to ankle)'
arntirnta	'heart'
awa	'liver'
aminta	'nose'
amwalya	'body fat'
mwarpwa	'molar teeth'
mwamwingpwa	'head hair'
mwangpwangpwirna	'lower back'
mwakarra	'thigh'
mwamarrpa	'leg calf'
mwangmwa	'brains'
mwilhkwa	'stomach'
mwatha	'ear'
mwiringa	'spine'

The products of some insects are classified according to their lustrous and lustreless appearance.

amwilhika	'beeswax'
mwangkarriya	'stored pollen'
mwarntja	'brood cells'
mwiwatha	'cocoon, Paperwasp's nest'
mwiyarriya	'bird's nest'

The most difficult dichotomy to identify as lustrous (A Class) or lustreless (MWA Class) was the one between freshwater versus

saltwater and between soil or mineral sand versus beach sand. The binary features of salty (MWA Class) versus non-salty (A Class) were at first posited in addition to lustrous and lustreless. These additional semantic features, however, are unnecessary because on Groote Eylandt both water and land can be divided into classes on their light-reflecting properties. The contrasting general terms are:

akwingwa	'fresh water'
mwakarta	'sea'
atjiringka	'soil, mineral sand'
mwithiyalya ~ mwithiyalya	'beach and its sand'

The fresh water in the creeks and lakes is clear and still, reflecting light and mirroring sharply-defined images; conversely, the tropical sea or ocean is usually opaque and constantly moving and, therefore, does not reflect light in the same way or mirror sharply-defined images. The distinction between lustrous fresh water (A Class) and lustreless salty water (MWA Class) extends to other fluids.

athalyimwa	'freshwater river'
awirikwa	'freshwater swamp'
atjirratharrpwa	'freshwater pool'
ayakangalhipwa	'far side of fresh water'
amwinthikpwalya	'dew'
angwatha	'tears'
alyikwalya	'saliva'
angamwina	'breast milk'
amwinha	'urine'
amwantjantjingirra	'joint fluid'

mwikwimwikwa	'deep sea'
mwithalyimwa	'river [tidal reach]'
mwitjirratharrpwa	'saltwater pool'
mwiyakangalhipwa	'far side of salt water'
mwikwana	'perspiration'
mwarra	'blood'
mwarrakamwamwa	'pill, tablet'

The soil is lustrous because it is impregnated with (shiny black) manganese and the mineral sands sparkle in the sun. Conversely, the coastal beaches and beach sand is lustreless because it is not a dazzling white but consists of creamy-coloured shellgrit or broken coral and is often dirty because frequently cut by rivers or creeks and flanked by mangroves. Sand dunes are classified as both A and MWA Class--the former shining because denuded of trees and vegetation. The difficulty in analysis arose from the author's lack of knowledge of the different types of sand and soil on Groote Eylandt and the problem in recognising the cultural borderline between lustrous and lustreless. Once these were established the language was seen to be very consistent and the classification predictable. The following examples are ordered to show the contrasts between Noun Class 3:4 and 3:5.

angwarnta	'white stones, coins'
angarmwirtha	'manganese'
akwalhirrangwirra ~ alhitha	'orange ochre'
angarrathatha	'shiny red soil'
amwilyimwilyintja	'soil, mud'
angakartjiyinga	'sandhill'
athirra	'open hole, soak'

angwa	'coastal border where vegetation starts'
ayangkitharrpwa	'island'
mwaltharra	'brown stones, gravel'
mwinyathirra	'(natural) tar'
mwawirirra	'orange stone'
mwamwirikwa	'red gravel road'
mwamwingwira	'sand'
mwamwithangkwa	'sandhill'
mwathirra	'cave'
mwartawa	'cooking stones'
mwarringwa	'yellow ochre'

Other Non-personified inanimates are classified because of their association with the above.

(i) associated with a specific habitat

The classification of over fifty Noun Class 3:4 and thirty Noun Class 3:5 arboreal items is based on the habitat in which they typically (not occasionally) grow. The focus, however, is on the soil (A Class) or sand (MWA Class), not the surrounding topography or surface vegetation (jungle, open forest, swamps, etc.). Levitt's research (1981) gives meticulous details of such topography but also provided invaluable information about the type of soil, e.g., very sandy soil, sand dune, moist soil near swamps. The Aborigines also gave her the vital key to their classification of plants, i.e., they pointed out that the mwilhingkwaliwa 'Cladode Pea plants' grow in sandy areas but the alhingkwaliwa 'Cladode Pea plants' grow in the open forest (Levitt 1981:114). The distinction in the type of soil

or sand facilitates foraging for food in a given area.

aninthirrkwa	'Bottle Brush'
angpwatjangpwatja	'Star Boronia'
arngkayiwaya	'Tamarind Tree'
akwirana	'Wild Grape'
athamwiya	'Hairy-leaved Convolvulus'
atjiwatjiwa	'Strap Fern'
mwaṃwilharrngkangwira	'Pink Hibiscus (3 sp.)'
mwaṃwira(k)pwirrirra	'Beach Calthrop'
mwanyingwinya	'Sand Fig'
mwarrngmirtha	'Bush Currant'
mwaritja	'Tar-vine root'
mwatjiwa	'Rock Fern'

The generic terms, arriparripa 'open forest, bush, scrub' and mwiringwana 'jungle', correspond with the contrast between A Class 'soil' and MWA Class 'sand'. The concept of light in the open forest versus darkness in the jungle may also be pertinent.

The generic terms, aka 'tree, wood, log, post' and amwarta 'grass, leaves', may be classified as A Class because the leaves are shiny (cf. arrimwara 'new shiny white shoots or new growth') or because the majority of trees or grasses for making artifacts and shelters grow in soil. There could also be an association with angwira 'fire and firewood'.

The classification of Non-personified place names corresponds with the presence of soil or freshwater versus sand or saltwater.

akpwiringa	'island off Scott Point'
akwiwalhinimwantja	'swamp at Four-mile'
amwanya	'creek name'
angarmantja	'rocks near Salt Lake'
mwamwalyingmantja	'Picnic Beach'
mwiyamwikwikwikwa	'Salt Lake entrance'
mwawilyimwantja	'Thompson's Bay'
mwingangmana	'inland sandhill name'

(ii) associated with other Noun Class 3:4 inanimates

The general terms for food are all under Noun Class 3:4, viz., anhinga 'vegetable food'; akwalya ~ amwathangkwa 'meat'. The reason for such classification is still obscure because (a) not all are lustrous; and (b) all three occur in both A and MWA Class habitats. All prepared introduced foods are also Noun Class 3:4, e.g. amwithinga 'flour'; amwirntimwirntatha 'icecream'. The most likely solution is their connection with angwira 'fire'. Equally akwalya the same word, awalyiwa, is used for 'cooked, ripe or ready to eat'--the fire or the sun presumably seen as supplying the necessary heat. The other possibility is an association with akwingwa 'fresh water and other edible fluids'.

(iii) associated with a body part

The following examples illustrate the type of associations which occur.

angamwina	'breast and its milk'
amwarmwarra	'sore'

amwithikarra	'scab'
angwinya	'pus'
alya	'itchy area'
amwinta	'nose'
anyirra	'nasal discharge'
anyingwinya	'hole in nasal septum'
mwarrikwa	'penis'
mwamwingwirra	'semen'
mwanpa	'eye'
mwamwakwilya mwanpa	'eyelid'
mwamwilyimwilya	'sleep in the eye'

Artifacts are seen as a part or product of the item from which they are made and are, therefore, classified in agreement with its Noun Class. The following examples are typical of many artifacts.

alhamwikwa 'bark canoe' was made from alhapwira 'Stringybark Tree' or alhingakirapa ~ amwirapa 'Milkwood Tree'; mwalhamwikwa 'canoe' was made mwamwarra 'Short-leaved Paperbark Tree'.

artja 'roasting stick' was made from arntiwa 'Bloodwood Tree'; mwamwintjirrkiya 'digging stick' was made from mwiyamwira 'Digging-stick Tree'; mwiyanga 'firesticks' were made from mwapwantha 'Peanut Tree' or mwirarrawa 'Red Kurrajong Shrub' or mwarrngmwirtha 'Bush Currant Shrub'.

amwiwara 'pronged spear' and (Noun Class 3:4) lamwa 'shovel-nosed spear' have shafts made from awariwara 'Spear Bush';

angarrkikpa 'harpoon' was made from alhimwilya 'Bloodwood Tree'; mwingarrkikpa 'hooked spear' and mwakwirra 'pronged spear' had shafts made from mwapwantha 'Yellow Hibiscus' or mwawirmwalha 'Pacific Rosewood Tree'.

The bark of several trees was used for artifacts and shelters, viz., alhapwira 'Stringybark Tree'; alyikwirra 'Grey Paperbark'; amwirapa 'Milkwood Tree'. Grass, the generic term for which is amwarta, was also used.

<u>amwingpwa</u>	'windbreak'
<u>amwiyarriya</u>	'bush shelter'
<u>alhkira</u>	'shelter with walls'
<u>atjamwirnta</u>	'coolamon'
<u>alhamwikwa</u>	'bark canoe'

The generic term, mwarra 'string, rope' is Noun Class 3:5 in agreement with the class of four trees from which it was made, viz., mwapina 'wattle trees'; mwapwalhpwa 'Peanut Tree'; mwanyingwinya 'Sand Fig'; mwiyarrawa 'Red Kurrajong Shrub'. Some of the string artifacts are:

<u>mwawilya</u>	'men's string skirt'
<u>mwikayiwa</u>	'dillybag'
<u>mwilyalya</u>	'armband'
<u>mwingarikwa</u>	'fishingline'
<u>mwakathithamwira</u>	'necklace'
<u>mwamwingwirnta</u>	'knot'

amwirntakitjika 'little things', is included in Noun Class 3:4, probably because most small traditional artifacts would

have been made from the A Class barks or from wood, aka.

akarrikarra ~ pantjila 'pencil' and akwampwimpwarra 'chair, church' could be associated with A Class because the prototypes were made from aka 'wood (gen.)' or because they shone with alhitha 'paint, varnish'.

amwirntamwirntatha 'ice-cream' is associated with angamwina 'breast milk'; amwithingira 'white flour' (and the words for rice, bread, Rolled Oats, damper, sugar) are classified under anhinga 'vegetable foods'.

3.3.2.3 Loanword classification

Loanword nouns fall into two groups: (a) those from a neighbouring Aboriginal language that usually apply to native flora and fauna or traditional artifacts; and (b) those from Macassan that refer to people, ships, winds, trade goods and prepared foods or those from English that mostly refer to domesticated or farm animals, agriculture, manufactured goods and prepared foods. In traditional Anindilyakwa, some of the items were derived from within the language but other foreign words were adapted phonologically. Some Macassan words may also have been borrowed from the neighbouring languages because of the late arrival of the praus on Groote Eylandt (there is an obvious difference in the age of the tamarind trees at Milingimbi and Umbakumba.)

Loanwords are easily identified by the strangeness of the word-initial consonants or vowel but also by rarity of a phoneme or irregular consonant sequences. Such words are unmarked for the noun class (except for some animates) but the class can be identified from the adjective or demonstrative modifiers within the noun phrase.

mwama pwankwitja	NG rlangkitj	'this Whale Shark'
thakina tjarrangwa	MK tjarrang	'that horse'
yarimwa kawala	ENG koala	'big koala'

A few loanwords (other than humans and domesticated animals) are prefixed by a nominal classifier when adopted into Anindilyakwa.

thalikita ~ thingarrpwiya	ENG alligator	'Estuarine Crocodile'
thiwaltja	NG arltja	'Water Python'
awilmwarra	NG wulmuwarri	'boomerang'
mwiwalngara	NG walngari	'Beach Salmon (4 sp.)'

The choice of noun class marker is usually arbitrary but, in a few instances, there is some variation between noun classes.

3.3.2.3A Personified noun classes

Loanword nouns fall into the same categories as traditional words.

NOUN CLASS 3:1 WIRRA

Loanwords for Noun Class 3:1 human animates have been introduced along with the "invaders" but also include some words from interaction in mainland ceremonies at Numbulwar.

wirrapwipwilanta	MK Hollander	'Caucasians'
wirriyalipala	ENG yallah fellah	'part-Aborigines and Asians'
winipwingkawa	MK bunggawa	'two male bosses'
wirrapwalitja	NG napalitjung	'owners'
wirritjingkwaya	NG tjirrikay	'ceremony bosses'
wirripwikwithitha	ENG sister	'three nurses'

The word, pwalanta, is now being used without prefixation by some Aborigines who have recently been in regular contact with Aborigines in Northeast Arnhem Land and in sustained association with white personnel from the Northern Territory Education Department which now seems to have adopted the word into English. (The contrastive term from NE Arnhem Land languages adopted by whites, yolngu 'Aboriginal people', is not accepted on Groote Eylandt.)

There is one loanword from an unknown source that is not prefixed but is included in Noun Class 3:1, viz., tjawina 'friends'. There are no masculine or feminine singular forms of this word.

The introduced domesticated and farm animals are usually seen in herds or flocks and are, therefore, associated with similar groups of traditional land mammals and included in Noun Class 3:1. The loanwords, however, are alternately classified as Noun Class 3:4. As some of these animals do not have a shiny skin or coat and have not lived on Groote Eylandt, their inclusion in Noun Class 3:4 may be associated with amwathangkwa 'meat' or with tjiwirra 'paper, book'. All the nouns, except nanikwita 'goat' (the first introduced animal), are prefixed by wirra- but unmarked for Noun Class 3:4.

ana nanikwita		'this goat'
akina pikipika	~ wirrakina wirripikipika	'that pig'
pwitjikata	~ wirripwitjikata	'cat'
pwilikwa	~ wirripwilikwa	'cattle, buffalo'
tjipa	~ wirritjipa	'sheep'

The only other loanwords in Noun Class 3:1 are as follows:

pwirmpwirnga 'Orion's Belt', a group of stars probably classified in association with wirripwirrkpa 'Pleiades'. This

loanword may have replaced a traditional word.

wirralharra 'red ochre' is recognised by the Anindilyakwa speakers as a loanword from the Yirrkala area. It is classified for unspecified gender and not Noun Class 3:3(ii) for the corresponding traditional word.

wirrakwina, 'turtle'. Some say that the word is the generic term for turtle and classify it as WIRRA Class (unmarked for gender) but others say it is the Yirrkala name for thingalhiwa 'Hawksbill Turtle' and classify it as THA Class.

NOUN CLASS 3:2 THA

Loanwords for human animates and domesticated or farm animals can be prefixed by tha- to indicate the female sex.

thipwalanta	MK Hollander	'white female'
thiyalapala	ENG yellah fellah	'part-aboriginal female'
thapwalitja	NG napalitjung	'female owner'
thipwitjikata	ENG pussycat	'female cat'

The loanword, tjarrangwa 'horse' (MK: tjarrang), is probably classified as THA Class because its face is similar to that of thingkwilhangwa 'Dugong'. An alternative solution could be the fact that both have an initial laminal consonant.

The four birds which are included in the WIRRA Noun sometimes have traditional synonyms. (Note: The emu is not native to Groote Eylandt.)

mwarliwiya	GP marliwiya	'Lew'
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karrathalpwawa			'Chestnut Rail'
tjangatjanga	NG	tjangatjanga	'Jungle Fowl' (NG: rooster)
thalki	ENG	turkey	'turkey'

The following non-human animates are either associated with a traditional synonym in Noun Class 3:2 or are classified according to the initial phoneme.

kwirnthirra	~	thamwapimwirra		'Olive Python'
thalikita	~	thingarrpwiya		'Estuarine Crocodile'
thiwaltja			NG arltja	'Water Python'
lingwirra	~	thingathiyalhiwa		'Blue-spotted Trevally (7 sp.)'
tharripa			MK tarripang	'trepang'

All the individual stars are classified in Noun Class 3:2 and this probably accounts for the loanword: pwarnimpirra ~ tarnimpirra 'Venus' which originates from the Gupapuyngu word, panumpirr.

Most of the loanword nouns for inanimate items fall into two groups: cloth (including wool and thread) or metal (including wire).

(i) cloth

Cloth and wool were introduced some centuries ago by the Macassans, the loanword being thimpwala 'cloth in oblongs or squares, flag, bed sheet, baby's napkin, dress material by the yard' (MK: sombala? 'sail'). Most terms for things made from cloth or wool are included in Noun Class 3:2(ii). The classification may be based on (a) an association with thakwiwarrkiwarrka 'spider (generic)' whose web is termed mwarra 'string'; (b) the initial phoneme of the first loanword; or (c) an association with the supernatural because

the cloth is incorporated into mortuary rites, i.e., flags are erected over a house as soon as a person dies to show that the area is taboo until the appropriate ceremonies have been completed. Other items are:

pwaliyarra	MK	palayarang	'sail'
kaliwirra	MK	karoro?	'tent (MK: sail)'
kalikwa			'calico, sheet'
pwirrikpwirrikwa			'man's naga'
tiratjitja			'trousers'
pwarnampwila	GP	panang?	'ball of wool'
thirata ~ kwatana			'sewing thread'

The Anindilyakwa words which have developed within the language structure along with the introduction of cloth and wool are all placed in the THA Noun Class, e.g., thingarrthingara 'ball of wool'; thathikapwalimwingka 'underwear'; thakwirathamwira 'woollen headband'.

There is some evidence that indicates that the classification may have originally or alternatively been Noun Class 3:5, e.g., tiritja 'dress' and pwilangkita 'blanket' are included in both 3:5 and 3:2(ii) Noun Classes; mwatjikirrinta 'mosquito net' is only Noun Class 3:5. Traditional items of apparel were made from mwarra 'string' and placed in the same MWA Noun Class, e.g., mwawilya 'men's string belt and tassel; mwilyalya 'armband'.

(ii) metal

The four metal items are hard to justify under Noun Class

3:2(ii) because another twenty metal items, including traditional terminology, are classified under the (lustrous) Noun Class 3:4. The following associations are tentatively posited:

pwapwilhikana 'galvanised iron, sheet of tin or metal' may have been associated with the shape of a sail which is in Noun Class 3:2(ii).

thakwitjarrarra 'washing machine' may be associated with sheet metal or with women.

thirrantha 'wire, clothesline, radio aerial, fencing wire' may be classified simply because of its initial phoneme or because of its similarity to wool.

thakwiwarriwarra 'electric fan' is most likely associated with wire (desk fan) or sheet metal (ceiling fan).

The word, thilhingana ~ thilingana 'salt' (MK cela?), is also in Noun Class 3:2(ii) and not the expected Noun Class 3:5 for salty things. The only explanation appears to be the initial phoneme. The synonym is yilingana at Angurugu and this would indicate a Personified classification on the semantic basis of a harmful supernatural.

NOUN CLASS 3:3 NI AND YI

The loanword nouns for male human animates and non-human domesticated or farm animals are classified in human animate Noun Class 3:3(i), rather than the non-human animate Noun Class 3:3(ii). This associates the farm animals with the domesticated dog.

nimakatjina MK Macassan 'Macassan male'

nipwalanta	MK	Hollander	'white man'
napwalitja	NG	napalitjang	'male owner'
nipwilikwa	ENG	bullock	'bull, male buffalo'

Land mammals and turtles are traditionally Noun Class 3:3(ii) and loanwords are, therefore, similarly classified. The koala is so classified because Anindilyakwa-speaking Aborigines say that it resembles a possum.

pwalingkwitja	GP	palkitja	'Agile Wallaby'
aniwa	NG	anuwa	'Flatback Turtle'
kawala	ENG	koala	'koala'

Seven fish and one shellfish are included in Noun Class 3:3(ii) in agreement with the classification of the traditional synonyms. All the loanwords are borrowed from a neighbouring Aboriginal language.

karawarra ~ yarmwantja	NG	arrwar	'Yellow Sweetlip'
kwirnkwirna ~ yimirntjarra	NG	kirnkirn	'Turrum'
pwirritja			'Blue-tailed Mullet'
yimwirarra ~ yaka	NG	yimirtarri	'Milk-fish'
yimpwalmwa	NG	yurnpalmi	'Squat Turban Shell'

The introduced food or fruit is usually classified under A Class but four items are YI Class. The first two may be associated with yilyakwa 'honey' and the last two with yinimwanginga 'Red Wild Apple' which also has a very large seed. Pears are classified as both Noun Class 3:3(ii) and 3:4. None of the fruit has been grown at Umbakumba.

kayika			'cake'
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pwanapwila		'pineapple'
yapwirikata		'apricot'
pwitjitja	ENG peaches	'peach'

There are four loanwords associated with winds or sickness that are classified in agreement with a traditional synonym or with supernatural power. One of the older women also supplied another word, yinikalanta 'calendar' (associated with moon) but it is not generally accepted.

pwarra ~ yingkwira	MK barra?	'NW wind'
pwirrpwila	ENG football	'any ball'
rapwa	ENG rubber	'rubber, eraser'
wikwimwa	ENG hookworm	'hookworm'

3.3.2.3B Non-personified noun classes

NOUN CLASSES 3:4 A and 3:5 MWA

The loanwords in Noun Class 3:4 (classified on the semantic criterion of invisible) are related to speech, winds or sickness. Those recorded, to date, are as follows:

tjapwitja	ENG service	'church service'
kwiyarirtha		'storm'
thingwarra	MK tunggarra	'east wind'
tirmwala	MK timorro	'northeast wind'
tangkinintja	ENG tetanus	'tetanus'
mitjila	ENG measles	'measles'

The word, mwamwarika 'southeast trade wind', is a loanword which has possibly been placed in the MWA Class because of its initial

phoneme. The traditional Anindilyakwa words are angwirntirra and yiniyarra.

There are eight non-human animates for which loanwords are used. All are classified by the semantic criteria of lustrous and lustreless but most vary with traditional synonym of the same Noun Class. The loanword from Gupapuyngu, milika, is A Class when referring to the 'Feather-fin Bullfish' with its gleaming black and white stripes, and MWA Class when referring to the 'Yellow Emperor' with its drab colour and dusky blotches.

amwarrila	NG	marrarla	'Large Egret'
mwarrikwirra			'Black-spot Long-tom'
kalampwarra ~ awilmwarra			'anemone sp.'
thiyiwa			'Hairy Caterpillar'
mwatja ~ atja	NG	atja	'Black-tip Shark'
pwankwitja	NG	rlankitj	'Whale Shark'
witjilhikwa	NG	wurrtjuluku	'Barred Long-tom'
mwiwalngara	NG	walngara	'Cooktown Salmon (4 sp.)'

There are two other loanwords relating to marine life. The word, lipanga 'bait' is in Noun Class 3:4 in association with akwalya 'meat, fish'; the word, mwithiyarra 'Giant-winged Oyster' is in Noun Class 3:5, probably in agreement with its initial morpheme.

Loanwords are used for some of the arboreal species which appear to be native to Groote Eylandt. Almost all of these seem to be borrowed from a neighbouring Aboriginal language. The word, pwirimwa 'Broom Berry', has probably been adapted from the English word 'broom' and is classified as both A and MWA Classes. The first set growing in (lustrous) soil are in Noun Class 3:4 and the second growing in

(lustreless) sand are in Noun Class 3:5.

kalangarnta	NG	wukalangarnta	'Flat Swamp Potato'
kalirra			'Yellow-ball Flower fruit'
kwiralpwa ~ awariwara			'Spear Bush'
kwinyarra	NG	kurninyarra	'Swamp Fig'
tjingkwilila	NG	tjingkurlirli	'Carissa Shrub'
tjangawila	NG	tjangawili	'Red Ash'
pwarwirra			'Cockatoo Grass'
mwapwalpwa	GP	mapalku	'Peanut Tree, string'

The introduced arboreal items are mostly fruit trees or vegetables which were classified according to the nature of their first habitat when introduced through agricultural projects around Umbakumba in the post-World War II period. The few that are/were grown in both habitats take both noun classifiers, e.g., pwinana 'banana', pinata 'peanut', kiyikwampwa 'cucumber'.

anyina			'onion'
karita			'carrot'
tjikini			'zucchini'
lamwintja			'limes (tree & fruit)'
kwiripa			'Wild Passionfruit'
tjampwa ~ angkaywaya	MK	tjampang	'Tamarind (tree & fruit)'
thinta	GP	thinti	'bamboo'
mwangwawa			'mango (tree & fruit)'
katjiwa			'cashew (tree & fruit)'
watamwilana			'watermelon'
pwiwapwiwa			'pawpaw (tree & fruit)'

pwitita	'potato'
pwaminkina	'pumpkin'

The term, kalikwa 'coconut palm' (MK: kaluku) is Noun Class 3:3(ii) by association with the indigenous palms. The nut, however, is classified as both 3:3(ii) and 3:5, the latter perhaps in association with the similar mwingalhika 'pandanus fruit'.

The terms for introduced prepared (mostly vegetable) foods are classified as 3:4, probably because they are categorised under the generic term, anhinga 'vegetable foods'. (Note: The term for 'tobacco' is included here because the Groote Eylandt Aborigines "eat tobacco" even though the practice of chewing tobacco has never been observed by the author.)

tampwa	'damper'
pwiriwita ~ pwirata	'bread'
rtirtirra	'Macassan rice cake'
tjikwa	'sugar'
pirrita ~ ratja MK berrasa? ENG rice	'rice'
pwarritja	'Rolled oats'
thampwakwa MK tambako	'tobacco, cigarettes'

The introduced terms for drinks are in Noun Class 3:4 in association with the generic terms, akwingwa or akwipipaka 'fresh water or drinkable fluids'. By contrast, the MWA Class word for medicine is classified because its association with salty water.

kwatiyala	'cordial'
tiya ~ rtiya ~ kapiti	'tea'
anitja MK anisi?	'alcohol'

mirritjina

'medicine'

The word miyilka 'non-human milk', has two classifications: Noun Class 3:4 in association with angmwina 'breast milk' and Noun Class 3:4 in agreement with its initial pr theme.

Most introduced mi facts made from metal are in Noun Class 3:4 probably because their prototypes were shiny but there are four items which fall into Noun Class 3:5. This assumption is supported by the fact that the introduced shiny steel axe and shovel-nosed spear are in Noun Class 3:4 whereas the traditional stone axe and spears were in Noun Class 3:5. There is also a contrast in noun class between a shiny billycan and a drab bucket. Some items, such as kettles and saucepans, are placed in both noun classes.

pwatjananga		'lantern'
lyalyinga		'knife'
kaliwanga	MK kalewang	'machete'
tjinapwa	MK sinapang	'gun'
pakirrikirra		'metal file'
thititja	NG thututju	'crowbar'
pwalangwa ~ akwirngkiwira	MK balango	'anchor'
pikanga	MK pekang	'fish hook'
pwatja	GP paatjtju	'nail'
pwatjikala	MK bassi kalling	'billycan'
pwithila	MK potolo?	'bottle'
kilatja	ENG glass	'window'
mwapwila	ENG marble	'marble'
parrika	ENG paddock	'(wire) gate, fence'
ritja	ENG razor	'razor'
tirtila		'bell'

pwangkwiya			'steel axe'
mwirngkirra		NG mirnkirra	'sinker'
pakita			'bucket'
tjipwina			'spoon'
tjaka			'jug'
mwawirngkaya			'stone axe'

The introduced wooden artifacts are classified as either Noun Class 3:4 or 3:5. It would seem that, from looking at the various items, the introduced timber was associated with the most similar native wood or under the generic term, aka 'wood'. The word, *riwila* 'ruler', is classified as both Noun Class 3:4 and 3:3(ii), presumably because the wood is similar to that of two different trees.

thirrapata ~ amwiwara		NG thurrapata	'pronged spear'
pwaliyarra		MK palayarang	'mast'
pantjila			'pencil'
awilmwarra		NG wulmuwarri	'boomerang'
thangwirnta			'hooked spear'
mwakatarra		MK	'rice platter'

The dugout canoe (as opposed to the bark canoe) is said to have been introduced by the Macassans and made primarily from trees in Noun Class 3:5. All other transport has been classified in association with it.

lipalipa		MK lepelepa	'boat'
mwitjiyanga ~ tingkiyi		MK biseang	'boat (wooden or aluminium)'

tiraka		'car, truck'
pwatjingwila		'bicycle'
arripilayina		'aeroplane'
kwilinga	MK guling	'rudder, steering wheel'

There are a few remaining artifacts which are classified as either Noun Class 3:4 or 3:5 for the reasons shown:

tjiwirra ~ tjirra 'paper, book' (MK surra?) and pwatha 'box (cardboard or wooden)' are classified under (lustrous) A Class because of their association with paperbark. Pound notes were traditionally given the same name as the paperbark.

mwampwilawa 'waterpot' is borrowed from Macassan and is classified as MWA Class, probably because of its lustreless appearance.

pwalmwarna 'hat' (NG: wupalmarna) is Noun Class 3:4 in agreement with the general term, amwarta 'leaves, grass'. The weaving of grass or palm leaves into hats and other artifacts is not indigenous to Groote Eylandt.

rlirrawaya 'sharpening stone' (source language unknown) is in Noun Class 3:4, probably in agreement with the classification of the local sharpening stones (in places such as Central Hill). Some others must have been traded with other tribes on the mainland.

mwinyatjirra 'tar, bitumen' (MK: minyak) is found offshore and classified as MWA Noun Class on the semantic basis of lustreless.

3.3.2.4 Substitution of nominal classifiers

Noun roots or stems can be classified by more than one noun

class marker and thus belong to more than one noun class. Nouns are of two types: (a) a proper noun which is the name of a person, place or thing; or (b) a common noun which is a name applied to each member of a whole class sharing the same distinctive feature. The assignment of a proper noun to a particular class is arbitrary but the substitution or interchange of noun classifiers on a common noun is very flexible.

3.3.2.4A With proper nouns

The substitution of nominal classifiers in proper nouns and species names with the same root can occur within and between the Personified and Non-personified classes. The change in nominal classifier can indicate that one was associated with supernatural power in the Dreamtime but the other was not. The identical or similar root indicates a common feature, such as shape or location.

The Personified Nominal Classifiers substitute in the following examples because of a difference in number and gender. The first in each pair of examples is seen alone but the second in large groups.

yilyampwarra	'Caspian Tern'
wirrilyampwarra	'Common Noddy'
yikwiwirratjitja	'Little Eagle'
wirratjitja	'bird (gen.)'

The first in each pair below is Personified (associated with a traditional Dreamtime story) and the second is Non-personified (classified by semantic criteria).

(i) geographical and personal names

Geographical and personal names in Anindilyakwa are frequently

associated with mythology. The first-born child, whether male or female, is given an important ceremonial or totemic name.

yantharrnga	'Central Hill'
antharrnga	'land around C. Hill'
yinhimwa	'Angurugu River'
anhimwa	'mangroves'
wirripwirrkpa	'Pleiades stars'
ampwirrkpa	'NE Islands'
wirrawilya	(clan name)
mwawilyimwantja	(place part-owned by Wurrawilya)
nanikwiyalhiya	(man's name)
mwamwikwiyalhiya	'crab sp.'

(ii) non-human animates

In almost all cases, the paired items are both non-human animates but exceptions do occur.

thilhirrinta	'Carpet Python' (juv.)
alhirrinta	'Carpet Python' (adult)
thingintjapana	'Dugong'
mwingintjapana	'Narrow-banded Mackerel'
thimwingarniyantha	'dragonfly'
{mwi}mwingarniyantha	'Giant Shell'
wirrimwikwa	'(red-eyed) spirits'
amwikwa	'glowing coals'
mwamwikwa	'spirit's eye, tail light, pandanus dye'

thimwamarrpa	'Red-backed Button Quail'
{mwa}mwamarrpa	'leg calf'
yiningkwira	'NW wind'
thimwarrkiningswira	'White-breasted Wood Swallow'

(iii) arboreal (including artifacts)

Some of the following pairs of examples include some Common Nouns, e.g., the generic terms and the Non-personified Bean Plants which the Aborigines regard as "all the same".

thirtirnta ~ NG yirtirnta	'Large-berried Shrub'
arntirnta	'heart'
yinimwanhinga	'Red Wild Apple'
anhinga	'vegetable food'
anhinganhinga	'any bush fruit'
mwinhinga	'Zamia Nut'
thathikwalyingpwa	'Flatpod Bean'
amwikwalyingpwitja	'Violet Bean'
mwanwikwalyingpwitja	'Fire Bean'
yinikwampwa	'Broad-leaved Paperbark'
mwingwinikwampwa	'White Bridal Tree'
yimwirntangirringirra	'Blady Grass'
amwirntangirringirra	'Potato Grass'
mwirringwara	'jungle'
thimwathiringwana	'grass sp.'
yingarrampwilya	'centipede'

mwangarrampwilya

'double-sided hooked
spear'

Another interesting feature of Anindilyakwa is the change of noun classifier in relation to the size (or age) of some specific non-human animates. The only systematic change is for rays but there are a few random changes with fish and a turtle.

There are twelve terms for Personified rays in Noun Class 3:2(ii) which refer to only the juvenile in each species. The adult counterparts are all in Noun Class 3:4 and all have an obvious lustrous feature, viz., gleaming back, white belly or bright blue spots.

alyiwa	adult)	'Blue-spotted Fantail Ray'
)	
thalyiwa	juvenile)	
amwarninthangwa	adult)	'Spotted Eagle Ray'
)	
thimwarninthangwa	juvenile)	

One turtle has a difference in classification according to size, viz., atjirakamwa is the juvenile which corresponds with yitjirakamwa 'adult Olive Ridley Turtle'. The Personified item here is the larger and not the smaller one as for rays. The reason may be that the large turtles are eaten whereas small ones are returned to the water so that they can 'grow big before being caught again'. Conversely, it is the small rays that are eaten because the flesh is "sweet and oily".

Two fish have been recorded as having a contrast in noun class affiliation because of size, viz., thalyakilya 'juvenile Groper' and alyakilya 'adult Groper'; yaka 'adult Bone-fish' and akwikwiwarapwa 'juvenile Bone-fish'.

3.3.2.4B With common nouns

The noun classifiers for all five noun classes can be interchanged on common nouns, except where it is not possible semantically. (The exceptions are within the "competence" of many of the language speakers but the identification of the referent is not readily given.) The noun class changes in agreement with the grammatical or semantic categories. Each word may, therefore, cover more than one item but some are used as citation forms for a specific thing, e.g., *yinimwamwiwa* 'egg' refers to any egg unless otherwise stipulated.

The most common change in noun class occurs for items that are marked for possession within the stem complex (see Section 3.2.3.3). The noun class-marker indicates the possessor. The compound stem is usually realised as an adjective root or a Bodypart noun root. An overt noun referent specifies the possessor in each particular context.

<i>awalyiwa</i>	'ripe, cooked'
<i>yinimwawalyiwa</i>	'flower of 3:3(ii) Class trees: <i>yinipwarrngintja</i> , <i>yinimwanhinga</i> '
<i>amwawalyiwa</i>	'flower of 3:4 Class trees: <i>ayalhikwa</i> '
<i>mwamwawalyiwa</i>	'flower of 3:5 Class trees: <i>mwapina</i> , <i>mwartirtarra</i> , <i>mwamwarra</i> '
<i>warnimwamwiwa</i>	'3:1 Class round things: fat people, dogs or birds, waterlily seeds'
<i>thathimwamwiwa</i>	'3:2(ii) Class round things: fat or pregnant woman or animal'
<i>nanimwamwiwa</i>	'3:3(i) Class round things: fat man'
<i>vinimwamwamwiwa</i>	'3:3(ii) Class round things: Wild Apple seed, egg, toe, ball'
<i>amwamwiwa</i>	'3:4 Class round things: button'

mwamwamwiwa	'3:5 Class round things: sun, eye, pill, seeds'
thathimwalyirra	'3:2(ii) Class juice: red dye from a dress'
yinimwalyirra	'3:3(ii) Class juice: honey, sugarcane'
amwalyirra	'3:4 Class juice: from fruit or oil/juice/blood from meat'
mwamwalyirra	'3:5 Class juice: from Pandanus fruit, coconut milk'
aringka	'head'
warnimwaringka	'people's heads'
thathimwaringka	'3:2(ii) neck of a dress or shirt, roots used for dyes'
amwaringka	'bottle lid, any 3:4 Class yam'
mwamwaringka	'any 3:5 Class yam'
angwinyampa	'angry'
wirrapwipwarta wirrangwinyampa	'policemen'
nangwinyampa	'angry male'
thathingwawinyampa	'clothes worn in a fight'
aningwawinyampa	'3:4 Class weapons: spear, gun'
mwaningwawiyampa	'3:5 Class vehicles: boat/plane/truck filled with soldiers'
yang{w}amwina ~ ying{w}amwina	'3:3(ii) Class: abscessed breast'
ang{w}amwina	'3:4 Class: woman's breast after the first baby's birth'
mang{w}amwina ~ mwing{w}amwina	'3:5 Class: girl's breast'
amwamwira	'3:4 Class: axe handle, pincer claw of a mud crab'

mwamwamwira

'3:5 Class: pincer claw of a
sand crab'

In the Personified mode, roots or stems are usually marked for the human classifications of non-singular Noun Class 3:1, feminine singular Noun Class 3:2(i), and masculine singular Noun Class 3:3(i). These classifications can, much more rarely, be extended to include other animates or inanimate items. The non-human animate is, however, temporarily being described in terms of a human being; the inanimate term is usually idiomatic. The only restriction on the number of substitutions is that the connotation is not possible semantically in Anindilyakwa.

wirringaya	'3:1 Class: widowers'
thingaya	'3:2(i) Class: widow'
ningaya	'3:3(i) Class: widower'
warningwakarrngimwantja	'3:1 Class: dentists'
thathingwakarrngimwantja	'3:2(i) Class: female dentist'
naningwakarrngimwantja	'3:3(i) Class: male dentist'
warningkwilyipwa	'3:1 Class: descendants'
thathingkwilyipwa	'3:2(i) Class: female descendant'
naningkwilyipwa	'3:3(i) Class: male descendant'
wirrakwakwa	'3:1 Class: Central Hill clan'
wirranimwakwakwa	'3:1 Class: clan males'
wirrathimwakwakwa	'3:1 Class : clan females'
thathimwakwakwa	'3:2(i) Class: clan female'
nanimwakwakwa	'3:3(i) Class: clan male'
nakwakwa	'3:3(i) Class: Laurence Wurrakwakwa's nickname'

wirrangariya	'3:1 Class babies: humans or animals such as dogs and birds'
thangariya	'3:2 Class baby: female human or non-human'
nangariya	'3:3(i) Class baby: male human'
angariya	'3:4 Class baby: fish, bird'
mwangariya'	'3:5 Class baby: fish, bird'
wirrilhamwikwarra	'3:1 Class: murderers'
thilhamwikwarra	'3:2 Class: murderess or crocodile'
nilhamwikwarra	'3:3(i) Class: murderer'
yilhamwikwarra	'3:3(ii) Class: animate that kills'
alhamwikwarra	'3:4 Class: animate that kills'
mwalhamwikwarra	'3:5 Class: animate that kills'
wirripwipwalanta	'3:1 Class: white people'
thipwalanta	'3:2(i) Class: white woman'
nipwalanta	'3:3(i) Class: 'white man'
apwalantha	'3:4 Class: English words or white man's food'
amwalya	'body fat'
warnimwamwalya	'3:1 Class: Aborigines'
thathimwamwalya	'3:2(i) Class: female Aborigine'
nanimwamwalya	'3:3(i) Class: male Aborigine'
yinimwamwalya	'3:3(ii) Class: living animate with body fat, e.g. koala'
amwamwalya ayakwa	'3:4 Class: true words'
-lyingwa	'to paint'
warnikwilyingwa	'3:1 Class: dancers'

thathikwilyingwa	'3:2(i) Class: female dancer'
nanikwilyingwa	'3:3(i) Class: male dancer'
yinikwilyingwa	'3:3(ii) Class: dancing ground'
amwikwilyingwa	'3:4 Class: bark painting'
akwilyingwa	'3:4 Class: mortuary rite'
mwamwikwilyingwa	'3:5 Class: liniment'

The human feminine Noun Class 3:2(i) and the human masculine Noun Class 3:3(i) also indicate the female and male sexes. The nominal classifiers can also be used with domesticated animals to distinguish the two sexes. The only traditional land mammals to be classified in such a way were probably dingos but all introduced house and farm animals (except nanikwita 'any goat') are now included.

warningwanimpwalhikpwa	'3:1 Class: dingo, dingoes'
thaningwanimpwalhikpwa	'3:2(ii) Class: female dingo'
naningwanimpwalhiklpwa	'3:3(i) Class: male dingo'

wirripwilikwa	'3:1 Class: cattle, buffalo'
thipwilikwa	'3:2(ii) Class: cow'
nipwilikwa	'3:3(i) Class: bull'

wirripwitjikata	'3:1 Class: pussycat(s)'
thipwitjikata	'3:2(ii) Class: female cat'
nipwitjikata	'3:3(i) Class: tomcat'

The Noun Class 3:3(ii) land or sea mammals can be classified as male sex by the use of the classifier with a Noun root that denotes an age (size) and gender classification for humans and dogs. To date, only a few examples have been found in relation to turtles, wallabies

and the Silver Gull. There is one Noun Class 3:5 arboreal item with a contrast between male and female.

warningkwarpwa	'3:1 Class: adult males, men'
naningkwarpwa	'3:3(i) Class: adult male, man'
yiningkwarpwa	'3:3(ii) Class: male turtle or wallaby'
yiningkwarpwithangwa	'3:3(ii) Class: Rainbow Bee-eater'
mwaningkwarpwa mwikwiwara	'3:5 Class: "male" edible white flesh of the Bush Mango'
wirrathitharrngka	'3:1 Class: adult females, women'
thitharrngka	'3:2(i) Class: woman'
yitharrngka yitjarra	'3:3(ii) Class: female Silver Gull'
mwitharrngka mwikwiwara	'3:5 Class: "female" edible yellow flesh of the Bush mango'
wirrakalhka	'3:1 Class: human foetus(s)'
thakalhka	'3:2(i) Class: female human foetus'
nakalhka	'3:3(i) Class: male human foetus'
yakalhka	'3:3(ii) Class: turtle foetus in an unhatched egg'
-warti	'hairy'
wirriwarta	'3:1 Class: dog, dogs'
thiwarta	'3:2(II) Class: female dog, bitch'
nuwarta	'3:3(i) Class: male dog'
yiwarta	'3:3(ii) Class: unborn turtle'

There is another set of common nouns in which the noun class appears to change between two similar items. The traditional name of a particular item is modified by the occurrence of an adjective or noun root in the first order of the complex stem and the noun class is

marked in agreement with the generic term for the item, e.g., shells are in Noun Class 3:4 in agreement with athithira 'shell gen.'). These words have been "engineered" to suit the demand by white people for a name for everything--even older Aborigines who have not been in the discussion will say "that's not a proper name for anything". In context, when comparing unnamed items, there is no misunderstanding of the term.

thimwikwimwirra	'Cowry Shell'
apwingkimwikwimwirra	'(hump-backed) shell like a Cowry'
yiwalhkwirra	'Venus Shell sp.'
anqangkiwalhkwirra	'Lucin Shell'
yilharta	'Mud Whelk'
arrkilharta	'Wendeltrap Shell'
amwingkwilharta	'Sand Creeper'
mwingarniyantha	'Giant Whelk'
arrkimwingarniyantha	'Mitre Shell'
amwingarniyantha	'Stromb Shell'
yiningwakpwitjakpwa	'Pikey Bream'
aningwakpwilyakpwa ~ alhikwiningwakpwilyakpwa	'Snub-nosed Dart'
thirntirnta	'Large-berried Shrub'
alhingkwirntirnta	'Poison Berry Tree'
mwiyarrawa	'Red Kurrajong'
alhingkwimwiyarrawa	'Yellow-ball Flower'

3.4 NOMINAL SUFFIXATION

Inflectional and derivational suffixes can occur on nominals and mark three types of possession, number and case. Inflectional suffixation creates a different form of the same word but derivational suffixation creates a new lexeme which may or may not change its grammatical class.

3.4.1 Possession

Three types of possession are found in nominal suffixation, viz., Genitive/Possessive, Propriative and Kinship. Genitive possession can be either inflectional or derivational, Propriative possession is derivational and Kinship possession is only inflectional.

3.4.1.1 Possessive (Genitive)

Possession in the noun phrase is inflectional and is marked by the suffix -hangwi. The Possessive suffix is attached to the modifier in the possessive noun phrase which does not have concord in its prefixation. Examples are as follows:

mwarliwiyilhangwa wirriyikwayiwa
3:2(ii) emu-POSS 3:1 children
'Emu's children.'

ana ayakwa tjanitilhangwa
3:4 this 3:4 speech (name)-POSS
'This story [is] Janet's.'

wimpwa thapwapwiriilhangwa thimpwala ngakwirriilhangwa
but 3:2(ii) many-POSS 3:2(ii) clothes 1IncPl-POSS

karrawara akingawirtitjinamwa akimwantja
high 1IncPl+3:2 will be climbing tree-LOC
'But we will be putting our many clothes up high in the tree.'

yingilhikana thakina thikwirirrkwilhangwiwa angalya
3:2 went 3:2(ii) that 3:2(ii) broлга-POSS-ALL 3:4 place
'She went to Broлга's place.'

The Possessive suffix is obligatorily affixed to about twenty nouns and usually follows a single noun or adjective root. The two phonologically-conditioned allomorphs are -lhangwi (following a vowel) and its hardened counterpart -thangwi (following a consonant). This usage is derivational.

yirikwitjilhangwa 'Brindled Bandicoot'
 /yi + ri{kwi} + kwitji + lhangwi/
 3:3(ii) body small POSS

thiningkwilhangwa 'Dugong'
 /tha + ningkwi + lhangwi/
 3:2(ii) pointed POSS

yinimwalyithangwa 'Rainbow Bee-eater'
 /yi + {a}ni + mw{i} + alyi{kpwa} + thangwi/
 3:3(ii) n-hfem INALP lips POSS

thimwapwiyanthangwa 'Brown Booby'
 /tha + mwapwi{rrkwi} + yan{tha} + thangwi/
 3:2(ii) short-legged aimless POSS

3.4.1.2 Propriative and Privative

The Propriative suffix 'having' is derivational and follows an adjective or noun root. There are three allomorphs: -mwirra ~ -mwi usually following a root-final vowel and the hardened counterpart -pwi following a consonant. (The form -pwirra has not yet been found.) The optional final syllable rra is considered to be the word-final stem formative (see Section 3.1.2.1). The Propriative suffix and the Comitative case marker share the same form, -mwi ~ -mwirra. There may, in fact, be a semantic overlap between the concept of 'having' and that of 'with' (accompaniment).

alhimwirra 'stirred up sediment'
 /{a} + alha + mwirra/
 3:4 sharp PROP

thimwikwimwirra 'Cowry Shell'
 /tha + mwikwi + mwirra/
 3:2(ii) salty PROP

yilyangwirra /yi + lyang{ka} + mwirra/ 3:3(ii) head PROP	'Ark Shell'
wirrawinyampimwirra /wirr{a} + awinyampi + mwirra/ 3:1(i) angry PROP	'quick-tempered [people]'
apwilhkwiwma /a + pwilhkwi + mwi/ 3:4 head hair PROP	'grass sp.'
yiningwimwarmwa /yi + {a}ni + ngwi + mwar{ngka} + mwi/ 3:3(ii) n-hfem ALP spirit PROP	'native bee sp.'
mwangkarrkpwa /mw{a} + angkarrk{a} + pwi/ NCL hip PROP	'Wild Plum'
mwapwalhpwa /mw{a} + apwalh{ka} + pwi/ 3:5 abdomen PROP	'Peanut Tree'
mwanpwa /mw{a} + arngka ==> an{ka} + pwi/ 3:5 eye PROP	'eye'

The following words illustrate the usage of the basic and hardened forms of the suffix 'having'. Apparently a choice is made to avoid ambiguity. Some first order roots are shortened forms.

mwirirrpwa /mwa + ri{pwi}rr{kwi} + pwi/ 3:5 back PROP	'human back'
mwarirmwa /mwa + ri{pwi}rr{kwi} + mwi/ 3:5 back PROP	'Mango Bark Tree'
awilyapwa /a + wilyi ==> wilya + pwi/ 3:4 one PROP	'one'
ampwilyimwa /{a} + ampw{aka} + wilyi + mwi/ 3:4 pair one PROP	'two, pair'
yiningwingwangpwa /yi + {a}ni + ngwi + ngw{iy}ang{ka} + pwi/ 3:3(ii) n-hfem ALP hand PROP	'four-footed mammals'

The Privative suffix, 'not having', follows a noun or adjective root. It has two allomorphs: -mi usually following a root-final vowel and its hardened counterpart -pi following a root-final consonant. The anticipated form, *-pirra, has not been identified but its absence saves any ambiguity with mwirri [mi^ɻi] ~ pwirri [pi^ɻi] 'wide, fat'.

thathingwithimpwalima 'naked female'
 /th{a} + atha + ngwi + thimpwala + mi/
 3:2(ii) hfem ALP cloth PRIV

nimwimpa 'blind'
 /ni + mwi{r}ng{kwi} + pi/
 3:3(i) eye PRIV

akilyarrpa 'not heavy'
 /[a] + a{n1} + ki + lyarr{ka} + pi/
 3:4 n-hfem ASR bone PRIV

yilharrpa 'Liviston Palm'
 /yi + lharr{ka} + pi/
 3:3(ii) bone (=spine) PRIV

animpinimpa 'shrub sp.'
 /a + nimp1 + ning{ki} + pi/
 3:4 REDUP pointed (=spear) PRIV

3.4.1.3 Kinship possession

Seven Possessive suffixes distinguish the grammatical categories of first, second and third person, singular and non-singular number, and third person masculine and third person feminine. These suffixes are used only with kinship nouns (see Section 3.2.5) and are listed on Table 9.

These suffixes incorporate syllables which have the same form as other nominal prefixation. In the third person singular, Gender morphemes, atha- (human.feminine) or ani- (non-human.feminine), is followed by kpwi; in the third person plural, arra is a variant form of the non-singular morpheme in the Nominal Prefix Nucleus,

TABLE 9: KINSHIP POSSESSION

	1ST PERSON	2ND PERSON	3RD PERSON	
			masc	fem
SINGULAR	arrka	ani	anikpwi	athikpwi
NON-SINGULAR		aningwi	arringpwi	

followed by ngpwi (probably a variant form of kpwi). No derivations are available for the remaining suffixes, except to point out that ngwi- is the Alienable Possession marker.

The following examples contrast the seven Kinship Possessive suffixes with the same root and prefix.

ningwarrka	'he, my father'
ningwanyingpwa	'he, our father'
ningwana	'he, your (sg) father'
ningwaningwa	'he, your (nsg.) father'
ningwanikpwa	'he, his father'
ningwathikpwa	'he, her father'
ningarringpwa	'he, their father'

Possession can be marked twice in the same noun phrase. Kinship Possession is marked by suffixation on the noun head but the modifier can also be marked by the Possessive suffix lhangwi.

wirriwartilhangwa	thirntathikpwa
/wirra + warti + lhangwi/	th{a} + {a}rnt{a} + athikpwi/
3:1(ii) hairy POSS	3:2(ii) mother 3FemSg
'she, the female dog's mother'	

wirringampwilyakwiyilhangwa
 /wirring{a} + ampwily{i} + kwiya + lhangwi/
 3:1FemDu two DU POSS

thirntharringpwa
 th{a} + {a}rnth{a} + arringpwi/
 3:2(ii) mother 3Nsg
 'she, the two [dogs'] mother.'

nganyangwa thirntirrka nayamwa wirranthintha
 /ngaya + lhangwi/ /tha + {a}rnta + {a}rrka/ 3:1 said 3:1 mouse
 "[She is] my mother," Mouse said.

The Kinship Possessive suffix -arrka has some irregular forms. The initial vowel is dropped in the word, thirntirrka 'my mother'; and the flap /rr/ consonant is deleted when there is a preceding stem-final flap, e.g., napwirraka 'my son'.

3.4.2 Number

The three morphemes for Number distinguish dual and plural from the unmarked singular, and a collective unspecific plural. The dual suffix is -kwiyi [k(w)iya]; the plural suffix is -wiyi; and the third suffix is -mwirriyi which means 'and all other similar items near the named one' or 'et cetera'. The Number morphemes can be attached to any or all words in the noun phrase. (Note: The High Vowel Lowering Rule 3 generates the low vowel preceding Number morphemes.) A Restrictive suffix, -mwi ~ -pwi, is used to limit the number of items and can be translated as 'only'.

The dual and plural Number morphemes for the Personified noun classes are redundant as the prefix is also marked for dual or plural, as shown in the last three examples. The trial can be marked by either the dual or plural morpheme.

winingkwanyingwakwiya
 /wi{rri}ni + ngkw{i} + anyingwi ==> anyingwa + kwiyi/
 3:1MascDu MMB KPOSS DU
 'our two mothers' mothers' brothers'

yipwikipwiyakarpwiyikwiya	yiningkwarpwa
/yipwkw{i} + apwiyakarpwiya + k{w}iyi/	3:3(ii) male adult
3:3(ii)Tri three DU	
'three male adult [seagulls]'	

anganthingiwiya	ningakpwirakamwa	amwirntakakina
/a + nganthinga + wiya/	3:3 is making	3:4 those there
3:4 sharp PL		
'He is making a lot of sharp [spears].'		

pwiya	narrimwangkarrnganimwa	mwiwikwayiwawiya
then	3:1+3:5 were covering	/mwi + yikwayiwa + wiya/
		3:5 small (p1) PL
'And then they were covering the small [nuts].'		

wirriyapwarrkiwiya
 /wirra + yapw{i} + arrka + wiya/
 3:1 old SX KPOSS PL
 'my older sisters'

nimwawirilhangwa	winampwilyimwakwiya	warningkwapwilhana
3:3(i) moon-POSS	3:1MascDu two-DU	3:1Pl offspring-KPOSS
'those two of Moon's sons'		

kaniwartanga	winalhakanimwantja
3:1Pl+3:3 will kill	3:1MascDu those-LOC

nanikwanikpwakwiya
 /n{i} + ani + kw{i} + anikpwi + kwiyi/
 3:3(i) n-hfem son KPOSS DU
 'He will kill those two, his two sons.'

The plural suffix *-wiya* can also be attached to a noun which is then the modifier in a noun phrase. The modifier is a mass, not a countable, noun as in most of the above examples.

tiritja	anhingawiya
3:2 dress	3:4 food-PL
'food-covered dress' / 'dress with a lot of food on it'	

atjiringkiwiya	athithira
3:4 soil-PL	bone
'dirt-covered bone' / 'bone with lots of dirt on it'	

naniyawangkwa	yikwiriwiya	ayamwa3:3(i)
old man	3:3(ii) grey hair-PL	3:4 body hair
'[He was] an old man with a long grey beard.'		

The Number suffix, *-mwirriyi* 'et cetera', has only been found to occur with singular prefixation.

thapwirranimwirriya
 /th{a} + apwirr{a} + ani + mwirriya/
 3:3(i) daughter KPOSS ETC
 'your daughter and the other [daughters]'

akwa ngarningka ningkwirra karningkwarpa
 and again 2Pl 2Pl male adults

yikawilyakatjinamwilhangwa mwalhamwikwamwirriya akwa
 2Pl+3:1 teach-ABL 3:5 canoe-ETC and

aningkwamwirriya
 3:4 spear-ETC

'And again, you men should teach [the boys] about the canoe and similar things and the spear and similar things.'

The Restrictive suffix, *-mwi(rra) ~ -pwi*, is adjoined only to numeral adjective roots and limits the number of items. The distribution of the two allomorphs is phonologically-predictable on the basis of dissimilation: *-mwi* follows the word-final syllable /pwi/; *-pwi* follows the word-final syllable /mwi/; and free variation occurs elsewhere. (Note: The intervening vowel is lowered to /a/ as per Vowel Lowering Rule 3.) This suffix has the same shape as the Propriative suffix 'having' and can co-occur with it.

wirriwilyapwamwa 'only one'
 /wirra + wilyapwi ==> wilyapwa + mwi/
 3:1(ii) one:PROP RST

nampwilyimwapwa 'only two'
 /n{i} + ampwilyimwi ==> ampwilyimwa + pwi/
 3:3(i) paired:PROP RST

mwamwangpwalhimwa ~ amwangpwalhipwa 'only five'
 /mwa + mwangpwalha + mwi ~ pwi/
 3:5 five RST

ampwawirimwa ~ amwpawirimwirra 'only a few'
 /{a} + ampwawiri + mwi(rra)/
 3:4 few RST

3.4.3 Case

There are five peripheral cases in Anindilyakwa marked by inflectional clitics. The term clitic is used for suffixes which are

bound morphemes functioning at clause level and attached to more than one grammatical class of words (see Hartmann 1972 re use in tagmemics). Case clitics can be attached to any word except a particle but are usually marked on only one member of the noun phrase--the adjective if there is more than one word.

There is a difference of opinion in linguistic theory as to whether case relationships are expressed only by inflectional suffixes on the noun phrase or whether it is permissible to use prepositions, postpositions or prefixation to express such relationship. Crystal (1985:42) emphasises that the linguistic term case involves only INFLECTIONAL suffixation and, if this is the only criterion, Anindilyakwa has a case system for only peripheral cases. The Benefactive morpheme in Anindilyakwa (Section 6.3.3), however, expresses the same semantic relationship as Crystal's Benefactive case, viz., "a case form whose function in the sentence is to express the notion of "in behalf of"...[with regard to] intended recipients", but cannot be called a case because it is realised by verb prefixation. This seems to me to prevent the same relationship, irrespective of the kind of affixation, from being under the same terminology. It also means that no nuclear cases exist in Anindilyakwa.

In the chapter "The case marking for the major syntactic relations", Blake (1977:6) describes some non-Pama-Nyungan Australian languages being in a separate neutral category. He further states: "We can consider that nouns and pronouns can operate in an ergative system, an accusative system or a neutral system, neutral either because there is no case marking or because there is unique marking for each of the three functions, Subject [intransitive], A[gent] and P[atient]". Anindilyakwa fits into this neutral category because it

has no nuclear case markers on nouns and pronouns but it differs in that verb prefixation is not always unique but in agreement with the grammatical subject (Nominative) or the grammatical object (Accusative). Blake's comment and data (1977: 1,12) for Tiwi which has a similar concord system to Anindilyakwa is: "Tiwi is accusative inasmuch as the functions of Subject [intransitive], A[gent] and P[atient] are represented by a cross-referencing system of bound pronouns prefixed to the verb which operate in a transparently accusative paradigm. The noun phrases are not marked for syntactic case...".

The nuclear cases, Nominative, Accusative and Dative, are discussed in this section but verb prefixation is described in terms of subject or object prefixes elsewhere in the thesis.

3.4.3.1 Nuclear cases

A nuclear case, as opposed to a peripheral case, is defined as one which is cross-referenced to subject and object prefixes in the verb. No case markers occur on the subject and object noun phrases or pronouns but they can occur on the indirect object.

3.4.3.1A Nominative and Accusative cases

The nuclear case system is tentatively regarded as an Accusative system. In discussing case relationships with respect to the Nunggubuyu verb prefixation, Heath (1984:552) states that 'some allomorphic patterns did point towards a hidden nominative/accusative bias'. This analysis, however, is dependent on the assignment of Accusative case to his inverse morpheme (nasal archiphoneme) which distinguishes the inverse object-subject ranking from the direct subject-object ranking in the verb prefixation (see also Heath 1984:375, 555). Anindilyakwa has not been analysed as having an

inverse morpheme but it does have an inverse hierarchical system in the verb prefixation.

The following examples illustrate the cross-referencing of members of the unmarked noun phrase or pronominal to the verb prefixation for transitive or intransitive subject and direct object.

nangkarrina nakina
/n{i} + angkarra + ni/ 3:3 that
3:3 run TNS
'He ran.'

kalyikpwayinamwa aka mwakartimwantja
/ka + liikpw{i} + aya + ni + mwi/ 3:4 wood 3:5 sea-LOC
3:4 float SNsg TNS NPIP
'The wood will be floating in the sea.'

warnimwamwalya nanirringkamwantja
3:1 Aborigines /na{rri} + ni + rringk{a} + a{mwi} + mwantja/
3:1 3:3 see NPIP LOC

yipwikwaya nilhikanamwantja
3:3 that coming /ni + lhik{a} + a{mwi} + mwantja/
3:3 come NPIP LOC
'The Aborigines were watching the approaching snake.'

thikwa kilhikatjimwantja arningkwaya ngayiwa
maybe /ka + lhik{a} + atja + mwantja/ tomorrow 1ExcSg
1ExcSg go TNS LOC

mwitjiniwa yipwawilyakinamwa ningkwiwa
3:4 mission-ALL /yipwa + wilyaka + n{i} + amwi/ 2Sg
1ExcNsg take TNS NPIP
'If I go to the mission tomorrow I will be taking you.'

wirrimwirntiwarna alhingatjirriwiya akwa
/wirra + ∅ + mwirntiw{i} + arni/ 3:4 long-PL and
2Nsg 3:4 divide TNS

arikwitharrpwiwiya
3:4 short-PL
'Divide the long and the short [sticks]!' / 'Sort them [into] long ones and short ones!'

3.4.3.1B Dative case

The Dative case has been used in the analysis of Aboriginal languages to cover several different functions (Blake 1975:35ff). Similar functions in Anindilyakwa are found in di-transitive verbs,

usually marked by the benefactive prefix mwini-. The noun phrase or pronoun in the indirect object is not marked with a distinctive Dative case-marker but by another case clitic. They express the role of beneficiary or possessor and the purposive.

The indirect object is always a human or non-human animate which is cross-referenced to the verb (instead of the direct object). The benefactive prefix almost always follows this indirect object prefix in the verb. The noun phrase or pronoun identifies the beneficiary but can take one of four case markers denoting different types of relationships.

(i) Possessor and assessed

The benefactive the Possessive suffix -hangwa on the noun phrase or personal pronoun in the indirect object denotes that the beneficiary owns the item mentioned in the direct object.

ngarripwikwimwiniyamina	ningkwilhangwa
/ngarripwikwi + Ø + m(w)ini + yam{w}i + ni/	2Sg-POSS
1IncTri 3:4 BENE do TNS	

akina
3:4 that
'We'll do that [work] for you.'

ngayiwa	kingamwinilyiyana
1ExcSg	/ka + nga + m(w)ini + lyily{i} + ani/
	1ExcSg 3:2 BENE send TNS

wirrintjaya ngalihilhangwa
(sympathy) 3:2(i)-POSS
'I will send it instead of her, the poor thing.'

nangamwinakarrnginamwa
/na{ni} + ng{a} + m(w)in{i} + akarrnga + n{i} + amwi/
3:3 (=3:2) 3:2 BENE get water TNS NPIP

akwingwa	thathiyamwarntjathikpwilhangwa
3:4 water	3:2 sister-KPOSS-POSS

'She is getting water for her sister.'

nanimwinangmwimwathamwirra
/na{ni} + ni + m(w)in{i} + angmwimwath{a} + amwirra/
3:3 3:3 BENE steal NPIP

anilhangwa thathlyanikpa
3:3-POSS 3:2 wife-KPOSS
'He [Rainbow] stole his [Bat's] wife for himself [Rainbow].'

nara ningana amwinithakangimwa
not 1ExcSg this /a + m(w)ini + thaka + anga + mwi/
NEV BENE cook TNS PIP

ningkwilhangwa akwalya
2Sg-POSS 3:4 fish
'I will not be cooking the fish for you.'

nara ningkana amwiningatjangimwa
not 2Sg this /a + mwini + ngatja + anga + mwi/
NEV BENE hit TNS NPC

nganyangwa aningwiwilyarra niyamwa
1ExcSg-POSS 3:4 middle 3:3 said
'"Don't be hitting me in the middle of my back!" he said.'

(ii) Purposive

The Purposive mood suffix, -yatha, co-occurs with the Benefactive marker, indicating that the recipient is the goal of the action or the purpose for which something was done. The indirect object is marked in the verb prefixation unlike the use of the purposive suffix for mood (Section 8.1.2.1). This suffix appears to be used only with a free form personal pronoun marked for Possessive case.

ngimwinakarrnginamwa
/{nga} + nga + m(w)ini + akarrnga + n{i} + amwi/
1ExcSg 3:2 BENE get water TNS NPIP

akwingwa nganyangwiyatha
3:4 water 1ExcSg-POSS-PURP
'She is getting water for me.'

nimwinakarrnginamwa akwingwa
/∅ + ni + m(w)in{i} + akarrnga + n{i} + amwi/ 3:4 water
2Sg 3:3 BENE get water TNS NPIP

anilhangwiyatha
3:3(i)-POSS-PURP
'Be getting the water for him!'

The Allative case clitic -wi can be used on the noun phrase or

pronoun in the indirect object with concord in the verb prefix. The meaning is usually purposive but could simply be understood as motion towards the beneficiary.

ngalhiwawa ngamwiniyikatja anhinga
 3:2(i)-ALL /∅ + nga + m(w)ini + yik{i} + atja/ 3:4 food
 2Sg 3:2 BENE deliver TNS

wirriyikwayiwawa
 3:1 children-ALL
 'Take the food to/for her and the children!'

yikwa ngayiwawa
 1IncSg give 1ExcSg-ALL
 'Give it to me!' (Note: The verb prefix means 'you to me')

nartjiyaya yirranimwanthinhayiwa
 3:3 stood 1ExcNsg+3:3 watched-ALL
 'He stood watching for us [to come].'

A pronoun in the Indirect Object can also be suffixed by the Change of Referent suffix -atja. This suffix denotes a change in the actor or agent within a discourse or in a sentence. Its usage can resolve ambiguity between the actor and beneficiary, as in the first example below.

wirringamwiningakpwirakina angalya
 /wirri{nga} + nga + m(w)ini + ngakpwiraka + ni/ 3:4 place
 2FemDu 3:2 BENE make TNS

ngalhatja
 3:2(i)-CofR
 'You two [girls] make the bed for her!'

ngayiwa nganimwinanthiyama anataja
 1ExcSg /nga + ni + m(w)in{i} + anthiy{a} + amwi/ 3:3-CofR
 1ExcSg 3:3 BENE search NPIP
 'I am looking for him.'

3.4.3.2 Peripheral cases

The five peripheral cases are Locative, Ablative, Pergressive, Allative and Comitative. The Pergressive case-markers refer to time and location. Some spatial relationships form paired oppositions in

relation to any given referent, viz., between Locative (stationary in space) versus Progressive (progression through space) and between Ablative (from a space) versus Allative (to a space).

Peripheral case markers are clitics in Anindilyakwa and can be attached to the verb in the absence of an overt noun phrase, in addition to and in agreement with the marker on the noun phrase, and instead of the noun phrase. The meaning of the verb is extended to include the notion expressed by the case marker, e.g., look towards, take from, and the goal of the action usually cross-referenced to the verb by the object prefixes.

3.4.3.2A Locative case

The locative case-marking clitic -mwantja can be translated into English as 'in, on, at, by'. The clitic can refer to either space or time and involves the concept of "stasis" or "stationary-ness" in relation to its referent. In the noun phrase, the case clitic is usually adjoined to only one of the modifiers when the phrase consists of more than one word. The following examples illustrate the occurrence of Locative case marked on the noun phrase.

ampwarriya	arimwamwantja	aka
2Sg sit	3:4 big-LOC	3:4 tree

'Sit next to the big tree!'

tingkiyimwantja	arakpwa	mwiikwitjiyimwantja
3:5 dinghy-LOC	comp.act	3:5 small-LOC

yirripitjayina
 1ExcPl disembarked
 'We went ashore in the small dinghy.'

akana	akwilyipwana	alhitha	anilhangwimwantja
however	3:4 bright	3:4 paint	3:3(i)-POSS-LOC

nanimwathangkwa
 3:3(i) his body
 'However, [Snake had] pretty colours on his body.'

kimwingkwathinamwa aka amwikayarra arningkwayimwantja
 1ExcSg will be digging 3:4 wood 3:4 roots 3:4 tomorrow-LOC

lharrwira
 3:4 afternoon

'I will be digging up the tree roots tomorrow afternoon.'

kampwa akimwakiniyatha ngawa akinimwantja
 therefore 1IncPl+3:4 will tell-PURP cont.act 3:4 that-LOC

mwarrnga ayikwitjiyimwantja
 3:4 night 3:4 Thursday-LOC

'And so we will tell the story on that Thursday night.'

pwiya naniyiwangkwilhangwimwantja alhikira yirrapwilyimwa
 then 3:3(i) old man-POSS-LOC 3:4 house 1ExcPl were staying

'And then we were staying at the old man's house.'

The Locative case-marker -mwantja is the least common way out of three grammatical ways to express accompaniment in Anindilyakwa. The referents are always animates. Semantically, there is still the concept of stationary-ness with regard to the referents/participants. In current data, the Locative clitic expressing accompaniment has been attached only to a noun. (See Sections 3.4.3.2E and 4.1.1.3 for alternative constructions.)

pwi:::ya nampwarrimwa thirntanikpwamwantja
 then 3:3 was sitting 3:2(i) mother-KPOSS-LOC
 'He was sitting with his mother.'

yingil hikana ngalhiwa wirriyikwayiwamwantja
 3:2 sent 3:2(i) 3:1 children-LOC
 'She went with the children.'

nakina niyarthangimwa wirrawimwinyimwantja
 3:3(i) that 3:3 was arriving home 3:1 duck-LOC
 'Rainbow married Duck.' (Lit: he was arriving home with Duck)

When the Locative case clitic occurs with verbs of impact, speech and sight, the noun phrase can be marked for Locative case. Some English glosses do not express the locative nature of the case. The noun phrase can also be marked for object agreement and the verb prefixed by the Benefactive prefix mwini-, as in the last two

examples.

ngalhilhangwa nangalyangpwarra aringkimwantja
3:2(ii)-POSS 3:2+3:2 head:split 3:4 head-LOC

akinimwirra thikwirirrkwimwantja
3:4 that-COM 3:2 broлга-LOC

'Emu hit Broлга on the head with that [stick].'

pwiyā narramwaka wirringwarringpwimwantja yakinihangwa
then 3:1+3:3 told 3:1 father-KPOSS-LOC 3:3(ii) that-ABL
'And then they told their father about that (snake).'

yingilyangkiyamwa thakina thathikwilyampwarrkiyatha
3:2 was thinking 3:2(ii) that 3:2 to trick-PURP

wirrikwalhimwantja
3:1 some-LOC

'She was thinking she would plan to trick some [others].'

narringamwinakwimwirna thakinamwantja
3:1Pl+3:2(ii) put 3:2(ii) that-LOC
'They put the spike in her (the stingray).'

nanimwiningatja yakina alhakpwimwantja
3:3(i)+3:3(ii) hit 3:3(ii) that 3:4 leg-LOC
'He hit it [the wallaby] on the leg.'

The Locative case clitic, -mwantja 'in, on, at, by', can be suffixed to a transitive or intransitive verb. The meaning of the verb is extended to include that of the clitic, e.g., carry on, fit into. The following examples show the verb carrying the case marker in addition to or instead of the noun phrase.

kiwilyakimwantja kingapwikwayininimwantja
2Sg+3:4 will carry-LOC 2Sg+3:4 will carry on head

aringkimwantja ningkwilhangwa anhinga
3:4 head-LOC 2Sg-POSS 3:4 vegetable food

'You can carry your [own] food on your head.'

ana athirrngwarna pwatha karrakayanamwimwantja
3:4 this 3:4 big 3:4 box 3:1+3:4 will be sitting-LOC

wirrimwangpwalha wirriyikwayiwa
3:1 five 3:1 children

'Five children can fit into this big box.'

athithipwirra ningirringkinamwantja
3:4 very similar 1ExcSg+3:4 am looking-LOC
'I am looking at the same one.'

In contrast with the inflectional use of the Locative case clitic, there is another derivational usage in which new noun lexemes are created, mostly geographical names. The case marker indicates that the place or item is "located at or in" the area identified by the preceding stem. The stem is a free form noun with or without its nominal classification. The words describing animates are usually Alienable Possession nouns.

aningwimwikwimwikwimwantja 'Blue-ringed octopus'
/{a} + ani + ngwi + mwikwimwiki + mwantja/
3:4 n-hfem ALP deep sea LOC

naningwakarrngimwantja 'male dentist
/n{i} + ani + ngw{i} + akarrnga + mwantja/
3:3(ii) n-hfem ALP teeth LOC

thathingwimwamwawirimwantja 'Brown Tree Snake'
/th{a} + atha + ngwi + mwamwawiri + mwantja/
3:2(ii) hfem ALP sun LOC

akwilyatjilyatjarrimwirrimwantja 'Seven-mile Beach'
/a + kwilyatjilyatjarrimwirra + mwantja/
3:4 sharpening stone: PROP LOC

mwingwarntimwantja 'Jagged Head'
/mwa + ngwarnti + mwantja/
3:5 rock LOC

The Locative marker replaces the Kinship Possession suffix in the following kinship terms:

wirringarrngwilhimwantja 'they two, her daughters-
/wirring{a} + arrngwilha + mwantja/ in-law'
3:1FemDu dau-in-law LOC

winathangimwantja 'they two, MMB children'
/wi{rri}ni + athanga + mwantja/
3:1MascDu marriageable LOC

3.4.3.2B Ablative case

The ablative case-marking clitic, -hangwi 'from, out of, off', primarily denotes movement from a space or from a point in time, as specified by its referent within the noun phrase.

anatja nipwina naningkwarpa
3:3(i)-CofR 3:3(i) this 3:3(i) man

 nanirringkirkamwa arriparripilhangwa
 3:1+3:3 keeps on looking 3:4 bush-ABL
'The man keeps on looking at them from the bush.'

naningwimwapwalhpwa anatja ningakpwirakatjingwinimwa
3:3(i) bat 3:3(i)-CofR 3:3 was hiding himself

 nakinilhangwa niwirrwilya
 3:3(i) that-ABL 3:3(i) rainbow
'Bat was hiding himself from Rainbow.'

akwalhimwantja niwarmwatjingwinamwirra akinilhangwa akwingwa
3:4 some-LOC 3:3 is standing himself up 3:4 that-ABL 3:4 water
'At other times he is standing up out of the water.'

nilhikana yarringkwa lharrwirilhangwa
3:3 went yesterday 3:4 afternoon-ABL
'He went yesterday afternoon.' (Lit: from the afternoon time)

mwingkiyatha kinilhatjamwirra lharrwirilhangwa
3:5 other-PURP 3:3 will be going 3:4 afternoon-ABL
'He will be going for another afternoon.'

naraka karramwiniwatjiwatjanga angalya
not-INTENS 3:1+3:1 go near 3:4 place

 apwapwirnilhangwa kwiritjimwitja
 3:4 many-ABL 3:4 year
'They never went near to that place after many years.'

The Ablative suffix -hangwi is also used with the English meaning 'about'.

yingarrikarrangimwa mwanimpwilhangwa tjanita
3:2 was writing 3:5 eye-ABL 3:2(i) (name)
'Janet was writing about the eye.'

namwirntakakparthanaka akinilhangwa apwirtha
3:1Pl were scared-INTENS 3:4 that-ABL 3:4 whale
'They were all very scared of the whale.'

When the Ablative case-marking clitic -lhangwi is attached to the verb the meaning can either be 'from (here or there)' or 'about'.

ningilhikatjilhangwa arakpwa ananiwiya
 1ExcSg go-ABL comp.act immediately
 'I am going from [here] right now.'

ningilhikanimwirrilhangwa arakpwa mitjinilhangwa
 1ExcSg was going-ABL comp.act 3:4 mission-ABL

ngilhawirrathinimwirrilhangwa
 1ExcSg was returning-ABL
 'I came back from the mission.'

ngiwilyakinilhangwa ana aka angwiriwa
 1ExcSg+3:4 take-ABL 3:4 this 3:4 wood 3:4 fire:ALL
 'I will take the wood from [here] to the fire.'

wirrimwangkathirra kalhikatjamwilhangwa yantjarrikina
 3:1 white people 3:1 will be going-ABL to there

karringakpwirakiniyatha
 3:1+3:4 will make-PURP
 'White people will be going from [here] to there to make it [house].'

kampwirra yakwitjina angakwipwa amwakalyiwakpwa
 therefore there from there (name)

yirrakakirimwokatjingwinimwilhangwa amwapa
 1ExcNsg were teaching ourselves-ABL 3:4 song
 'Up there at Bickerton Island, we were learning [new] songs.'

ngarramwakinamwa nilhikanimwirrilhangwa yarimwa
 1IncNsg are telling 3:3 was coming-ABL 3:3(ii) big
 'We are telling you about the giant who came [from the mainland].'

3.4.3.2C Pergressive case

There are two pergressive case-marking clitics: the Locative Pergressive morpheme, -lhangwiya 'through, along, across or over a location', and the Time Pergressive morpheme, -wiya 'through or during a period of time'. Both denote movement or progression through space. The clitic -lhangwiya consists of two morphemes: the Ablative case-marker -lhangwi and the Time Pergressive clitic -wiya (see also Section 7.4.2). This derivation has been confirmed by the pronunciation of the four syllables and by Aboriginal literates who

often spell the clitic as lhangwiya.

The following examples of the Locative Progressive case-marking clitic -lhangwiya illustrate its usage within the noun phrase.

pwiya mwamwirikwillhangwiya ampwaka kilhikatjamwa
then 3:5 road-LPRG later 2Sg will be going
'And then, later on, you keep going along the main road.'

akina nayirmangimwirra mwapwilhalhillhangwiya mwakarta
3:4 that 3:4 was swimming 3:5 shallow-LPRG 3:5 sea
'The fish was swimming through the shallow sea.'

nilhikanimwa anganthingillhangwiya amwarta
3:3 was going 3:4 sharp-LPRG 3:4 grass
'He was going through the sharp grass.'

lhikatja mwamwithangkwillhangwiya
2Sg go 3:5 sandhill-LPRG
'Go across the sandhill!'

ampwilyimwillhangwiya ningana ningilhikana
3:4 two-LPRG 1ExcSg this 1ExcSg went
'I went through two [places].'

When the Locative Progressive case-marking clitic -lhangwiya is suffixed to a verb progression through a particular location or (perhaps) continuation of the action seems to be implied.

kilhikatjamwillhangwiya ngayiwa ninganimwalhika
1ExcSg will be going-LPRG 1ExcSg 1ExcSg tracks

yikilhikwamwirrkatjina
1ExcNsg will follow
'I will be going through [the area]; you can follow my tracks.'

ningiwilyakinillhangwiya ngayiwa pwatjikala angalyiwa
1ExcSg+3:4 carried-LPRG 1ExcSg 3:4 billycan 3:4 home-ALL
'I carried along my billycan to [my] home.'

nimwanillhangwiya anilhangwa pwangkwiya
3:3+3:4 picked up-LPRG 3:3(i)-POSS 3:4 axe

yilyakwiyatha
3:3(ii) honey-PURP
'He picked up his axe so that [he could go] for honey.'

The following examples illustrate the occurrence of the Time Progressive case-marking clitic (TPRG), -wiya 'during that

time'. It is usually affixed to adverbial nouns but can occur on other words in the noun phrase.

yikwina awilyiwilyapwawiya
 1ExcSg/2Sg give 3:4 REDUP:one-TPRG
 'Give me one at a time!'

ngayiwa ningalhalhikatjamwa ningingarringarranamwa
 1ExcSg 1ExcSg keep going 1ExcSg keep visiting

 nganyangwa chirntirrka athiwayiwiya
 1ExcSg-POSS 3:2(i) mother-KPOSS for a while-TPRG
 'I always go and visit my mother for a few days.'

ngayiwa ningampwarrnga athinipwawiya akwitjina
 I I sat soon-TPRG there

 kampwirra ningkwiwa aritjilhangwa
 therefore you behind
 'I got there early and so you [followed] later.'

When the Time Progressive case-marking clitic, -wiya (progression through time), is attached to the verb the imperfective aspect suffix often co-occurs. The clitic indicates the continuation of the action over a period of time.

ningikwilharritjinawiya akwingwa katinimwantja
 1ExcSg+3:4 am dropping-TPRG 3:4 water 3:4 garden-LOC
 'I am watering the garden.' (Lit: I am dropping water)

yingingwathanawiya ampwaka
 3:2 is crying-TPRG later
 'She is still crying.'

ningithakinawiya ampwaka amwathangkwa angwirimwantja
 1ExcSg+3:4 is cooking-TPRG later 3:4 flesh 3:4 fire-LOC
 'I am still cooking the meat on the fire.'

ningimwangkarraniwiya mwamwawirawa ngayiwa
 1ExcSg+3:5 run-TPRG 3:5 sun (=clock)-ALL 1ExcSg
 'I will go [and find out] the time.'

3.4.3.2D Allative case

The Allative case-marker, -wi 'to, towards', denotes movement to or towards a space (identified by its referent within the noun

phrase). The following examples illustrate the Allative case-marking clitic in a noun phrase where the meaning is 'to, towards'.

narrimwathiwarrka	arakpwa	mwarimwi	mwarra	mwarimwi <u>wa</u>
3:1+3:4 tied	comp.act	3:5 big	3:5 rope	3:5 big-ALL

mwitjiyanga

3:5 boat

'They tied the big rope to the big boat.'

akwa	kampwirra	nimwarntharrkina	angarripa	yipwirathi <u>wa</u>
and	therefore	3:3 pointed	this way	3:3(ii) wallaby-ALL

'Therefore he pointed this way towards the wallaby.'

narringka	apwirthi <u>wa</u>
3:5/3:4 looked	3:4 whale-ALL

'The shark looked towards the whale.'

nanikwirthaka	yakina	wirrakina	warnimwamwalya
3:1+3:3 walked round	3:3(ii) that	3:1 those	3:1 people

niwarrikpayina

3:1+3:4 threw

angwarnta

3:4 rock

yakiniwa

3:3(ii) that-ALL

yingarna

3:3(ii) snake

'They walked all around that [snake] and threw rocks towards the snake.'

The Allative case-marker can also be translated as 'about' when it is used with verbs of speech and thought but it still retains an underlying notion of these being directed towards the addressee.

kampwirra	karningmwa	yikangkirratjamwa
therefore	2Pl knowledgable	2Pl will be thinking

nipiniwa

3:3(i) this-ALL

nantjarrngalyilya

3:3(i) boy

akwa thingirwa

and 3:2(ii) clay-ALL

'Thus you will be thinking about this boy and about the clay.'

The Allative case-marking clitic can also be used to denote the goal or purpose towards which a person is aiming. The English gloss in such noun phrases is 'for'. Note that the Purposive mood clitic -yatha co-occurs with the Allative case-marker -wi in the last example (see Section 8.1.2.1).

yingilhawirratha ampwaka akpwiringkimwantja
 3:2 returned later 3:4 dry land-LOC

yingiringkwiringkwapwatjingwiniwa
 3:2 kept covering herself-ALL
 'She returned later to dry land for the purpose of covering herself.'

yingitjathanamwa yingakpwirrangkinamwa anhingawa
 3:2 is emerging 3:2+3:4 is looking for 3:4 food-ALL

alyarrngwalyilya
 3:4 night
 'She (the echidna) comes out looking for food at night.'

ngilhikatjamwa akwalyiwa mwithalyimwawa
 1ExcSg+3:4 am going 3:4 fish-ALL 3:5 river-ALL
 'I am going to the river for fish.'

kilhikatjiyatha ningana akwingwiwa
 1ExcSg go-PURP 1ExcSg this 3:4 water-ALL
 'I will be going for water.'

3.4.3.2E Comitative case

The Comitative suffix, -mwi(rra) ~ -mwi 'with', 'by means of', denotes instrument and accompaniment. The following examples show the instrumental usage.

tjirrilhangimwa mwitjiyanga yirrakina yirrilhikanimwa
 3:3(i) Jerry-POSS-COM 3:5 boat 1ExcPl those 1ExcPl were going

mwithirrngwarnimwa arapwiyimwitha
 3:5 big-COM (name)-COM-TRM
 'We were going in Jerry's big boat, the Arabia.'

yakina yipwiratha nilhikanimwa anilhangwimwa
 3:3(ii) that 3:3(ii) wallaby 3:3 was going 3:3(ii)-POSS-COM

apwiyarpwiwa alhika wipwirra yikwalha
 3:4 four 3:4 foot like 3:3(ii) some

yiningwingwangpwa
 two-handed animals
 'The wallaby was going along on his four feet like other four-footed animals.'

narimwithangwa nilyikwanimwa thingirimwirra
 3:3(i) big-POSS 3:3 was painting 3:2(ii) clay-COM

anilhangwa nanimwathangkwa
 3:3(i)-POSS 3:3(i) his body
 'His oldest son was painting his body with white clay.'

nara nanimwa ayikwitjiya wimpwa arimwimwirra
 not 3:4 this-COM 3:4 small but 3:4 big-COM
 'Not with the small one but with the big one.'

akilhangwa yipina arikwitharrpawamwantja
 3:4 tree-ABL 3:3(ii) this 3:4 short-LOC

angapwa kwimimwana yakina
 3:4 that there 2MascDu+3:3 will pick up 3:3 (ii) that

ayarrkamwa
 3:4 hand-COM
 'You can get it [goanna] off a short tree with [your] hands.'

The Comitative case is also used to denote accompaniment. The meanings vary in the following examples but some appear to have the semantic concept of 'having'.

pwatjikala nalyangpwirrkwina akwingimwa
 3:4 billycan 3:4 is filled 3:4 water-COM
 'The billycan is filled with/by water.'

kingilhatjamwa yiwilyapwamwirra yimwawira
 3:2 will be going 3:3(ii) one-COM 3:3(ii) moon
 'She will be going for a month.'

Question: Angampwimwirra kwiwilyakinemwa ningkana
 3:4 which? 2Sg will be taking 2Sg this
 'Which one will you be taking?'

Answer 1: nara ananimwa ayikwitjiya wimpwa
 not 3:4 this-COM 3:4 small but
 arimwimwirra
 3:4 big-COM
 'Not the small one but the big one.'

Answer 2: Athirrngwarnimwirra pwangkwilya
 3:4 big-COM 3:4 tomahawk
 'The biggest axe.'

The suffixation of the Comitative case clitic to a verb has only rarely been found. The problem may lie in its similarity to the past imperfective suffix and further investigation is necessary.

winalhangapamwirrathingwa arakpwa nanilhikilhikilhalha
3:1MascDu-COM-? comp.act 3:1MascDu kept making a noise

nanapwirrmpwatjangimwirra akwingwimwantja
3:1MascDu splashing in-COM 3:4 water-LOC
'Those two [boys] kept making a noise by splashing in the water.'

The morphological structure of the free form personal pronouns differs from that of all other word classes. The Nominal Prefix Nucleus occurs in the Pronoun Nucleus to which is added a stem formative. There are, however, some differences in the two sets of morphemes. Pronouns differ from nominals in that they are not suffixed by the Number morphemes; they are similar to nominals in that they are marked by the same case clitics. Pronouns, however, are uniquely marked for Change of Referent within a text (between sentences) or within a clause.

There are eighteen personal pronouns which distinguish the same grammatical categories for person, number and gender as in the Nominal Prefix Nucleus (see Section 3.3.1). Only four further pronouns are added with the marking of trial.

Personal Pronouns are used when referring to human animates or non-human animates that assume the role of humans in the traditional Dreamtime stories, e.g., they speak, think, evaluate, fight with an implement, or alter their appearance. Such non-human animates are arbitrarily classified as either feminine (Noun Class 3:2(ii) THA), masculine (Noun Class 3:3(ii) YI) or the non-singular (Noun Class 3:1 WIRRA).

4.1 PRONOUN STEM

A pronoun consists of an obligatory the Pronoun Nucleus and a stem formative.

TABLE 10: DEEP STRUCTURE MORPHEMES OF PRONOUN NUCLEUS

	PERSON	NUMBER	GENDER/NUMBER
NON-SINGULAR			
1ST INCL	ngakwi	rra nsg	nga
1ST EXCL	ya		hfem hmasc
2ND	ningkwi		
3RD 3:1	apwi		pwakwirra tri
SINGULAR			
1ST INCL	yakwi		
1ST EXCL	ngaya		
2ND	ningkwi		
3RD 3:2(1)	nga		
3:2(11)	nga		
3:3(1)	ani		
3:3(11)	yi		
3:4	ã		
3:5	mwa		
			ngalha ni
			non-hmasc hmasc

4.1.1 Pronoun nucleus

The grammatical categories in the Pronoun Nucleus are Person, Number and Gender/Number. Table 10 shows the deep structure form of the morphemes in these categories.

The morphemes in the Nominal Prefix Nucleus and the Pronoun Nucleus differ in some forms. A comparison of the deep structure morphemes for the person category is shown in Table 11.

TABLE 11: COMPARISON OF PRONOUN & NOMINAL PERSON PREFIXATION

		PRONOUNS	NOMINALS
NON-SINGULAR			
1ST	INCL	ngakwi	nga
	EXCL	ya	ya
2ND		ningkwi	kwi
3RD	3:1	apwi	wi
SINGULAR			
1ST	INCL	yakwi	ya
	EXCL	ngaya	ninga
2ND		ningkwi	ningkwi
3RD	3:2	nga	tha
	3:3(i)	ani	ni
	3:3(ii)	yi	yi
	3:4	a	a
	3:5	mwa	mwa

Totally different morpheme shapes are used for first person exclusive singular and third person Noun Class 3:2 but the same morphemes are used for first person exclusive non-singular, second person singular, and for third person Nominal Classes 3:3(ii), 3:4 and 3:5.

The remaining morphemes that differ are usually shortened in some way in the Nominal Prefix Nucleus. In most instances, the initial syllable is deleted, the exception being in the first

inclusive non-singular where the second syllable is deleted to make the non-singular prefixes symmetrical in the nominals. In the third person non-singular nominals, the word-initial consonant is lenited after the deletion of the initial syllable.

The Number morphemes for the Pronoun Nucleus and the Nominal Prefix Nucleus are identical but Gender/Number has additional forms in the pronouns. The trial morpheme pwikwi- for the nominals has an additional non-singular morpheme rra- following that morpheme in the pronouns. A distinction between human masculine and non-human.masculine co-occurs with the singular Person morphemes only in the pronouns. The composite forms in the surface structure of the personal pronouns (excluding trial) are shown in Table 12. (See Section 3.3.1 for the derivations of dual forms.)

TABLE 12: PRONOUN NUCLEUS (SURFACE STRUCTURE)

PERSON/NUMBER/GENDER				PRONOUN NUCLEUS
1ST	INCL		PL	ngakwirri-
	EXCL		PL	yirri-
2ND			PL	ningkwirri-
3RD	3:1		PL	apwirri-
1ST	EXCL	HFEM	DU	yirringi-
	EXCL	HMASC	DU	yini-
2ND		HFEM	DU	ningkwirringi-
		HMASC	DU	ningkwirri ~ ningk(w)ini-
3RD		HFEM	DU	apwirringi-
		HMASC	DU	apwirri ~ ap(w)ini
1ST	INCL		SG	yakwi-
	EXCL		SG	ngayi-
2ND			SG	ningkwi-
3RD	3:2		SG	ngalhi-
	3:3(i)		SG	ani-
	3:3(ii)		SG	yingalhi-
	3:4		SG	angalhi-
	3:5		SG	mwingalhi- ~ mwangalhi-

The pronoun system in Anindilyakwa is not unit-augmented (see Glasgow 1966, Sharpe 1972:86, McKay 1979). Such systems require only one trial form and Anindilyakwa has a trial counterpart for each plural form. In this respect, the Anindilyakwa pronoun system differs from that for Nunggubuyu (Warren 1982:41). Table 13 sets out the pronouns in a similar form to that used for the unit-augmented or 1-2 system.

In Table 13, the first person singular forms for inclusive and exclusive do not correlate with those for the non-singular, i.e., one would expect the ngaya and yakwi to be reversed to show consistency. The syllable kwi in the singular inclusive forms is the shortened form for second person (see Section 3.3.1 Table 6). The internal structure of the deep structure morphemes is as follows:

1st exclusive singular	ngaya 1ExcSg		
1st inclusive non-singular	nga{ya} 1ExcSg	kwi 2nd	rra Nsg
1st inclusive singular	{nga}ya 1ExcSg	kwi 2nd	
1st exclusive non-singular	ya 1IncSg		rra Nsg

As anticipated, the second person is not marked in the exclusive pronouns. The first exclusive non-singular builds on the first inclusive singular and not the first exclusive singular. Such building is found in the unit-augmented system. (Note: In the first inclusive, the absence of a Number prefix indicates that 'you and I' is a single complex speaker/addressee interaction.)

4.1.1.1 Person

The shapes of the first order Person prefix are irregular for

TABLE 13: PRONOUN NUCLEUS SYSTEM

NUMBER	1ST PERSON	1ST/2ND PERSONS	2ND PERSON	3RD PERSON
SINGULAR FEM MRSC	ngaya	yaku	ningkui	nga ani
DUPL FEM MRSC	yirringa yirringi	(no pronoun form)	ningkuirringa ningkuirringi	apuirringa apuirringi
TRIAL	yirripwikuirra	ngarripwikuirra	ningkuirripwikuirra	apuirripwikuirra
PLURAL	yirra	ngakuirra	ningkuirra	apuirra

first person but can be seen to originate from the first singular form ngaya which is shown as exclusive because, like other exclusive pronouns, it excludes any addressee. All first person morphemes incorporate one of these two syllable, i.e., nga or ya. Such alternatives avoid ambiguity.

ngakwirriwa 'we all'
 /nga{ya}kwi + rra + wi/
 1IncPl nsg SF

yirringiwa 'we all [but not you]'
 /{nga}ya + rra + nga + wi/
 1ExcSg nsg HfemDu SF

The second person morpheme ningkwi is regular for singular and non-singular. Its shortened form kwi also occurs in the first person inclusive pronouns as part of the composite morpheme (otherwise the Word-medial Neutralisation Rule 2 would apply.)

yakwiwa 'you and I'
 /{nga}ya kwi + wi/
 1ExcSg 2nd SF

ngakwirriwa 'we all'
 /nga{ya} kwi + rra + wi/
 1ExcSg 2nd nsg SF

The morphemes for third person show a distinction between the non-singular apwi and the five non-singular pronouns allied with the respective Nominal Classes.

4.1.1.2 Number

The Number category immediately follows the Person category. Singular number is unmarked and non-singular number is obligatorily marked by rra-.

ningkwi- /ningkwi/ 2nd singular

ningkwirringi-	/ningkwi + rra + nga/	2nd hmasc dual
ningkwirri-	/ningkwi + rra /	2nd plural
apwirringi-	/apwi + rra + nga/	3rd non-h.masc dual
apwirri-	/apwi + rra /	3rd plural

The absence of any marking of non-singular in the first person inclusive form yakwi 'you and I' led to its placement as a singular form. The interaction between speaker and addressee thus seems to be regarded as a single complex unit--one in which there is a cohesive relationship between the two persons, i.e., an underlying semantic concept of pairedness or duality.

4.1.1.3 Gender/Number

The Gender/Number category follows the Number category in third order in the Pronoun Nucleus. With non-singular person morphemes, there is a distinction between the human masculine ni- and the human feminine nga-, both of which also incorporate the concept of duality. The following examples illustrate the Gender/Number morphemes. The coalescence is the result of Cerebralisation (Section 2.5.2.3) and subsequent loss of retroflexion (Section 2.11.2).

apwirringiwa		3rd hfem dual
/apwirra	+ nga + wi/	
3:1	hfem SF	
yirringiwa		1st excl hfem dual
/yirra	+ nga + wi/	
1ExcPL	hfem SF	
ningkwirniwa		2nd hmasc dual
/ningkwir{ra}	+ ni + wi/	
2Pl	hmasc SF	
yiniwa		1st excl hmasc dual
/yi{rri}	+ ni + wi/	
1ExcPl	hmasc SF	

The Gender/number morphemes which follow the Person morphemes only occur with the third person Nominal Classes.⁴ The non-human.masculine (i.e., not human masculine) ngalha- contrasts with the human masculine ni-. Thus no contrast exists between the singular and dual human masculine morphemes but does exist between the two human feminine morphemes, nga (human feminine dual) and ngalha (human feminine singular).

In the following examples, reduction in the morphemes for Nominal Classes 3:2 and 3:3 is created by Haplogy (Section 2.5.2.1).

aniwa 'he'
 /a{ni} + ni + wi/
 3:3(i) h-masc SF

ngalhiwa 'she'
 /{nga} + ngalha + wi/
 3:2 n-h-masc SF

yingalhiwa 'it'
 /yi + ngalha + wi/
 3:3(ii) n-h-masc SF

In Modern Anindilyakwa, the third person pronouns have been reduced to two forms by the deletion of the Person prefixes for Nominal Classes 3:3(ii), 3:4 and 3:5. This results in a contrast between ani- (human masculine) and ngalha- (not human masculine). The full forms, yingalhi-, angalhi-, mwingalhi-, have been elicited from the older generation but are not known by the younger people. Thus ngalhiwa is used for all Nominal Classes except 3:3(i). The following examples illustrate the current usage which has only been found in texts suffixed for Change of Referent.

Footnote 4: There is no indication as to whether this gender contrast should be analysed as part of the Person category or the Gender/Number category. The word-medial neutralisation of the Person morphemes, however, has influenced the decision.

ngayiwa ngilhikatja mwana atjingkwipwapwa ngalhatja
 1ExcSg 1ExcSg go CSL 3:4 sick-CSL 3:2(1)-CofR
 'I go because she [is] sick.'

yirrapwirraranimwa tiraka wimpwa tingkiyi
 1IncPl were waiting for 3:5 truck but 3:5 dinghy

ngalhatja nimwangkarranimwa arripwatja angalyiwa
 3:5-CofR 3:5 was running that way 3:4 home-ALL
 'We were waiting for the truck but the dinghy was going home
 that [other] way.'

napwikwimwangwirrkwana mwinhingiwa wimpwa ngalhatja
 3:1Tri+3:5 looked for 3:5 zamia nuts-ALL but 3:4-CofR

aningwathinipwa awalyiwa
 3:4 flowers 3:4 ripe
 'The three of them looked for zamia nuts but the flowers [were just]
 coming out.'

Trial is optionally marked by pwikwirra- which can be added to the four plural forms. The first person is again irregular in that ngakwirra is reduced to ngarra, a reduction not consistent with any of the phonological rules. Trial is used only when the speaker is being specific in identifying three people--in other instances the more general plural form is used. The symmetrical patterning of the trial can be seen by the following alignment:

1st inclusive trial	ngarripwikwirri-
1st exclusive trial	yirripwikwirri-
2nd trial	ningkwirripwikwirri-
3rd trial	apwirripwikwirri-

When a male and a female person interact there is an honorific system in which the dual marker is the opposite gender to the speaker.

yirrapwikwayinimwirra anhinga wirriyikwayiwa akwa
 1ExcTri+3:4 were sharing 3:4 food 3:1 children and

yirringiwa
 1ExcFemDu
 'We [my wife and I] were sharing the food with the children.'

winilhikatja ningkwirniwa niyamwa
 2MascDu go 2MascDu 3:3 said
 '“You [female] go with him,” he said.’ (Lit: you two males go.)

The dual free form pronouns occur when two persons share the same activity, thus highlighting the cohesive nature of the relationship. The two people are usually of the same sex.

yakwiwa yakwilhikatja yakarntakatja akwalya
 1IncSg 1IncSg go 1IncSg+3:4 will spearfish 3:4 fish
 ‘Why not come spear-fishing with me?’

ngarrilhikana apwirringiwa
 3:1FemDu went 3:1FemDu
 ‘She went with her.’ (Lit: the two women went)

yirringiwa ngilhikanimwa
 1ExcFemDu 3:1FemDu was going
 ‘I [female] was going with her.’ (Lit: we two were going)

4.1.2 Stem-formative -wi

The stem formative -wi follows the Pronoun Nucleus and precedes all other suffixation. It could possibly be analysed as the subject and object marker on free form pronouns. The reasons for positing this morpheme as a stem formative are as follows:

- (i) the stem-formative -wi also occurs with nominals when one of the set of first order roots is in second (word-final) order. This parallels the change from a word-initial position for the Nominal Prefix Nucleus to a word-final position as the pronoun nucleus.
- (ii) if the suffix is regarded as the case marker, then some of the peripheral (adverbial) cases must be said to be marked for Nominative or Accusative as well as for the peripheral case, e.g., Kwa lhikatja ngayiwa-mwantja! ‘Come with me!’. Multiple case-marking does occur in other Aboriginal languages

but not usually in this order (Dench & Evans 1988:28).

(iii) by positing the suffix as a stem-formative, both the free form pronouns and nominals can be treated as unmarked for subject and object. This is not necessarily significant because there is a contrast in other Australian languages.

The following examples illustrate the occurrence of the stem formative in the subject. Such pronouns are unmarked for case in contrast with those that occur as object. (Note: The object pronouns may include the stem formative but are always marked for a peripheral case.)

nimwantharrka	<u>aniwa</u>	mwakina	mwingarikwa
3:3+3:5 pointed	3:3(i)	3:5 that	3:5 fishing line

'He aimed the fishing line.'

arntakatja	<u>ningkwiwa</u>	ananiwiya	akwalyiwa
2Sg spearfish	2Sg	now	3:4 fish-ALL

'You spear-fish for fish now!'

nara	<u>ngayiwa</u>	alhikangimwa
not	1ExcSg	not going

'I am not going.'

The stem-formative almost always occurs when the free form pronoun is the subject or object of the sentence. Even though the stem formative is not obligatory, some of the younger Anindilyakwa literates or editors will add it when transcribing or checking texts recorded by the older people.

ningapwirangkinamwirra	<u>ngaya</u>	yiningwingwangpwiwa	ningana
1ExcSg am finding	1ExcSg	3:3(ii) mammal-ALL	1ExcSg this

'I am going to find some land mammals.'

<u>ngalha</u> (~ ngalhiwa)	angilhikatja	tirakiwa
3:2(i)	let her go	3:5 truck-ALL

'Let her go in the truck.'

4.2 PRONOUN SUFFIXATION

Pronouns can be suffixed by three derivational suffixes which are found only in pronouns and by the Possessive suffix -lhangwi which also occurs with nominals and demonstratives. Pronouns are inflected for the peripheral cases and by a Change of Referent marker.

4.2.1 Derivational

The three derivational suffixes are -apwakwiyi 'in isolation'; -ampwirri 'in rotation'; and -kwapwi 'in addition'.

The derivational suffix, -apwakwiyi [apwakiya] 'alone, in isolation', follows the Pronoun Nucleus and replaces the stem formative -wi. This replacement may, however, be simply a deletion by Haplology. There is also a variant form, -a(pwa)pwilhangwi, in which there are two morphemes. In the first morpheme, the third syllable regressively assimilates to the second and the final syllable yi is dropped; the second morpheme is probably the Possessive suffix -lhangwi.

ngal <u>hapwakwiya</u>	angiwilyakina	anhinga
3:2(i) alone	let her carry	3:4 food
'Let her take the food by herself.' / 'Let her carry her own food.'		

ngal <u>hapwapwilhangwa</u>	angiwilyakina	anhinga
3:2(i) alone	3:2 let carry	3:4 food
'Let her take the food by herself.'		

ningingangakpwiraka	ngay <u>apwakwiya</u>	thaka	tiritja
1ExcSg+3:2 made	1ExcSg alone	3:2(ii) this	3:2(ii) dress
'I made this dress myself.'			

yikilhikatja	yangkwirranga	ningkwirrap <u>wakwiya</u>
2Pl will come	to here	2Pl alone
'You should come along here on your own.'		

The suffix, -ampwirri [empiri] 'in rotation, in turn', follows the Pronoun Nucleus and replaces the stem-formative -wi. The derivation of the morpheme is not known but it may be associated with

the same form in the verb 'to wait'. A variant form, -ampwilhangwi [amp^w u^lŋwu], has two morphemes: the first morpheme ampwi is the shortened form of -ampwirri which is followed by an obligatory Ablative case clitic -lhangwi.

ngal <u>hampwirra</u>	angi <u>wilyakina</u>	anhinga
3:2(i) rotating	3:2 let carry	3:4 food

'It's her turn to take the food.'

pwiya	ngarningka	ngayiwa	ngay <u>ampwilhangwa</u>
then	again	1ExcSg	1ExcSg rotating

ningak <u>pwirranga</u>	athikalyik <u>pwa</u>
1ExcSg+3:4 found	3:4 lily

'Then I, in my turn, found a lily.'

akwa	narringi <u>wartanga</u>	nakina	ap <u>wirringampwilhangwa</u>
and	3:1FemDu+3:3 hit	3:2(i) that	3:1FemDu rotating

'And the two women, in their turn, hit him.'

The suffix, -kwapwi 'in addition', does not immediately follow the Pronoun Nucleus but occurs after the Change of Referent marker, -atja. There is justification semantically for this co-occurrence because the suffixed pronoun always involves a change of referent.

ngalhatjik <u>wapwa</u>	yimwarntaki <u>wapwa</u>	kinamp <u>wilyamwa</u>
3:2(i) additional	3:3(ii) lizard	3:3 will be staying

athirrim <u>wantja</u>
3:4 hole-LOC

'The blue-tongue lizard also might be living in a hole.'

anana	ngalhatjik <u>wapwa</u>	ngalhil <u>hangwa</u>
3:4 this	3:2(i) additional	3:2(i)-POSS

'This [is] for her too.'

yalhakwa	ngantjik <u>wapwa</u>	ngarntakatja	akwalya
here	1ExcSg additional	let me fish	3:4 fish

ananim <u>wantja</u>	angalya
3:4 this-LOC	3:4 place

'Let me also fish at this place.'

4 .2 Inflectional

The Possessive suffix -lhangwi follows the Pronoun Nucleus

and replaces the stem formative -wi. It is used for Possessive case within the noun phrase but can also be used in the indirect object. (Note: There are other assimilated variants of this suffix (see Section 2.7.2).)

ampwaka ningingararrimatjinawiya thimpwala yakwilhangwa
 later 1ExcSg+3:2 am drying-TPRG 3:2(ii) dress 1IncSg-POSS
 'I am still drying our dresses in the sun.'

tjayi lhikatja anana nganyangwa angalya
 away 2Sg go 3:4 this 1ExcSg-POSS 3:4 place

karntakatjiyatha akwalyiwa
 1ExcSg+3:4 will spear-PURP 3:4 fish-LOC
 'Go away! This is my place to fish.' (Lit: for fishing).'

yiningapwa ngakwirrilhangwa yikwithikwitha
 3:3(ii) good 1IncPl-POSS 3:3(ii) chest
 'We feel good now.' (Lit: our chests are good)

kingakwina ana ngalhilhangwa tjiwirra
 1ExcSg+3:2 will give 3:4 this 3:2(i)-POSS 3:4 book
 'I will give this book to her.'

wakarrngina akwingwa yakwilhangwa
 2Sg+3:4 get water 3:4 water 1IncSg-POSS
 'Get the water for us!'

kithakinamwa angwirimwantja ningkwilhangwa
 1ExcSg+3:4 will be cooking 3:4 fire-LOC 2Sg-POSS
 'I will be cooking it on the fire for you.'

The Change of Referent suffix is found only in the pronouns and follows the Pronoun Nucleus. It indicates a change in the dramatic personae and is used for anaphoric reference in non-reported speech in discourses or in the second clause within a sentence. In this context, it is always cross-referenced as the subject of the verb.

ngaya mwama mwtjijalya nganyangwa ninganingkwalyirra
 1ExcSg 3:5 this 3:5 beach 1ExcSg-POSS 1ExcSg Mamarika
 "'I, the Mamarika, own this beach," he said.

ningana niyamwa. Ningkwiwa angalhipwa
 1ExcSg this 3:3 said 2Sg that side
 "You [own] the beach

mwitjiyalya alhilhiyangilhangwa niyamwa anatja.
 3:5 beach (name)-ABL 3:3 said 3:3(i)-CofR
 on that side, from Aliliyanga," the other man said.

Nalhilhiyanga niwilyapwa nakina anatja
 3:3(i) Amagula 3:3(i) one 3:3(i) that 3:3(i)-CofR
 This one [was] an Amagula; that other one [was]

naningkwalyirra niwilyapwitha.
 3:3(i) Mamarika 3:3(i) one-TRM
 Mamarika.'

yantjarra nakaka nilhikana thathimwingkwirrawa
 this way 3:3(i) this 3:3(i) went (name)-ALL

anatja angarripa amwirakiwarrikwa
 3:3(i) that way (name)
 'He [Horace] went this way to the place, Dadimungkwurra; he
 [Nangbinarra] went that way to Amirakuwarrikwa'.

arripwilayina mwapwarta yaya wimpwa ngalhatja
 3:5 aeroplane 3:5 agile pace but 3:5-CofR

tiraka mwanitjiyangma yaya
 3:5 truck 3:5 weak pace
 'An aeroplane goes faster than a car.' (Lit: the aeroplane [has]
 a fast pace but the truck a weak pace.)

ningkwa apwapwirna akina wimpwa ngantja athirrapwa
 2Sg 3:4 many 3:4 that but 1Sg-CofR 3:4 few
 'You [have] lots but I [have] a few.'

Another usage of the Change of Referent suffix is in the di-
 transitive clause in which this form of the pronoun occurs in the
 indirect object (see also Section 3.4.3.1B). The semantic concept is
 still one of marking the change from the participant in the subject to
 a different participant in the indirect object.

ngamwiningakpwirakina angalya ngalhatja
 2Sg+3:2 make 3:4 place 3:2(i)-CofR
 'Make the bed for her!'

kilhikatjimwantja ningkwiwa ngantja
 2Sg go-LOC 2Sg 1ExcSg-CofR

yikimwinipwayantanamwa apwila akwa awirintja
 2Sg/1ExcSg will be buying 3:4 apple and 3:4 orange
 'When you go [shopping] you will be buying an apple and orange
 for me.'

nganiyarriya wirrintjaya apwirringatja
 (empathy) (sympathy) 3:1FemDu-CofR
 '[I] feel very sorry for the two women.'

The Locative, Ablative, Allative, Pergressive and Comitative case clitics can be attached to the free form or the possessive pronouns, i.e., the case marker follows the stem formative -wi or the Possessive suffix -lhangwi. (Note: The Time Pergressive clitic apparently involves pergression rather than juxtaposition.)

wirrakina wirratjitja nanirntarrka aniwamwantja
 3:1 that there 3:1 bird 3:1+3:3 grabbed 3:3(i)-LOC
 'That bird grabbed onto him.'

nanaka ngayiwamwantja
 3:3(i) this 1ExcSg-LOC
 'The man [is] near me.'

akina ayakwa yirrilyalyingpwikayinimwa
 3:4 that 3:4 speech 1ExcPl were discussing

 ngakwirrilhangwilhangwa wirriyikwayiwa
 1IncPl-POSS-ABL 3:1 children
 'We were talking about our children.'

amwirntakakina nalhawirrathinimwa apwirriwawa
 3:4Pl those there 3:1Pl were returning 3:1Pl-ALL
 'Those [spears] kept returning to them.'

ningilyilyangimwa ayakwa ngalhiwawa.
 1ExcSg+3:4 was delivering 3:4 speech 3:2(i)-ALL
 'I was delivering the message to her.'

ningkwiwilhangwiya yirrayiwarna
 2Sg-LPRG 1ExcSg+2Sg follow
 'I followed along in your [tracks].'

ngayiwawiya kampwarriya
 1ExcSg-TPRG 2Sg sit
 'You should [come and] sit close to me!'

kwilhikatjamwirriwiya ningkwilhangwimwirra tiraka
 2Sg are going-TPRG 2Sg-POSS-COM 3:5 car
 'You are always going in your car.'

yingilhikatjamwa ngayiwamwirra
 3:2 is going 1ExcSg-COM
 'She is going with me.'

Anindilyakwa has 320 free forms of the demonstrative (including variants but excluding shortened forms). These are divided into six sets in which the roots distinguish location in relation to the speaker and/or addressee, and visibility. They can be used as an attributive modifier within a noun phrase or as the noun phrase itself. One of the six sets has an anaphoric function in a discourse. A demonstrative and a personal pronoun often occur in apposition, especially in first and second persons.

A demonstrative consists of an obligatory Nominal Prefix Nucleus, an optional Number morpheme and an obligatory demonstrative root. The morphological structure of demonstratives and personal pronouns are quite different. Demonstratives differ from nominals in two ways: (a) there are additional Number morphemes which are closer in shape to those in the verb prefixation; and (b) only a set of simple demonstrative roots can occur. Suffixation for nominals and demonstratives is the same. The deep structure demonstrative morphemes are shown on Table 14.

The Anindilyakwa demonstratives have combinations of prefixes and roots which appear to be illogical to non-native speakers, e.g., 'that I over there' and 'this you here'. These first and second person demonstratives are only used in unusual situations, such as referring to a reflection or image in water, a mirror or a photo. Thus 'that I over there' is used when a photo of me is at a distance from myself and the person to whom I am speaking.

TABLE 14: DEEP STRUCTURE MORPHEMES OF THE DEMONSTRATIVES

	NOMINAL PREFIX NUCLEUS	NUMBER	ROOT: LOCATION
NON-SINGULAR 1>T INCL PL TRI	ngarra ngarripwiku	mairntaku ~ wirrakwi PL	anani akani anani ~ ayani here: SG/PL here: DU/TRI here: PLURAL
1ST EXCL EXCL TRI PL TRI	yirra yirripwiku	alhaki DU/TRI	akini akini ~ ayini there there: PLURAL
1ST EXCL MASC DU EXCL FEM DU	yirriini => yini yirringa		
2ND PL TRI	kwirra kwirripwiku		
MASC DU FEM DU	kwirriini => kini kwirringa		angapwi angakpi over there: SG/PL over there: DU/TRI
3RD PL TRI	wirra wirripwiku		
MASC DU FEM DU	wirriini => wini wirringa		angampwi angangpi unknown location: SG/PL unknown location: DU/TRI
SINGULAR			
1ST INCL EXCL	ya ninga		pwikwaya approaching
2ND SG	ningkwi		
3RD 3:2(1) 3:3(1) 3:3(11) 3:4 3:5	tha ni yi a mwa		pwini not visible

5.1 DEMONSTRATIVE ROOTS

The demonstrative roots divide into two semantic groups, viz., realis and irrealis. The realis roots indicate that an item is visible and in a certain position in relation to the speaker and/or addressee; the irrealis roots indicate that the referent is not visible to the speaker and the location, therefore, is irrelevant or unknown.

5.1.1 Realis

The roots in the four sets of realis demonstratives are as follows:

anani	'this one near the speaker, this here'
akini	'that one near the addressee, that there'
angapwi	'that one distant from speaker & addressee, that over there'
pwikwaya	'this one approaching the speaker and addressee'

If an item is midway between the speaker and addressee either demonstrative can be chosen. If a visible item is outside the immediate area of interaction between the speaker and addressee the demonstrative angapwa is used to denote a distance of anything more than two or three feet from the speaker and addressee. Children learn to use the two extremes of distance, anani and angapwi', prior to the more complex akini.

The demonstrative, pwikwaya 'this approaching', may consist of the empty morph pwi plus the root kwaya 'to share' since, in my experience, the person approaching frequently stops and joins in the conversation.

Examples of the four realis demonstratives are as follows:

yalhakwilhangwiya ninganana ningilhikatjamwa
 here-LPRG 1ExcSg this here 1ExcSg am going
 'I am going along here.'

narringamwinakwimwirna ṭhakiniwantja
 3:1+3:2 put 3:2 that there-LOC
 'They put [the spike] in her.'

nara anana wimpwa angapwa tjiwirra
 not 3:4 this here but 3:4 that over there 3:4 book
 'Not this one but that book over there.'

arngkwawira mwangiyiwanga mwipwikwaya nimwilhikana
 once 3:5 shark 3:5 this coming 3:5 went
 'Once the shark went towards [the whale].'

The first three realis demonstratives listed above have allomorphs and, in some instances, shortened forms.

- (i) The realis demonstrative roots, anani 'this here' and akini 'that there', vary freely with ayani and ayini, respectively, when the prefix is marked for plural. The suffix -aya is the same form as the suffix used to mark the plural subject or object in the verb suffixation (see Section 6.3.2).

kwirrimwirntakanana ~ kwirrimwirntakayana
 /kwirra + mwirntak{a} + anani ~ ayani/
 2Pl Pl this here
 'these here: all of you'

yirrimwirntakakina ~ yirrimwirntakayina
 /yirra + mwirntak{a} + akini ~ ayini/
 1ExcPl Pl that there
 'those there: all of us'

yimwirntakakina ~ yimwirntakayina
 /yi + mwirntak{a} + akini ~ ayini/
 3:3(ii) Pl that there
 'those there: YI Class'

- (ii) Two realis demonstrative roots each have two different roots corresponding with a difference in number, viz., anani 'this here (singular and plural)' versus akani 'this here (dual and

trial); and angapwi 'that over there (singular and plural)' versus angakpi [aŋekpi] 'that over there (dual and trial). There is no apparent reason for these number distinctions but it may be that, as the other member of the trinary set, akini 'that there', does not distinguish number, the deep structure form of anani was akani and that regressive assimilation has changed some surface structure forms. The occurrence of a morpheme-initial [a] and not the fronted allophone [e] in angakpi suggests the presence of two morphemes, the nature of which has not been ascertained.

ningkanana
 /ningk{wi} + anani/
 2Sg this here:sg/pl
 'this here: you'

kwirrimwirntakanana
 /kwirra + mwirntak{a} + anani/
 2Pl Pl this here:sg, l
 'these here: all of you'

kinalhakana
 /k{w}i{rri}n{i} + alh{aki} + akani/
 2MascDu DU this here:du/tri
 'these here: you two males'

wirrangapwa
 /wirr{a} + angapwi/
 3:l that over there:sg/pl
 'those over there: all of them'

wirringalhangakpa
 /wirring{a} + alh{aki} + angakpi/
 3:lFemDu DU those over there:du/tri
 'those over there: they two females'

ngarripwikwalhangakpa
 /ngarripwikwi + alh{aka} + angakpi/
 1IncTri DU those over there:du/tri
 'those over there: all of us' (in a photo)

- (iii) The realis root, anani 'this here', is the only one which has irregular phonologically-conditioned forms within the set. Four allomorphs occur in the singular or plural forms, viz.,

anani, arnarni, amami, and akaka. The second allomorph is the result of the Cerebralisation following plural prefixation (see Section 2.5.2.3). The allomorph, amami [ememi ~ amemi], is progressively assimilated following the singular nominal classifier mwa-. The nasal, however, is not rounded. The most likely explanation is that it conforms to the regular phonological patterning of an unrounded nasal preceding the word-final high fronted vowel allophone.

anana
 /{a} + anani/
 3:4 this here:sg/pl
 'this here: A Class'

warnarna
 /wirra + anani ==> arnani ==> arnarni/
 3:1 this here:sg/pl
 'these here: WIRRA Class'

mwamama
 /m{wa} + anani ==> amwamwi ==> am{w}am{w}i/
 3:5 this here:sg/pl
 'this here: MWA Class'

The allomorph, akaka [akaka] 'this here', occurs only in the third person singular forms for Noun Classes 3:2, 3:3 (i) and 3:3(ii). The reduplication suggests assimilation within the root. This supports the above suggestion that the deep structure form akani was once regular and not irregular for singular number. Progressive assimilation operating on akani would result in akaka. Furthermore, the allomorph akaka freely varies with assimilated forms, conditioned by the nominal classifier.

thakaka	~	thathaka	'this here: THA Class'
nakaka	~	nanaka	'this here: NI Class'
yakaka	~	yayaka	'this here: YI Class'

previously-named participant in the story continues to be the main actor. It is in contrast with the use of the Change of Referent marker on the personal pronoun when the main actor changes. The choice of this particular demonstrative appears to be quite arbitrary seeing that there can be no concept of nearness to the addressee (or audience). All six demonstratives can occur in reported speech. The following excerpts from the same story exemplify the usage of various demonstratives in reported speech and the contrast between the anaphoric demonstrative and the Change of Referent pronoun (see underlining).

Angkwawira mwangwiyiwanga mwipwikwaya nimwilhikana
 once 3:5 shark 3:5 this coming 3:5 came
 Once the shark came towards the whale.

apwirthiwa. Pwiya nimwartanga mwakina
 3:4 whale-ALL then 3:5 called 3:5 that there
 Then that [shark] called out

akwalhiwa akwalya wirriringka
 3:4 other:ALL 3:4 fish 2P1+3:4 look at
 to the other fish, "Look at that whale over there!"

angapwa apwirtha. Pwiya nayamwa
 3:4 that over there 3:4 whale then 3:5 said
 Then he [whale]

angalhatja kiyamwarrkinamwa ningana
 3:4-CofR 1ExcSg be doing how? 1ExcSg this here
 said, "How can I get big

kingimwirrthiniyatha akwa karimirrthiniyatha.
 1ExcSg will become fat-PURP and 1ExcSg will become big-PURP
 and fat?"

A demonstrative and a personal pronoun co-occur quite frequently in the same sentence. There is no known syntactic or semantic reason for this co-occurrence. For example:

Question: akina akwalya ngawa ningkwirra
 3:4 that there 3:4 fish cont.act 2P1
 'Do you all have enough fish?'

Answer: katha ngayiwa ningana
 don't know 1ExcSg 1ExcSg this here
 'I don't know.'

5.1.2 Irrealis

One of the two irrealis demonstratives is an interrogative. The roots in the two sets of irrealis demonstratives are as follows:

pwini	'that not visible to the speaker'
angampwi	'which?, what?'

The location of the item represented by pwini 'not visible, unseen' is known by the speaker who will supply the information if others are in doubt. In contrast, the interrogative demonstrative angampwi indicates that the location is unknown to the speaker.

The following examples illustrate the positioning of the irrealis demonstrative pwini as head or modifier of the noun phrase. The fact that an item is 'not visible' can often only be determined in the context of a conversation or a narrative.

kampwirra thipwina thingira anilhangwamwantja
 therefore 3:2(ii) that unseen 3:2(ii) clay 3:3(i)-POSS-LOC

nanimwathangkwa yingiwirritjingwa
 3:3(i) his body 3:2 moved itself
 'Thus the clay on his body had disappeared.'

yingapwirangka apwiniwa angwarnta
 3:2 looked for 3:4 that unseen-ALL 3:4 stone
 'She looked for the stone.'

naniwarrikawarriyathinimwirra naripwapwa
 3:3MascDu were becoming upset not-CSL

wirripwina wirrangariya
 3:1P1 those unseen 3:1P1 young
 'The two of them were becoming upset because [there were] no children.'

The irrealis demonstrative pwina is also used in comparisons

to indicate that the items are the same or similar.⁵ It does not seem to indicate that the items are 'not visible' because the realis demonstratives can occur in the same sentence. In this particular usage, the root pwini can be marked simply by the Nominal Prefix Nucleus or be attached to a demonstrative (see last two examples).

alhakina pwatjikala apwinikwiya
 3:4Du those there 3:4 tin 3:4 same-DU
 'Those two tins are the same.'

awirrakayana apwiniwiya wimpwa angapwa
 3:4Pl these here 3:4 same-PL but 3:4 that over there

 ngalhatja angka
 3:4-CofR 3:4 other
 'These are the same but that one over there is different.'

wimpwa ngalhatja thipwina thilyapwirnta
 but 3:2(ii)-CofR 3:2(ii) that unseen 3:2(ii) frog

thipwina ngawa wipwirra
 3:2 same cont.act like
 'But the frog was still the same as before.'

pwiya angwirrirtha nalhantarrkina anipwina arakpwa
 then 3:4 magpie 3:4 thought 3:4 same comp.act

 kiniwilyakatjiniyatha yaka yingwa
 1ExcSg+3:2 will show-PURP 3:3(ii) this here 3:3(ii) crow
 'Then that same Magpie thought, "I will teach Crow [a lesson]."'

wirrapwapwirnilhangwa nalyalyingmwayinimwaka
 3:1 many-ABL 3:1+3:4 were liking-INTENS

wirrapwapwirnilhangwa yimpwikwa niwirrwilya
 3:1 many-ABL except 3:3(i) rainbow

nakinipwinitha
 3:3(i) that there-same-INTENS
 'Everyone was enjoying it--everyone except that same Rainbow.'

Footnote 5: Two realis demonstratives can also be used for comparisons but the word, wipwirra 'like', co-occurs, e.g.,

 thakina wipwirra thakaka
 'that [dress] is like this one'

As both constructions seems to have been used for visible items more field work is necessary to resolve the issue.

The negative adverb nara can precede the irrealis demonstrative pwini to form the idiomatic expression that can be translated 'not here', 'not there', 'non-existent' or 'without'. Semantically the phrase is marked twice for negative. This construction is often the answer to a question and occurs without its referent as head of the noun phrase.

nara mwipwina yalhakwimwantja
not 3:5 that unseen here-LOC
'It [the boat] is not here'.

arakpwawiya yakina yipwiratha nara
long ago 3:3 that there 3:3 wallaby not

 mwipwina mwamwithakpwa
 3:5 that unseen 3:5 tail
'A long time ago the wallaby [was] without a tail.'

Question: wirripa warnimwamwalya narranirringka
 3:1 any? 3:1 people 3:1+3:3 saw
'Did he see any people?'

Answer: nara wirripwina
 not 3:1 those unseen
'[The people] were not there.' / 'No one.'

An interrogative demonstrative, represented by apa [epa] 'any?', is probably related to the irrealis demonstrative apwini 'not visible' or the question suffix -pwini (Section 8.2.1.6).⁶ This interrogative demonstrative is used when the questioner cannot see any visible evidence of the items. The root p[w]i is prefixed by the Nominal Prefix Nucleus but only a limited number of singular

Footnote 6: The realis demonstrative, represented by akini, is used with question intonation when the referent is visible, e.g.,

Question: akina akwalya ngawa ningkwirra
 3:4 that there 3:4 fish enough 2P1
'Do you all have enough fish?'

Answer: katha ngayiwa ningana
 don't know 1ExcSg 1ExcSg this here
'I don't know.'

forms have been recorded to date. No suffixation occurs. It may well be that this word is an interrogative adjective but it is analysed as a demonstrative because of the association with demonstratives in a Question/Answer mode.

Question: apa ningkakupwirrangarna anhinga
 3:4 any? 2Sg+3:4 found 3:4 food
 'Did you find any food?'

Answer: nara apwina kakpwirrangarna
 not 3:4 that unseen 1ExcSg will find
 'I found nothing.' / 'I did not find it [food].'

Question: wirripa warr.imwamwalya narrarringka
 3.1Pl any? 3:1 people 3:1+3:3 saw
 'Did he see any people?'

Answer: nara wirripwina
 not 3:1 those unseen
 'No one.'

Question: wayi apa ngantja angwira
 oh 3:4 any? 1ExcSg-CofR 3:4 wood
 'Hey, [have you] any wood for me?'

Answer: nar'apwina
 not 3:4 that unseen
 'None.'

Question: ningkwipa
 2Sg any?
 'Are you there?'

Answer: yawi ningana yalhakwimwantja
 yes 1ExcSg this here here-LOC
 'Yes, I'm here.'

The interrogative irrealis demonstrative root has two different roots corresponding with a change in number, viz., angampwi 'which? (singular/plural)' and angangpi [a_nenpi ~ e_nenpi] ~ angampi [a_nempi] 'which? (dual/trial)'. The dual/trial realis and irrealis forms, angakpi 'those over there' and angangpi 'which of those?', contrast only by the use of /ng/ and its hardened counterpart /k/.

The meaning would, however, be neutralised if these roots were to be considered to be the same number infix or root.

nangampwa
/n{a} + angampwi/
3:3(i) which?:sg/pl
'Which one is that [NI Class]?'

thalhangangpa
/th{a} + alh{aki} + angangpi/
3:2(ii) DU which?:du/tri
'What are those two [THA Class]?'

wirripwikwalhangangpa
/wirripwikwi + alha{aki} + angangpi/
3:1Tri DU which?:du/tri
'What are those three [WIRRA Class]?'

The interrogative demonstrative, angampwi 'what?, which?', has a secondary meaning of 'where?'. (Note: This demonstrative has the same root as the interrogative adverb ngampwi- 'where?'.) The answer to the question, however, is not an adverb but a realis or irrealis demonstrative, as seen in the pairs of examples below.

Question: nangampwa nawirrmwikwimwa
3:3(i) which? 3:3(i) man
'Which man?' / 'Where is the man?'

Answer: nakina
3:3(i) that there
'That man there.'

Question: thangampwa thatharrngka
3:2(i) which? 3:2(i) woman
'Which woman?' / 'Where is the woman?'

Answer: thangapwa arrakpimwantja
3:2(i) that over there outside-LOC
'That woman outside.'

Question: angampwa akwalya
3:4 which? 3:4 fish
'Which fish?' / 'Where is the fish?'

Answer 1: anana akwalya ningkwirangimwa
3:4 this here 3:4 fish 1ExcSg+J:4 was hooking
'This fish that I was hooking.'

Answer 2: nara apwina akwalya kikwiranga
 not 3:4 that unseen 3:4 fish 1ExcSg+3:4 would hook
 'I did not catch a fish.'

An irrealis interrogative demonstrative can co-occur with any member of a noun phrase. This permits the co-occurrence of two different demonstratives.

angampwikwiya apwina nganyangwa
 3:4 which?-DU 3:4 that unseen 1ExcSg-POSS
 'In which [place] are my two things?'

mwangampwa mwakina
 3:5 which? 3:5 that there
 'What is that?'

mwangampwa mwarimwa mwitjiyanga
 3:5 which? 3:5 big 3:5 boat
 'Where is the big boat?'

The interrogative demonstrative angampwi is also used in the same way as 'what's its name?' or 'what you may call it' in English. It may be asking for an answer from the audience or simply used as an aside until the correct name of the item is recalled.

angampwaka apwina amwikirra angalya
 3:4 which?-INTENS 3:4 that unseen 3:4 its name 3:4 place
 'What do you call it? The name of that place?'

5.2 ADVERBIAL DEMONSTRATIVES

Three of the demonstratives are affixed by the Time Progressive case clitic to indicate time. The prefixation is restricted to the nominal classifier for Noun Class 3:4 which is associated with invisibility. They function syntactically as adverbs, not as part of a noun phrase. (See also Section 7.1.2). The three demonstrative adverbs are:

a(na)niwiya	now, immediately, during the the present time
apwiniwiya	a while ago, during those few days, that time in the past
akiniwiya	previously-mentioned time, during that past time

The realis demonstrative in ananiwiya 'now' indicates that the time is close to the speaker. The meaning of akiniwiya 'that past time' is similar to its usage for anaphoric reference in the discourse. The adverbial demonstrative, ap{w}ini (recent past time), implies that the time has disappeared because of the use of the demonstrative for the 'not visible or unseen'.

ningilhiakatjamwa	<u>ananiwiya</u>	ningana
1ExcSg am going	3:4 this here-TPRG	1ExcSg this here

kimwarringkinamwa	mwitjiyangiwa
1ExcSg+3:5 will be seeing	3:5 boat-ALL

'I am going now to see the boat.'

ningimwarringkinamwa	mwitjiyanga	<u>ananiwiya</u>
1ExcSg+3:5 am seeing	3:5 boat	3:4 this here-TPRG

'I can see the boat right now.'

nimwangkarrinimwa	tiraka	angwiira	akwa	<u>akiniwiya</u>
3:5 was running	3:5 truck	strongly	and	3:4 that there-TPRG

ngarringakowartha
1IncPl were frightened

'The truck was going fast and, at that time, we were frightened.'

yingilhihana	<u>apwiniwiya</u>
3:2 went	3:4 that unseen-TPRG

'She went a few minutes ago / last week.'

The above usage contrasts with the occurrence of the demonstratives as modifiers of an adverbial noun within the noun phrase. Their prefixation is also restricted to Noun Class 3:4 but in agreement with the noun class of the head of the noun phrase. Various case clitics can occur in this environment.

kingatjininamwa angwalha animwantja tjantiyi
!ExcSg+3:4 will be killing 3:4 crab 3:4 this here-LOC 3:4 Sunday
'I will be killing the mud crab on this [coming] Sunday.'

nilhikana yakiniyatha yimwawira
3:3 went 3:3(ii) that there-PURP 3:3(ii) moon
'He went for three months.'

5.3 DEMONSTRATIVE PREFIXATION

The demonstratives are prefixed by the Nominal Prefix Nucleus but have a dual number prefix which does not occur in nominals or personal pronouns. It follows the Nominal Prefix Nucleus.

The number morphemes in the demonstratives distinguish singular, dual/trial and plural. Singular is unmarked; dual and trial are marked by the same number morpheme lhaki-; plural is marked by the freely-varying morphemes, mwirntaka- and wirrak-. The number morphemes are optional with the human plural WIRRA noun class which already has number marked in the nominal prefix nucleus but obligatory with the non-human plurals in the THA, YI, MWA and A noun classes.

ninganana 'this here: I'
/ning{a} + anani/
1ExcSg this here

ningkakina 'that there: you'
/ningk{wi} + akini/
2Sg that there

wirrangapwa ~ wirrimwirntakangapwa ~ wirriwirrakangapwa
/wirr{a} + (mwirntak{a} ~ wirrak{a}) + angapwi/
3:1 PL that over there
'those over there: WIRRA Class'

thimwirntakipwikwaya ~ thiwirrakipwikwaya
/tha + (mwirntaka ~ wirraka) + pwikwaya/
3:2(ii) PL this coming
'these approaching: THA Class'

yimwirntakipwina ~ yiwirrakipwina
/yi + (mwirntaka ~ wirraka) + p{w}ini/
3:2(ii) PL that unseen
'those not visible: YI Class'

amwirntakangampwa ~ awirrakangampwa
 /a + (mwirntak{a} ~ wirrak{a}) + angampwi/
 3:4 PL which?
 'which of those?: A Class'

The deep structure form of the dual number morpheme, alhaki- ~ alyaki-, has been difficult to determine. The penultimate low vowel is fronted in the irrealis demonstratives, thus indicating that the final syllable is ki-. (Note that in other demonstratives the final VCV elides.) The phonological rules operate with both possibilities, alhaki- or alhakpi-. The former has been arbitrarily chosen as the form throughout this thesis--the arguments for and against each choice are as follows:

- (a) the deep structure alhaki- would be similar to the dual prefix lhirraka- in the verbs, i.e. a morpheme-initial /a/ is added and the morpheme-medial VCC sequence /irr/ is deleted. This, however, is unusual because it is not the deletion of a medial syllable. The final syllable is that of the Adjectiviser ki-, commonly found in the first root of an adjective stem, but differing from other number morphemes which all end in /ka/.

wirringalyakpwina
 /wirring{a} + alyak{i} + p{w}ini/
 3:1FemDu DU that unseen
 'those two not visible: WIRRA Class'

thalhakpwikwaya
 /th{a} + alhak{i} + pwikwaya/
 3:2(ii) DU this coming
 'these two approaching: THA Class'

yalhakana
 /y{i} + alh{aki} + akani/
 3:3(ii) DU these here:du/tri
 'these two here: YI Class'

- (b) the deep structure alhakpi- would correspond with the demonstrative root angakpi- but the alternation, /lh/ ~ /ng/,

does otherwise occur. (Note: The hardened counterpart of /ng/ is /k/ and of /lh/ is /th/). Furthermore, no other number prefix has a final CCV.

kwirringalhangakpa
/kwirring{a} + alh{akpi} + angakpi/
2FemDu DU those over there:du/tri
'those two over there: you fem'

mwalhangangpa
/mw{a} + alh{akpi} + angangpi/
3:5 DU which?:du/tri
'which two: MWA Class?'

In the trial demonstratives, the dual prefix follows the trial marker in the Nominal Nucleus. The last two examples show how number can be marked four times in the one demonstrative.

apwikwalhakana
/apwikw{i} + alh{aki} + akani/
3:4Tri DU these here:du/tri
'these three here: A Class'

yirripwikwalhakpwina
/yirripwikw{i} + alh{aki} + p{w}ini/
1ExcTri DU that unseer
'those three not visible: we'

wirripwikwalhangakpa
/wirripwikw{i} + alh{aki} + angakpi/
3:1Tri DU those over there:du/tri
'those three over there: WIRRA Class'

5.4 DEMONSTRATIVE SUFFIXATION

Demonstratives do not have any distinctive suffixation but are affixed by some, but not all, of the nominal suffixes and clitics. No derivational suffixation has been found. They are not inflected by the Possessive suffix because the possessive personal pronouns are used instead.

The Number suffixes (Section 6.3.2 excluding Restrictive) can

be attached, viz., -kwiya (dual), -wiya (plural), and -mwirriya 'and all the others in the vicinity'. For trial number, there is a choice of either the dual or the plural number suffixes.

angampwikwiya apwina nganyangwa
 3:4 which?-DU 3:4 that unseen 1ExcSg-POSS
 'Where are my two things?'

apwikwalhakina pwtjikala apwikwalhakpwinikwiya
 3:4Tri that there 3:4 billycan 3:4Tri same-DU
 'Those three billycans there are the same.'

wirrangapwawiya wirripwipwilantiwiya
 3:1 that over there-PL 3:1 whites-PL
 'All the non-aboriginal people [are] over there.'

akiniwiya nganyangwa
 3:4 that there-PL 1ExcSg-POSS
 'All this [is] mine.'

thangampwamwirriya thakina
 3:2 which?-ETC 3:2 that there
 'What [kind is] that [bird] and similar [ones] there?'

The peripheral case-marking clitics are often marked on the demonstrative in the noun phrase. The following sets of examples illustrate this occurrence for Locative, Ablative, Allative, Pregressive and Comitative cases.

yikilhikatja yalhakwa ngantjikwapwa ningarntakatja
 2ExcPl will go here 1ExcSg-POSS-also 1ExcSg+3:4 spearfish

akwalya ananimwantja angalya
 3:4 fish 3:4 this here-LOC 3:4 place
 'We will come here and spear-fish at this place.'

angampwiwantja angalya ningkwampwilyamwa
 3:4 which?-LOC 3:4 place 2Sg are staying
 'In which place are you living?' / 'Where are you living?'

anatja ningakpwirakatjingwinimwa nakinilhangwa
 3:3(i)-CofR 3:3 was hiding himself 3:3(i) that there-ABL

niwirrwilya
 3:3(i) rainbow
 'He was hiding himself from Rainbow.'

yirramwaka mwakinihangwa arakpwawiya wirrarimwirimwa
1ExcPl+2Pl told 3:5 that there-ABL long ago 3:1 big

natjitjangimwa
3:1 kept eating
'We told about that (fruit) the giants on eating a long time ago.'

kampwirra naniwilyaka nakina wirrakina
therefore 3:1+3:3 took 3:3(i) that there 3:1 those there

thakiniwa
3:2(ii) that there-ALL
'Therefore he took those people to that [frog].'

yikangkirkakatjamwa nipwiniwa nantjarralyilya
2Pl are running 3:3(i) that unseen-ALL 3:3(i) boy

akwa thingirawa
and 3:2(ii) white clay-ALL
'You will be thinking of the boy and the white clay.'

ananilhangwiya ngawa kwiyanwinamwa
3:4 this here-LPRG cont.act 2Sg+3:4 is saying
'You keep on saying it [word] like this.' (Lit: along this)

mwangapwilhangwiya lhikatja mwamwirikwa
3:5 that over there-LPRG 2Sg go 3:5 road
'Go along the road over there.'

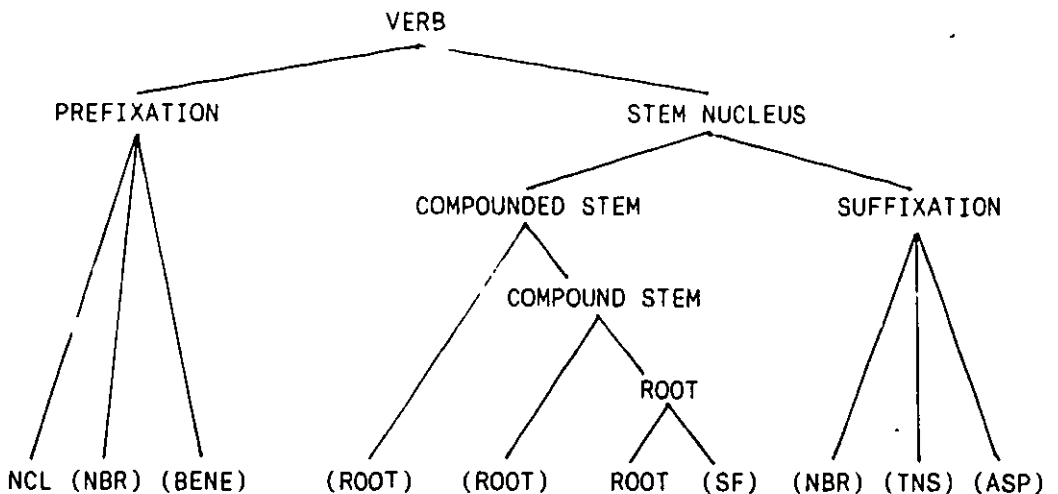
mwangampwimwirra ningkilhikanimwa mwitjiyanga
3:5 which?-COM 2Sg were going 3:5 boat
'By/in which boat were you going?'

wirrilhikatja warnimwirra
2Pl go 3:1 these here-COM
'Go with these [people]!'

Anindilyakwa verbs have a distinctive set of verb roots, stem formatives and number morphemes. The verb prefixes for subject and object are similar in shape to those in the Nominal Prefix Nucleus. The additional Number morphemes in the prefixation resemble those for nominals (see Section 3.3.1.3) but, in the suffixation, is similar to that for the demonstratives (see Section 5.1.1). The verb prefixation also marks mood in the verb; the derivational suffixation marks tense and aspect. Inflectional case clitics are also attached to a verb.

Table 14 diagrams the verb structure. Verb roots occur only in the second position in the compound stem; noun or adjective roots can occur in the first position of a compound or compounded stem. The morphemes in brackets are optional.

TABLE 14: VERB STRUCTURE



6.1 VERB ROOTS

The minimal realisation of a verb root is the single or reduplicated root. A verb root can only occur in the first position in a compound stem. The following examples illustrate the single root which has from one to three syllables.

nimwapina		'he sang'
/ni + m{w}api + ni/		
3:3	sing	TNS
nalyilyanga		'he took the dead
/n{i} + alyily{i} + anga/		person's spirit away'
3:3	remove spirit	TNS
ngarrartanga		'we called out'
/ngarr{a} + art{a} + anga/		
1IncNsg	call out	TNS
yingimwarringkina		'she saw it'
/yinga + mwa + rringka + ni/		
3:2	3:5	see TNS
mwilyana		'carry it on the hip!'
/∅ + ∅ + mwily{a} + ani/		
2Sg	3:4	carry on hip TNS
nalyipwana		'he ate it'
/n{i} + ∅ + alyi{k}pw{i} + arni/		
3:3	3:4	eat TNS

Reduplication of a verb root indicates continuation or repetition of the action (see Section 2.8 for Reduplication Rules).

ngarrirrakirrakayanga		
/ngarra + rraka + rrakay{a} + anga/		
1IncNsg	REDUP	sit down TNS
'We keep on sitting down.'		
niwarriwarrinamwa		
/ni + warra + warra + n{i} + amwi/		
3:3	REDUP	wriggle TNS NPIP
'He is keeping on wriggling.'		
nilharrmwilharrmwanamwirra		
/ni + ∅ + lharrmw{i} + lharrmw{i} + an{i} + amwirra/		
3:3	3:4	REDUP chase TNS NPIP
'He is keeping on chasing it.'		

kingalyalyipwarna
 /king{a} + ∅ + aly{i} + alyipw{i} + arni/
 3:2 3:4 REDUP eat TNS
 'She will eat and eat it.'

arngkapwapwirnilhangwa nakina nimwirrkwimwirrkwilhimwirra
 3:4 often-ABL 3:3(i) that 3:3 was keeping on lying

awarrwalya
 3:4 shade
 'He was often lying down in the shade.'

6.2 VERB STEM COMPLEX

In the compound stems, a noun or adjective root is compounded with a verb root to yield a more specific lexical meaning. Some transitive verb roots are obligatorily bound. Compound verb stems make up the major portion of the verb inventory (see Dixon 1980:411 for similar complexity in Guurindji and Walmatjarri).

6.2.1 Compound stems

Compound stems consist of a nominal root in the first position and a verb root in the second position. The root can be further compounded by a nominal root preceding the compound stem.

6.2.1.1 In transitive verbs

The incorporated Bodypart noun root in a transitive verb can refer to the noun in the direct object. The object prefixation sometimes co-occurs with the noun root but it is by no means obligatory. This omission may be due to the fact that the object prefix is often the same shape as the initial syllable of the incorporated Bodypart root and is subject to deletion by Haplology. The possessor of the body part is different from the subject referent unless the verb stem is reflexive or reciprocal (see Section 6.2.2.4). (Note: The shortened forms of the Bodypart noun roots are often used

in the lengthy verbs.)

wilhakpwakirithana /∅ + wi + lhakpwaka + rith{a} + ani/ 2Sg 3:4 leg chop TNS	'chop its leg off!'
ngari(pwirr)kwirringka /∅ + nga + ripwirrkwi + rringka/ 2Sg 3:2 back see	'look at her back!'
nilha(ngar)ngkithakina /ni + lhangarngka + thaka + ni/ 3:3 head cook TNS	'he cooked its head'
niwarrkirntirrka /ni + warrka + rntirrka/ 3:4 teeth take	'he took its teeth'
nimwarngkirringkina /ni + mwarngka + rringka + ni/ 3:3 spirit see TNS	'he saw [the dead man's] spirit'

A Shape adjective root can also precede the verb root in the same position as the Bodypart noun root in the transitive (and intransitive) verb. It has the same role of identifying the goal of the action. The Shape adjective and the Bodypart noun roots are both used in reference to the body part.

niyalhkirringkina /ni + yalhki + rringk{a} + ni/ 3:3 long-necked see TNS	'He looked at its neck.'
niwarrkilhalhika /ni + warrki + lhalhika/ 3:3 chest-shaped leave behind	'He left the chest behind.'
nganilhirkpwirrana /nga{rra} + ni + lhirrk{i} + pwirr{a} + ani/ 1IncNsg 3:3 short-bodied split TNS	yipwiratha 3:3(ii) wallaby 'We split the wallaby's carcass [lengthwise].'

Compare:

mwarampwarrkirringkina /∅ + mwa + ramp{w}arrki + rringka + ni/ 2Sg 3:5 flat see TNS	'Look at its back!'
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mwaripwirrkwiringka
 /Ø + mwa + ripwirrkwi + rringka/
 2Sg 3:5 back see
 'Look at its back!'

With verbs of impact and transfer, the participants are cross-referenced in the verb as the subject and object and the free form body part in the noun phrase (and sometimes the recipient) is marked for Locative case. It is not obligatory to incorporate the Bodypart noun root in the verb.

ninginingatjamwa anilhangwimwantja aringka
 /ninga + ni + ngatj{a} + amwi/ 3:3(i)-POSS-LOC 3:4 head
 1ExcSg 3:3 hit NPIP
 'I am hitting him on his head.'

yirikwitjilhangwa nanirntarrka nakina
 3:3(ii) bandicoot 3:3+3:3 grabbed 3:3(i) that

akpwilhangwa
 3:4 buttocks-POSS
 'Bandicoot grabbed him [Wallaby] on his buttocks.'

yingatja ninganimwamwalyimwantja niyamwa
 1IncSg hit 1ExcSg my flesh-LOC 3:3 said
 '"You hit me on my body!" he said.'

akinimwa niringanthangimwa anilhangwa amwinta
 3:4 that-COM 3:3 head:was cutting 3:4-POSS 3:4 nose
 'He cut his nose with that [spearhead].'

naningatjamwa nakina aningwiwilyarrimwantja
 3:3+3:3 hit 3:3(i) that 3:4 its middle-LOC

nikpwimwantja nipwina kampwa
 3:3(i) pheasant-LOC 3:3(i) that unseen therefore

niritjamwiyamwa yimwa mwiwilyapwa
 3:3(i) small-backed 3:3(ii) backside 3:5 one

nimwantjitjalhana
 3:3 hair:carry
 'He [Seagull] hit him [Pheasant] in the middle of the back and therefore he [Pheasant] has a small backside that carries one [long] tail feather.'

The Bodypart noun and the Shape adjective roots are used for objects which are considered to have the same type of physical

features. This extends the usage but does not change the primary meaning of the root.

ningakpwirrkwatjina

/ni + ngak{a} + pwirrkwi + tja + ni/
3:3 thigh crush TSR TNS

'He flattened the mound.' (Lit: crushed its thigh)

napwalhpwatjana

/n{i} + apwalh{ka} + pwatj{a} + ani/
3:3 abdomen hit TNS

'He hit the ground.'

narntirrkpwatjana

/n{i} + arntirrk{a} + pwatj{a} + ani/
3:3 ?elbow hit TNS

'He hit the Wild Plum tree.'

nirrakpwarrana

/ni + rrak{a} + pwirr{a} + ani/
3:3 forehead split TNS

'He split the firewood.'

niringkiwirrana

/ni + ringka + wirr{a} + ?ni/
3:3 head throw TNS

'He threw the anchor in.'

ngarrimwingkwilharritjina

/ngarra + mwing{kwirr}kwi + iharra + tja + ni/
1IncNsg cheek fall TSR TNS

'We shook the fruit off.' (Lit: dropped the [fatty] cheeks)

ningilyipwirrkwiripwikwina

/ninga + lyipwirrkwi + ripwikwi + ni/
1Sg lips fold TNS

'I hemmed it.'

ningalhkithakina

/ning{a} + alhka + thaka + ni/
1Sg wing cook TNS

'I singed its feathers.'

nirrakirntangmwatjina

/ni + rraki + rntangmwi + tja + ni/
3:3 elongated clap TSR TNS

'He strummed the guitar.'

wirriyakiyiwirna

/wirra + yaka + yiwi + rni/
2Nsg chest follow TNS

'Follow the river!'

ana athalyimwa
3:4 this 3:4 river

Many Anindilyakwa verb roots are bound. In the above examples,

lexical roots fill the first position in the compound stem. If the identification of the object is not known because of such situations as distance or darkness, the Nominaliser (ng)kwi- or the Adjectiviser (ng)ki- is substituted for the actual body part or its shape.

ngarrikwirrithana 'We made a scratching
/ngarra + kwi + rri{a} + ani/
1IncNsg NSR scratch TNS noise.'

ngarrikwiwirrana 'We threw it down.'
/ngarra + kwi + wirr{a} + ani/
1IncNsg NSR throw TNS

wirrikilhirrwana 'Drag it along!'
/wirra + ki + lhirr{a} + arni/
2Nsg ASR drag TNS

ningkarrngina 'He chopped it.'
/ni + ngk{i} + arrnga + ni/
3:3 ASR chop TNS

The stem nucleus can consist of three different roots but this only occurs when a noun or adjective root is added to a compound stem.

nimwakwirikpwitjangatjina
/ni + mwa{pwirr}kwi + rikpwitjanga + tja + ni/
3:3 short-legged (=treeless) body:jump TSR TNS
'He shifted camp.'

Very few compound transitive verb stems appear to be idiomatic but the following have been found. The compounded stem appears to be a frozen collocation. The lack of idiomatic transitive verb stems is in direct contrast with the very large number of idiomatic intransitive stems.

nilyalyiwangina
/ni + ∅ + lyalyi{kawi} + wanga + ni/
3:3 3:4 tongue bite TNS
'He chewed it.'

kilyangpwarrkwinamwa	angalya
/ka + lyang{ka} + pwarrkwi + n{i} + amwi/	3:4 place
1ExcSg head go a little way TNS NPIP	
'I will be sweeping the floor.'	

6.2.1.2 In intransitive verbs

In the intransitive verb, the incorporated noun or adjective root can be cross-referenced to the subject. The relationship between the subject and the incorporated root is one of inalienable possession.

narntiwarrkina	
/n{i} + arnta{ka} + warrka + ni/	
3:3 elbow weave in and out TNS	
'He limped.' (Lit: His elbow wove in and out.)	

nirikwilhalhina	
/ni + rikwi + lhalha + ni/	
3:3 body shallow TNS	
'He squatted.' (Lit: His body [was] shallow.)	

ngarringwinakilharrina	
/ngarra + ngwinaka + lharra + ni/	
1IncNsg knee fall TNS	
'We knelt down.' (Lit: Our knees fell.)	

ngarririkwilharrina	
/ngarra + rikwi + lharra + ni/	
1IncNsg body fall TNS	
'We were born.' (Lit: Our bodies fell.)	

namwilhirkwilharrina	
/na + mwilhirkwi + lharra + ni/	
3:4 breast fall TNS	
'It was born prematurely.' (Lit: Its breast fell.)	

yingiyangkilyikpwina	
/yinga + yangka + lyikpwi + ni/	
3:2 head(=speech) float TNS	
'She spoke but was not heard.' (Lit: Her speech floated.)	

yingimwirarrngalhana	
/yinga + mwir{aka} + arrngalh{a} + ani/	
3:2 chin curve scratch TNS	
'She was husky.' (Lit: Her throat area scratched.)	

nampwakiwirtana	
/r{i} + ampwaka + wirt{a} + ani/	
3:3 pair climb TNS	
'He climbed with hands and feet.' (Lit: His hands and feet climbed.)	

nalhingkwiwarra
/na + lhingkwi + warra/
3:4 hair move
'It grew taller.' (Lit: Its foliage (=hair) moved.)

napwalhmwirthina
/n{a} + apwalh{ka} + mwirthi + ni/
3:4 abdomen be brown TNS
'It [the sky] got darker.' (Lit: Its abdomen became brown.)

narratjalhanga
/na + rra{ka} + tjalh{a} + anga/
3:4 forehead emerge TNS
'It [the cliff] jutted out.' (Lit: Its forehead emerged.)

nayangkilhawirra^mhina
/na + yangka + lhawirra^mhina + ni/
3:4 speech (=speech) return TNS
'It echoed.' (Lit: Its speech returned.)

The Shape adjective root also occurs in the first position of a compound stem with an intransitive verb. The relationship with the subject is still usually one of inalienable possession. The last example, however, may indicate that an appositional relationship may also be possible.

narrakirntangmwina
/na + rraki + rntang^m{w}i + ni/
3:4 elongated click TNS
'It [the wire] twanged.' (Lit: Its strand clicked.)

napwingkartjina
/n{i} + ap{w}ing^m{i} + artja + ni/
3:3 humped stand TNS
'He was humpbacked.' (Lit: His body stood up.)

ningangkiwanginimwa
/ni + ngangki + wanga + ni + mwa/
3:3 concave bite TNS PIP
'He was breathing.' (Lit: His concave part was biting.)

narningpwitjanga
/n{a} + arning{ki} + pwitj{i} + anga/
3:4 pointed jump TNS
'It [the spear] sprang up.' (Lit: It, the pointed thing, jumped.)

In the intransitive verbs, the compound stem is often idiomatic. It is difficult to know where to break the continuum

between literal within the Aboriginal culture and metaphorical. The following examples illustrate the type of metaphor that is very frequent in Anindilyakwa.

ngarriyangkilhapwana

/ngarra + yangka + lhapw{i} + ani/

1IncNsg head test TNS

'We asked.' (Lit: We tested [the other person's] head.)

ngarrilyalyingpwikwayina

/ngarra + lyalying{ka} + pwikw{i} + aya + ni/

1IncNsg REDUP:tongue ?blow on SNSg TNS

'We conversed.'

nilyangmwirithina

/ni + lyang{ka} + mwirithini/

3:3 head be hollow

'He was incompetent.' (Lit: His head was hollow. / He was hollow-headed.)

ningwirrkwanyarra

/ni + ngwirrkw{i} + anyarri/

3:3 mouth hard

'He swore.' (Lit: His mouth [was] hard. / He [was] hard-mouthed.)

ninyakampwilya

/ni + nyak{a} + ampwilyimwi/

3:3 chest stay

'He trusted in the old ways.' (Lit: His chest stayed.)

napwirrpwitjanga

/n{i} + apwirr{kwi} + pwitjanga/

3:3 buttocks jump

'He was startled.' (Lit: His buttocks jumped.)

niyakiwitjanga

/ni + yaka + pwitjanga/

3:3 chest jump

'His chest jumped.' (Lit: His chest jumped.)

yingiwarrwirthana

/yinga + warr{ki} + wirth{a} + ani/

3:2 chest-shaped sing TNS

'She chose to work well.' (Lit: Her chest-shaped [part] sang.)

yingiyangkartirtarrithana

/yinga + yangk{a} + artirtarra + th{a} + ani/

3:2 head(=speech) hot INCH TNS

'She squealed.' (Lit: Her speech became hot.)

nirikwitharrpwikwina

/ni + rikwi + tharrpwi + kwa + ni/

3:3 body short CAUS TNS

'He sat with his legs tucked under.' (Lit: He caused his body to shorten.)

The stem nucleus of the intransitive verb can consist of three different roots but this is a single initial root added to a compound stem. Such constructions are few in number. Compare the following set of words:

niwarrpwikwina
 /ni + warr {ki} + pwikwi + ni/
 3:3 chest-shaped winnow TNS
 'He thought.'

niyakiwarrpwikwina
 /ni + yaka + warrpwikwi + ni/
 3:3 chest think TNS
 'He remembered.'

nilyangkiwarrpwikwatjingwina
 /ni + lyangka + warrpwikwi + tjingwi + ni/
 3:3 head think REFL TNS
 'He thought to himself.' / 'He pondered.'

6.2.2 Derived verbs

Five stem formatives which follow the root or stem divide into three position classes, viz., (i) Causative/Inchoative, (ii) Transitive, and (iii) Reflexive/Reciprocal. The Causative and Transitive morphemes create transitive verbs; the Inchoative, Reflexive and Reciprocal create intransitive verbs. The Causative and Inchoative both derive verbs mainly from adjective roots or stems; the Transitive and Reflexive/Reciprocal morphemes are applied to verb roots.

6.2.2.1 Causative

The causative marker ka is usually suffixed to an adjective root or stem but can also occur with a noun, adverb or verb stem. The verb itself is then transitive. The causative marker can be preceded by either a high or a low vowel. In 95% of a 226 word corpus, the stem-final high vowel is retained if the penultimate vowel in the stem is /a/ but this vowel is changed to the low vowel /a/ if the penultimate vowel in the stem is /i/. These statistics are based on

the Aborigines' preferred or first choices but, as this dissimilation rule is not obligatory, the two possibilities both occur with some regularity. In the remaining data, Aborigines have not accepted the variation and, while it may simply be fixed irregularity, the following has been observed: (a) when two high vowels occur the second vowel is very short and unstressed, and frequently between two laminals); and (b) in the eight examples where two low vowels co-occur the intervening consonant is always a rounded labial peripheral.

mwakwilyathathikina

/∅ + mwa + kwilyathatha + ka + ni/
 2Sg 3:5 NSR:be shining CAUS TNS
 'Polish the floor!' / 'Make the floor shine!'

yingingpwatjikinimwa

/yinga + ∅ + ngpwatja + ka + ni + mwi/
 3:2 3:4 smell CAUS TNS PIP
 'She was making it smell.' / 'She was making it smelly.'

ngarrimwayarrarikina

/ngarra + mw(a) + ayarrarri + ka + ni/
 1IncNsg 3:5 forked CAUS TNS
 'We made it [the tree] tremble.'

ningingwirrkwiwarrwalyikinamwa

/ninga + ∅ + ngwirrkwiwarrwalya + ka + n{i} + amwi/
 1ExcSg 3:4 mouth:shade CAUS TNS NPIP
 'I am making the food bland.'

Compare the following pair of words:

ngarripwikwiritjangimwa

/ngarripwikwi + ∅ + ritj{a} + anga + mwi/
 1IncTri 3:4 scrape TNS PIP
 'The three of us were scraping the wood smooth.'

aka
 3:4 wood

ngarripwikwiritjikinimwa

/ngarripwikwi + ∅ + ritja + ka + ni + mwi/
 1IncTri 3:4 scrape CAUS TNS PIP
 'The three of us were clearing the ground.'

angalya
 3:4 place

The Causative morpheme has another allomorph kwa which has been recorded in two environments. When an adjective root or stem has a final rounded peripheral consonant, the phonologically-conditioned

allomorph kwa occurs in free variation with ka. This progressive assimilation only occurs when the intervening vowel is high (see also Section 2.7.2).

wirrinarrngwika ~ wirrinarrngwikwa
/wirra + Ø + nyarrngwi + kwa/
2Nsg 3:4 tame CAUS
'Domesticate the bird!'

yingingatharrpwik(w)ina ~ yingingatharrpwikwa
/yinga + nga + tharrpwi + k(w)a + ni/
3:2 3:2 short CAUS TNS
'She shortened the dress.'

nimwiramwaka ~ nimwiramwika ~ nimwiramwikwa
/ni + Ø + mwiramwi + k(w)a/
3:3 3:4 muted CAUS
'He quietened it [the noise].'

In the second environment, some roots and stems are obligatorily adjoined by the allomorph kwa to form a causative verb. The meaning of these verbs is often idiomatic. (Note that, in the first example, the plural prefix is used as the verb root. This corresponds with its use in derived nouns.)

yirrimwirntikwinimwa
/yirra + mwirnta{ka} + kwa + ni + mwi/
1ExcNsg PL (=many) CAUS TNS PIP
'We were all coming together.' (Lit: we were causing pluralisation)

kimwangwinyik(w)inamwa
/ka + mwa + ngwinyi + kwa + n{i} + amwi/
1ExcSg 3:5 soft CAUS TNS NPIP
'I will be grinding the Zamia nuts.'

napwalhkayikwina
/Ø + n{i} + apwalh{ka} + kaya + kwa + ni/
2Sg 3:3 abdomen lift up CAUS TNS
'Make him stand up!'

In two or three words, the causative marker ka ~ kwa follows what appears to be the stem formative rra (see Section 3.1.2).

nara arimwakwimwa ~ arimwikwimwa ~ arimwirrikwimwa
/nara {a} + arimwi + (rra) + kwa + mwi/
not NEV big SF CAUS PIP
'Don't be making it louder!' / 'Don't put it up higher!'

nimwangpwithirrika

/ni + mwa + ngpwitha + rra + ka/
3:3 3:5 strong SF CAUS
'He made the rope strong.'

6.2.2.2 Inchoative

The Inchoative suffix, like the Causative morpheme, changes nominals and adverbials into verbs. It primarily follows the final root of an adjective and, to a far lesser extent, a noun or an adverb. The verb itself is intransitive.

The vowel preceding the inchoative stem formative tha can be either a low or high vowel. The phonological conditioning is the same as for the Causative morpheme but is much more common. In 91% of a 227 word corpus, the stem-final high vowel is retained if the penultimate vowel in the stem is /a/ but this vowel is changed to the low vowel /a/ if the penultimate vowel in the stem is /i/. High Vowel Lowering Rule 3 (Section 2.3.2.4) can also be said to have created the low vowel in some of the data. The English translation often utilises the passive voice but the Anindilyakwa concept is one of "becoming". The stem formative, together with the verb aspect suffixation, indicates that the process of "becoming" is either complete or incomplete, e.g. 'became, is becoming, will be getting, got, was, is'.

niyakirrarrithina ~ niyakirrarrathina

/ni + yakirrari + tha + ni/
3:3 happy INCH TNS
'He was happy.' / 'He became happy.'

warnikwiyalhilhithina ~ warnikwiyalhilhathina

/warni + kwi + yalhilha + tha + ni/
3:1 NSR shy INCH TNS
'...to have become shy.'

ningkwilyingatjirrarrathina

/ningkwi + lyingatjirrarra + tha + ni/
2Sg torso:long INCH TNS
'You have grown taller.' (Lit: became long)

nalyarrngwalyilyathina
/n{a} + alyarrngwalyilyi + tha + ni/
3:4 night INCH TNS
'It got dark.'

naritjithina
/n{i} + aritja + tha + ni/
3:3(ii) last INCH TNS
'He ended up last.'

There is considerable variation in presence or absence of the nominal classifier. The full form of the adjective, the stem or just the root can be suffixed for inchoative. The alternative forms generally have a fixed idiomatic meaning. Compare the following pairs:

nakpwiringkathina
/na + kpwiringka + tha + ni/
3:4 dry INCH TNS
'It got dry.'

niringkathina
/ni + ringka + tha + ni/
3:3 blow on INCH TNS
'It stopped raining.' (Lit: it became blown on.)

nawirrariyathinimwa
/n{a} + awirrariyi + tha + ni + mwi/
3:4 bad INCH TNS PIP
'It was going bad.'

yingarriyathinimwa
/ying{a} + arriy{i} + tha + ni + mwi/
3:2 bad INCH TNS PIP
'She was getting sicker.' (Lit: was becoming bad)

In some verbs, the inchoative marker is obligatorily suffixed to a verb root which does not otherwise appear as a separate entity. The Anindilyakwa concept is closer to the passive voice than some of the above.

niritjawithimwa
/ni + ri{kwi}tjawi + tha + mwi/
3:3 body:carry INCH PIP
'He was riding.' (Lit: became carried)

yirripwikwimwingkimwingkathayini:::wa
 /yirripwikwi + mwingkimwingka + th{a} + aya + ni + wa/
 1ExcTri REDUP:dig INCH SNsg TNS cont.act
 'We three kept on digging.' (Lit: dig = become a mouth)

nitjarrithina
 /ni + tjarri + tha + ni/
 3:3 ?forked INCH TNS
 'He was finished.'

The following pairs of examples illustrate the interchangeability of the obligatory inchoative and causative markers. Every verb root that can be marked for causative can be marked for inchoative (but not vice versa).

kilhawirrathinamwa
 /ka + lhawirra + tha + n{i} + amwi/
 1ExcSg return INCH TNS NPIP
 'I will be returning.'

kilhawirrakinamwa
 /ka + ni + lhawirra + ka + n{i} + amwi/
 1ExcSg 3:3 return CAUS TNS NPIP
 'I can bring back a goanna.' (Lit: will be causing its return)

ngarrilharrngkwilharrngkwithaka
 /ngarra + lharrngkwilharrngkwi + tha + ka/
 1IncNsg REDUP:things burn CAUS
 'We kept on cooking the things.'

yingithatha
 /yinga + tha + tha/
 3:2 burn INCH
 'The dress was burnt.'

nara akwitjarrikwa
 nara /a + kwi + tjarri + kwa/
 not NEV NSR forked CAUS
 'Don't finish it!' (Lit: do not cause it to be forked)

natjarrithinamwa
 /na + tjarri + tha + n{i} + amwi/
 3:4 forked INCH TNS NPIP
 'It is being finished.' (e.g., ice melting, fat dissolving)

6 2.2.3 Transitiviser

The Transitive stem formative tja follows the verb root and

immediately precedes the tense or aspect marker. An agent or actor (not an experiencer) must be the subject of the verb. The low vowel preceding this stem formative is phonologically-conditioned in the same way as the Inchoative but it also occurs when the Causative morpheme or the last consonant in the root/stem is a velar.

There is very little semantic difference between a Causative and a Transitive verb. A choice is usually made as to which stem formative is used with each verb root but there is some overlap, e.g., in the verbs "I shortened it" and "I made it shorter". The Transitive can follow the Causative morpheme without any semantic difference known to the author.

The occurrence of the Transitive is illustrated in the following sets of examples in contrast with its absence in the intransitive counterpart. The Agent is the subject in the transitive verb and the Experiencer is the subject in the intransitive. This is a common feature of Anindilyakwa.

ningirakayanamwa

/ninga + rakay{a} + an{i} + amwi/
 1ExcSg lie on one's back TNS NPIP
 'I am lying down on my back.'

ningirakayitjinamwa

/ninga + ∅ + rakaya + tja + n{i} + amwi/
 1ExcSg 3:4 lie on one's back TSR TNS NPIP
 'I am laying the stone down.'

niwarrina

/ni + warra + ni/
 3:3 move TNS
 'He wriggled.'

nimwawarritjina

/ni + mwa + warra + tja + ni/
 3:3(i) 3:5 move TSR TNS
 'I started the car.'

naniwarrikwatjina

/n{i} + ani + warra + kwa + tja + ni/
 3:3 3:3 move CAUS TSR TNS
 'He turned the eggs over.'

yinimwamwiwa

3:3(ii) egg

yingilharrina
 /yinga + lharra + ni/
 3:2 fall TNS
 'She fell.'

yingilharritjina akina
 /yinga + ∅ + lharra + tja + ni/ 3:4 that
 3:2 3:4 fall TSR TNS
 'She dropped it.'

wirtana
 /∅ + wirt{a} + ani/
 2Sg climb TNS
 'Climb up!'

wiwirtitjina amwirntakitjika
 /wi + ∅ + wirta + tja + ni/ 3:4 little things
 2Sg 3:4 climb TSR TNS
 'Put the little things up!'

narntangmwiniwa
 /na + rntangmwi + ni + mwi/
 3:4 clap TNS PIP
 'The bell was ringing.'

wirntangmwatjina ningkwilhangwa ayarrka
 /wi + ∅ + rntangmwi + tja + ni/ 2Sg-POSS 3:4 finger
 2Sg 3:4 clap TSR TNS
 'Snap your fingers!'

nara ningkwana alyangkiwamwangimwa
 not 2Sg this /a + lyangkiwamw{i} + anga + mwi/
 NEV head:nod TNS PIP
 'Don't nod your head!'

nara ningkwana amwalyangkiwamwatjangimwa
 not 2Sg this /a + mwa + lyangkiwamwi + tj{a} + anga + mwi/
 3:4 3:5 head:nod TSR TNS PIP
 'Don't wink/blink your eyes!'

6.2.2.4 Reflexive and reciprocal

The Reflexive stem formative, *-tjingwi*, follows a verb root. The resultant reflexive verb is intransitive, as identified by the verb prefixation. A low vowel can precede the Reflexive morpheme under the same phonological conditions as the Transitiveiser. In some instances, the meaning appears to be superfluous in English, as in the

third example below.

akwa yingakpwiwarrkatjingwinamwa
and /ying[a] + akpwiwarrka + tjingwi + n{1} + amwi/
3:2 hide REFL TNS NPIP

atjiringkimwantja
3:4 ground-LOC

'She is hiding herself in the ground.'

naningwirthirrwatjingwinimwa akwingwimwantja
/nani + ngwirthirwi + tjingwi + ni + mwi/ 3:4 water-LOC
3:1MascDu dive REFL TNS PIP

'The two men were diving themselves in the water.'

yingiwilyakinamwa namwakimwakitjingwinamwa
3:2+3:4 is showing /na + mwakimwaka + tjingwi + n{1} + amwi/
3:4 REDUP:mark REFL TNS NPIP

yinipa wipwirra ngalhilhangwimwantja aringka
3:3 red ochre like 3:2(ii)-POSS-LOC 3:4 head

'Broiga is carrying the red mark, that keeps marking itself, on her head.'

thipwina thingira anilhangwimwantja nanimwathangkwa
3:2(ii) that 3:2(ii) clay 3:3(i)-POSS-LOC 3:3(i) his body

yingiwirritjingwa arakpwa
/yinga + wirra + tjingwi/ comp.act
3:2 throw away REFL

'The clay disappeared from his body.' (Lit: threw itself away)

nalhingkwapwitjatjingwina
/na + lhingkwapwitja + tjingwi + ni/
3:4 hair:jump REFL TNS
'The grass grew.' (Lit: jumped its foliage up.)

The Reflexive morpheme can follow the Causative or the Transitivity suffix but the verb remains intransitive. This means that the reflexive suffix can de-transitive a verb, thus indicating that reflexiveness outranks transitivity. The following examples show the use of the causative marker in the reflexive verb.

nimwamarrkiwarrikwatjingwa
/nimwa + m{w}arrkiwarra + kwa + tjingwi/
3:5 circular:move CAUS REFL
'It [the sun] moved itself [to the afternoon position].' (Lit: made its circular shape move.)

niwalhkiwayitjatjingwina
 /niw{a} + alhkiwaya + tja + tjingwi + ni/
 3:4 wing:brush off TSR REFL TNS
 'The seed peeled its own skin off.' [Lit: brushed its wing off]

yirriwarpwarritjatjingwina
 /yirra + warpwarra + tja + tjingwi + ni/
 1ExcNsg ?head:split TSR REFL TNS
 'We all rolled ourselves over.'

nakina anilhangwa nanikwiwanikpa
 3:3(i) that 3:3(i)-POSS 3:3(i) son-KPOSS

niwarrikwatjingwimwa wipwirra
 /ni + warra + kwa + tjingwi + mwi/ like
 3:3 move CAUS REFL PIP

thiwathirra
 3:2(ii) cockatoo
 'His son was causing himself to turn into a cockatoo.'

niyangkithirrpwirakatjingwina
 /ni + yangkithirrpwira + ka + tjingwi + ni/
 3:3 head:level CAUS REFL TNS
 'He made himself straighten up.' (Lit: caused his head to be level)

There is an alternative way to express reflexivity when there is more than one person or thing involved. The non-singular suffix -aya follows the verb root or stem. It could be argued that the semantic concept is simply one of plurality in contrast to reflexivity expressed by -tjingwi. The following examples in which the action is done separately by each actor or agent are given to show the contrast with those above.

nawirrakingpwiringkathayinimwirra
 /na + wirraka + ngpwiringka + th{a} + aya + ni + mwirra/
 3:1 SNSg dry INCH SNsg TNS PIP
 'They were all drying themselves off.' (Note: Each person dried himself/herself)

yirringirikwirikwayina
 /yirringa + rikwirik{i} + aya + ni/
 1ExclFemDu REDUP:sit face to face SNsg TNS
 'We sat ourselves face to face.'

ngawa niwarrkpwitjangayinamwa
 cont.act /niw{a} + arrkpwitjang{a} + aya + n{i} + amwi/
 3:4 jump up SNsg TNS NPIP
 'The sores keep coming up.'

The Reciprocal verb is not marked differently in the morphological structure from the Reflexive verb with a non-singular subject. The action of the verb involves a mutual relationship between a number of people, e.g., meet together, follow, or share.

naywayinimwirra

/na + yiw{i} + aya + ni + mwirra/

3:1 follow SNsg TNS PIP

'They were all keeping on following each other.'

ngarrirringkayina

/ngarra + rringk{a} + aya + ni/

1IncNsg see SNsg TNS

'We can all see each other.'

naniwartiyinamwirra

/nani + warti + ya + n{i} + amwirra/

3:1MascDu fight SNsg TNS NPIP

'The two men are fighting each other.' / 'The two men are fighting.'

6.2.2.5 Interrogative verb

The only interrogative verb in Anindilyakwa, yamwarrka 'do how?' or 'do what?', is intransitive, as indicated by the verb prefixation. Its two morphemes are yamwi 'do, say' and an irregular Causative stem formative, arrka. The interrogative verb cannot be negated.

kwitja yingiyamwarrkinamwa

hey /yinga + yamwarrka + n{i} + amwi/

3:2 do what? TNS NPIP

thakina

3:2(i) that

'Hey there! What is she doing?'

ningkiyamwarrkamwa

/ningkwi + yamwarrk{a} + amwi/

2Sg do how? NPIP

'How are you making [your] dress?'

ningkwingangakpwirakamwa

2Sg+3:2 are making

tiritja

3:2 dress

akiyamwarrkinamwa

/aka + yamwarrka + n{i} + amwi/

1IncNsg do what? TNS NPIP

'What are we going to do?'

ngarna

1IncPl this

arakpwa

comp.act

pwiya niyamwa mwitjikipitja

then 3:3 said (name)

ngarriyamwarrkina

/ngarra + yamwarrka + ni/

1IncNsg do what? TNS

'And then Mr Gibbs said, 'What are we to do?'

nayamwa	akina	kiyamwarrkinamwa		
3:4 said	3:4 that	/ka	+ yamwarrka + n{i}	+ amwi/
		1ExcSg	do what?	TNS NPIP

ngantja	ningana	karimwithiniyatha		
1ExcSg-CofR	1ExcSg this	/k{a}	+ arimwi + tha + ni + yatha/	
		1ExcSg	big	INCH TNS PURP

'It [Whale] said, "What could I be doing to get fat?"' / 'How can I be getting fat?'

6.3 VERB PREFIXATION

The verb prefixation cross-references and identifies the nuclear case relationships of the free form subject and object nominals which are themselves unmarked for nuclear cases. The case relationships are Nominative (subject), Accusative (object) and Dative (indirect object). The verb prefixes also indicate mood (but not tense or aspect).

The transitive verb is distinguished from the intransitive by the addition of a prefix cross-referencing the object nominal. The subject and object prefixes indicate person, number and gender but can be followed by other Number morphemes which further distinguish dual and plural in the subject or object.

The subject and object morphemes often have the same deep structure morpheme-final low vowel. In the surface structure there is a contrast that distinguishes the subject prefix from the object prefix. The subject prefix ends in the high vowel which is generated by the application of the Word-medial Neutralisation Rule (see Section 2.1). The object prefix is irregular because the rule is not applied and the deep structure low vowel is retained in the surface structure. This system is obviously used to avoid ambiguity but it also permits the deep structure form to be reflected in the surface structure.

yingimwarringkinimwa						mwangwiywanga
/yinga ==> yingi	+ mwa	+ rringka	+ ni	+ mwi/		3:5 shark
3:2	3:5	see		TNS	PIP	

'She was looking at the shark.'

yingamwiringkinimwa		mwangwiyiwanga
/yinga + mwa ==> mwi + rringka + ni + mwi/		3:5 shark
3:2 3:5 see TNS PIP		
'The shark was looking at her.'		

The distinction between human NI and non-human masculine YI Noun Classes is neutralised in the verb prefixes to the NI Class. There is, however, one situation in which the two can contrast, i.e., the human masculine NI as both subject and object is realised as the masculine dual subject whereas the co-occurrence of human masculine NI and non-human masculine YI is treated as two separate entities. In the transitive Actual, Potential and Hortatory verbs, the distinction between the two Non-personified Noun Classes A and MWA is neutralised to the A class.

The prefix order for subject and object prefixes in the transitive verbs is determined by their rank within a nominal hierarchy. The one with the higher rank is placed first irrespective of whether it is subject or object; when the subject and object prefixes are of equal rank the subject prefix precedes the object prefix. The hierarchical ranking in a descending scale is: first person; second person; third person non-singular Personified Noun Class 3:1; the equal status singular Personified Noun Classes 3:2 and 3:3; the singular Non-personified Noun Classes 3:4; and the singular Non-personified Noun Class 3:5 (see double lines in the tables later in this section). Thus, in the third person, non-singularity ranks higher than singularity, and Personified ranks higher than Non-personified. The ranking between first versus second person and Noun Class 3:4 versus 3:5 is not as clearly defined as the others (as explained below).

The hierarchical ranking places the participants in the speech act (1st and 2nd person) on the highest level. The first and second

person morphemes always precede third person.

wirrimwirntiwarna alhingatjirriwiya akwa
/wirra + Ø + mwirntiw{a} + arni/ 3:4 long-PL and
2Nsg 3:4 divide TNS

 arikwitharrpwa yingiyamwina thakina
 3:4 short 3:2 said 3:2 that
"Sort them into long ones and short ones!" she said.'

nara ngalhiwa yakangingatja
not 3:2(i) /yaka + nga + ngatja/
 1IncSg 3:2 hit
'She did not hit both of us.'

kampwirra yirramwangkarnimwa mwalhamwikwa
therefore /yirra + mw{a} + angk{a} + arni + mwi/ 3:5 canoe
 1ExcNsg 3:5 fetch TNS PIP
'And so the canoe was picking us up.'

The co-occurrence of first and second persons as subject and object results in indivisible (but not fused) prefixation. Each prefix is in the first person inclusive or exclusive, regardless of whether first or second person is subject or object. This seems to indicate that first person is ranked higher than second person. (Note: The indivisible forms are discussed in Section 6.3.1.1 re Tables 20 and 21.)

yirringka ngayiwa
/yirra + rringka/ 1ExcSg
1ExcNsg see
'You all saw me.'

ngarraringka ningkwirriwa
/ngarra + rringka/ 2Pl
1IncNsg see
'I saw all of you.'

yirringka ngayiwa
/ya + rringka/ 1ExcSg
1IncSg see
'You saw me.'

yipwayiwarna ningkwiwa
/yipwa + yiw{a} + arni/ 2Sg
2Nsg follow TNS
'I will follow you.'

instances, the same hierarchical system operates in a different way, viz., only the nominal with the highest rank is cross-referenced in the verb. There are, however, some other differences which pertain specifically to the classification for person. These are:

(a) If the aggregate of humans in the co-ordinated noun phrase is three or more the verb is marked for human non-singular Noun Class 3:1.

apwlyakarpwiya amwingwirra akwa yilyanga yiwilyapwa
3:4 three 3:4 crayfish and 3:3 ray 3:3 one

nanarthirra
/na{ni} + n{i} + arthirr{a} + anga/
3:1MascDu 3:3 stab TNS

'The two of them speared three crayfish and one Shovel-nosed Ray.'

yirramwirntakimwilyangimwirra
/yi{rra} + rra + mwirntaka + mwilyanga + mwirra/
1ExcNsg 3:1 OPL carry in arms PIP

alyikwira akwa wirriyikwayiwa
3:4 bark and 3:1 children

'We carried the paperbark and the children in our arms.'

nakina akwa thathingwiyankpwa akwa wirrimwangpwalha
3:3 that and 3:2 wife-KPOSS and 3:1 five

wirriwilyapwa wirriyikwayiwa niwampwilkimwa
3:1 one 3:1 children /niw{a} + ampwilya + mwi/
3:1 live PIP

angalyimwantja
3:1 place-LOC

The man, his wife and six children were living in that place.'

nakina naniyiwangkwa naniwilyakamwa
3:3 that 3:3 old man /na{rra} + ni + wilyak{a} + amwi/
3:1 3:3 take NPIP

winampwilyimwa nanikwanikpwakwiya akwa thampwirimwa
3:1MascDu two 3:1MascDu son-DU and 3:2 one

thathiyawanikpwa amwathirra akwingwawa
3:2 daughter-KPOSS 3:4 hole 3:4 water-ALL

'He is taking two of his sons and his daughter to the waterhole.'

(b) If the multiple referents are from different non-human noun classes the verb prefix appears to agree with a related generic

classification rather than any individual class. The most common generic classifications are akwalya 'edible white flesh' with an extended meaning of 'fish'; amwathangkwa 'its flesh' with an extended meaning of 'edible meat'; and anhinga 'vegetable food'; and yiningwingwangpwa 'four-footed land mammals (Lit: having hands)'.

nalhikanimwa angalhipwa akina akwalya
/na + lhik{a} + ani + mwi/ from there 3:4 that 3:4 fish
3:4 go TNS PIP
'They [the stingray (3:2), the shark (3:5), and the swordfish (3:3)]
were going from there.'

mwipwina mwanwiywanga akwa akwalha akwalya
3:5 that 3:5 shark and 3:4 some 3:4 fish

 namwarngkatjiwamwirrithingwa
 /na + Ø + mwarngka + tja + w{i} + amwirra + thingwa/
 3:4 3:4 laugh TSR ?SF NPIP ???
'The shark and some fish are laughing at it [the whale].'

ngalhatja yingalyipwarnimwa anhingwa
3:2(ii)-CofR /ying{i} + Ø + alyipw{i} + arni + mwi/ 3:4 food
 3:2 3:4 eat TNS PIP

 thilhantha
 3:2 rock wallaby
'She was eating vegetable food and rock wallaby.'

(c) If a first or second person singular pronoun co-occurs with a third person nominal or nominals the cross-referencing in the verb prefixation is for first or second person non-singular. (Note: In the following examples, the appropriate prefixation for the interaction of first or second person subject and object is used (see Section 6.3.1.1A, Table 20).)

ngayiwa akwa tjanita akwa yilayina yininwamwiwa-wa
1ExcSg and (name) and (name) 3:3 egg-ALL

 yirrapwirrangkayinimwa/
 /yirr{i} + apwirrangk{a} + aya + ni + mwi/
 1ExcNsg look for SNsg TNS PIP
'Janet, Elaine and I [Sue] were looking for turtle eggs.'

warnamwamwalya akwa ngayiwa angwirrkwa
 3:1 Aborigines and 1ExcSg Angurugu

yirrilhikanimwa
 /yirri + lhik{a} + ani + mwi/
 1ExcNsg go TNS PIP
 'The Aborigines and I were going to Angurugu.'

ningkwiwa yilhirrakirringka thalhapwiyantja
 2Sg /ya + lhirra + rringka/ (personal name)
 1IncSg ODU see

akwa ngayiwa
 and 1ExcSg
 'You saw Dalabianja and me.'

thapwinkanga akwa mwariya akwa ningkwana
 (name) and (name) and 2Sg this

ngamwirntak irringka
 /nga{rra} + mwirntaka + rringka/
 1IncNsg OPL see
 'I saw you, Dabinkanga and Mariya.'

6.3.1 Modality

There are six separate sets of verb prefixes in Anindilyakwa. They distinguish four 'positive' moods (Actual, Potential, Imperative and Hortatory) and two negative moods (Negated Actual and Negated Potential). The negated moods are always preceded by the negative nara. The Potential and Negated Potential share the same set of prefixes. The sixth prefixation set involves the Infinitive verb and could be called Purposive mood because of the meaning and its frequent co-occurrence with the Purposive suffix -yatha. The Interrogative mood is not specifically marked but uses Actual or Potential prefixation with a change in intonation.

6.3.1.1 Actual and Potential moods

The terms, Actual and Potential, have been chosen because a time or tense perspective is not involved. The contrast is between an action which has already begun or is starting right now versus one which has not yet begun. The concept could be stated as past or

immediate action versus projected action. In the English future tense, the intention of the speaker is implied; in Anindilyakwa there is no intention implied. The Aboriginal addressee knows that the statement provides no guarantee that the action will take place but, when a non-Aboriginal tries to press the point and get that guarantee, the answer is always "maybe" (whether in English or the vernacular). The contrast is on whether the task has happened or is happening (and thus is expected to be finished) or whether it has only a potential for being enacted. The Negated Actual mood indicates that such an action or event is not happening, will not be happening or is forbidden. (Note: Tense is marked by suffixation.)

The Actual and Potential verb prefixes have a greater degree of similarity with the Nominal Classifiers than the Personal Pronoun Nucleus. The verb prefixes are entirely different from the nominal prefixes in the third person plural Noun Class 3:1 and singular Noun Class 3:2. In the latter class, the verb prefix yinga- is similar to the pronominal ngalha-. The nominal masculine singular ni- and nani- are both used in the verb prefixation. The surface forms are the same as for nominals and pronominals, as described in Sections 3.3.1 and 4.1.1).

An important distinction between the nominal, pronominal and verbal prefixation is in the first person inclusive singular. The nominal prefixation has the deep structure form ya- and the pronominal has yakwi-. In the verbal prefixation both ya- and yarra- are used. The latter form incorporates the non-singular number morpheme rra-. For consistency, first inclusive singular is used for all three forms.

6.3.1.1A Transitive

The verb prefixation for transitive verbs is divided into two

groups which are structured differently depending on: (a) interaction between speaker and addressee (first and second person) and (b) interaction of first, second and third persons. The second group will be discussed first because the morphemes are more clearly segmentable.

The transitive verb prefixation indicates the person, number and gender of the subject and object. Plural, trial, dual and singular number are differentiated but the plural is frequently used to refer to three items as well. Tables 16 and 17 list the surface forms of the Actual transitive and Potential transitive, respectively.

The deep structure morphemes for Actual transitive prefixation is listed on Tables 18. Note that, in the surface structure shown in Table 16, the low vowel is retained in the object but neutralised to a high vowel in the subject. The prefix order of the subject or object determines its shape, i.e., a first order prefix consists of two syllables but a second order prefix consists of only one syllable, having dropped the initial syllable of the first order prefix.

TABLE 18: DEEP STRUCTURE ACTUAL TRANSITIVE PREFIXES

			SUBJECT		OBJECT	
			First Order	Second Order	First Order	Second Order
1ST	INCL	NON-SG	ngarra		ngarra	
1ST	EXCL	NON-SG	yirra		yirra	
2ND		NON-SG	kwirra		kwirra	
3RD	3:1	NON-SG	narra	pwi	narra	rra
1ST	INCL	SG	ya(rra)		yarra	
1ST	EXCL	SG	ninga		nga	
2ND		SG	ningkwi		nga	
3RD	3:2	SG	yinga	nga	yinga	nga
3RD	3:3	SG	(na)ni	ni	nani	ni
3RD	3:4	SG	niwa	kwi	-----	∅
3RD	3:5	SG	nimwa	mwa	-----	mwa

TABLE 16: TRANSITIVE ACTUAL VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT /// OBJECT			1ST INCL NON-SG	1ST EXCL NON-SG	2ND NON-SG	1ST INCL SG	1ST EXC/2ND SG
1ST	INCL	PL					
1ST	INCL	TRI					
1ST	INCL	SG					
1ST	EXCL	PL					
1ST	EXCL	TRI					
1ST	EXCL	FEM DU					
1ST	EXCL	MASC DU					
1ST	EXCL	SG					
2ND		PL					
2ND		TRI					
2ND	FEM	DU					
2ND	MASC	DU					
2ND		SG					
3RD	3:1	PL	# ngarra pui	# yirra pui	# kuirra pui	# yarra pui	# (ngi) pui
3RD	3:1	TRI	# ngarra pui	# yirra pui	# kuirra pui	# yarra pui	# (ngi) pui
3RD	3:1	FEM DU	# ngarra pui	# yirra pui	# kuirra pui	# yarra pui	# (ngi) pui
3RD	3:1	MASC DU	# ngarra pui	# yirra pui	# kuirra pui	# yarra pui	# (ngi) pui
3RD	3:2	SG	# ngarra ngi	# yirra ngi	# kuirra ngi	# yarra ngi	# (ngi) ngi
3RD	3:3	SG	# ngarra ni	# yirra ni	# kuirra ni	# yarra ni	# ngi ni
3RD	3:4	SG	# ngarra kui	# yirra kui	# kuirra kui	# yarra kui	# (ngi) kui
3RD	3:5	SG	# ngarra mui	# yirra mui	# kuirra mui	# yarra mui	# ngi mui

	3RD 3:1 NON-SG	3RD 3:2 SG	3RD 3:3 SG	3RD 3:4 SG	3RD 3:5 SG
	nga(rri) rra nga(rri) rra ya(rri) rra	ngarra nga ngarripuikwi nga ya(rri) nga	ngarra ni ngarripuikwi ni ya(rri) ni	ngarra Ø ngarripuikwi Ø yi Ø	ngarra əwa ngarripuikwi əwa yi əwa
	yi(rri) rra yi(rri) rra yi(rri) rra yi(rri) rra ninga rra	yirri nga yirripuikwi nga yi(rri)ni nga yi(rri)ni nga (ni)ngi nga	yi(rri) ni yirripuikwi ni yirringi ni yi(rri)ni ni (ni)ngi ni	yirri Ø yirripuikwi Ø yirringi Ø yi(rri)ni Ø (ni)ngi Ø	yirri əwa yirripuikwi əwa yirringi əwa yi(rri)ni əwa (ni)ngi əwa
	k(u)u k(u)i(i) rra k(u)i(i) rra k(u)i(i) rra k(u)i(i) rra ningk(u)a rra	k(u)irri nga k(u)irripuikwi nga k(u)irri(ngi) nga k(u)i(rri)ni nga ningk(u)i nga	k(u)i(rri) ni k(u)irripuikwi ni k(u)irringi ni k(u)i(rri)(ni) ni ningk(u)ini ni	k(u)irri Ø k(u)irripuikwi Ø k(u)irringi Ø k(u)i(rri)ni Ø ningk(u)i Ø	k(u)irri əwa k(u)irripuikwi əwa k(u)irringi əwa k(u)i(rri)ni əwa ningk(u)i əwa
	na(rri) rra na(rri) rra na(rri) rra na(rri) rra	narri nga narripuikwi nga na(rri)ni nga na(rri)ni nga	na(rri) ni narripuikwi ni na(rringi) ni na(rri)(ni) ni	narri Ø narripuikwi Ø narringi Ø na(rri)ni Ø	narri əwa narripuikwi əwa narringi əwa na(rri)ni əwa
	ni nga ni(rra) ni ni ni	na(ni) nga na(ni) nga	yingi ni na(ni) ni	yingi Ø ni Ø	yingi əwa ni əwa
	ni kwi ni əwi	ni kwi ni əwi	ni kwi ni əwi	ni Ø ni Ø	ni əwa ni əwa

TABLE 17: TRANSITIVE POTENTIAL VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT /// OBJECT			1ST INCL NON-SG		1ST EXCL NON-SG		2ND NON-SG		1ST INCL SG		1ST EXCL/2ND :	
1ST	INCL	PL										
1ST	INCL	TRI										
1ST	INCL	SG										
1ST	EXCL	PL										
1ST	EXCL	TRI										
1ST	EXCL	FEM DU										
1ST	EXCL	MASC DU										
1ST	EXCL	SG										
2ND		PL										
2ND		TRI										
2ND		FEM DU										
2ND		MASC DU										
2ND		SG										
3RD	3:1	PL	■ aka	pui	■ yika	pui	■ yika	pui	■ yaka	pui	■ ka	pui
3RD	3:1	TRI	■ aka	pui	■ yika	pui	■ yika	pui	■ yaka	pui	■ ka	pui
3RD	3:1	FEM DU	■ aka	pui	■ yika	pui	■ yika	pui	■ yaka	pui	■ ka	pui
3RD	3:1	MASC DU	■ aka	pui	■ yika	pui	■ yika	pui	■ yaka	pui	■ ka	pui
3RD	3:2	SG	■ aka	ngi	■ yika	ngi	■ yika	ngi	■ yaka	ngi	■ ka	ngi
3RD	3:3	SG	■ aka	ni	■ yika	ni	■ yika	ni	■ yaka	ni	■ ka	ni
3RD	3:4	SG	■ aka	kui	■ yika	kui	■ yika	kui	■ yaka	kui	■ ka	kui
3RD	3:5	SG	■ aka	oui	■ yika	oui	■ yika	oui	■ yaka	oui	■ ka	oui

1 ST SG	3 RD 3:1 NON-SG	3 RD 3:2 SG	3 RD 3:3 SG	3 RD 3:4 SG	3 RD 3:5 SG
	a(ɔi) ■ ka a(ɔi) ■ ka ya(ɔi) ■ ka	aki ■ nga akipuikui ■ nga yaki ■ nga	aki ■ ni akipuikui ■ ni yaki ■ ni	aki ■ Ø akipuikui ■ Ø yaki ■ Ø	aki ■ əwa akipuikui ■ əwa yaki ■ əwa
	yi(ɔi) ■ ka yi(ɔi) ■ ka yi(ɔi) ■ ka yi(ɔi) ■ ka ɔi) ■ ka	yiki ■ nga yikipuikui ■ nga yikini ■ nga yikini ■ nga ki ■ nga	yiki ■ ni yikipuikui ■ ni yikingi ■ ni yiki(ni) ■ ni ki ■ ni	yiki ■ Ø yikipuikui ■ Ø yikingi ■ Ø yikini ■ Ø ki ■ Ø	yiki ■ əwa yikipuikui ■ əwa yikingi ■ əwa yikini ■ əwa ki ■ əwa
	yi(ɔi) ■ ka yi(ɔi) ■ ka yi(ɔi) ■ ka yi(ɔi) ■ ka ɔi) ■ ka	yiki ■ nga yikipuikui ■ nga yikini ■ nga yikini ■ nga ki ■ nga	yiki ■ ni yikipuikui ■ ni yikingi ■ ni yiki(ni) ■ ni ki ■ ni	yiki ■ Ø yikipuikui ■ Ø yikingi ■ Ø yikini ■ Ø ki ■ Ø	yiki ■ əwa yikipuikui ■ əwa yikingi ■ əwa yikini ■ əwa ki ■ əwa
pui	ka(rri) ■ rra	karri ■ nga	ka(rri) ■ ni	karri ■ Ø	karri ■ əwa
pui	ka(rri) ■ rra	karripuikui ■ nga	karripuikui ■ ni	karripuikui ■ Ø	karripuikui ■ əwa
pui	ka(rri) ■ rra	ka(rri)ni ■ nga	ka(rri)ni ■ ni	ka(rri)ni ■ Ø	ka(rri)ni ■ əwa
ngi	■ karri nga	kini ■ nga	kingi ■ ni	kingi ■ Ø	kingi ■ əwa
ni	■ ka(rra) ni	kini ■ nga	ki(ni) ■ ni	kini ■ Ø	kini ■ əwa
kui	■ karra kui	■ kinga kui	■ kana kui	k(iu)a ■ Ø	k(iu)a ■ Ø
əui	■ karra əui	■ kinga əui	■ kana əui	k(iəu)a ■ Ø	k(iəu)a ■ Ø

The following examples illustrate the subject and object prefixation for the Actual mood.

mwapwapwirna	yirrimwapwirrangarna
3:5 many	/yirra + mw{a} + apwirrang{a} + arni/ 1ExcNsg 3:5 find TNS

'We found a lot of yams.'

yawi	nginirringkamwa	ngantja
yes	/nga + ni + rringk{a} + amwi/ 1ExcSg 3:3 see NPIP	1ExcSg-CofR

'Yes, he can see me.' (Lit: is seeing)

kwiniwirraririkwiya	kwinimwalhpwilhalhikiya
2MascDu bad-DU	/k{w}ini + mw{a} + alhpwilhalhika + yi/ 2MascDu 3:5 wing:remain TNS

mwyatja	yingiyamwa
3:5 shoulder blade	3:2 said

'You two bad men have [skinny] shoulder blades,' she said [as an insult].'

narrarrangpwa	arakpwa	wirrakina
/na{rra} + rra + arrangpwa/ 3:1 3:1 collect	comp.act	3:1 those

wirrayangkwirra
3:1 waterlily

'They collected the waterlily roots.'

winalhakina	nikpwa	akwa	nitjarra
3:1MascDu those	3:3 pheasant	and	3:3 seagull

naningwirrkwanimwa	akwalya
/na{rri}ni + Ø + ngwirrkw{i} + ani + mwi/ 3:1MascDu 3:4 hunt TNS PIP	3:4 fish

'Pheasant and Seagull were hunting for fish.'

pwiya	arakpwa	mwipwikwaya	tirakita
then	comp.act	3:5 this coming	3:5 tractor

yirramwangkarna
/yirra + mw{a} + angk{a} + arni/ 1ExcNsg 3:5 put TNS

'And then the approaching tractor picked us up.'

Table 19 lists the prefixation for the Potential transitive verbs. These are similar to the Actual transitive but have a major difference in that they do not distinguish between the first exclusive and the second non-singular subject and object.

The contrast between the Actual and Potential morphemes lies in the substitution of /k/ for other consonants. The changes are: (a) in the first order third person subject, the velar consistently replaces the initial consonant of the subject morphemes; (b) in the the first or second person subject or object and the 3:1 object, the non-singular number morpheme rra- is replaced by ka- (except when 3:1 is both subject and object); and (c) in the first exclusive and second person singular subject, the initial syllable is dropped and the initial consonant of the second syllable replaced by /k/. The initial /ng/ of the first person inclusive non-singular /ngaka/ is dropped--not an unusual feature in that the initial velar nasal is often only approximated (see Section 2.2.6). The person morphemes are listed in a different order in Table 19 to highlight the consistency in the change to a velar.

TABLE 19: DEEP STRUCTURE POTENTIAL TRANSITIVE PREFIXES

			SUBJECT		OBJECT	
			First Order	Second Order	First Order	Second Order
1ST	INCL	NON-SG	aka		aka	
1ST	EXCL	NON-SG	yika		yika	
2ND		NON-SG	yika		yika	
1ST	INCL	SG	yaka		yaka	
1ST	EXCL	SG	ka		ka	
2ND		SG	ka		ka	
3RD	3:1	NON-SG	karra	pwi	karra	ka / rra
3RD	3:2	SG	kinga	nga	kinga	nga
3RD	3:3	SG	kini	ni	kani	ni
3RD	3:4	SG	kiwa	ka	-----	∅
3RD	3:5	SG	kimwa	mwa	-----	mwa

The following examples illustrate the Potential prefixation for transitive verbs. Various free translations in English have been given to show the range of meaning of this Potential morpheme.

athinipwilhangwa yirringalhakana
soon-ABL 1ExcFemDu this

yikingawartanamwa
/yiki{ngi} + nga + warta + an{i} + amwi/
1ExcFemDu 3:2 fight TNS NPIP
'We two women will be fighting her soon.'

niyamwa yikwingpwa yakapwiwartanimwa
3:3 said 3:3 possum /yaka + pwi + wart{i} + ani + mwi/
1IncSg 3:1 fight TNS PIP
yalhakana
1IncSg this
'The possum said, "They will be killing you and me."'

ningkwirriwa karningkwarpwa malhamwikwamwirriya
2Pl 2MascDu men 3:5 canoe-ETC

yikawilyakatjinamwilhangwa
/yi{ka} + ka + wilyakatja + n{i} + amwi + lhangwi/
2Nsg 3:1 teach TNS NPIP ABL
'You men should be teaching the boys about canoes and other things.'

nakina kiningalyilyakimwantja yakina
3:3(i) that /ki{ni} + ni + ngalyilyaka + mwantja/ 3:3(ii) that
3:3 3:3 tread on LOC

yingarna kinartharranamwa
3:3(ii) snake /ki{ni} + n{i} + artharr{a} + an{i} + amwi/
3:3 3:3 pierce TNS NPIP
'If he stands on that snake it will bite him.'

kingilyangparrkinamwa angalya kampwa
/kinga + Ø + lyangparrka + n{i} + amwi/ 3:4 place therefore
3:2 3:4 sweep TNS NPIP

karralyipwarnamwa anhinga
/karr{i} + Ø + alyipw{i} + arn{i} + amwi/ 3:4 food
3:1 3:4 eat TNS NPIP

aritjilhangwa
later
'She will be sweeping the floor so that later they can be eating.'

The subject and object Actual and Potential transitive prefixes are generally systematic but there are some irregularities when specific subject and object prefixes co-occur. For example, the presence or absence of the vowel /a/ is sometimes unpredictable. Reasons cannot be given for all but many of the irregularities can be explained by the operation of phonological rules or adjustments to

avoid ambiguity. The irregularities are as follows:

(i) phonological

(a) Deep structure contrasts can be neutralised in the surface structure by the operation of the Haplology Rule. This creates ambiguity only when it is not clarified in context or by the presence of the free subject or object. The surface neutralisation is found when the singular or dual masculine prefix is the subject or object and is illustrated below using the Actual prefixes underlying the surface structure nani-.

Deep Structure	Surface Structure
Subj: nani + Obj: ni 3:3 3:3	==> na{ni}ni
Subj: narrini + Obj: ni 3:1MascDu 3:3	==> na{rrini}ni
Subj: narri + Obj: ni 3:1 3:3	==> na{rri}ni
Subj: narrini + Obj: ∅ 3:1MascDu 3:4	==> na{rri}ni

(b) Variant prefixes (not listed in the tables) substitute the low vowel for the high at the morpheme boundary between the subject and object. This occurs when the subject is first or second person and the object is third person singular. The addition of the vowel /a/ serves to prevent the operation of the Haplology Rule.

Subj: ningka + Obj: ni 2Sg 3:3	==> ningkini ~ ningkani
Subj: ninga + Obj: ni 1ExcSg 3:3	==> ningini ~ ningani
Subj: kini + Obj: ni 2MascDu 3:3	==> ki(ni)ni ~ kinani

The same phenomenon occurs when the first or second singular subject co-occurs with a third person plural object, e.g., ningi- + rra- ==> ningarra-.

(c) When a dual or trial subject co-occurs with a Noun Class 3:1 object rra-, the surface structure forms only have the person morphemes in the subject prefix. The plural Number morpheme has been entered as a deletion on Tables 16 and 17 because it could be said to be reduced by the Haplology Rule. No phonological rule, however, can account for the absence of the Gender morphemes, nga- (feminine dual) or ni- (masculine dual). It would seem that, with the interaction of non-singular in both subject and object, the focus has changed to the combined plurality, rather than the specific number and gender of the subject.

(d) The first exclusive or second singular subject and object (ki- and ka-) is regular throughout the Potential mood but irregular in the Actual mood. The first order subject is ningi- but the first syllable is dropped in the first order object ngi-. It is irregular, however, in that the object prefix does not have a final /a/ and because it only occurs in the surface structure when the object is 3:3 or 3:5. The deletion can only partly be justified in terms of the Haplology Rule.

(e) The first inclusive singular subject and object prefix (yaki- and yaka-) is consistent throughout the Potential prefixation but is not consistent in the Actual prefixation.

Two different forms occur in the surface forms for the Actual mood, viz., ya- first inclusive subject and yarra- first inclusive object. The deep structure rra- is posited as a deleted syllable in the subject prefix for two reasons--the occurrence of the final /a/ suggests a deleted syllable because otherwise the vowel would neutralise to /i/, and because the Potential prefixation has a corresponding syllable in the surface structure. This does not explain the irregular occurrence of the subject prefix yj- with Noun Classes 3:4 and 3:5 in object. This form is the one used throughout the nominals and pronominals. The term, 1st inclusive singular, is retained for the subject prefix, ya- or yj-, to maintain consistency throughout the different word classes for the same unit. Examples in the Actual mood are:

Obj:	yarra	+	Subj:	pwi
	1IncSg			3:1
Subj:	ya{rra}	+	Obj:	rra
	1IncSg			3:1
Subj:	ya{rra}	+	Obj:	mwa
	1IncSg			3:5

(f) Metathesis is probably the reason for the irregular surface forms, narringa- and karringa-, for a Noun Class 3:2 subject with a Noun Class 3:1 object. For example, the morpheme-final vowels narra- and ngi- metathesise.

(ii) ambiguity

(a) the Noun Class 3:3 object prefixes, nana- and kana-, occur in the surface structure preceding a second order 3:4 or 3:5 subject. These differ from all other forms of the

deep structure morphemes, nani- [neni] and kani- [keni]. Furthermore, to posit a deep structure nana- and kana- would violate Vowel Fronting Rule 1.⁷ The change to the final vowel /a/ would therefore appear to be just a surface phenomenon to avoid ambiguity with nanimwa- (3:3 subject and 3:5 object). The morpheme-final /a/ also makes them more symmetrical with other first order object prefixes.

(b) The allomorphs for Noun Class 3:3 subject or object are first order nani- and second order ni-. When the object is Noun Class 3:4 or 3:5, the 3:3 allomorph ni- occurs in the first position. These combinations, ni- and nimwa-, avoid ambiguity with the co-occurrence of a Noun Class 3:1 masculine dual subject and 3:4 or 3:5 object, i.e., nani- or nanimwa-.

(c) Ambiguity can be caused by the lack of contrast when two noun classes are of equal status. It seems to be just an idiosyncrasy of Anindilyakwa rather than pertaining to the action of a phonological rule. Only the shortened form na- occurs when Noun Classes 3:4 (niwa-) and 3:5 (nimwa-) interact as subject and object; the prefixation for Noun Class 3:3 (masculine) subject and Noun Class 3:2 (feminine) object is also used for the co-occurrence of Noun Class 3:2 (feminine) as subject and object. The former prefix combination in each pair conforms to the overall prefix system. The ambiguity is exemplified by the masculine and feminine, as follows:

Footnote 7: If the final /a/ vowel were assigned to the second order prefix greater irregularities would occur elsewhere, e.g., with a first or second singular object prefix and the 3:1 subject. The above analysis is the simplest and most logical solution.

kinangalhawirrakatjinimwa
 /kini + nga + lhawirra + ka + tja + ni + mwi/
 3:2 3:3 return CAUS TSR TNS PIP

anilhangwa thathingwiyankpwa
 3:3(i)-POSS 3:2 wife-KPOSS
 'He would be bringing back his wife.'

nangimwangimwa thakina
 /na{ni} + nga + mw{i} + anga + mwi/ 3:2 that
 3:2 3:2 pick up TNS PIP

thathikwiwarrkiwarrka
 3:2 spider
 'She [Velma] was picking up that spider.'

Table 20 lists the morphemes for all the subject/object combinations which are semantically possible when first and second person interact as subject and object. (Note: The same person in the subject and object results in a reflexive verb prefixed for the intransitive; the interaction of first inclusive and second persons also results in reflexivity.)

The verb prefixation for first and second person subject and object combinations does not divide into separate morphemes and does not consist of a fused or portmanteau morpheme. All three Actual and two Potential deep structure morphemes are the regular forms for either first inclusive or first exclusive prefixes. The morpheme-final /i/ occurs when second person is the subject; the morpheme-final /a/ occurs when second person is the object. Thus first person is in focus in the shape of the morphemes but second person in the cross-referencing as subject or object. The most marked combinations involve a first exclusive singular subject or object in which there is apparently a special relationship between speaker and addressee(s), viz., the first inclusive singular morpheme yi- is used for a second singular subject and first exclusive singular object; the first inclusive non-singular morphemes, ngarra- and ka-, are used for a

TABLE 20: 1ST & 2ND PERSON TRANSITIVE ACTUAL VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT // OBJECT	1ST EXCL NON-SG	1ST EXCL SG	2ND NON-SG	2ND SG
1ST EXCL NON-SG	----	----	yirra	yirra
2ND NON-SG	yirri	yirri	----	----
1ST EXCL SG	----	----	ngarra	yirra
2ND SG	yirri	yɪ	----	----

TABLE 20: 1ST & 2ND PERSON TRANSITIVE POTENTIAL VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT // OBJECT	1ST EXCL NON-SG	1ST EXCL SG	2ND NON-SG	2ND SG
1ST EXCL NON-SG	----	----	yika ~ yipa	yika ~ yipa
2ND NON-SG	yiki	yiki	----	----
1ST EXCL SG	----	----	ka	yika ~ yipa
2ND SG	yiki	yiki	----	----

second non-singular object and first exclusive singular subject. In all other combinations, the first exclusive non-singular morphemes, yirra- and yika ~ yipwa-, occur.

ningkwiwa yingatjamwa ngayiwamwantja
 2Sg /ya + ngatj{a} + amwi/ 1ExcSg-LOC
 1IncSg hit NPIP
 'You are hitting me.'

kithakinamwantja kakwinamwirra ampwaka
 1ExcSg+3:4 will be cooking-LOC /ka + kwi + n{i} + amwi/ later
 1ExcSg give TNS NPIP
 'After I will have been cooking it I will be giving it to all of you.'

ngayiwa ngarramwamwirikwatjinamwa
 1ExcSg /ngarra + mwamwirikw{i} + tja + n{i} + amwi/
 1IncNsg help TSR TNS NPIP

ningkwirriwamwantja
 2Pl-LOC
 'I am going to help all of you.'

ngayiwa yirrangatjamwa ningkwiwamwantja
 1ExcSg /yirra + ngatj{a} + amwi/ 2Sg-LOC
 1ExcNsg hit NPIP
 'I am hitting you.'

kikwiranimwantja ngarningka akwalya
 2Sg+3:4 will catch-LOC again 3:4 fish

yikikwirna ngantja
 /yiki + kwi + rni/ 1ExcSg-CofR
 1ExcNsg give TNS
 'When you catch fish again you can give me some.'

kikwirangimwantja akwalya kampwirra
 2Sg+3:4 hook-LOC 3:4 fish therefore

yipwamwinithakamwa ngayiwa
 /yipwa + mwini + thak{a} + amwi/ 1ExcSg
 1ExcNsg BENE cook NPIP
 'If you had caught a fish then I would be cooking it for you.'

There are two surface structure morphemes which are irregular. In the transitive Potential prefixation, the co-occurrence of a first exclusive singular subject with a second non-singular object would suggest the form aka- to correspond with ngarra- in the Actual mood prefixation. The absence of the morpheme-initial /a/ prevents

ambiguity with the combination of first inclusive plural subject and Noun Class 3:1 object. In the transitive Actual mood prefixation, the first inclusive singular morpheme yi- is used for the co-occurrence of second singular subject and first exclusive singular object, whereas the morpheme yirri- is the counterpart of the Potential yiki-.

6.3.1.1B Intransitive

The subject prefixes in the Actual and Potential intransitive verbs are similar to their counterparts in the transitive prefixation. Table 21 lists the deep structure prefixes for the intransitive (subject) prefixes.

TABLE 21: DEEP STRUCTURE INTRANSITIVE SUBJECT PREFIXES

	Actual	Potential
1ST INCL NON-SG	ngarra	aka
1ST EXCL NON-SG	yirra	yika
2ND NON-SG	kwirra	yika
3RD 3:1 NON-SG	narra	karra
1ST INCL SG	ya	yaka
1ST EXCL SG	ninga	ka
2ND SG	ningkwi	ka
3RD 3:2 SG	yinga	kinga
3RD 3:3 SG	ni	kini ~ kani
3RD 3:4 SG	niwa	kiwa
3RD 3:5 SG	nimwa	kimwa

The deep structure transitive and intransitive subject and object prefixes can be compared in Table 18, 19 and 21. Only one deep structure form occurs for all non-singular prefixation irrespective of whether the verb is transitive or intransitive or whether the prefix occurs as subject or object; the first person exclusive singular second person singular and Noun Class 3:2 singular

for intransitive are the same as the first order transitive subject or object prefixes. Minor irregularities between other intransitive singular prefixes and their transitive counterparts, as follows:

- (i) In the Potential mood, the first person inclusive singular intransitive yaka- is identical with that for a transitive subject or object. In the Actual mood, only the intransitive prefix ya- which is similar to the transitive subject but not the transitive object form, yarra-, which is marked for the non-singular.

yilhikanimwa	angwirrkwiwa	yarringkwa
/ya + lhik{a} + ani + mwi/	(name)-LOC	yesterday
1IncSg go TNS PIP		
'You and I went to Angurugu yesterday.'		

- (ii) In the Actual mood, the third person Noun Class 3:3 singular morpheme ni- is the shortened second order transitive subject or object form. In the Potential mood, the prefix allomorphs, kini- and kani-, are the same as for the transitive subject or object but are in free variation.

amwarrimwantja	nirrakartjaya
in front of-LOC	/ni + rrakartjaya/
	3:3 sit
'He sat in front of me.'	

nimwalyangkana	lhikwakwa
/ni + mwalyangk{a} + ani/	en route
3:3 play TNS	
'He played along the way.'	

kinilhikatjamwa	~	kanilhikatjamwa
/kini ~ kani + lhik{a} + atj{a} + amwi/		
3:3 go TNS NPIP		
'He will be going.'		

- (iii) In both the Actual and Potential moods, the deep structure forms of the intransitive Noun Classes 3:4 and 3:5 are the same as the first order transitive subject prefixation. In the

TABLE 22: INTRANSITIVE ACTUAL AND POTENTIAL VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT		ACTUAL	POTENTIAL
1ST	INCL PL	ngarri	aki
1ST	INCL PL	ngarrripwiku	akipwiku
1ST	INCL SG	yi	yaki
1ST	EXCL PL	yirri	yiki
1ST	EXCL TRI	yirripwiku	yikipwiku
1ST	EXCL FEM DU	yirringi	yiangi
1ST	EXCL MASC DU	yirriŋi	yikini
1ST	EXCL SG	ningi	ki
2ND	PL	k(w)irri	yiki
2ND	TRI	k(w)irripwiku	yikipwiku
2ND	FEM DU	k(w)irringi	yikingi
2ND	MASC DU	k(w)irriŋi	yikini
2ND	SG	ningk(w)	ki
3RD	3:1 PL	na(rri)	ka(rri)
3RD	3:1 TRI	na(rri)pwiku	ka(rri)pwiku
3RD	3:1 FEM DU	na(rri)ngi	ka(rri)ngi
3RD	3:1 MASC DU	na(rri)ŋi	ka(rri)ŋi
3RD	3:2 SG	yingi	kingi
3RD	3:3 SG	ni	kini ~ kani
3RD	3:4 SG	na / niwi /	ka / kiwi /
			CONS) VOWEL)
3RD	3:5 SG	nimwi	kimwi

nimwilharrmparrimwa nganyangwa mwilhkwa
 /nimwi + lharrmpwarra + mwi/ 1ExcSg-POSS 3:5 stomach
 3:5 be upset TNS
 'I was feeling frightened' (Lit: my stomach was being upset)

kampwirra akina kiwarpwirraŋga
 therefore 3:4 that 2Sg+3:4 will find

 niwararikatjingwinamwa akimwantja
 /niw[a] + ararika + tjingwi + n{i} + amwi/ 3:4 tree-LOC
 3:4 tie REFL TNS NPIP
 'You will find the canoe tied to a tree.' (Lit: it is tying itself
 to a tree)

The following examples illustrate the intransitive Potential mood prefixations.

kimwangkarrinamwa ampwakilhangwa tiraka
 /kimw[a] + angkarra + n{i} + amwi/ slowly 3:5 truck
 3:5 run TNS NPIP
 'The truck will be going slowly.'

ngarningka kalhalhikatja ningkwakina
 again /k[a] + alhalhik{a} + atja/ 2Sg that
 2Sg REDUP: go TNS

 kinakpwirangina yinimwalhikiyatja
 2Sg+3:3 find 3:3 tracks-PURP
 'You should keep going so that you can find more [goanna] tracks.'
 (Lit: should go and go)

nampimpirrarinimwa ngawa wirrapwapwirnilhangwa
 3:3 was keeping on waiting cont.act 3:1 many-ABL

 kamwingkwimwingkwilhitjayinamwirriwa
 /ka[rra] + mwingkwimwingwilha + tjaya + n{i} + amwirra + wa/
 3:1 REDUP: sleep RECP TNS NPIP ALL
 'He kept on waiting [until] everyone would be keeping on sleeping.'

The third person Noun Class 3:1 prefix is irregular in the surface structure. The deep structure narra- can be reduced by the deletion of the non-singular number morpheme rra-. This deletion is optional in the dual and trial prefixes which retain the marking of number in the following gender or number prefixes. The deletion almost always occurs in the plural prefix and this is probably due to the fact that it is frequently followed by the plural number

allomorphs, mwirntaka- ~ wirraka-. Thus there is a reduction in the co-occurrence of number morphemes.

mwarliwiya akwa ngalhilhangwa waritjira
3:2 emu and 3:2-POSS 3:1 children

nalhawirrathina wirrakina
/na{rra} + lhawirra + tha + ni/ 3:1 those
3:1 return INCH TNS

pwiya narrarrangpwamwa anhinga
then /narra + Ø + arrangpw{i} + amwi/ 3:4 food
3:1 3:4 collect NPIP

'Emu and her children returned and are collecting food.'

na(rri)pwikwilhawirrathina
/na(rri)pwikwi + lhawirra + tha + ni/
3:1Tri return INCH TNS
'We three stayed for a long time but the three of them returned home.'

The above reduction in the intransitive Noun Class 3:1 non-singular morpheme can cause ambiguity with the Noun Class 3:4 prefixation. This is usually resolved by adding the non-singular number prefix or suffix to the verb. Compare the following:

nakwiwartjina 'It stood.'
/na + kwiwartja + ni/
3:4 stand TNS

nakwihatjayina 'They stood.'
/na{rra} + kwiwartj{a} + aya + ni/
3:1 stand SNsg TNS

namwirntakilhikana 'They went.'
/na{rra} + mwirntaka + lhik{a} + ani/
3:1 SPL go TNS

The Actual or Potential verb prefixation is used for the Interrogative mood. The clause or sentence is structurally the same but the interrogative is differentiated by a change in intonation pattern. (Also see Section 7.5 for Interrogative Adverbs.)

kwirrilharrngkwitjarrkwa ningkwirriwa
/kwirra + Ø + lharrngkwi + tjarrk{i} + wi/ 2Pl
2Nsg 3:4 things finish SF
'Have you all finished [unloading] the luggage?'

napwakayinamwa
 /na + p{w}ak{i} + aya + n{i} + amwi/
 3:1 drink SNsg TNS NPIP
 'Are they all drinking?'

kartharriyamwa ningana
 /k{a} + Ø + arthirra ==> artharri + y{1} + amwi/ 1ExcSg this
 1ExcSg 3:4 spear TNS NPIP
 'Which fish will I spear?'

kilhikatjamwipwina ningana athiwapwa
 /ka + lhik{a} + atj{a} + amwi + p{w}ini/ 1ExcSg this today
 1ExcSg go TNS NPIP QM
 'Will I be going today?'

6.3.1.2 Negated Actual and Negated Potential moods

A verb is negated by the use of the particle nara which always precedes the verb but can be separated from it by other words. The verb is prefixed in two different ways: (a) the parallel to the (positive) Actual mood is prefixed only by a-; (b) the parallel to the (positive) Potential mood retains its full set of prefixes. The semantic concept for the Negated Actual involves a factual statement about a non-event, i.e., an activity that is non-existent now or in the future; the semantic concept for the Negated Potential involves an event that was potentially possible or probable but did not eventuate. For these reasons, the Negated Actual is used for non-past events and the Negated Potential for past activities.

The Negated Actual prefix a- does not indicate either subject or object.⁸ The verbs do not have a pair of contrastive morphemes to distinguish tense. The suffix angimwi resembles one of the past tense and aspect combinations (see Section 6.4.2.1).

Footnote 8: It may be of interest to some to note that it is the Negated Actual prefix a- that the very young children use on all verbs in the earliest stage of language acquisition.

nara arringkangimwa mwiitjiyanga
nara /a + rringk{a} + anga + mwi/ 3:5 boat
 not NEV see TNS PIP
 'I cannot see the boat.' (Lit: am not seeing)

nara ningana angwirrkwangimwa tampwa
nara 1ExcSg this /a + ngwirrkw{1} + anga + mwi/ 3:4 damper
 not NEV hunt TNS PIP
 'I cannot make a [good] damper.' (Lit: am not hunting)

mwanipwirra wirrikwalha nara alhikangimwa
 CSL 3:1Pl some nara /a + lhik{a} + anga + mwi/
 not NEV go TNS PIP

kwiliwa angwiyampilhangwa nawirranamwa
 3:4 school-ALL 3:4 anger-ABL 3:1 are throwing
 'The reason some [children] are not going to school is that they
 are being teased.'

nara ngayiwa angkangimwa arningkwaya
nara I /{a} + angk{a} + anga + mwi/ tomorrow
 not NEV fetch TNS PIP
 'I will not be picking it up tomorrow.'

The Negated Actual can also be used in the interrogative mood and one which is usually translated as an Imperative in English. The latter is not so much a command forbidding the addressee to do something as a definitive statement indicating that the event is not to take place.

nara ningkana arntaka(ngi)mwa athiwapwa
nara 1ExcSg /{a} + arntak{a} + anga + mwi/ today
 not NEV spear-fish TNS PIP
 'Aren't you going fishing today?'

nara ararikangimwa wirrakina wirriwarta
nara /{a} + ararik{a} + anga + mwi/ 3:1 that 3:1 dog
 not NEV tie TNS PIP
 'You are not to be tying the dogs up.' / 'Don't tie the dogs up!'

nanimwakamwa katjingwa nara
 3:1+3:3 is telling so that nara
 not

alhikangimwiyatha akiniwa akwingwa
 /a + lhik{a} + anga + mwi + yatha/ 3:4 that 3:4 water
 NEV go TNS PIP PURP
 'He was telling them so that they would not be going to the
 water.' / 'He was telling them, "Don't be planning to go to
 the water!"'

nara alhikangimwiyatha ayakiwarriwa
nara /a + lhik{a} + anga + mwi + yatha/ 3:4 other bank-ALL
 not NEV go TNS PIP PURP
 'You are not to be going to the other [river] bank.' / 'Don't go to
 the other side [of the river]!'

The transitive or intransitive Negated Potential mood
 prefixation is the same as for the Potential mood.

nara nakina kanilhkana kiningawilyaka
nara 3:3 that /kani + lhik{a} + ani/ /kini + nga + wilyaka/
 not 3:3 go TNS 3:3 3:2 take

thirntanikpwa mwana yingiwartangimwa
 3:2 mother-KPOSS CSL 3:2 was working
 'He did not take his mother because she was working.'

nara yikinthaya yirratja
nara /yika + n{i} + anthaya/ 1ExcPl-CofR
 not 1ExcNsg 3:3 see
 'We could not see him.' / 'We did not see him.'

thirntathikpwa nara kiningangatjingatjina
 3:2 mother-KPOSS nara /kini + nga + ngatjingatja + ni/
 not 3:3 3:2 REDUP:hit VCL
 'Her mother has never hit her.'

akana nara ngawa kinangkarrina yakinitha
 however nara cont.act /kin{i} + angkarra + ni/ 3:3 that-TRM
 not 3:3 run TNS
 'However, he [Snake] still could not run away.'

nara kingampwampwilya yalhakwa
nara /king{a} + ampwampwilya/ here
 3:2 REDUP:stay
 'She did not stay on and on here.' / 'She did not reside here.'

nara ampwaka yikingingatjayina yirringalhakana
nara later /yikinga + ngatj{a} + aya + ni/ 1ExcFemDu this
 1ExcFemDu hit SNsg TNS
 'We two women have not fought as yet.' / 'We two women will not fight
 until later.'

Attempts to find a Negated Hortatory failed--the sentence
 structure changed to include the Negated Actual. For example, the
 sentence, 'don't let your dog bite him', was translated as nara
alharrkamwa nakina ningkwilhangwa niwarta mwana kanangiyamwapwapwa
 'Don't release your dog because it might bite him'.

6.3.1.3 Imperative mood

The verb prefixation for the Imperative mood is similar to the nominal and pronominal prefixation for second person. The initial rounded velar stop consonant /kw/ is, however, lenited to the continuant /w/.

The surface structure for the transitive and intransitive Imperative prefixation is listed on Table 23. The dual and trial morphemes are consistent with those for nominals, pronominals and the Actual mood in verbs.

6.3.1.3A Transitive

The deep structure transitive Imperative prefixation is shown on Table 24. The object prefixes are the same as for Actual mood.

TABLE 24: DEEP STRUCTURE TRANSITIVE IMPERATIVE PREFIXES

		SUBJECT First Order	OBJECT Second Order
2ND	NON-SG	wirra	rra
3RD 3:1	NON-SG		
2ND	SG	∅ / wi	nga ni ∅ ~ wi mwa
3RD 3:2	SG		
3RD 3:3	SG		
3RD 3:4	SG		
3RD 3:5	SG		

The following examples illustrate the occurrence of the transitive Imperative prefixes when the object is third person.

wirringarrinkina	thaka
/wirra + nga + rringka + ni/	3:2 this
2Nsg 3:2 see TNS	
thathikwiwarrkiwarrka	thapwarta
3:2 spider	3:2 dangerous
'Look at this dangerous spider!'	

TABLE 23: INTRANSITIVE IMPERATIVE VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT	
2ND	
2ND	PL
2ND	TRI
2ND	FEM DU
2ND	MASC DU
2ND	SG

	wi(rri)
	wi(rri)puiku
	wi(rri)ngi
	wi(rri)ni
	∅

TABLE 23: TRANSITIVE IMPERATIVE VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT	///	OBJECT	3RD 3:1 NON-SG	3RD 3:2 SG	3RD 3:3 SG	3RD 3:4 SG	3RD 3:5 SG
2ND		PL					
2ND		TRI					
2ND		FEM DU					
2ND		MASC DU					
2ND		SG					

	wi(rri)	# rra	# nga	wi(rri)	# ni	wi(rri)	# mwa
	wi(rri)	# rra	# nga	wi(rri)puiku	# ni	wi(rri)puiku	# mwa
	wi(rri)	# rra	# nga	wi(rri)ngi	# ni	wi(rri)ngi	# mwa
	wi(rri)	# rra	# nga	wi(rri)ni	# ni	wi(rri)ni	# mwa
	wi	# rra	# nga	∅	# ni	∅	# mwa

wirringka angapwa apwirtha
 /wirra + \emptyset + rringka/ 3:4 that there 3:4 whale
 2Nsg 3:4 see
 'Look at the whale over there!'

mwangakpwatjiya ningkwiwa
 / \emptyset + mwa + ngakpwatji + yi/ 2Sg
 2Sg 3:5 thigh:hit TNS
 'Hit [his] thigh!'

ngamwinakarrngina ngalhilhangwa akwingwa
 / \emptyset + nga + mwin{i} + akarrnga + ni/ 3:2-POSS 3:4 water
 2Sg 3:2 BENE get water TNS
 'Get the water for her!'

Two of the singular verb prefixes have two allomorphs, wi- and \emptyset -. One is morphologically-conditioned and the other is phonologically-conditioned.

- (i) When a second singular subject co-occurs with a non-singular 3:1 object the verb prefix is wirra-. The prefix rra- is consistently used for 3:1 object. This leaves an irregular prefix wi- (and not \emptyset -) for the second person singular subject. The reason for additional of the initial prefix may be to avoid a word-initial /rr/ which is very unusual in Anindilyakwa. It does, however, result in ambiguity between a singular and a non-singular second person subject with a 3:1 non-singular object.

wirramwingkwirratjina
 /wi{rri} + rra + mwingkwirra + tja + ni/
 2Nsg 3:1 care for TSR TNS
 '[You three women] mind them [the children]!'

wirralharrmwana
 /wi + rra + lharrmw{i} + ani/
 2Sg 3:1 chase TNS
 '[You sg] chase them [the children]!'

- (ii) When the second person singular subject occurs with a singular 3:4 object the verb prefix has two allomorphs wi- and \emptyset - which

vary freely. The expected co-occurrence of these subject and object prefixes would result in zero plus zero. The allomorph wi- is harder to explain but it seems most likely to be the singular 3:4 object prefix because of its similarity to the Actual mood equivalents, niwi- and kwi-. The following examples illustrate the variation between wi- and Ø- in the 3:4 noun class object.

ningkana alyipwarnimwa
 2Sg this /Ø + Ø + alyipw{a} + arni + mwi/
 2Sg 3:4 eat TNS PIP

apwapwirna akwalya arngkapwapwirnilhangwa niyamwa
 3:4 many 3:4 fish often-ABL 3:3 said
 "You must be eating lots of fish all the time!" he said.'

yamwina athiwapwa
 /Ø + Ø + yam{w}a + ni/ today
 2Sg 3:4 do TNS
 'Do it today!'

wingkarrngina aringka
 /Ø + wi + ngkarrnga + ni/ 3:4 head
 2Sg 3:4 cut TNS
 'Cut its head off!'

wiyakwiyiwirna ana
 /Ø + wi + yakwi + yiwi + rni/ 3:4 this
 2Sg 3:4 river follow TNS

athalyimwa yantjarra niyamwa yingwa
 3:4 river that way 3:3 said 3:3 crow
 "You go that way and follow this river!" the crow said.'

wimwiya pwangkwilya akwa
 /Ø + wi + m{w}i + yi/ 3:4 axe and
 2Sg 3:4 pick up TNS

rithiya ana aka
 /Ø + Ø + ritha + yi/ 3:4 this 3:4-tree
 2Sg 3:4 chop TNS
 'Pick up the axe and chop down the tree!'

The prefixation for a second person subject and a first person object, yi- and yirri-, are the same as for the corresponding Actual mood prefixes. It seems, therefore, questionable to consider them as

separate grammatical categories.⁹ The most likely explanation is that these prefixes do not imply a command but a polite request to a fellow-participant in the speech event. They are, therefore, NOT entered in Table 23 or 24. In this respect, the Imperative and Hortatory prefixes are alike.

yikwina	ngantja	awilyapwa	pwatjikala
1IncSg give	1ExcSg-CofR	3:4 one	3:4 billycan
'Give me the billycan!'			

ningkwathitjarrka	kikwiyarripina	ningkakina
2Sg cousin-KPOSS	2Sg+3:4 will miss	2Sg that

amwarninthangwa	yikwa	ngayiwawa	yingiyamwa
3:4 stingray	/ya + kwi/	1ExcSg-ALL	3:2 said
	1IncSg give		
'"You, my cousin, will miss the stingray. [So] you give [the spear] to me!" she said.'			

yirrilharmwanga	ningkwiwa
1ExcNsg chased	2Sg
'Chase all of us!'	

6.3.1.3B Intransitive

The intransitive Imperative subject prefixes are the same as transitive counterparts. The number prefix rra- is optional and, in its shortened form, is ambiguous with the transitive prefix wi- for second singular subject and 3:4 object.

awiyapana	athikwina	parrikilhangwiya
/ø + awiyap{i} + ani/	there	3:4 gate-LPRG
2Sg enter TNS		
'Go in through the gate!'		

wirrilhikatja	warnimwirra
/wirra + lhik{a} + atja/	3:1 these-COM
2Nsg go TNS	
'Go along with them.'	

Footnote 9: There are no examples of a first person inclusive object in the Imperative Mood in the texts. Any attempts to elicit such constructions did not achieve the desired results. Sentence structure was changed so that the object was marked for a peripheral not the accusative case.

ampirrarina ampwaka thathingwiyaniwa
 /Ø + ampirrarara + ni/ later 3:2 wife-KPOSS-ALL
 2Sg wait TNS

kingiwilyakinamwirriwa anhinga
 /kinga + wilyaka + n{i} + amwirra + wa/ 3:4 food
 3:2 carry TNS NPIP ALL

naniyamwa
 3:3MascDu said
 '“Wait until later when your wife will be bringing back some food!”
 the two of them said.'

tjayi winilhikatja yimanthiwa
 go away /wi{rrj}ni + lhik{a} + atja/ 3:3 turtle-ALL
 2MascDu go TNS

ningkwirna niyamwa winampwilyimwawa
 2MascDu 3:3 said 2MascDu two-ALL
 '“Go away, you two men, and look for turtles!” he said to the two
 men.'

wipwikwampwilya
 /wi{rra}pwik{wi} + ampwilya/
 2Tri stay
 'You three stay here!'

tjayi wilhikatja
 go away /wi{rra} + lhik{a} + atja/
 3:1 go TNS
 'Go away, all of you!'

6.3.1.4 Hortatory mood

The Hortatory mood is only distinguished from other moods in the third person.¹⁰ This prefixation agrees with that for the subject and object of the main verb.

The third person Hortatory prefixation for both subject and object is based on the Personal Pronoun Nucleus (see Section 4.1.1). The first order person prefixes for non-singular and human.masculine singular are identical but the non-human.masculine is modified from the pronominal ngalha- to the verbal anga-.

Footnote 10: First person utilises the Actual prefixation, e.g., 'let me do that for you' ==> ngayiwa ngiyar & kinga ningkwilhangwa 'I will do that for you'. Second person is semantic possibility in this type of construction.

Table 25 lists the surface prefixation for both the transitive and intransitive Hortatory. (See Section 4.1.1 for deletion rules for the Personal Pronoun Nucleus.)

6.3.1.4A Transitive

The deep structure transitive Hortatory person morphemes for subject and object in both first and second positions are shown in Table 26.

In the third person singular, each morpheme has two allomorphs: the allomorph with an initial /a/ occurs in first order and the allomorph with no initial vowel in second order. The third person

TABLE 26: DEEP STRUCTURE TRANSITIVE HORTATORY PREFIXES

	SUBJECT		OBJECT	
	First Order	Second Order	First Order	Second Order
1ST INCL NON-SG 1ST EXCL NON-SG 3RD 3:1 NON-SG	apwirra	pwi	aka	
			yika	
			apwirra	rra
1ST INCL SG 1ST EXCL SG 3RD 3:2 SG	anga	nga	yaka	
	ani	ni	ka	
	-----	kwi	anga	nga
3RD 3:3 SG			ani	ni
3RD 3:4 SG	-----	mwa	anga	∅
3RD 3:5 SG			-----	mwa

plural has three allomorphs: apwirra- is used in the first order for both subject and object; pwi- without an initial /a/ is used for the second order subject; and the plural morpheme rra- for the second order object. The plural morphemes can be modified for dual and trial as shown in Table 26 above.

TABLE 25: INTRANSITIVE HORTATORY VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT			
3RD	3:1	PL	apwi(rri)
3RD	3:1	TRI	a(puirri)puikwi
3RD	3:1	FEM DU	apuirringi
3RD	3:1	MASC DU	apuir(ri)ni / ap(w)i(rri)ni
3RD	3:2	SG	angi
3RD	3:3	SG	ani
3rd	3:4	SG	akwi
3RD	3:5	SG	amwi

TABLE 25: TRANSITIVE HORTATORY VERB PREFIXES (SURFACE STRUCTURE)

SUBJECT /// OBJECT			1ST INCL NON-SG		1ST EXCL NON-SG		1ST INCL SG		1ST EXCL SG		3RD 3:1
3RD	3:1	PL	* aka	pwi	* yika	pwi	* yaka	pwi	* ka	pwi	apwi(rri)
3RD	3:1	TRI	* aka	pwi	* yika	pwi	* yaka	pwi	* ka	pwi	apwi(rri)
3RD	3:1	FEM DU	* aka	pwi	* yika	pwi	* yaka	pwi	* ka	pwi	apwi(rri)
3RD	3:1	MASC DU	* aka	pwi	* yika	pwi	* yaka	pwi	* ka	pwi	apwi(rri)
3RD	3:2	SG	* aka	ngi	* yika	ngi	* yaka	ngi	* ka	ngi	* apuirri
3RD	3:3	SG	* aka	ni	* yika	ni	* yaka	ni	* ka	ni	* ap(w)i(rri)
3RD	3:4	SG	* aka	kwi	* yika	kwi	* yaka	kwi	* ka	kwi	* apuirra
3RD	3:5	SG	* aka	mwi	* yika	mwi	* yaka	mwi	* ka	mwi	* apuirra

3RD 3:1 NON-SG	3RD 3:2 SG	3RD 3:3 SG	3RD 3:4 SG	3RD 3:5 SG
apui(rri) # rra apui(rri) # rra apui(rri) # rra apui(rri) # rra	apuirri # nga apuirripwikui # nga ap(w)i(rri)ni # nga ap(w)i(rri)ni # nga	ap(w)i(rri) # ni apuirripwikui # ni apuirringi # ni ap(w)i(rri)ni # ni	apuirri # β apuirripwikui # β apuirringi # β ap(w)i(rri)ni # β	apuirri # a apuirripwikui # a apuirringi # a ap(w)i(rri)ni # a
# apuirri ngi # ap(w)i(rra) ni	ani # nga ani # nga	angi # ni a(ni) # ni	angi # β ani # β	angi # x ani # x
# apuirra kui # apuirra mui	# anga kui # anga mui	# ana kui # ana mui	anga # kui anga # kui	anga # k anga # k

apwiringamwamwirikatjina ngalhatja
 /apwirra + nga + mwamwirakatja + ni/ 3:2(i)-CofR
 3:1 3:2 help TNS
 'Let them all help her.'

mwamwa anilhikatja anatja
 okay /anj + lhik{a} + atja/ 3:3(i)-CofR
 3:3 go TNS

apwiningarrana
 /ap{w}ini + ngarr{a} + ani/
 3:1MascDu visit TNS
 'It's okay, let him visit the other man.'

anginatingjina aniwamwantja
 /anga + ni + ngatja + ni/ 3:3(i)-LOC
 3:2 3:3 hit TNS
 'Let her hit him.'

ngalhatja angiwiyakina anhinga
 3:2-CofR /anga + ∅ + wilyaka + ni/ 3:4 food
 3:2 3:4 take TNS
 'Let her take the food. / It's her turn to take the food.'

The verb prefixation for the interaction of the Noun Class 3:4 and 3:5 as subject or object is angka-. It is the same as for Noun Class 3:2 subject and 3:4 object. Such usage parallels the pronominal system in which the distinction between the non-human.male Noun Classes 3:2, 3:4 and 3:5 is being lost. (see Section 4.1.1.1).

6.3.1.4B Intransitive

The deep structure person morphemes for the intransitive Hortatory subject are shown below in Table 27. The intransitive subject prefixes are the same as those for the transitive verb.

TABLE 27: DEEP STRUCTURE INTRANSITIVE HORTATORY PREFIXES

3RD	3:1 NON-SG	apwi(rra)
3RD	3:2 SG	anga
3RD	3:3 SG	ani
3RD	3:4 SG	aka
3RD	3:5 SG	amwa

kwa	anilhikatja	katjingwa	yilyakwa
here	/ani + lhik{a} + atja/ 3:2 go TNS	so that	3:3 honey

kinirringkinyatha
3:3+3:3 will see-PURP
'Let him come to see the honey.'

mwamwa	angilhikatja	tawiniwa
okay	/anga + lhik{a} + atja/ 3:2 move TNS	3:4 Darwin-ALL

'It's okay, let her go to Darwin.'

apwiniyakayina	~	apwirniyakayina	anatja
/apwirrini ==>	ap{w}i{rri}ni + yakaya	+ ni/	3:3(i)-CofR
3:1MascDu	stay together	TNS	

'Let the two of them marry.' / 'Let him marry her.'

6.3.1.5 Infinitive

The prefixation for the Infinitive differs from all others in that there is no morphological distinction between intransitive and transitive. The infinitive is best described as a nominalised verb because the prefixation is identical with that for nominals (see Section 3.2.3.1). For example:

thathikwatjarra	tiritja
/th{a} + atha + k{wi} + atjarra/ 3:2 hfem NSR wash	3:2(ii) dress

'clean dress'

kingilhikatjamwa	thathikwatjarra
3:2 is going	/th{a} + atha + k{wi} + atjarra/ 3:2 hfem NSR wash

'She is going to wash it.'

The Infinitive prefixation is cross-referenced in agreement with the person, number and gender of the subject of the intransitive verb or the object/indirect object of the transitive verb in the preceding clause to which it is subordinated. Table 28 lists the surface forms of the infinitive prefixation. The infinitive mood is used to express purpose and the dependent clause is usually marked by the clitic -yatha (purposive).

TABLE 28: INFINITIVE VERB PREFIXES (SURFACE STRUCTURE)

1ST	INCL		PL	ngarni	+ kwi
1ST	INCL		TRI	ngarrripwik(w)ani	+ kwi
1ST	INCL	FEM	SG	yathi	+ kwi
1ST	INCL	MASC	SG	yani	+ kwi
1ST	EXCL		PL	yarni	+ kwi
1ST	EXCL		TRI	yirripwik(w)ani	+ kwi
1ST	EXCL	FEM	DU	yirringathi	+ kwi
1ST	EXCL	MASC	DU	yinani	+ kwi
1ST	EXCL		SG	ningani	+ kwi
2ND			PL	k(w)ani	+ kwi
2ND			TRI	kwirripwik(w)ani	+ kwi
2ND		FEM	DU	kwirringathi	+ kwi
2ND		MASC	DU	k(w)inani	+ kwi
2ND			SG	ningk(w)ani	+ kwi
3RD	3:1		PL	warni	+ kwi
3RD	3:1		TRI	wirripwik(w)ani	+ kwi
3RD	3:1	FEM	DU	wi(rri)ngathi	+ kwi
3RD	3:1	MASC	DU	winani	+ kwi
3RD	3:2(1)		SG	thathi	+ kwi
3RD	3:2(11)		SG	thani	+ kwi
3RD	3:3(1)		SG	nani	+ kwi
3RD	3:3(11)		SG	yini	+ kwi
3RD	3:4		SG	a	+ kwi
3RD	3:5		SG	mwamwi	+ kwi

nganingayinthangimwa nanikwilhika arakpwa
1ExcSg+3:3 was wanting /nanikwi + lhika/
3:3 go comp.act
'I was wanting him to go.'

yirrikwitjilhangwa nilyangkiyamwamwa
3:3 bandicoot 3:3 is thinking

nanikwiyangkwilhapiyatha nipwirathimwantja
/nanikwi + yangk(w)ilhapi + yatha/
3:3 ask PURP 3:3 wallaby-LOC

katjingwa nanikwikwiyatha wirrampwilyimwa
also /nanikwi + kwi + yatha/
3:3 give PURP 3:1 two

wirrangariya
3:1 young

'Bandicoot was thinking about asking Wallaby to give him two of his children.'

ningitjingwinimwa ninganikwilhikatjiwa
1ExcSg was tiring /ninganikwi + lhik{a} + atja + wa/
1ExcSg go TNS cont.act
'I was getting too tired to walk any further.'

nanangkirranimwirra nakina nanikwiewartilhangwa
3:2 was knowing 3:3 that /nanikwi + warti + lhangwi/
3:3 kill ABL

niwirrawilya
3:3 rainbow

'He knew [he had] to kill Rainbow.'

ningingamwakamwa thathikwiringanthiyatha arakpwa
1ExcSg+3:2 am telling /thathikwi + ringantha + yatha comp.act
3:2 cut PURP

yipwiratha
3:2 wallaby

'I am telling her to cut the wallaby up.'

ngarningka ngarramwakinamwa karnikwilhawirrathiyatha
again 1IncNsg are telling /karnikwi + lhawirratha + yatha/
2P1 return PURP

'We are telling all of you again that you should return.'

wirrikwalha warningkwarpwa naniyikanamwirra akwingwa
3:1 some 3:1 men 3:1+3:3 are taking 3:4 water

katjingwa nanikwipakiyatha
so that /nanik(w)i + paki + yatha/
3:3 drink PURP

'Some [of the other] men are taking water for him to drink.'

In the above examples, the Infinitive prefixation agrees with a subject or object consisting of a human or non-human animate. When

the object of the transitive verb in the first clause is inanimate
the infinitive prefix agrees with the subject and not the object.

narrarrangpwamwaka	anhinga	apwapwirna	wirrakina
3:1+3:4 collected	3:4 food	3:4 many	3:1 those

warnikwalyipwariyatha
/warnik{wi} + alyipwara + yatha/
3:1 eat PURP

'They collected lots of food so that they could eat it.'

naningimwapwalhpwa	ningayinthangimwaka	aningapwa
3:3 bat	3:3+3:4 was wanting-INTENS	3:4 good

aningkwa	nanikwiwartiyatha	nakina
3:4 spear	/nanikwi + warti + yatha/ 3:3 kill PURP	3:3 that

'Bat was wanting a good spear to kill him [Rainbow].'

6.3.2 Number

Number is optionally marked by a third order prefix. The allomorphs of the Number morpheme are lhirraka- for dual and wirraka- ~ mwirntaka- for trial or plural. They agree with the subject of an intransitive verb and the object of a transitive verb. The prefix maintains the third order position irrespective of whether the subject or object prefix is in first or second position.

6.3.2.1 Dual

The third order dual number prefix lhirraka- can co-occur with either a singular or non-singular subject or object prefix. When the mood prefix is already non-singular the number prefix marks non-singularity a second time; when the mood prefix is singular the dual number prefix indicates that the cross-referent consists of two individual items. In the following examples, the third order dual number prefix is shown in agreement with and contiguous to the intransitive subject and the transitive object.

nilhrrakampwilyimwa
 /ni + lhrrak{a} + ampwilya + mwi/
 3:3(ii)Sg SDU stay PIP
 'The two reptiles are staying here.'

nalhrrakampwilyamwa
 /na + lhrrak{a} + ampwily{a} + amwi/
 3:4 SDU stay NPIP
 'The two fish are staying here.'

nimwilhrrakwilhikatjama
 /nimwa + lhrraka + lhika + atj{a} + amwi/
 3:5 SDU go TNS NPIP
 'The two sharks are going.'

narrimwalhrrakirringkimwa tiraka
 /narra + mwa + lhrraka + rringka + mwi/ 3:5 truck
 3:1 3:5 ODU see PIP
 'The dogs saw the two trucks.'

kinimwalhrrakingatjina mwanwiyiwanga
 /kini + mwa + lhrraka + ngatja + ni/ 3:5 shark
 3:3 3:5 ODU kill TNS
 'He will kill the two sharks.'

yarralhrrakingatjina
 /ya{kwi} + rra + lhrraka + ngatja + ni/
 1IncSg 3:1 ODU hit TNS
 'We two hit the two of them.'

wirralhrrakakwiratjina
 /wi{rra} + rra + lhrraka + akwira + tja + ni/
 2Nsg 3:1 ODU look after TSR TNS

wirringampwilyimwakwiya wirringiyikwitjiya
 3:1 two 3:1 small
 'Look after the two children!'

In the following examples, the dual number prefix specifies the number of the object even though it is separated from the object prefix.

nanilhrrakapwirrimwirra
 /na{rra} + ni + lhrrak{a} + apwirra + mwirra/
 3:1 3:3 ODU leave behind PIP
 'He were leaving the two of them behind.'

karringalhrrakwirringkina
 /karra + nga + lhrraka + rringka + ni/
 3:1 3:2 ODU see TNS
 'She will look at the two women.'

yikapwilhrrakingatjina
 /yik{a} + apwi + lhrraka + ngatja + ni/
 1ExcDu 3:1 ODU hit TNS
 'They will hit us two.'

The number prefix for duality does not occur when the subject is marked for masculine and feminine dual by ni- and nga-, respectively. However, an object marked by lhrraka- can co-occur with the dual subject marker.

yikingilhrrakingatjinamwa
 /yikinga + Ø + lhrraka + ngatja + n{i} + amwi/
 2FemDu 3:4 ODU kill TNS NPIP
 'You two [women] can kill the two fish.'

ka(ni)nilhrrakingatjinamwa
 /ka{rri}(ni) + ni + lhrraka + ngatja + n{i} + amwi/
 3:1MascDu 3:3 ODU kill TNS NPIP
 'The two men will be killing the two reptiles.'

Dual and trial number prefixes can co-occur as either subject or object but rarely are both marked in the same transitive verb. When only one is marked any ambiguity can be resolved by adding the free form noun or pronoun.

yirripwikwimwalhrratjawithiyiniwa
 /yirripwikwi + mwa + lhrra{ka} + tjawitha + ya + ni + wa/
 1ExcTri 3:4 ODU get onto ONsg TNS ALL
 'The three of us hopped into the two canoes.'

yikilhrrakingatjina ~ yikipwikwingatjina
 /yiki(pwikwi) + Ø + lhrraka + ngatja + ni/
 2Tri 3:4 ODU hit TNS
 'You three hit the two fish.'

yikilhrrakingatjinamwa
 /yika + Ø + lhrraka + ngatja + n{i} + amwi/
 2Nsg 3:4 ODU kill TNS NPIP

ningkwirripwikwirriwa
 2Tri
 'The three of you could kill the two fish.'

6.3.2.2 Plural

The third order plural number prefix wirra- or mwirntaka- can co-occur with either a singular or non-singular prefix. The value of singular or trial is changed to plural. The plural number prefix is in agreement with the subject of an intransitive and the object of a transitive verb. The reduplication of the plural morpheme intensifies or increases the number.

In the intransitive verbs, the plural number prefix is always contiguous to the subject prefix that it modifies. The following examples illustrate the occurrence of the subject plural, variation between the two plural allomorphs and reduplication.

yirriwirrakirikpwitjangayina
 /yirra + wirra + rikpwitjang{a} + aya + ni/
 1ExcNsg SPL jump SNsg TNS
 'We all jumped.'

yirripwikwiwirrakilyiwakatjina
 /yirripwikwi + wirra + ∅ + lyiwaka + tja + ni/
 1ExcTri SPL 3:4 go around TSR TNS
 'We all went around the cape.'

karramwiwirrakingatjina
 /karr{a} + amwi + wirra + ngatja + ni/
 3:1 3:5 SPL kill TNS
 'The sharks will kill them.'

nawirrakapwathangamwirra ~ namwirntakapwathangamwirra
 /na{irra} + (wirra{a} ~ mwirntak{a}) + apwath{a} + ang{a} + amwirra/
 3:1 SPL be scared TNS NPIP
 'They are being frightened.'

yirrimwirntamwirntakalhalhikaniwa
 /yirra + mwirnta{ka} + mwirntak{a} + alhalhik{a} + ani + wa/
 1ExcNsg REDUP SPL REDUP:go TNS ALL
 'A very large number of us kept on going.'

In the transitive verbs, the plural morpheme always occurs in third order. The plural number prefix and the object prefix it modifies are not always contiguous because a second order subject prefix may intervene.

kawirrakangatjina

/[ka] + ka + wirraka + ngatja + ni/
1ExcSg 3:1 OPL kill TNS

'I will kill them all.'

karripwikwimwawirrakirringkamwa

/karripwikwi + mwa + wirraka + rringk(a) + amwi/
3:1Tri 3:5 OPL see NPIP

'The three of them might be seeing the large number of canoes.'

namwirntakilyangpwirrkwa

/na[rra] + Ø + mwirntaka + lyangpwirrkwa/
3:1 3:4 OPL fill

'They filled many places [with water].'

yikakiwirrakingatjina

/yik[a] + aka + wirraka + ngatja + ni/
2Nsg 3:4 OPL kill TNS

'The fish will kill you all.'

nanimwirntakirringka

/na[rra] + ni + mwirntaka + rringka/
3:1 3:3 OPL see

'He saw the large group of them.'

In transitive verbs where one prefix is used for the combination of first and second person in the subject or object, the few available examples show the dual or plural number morpheme cross-referenced to the object.

yilhirrakirringka

/ya + lhirraka + rringka/ ngayiwa akwa yilitjipwitja
1IncSg ODU see 1ExcSg and (name)

'You saw Elizabeth and me.'

ngamwirntakirringka

/nga[rra] + mwirntaka + rringka/
1IncNsg OPL see

'I saw all of you.'

The number of items is usually identifiable from context. Any ambiguity, however, can be clarified by cross-reference to a nominal, pronominal or noun phrase. This is most likely to refer to agreement with the object because the subject prefixation is much more concise in its marking of number. Note that, in the last example, there is a

very unusual co-occurrence of plural number in the verb prefixation and dual number in the free form nominals.

yikipwikwingatjinamwa akwalyakwiyimwantja
 /yikipwikwi + Ø + ngatja + n{i} + amwi/ 3:4 fish-DU-LOC
 2Tri 3:4 kill TNS NPIP
 'You three can kill the two fish.'

narringimwirntakiwilyakamwirra
 /narringa + Ø + mwirntaka + wilyak{a} + amwirra/
 3:1FemDu 3:4 OPL bring NPIP

apwapwirna anhinga
 3:4 many 3:4 food
 'The two of them are bringing lots of food.'

narringimwirntakilyakwikwamwa
 /narringa + {mwa} + mwirntaka + lyakwikw{i} + amwi/
 3:1FemDu 3:5 OPL soak NPIP

mwarntakirriyarrawiya
 3:5 yam-PL
 'Two of the women are soaking many Long Yams.'

nimwirntakitharrpwikamwa
 /ni + Ø + mwirntaka + tharrpwi + k{a} + amwi/
 3:3 3:4 OPL short CAUS NPIP

alhika akwa yina.
 3:4 foot and 3:3 knee joint
 'The bandicoot is folding his legs.' (Lit: shortening foot and knee)

The non-singular rra- morpheme in the subject prefixation is almost always deleted preceding the non-singular number prefixes. As this is not consistent with syllable deletion by the Haplology Rule, the third order plural number prefix is best considered to be a replacement of the non-singular number morpheme rra-.

nalhirrakatjawithiyina
 /na{rra} + lhirraka + tjawi + tha + ya + ni/
 3:1 SDU ride INCH ONsg TNS
 'They both went in the canoe.'

namwirntakimwirntakimwirayangaka
 /na{rra} + mwirntaka + mwirntaka + mwiray{a} + ang{a} + aki/
 3:1 REDUP SPL hunger TNS INTENS
 'They were all very hungry.'

nawirrakampwilyimwa
 /na{rra} + wirrak{a} + ampwilya + mwi/
 3:1 SPL stay PIP
 'All the dogs were staying [home].'

apwiwirrakilhikatja
 /apwi{rra} + wirraka + lhik{a} + atja/
 3:1 SPL go TNS
 'Let them all go.'

6.3.3 Benefactive

The Benefactive prefix mwini- follows the second order indirect object prefix but it can be separated from a first order indirect object prefix by the subject prefix. The meaning is 'on behalf of' but this often is only clarified by context. For a discussion of the peripheral case clitics which occur on the indirect object noun phrase when the verb incorporates the Benefactive prefix see Section 6.3.3.

wirripwina warnimwamwalya
 3:1 those unseen 3:1 Aborigines

nanimwinangkirrayinimwa
 /na{rra} + ni + mwini{i} + angkirr{a} + aya + ni + mwi/
 3:1 3:3 BENE run SNsg TNS PIP
 'Those [other] Aborigines were chasing it [the snake] away for him.'

kilhikatjamwa ningana alyangkwihiwa akwa
 1ExcSg will be going 1ExcSg this (name)-ALL and

yipwamwinipwayanthanamwa
 /yipwa + m{w}ini + pwayanth{a} + an{i} + amwi/
 1ExcNsg BENE buy TNS NPPI
 'I will be going to Alyangkula and will be buying an axe for you.'

nara kanimwiningayinthanga anilhangwa
 nara /ka{rra} + ni + mwini + ngayinth{a} / 3:3-POSS
 not 3:1 3:3 BENE want

alhikwantja
 3:4 dance
 'He did not want [to do] the dance for them.'

kapwimwiningakpwirakinamwa katana
 /k{a} + apwi + m{w}ini + ngakpwiraka + n{i} + amwi/ 3:4 garden
 1ExcSg 3:1 BENE make TNS NPPI

kapwimwinilhingkwapwitjinama
 /k{a} + apwi + m(w)ini + lhingkwapwi + tja + n{i} + amwi/
 1ExcSg 3:1 BENE grow TSR TNS NPIP
 'They will make a garden for me.'

The Benefactive morpheme mwini- can also occur in an intransitive reflexive or reciprocal verb. In the verb prefixation, the Benefactive implies a covert indirect object which is identical with the subject. A free form indirect object does not co-occur.

nimwiningatjatjingwinimwa yipwiratha
 /nimwa + m(w)ini + ngatja + tjingwi + ni + mwi/ 3:3 wallaby
 3:3 BENE hit REFL TNS PIP
 'The wallaby was hitting itself.'

ngarripwikwimwinakarrngatjingwina
 /ngarripwikwi + m(w)in{i} + akarrnga + tjingwi + ni/
 1IncTri BENE get water REFL TNS
 'We three got water for ourselves.'

6.4 VERB SUFFIXATION

The Anindilyakwa verbs are suffixed by three different sets of morphemes. The first order suffix class is Number and these morphemes are in agreement with the subject or object prefixes; the second order suffix class indicates both verb class and tense; and the third order suffix class denotes both aspect and tense. Verbs can also be suffixed by the case clitics and this is discussed in Section 3.4.3.

6.4.1 Verb classes

Verb roots in Anindilyakwa are assigned to different classes corresponding with contrasts in the shape of the paired Past and Non-past tense allomorphs. There is neutralisation of the tense contrast for some verb classes but clarification is always available through the addition of the imperfective aspect suffixation which also incorporates tense.

Two classification systems are operating in the assignment of a verb root or stem to a specific verb class. In both systems, the

classification is arbitrary, i.e., no phonological or semantic criteria have been found for assigning a root to a specific class.

The first system places a verb root in one of several different classes. There are very few verb roots for which the meaning is distinguishable only by the verb classifier. The following pairs of examples show the change in the verb class corresponding with a change in tense. Aspect suffixation has been added to identify otherwise neutralised tense suffixation.

ningithithangimwa /ninga + ∅ + thith{a} + <u>anga</u> + mwi/ 1ExcSg 3:4 shut 2B(i) PIP	'I was shutting it.'
ningithithinimwa /ninga + ∅ + thitha + <u>ni</u> + mwi/ 1ExcSg 3:4 scratch 1A PIP	'I was scratching it.'
ninganilyangpwatjanga /ning{a} + ani + lyangpwatj{a} + <u>anga</u> / 1ExcSg 3:3 head:hit 2B(i)	'I hit his head.'
ningingpwatjingimwa /ninga + ∅ + ng{ki} + pwatja + <u>ni</u> + mwi/ 1ExcSg 3:4 unspec smell 1A PIP	'I was smelling it.'
ngarrimwingkwilhinga /ngarra + mwingkwilha + <u>nga</u> / 1IncNsg cheeks:lie down 1B	'We all slept.'
ngarriringkwilhanga /ngarra + ∅ + ringkwilh{a} + <u>anga</u> / 1IncNsg 3:4 grind 2B(i)	'We ground it.'
angkarrinamwa /∅ + angkarra + <u>ni</u> + amwi/ 2Sg run 1A NPIP	'Be running!'
angkirratjamwa /∅ + angkirr{i} + <u>atj{a}</u> + amwi/ 2Sg listen 2C NPIP	'Be listening!'

The second system places all verb stems which incorporate a stem formative or marked by the number suffix into Verb Class 1A. This supersedes the assignment of the root itself to another class. The following examples contrast this verb stem classification with the verb root classification.

wintjalhitjina
 /wi + ø + ntjalha + tja + ni/
 2Nsg 3:4 jut out TSR 1A
 'Poke your tongue out!'

nantjalhana
 /na + ntjalh{a} + ani/
 3:4 jut out 1B(ii)
 'It jutted out.'

ngarriwirrakiywayina
 /ngarra + wirraka + yiw{a} + aya + ni/
 1IncNsg SPL follow RECP 1A
 'We all followed each other.'

ngarrawirrakiywarna
 /nga{rra} + rra + wirraka + yiw{a} + arni/
 1IncNsg 3:1 OPL follow 2A(i)
 'We all followed them.'

wakpwarthiwakinamwa
 /w{i} + ø + akpwartha + wi + ka + ni + amwi/
 2Sg 3:4 frighten ?SF CAUS 1A NPIP
 'Be frightening it!' (Lit: cause it to be being frightened!)

nakpwarthangimwa
 /n{i} + akpwarth{a} + anga + mwi/
 3:3 frighten 2B(i) PIP
 'He was being frightened.'

The verb roots and stems divide into two major classes based on the presence or absence of the morpheme-initial vowel /a/. These two classes can be further grouped into a maximum of three separate sub-classes distinguishable by contrasting pairs of allomorphs for past and non-past tenses. There are also some other minor differences in morpheme shapes, usually accounted for by phonological criteria.

Table 29 presents the five possible verb classes and sub-classes. The tense morphemes are neutralised in Sub-class A but are identifiable as being used for both past and non-past by the addition of a past or non-past aspect suffix. Verb Class 1 does not have a sub-class C. (Note: The high vowel following /n/ and /rn/ in A sub-classes is based on symmetry with B. The allophones preceding the nasals are predictable, i.e., [a] precedes /rn/ and [e] precedes /n/.)

TABLE 29: VERB CLASSIFIERS

	SUB-CLASS A	SUB-CLASS B	SUB-CLASS C
CLASS 1	Non-past: -ni Past: -ni	Non-past: -ni Past: -nga	-----
CLASS 2	Non-past: -a(r)ni Past: -a(r)ni	Non-past: -ani Past: -anga	Non-past: -atja Past: -a(r)ni

The number of verb roots or stems which occur in each verb class differs greatly. The percentages are based on a dictionary corpus of 442 verbs which have 251 different verb roots. The statistical count has only been done for roots or stems which do not include a stem formative because their inclusion would skew the results towards an abnormally large number in Class 1A.

Table 30 lists the number of verbs and examples in each sub-class of verb roots. The percentage for each verb class is calculated on the number of verb roots (not examples). The roots are fairly evenly spread with 55% in Class 1 and 45% in Class 2 but the two largest sub-classes (Classes 1A and 2B) account for 82% of the data.

TABLE 30: VERB CLASS STATISTICS

	No. of Examples	No. of Verb Roots	Percentage of Roots
CLASS 1A	224	129	51%
1B	25	10	4%
CLASS 2A	38	24	10%
2B	143	78	31%
2C	12	10	4%
	-----	-----	-----
	442	251	100%
	=====	=====	=====

The fact that neutralisation occurs in 61% of the data (Classes 1A and 2A) indicates that verb classification and its corresponding tense contrast has a low functional load in Anindilyakwa. Verb class suffixation is also neutralised in the Actual Negative. Furthermore, the verb classification for all verbs can be replaced by the suffix *-ya*. Although it is recorded occasionally in texts from the older generation this replacement is probably a language acquisition technique (as supported by some Aborigines who mentioned it was used when speaking to children and the young children's replacement of all prefixation by *-a*). When checking the data, some Aborigines have preferred the information: "when talking to a child".

6.4.1.1 Verb Class 1

Verb Class 1A is the largest class and has no irregular verbs. Excluding verbs with the stem formatives, there are seventy-three intransitive and fifty-six transitive verbs in the class. The past and non-past forms of the class-marking suffix are *-ni*.

yingingwinakilharrinimwa	'She was kneeling.'
/yinga + ngwinakilharra + <u>ni</u> + mwi/	
3:2 knee:fall 1A PIP	
ningwathinamwa	'He is wailing.'/ni +
ngwatha + <u>n{i}</u> + amwi/	
3:3 cry 1A NPIP	
wirrarrikpinamwa	'Be throwing it!'
/wirr{a} + \emptyset + arrikpi + <u>n{i}</u> + amwi/	
2Nsg 3:4 throw 1A NPIP	
ningiripwikwina	'I folded it.'
/ninga + ri{kwi} + pwikwi + <u>ni</u> /	
1ExcSg body fold 1A	

Verb Class 1A includes all the verb stems with a stem formative for Inchoative, Causative or Transitive, or that are suffixed by a Reflexive, Reciprocal, or Number morpheme. One of example of each is

given.

nangkalyithinamwa

/na + ngkalya + tha + n{i} + amwi/
3:4 wet INCH 1A NPIP
'It is getting wet.'

wingkalyikina

/wi + ∅ + ngkalya + ka + ni/
2Sg 3:4 wet CAUS 1A
'Make it wet!'

ningakartjiyatjina

/ni + ∅ + ngakartjiya + tja + ni/
3:3 3:4 thigh:stand up TSR 1A
'He piled the soil up.'

ningirikwiwarrikwatjingwinimwa

/ninga + rikwiwarra + kwa + tjingwi + ni + mwi/
1ExcSg body:move CAUS REFL 1A PIP
'I was making myself turn around.'

kamwirntikwayinamwirra

/ka{rra} + ∅ + mwirntikw{1} + aya + n{i} + amwirra/
3:1 3:4 divide RECP 1A NPIP
'They will all be sharing [the food] with each other.'

nawirrakiwirrilhiyinamwa

/na + wirraka + wirrilha + {a}ya + n{i} + amwi/
3:1 SPL sink SNsg 1A NPIP
'They are all sinking.'

Verb Class 1B is a small class of ten intransitive verbs for which -ni is non-past tense and -nga past tense. The final consonant in all of these roots is a lamino-palatal or lamino-dental but there is very little other evidence of phonological criteria for separating the verb classes. The past tense form has also been given as -ni, thus removing the contrast between Class 1A and 1B. It is not known whether this variation is acceptable within the whole community or is under-differentiation of the sub-classes leading to possible language change. The statistically frequent forms are:

ningirikwilhalhingimwa

/ninga + rikwilhalha + ng{a} + amwi/
1ExcSg body:sit (=shallow) 1B NPIP
'I was squatting down.'

nampwilyingimwa
 /ni + ampwilyi + nga + mwi/
 3:3 stay 1B PIP
 'He was staying.'

mwingkwilhinamwa
 /∅ + mwingkwilha + ni + amwi/
 2Sg cheeks:lie down 1B NPIP
 'Be sleeping!' / 'Go to sleep!'

6.4.1.1 Verb Class 2

Verb Class 2A contrasts with other verb classes but there is usually no tense distinction for past versus non-past tenses. It divides into three sub-sets because of metathesis and the loss of retroflexion (see Sections 2.9 and 2.11).

Verb Class 2A(i) consists of seven verb roots (two intransitive and five transitive) which use the allomorph -arni for both past and non-past tenses. It is the sub-set of Class 2A in which the retroflexion has not been lost. The common phonological feature in these roots is the rounded peripheral /w/ as the final consonant. This may have influenced the retention of the retroflexion but it has not done so in other data.

ningiyinthirwarnimwa 'I was burying it.'
 /ninga + ∅ + yinthirw{a} + arni + mwi/
 1ExcSg 3:4 upper back:bury 2A(i) PIP

nimwarrwarnamwa 'He is wandering around.'
 /ni + mwarrw{a} + arn{i} + amwi/
 3:3 wander 2A(i) NPIP

yingimwirntiwarna 'She counted them.'
 /yinga + ∅ + mwirntiwa + arni/
 3:2 3:4 divide 2A(i)

Verb Class 2A(ii) consists of four transitive verb roots classified by the use of -arni (past tense) and -rni (non-past tense). The retroflexed consonant alternates with its alveolar counterpart in two of these verbs. The most likely explanation for

the absence of an initial /a/ in the non-past tense is the metathesizing of the two vowels.

ningangkarnimwa

/ninga + ∅ + angk{a} + arni + mwi/
1ExcSg 3:4 fetch 2A(ii) NPIP
'I was fetching it.'

kakwimwirnamwa

/k{a} + ∅ + akimwa + arni ==> irn{a} + amwi/
1ExcSg 3:4 put 2A(ii) NPIP
'I will be putting it there.'

ngayakirnamwa ~ ngayakinamwa

/∅ + nga + yaka + arni ==> irn{a} + amwi/
2Sg 3:2 take away 2A(ii) NPIP
'Be abducting her!'

Verb Class 2A(iii) differs from the two sub-sets above in its total absence of any retroflexion. The neutralised tense distinction is marked by -ani. Nine intransitive and four transitive verbs occur in the sub-set.

nalharrkiwilyakana

/na + lharrkiwilyak{a} + ani/
3:4 bone:go around 2A(iii)

'It rolled over.'

kilyingkwanamwa

/ka + ∅ + lyingkw{i} + an{i} + amwi/
1ExcSg 3:4 spread 2A(iii) NPIP

'I will be spreading it.'

walhthathanamwa

/w{i} + alhthath{a} + an{i} + amwi/
2Sg wing:pierce 2A(iii) NPIP

'Be piercing it!'

Verb 2B consists of seventy-eight verb roots marked by -anga for the past tense and -ani for the non-past tense. There are thirty-six intransitive and forty-two transitive roots.

ningimwarntirrangimwa

/ninga + mw{a} + arntirr{a} + anga + mwi/
1ExcSg 3:5 dislike 2B PIP
'I was wakeful all night.'

yingilharrmwanamwa
 /yinga + Ø + lharrmw{a} + an{i} + amwi/
 3:2 3:4 chase 2B PIP
 'She is chasing it.'

niwanpwirrathangimwa
 /ni + wanpwirrath{a} + anga + mwi/
 3:3 head:be split 2B PIP
 'He was trembling with fear.'

Verb Class 2C consists of ten verb roots marked by -ani for the past tense and by -atja for the non-past tense. The past tense -ani freely varies with -arni in some words. Six of the verbs are intransitive and four are transitive.

kilhikatjamwa 'I will be going.'
 /ka + lhik{a} + atj{a} + amwi/
 1ExcSg go 2C NPIP

narntakanimwa ~ narntakarnimwa 'He was spear-fishing.'
 /n{i} + arntak{a} + a(r)ni + mwi/
 3:3 fish with a spear 2C PIP

wilyapwatjamwa 'Be tasting it!'
 /wi + lyapw{a} + atj{a} + amwi/
 2Sg test 2C NPIP

6.4.2 Tense and Aspect

The verbs are optionally suffixed by a tense morpheme and an aspect morpheme which also incorporates tense. The tense suffix precedes the aspect suffix. Both these suffixes interact with the mood prefixation for Actual, Potential, Imperative, Hortatory, Negated Actual and Negated Potential prefixation but the Infinitive does not take either suffix. (Note: The habitual is not marked by aspect but by reduplication of the verb root.)

6.4.2.1 Tense

The two allomorphs of the tense morpheme distinguish between past and non-past tense. The shape of the tense allomorphs differs

according to the Verb Class. This tense distinction is neutralised in some instances (see below). The following pairs of examples contrast past and non-past tenses.

yingithithanga 'She shut it.'
 /yinga + Ø + thith{a} + anga/
 3:2 3:4 shut PTNS

kingithithana 'She will shut it.'
 /kinga + Ø + thith{a} + ani/
 3:2 3:4 shut NPTNS

ngarrimwakwimwarna 'We held [the boat].'
 /ngarra + mw{a} + akwimw{1} + arni/
 1IncNsg 3:5 hold PTNS

ngarrimwakwimwirna 'We hold [the boat].'
 /ngarra + mw{a} + akwimwi + rni/
 1IncNsg 3:5 hold NPTNS

There are restrictions in the inter-relationship of the mood prefixes and the tense suffixes. Both past and non-past tense co-occurs with the Actual prefixes; only the non-past tense co-occurs with the Potential and Imperative prefixes; and only the past tense co-occurs with the Negated Potential prefixes.

Actual + Past

ningarntakana ningana akwalyiwa
 /ning{a} + Ø + arntak{a} + ani + Ø/ 1ExcSg this 3:4 fish-ALL
 1ExcSg 3:4 spearfish PTNS PRF

yarringkwa
 yesterday
 'I went spear-fishing yesterday.'

Actual + Non-past

ningarntakatjamwa ningana ananiwiya
 /ning{a} + Ø + arntak{a} + atj{a} + amwi/ 1ExcSg this now
 1ExcSg 3:4 spear-fish NPTNS NPIP
 'I am going spear-fishing right now.'

Potential + Non-past

kilhikatja		karntakatja
/ka + lhik{a} + atja/		/k{a} + ø + arntak{a} + atja/
1ExcSg go NPTNS		1ExcSg 3:4 spear-fish NPTNS

akwalyiwa
3:4 fish-ALL
'I will spear-fish tomorrow.'

Imperative + Non-past

arntakatja		akwalya	athiwapwa
/ø + ø + arntak{a} + atja/		3:4 fish	today
2Sg 3:4 spear-fish NPTNS			

'Spear-fish today!' / 'Go spear-fishing today!'

Negated Potential + Past

nara	kilhikana	akwalyiwa
not	/ka + lhik{a} + ani/	3:4 fish-ALL
	1ExcSg go PTNS	

	karntakana	yarringkwa
	/k{a} + ø + arntak{a} + ani/	yesterday
	1ExcSg 3:4 spear-fish PTNS	

'I did not go and spear-fish yesterday.'

The tense distinction in the suffixation is neutralised with the Negated Actual prefixes. The morpheme -anga occurs in this position for all verb classes and, while no tense distinction is made, this allomorph occurs only as past tense elsewhere. Furthermore, only the past imperfective aspect allomorph co-occurs with -anga. In the second person, the Negated Actual is often translated as a Negated Imperative but it functions more as a polite rebuke than an order not to do something.

Negated Actual + Past + Past Imperfective

nara	arntakangimwa	ningana
not	/ {a} + arntak{a} + anga + mwi/	1ExcSg this
	NEV spear-fish PTNS PIP	

	akwalyiwa	arningkwaya
	3:4 fish-ALL	tomorrow

'I am not fishing here tomorrow.'

wirrikwalha nara alhikangimwa kwiliwa
 some not /a + lhik{a} + anga + mwi/ 3:4 school-ALL
 NEV go PTNS PIP
 'Some [children] have not been going to school.'

nara ayankilhapwangimwa ngayiwamwantja
 not /a + yangkilhapw{a} + anga + mwi/ 1ExcSg-LOC
 NEV head:test* PTNS PIP
 'You are not to ask me [for food].' / 'Don't ask me [for food]!'

The tense morpheme is optional but its omission does not create ambiguity. Its absence preceding the imperfective aspect morpheme reduces the redundancy caused by the marking of tense in both suffixes. Only the past tense allomorph can occur with a Negated Potential mood prefix and a perfective aspect suffix. (Note: The Potential prefix unmarked by the tense allomorph has not been found.)

Actual + [no past tense] + Perfective

yathikina napwikwiyartha
 from there /napwikwi + yartha + ø/
 3:1Tri arrive PRF
 'The three of them arrived [back] from there.'

Negated Actual + [no non-past tense] + Non-past Imperfective

wirrikwalha nara alhikamwa kwiliwa
 3:1 some not /a + lhik{a} + amwa/ 3:4 school-ALL
 NEV go NPIP
 angwinyampwilhangwa nawaranamwa
 3:4 teasing-ABL 3:1 are not wanting
 'Some are not going to school [because] they are not wanting to be teased.' / 'Some do not go to school...'

Negated Actual + [no past tense] + Past Imperfective

nara ningana awarthimwa warka
 not 1ExcSg this /a + ø + warthi + mwi/ 3:4 work
 NEV 3:4 work PIP
 'I was not working [at the hospital].'

Negated Potential + [no past tense] + Perfective

nara kithaka mwana ningiwarthangimwa
 not /ka + thaka + Ø/ CSL 1ExcSg was working
 1ExcSg cook PRF

katanimwantja
 3:4 garden-LOC

'I did not cook it because I was working in the garden.' / 'I could not cook it because I was gardening.'

The verb root can occur occasionally without any suffixation when the verb prefixation is Actual or Potential (not, to date, in Imperative). The absence of the tense/verb class morpheme involves a perfective aspect but the difference in this usage is not really known. It seems to occur in discourses in the same position as the Terminative clitic -*thə* (see Section 8.2.2.3). If this is correct the absence indicates termination of an event.

natjarritha
 /na + tjarrī + Ø + tha/
 3:4 finish PRF TRM
 'It [the story] is finished.'

yakwitjina arra napwikwimwingkilha
 there (name) /napwikwi + mwingkilha + Ø/
 3:1Tri sleep PRF
 'The three of them slept at Erra.'

pwiya athirra l- pwiranga akina
 then 3:4 hole /k{a} + ək{wi} + pwiranga + Ø/ 3:4 that
 2Sg NSR find PRF

yaratjilangwa
 3:3(ii) goanna-POSS
 'And then you will find a goanna's hole.'

6.4.2.2 Aspect

The allomorphs of the aspect suffix contrast perfective versus imperfective aspects. The perfective aspect is unmarked; the imperfective has a tense contrast between *-amwi* ~ *-amwirra* (non-past) and *-mwi* ~ *-mwirra* (past). The most marked is the imperfective.

The definitions of perfective and imperfective aspects provided by Comrie (1976:16,24) describe very succinctly the semantic concepts for these aspects in Anindilyakwa.

"perfectivity indicates the view of a situation as a single whole, without distinction of the various separate phases that make up that situation (p.16). The general characterisation of imperfectivity ..., namely explicit reference to the internal temporal structure of a situation, viewing a situation from within". (p.24)

A variety of English translations are possible for the one Anindilyakwa structure and this will be illustrated in the glosses throughout this sub-section. The following set of examples illustrate the six basic (positive) contrasts for tense, mood and aspect.

nilhikatja /ni + lhik{a} + atja + ø/ 3:3 go NPTNS PRF	'He goes.'
nilhikana /ni + lhik{a} + ani + ø/ 3:3 go PTNS PRF	'He went.'
kinilhikatja /kini + lhik{a} + atja + ø/ 3:3 go NPTNS PRF	'He will go.'
nilhikatjamwa /ni + lhik{a} + atj{a} + amwi/ 3:3 go NPTNS NPIP	'He is going.'
nilhikanimwa /ni + lhik{a} + ani + mwi/ 3:3 go PTNS PIP	'He was going.'
kinilhikatjamwa /kini + lhik{a} + atj{a} + amwi/ 3:3 go NPTNS NPIP	'He will be going.'

alyipwarnamwa		apwapwirna	akwalya
/∅ + ∅ + alyipw{i} + arn{i} + amwi/		3:4 many	3:4 fish
2Sg 3:4 eat	NPTNS	NPIP	

arngkapwapwirnilhangwa
 3:4 many times-ABL
 'Be eating lots of fish all the time!' / 'You must be eating
 lots of fish all the time.'

The following example illustrate the co-occurrence of the perfective aspect suffixes with the Potential mood prefixation.

Negated Potential + Past + Perfective

nara	ningana	karntakana	
not	1ExcSg this	/k{a} + ∅ + arntak{a} + ani + ∅/	
		1ExcSg 3:4 spear-fish	PTNS PRF

akwalyiwa athiwapwa
 3:4 fish-ALL today
 'I did not spear-fish today.'

mwanipwapwa	nara	kilhikana		kwiliwa
CSL	not	/ka + lhik{a} + ani + ∅/		3:4 school
		1ExcSg go	PTNS PRF	

'Why didn't you go to school?'

Negated Potential + Non-past + Perfective

nara	ningana	kalhalhikatja	
not	1ExcSg this	/k{a} + alhalhik{a} + atja + ∅/	
		1ExcSg REDUP. go	NPTNS PRF

'I never go.'

The following examples illustrate the co-occurrence of the imperfective aspect allomorphs with the Negated Actual prefixation.

Negated Actual + Past + Past Imperfective

nara	arntakangimwa		ningana
not	/[a] + ∅ + arntak{a} + anga + mwi/		1ExcSg this
	NEV 3:4 spear-fish	PTNS PIP	

akwalya arakpwa ningitjingwinamwipwapwa
 3:4 fish comp.act 1ExcSg am tiring-CSL
 'I was not spear-fishing because I am [feeling] tired.'

nara yalhakwa arntakangimwa ningkana
 not here /{a} + arntak{a} + anga + mwi/ 2Sg this
 NEV spear-fish PTNS PIP
 'You should not to be spear-fishing here.' / 'Don't be spear-
 fishing here!'

There appear to be two variants of the non-past tense and aspect sequence -angimwi for the Negated Actual. The medial syllable elides in the variant -amwi and the two forms occur frequently in free variation. The other variant -ingamwa is quite rare, occurring in only about five words. As the final surface vowel in the root is always /a/, there is a possibility that this alternative is caused by metathesis of the vowels.

nara alharrka(ngi)mwa nakina ningkwilhangwa
 not /a + lharrk{a} + a(nga) + mwi/ 3:3(i) that 2Sg-POSS
 NEV release PTNS NPIP

niwarta
 3:3(i) dog
 'You are not to be releasing your male dog.' / 'Don't be releasing
 your male dog!'

nara arringka(ngi)mwa ngakwirrilhangwa
 not /a + rringk{a} + a(nga) + mwi/ 1IncPl-POSS
 NEV see PTNS NPIP

mwanpwa
 3:5 eye
 'Our eyes cannot be seeing [the scabies mite].'

nara yalhakwa angarikwingamwa ningkana
 not here /a + ngarikwi + anga mwi ==> ingamwa/ 2Sg this
 NEV line-fish PTNS PIP
 'You are not to be line-fishing here.' / 'Don't line-fish here!'

6.4.3 Number

The verb can optionally be marked by the non-singular suffix, -aya ~ -atja, which precedes the tense or aspect suffixation. It refers to the subject of an intransitive verb or the object of a transitive verb. (See also Section 6.2.2.4)

ningimwitjikayinamwa ~ ningimwitjikatjinamwa
 /ninga + Ø + mwitjik{a} + aya ~ atja + n{i} + amwi/
 1ExcSg 3:4 pick up ONsg TNS NPIP
 'I am picking up the little bits and pieces.'

ningimwithayinimwa ~ ningimwithatjimwa
 /ninga + {mwa} + mwith{a} + aya ~ atja + mwi/
 1ExcSg 3:5 hold in the lap ONsg PIP
 'I was paddling [the boat].'

Non-singularity can be marked twice, i.e., in the prefixation and the suffixation.

nawirrakingpwiringkathayina
 /na + wirraka + ngpwiringka + th{a} + aya + ni/
 3:4 SPL dry INCH SNsg TNS
 'Everything got dry.'

ngarriwirrakitharrpwikwatjina
 /ngarra + Ø + wirraka + tharrpwikw{a} + atja + ni/
 1IncNsg 3:4 OPL shorten ONsg TNS
 'We all put the things together.'

Adverbs are primarily distinguished from other major word classes (verbs, nominals and pronominals) by the absence of prefixation. They differ from particles because they can carry case-marking clitics. Some adverbs are monomorphemic but most are polymorphemic. A few adverbial clitics have been included in this section because of their grammatical relationship with separate words.

The adverbs have been divided into five different types: locative, pergressive, manner, temporal and interrogative. The locative and pergressive adverbs are either speaker-oriented or environment-oriented. Some of the interrogative adverbs have an adjective or demonstrative roots.

7.1 LOCATIVE ADVERBS

Location in adverbs can relate to time or space. Semantically and, to a lesser extent morphologically, they divide into two groups. One group refers to a specific position in relation to the surrounding environment (including people) but the other group refers to a specific position in relation to the speaker, narrator or author. In Anindilyakwa discourses, the narrator or author acts as an observer describing events as if sitting watching them, e.g., live telecasts by racing or Olympic Games commentators. These adverbs can be inflected for the peripheral cases.

7.1.1 Environment-oriented

Locative adverbs which indicate the specific position of an object in relation to its environment are set out in (horizontal)

contrastive pairs in Table 32. The locative adverbs refer to time as well as space. The system is defective in that the term arrawa is used in two different contrastive pairs. Some Warrindilyakwa Aborigines themselves presented the locative adverbs as pairs of antonyms.

TABLE 32: LOCATIVE ADVERBS (ENVIRONMENT-ORIENTED)

karrawara / apwalhkaya high, high up, above, over, on top of	arrawa low, low down, under, underneath, beneath
arrakpi outside	arrawa inside
akwithangwa near, nearby, next to close to, beside, nearly, almost	awirrikalya distant, far off, remote, long way away

The locative adverb, karrawara 'up high', is much more frequently used than its synonym. Even though it can be marked for case it is often not marked.

thapwapwirrangwa thimpwala ngakwirrilhangwa karrawara
3:2 many-POSS 3:2 clothing 1IncPl-POSS high

akingawirtitjinamwa akimwantja
1IncNsg+3:2 will be putting 3:4 tree-LOC
'We should be putting our clothes high up in the tree.'

yirripikwalhilhikani:::wa karrawara arakpwa
1ExcNsg went-cont.act high comp.act

yirrangapwa yakwitjina arakpwa
1ExcPl there there comp.act
'We three kept on going [until we reached] the top up there.'

wirringalhakana thikwirirkwa ngawa naringangkirranamwirra
3:1FemDu 3:2(ii) brolga cont.act 3:1+3:2 are thinking

niwangkirrayinamwirra karrawarilhangwiya
3:1 are running high-LPRG
'The two brolgas are still thinking and running around high [in sky].'

The word, apwalthkaya(wa) 'above, up high', has been given as the synonym for karrawara(wa) but only one example is available from texts or elicited data. The word is obviously related to the verb, apwalthkayikwi 'to stand up', in which the first root is apwalthka 'abdomen'. It is also possible that the sky is seen as shaped like an abdomen.

yingampwilyimwa amwiningka apwalthkaya mwipwinimwantja
3:2 was staying 3:4 different high 3:5 that unseen-LOC

mwamwithangkwitha
3:5 sandhill-TRM
'She was staying up high on another sandhill.'

The locative adverb, arrawa 'down low' and 'inside', does not distinguish between the concepts of 'inside-ness' and 'underneath-ness'. The following examples illustrate both meanings and the contrast with karrawara.

narrawilyakamwa wirrapwapwirnaka wirrawimwinya
3:1+3:1 are carrying 3:1 many-INTENS 3:1 ducks

arrawa apwirnilhangwimwantja kayiwa
inside 3:1-POSS-LOC 3:5 bag
'They are carrying lots and lots of ducks inside their bag.'

nimwirrkwilhimwa arrawa akimwantja
3:3 was lying under 3:4 tree-LOC
'He was lying down under the tree.'

akwa mwarra mwipwina nimwikwilharrinimwa arrawiwa
and 3:5 blood 3:5 that unseen 3:5 was falling inside-ALL
'And the blood was flowing down inside [her body].'

arrawimwantja alhikirimwantja
inside-LOC 3:4 house-LOC
'Inside the house.'

nampwampwilyimwirra nakwikwawira arrawa
3:3 was keeping on sitting 3:3 alone inside

mwathirrimwantja karrawara mwamwithangkwiwantja
3:5 cave-LOC high 3:5 sandhill-LOC
'He was keeping on sitting alone inside the cave high up in the hills.'

The locative adverb, arrakpi [e^hrekpi] 'outside', has been recorded only in reference to location in space. Its contrast with arrawa 'inside' is shown in the following examples.

thangapwa arrakpimwantja
 3:2(i) that there outside-LOC
 'She is outside.'

alyarrngwalyilya yakina nilhikana arrakpiwa
 3:4 night 3:3(ii) that 3:3 went outside-ALL
 'At night he [Wallaby] went outside.'

akiwarrilhangwa arrawimwantja wimpwa akiwarrilhangwa
 3:4 portion-ABL inside-LOC but 3:4 portion-ABL

arrakpimwantja
 outside-LOC
 'Part [of the airconditioner] will be inside and part outside.'

The locative, akwithangwa 'near', is not mono-morphemic. The first of the two morphemes akwi is the shortened form of (y)al^hakwa 'here'. The second morpheme -thangwa may be the hardened form of the ablative case clitic or the possessive suffix. The latter would indicate an (as yet unconfirmed) semantic concept of 'possessing here-ness'.

aniwa akwithangwa ngarrilhikatjamwa angalya
 3:4 this-ALL near 1IncNsg are going 3:4 place
 'We are going close to this place.'

pwiya mwiwilyapwimwantja mwarrnga thakina yingilhikana
 then 3:5 one-LOC 3:5 night 3:2 that 3:2 went

akwithangwiwa awirikwa
 near-ALL 3:4 swamp
 'And then for one night she went near to the swamp.'

aningkwa nakwimwarnimwirra akwithangwa aniwamwantja
 3:4 spear 3:3+3:4 was putting near 3:3(i)-LOC
 'He was putting the spear next to him.'

napwiwarrka anilhangwa aningkwa arrawa amwartimwantja
 3:3+3:4 hid 3:3(i)-POSS 3:4 spear inside 3:4 grass-LOC

akwithangwa
 near
 'He hid his spear in the grass nearby.'

akwithangwa kalharrmwirthinamwa
 near 3:4 will be becoming dark
 'It's nearly dark.'

mwi

wina 3:5 that unseen mwi

tjiyanga 3:5 boat akwithangwa near kimwi

wirthinamwa 3:5 will be sinking

yirriyamwa
 1ExcNsg said
 "'The boat is almost sinking," we said.'

The Locative adverb, wilyarra 'in the middle, centrally', is an adjective root, minus the nominal classifiers.

arapwa yirripwikwilhika yirripwikwiyatja
 comp.act 1ExcTri went 1ExcTri followed

yinangarikwiwilyarrakamwirra thakini-tha
 3:2+3:2 was causing centrality 3:2 that-TRM

wilyarra yingilhikanimwa
 centrally 3:2 was going
 'We three followed--she (Miss Harris) went in the middle.' (Dabarda was first and Maria last)

ana apwaka wilyarra apwina
 3:4 this 3:4 over there-INTENS centrally 3:4 that unseen

nakpwlhtjirrathina apwina ningiyamwa
 3:4 became long 3:4 that 1ExcSg said
 "'It is in the middle over there in the undulating country," I said.'

nalhikanimwa akina pwiya wilyarrapwa
 3:1 were going 3:4 that then centrally-RST

niwalharrngparrngimwa antharrnga
 3:1 were settling down (name)
 'They kept going and then they settled down about halfway at Antharrnga.'

Rebecca ningkwiwa lhikatja wilyarriwa
 (name) 2Sg 2Sg go middle-ALL
 'Rebecca, go to the centre (of the circle)!'

7.1.2 Speaker-oriented

The second set of locative adverbs which refers to a more general position in relation to the speaker or narrator are shown on Table 33 in (horizontal) contrastive pairs. These adverbs

sometimes inflected by pergressive case-markers, -lhangwiya and -wiya.

TABLE 33: LOCATIVE ADVERBS (SPEAKER-ORIENTED)

near to speaker		distant from speaker	
(y)alhakwa	here	(y)akwitjina	there
(y)athatha	on this side	(y)athikina	on that side
a(tha)thipwina	on this side (previously mentioned)	a(lha)lhipwatja	on that side (previously mentioned)

The first order morpheme in the stems of locative adverbs, yathatha 'near the speaker' or 'on one side', has various phonologically-conditioned allomorphs in the surface structure, viz., (a) the forms shortened by the Haplology Rule (see Section 2.5.2.1), e.g., yatha; (b) the variation between /th/ and /lh/ because of the Fortition Rule (see Section 2.12), e.g., yalha, alhalha and alhatha; and (c) the absence of the initial consonant /y/ (see Section 2:10), e.g., athatha and atha. In the deep structure of the word yakwitjina, the medial syllable of the first morpheme yalhakwi has probably elided.

The second order morphemes make a distinction between being near the speaker or farther away. There is some resemblance to the demonstrative pronoun root but these are not demonstratives because of the lack of prefixation--they simply share the same root. The two demonstrative roots are: akini 'there nearer to the addressee' and pwini 'that not visible' which has a secondary meaning of 'same that as previously referred to'. No explanation can be given for the

alternative forms except that yathatha could be the result of progressive assimilation of the nasal in ani 'this near the speaker' to the last stop in yatha.

The following examples illustrate the contrastive pair of adverbs, (y)alhakwa 'here' and (y)akwitjina 'there'. In some of the examples from stories, the narrators were at Umbakumba but the orientation is related to the speaker rather than the township.

yalhakwa nimwathathinamwa nwakina ningiyamwa
here 3:4 is burning 3:5 that 1ExcSg said
'The fire is burning the tyre here [near me]," I said.'

pwiya alhakwa arakpwa yarna angalyimwantja
then here comp.act 1ExcPl these 3:4 place-LOC
'And then we were all at home here.'

kingakpwirakinamwa angalya alhikira akwitjina
1ExcSg+3:4 will be making 3:4 place 3:4 house there
'I will be building a house there.'

yakwitjina arra napwikwimwingwilha
there (name) 3:1Tri slept
'The three of them slept the night there at Arra.'

The following examples illustrate the contrastive pair of adverbs, (y)athatha 'on this side' and (y)athikina 'on that side'. The shortened form is also included.

nakina ana yathatha angalya naningkwalyirra
3:3(i) that 3:4 this on this side 3:4 place 3:3(i) Mamarika

wimpwa anatja angalya angalhipwa
but 3:3(i)-CofR 3:4 place that way
'He, the Mamarika man, had a place on this side but he [Amagula] had a place in that direction.'

yatha arakpwa ningilhikanimwa mwiwilyapwamwa
on this side comp.act 1ExcSg was going 3:5 one

ningimwingwilhimwirra ampwikwampwa
1ExcSg was sleeping (name)
'On this side I was going and sleeping one night at Umbakumba.'

nilhawirrathinimwa yathathilhangwiya
3:3 was returning on this side-LPRG
'He was returning from across there.'

thakina athikina yingilhikana yingimwatjiwarna
 3:2 that on that side 3:2 went 3:2 walked

arakpwa angapwiwa angalya
 comp.act 3:4 that there-ALL 3:4 place
 'She walked on that side to that place over there.'

nilhikwilhikwayina athikinaka apwirantjarrarra
 3:3 kept dancing on that side-INTENS 3:4 smooth
 'He kept on dancing on that side and [made] a smooth [place].'

The locative adverbs, alhalhipwina 'on this same side' and alhalhipwatja 'on that same side', seem to be used when referring to something that has just been mentioned. This is probably related to the usage of the irrealis demonstrative words with pwini for indicating similarity or sameness. No meaning has been assigned as yet to the morpheme pwatja. The shortened form, alhipwi 'on that same side', may be baby talk.

yirripwikwalhakana athipwina yirranikwa akina
 1ExcTri went on this same side 1ExcNsg+3:3 gave 3:4 that

akwalya
 3:4 fish
 'We went on this side and he gave us [shark] meat.'

alhalhipwatja arakpwa nakina nilhikwayina
 on that same side comp.act 3:3(i) that 3:3 danced
 'He danced on that side.'

pwiya athipwina wirrirrakarimwa wimpwa
 then on this side 3:1 big but

alhipwatja wirrirrakitjirra
 on that side 3:1 long
 'And then [he left] the big one on this side and the long one on that side.'

alhipwa ningana apwirrimwantjilhangwa
 on that same side 1ExcSg this (name)-ABL
 'I [went] from Four-Mile Billabong on that side.'

The adverb, angalhalhipwatja 'from that side, from over yonder, from there', has two shortened forms: angalhipwa and angalyipwa. The derivation of this adverb is not resolved as yet. It may be an

adverbial noun in which an adverbial stem is preceded by the Alienable Possession marker ngwi-.

pwiya nihawirrathimwilhangwa angalhalhipwatja
 then 3:3 was returning-ABL from there

mwawilyimwantjilhangwa
 3:5 Thompson's Bay-ABL
 'And then he was returning from Thompson's Bay.'

angalhipwa angampwilhangwa amwakalyiwakpwa
 from there which?-ABL (name)

yirringalhawirrakatjiwamwa thingkwilhangwa
 1ExcNsg+3:2 were bringing back 3:2(ii) dugong

thathimwathangkwa
 3:2(ii) her flesh
 'From that place, Bickerton Island, we were bringing dugong meat back (with us).'

7.2 PERGRESSIVE ADVERBS

A progressive adverb is a separate word which indicates progression through space or time as opposed to the locative adverb meaning stationary in space or time. These adverbs are often accompanied by an appropriate hand movement. Verbs of motion frequently co-occur with the adverbs but the latter in themselves imply movement. They are not further suffixed for peripheral cases.

7.2.1 Environment-oriented

Table 34 lists the one pair of progressive adverbs that are orientated to the environment rather than the speaker. The words refer to both location and time.

TABLE 34: PERGRESSIVE ADVERBS (ENVIRONMENT-ORIENTED)

<u>athinakpwa</u> (go) ahead, first, early	<u>aritjilhangwa</u> (follow) behind, last, late
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The pergressive adverb athinakupwa 'ahead' consists of two morphemes. The first morpheme is athini which is also found in temporal adverbs, e.g., athinipwa 'soon'. It is probably the same morpheme as (y)athatha 'on that side' in which the last syllable in the surface structure could be said to have assimilated to the previous one. The second morpheme is akupwa 'buttocks'. The word is used when someone goes ahead or arrives early in order to prepare something for those following.

wangkirrayina athinakupwa katjingwa
2Nsg go ahead so that

yikakarnginyatha akwingwa yirriyamwa
1ExcNsg will get water-PURP 3:4 water 1ExcNsg said
'"Go on ahead so that you can get us some water!" we said.'

nangapwa ngarranimwinakwirratjinamwirra athinakupwa
3:3(i) that there 1IncNsg+3:3 is minding ahead
'That [man] over there is minding it ahead for us.'

athinakupwa thirntanikpwa yingilhikirakamwa alhikira
ahead 3:2 mother-KPOSS 3:2+3:4 is building 3:4 house

akwa yingilhirakamwa angwira
and 3:2+3:4 is building 3:4 fire
'First of all, his mother is building a house and a fire.'

ngalhatja mwariya akwa wirriyikwayiwa niwampwilya
3:2-CofR (name) and 3:1 children 3:1 stayed

athinakupwa angalyimwantja
ahead 3:4 home-LOC
'Mariya and the children stayed at home at first.'

The pergressive adverb aritjilhangwa 'behind' consists of two morphemes. The first morpheme aritji could be a hardened and shortened form of the adjective root rrariya; the second is the ablative case-marker -lhangwi. The word is used of someone following another person or one who comes after or later than everyone else.

pwi:::ya ngalhatja yinganthaya aritjilhangwa
then 3:2-CofR 3:2 looked behind
'And then Dabarda looked behind [her].'

yirripwikwirratja ngayiwa akwa mwitjatja akwa
 1ExcTri-CofR 1ExcSg and (name) and

mwitjyarritja yirringilyakiwana ngalhatja thapawarta
 (name) 1ExcFemDu led 3:2-CofR (name)

aritjilhangwa yirrangapwirrakwiyiwarna
 behind 1ExcNsg+3:2 followed

'Mijaja, Miss Harris and I led and Dabarda followed on behind us.'

ngayiwa ningampwarrnga athinipwawiya akwitjina kampwirra
 1ExcSg 1ExcSg soon-TPRG there therefore

ningkwiwa aritjilhangwa
 2Sg behind

'I got there early and thus you came later.'

ngalhapwapwilhangwa amwirntakiljika aritjilhangwa
 3:4 its turn-ABL 3:4 small things behind

'The luggage, in its turn, [was taken off] last.'

ampwaka ngaya aritjilhangwa
 later 1ExcSg behind

'I [am waiting] until last.'

There is another pergressive adverb, lhikwakwa 'en route, along the way', which refers to space but not to time.¹¹ The word appears to be a shortened form resulting from the reduplication of the root lhikwa 'to dance'.

mwitjiyangimwa mwakartilhangwiya mwathirrngwarna mwakarta
 3:5 boat-COM 3:5 sea-LPRG 3:5 big 3:5 sea

yirramwartangimwa lhikwakwa
 1ExcNsg were climbing en route

'We were going by boat through big waves en route.'

Footnote 11: There is another adverb, lhikwiniyawa 'last, later', which is similar in morphological structure to lhikwakwa. It is used of the last action before leaving or the last person to go. As only the following example occurs in texts, its analysis as a pergressive adverb cannot yet be established.

ana anhinga ningalyipwarnamwa ngayiwa kihikatjawa
 3:4 this 3:4 food 1ExcSg am eating 1ExcSg 1ExcSg will go-ALL

lhikwiniyawa
 last

'I am eating this food [and] I will be going later.'

narringingwathayinimwirra lhikwakwa winalyakpwiniwa
 3:1FemDu were crying en route 3:1MascDu those unseen-ALL
 'The two women were crying along the way about the two boys.'

yakina nayitjinimwirra wirrapwapwirna warnimwamwalya
 3:3(ii) that 3:3 was eating 3:1 many 3:1 people

lhikwakwa nilhikanimwantja
 en route 3:3 went-LOC
 'He [Snake] was eating a lot of people as he went along.'

7.2.2 Speaker-oriented

Table 35 lists the pergressive adverbs in paired oppositions in relation to movement to or from the speaker (as explained by the Aborigines themselves). The derivation of one word, however, indicates that the movement is towards the addressee. These adverbs are frequently accompanied by an appropriate hand movement. The horizontal pairs of antonyms were supplied by some of the Warnindilyakwa Aborigines. The word-initial consonant /y/ is optional in some words (see Section 2.10).

TABLE 35: PERGRESSIVE ADVERBS (SPEAKER-ORIENTED)

towards the speaker	away from the speaker
(y)angkwirrangwa to here, towards the speaker	angakipwa to there, away from the speaker
angarripwa (come) this way towards the speaker but changing one's the intended direction	(y)antjarri(kina) (go) that way from the speaker but not straight ahead
arripwapwa (come) towards the speaker	arripwatja (go) away/along from the speaker but in another direction

The derivation of these words is hard to determine because of the irregular forms. There are, however, overall similarities in the morphemes throughout the whole set. The morpheme in the first position is probably the noun root (y)angka 'head' but could also be the noun root arangka 'eye'. The second morpheme kini is the demonstrative root, akini 'that near the addressee'. The morphemes, pwapwa and pwa(tja), are paired and mean 'towards the speaker' and 'away from the speaker', respectively. The morpheme, tjarri [tjeɾi], is probably the hardened form of the adjective root, yarriki 'forked'; the morpheme, arri [eɾi], may also be a shortened form of the same root (see Section 2.9).

In the pergressive adverb, yangkwirrangwa 'to here', the initial consonant /y/ is optional. The derivation of the word is not known but the first morphemes seem to be yangkw and the other/s perhaps rangwi or ranga, plus the Allative case-marker -wa. The case-marker frequently co-occurs on another word in the sentence.

wangkirratja yangkwirrangwa ngayiwawa
2Sg run to here 1ExcSg-ALL
'Run towards me!'

alyarrngwalyilya arakpwa akina mwarngkirngkiwilyarra
3:4 night comp.act 3:4 that 3:5 midnight

yilhawirrathinimwa angkwirrangwa angalyiwa
1IncSg were returning to here 3:4 home-ALL
'It was midnight when we were arriving home here.'

anatja angkwirrangwa nangkarrinimwa nangkarnimwirra
3:3(i)-CofR to here 3:3 was running 3:3 was getting

thampwakwiwa
3:2(') tobacco-ALL
'He was running back here to get tobacco.'

mwilharrngkwitharrpwamwa nimwangkarrina angkarrangwa
3:5 tractor (short thing) 3:5 ran to here
'The tractor came back here'

yangkwirrangwawiya ningana ningilhikatjamwa
to here-LPRG 1ExcSg this 1ExcSg am going
'I am going around to here.'

The derivation of the adverb, angakipwa 'to there', has not been ascertained. The first morpheme could be {y}ang{ka} 'head' and the last morpheme pwa could be the short form of pwatja 'away from the speaker'. (Note: There is a slight possibility that this is not a separate pergressive adverb but a variant form of the adverbial noun angalhipwa.)

yingilhawirrathina yingalhilhikani:::wa angakipwa
 3:2 returned 3:2 kept going-cont.act to there
 'She returned and kept on going [until she got] to there.'

yirripwikwirrakwithirrintinga angalyimwantja angakipwa
 1ExcTri descended 3:4 place-LOC to there

arakpwa yirripwikampwirra
 comp.act 1ExcTri settled
 'We three went there to our camp and settled down.'

angakipwa mwithiyalyimwantja yirranirikpwitjangatja
 to there (name)-LOC 1ExcNsg+3:3 jumped off
 'He landed us there at Saltwater Creek.'

The pergressive adverb, angarripwa 'this way', probably consists of three morphemes: yang{ka} 'head'; arri{ki} 'forked'; and {pwa}pwa 'towards the speaker'. It has a shortened form arripwa which deletes the first morpheme. Such deletion is irregular.

akina arakpwa niwangkarrina angarripwa mwikwimwikwiwa
 3:4 that comp.act 3:4 went this way 3:5 sea-ALL
 'It went straight ahead to the sea.'

wirringingampayina arripwa yiningwampwakiyatha
 2FemDu bathe this way 3:3(11) clam-PURP

thapwirrikwiya yingiyamwa
 3:2(1) daughter-DU 3:2 said
 '"You two daughters bathe this way for clams!" she said.'

yikilharrkatjiyatha arimiwiwa atjipwitila angarripwa
 1ExcNsg will send-PURP 3:4 big-ALL 3:4 hospital this way

tawiniwa
 Darwin-ALL
 'We intend to send you to the big hospital, this way to Darwin.'

The progressive adverbs, yantjarrikina ~ yantjarra 'that way', refer to movement away from the speaker. The word probably consists of three morphemes, viz., (y)angka 'head' in which the final syllable is deleted and the nasal assimilates to the laminal stop; tjarri{ki} 'forked'; and kini 'near to the addressee'. The meaning of the demonstrative root indicates that the movement is related to the addressee rather than the speaker. It would seem that an addressee is implied even though one is not always visible to the group involved in the conversation. The Aborigines sometimes include that information in the free translation of the sentence.

nangkarra antjarrikina akiniwa athalyimwa
 3:3 ran that way 3:4 that-ALL 3:4 river
 'He ran that way [towards them] to the river.'

yantjarra aniwa nilhikana thathimwingkwirrawa
 that way 3:3(i) 3:3 went 3:2(ii) point-ALL
 'He went that way to the point [where the others were waiting].'

nara wiyakwiywirna ana athalyimwa yantjarrikina
 not 2Nsg+3:4 follow 3:4 this 3:4 river that way

niyamwa yingwa
 3:3 said 3:3(ii) crow

'No, follow the river in that direction!' Crow said.

nara yantjarra angarripwa
 no! that way this way
 'Not that way, this way.'

The contrasting pair of adverbs, arripwapwa 'this way, towards the speaker' and arripwatja 'that way, away from the speaker', share the first morpheme arri{ki} 'forked' but contrast in the second morpheme. There is a possibility that the morpheme, wapwa 'this way', has the deep structure demonstrative root pwini in which the last consonant has assimilated to the former.

nipwikwaya arripwapwa
 this coming this way
 'He [is] coming this way.'

thakina yinitjingwinimwirra amwarngka akwa yingilhikana
 3:2 that 3:2+3:4 was laughing 3:4 laugh and 3:2 went

 yingikwakpwirriwarna ngarningka arripwatja
 3:2 crawled on her stomach again that way
 'She was laughing and went crawling along on her stomach again
 that way.'

wilhawirrathina arripwatja mwirirrpwamwa
 2Nsg return that way 3:5 human back-COM
 'Go backwards!'

The pergressive adverb arripwatjipwa means to 'turn and go that way'. There is a slight change in meaning because of the reduplication which seems to indicate repetitive action. No examples are available from text. The morpheme, pwatja 'that way', is most likely to be tjipwa because of its reduplicated form pwatjipwa (the reduplication and metathesis of pwatja would yield pwatjapwa).

7.3 MANNER AND TEMPORAL ADVERBS

The manner and temporal adverbs are structured in different ways. Some are monomorphemic while others are polymorphemic; some can be affixed by a limited number of syntactic suffixes, e.g., Intensifier and Terminaliser.

7.3.1 Uninflected adverbs

There are two adverbs which do not take derivational or syntactic inflections, other than the intensifier or terminaliser. These words could alternatively be regarded as particles but semantically fit in with the adverbs. The two adverbs are:

athirrariyapwa	suddenly
angwirra	strongly, energetically

The adverb, athirrariyapwa 'suddenly', is composed of three

morphemes. The first morpheme is probably the short form of {y}atha 'on this side'; the second is most likely to be the adjective root rrariya 'bad'; and the third -apwa may be the restrictive suffix 'only'. (Note: The semantic concept of badness or wrongness connected with 'suddenly' may have arisen from the cultural prohibition that a person not be woken suddenly so that the person's spirit will have time to return to the body.) The word has been checked but no examples are available from texts. The adverb, angwirra 'strongly, hard', is inflected by only the Intensifier and Terminaliser.

kampwirra	nangawartanga	thakina	<u>angwirra</u>	mwirirrpwamwantja
therefore	3:2+3:2 hit	3:2 that	strongly	3:5 back-LOC

'And so she hit her hard on the back.'

yakina	yipwiratha	nangkarrinimawaka	<u>angwirra</u>
3:3 that	3:3 wallaby	3:3 was running-INTENS	strongly

'That wallaby was running very fast/hard.'

ngalhatja	yirikwitjilhangwa	nanarrkarna	nakinimwantja
3:3(ii)-CofR	3:3(ii) bandicoot	3:3+3:3 pulled	3:3(i) that-LOC

angarripa	<u>angwirra</u>
that way	strongly

'Bandicoot pulled [the tail of] Wallaby very hard that way.'

7.3.2 Adverbs inflected only by -wiya

There are some temporal adverbs which have only been recorded with the Progressive Time case-marker -wiya. The overall meaning does not always appear to change but the case-marker does indicate that duration of time is involved. These adverbs are as follows:

warnantji(pwawiya)	quickly
athiwaya(wiya)	for a while
a(thathinipwa(wiya)	soon, in a little while, first (before)

The adverb for 'quickly' has two forms, warnantjipwawiya ~ warantjipwawiya, in which the nasal and not the reflexion has been lost. The word consists of three morphemes: warnantja 'quickly'; pwi (empty morph); -wiya (time progressive case). The vocative suffix -a::wi can be used with the shortened form warnantja.

akwa nanayitjina ngawa warnantjipwawiya
 and 3:1MascDu+3:4 ate cont.act quickly
 'And the two men continued to eat it quickly.'

akina amwarmwarra natjinginimwa warantjipwawiya
 3:4 that 3:4 sore 3:4 was dying quickly
 'The sore was getting better quickly.'

warnantja lhikatja niyamwa
 quickly 2Sg move 3:3 he said
 '"Come quickly!" he said.'

warantja::wi
 quickly-VOC
 'Quickly!'

The temporal adverb, a(tha)thinipwa 'soon', consists of two morphemes. The first root is athatha 'on this side' (as seen in the locative adverbs); the second root may be a metathesised form of the demonstrative pwini 'near the speaker'. This would imply a meaning of 'time that is on this side near the speaker'. The addition of -wiya can extend the meaning of athinipwawiya to 'first in time, before (something else), early'.

yirrilhalhikanimwa::wa pwiya awilyapwa ayangkitharrpwa
 1ExcNsg kept going then 3:4 one 3:4 island

athinipwawiya
 soon-TPRG

'We kept on going and then soon an island [appeared].'

pwiya yakwitjina tjatimwantja yirrimwirntakirikwpwitjangayina
 then there 3:4 jetty-LOC 1ExcNsg jumped off

yarnimwamwalya athinipwawiya
 1ExcPl Aborigines soon-TPRG

'And then we Aborigines all jumped off first.'

yawa arakpwa athinipwa kilhikatjamwa
 yes comp.act soon 1ExcSg will be going
 'Yes, I will be going soon.'

athinipwawiya wirtarriyawiya nanilharrkatjamwa
 early morning-TPRG 3:1+3:3 is sending

wirrathithiyara yangkwirrangwa ampwikwampwiwa
 3:1 girls to here Umbakumba-ALL
 'Early in the morning he is sending the girls here to Umbakumba.'

The temporal adverb, athiwaya 'for a little while', has two morphemes. The first root is the shortened form of the root athatha 'on this side' (see locative adverbs); the second root is possibly the adjective root waya 'weak'.

pwiya angwirrita naniyangkilhapanimwantja mwakiniyatha
 then 3:4 magpie 3:3+3:3 asked-LOC 3:5 that-PURP

athiwaya
 for a while
 'And then Magpie asked Crow for that [raft] for a while.'

ninganikwinilhangwiya mwamwama tiraka nganyangwa
 1ExcSg+3:3 gave-LPRG 3:5 this 3:5 truck 1ExcSg-POSS

athiwayawiya
 for a while-TPRG
 'I gave him this truck of mine for a while.'

7.3.3 With multiple inflection

Some temporal adverbs can be suffixed by more than one case-marking clitic. The meanings of the ones recorded to date are: -mwantja 'on or at that time'; -lhangwi 'from that time'; -wiya 'during that time'; and -yatha 'for that time'. The mitative case-marker, -mwi(rra), does not appear to add anything to the meaning. The most common case-marker is still the Time Progressive -wiya.

The case clitics are optional on the following temporal adverbs. It is highly probable that all but the first word are

adverbial nouns but there is as yet no real evidence of prefixation.

ampwaka ~ ampwakimwirra	later, later on
athiwapwa	today

The monomorphemic adverb ampwaka has a primary meaning of 'later' but this includes continuing to do something after the expected time limit for its completion. It can be translated as '(until) later, not now, still, later still, yet'. The addition of the concomitative clitic -mwirra does not appear to change the meaning.

yakwitjina	yirriwirrakirikpwitjangina	yirriwirramwirrkwilha
there	1ExcNsg jumped off	1ExcNsg all reclined

ampwakitha
later-TRM

'We all jumped off there and lay down until later.'

ampirrarina	<u>ampwaka</u>	thathingwiyani
2Sgwait	later	3:2 wife-KPOSS

kingiwilyakinamwirriwa	anhinga	nyamwa
3:2+3:4 will be bringing-ALL	3:4 food	3:3 said

'"Wait until later [when] your wife will be bringing some food back!" he said.'

nara	<u>ampwakimwirra</u>	kithaka	ningana
not	later-COM	1ExcSg+3:4 will cook	1ExcSg this

'I will not cook it until later.' / 'I have not cooked it yet.'

yingwa	<u>ampwaka</u>	nimwingkwilhinga
3:3 crow	late	3:3 slept

'The crow slept until late.'

The adverb, ampwakilhangwa 'slowly, gently, carefully, softly', is used of both actions and speech. It consists of the adverb ampwaka 'later' and the ablative suffix -lhangwi. The lengthening of the first syllable increases the degree of slowness in a similar way to the use of the same phonological feature with the

time sequence conjunction pwiyā (see Section 8.1.1.2). The occurrence of the ablative case-marker -lhangwi changes the meaning to 'slowly, carefully, softly' and refers to speech as well as time.

pwiyā ampwakilhangwa nimwanga ampwilyimwakwiya
 then carefully 3:3+3:4 picked up 3:4 two-DU

aka
 3:4 stick

'And then he carefully/gently picked up the two sticks.'

ampwakilhangwa nilyapwikinamwirra karrawarilhangwiya
 slowly 3:3 is creeping high-LPRG

winalhakinimwantja
 3:1MascDu-LOC

'Slowly he is creeping higher towards the two men.'

a:::mpwakilhangwa ngalhaŋja mwakarta mwathirringwarnaka
 slowly 3:5-CofR 3:5 sea 3:5 big-INTENS

nimwiwarmwatjingwinimwaka
 3:5 was standing itself up-INTENS

'Very slowly a very big wave was raising itself up.'

The adverb, athiwapwa 'today (from dawn till dawn), nowadays', consists of two morphemes: {y}atha 'on this side' and wapwa which may be a lenited form of pwapwa 'this way'. The word is optionally suffixed by the progressive case-marker -wiya, the locative case-marker -mwantja, and the concomitative case-marker -mwirra. The restrictive suffix -(a)pwī (usually adjoined to adjectives) follows the locative case-marker in the adverb, athiwapwamwantjipwa 'only for today'.

akwa kampwirra arakpwa athiwapwa thakina
 and therefore comp.act today 3:2 that

yingampwilyamwa yingakpwiwarrkatjingwinamwa
 3:2 is staying 3:2 is hiding herself

mwaningwilhitha
 3:5 daytime

'And therefore nowadays she is hiding herself in the daytime.'

kingilhikatjina athiwapwamwirra
 3:2 will go today-COM
 'She will be going today.'

ningimwarringkimwa athiwapwawiya wirtarriyawiya
 1ExcSg+3:5 was seeing today-TPRG morning-TPRG

mwitjiyanga
 3:5 boat
 'I was seeing the boat during this morning.'

The temporal and manner adverbs in which the case-markers are obligatory for that specific meaning are as follows:

arakpwawiya	long ago
yangmwangmwintjilhangwa	purposelessly, aimlessly, needlessly

The adverb, arakpwawiya 'a long time ago' has a less common form arakpwakwiya [arakpwakiya].¹² The morpheme in first position is the particle arakpwa (completed action) and is suffixed by -wiya (time progressive). The word is mainly used of the Dreamtime and, by its derivation, implies that this era was complete in itself and distinct from the present one. Some speakers use the term to mean 'some time ago, many years ago'.

arakpwawiya akina apwirtha alharrpwilhalhaka
 long ago 3:4 that 3:4 whale 3:4 thin-INTENS
 'During the Dreamtime, the whale was very thin.'

akwa nanimwakinamwirra ayakwa arakpwawiyilhangwa
 and 3:3+3:1 was telling 3:4 word long ago-ABL

wirrarimwirimwilhangwa angalya
 3:1 very big-POSS 3:4 place
 'And he was telling them a Dreamtime story about the giants' place.'

Footnote 12: There is a variant arakpwakwiya which has been supplied for the dictionary but has not been used in the telling of traditional stories. The suffix -kwiya does not occur anywhere else as a syntactic inflection and may have arisen because -wiya varies with -kwiya as the trial/plural suffix on nominals.

arakpwawiyilhangwa niwapwirrathathitjingwinimwilhangwa
long ago-ABL 3:4 was starting itself-ABL

winampwilyimwakwiya winanimwamwalyikwiya
3:1MascDu two-DU 3:1MascDu two-DU

nanimwingkwilhitjiyinimwa arrawa mwathirrimwantja
3:1MascDu were sleeping inside 3:5 cave-LOC
'From the Creantime, from its beginning, two men were sleeping
inside a cave.'

ngayiwa arakpwawiya ningampwilyimwirra nimpwilhwarimwantja
1ExcSg long ago 1ExcSg was living Numbulwar-LOC
'I was living at Numbulwar a long time ago.'

The adverb, yangmwangmwintji' igwa 'purposelessly', is polymorphemic and consists of the repeated verb yangmwintjitha 'to be quiet, to cease talking' and the ablative clitic -lhangwi. This word has been given and checked as a dictionary item but no example is available from texts. (Note: A person has been described as 'aimless' if just sitting quietly without doing anything.)

7.4 INTERROGATIVE ADVERBS

The four interrogative adverbs occur initially in the sentence or follow an interjection. They can be marked for peripheral cases or by the nominal number suffix. These adverbs differ from adverbial nominals or demonstrative pronouns because they lack prefixation but are similar because of the presence of the nominal number suffix. (Note: For the interrogatives in other word classes see Sections 3.2.7, 5.1.2, 6.2.2.5 and 8.2.1.6.)

7.4.1 Interrogative: lhaka

The word, lhaka 'already' 'ready', functions as an interrogative adverb and a particle. It appears to be related both in shape and meaning to arakpwa (completed action) and arakpwa frequently occurs in the answer to the question. As an interrogative

spoken in isolation, it questions whether or not the addressee has completed a prior activity in order to be ready for the next one, i.e. 'are you ready to go?', 'is it ready?', 'have you finished it?'. The Purposive mood clitic, the Intensifier and the Possessive suffix have all been recorded attached to this word.

lhaka ningkilhikatjamwa arakpwa
 already 2Sg are going comp.act
 'Are you ready to go?'

lhaka ningkwaningapwath^a arakpwa
 already 2Sg have become good comp.act
 'Are you well now?'

lhakiyatha ngantja akina
 already-PURP 1ExcSg-CofR 3:4 that
 'Is there anything for me?'

lhakaka wirringalhakpwina wirritharrngkikiwiya
 already-INTENS 3:1 those unseen 3:1 women-DU
 'Can you see those two women already?'

lhakithangwa nganyangwa akina
 already-POSS 1ExcSg-POSS 3:4 that
 'Is it really mine?'

7.4.2 Interrogative: angkapwirra

The interrogative word, angkapwirra ~ akapwirra 'who?', is classified as an interrogative adverb because the word is not prefixed by nominal classifiers. The two morphemes may be: (a) the adverbial morpheme {y}angkwi (meaning unknown) and -pwirra (question marker) but its co-occurrence of -pwirra with another question-marking suffix -pwini is strange; or (b) the noun classifier /a/ followed by a{r}ngkwi 'eye' and the root apwirra 'many'. This adverb has been found to be suffixed for the Allative case and by the Purposive and Reason clitics.

angkapwirra wirrakina arrakpinwantja nayangpayinamwa
 who? 3:1 those outside-LOC 3:1 are talking
 'Who is talking outside?'

angkapwirri(wa) nalhikanimwa mwtjilyalyiwa
 who?-ALL 3:1 were going 3:5 beach-ALL
 'Who was going to the beach?'

akapwirriyatha akina
 who?-PURP 3:4 that
 'Who is that for?'

akwapwirripwapwa pwiwartangimwa
 who?-CSL 2Sg+3:1 was hitting
 'Why were you hitting whoever it was?'

The interrogative word, angkapwirrilhangwa 'whose?', consists of the above interrogative plus the possessive suffix -lhangwi. The following examples extend the number of case clitics to include Locative.

angkapwirrilhangwa ningkwakina thirntana
 who?-POSS 2Sg that 3:2 mother-KPOSS
 'Who is your mother?' / 'What is your mother's name?'

akapwirrilhangwimwantja alhikira
 who?-POSS-LOC 3:4 house
 'Whose house is that?' / 'Whose is the house?'

Unlike the other interrogative adverbs, the number suffix associated with nominals can be added to either angkapwirra or angkapwirrilhangwa.

akapwirriwiya wirrakina warnimwamwalya
 who?-PL 3:1 those 3:1 Aborigines
 'Who are those Aborigines?'

akapwirrilhangwiwiya anana akwalya
 who?-POSS-PL 3:4 this 3:4 fish
 'Who does all the fish belong to?'

If the identity of the 'who' is not known the cross-referenced prefix in the verb or the demonstrative pronoun is in the third person plural. This can be seen in the following question and answer examples below.

Question: angkapwirra nalhikanimwa mwiŋjalyiwa
 who? 3:1 were going 3:5 beach-ALL
 'Who was going to the beach?'

Answer: ngayiwa ningilhikanimwa
 1ExcSg 1ExcSg was going
 'I was going.'

Question: angkapwirra ningkwarrangayinthimwirra
 who? 2Sg+3:1 are wanting
 'Who are you wanting?'

Answer: ningkwiwa
 2Sg
 'You.'

Question: akapwirripwina warna
 who?-QM 3:1 these
 'Who are these [people]?'

Answer: nganyangwa thirntirrka thaka
 1ExcSg-POSS 3:2 mother-KPOSS 3:2 this
 'She is my mother.'

7.4.3 Interrogative: ngampwi-

The root of the interrogative adverb, ngampwi- 'where?', differs from the interrogative demonstrative root angampwi 'which?', only in the absence of the nominal class-marking prefixation. This adverb is obligatorily suffixed by Locative, Ablative, Allative, and Locative Progressive case-markers and for Purposive mood. The Locative form, however, is irregular because the syllable mpwi preceding -mwantja is deleted by the Haplology Rule (Section 2.5.2.1).

ngamwantja	where at? at what place? whereabouts?
ngampwilhangwa	from where? from whence?
ngampwiwa	where to?
ngampwilhangwiya	along where?
ngampwiyatha	when?

ngamwantja ningkwiwa ningkirikwilharrinimwa
 where?-LOC 2Sg 2Sg were falling
 'Where were you born?' (Lit: were you falling)

ngampwilhangwa ningkilhikanimwa
 where?-ABL 2Sg were going
 'Where were you coming from?'

ngampwiwa ningkilhikatjamwa
 where?-ALL 2Sg are going
 'Where are you going to?'

ngampwilhangwiya nakaka nilhikanimwa
 where?-PRG 3:3(i) this 3:3 was going
 'Along where was he going?' / 'How far was he going?'

ngampwiya thakina yingiyarthangimwa
 where?-PURP 3:2 that 3:2 was arriving
 'When did she arrive?'

7.4.4 Interrogative: mwiampwana

The interrogative adverb, mwiya(m)pwani 'for what purpose?', differs from the interrogative adjective amwiampwana only in the absence of the nominal classifying prefixation and there does not appear to be a change in the meaning. The first morpheme is mwi- (inalienable possession) which indicates that this adverb must be derived from the interrogative adjective. The second morpheme is possibly a reduced and assimilated form of the verb root yanthapwani 'ask'. The adverb is only suffixed by the Reason case clitic or the Question marker.

mwiampwana nalhawirrakatjinamwirra akina
 what purpose? 3:4 is bringing itself 3:4 that
 'For what purpose is the spear returning?'

mwiapwanipwapwa nakina nilhikatjamwirra antjarrkina
 what purpose?-CSL 3:3(i) that 3:3 is going that way
 'Why is he going down there?'

mwiampwanipwirra kwirringiyamwarrkina
 what purpose?-QM 2FemDu do
 'What's the matter? What are you two doing that for?'

The meaning of the interrogative adverb mwiampwani can be

extended to include the semantic concept of questioning 'why'. The contrast in meaning between purposive and reason is best illustrated in the question and answer framework, as shown in the data below. There is, however, no clear morphological distinction between reason and purpose in much of the data and the actual meaning would have to be ascertained from context. An indication of the addressee's reaction is sometimes seen found in the presence of purposive -yatha or reason -pwapwa clitic in the reply.

Question: mwiampwana ningkwilhikanimwa
 what purpose? 2Sg were going
 'For what purpose were you going?'

Answer: ningilhikanimwa ningapwayinthangimwiyatha thimpwala
 1ExcSg was going 1ExcSg+3:2 was buying-PURP 3:2 dress
 'I was buying a dress.'

Question: mwiampwanipwirra ningkwingwathinamwa
 what purpose?-QM 2Sg are crying
 'Why are you crying?'

Answer: thiyapwarrka nganyangwa ngiwartangimwa
 3:2 sister-KPOSS 1ExcSg-POSS 1ExcSg+3:2 was hitting
 'My sister was hitting me?'

Question: mwiampwanilhangwa ngiwartangimwa
 what purpose?-ABL 2Sg+3:2 was hitting
 'Why was she hitting you?'

Answer: ningingapamwapwapwa
 1ExcSg was swearing-CSL
 'Because I was swearing.'

The words, mwiampwana and mwiampwanipwapwa, can be shortened to mwana and mwanipwapwa, respectively.

mwana
 what purpose?
 'What's wrong with you?' / 'What's up?'

mwanipwapwa ngiwartanga ningkwiwamwantja
 what reason? 2Sg+3:2 hit 2Sg-LOC
 'Why did she hit you?'

mwanipwapwa nara kilhikana kwiliwa
 what reason? not 2Sg go 3:4 school-ALL
 'Why didn't you go to school?'

The shortened word mwana can co-occur redundantly with another interrogative adverb or adjective. In this construction, it seems to function as only a question marker--there are no examples of its co-occurrence with the Question-marking suffix -pwirra. It is usually placed first in the sentence, immediately preceding the other interrogative word.

mwana ngampwiwa ningkwakina ningkwihatjamwirra
 CSL where?-ALL 2Sg that 2Sg are going
 'Where are you going to?'

mwana angkapwirrimwantja
 CSL who?-LOC
 'Who has it?'

mwana ampwarngarnilhangwa angalya kwirrilhikanimwa
 CSL 3:4 how many?-ABL 3:4 place 2Nsg were coming
 'How many places were you coming from?'

angampwa mwana akina
 3:4 which? CSL 3:4 that
 'Where is that?' / 'At which place is that?'

CHAPTER 8 PARTICLES AND CLITICS

Particles are distinguished from other word classes in that they are uninflected, i.e., neither prefixation or derivational suffixation occurs. Syntactic inflection is limited to the two non-modal clitics for emphasis or intensification. Particles are usually mono-morphemic.

Particles and miscellaneous clitics fall into three groups: conjunctions, modal or non-modal particles and interjections.

8.1 CONJUNCTIONS

Eleven conjunctions have been found in Anindilyakwa, linking clauses, phrases or words. As free form particles, they usually occur in sentence-initial or clause-initial position but can be placed second. Some free form conjunctions co-exist with a clitic of the same meaning.

8.1.1 Co-ordination

Co-ordination is marked by six different free form particles (and a possible sixth) which indicate co-ordination which is Simple, Sequential, Adversative, Concessive, Resultative and Similative.

8.1.1.1 Simple: akwa

The conjunction, akwa 'and', joins any two independent clauses, phrases or words in a simple co-ordinated relationship. Two pronominals are not linked by akwa because the language structure incorporates such combinations as non-singularity in the prefixation.

ningarthirranimwa akwalya akwa
1ExcSg+3:4 was spearing 3:4 fish and

yirringalyipwarnimwa
1ExcFemDu+3:4 were eating
'I was spearing the fish and we two [my wife and I] were eating it.'

yakina yipwiratha yinikwiyalhilha yiningwingwangpwa
3:3(ii) that 3:3(ii) wallaby 3:3(ii) shy 3:3(ii) mammal

akwa nampwilyimwirra yakwikwawira
and 3:3 was staying 3:2(ii) alone
'The wallaby was a shy animal and stayed alone.'

winalhakina nikpwa akwa nitjarra
3:1MascDu those 3:3(i) pheasant and 3:3(i) seagull

naningkwirrkwanimwa akwalya
3:1MascDu+3:4 were hunting 3:4 fish
'Pheasant and Seagull were fishing.'

ngayiwa akwa tjanita akwa yilinyina
1ExcSg and (name) and (name)

yirrapwirrangkayinimwa yinimwanwiwawa
1ExcNsg were looking for 3:3(ii) eggs-ALL
'Janet, Elaine and I were looking for turtle eggs.'

8.1.1.2 Sequential: pwiya and yiya

The conjunction, *pwiya* [p^wiyā ~ piyā], joins two independent clauses and indicates a time sequence, i.e., of one event or activity following another, ad infinitum. This is the most common conjunction in narratives. Heath (1984:425ff, 618) refers to the Nunggubuyu equivalent as 'now' and 'then' denoting temporal immediacy based on the present tense and sequential function in discourses. The Anindilyakwa Aborigines, however, translate this word as 'and then' and appear to me to be focussing only on the sequence of activities, regardless of whether the tense is past or non-past.

narringalhalhakaniwa pwiya yinginirringka yilyakwa
3:1Nsg kept going-ALL then 3:2+3:3 saw 3:3(ii) honey

mwariya
(name)
'They kept on going and then Maria saw another hive.'

pwiyā warina nimwakpwirringa mwinhinga athinipwayiwa
 then (name) 3:3+3:5 found 3:5 zamia nuts soon (=first)

pwiyā narrimwarringka pwawitawi
 then 3:1+3:5 saw 3:5 photo

'And then, first of all, Warren found the zamia nuts and then they photographed them.'

kwirrilhikatjamwa mirritjinilhangwawa angalya pwiyā
 2Nsg are coming 3:4 medicine-POSS-ALL 3:4 place then

yirratja ngarramwinarrkpinamwa mirritjina
 1ExcPl-CofR 1IncNsg+2Nsg are throwing 3:4 medicine

akinimwantja amwamwarra
 3:4 that-LOC 3:4 sore

'You come to the clinic and we will put medicine on your sores.'

nakina nilhikanimwa angarripa pwiyā angarripa
 3:3 that 3:3 was going that way then that way
 'He was going this way and that way.'

The first syllable of pwiyā can be lengthened and high pitched to indicate continuation of the action in the first clause. Alternately, the conjunction can be reduplicated to intensify the activity.

yirripikwiyamwintjamwa ngawa pwī:::ya wilyarra
 1ExcTri are doing cont.act then centrally

anyingwinyimwantja
 3:4 (name)-LOC

'We three kept on doing [it] and then we were in the middle at Anyingwinya.'

yirrimwirntakalhilhikani:::wa yirriwirtanga pwī:::ya
 1ExcNsg kept going-cont.act 1ExcNsg climbed then

wirrkwalha arakpwa namwirntakilhawirrathina arakpwa
 3:1 some comp.act 3:1 returned comp.act

'We kept going and climbed up and up and some returned.'

yirriwirrakalhilhikana ngawa yirrakina pwī:::ya
 1ExcNsg kept going cont.act 1ExcPl those then

pwī:::ya yirriyartha arakpwa angalyimwantja
 then 1ExcNsg arrived comp.act 3.4 home-LOC

'We kept on walking and walking and then we arrived home.'

During the narration of a story, the conjunction pwiyā can be

used with question intonation to mean 'And then what?' or 'What happens/happened next?'.
 used with question intonation to mean 'And then what?' or 'What happens/happened next?'.
 used with question intonation to mean 'And then what?' or 'What happens/happened next?'.

The conjunction, yiya ~ yiyi [yi:], joins two nominals or adverbs. It is considered to be a locative sequential co-ordinator because it is used to link a list of similar items. This word is similar in shape to the conjunction pwiyā which has also been recorded as [p iyiyā]. The conjunctions, yiyā and akwā, are both used to separate the nominals in a list but the former is very rare.

niwangkirrayina	angkiwa	<u>yiyā</u>	angkiwa	angalya
3:1 ran	3:4 other-ALL	and	3:4 other-ALL	3:4 home

'They ran home in all directions.'

wirrapwapwirna	wirritharrngka	yakwitjina	angkilhangwa
3:1 many	3:1 women	there	3:4 other-ABL

<u>yiyā</u>	angkilhangwa	angalya
and	3:4 other-ABL	3:4 place

'Many woman [came] there from different places.'

karnimwamwalya	<u>yiyā</u>	wirriwarta	<u>yiyā</u>
2Pl Aborigines	and	3:1 dog	and

yiningingangpwimwirriya	kampwampwilyamwa
3:3 four-legged animals-ETC	2Sg are keeping on staying

mwithalyimwimwantja	akwā	awirikwamwantja
3:5 estuary-LOC	and	3:4 swamp-LOC

'You Aborigines, dogs, mammals and the rest are to keep on staying at the river estuary and the swamp.'

8.1.1.3 Adversative: wimpwa

The adversative conjunction, wimpwa [ump^wa ~ mp^wa], joins two independent clauses in which the two activities or states are opposed to each other.

warningwamwartakpwa	niwarrwarrwartangimwa	alyingpwa
3:1 godwit	3:2 was keeping on hitting	3:4 clapsticks

<u>wimpwa</u>	thikwirirkwa	yinginirakpwirnimwa
but	3:2(ii) broлга	3:2+3:3 was playing
yiraka		
3:3(ii) didjeridu		

'Godwit tapping the clapsticks but Broлга was playing the didjeridu.'

niwilyapwa naningkwalyirra wimpwa niwilyapwa
 3:3(i) one 3:3(i) Mamarika but 3:3(i) one

nalhilhiyangwa
 3:3(i) Amagula
 'One man was Mamarika but the other Amagula.'

yalhakwa arakpwa ningana ningampwarrinamwa wimpwa
 here comp.act 1ExcSg this 1ExcSg am staying but

arakpwa wilhikatja wiwirtana angarripa
 comp.act 2Sg go 2Sg climb that way
 'I am staying here but you go and climb up that way!'

nara arakpwa nakina nantjarrngalyilya wimpwa
 not comp.act 3:3(i) that 3:3(i) boy but

thiwathirra arakpwa
 3:2(ii) cockatoo comp.act
 '[Now] he is not a boy but a cockatoo.'

8.1.1.4 Concessive: aka(r)na

The concessive conjunction, akani [akena] ~ akani, joins any two independent clauses. The relationship is one of weaker opposition than wimpwa and is best translated by the English term, 'however' or 'nevertheless'. The comment in the second independent clause shows that the activity in the first independent clause was attempted but not satisfactorily accomplished.

niwartanga arakpwa wirrakina thakiniwa katjingwa
 3:1 called comp.act 3:1 those 3:2(ii) her-ALL so that

thathikwilhawirrakwatjiniyatha akwingwa akana
 3:2 to bring back-PURP 3:4 water however

ngalhatja ngawa yingimwingkilinga
 3:2-CofR cont.act 3:2 slept
 'They called out to her to bring back the water; she, however, continued to sleep.'

nilhapwatjingwina kwiraya nilhikana apwiyarpwiwamwa alhika
 3:3 tested himself try 3:3 went 3:4 four-COM 3:4 foot

akana nara ngawa
 however not cont.act
 'Wallaby tried to walk on four feet but he couldn't.'

nampwilya yakwitjina akana yapwapwirna yarrnga
 3:3 stayed there however 3:3(ii) many 3:3(ii) leech
 'He stayed there--however there were too many leeches.'

kampwirra warnimwamwalya nanirringkimwantja yipwikwaya
 therefore 3:1 people 3:1+3:3 saw-LOC 3:3(ii) this coming

nilhikanimwantja kwiraya niwangkirrayinimwa
 3:3 came-LOC try 3:1 were running

akana niwapwiwarrkatjingwinimwa
 however 3:1 were hiding themselves

'Therefore when the people saw the approaching snake they tried
 to run and hide themselves.'

8.1.1.5 Resultative: kampwirra

The conjunction, kampwirri [kempiʔa] ~ kampwi [kamp^wa],
 joins two independent clauses but the relationship is one of cause and
 effect. The event in the second clause happened as a result of the
 first or could not have happened without the first event. It can be
 translated as 'therefore', 'thus', 'as a result', 'and so' or 'in
 order to'.

nilharra yalyakwa kampwirra nimwirntatha nakina
 3:3 fell 3:3(ii) rain therefore 3:3 got cold 3:3(i) that

ningwanikpwa
 3:3(i) father-KPOSS

'It was raining and, as a result, his father got cold.'

nanimwiningatja nakina alhakpwimwantja kampwa
 3:3+3:3 hit 3:3(i) that 3:4 leg-LOC therefore

mwarra alhakpwa nakina
 3:5 blood 3:4 leg 3:3(i) that

'He hit him on the leg and therefore he has a red leg.'

pwiyā nara angapwa ningilhawirrathina kampwirra
 then not 3:4 that there 1ExcSg returned therefore

ngarningka
 again

'And then nothing happened and therefore I returned again.'

nayamwa angwirrirtha ningana kampwirra arakpwa
 3:4 said 3:4 magpie 1ExcSg this therefore comp.act

kinikirriyakamwa nakina
 1ExcSg+3:3 will trick 3:3(i) that

'Magpie said, "I will trick him [as a retaliatory act]."'

The conjunction kampwirra is the only one which is juxtaposed to another conjunction. It has been found following the other four co-ordinators and the purposive subordinator.

arngkwawira yingiyakwirranaka akwingwa akwa kampwirra
 3:4 once 3:2 thirsted-INTENS 3:4 water and therefore

yingilyangkiyamwa thakina thathikwilyampwarrkiyatha
 3:2 was thinking 3:2 that 3:2 to trick-PURP

wirrikwalhimwantja
 3:1 some-LOC

'Once she was very thirsty for water and therefore she was thinking about tricking the others.'

pwia kampwirra arakpwa narritjarrikwa wirrakina
 then therefore comp.act 3:1+3:4 finished 3:1 those
 'And then, as a result, they finished it [the dancing].'

pwia nitjarrkinamwa arakpwa wimpwa kampwirra
 then 3:3+3:4 is finishing comp.act but therefore

arakpwa nanimwakinamwa akinilhangwa angalya
 comp.act 3:3+3:1 is telling 3:4 that-ABL 3:4 place

nɪwampwilyamwilhangwa
 3:1 are staying-ABL

'And now he is finishing the story but, as a result, is telling them about the place where they were staying.'

akana kampwirra yinganarra nakpwirranga arakpwa
 however therefore (name) 3:3+3:4 found comp.act

ayangkitharrpwa
 3:4 island

'However, as a result, Snake found the island.'

katjingwa kampwirra yikamwakiniyatha
 so that therefore 1ExcNsg can tell-PURP

kiyamwarrkinamwa ningkwakina nayamwa akina
 1ExcSg do how? 2Sg that 3:3 said 3:4 that

'"So therefore you can tell me how I am going to do it," the octopus said.'

The conjunction kampwirra can be translated as 'next' in the following constructions: ningkwiwa kampwirra 'You (go) next.' While the meaning is idiomatic there is still the concept of taking action because the previous activity has or will be completed.

8.1.1.6 Similative: wipwirra

The conjunction, wipwirra [(w)upwura] 'like', links a phrase or word to another in the clause. It can precede or follow the linked word noun or phrase. The conjunction indicates the similarity between two items or previous and present states.

mwamwintjirratha yingimwalhkayitjiwamwa wipwirra
3:5 spear 3:2+3:5 is standing up like

warningkwarpwa

3:1 men

'She is standing the spears up like men [stand up].'

nimwingwathayinimwa yinipa wipwirra nimwiyamwamwa
3:5 was crying 3:3(ii) red ochre like 3:5 is doing

ngalhilhangwa mwampwilyimwakwiya mwanpwakwiya

3:2-POSS 3:2 two-DU 3:2 eye-DU

'She was crying and her two eyes were getting red.' (Lit: her two eyes were crying.)

akina wipwirra nayamwamwa ayikwitjiya alhikira
3:4 that like 3:4 is doing 3:4 small 3:4 house

'The lighthouse looks like that small house [on NE Islands].'

yirrilhawirrathina angalyiwa alyarrngwalyilya tjapwitja
1ExcSg returned 3:4 place-ALL 3:4 evening 3:4 service

yirrampwarringa wipwirra yalhakwa
1ExcNsg sat like here (=this)

aningwalyarrwalyilya ngarrampwarrinamwa
3:4 evening service 1IncNsg are sitting

'We returned to the place and had an evening service like the evening service we are having here [at Umbakumba].'

nalhikana wimpwa ngalhatja thipwina thilyapwirnta
3:1 went but 3:2-CofR 3:2 that unseen 3:2(ii) frog

arakpwa thipwina ngawa wipwirra
comp.act 3:2 that unseen cont.act like

yingilhawirrathina arakpwa
3:2 returned comp.act

'They went but the frog was still the same as she had been.'
(Lit: she returned [to be] like her [original shape])

The conjunction wipwirra can be reduplicated to intensify the similarity. The lexical meaning is 'like' or 'similar to'. (The

Anindilyakwa concept of sameness does not necessarily mean 'exactly the same'.)

yakina	nara	kinirikwpwirikwpwitjangina	wipwirriwipwirra
3:3 that	not	3:3 hop and hop	REDUP: like

athiwapwa
today

'He [Wallaby] did not hop and hop just like he does today.'

yingakirrampa	arakpwa	natjalhkwingwirrathina	arakpwa
3:2+3:4 put back	comp.act	3:4 became covered	comp.act

wipwirra	apwina	ngawa	wipwirritha
like	3:4 that unseen	cont.act	like

'She pulled [the sand] back [until] it was level like it was before.'

8.1.2 Subordination

The six different types of subordination are: Purposive, Anticipatory, Causal (reason), Definite, Conditional and Temporal.

8.1.2.1 Purposive: katjingwa and -yatha

The conjunction, katjingwa 'so that', 'for the purpose of', is the free form purposive marker that links a subordinate purpose clause to the main independent clause. It has the same meaning as -yatha and usually co-occurs with it.

akina	aningapwa	aningkwa	<u>katjingwa</u>	nanikwartiyatha
3:4 that	3:4 good	3:4 spear	so that	3:3 to kill

niwirrilyimwantja
3:3(ii) rainbow-LOC

'That was the best spear for killing Rainbow.'

pwiya	yimwawira	nimwarrkarna	angwirra	mwingpwithiyatha
then	3:3(ii) moon	3:3+3:5 pulled	strongly	3:5 strong bag-PURP

<u>katjingwa</u>	winalhakinakwiya	nariyatha	kanangkirrayina
so that	3:1MascDu-DU	not-PURP	3:3MascDu will run

'Moon pulled the strong [dillybag] tight so that the two men could not run away.'

yawi	kwa	anilhikatja	<u>katjingwa</u>	kinirringkinyatha	yilyakwa
yes	here	let him come	so that	3:3+3:3 will see-PURP	3:3 honey

'Yes, let him come so that he can see the honey.'

The Purposive mood clitic -yatha denotes planning or purposing to carry out the action of the verb. In addition to its occurrence with the conjunction, katjingwa, it commonly occurs with the infinitive verb in the subordinate clause.

namwirntakilhikana warnikwipakatjyatha akwingwa
 3:1Pl came 3:1 to drink-PURP 3:4 water
 'They all came to drink the water.'

nanilyangkiyamwa winalhakina winanikwilhikiyatha
 3:1MascDu were thinking 3:1MascDu those 3:1MascDu to go-PURP

athalyimwawa winanikwingampatjyatha
 3:4 river-ALL 3:1MascDu to bathe-PURP
 'The two of them were thinking about going to the river to swim.'

ngarningka ngarramwakinanamwa karnikwilhawirrathiyatha
 again 1IncNsg are telling 2Pl to return-PURP
 'We are telling you again to return [home].'

The Purposive mood clitic can be attached to the verb in an independent clause and modify its meaning to one of intention to fulfil the action.

nangkarriniyatha akana wirrakina wirratjitja
 3:3 ran-PURP however 3:1 that 3:1 bird

nanirntarrka aniwamwantja
 3:1+3:3 grabbed 3:3-LOC
 'He planned to run away, however, the bird got hold of him.'

kwinithakiniyatha naningkwarpwa yinimwamwiwa angwirimwantja
 3:3+3:3 will cook-PURP 3:3(i) man 3:3(ii) eggs 3:4 fire-LOC
 'The man plans to cook the eggs in the fire.'

kimwaniyatha aka akwa
 1ExcSg+3:4 will grab-PURP 3:4 stick and

kiningatjyatha yirikwithilhangwa
 1ExcSg+3:3 will kill-PURP 3:3(ii) bandicoot
 'I plan to grab a stick and to kill Bandicoot.'

The Purposive clitic, -yatha, is usually marked on the verb but it is also occasionally found on the noun phrase. (See Section 3.4.3.2D for the use of the Allative case denoting purposive mood.)

ningkarrnginilhangwa aka alhikiriyatha
 1ExcSg cut-ABL 3:4 wood 3:4 house-PURP

kingakpwirakiniyatha
 1ExcSg+3:4 will make-PURP
 'After I cut the wood I plan to build a house.'

yingilhawirrathina yingiwilyakamwa anhinga thakina
 3:2 returned 3:2+3:4 was bringing 3:4 food 3:2 that

katjingwa thathikwangkwilhyatha wirriyikwayiwiyatha
 so that 3:2 to grind 3:1 children-PURP
 'She returned bringing food to grind for the children.'

8.1.2.2 Anticipatory: yanthilhangwa

The conjunction yanthilhangwa 'until' links a subordinate clause to the main independent clause. The word probably consists of two morphemes: yantha 'aimlessly' and -lhangwa (ablative). In much of the data the action in the independent clause seems to have no goal and just continues on to an inevitable conclusion (as stated in the subordinate clause).

nilhikana nangkarrina akwa nimwalyangkana lhikwakwa
 3:3 went 3:3 ran and 3:3 played en route

yanthilhangwa nimwarrawarna
 until 3:3 wandered around
 'He ran and played along the way until he was lost.'

nithirrintinga yakina ngawa yanthilhangwa
 3:3 descended 3:3(ii) that cont.act until

nampwilya yilyangmwantja
 3:3 stayed 3:3(ii) (name)
 'He continued to descend until [eventually] he stayed at Yilyangmanja.'

nakina nampwilyimwirra ninganthingakamwa amwirntakakina
 3:3(i) that 3:3 was staying 3:3+3:4 is sharpening 3:4 those

yanthilhangwa anganthingawiya ngawa ningakpwirakimwa
 until 3:4 sharp ones cont.act 3:3+3:4 is making
 'He was sitting sharpening those [spears] until he had made enough sharp ones.'

The anticipatory conjunction can also precede a nominal but an underlying verb could be said to occur in the deep structure. The noun

is always an adverbial noun involving specific time.

yanthilhangwa kiritjimwitjimwantja
 until 3:4 Christmas-LOC
 'Until Christmas [has come].'

8.1.2.3 Causal: mwanipwapwa

The conjunction, mwanipwapwa [menup^wɔp^wa] 'because', usually conjoins an independent and a dependent reason clause. The first two syllables can occur as a separate word mwana and the last two syllables as the clitic -pwapwa. The clitic is usually affixed to the word that follows mwana. The sentence can be marked more than once for reason. (Note: There is double subordination in the second example but such rare occurrences have not been analysed as yet.)

kaniwartangiyatha winalhakinimwantja nanikwanikpwakwiya
 1ExcSg+3:1 will kill-PURP 3:1MascDu-LOC 3:3 son-KPOSS-DU

mwanipwapwa winimwingwirthangmwakwiyipwapwa
 because 3:1MascDu are greedy-CSL
 'I will kill his two sons because they are greedy.'

nampwampwilyimwirra nakwikwawira arrawa mwathirrimwantja
 3:3 kept on sitting 3:3 alone inside 3:5 cave-LOC

nakina naniwirrkpamwirripwapwa niwirrwilyawa
 3:3(i) that 3:3+3:3 is hating-CSL 3:3(i) rainbow

mwanipwapwi nanimwinangmwathimwirripwapwa
 because 3:3+3:2 was stealing-CSL

anilhangwa thathiyani

3:3-POSS 3:2 wife-KPOSS
 'Bat kept on sitting alone inside the cave because he hated Rainbow because he stole his wife.'

ngayiwa ningilhikatja mwana atjingwipwapwa ngalhatja
 1ExcSg 1ExcSg go QM 3:4 sickness-CSL 3:2-CofR
 'I go because she is sick.'

niwirtangimwirripwapwa akimwantja nilhikatjimwirra nakina
 3:3 was climbing-CSL 3:4 tree-LOC 3:3 was going 3:3 that
 'Because he was climbing the tree he fell.'

8.1.2.4 Definite: -mwantja

The locative case-marking clitic -mwantja is attached to the

verb in a subordinate Definite clause and equates with the English conjunction 'when'. The verbs in both the subordinate and main independent clauses are prefixed for the Potential or Actual mood and can take the full range of tense and aspect suffixes. The activity has not yet happened but the action in the subordinate clause is assured. The first set of examples illustrate the Actual mood and the second set the Potential mood.

winalhakina nanarrikayinimwantja aningkwa
 3:1MascDu those 3:1MascDu+3:4 were throwing-LOC 3:4 spear

nalhawirrathinimwa
 3:4 was returning
 'When they threw the spear it was returning.'

niyamwa mwiyanpanipwirra yingatja
 3:3 said wny-QM 1IncSg hit

ningimwingkwilhingamwirrimwantja
 1ExcSg am sleeping-LOC
 'He said, "Why did you hit me when I am sleeping?"'

akana niyamwamwantja nakina anatja
 however 3:3+3:5 was doing 3:3(i) that 3:3(i)-CofR

yirikwitjilhangwa nanirtarrka nakina akpwilhangwa
 3:3(ii) bandicoot 3:3+3:3 grabbed 3:3 that 3:4 buttocks-POSS
 'However, when he [Wallaby] was doing that, Bandicoot got hold of his buttocks.'

kartharriyamwantja akwalya kampwirra
 1ExcSg+3:4 will be spearing-LOC 3:4 fish therefore

kamwinithakinamwa ngayiwa
 1ExcSg will be cooking 1ExcSg
 'When you catch a fish then I will be cooking it for you.'

ningkwakina kiningalyakwimwantja yakina yingarna
 2Sg that 2Sg+3:3 will tread on-LOC 3:3 (ii) that 3:3(ii) snake

kanatharriyamwa
 3:3 will be spearing
 'When you stand on the snake it will be biting you.'

pwiya kampwa kalharmwirthemwantja kilhirakina
 then therefore 3:4 will be dark-LOC 2Sg+3:4 will build

angwira ningkwiwa
 3:4 fire 2Sg
 'And so when it gets dark you should light a fire.'

pwiya angwirrirtha naniyangkilhapanimwantja mwakiniyatha
 then 3:4 magpie 3:3+3:3 asked-LOC 3:5 that-PURP

athiwaya anatja yingwa nanimwakamwa
 for a while 3:3-CofR 3:3(ii) crow 3:3+3:3 was telling

nakinimwantja kwiraya
 3:3(i) that-LOC try (=trick)

'And then when Magpie asked him for the raft for a while Crow was telling him a lie.'

Two occurrences of subordination co-occur in the following sentences. Such examples are rare and have not been analysed as yet. In the latter example, the same action of cooking is repeated with slightly different synonyms.

kampwirra warnimwamwalya nanirringkimwantja yipwikwaya
 therefore 3:1 people 3:1+3:3 saw-LOC 3:3 this coming

nilhikanimwantja kwiraya niwangkirrayinimwa
 3:3 came-LOC try 3:1 were hiding themselves

'When they saw it, when the approaching Snake came, they were trying to hide themselves.'

kithakinamwantja kakwinamwirra akwalya
 1ExcSg+3:4 will be cooking-LOC 1IncSg will be giving 3:4 fish

arakpwa kawalyiwathimwantja
 comp.act 1ExcSg+3:4 will have become ready to eat-LOC

'When I will be cooking the fish I will be giving it to you--when it will be ready to eat.'

There are textual examples in which a subordinate clause is marked by -mwantja with a possible meaning of 'where'. Other than posit another type of subordination, it seems wiser to consider it to mean 'when' until further research can be done.

winampwilyimwakwiya winiyikwitjiyakwiya nanimwalyangkayinimwirra
 3:1MascDu two-DU 3:1MascDu small-DU 3:1MascDu were playing

winalhakina apwirnilhangwimwirra ayikwayiwa
 3:1MascDu those 3:1MascDu-COM 3:4 small(pl)

aningkwa akwithanga nampwilyamwirrimwantja yingarna
 3:4 spear near 3:3 was living-LOC 3:3 snake

'The two boys were playing with their little spears near to where Snake was living.' / 'The two boys were playing with their little spears when Snake was living nearby.'

8.1.2.5 Conditional: -mwirrikpwa

The Comitative clitic, -mwirra plus word-final stem formative -kwj, indicates that the action in the subordinate clause is an imposed condition before the action of the main clause can take place.

nampirraranimwa	kanikwam <u>wirrikpwa</u>	winalhakina
3:3 was waiting	3:1+3:3 will be giving-COM	3:1MascDu those

wirrawimwinya
3:1 duck

'He was waiting [to see] if they [his two sons] would be giving him a duck.'

kingirringkinam <u>wirrikpwa</u>	yingiyamwarrkina	yinganthapwana
3:2+3:4 will be seeing-COM	3:2 do what?	3:2 asked

'She asked what she would do if she saw the stone.'

ningampirraranimwa	kwiraya	kalhikanim <u>wirrikpwa</u>	wirrakwakwa
1ExcSg was waiting	try	3:1 will come-COM	3:1 (clan name)

'I was trying to wait [to see] if the Wurrakwakwa would come.'

8.1.2.6 Temporal: -hangwa and -wiya

When the ablative suffix -hangwi is attached to the verb in a subordinate clause it indicates temporal subordination. It is best translated as 'after' because the activity in the main independent clause does not begin until after that in the subordinate clause is completed.¹³ Either Actual or Potential Indicative prefixation can be used in the subordinate clause.

kwirranthakpwilkatjingwinamw <u>ilhangwa</u>	akwingwilhangwa
2Nsg will be washing yourself-ABL	3:4 water-ABL

kwirrilhikatjamwa	mirrithinilhangwa	angalya
2Nsg are going	3:4 medicine-POSS	3:4 place

'After you finish washing yourself with water you are to go to the clinic.'

Footnote 13: When trying to elicit the English construction 'before I do such-and-such I will do such-and-such' the Anindilyakwa sentence was changed to this 'after' construction or, to a lesser extent, one which puts the two events in sequence using pwj, a.

kilhikatjawa ngayiwa ngatjarriyilhangwa thimpwala
 1ExcSg will go-ALL 1ExcSg 1ExcSg+3:2 have washed-ABL 3:2 clothes
 'I will go after I have washed the clothes.' / 'Before I go I
 will wash the clothes.'

ningimwangkilhangwa tiraka katjingwa kilhikatjiyatha
 1ExcSg have picked up-ABL 3:5 truck so that 1ExcSg will go-PURP

 alyangkwihiwa
 3:4 (name)-ALL
 'After I pick up the truck I am planning to go to Alyangkula.'

kiwilyakinawa tjiwirra kwiliwa nganyangwa
 1ExcSg+3:4 will take-ALL 3:4 book 3:4 school-ALL 1ExcSg-POSS

 kwirringkilhangwa ningkwiwa athinipwawiya
 2Sg+3:4 see-ABL 2Sg soon (=first)
 'After you have looked at it first I will take my book to school!'

The pergressive suffix *-wiya* occurs on verbs if the activity in the independent and subordinate clauses is happening at the same time. (In comparing the last two examples below, note that the /a/ preceding *-wiya* represents the non-past imperfective suffix *-amwi* in which the second syllable has been deleted by the Haplology Rule.)

akwa nimwapwartitjina arakpwa angwiriya anatja
 and 3:3+3:4 rubbed comp.act 3:4 fire-PURP 3:3(i)-CofR

 yingwa ampwaka nimwingkwilhiwiya
 3:3(ii) crow later 3:3 slept-TPRG
 'And Magpie rubbed the sticks together for fire while Crow slept.'

ningalyipwarna akwalya nimwingkwilhawiya mwarrnga
 1ExcSg+3:4 ate 3:4 fish 3:3+3:5 was sleeping-TPRG 3:5 sleep
 'I ate it while he was sleeping.'

ngarrilhikatjamwa arakpwa ayikwitjiya niwangkarrinawiya
 1IncNsg are going comp.act 3:4 small 3:4 is running-TPRG
 'We are going [now] while a breeze is blowing.'

8.2 MISCELLANEOUS PARTICLES AND CLITICS

Like the conjunctions, the particles and clitics in this subsection are not inflected (except by the Intensifying and Terminative clitics). Three of the free form particles indicate aspect, (completive, continuative, and repetitive) and three mood

(dubitative, negative and interrogative). Other miscellaneous particles and clitics distinguish restrictive, intensifying and terminative.

8.2.1 Aspect and Mood particles

The three particles for aspect form a set of semantic contrasts. The Completive and Continuative aspect particles are in opposition to each other and, in their widest usage, indicate whether the activity is seen as completed versus continuing. The third one in the set is the Repetitive particle and it indicates the repetitive or on-going nature of the activity. The other particles in this subsection do not show any inter-relationship or opposition.

8.2.1.1 Completive: arakpwa

The aspect particle arakpwa indicates that the action of the verb is complete. It occurs with verbs which are not marked by the past continuative aspect suffix, -mwi(rra). The particle frequently follows the resultative conjunction kampwira and indicates that the activity of the preceding clause has already been completed.

ngalhatja arakpwa thaka
 3:2-CofR comp.act 3:2(i) this
 'She [got] close.'

ngarrilhatja yirriyamwa arakpwa yirrimwirntakilhika
 1IncNsg go 1ExcNsg said comp.act 1ExcNsg went
 'We'll go, we said and we all went.'

yirratja yirriyamwa nara angalyiwa arakpwa
 1ExcNsg-CofR 1ExcNsg said not 3:4 home-ALL comp.act

ngarrilhatja ngarriwarrikwatjingwina
 1IncNsg go 1IncNsg exchanged ourselves

yathathiwiya
 on this side-TPRG
 'We said, "No, we'll go straight home now.'

yirripwikwalhalhikani::wa karrawara arakpwa
 1ExcTri kept on going-cont.act high comp.act

yirrangapwa yakwitjina arakpwa
 3:3(ii) that there there comp.act
 'We kept on going up [until we reached] the top there.'

pwiya angwirrirtha nalhantharrkina ana arakpwa
 then 3:4 magpie 3:4 thought 3:4 this comp.act

kiwilyakatjiniyatha yaka yingwa
 1ExcSg will show-PURP 3:3(ii) this 3:3(ii) crow
 'And then Magpie thought, "I will teach the same crow [a lesson]."'

yakwitjina arakpwa nimwangkarrkartjaya nimwithathinimwa
 there comp.act 3:5 smoked 3:5 was burning

mwingakina yirripwimwakirriwantjimwa nimwingpwatjinimwa
 3:5 that 1ExcTri+3:5 are smelling 3:5 was smelling
 'There [the tyre] smoked [and] was burning [and] we smelt fire.'

The aspect particle, arakpwa, can modify a time adverb and indicate that the time is complete or almost complete.¹⁴

pwiya lharrwira arakpwa apwirratja wirrikwalha
 then 3:4 afternoon comp.act 3:1-CofR 3:1 some

wirripwikwaya namwirntakilhikarna
 3:1Tri these coming 3:1 came
 'And then late in the afternoon they all came.'

8.2.1.2 Continuative: ngawa

The aspect particle ngawa indicates that the activity of the

footnote 14: There are a few examples of this particle being used where the continuative aspect is marked on the verb. No explanation can be given at this time. They may be errors or the word arakpwa may not be referring to the verb in apposition. For example:

yatha arakpwa ningilhikanimwa mwiwilyapwamwa
 or this side comp.act 1ExcSg was going 3:5 one-only

ningimwingkwilhimwirra ampwikwampwa mwaningwangaalhipwa
 1ExcSg was sleeping 3:4 (name) 3:5 that day

ningilhikanimwirrilhangwa mitjinilhangwa
 1ExcSg was coming-ABL 3:4 mission-ABL
 'On this side I was going and was sleeping one night at Umbakumba on the day I was coming from the mission.'

verb is continuing at that time or some time later, i.e., it is not yet complete. It is the antonym of arakpwa. The Anindilyakwa speakers often do not make any overt reference to the word in their English translations. It can, however, be translated as 'still'.

The continuative particle ngawa often co-occurs with verbs marked by continuative aspect suffix -mwi(rra) and with the reduplicated forms of verbs. The suffix and particle do not co-occur. There are, however, sentences in which the verb is not marked for the continuative aspect but the particle ngawa immediately follows the verb. It seems that, in such data, only the particle indicates the continuation of the activity.

apwirratja	wirratjitja	wirriyirrpuyirra	ngawa
3:1Pl-CofR	3:1 birds	3:1 constant	cont.act

namapayinimwirra
3:1 were singing
'The birds were continuing to sing.'

nakina	niwarpwarrinimwa	akinawa	akwa	yakwitjina
3:3(i) that	3:3 was rolling	3:4 that-LOC	and	there

ngawa	nampwilyamwirra
cont.act	3:3 was sitting

'He rolled into the water and there he continued to sit.'

narringinilharrmwangimwirra	nimwawiriwa	akana	nara
3:1-3:3 were chasing	3:3(ii) moon-ALL	however	not

ngawa	karringinakpwirrangarna
cont.act	3:1FemDu+3:3 could find

'The two women were chasing Moon but, however, could not catch him.'

anana	ngawa	yirramwiniwilyakina	ngayiwamwantja
3:4 this	cont.act	1ExcNsg carry	1ExcSg-LOC

'I am still keeping this for you.'

namwirntakimwirayangaka	ngawa	akwa	niwayitjinaka
3:1 hungered-INTENS	cont.act	and	3:1 ate-INTENS

ngawa	narrilharrngkwitjarrikiwa	amwirntakipwina
cont.act	3:1 things:finished	3:4 those unseen

anhinga	warnantjipwawiya
3:4 food	quickly

'They continued to be very hungry and to eat quickly [until] they had finished all the food.'

The particle ngawa also occurs in verbless constructions, viz., those that consist of a topic and comment.

winampwilyimwilhangwa ngawa arrawa akwingwimwantja
 3:1MascDu two-ABL cont.act under 3:4 water-LOC
 'The two men continued to be underneath the water.'

A verb can indicate continuous action by the addition of the suffix by -wa, usually accompanied by length and high pitch on the penultimate syllable and reduplication of the verb root. As -wa does not co-occur with the particle ngawa it is considered to be a short affixed form of the particle. The continuative aspect suffix on a verb does not co-occur with -wa. Furthermore, Aboriginal literates sometimes hyphenate the particle ngawa to the verb to correspond with the orthographical use of hyphenation preceding inflectional suffixes.

ngarriwirrakitharrpwikwayinamwirri:::wa
 1IncNsg are shortening ourselves-cont.act
 'We are all gathering ourselves together [for the meeting].'

nanilhalhikani:::wa nanilhawirathinaka
 3:1MascDu kept going-cont.act 3:1MascDu returned-INTENS

arakpwa winalhakina akana ampwakilhangwa
 comp.act 3:1MascDu those however slowly

nanilhikana
 3:1MascDu went

'Those two men continued to go; they returned but, however, were walking slowly.'

yirripwikwimwingkimwingkathayini:::wa yirripwikwimwarrikpaka
 1ExcTri kept on digging-cont.act 1ExcTri+3:5 threw-INTENS

mwarntakirriyarra
 3:5 yam

'We three continued to keep on digging [and] threw out a lots of yams.'

The following examples compare the three ways in which continuative aspect is shown.

pwiya yirrimwirntamwirntakalhalhikani:::wa
 then 1ExcNsg kept going-cont.act
 'And then we all continued to keep on going.'

yirripwikwalhikanimwirra ngawa yirripwikwalhakina
 1ExcTri were going cont.act 1ExcTri those
 'The three of us continued to go.'

anatja nipwina niwilyapwa nilhikana ngawa
 3:3-CofR 3:3(i) that unseen 3:3(i) one 3:3 went cont.act
 'The eldest son continued to go on.'

The aspect particle ngawa can precede or follow a nominal or adverb. The concept appears to be one of continuity of the time or state and equates with the English term 'still.'

anipa ngawa karrawarilhangwa nangpwatja angwira
 3:4 alive cont.act high-ABL 3:4 smelt 3:4 fire
 'The fire was still alive and could be smelt from high up.'

akwa kampwa arakpwa athiwapwa ngawa
 and therefore comp.act today cont.act

kampwirra yakinaka yimwirrtjingwa ngawa
 therefore 3:3(ii) that-INTENS 3:3(ii) black cont.act
 'And, as a result, still today the crow is still black.'

The particle ngawa has an extended meaning of 'enough'. This appears at first to be contradictory but can be explained as a temporary cessation of an activity which is likely to be resumed at some future date.

ninganthingakamwa amwirntakakina yanthilhangwa
 3:3+3:4 is sharpening 3:4 those until

anganthingawiya ngawa ningakpwirakamwa
 3:4 sharp-PL cont.act 3:3+3:4 is making
 'He is sharpening all those spears until he makes enough sharp ones.'

akina ngawa ningilhikanimwirra angalyawa
 3:4 that cont.act 1ExcSg was going 3:4 home-LOC
 'That was enough--I was going home.'

arakpwa arakpwawiya akina ngawa
 comp.act long ago 3:4 that cont.act
 'That's all [for now] about the past.'

akina akwalya ngawa ningkwirriwa
 3:4 that 3:4 fish cont.act 2Pl
 'Have you enough fish?'

The particles ngawa can follow a demonstrative to signal the end of a discourse. The syllable pwi optionally intervenes and connects the two words to form the one phonological word. This syllable is probably a shortened form of the conjunction, pwiyi 'and then'.

ana pwiya ngawa ==> [enup^wuŋa^wwa] 'this [is] enough'
 akina pwiya ngawa ==> [akinup^wuŋa^wwa] 'that [is] enough'

8.2.1.3 Repetitive: ngarningka

The aspect particle, ngarningka 'again', indicates repetition of the action stated in the verb.

ngalhatja thikwirirkwa nangamwinikalyikamwaka
 3:2(ii)-CofR 3:2(ii) broлга 3:2+3:2 is not believing-INTENS

 ngawa ngarningka nangayanthapana mwarliwiyawa
 cont.act again 3:2+3:2 asked 3:2(ii) emu-ALL
 'Broлга still is not believing her and asked her again.'

pwiya yirrakina yirramwamwanga nimwangkarrina
 then 1ExcPl those 1ExcNsg+3:5 picked up 3:5 ran

ngarningka akwa yirrilhikana
 again and 1ExcNsg went
 'And then the truck picked us up again and we went home.'
 yirripwimwingwilha ngarningka yirripwikwingwirrkana
 1ExcTri slept again 1ExcTri hunted for

 mwinhinga
 3:5 burrawang nuts
 'We three slept and again [next day] we hunted for Zamia nuts.'

ngarningka mwiwilyapwimwantja mwarrnga napwilhikanimwa
 again 3:5 one-LOC 3:5 sleep 1IncTri were going
 'Again, after a night's sleep, we three were going on again.'

ngalhatja aningwathinipwa awalyiwa ngarningka
 3:4-CofR 3:4 first 3:4 ripe again
 '[The flowers] were just coming out again.'

When the particle refers to a nominal or pronominal the concept is one of repetition or addition and can be translated as 'also'.

akwa ngarningka ningkwirriwa karningkwarpwa
and again 2P1 2P1 men

yikawilyakatjinamwilhangwa mwalhamwikwamwirriya
2Nsg+3:1 show-ABL 3:5 canoe-ETC
'And you men also should show the boys about canoes and other things.'

yingitjarrikwamwa athalyimwa akwa awirikwa
3:2+3:4 is finishing 3:4 river and 3:4 swamp

apwipwirringkwitharrpwa akwa amwathirra akwa
3:4 waterholes and 3:4 soak/well and

ngarningka akwalha yingikpwiringkakamwirraka
again 3:4 some 3:2+3:4 made dry-INTENS
'She finished [drinking] the water in the river, swamp, waterholes and also some others [until] she made them very dry.'

The particle ngarningka can also be translated as 'more', 'another' or 'others' but the concept remains one of repetition or addition (not continuation). It is difficult in many instances to make a distinction between 'again' and 'more'.

akwa kikwiranamwantja ngarningka akwalya
and 2Sg+3:4 will be hooking-LOC again 3:4 fish

yikikwirna ngantja
1IncSg give 1ExcSg-DAT
'And when you catch some more fish please give me some.'

nalharrngkwirikwitha ngarningka yingapwirthanga awilyapwa
3:4 thing:became raw again 3:2+3:4 cooked 3:4 one
'The thing was raw so she cooked it one more [time].'

yikwa ngarningka
1IncSg give again
'Give me more!'

8.2.1.4 Dubitative: thikwa; yinthiya and kwiraya

Two mood particles are considered to be dubitative. The first is thikwa 'maybe, perhaps' which has the same meaning as those words

in English. It co-occurs with the actual, potential or negated moods in the verb prefixation.

thikwa kingilhikatjamwa
perhaps 3:2 will be coming
'Perhaps she will be coming.'

thikwa kithakina arningkwaya thikwa naritha
perhaps 1ExcSg+3:4 will cook 3:4 tomorrow perhaps not-TRM
'I might cook it tomorrow, maybe not.'

thikwa thikwa nara
perhaps perhaps not
'Maybe, maybe not.'

The mood particle thikwa can modify a noun or adverb and indicates a doubt about its specific identity.

thikwa angkapwirra wirrakina
maybe who 3:1 those
'Who perhaps is out there?'

akinaka amwakwilyimwithaka pwilayin yirriywarnimwa
3:4 that-INTENS 3:4 complete-INTENS 3:4 plains 1ExcNsg were followi

thikwa yathatha akwa ngampwiwa thikwa
perhaps this side and where?-ALL perhaps

mwawilyimwantjiwa
3:5 (name)-ALL

'We were walking across the entire plains area, maybe on this side, and where to? perhaps Thompson's Bay.'

yirriwa yirrilhikanimwa yirrapwirangkimwa mwanngarrpwiwa
1ExcPl 1ExcNsg were going 1ExcNsg were searching 3:5 plum-ALL

akwa mwarrngmirthiwa thiwitha
and 3:5 currant-ALL perhaps-TRM
'We were looking for perhaps Wild Plum and Bush Currant fruit.'

The second dubitative particle, yinthā ~ yinthi 'or perhaps', is used when there is a choice between two alternatives but does not really equate with the English word 'or'. The usage of yinthā ~ yinthi suggests a doubt about the original statement and suggests another possibility. It cannot be used for sentences, such as 'Would

you like tea or coffee?', the answer to which is implied by the acceptance or refusal of the latter item. (Note: It could alternatively be considered to be a conjunction.)

There is very little evidence of its use in choosing between one of two possible activities. The most common usage is between two nominals or adverbs.

ngakwirrilhangwimwantja wirriyikwayiwa aningapwawiya
1IncPl-POSS-LOC 3:1 children 3:4 good-PL

ngarrawilyakathinamwa yinthi awirrariyawiya
1IncNsg+3:1 are showing or perhaps 3:4 bad-PL
'We are teaching our children about the right or perhaps the wrong things.'

ngarrilhikatja angwirrkwiwa yinthi
1IncNsg go 3:4 Angurugu-ALL or perhaps

ngarriwarrikwatjingwina arakpwa angalyiwa niyamwa
1IncNsg take ourselves past comp.act 3:4 home-ALL 3:3 said
'"Are we going to Angurugu or straight past it to home?" he said.'

kilhikatjamwirra athiwapwa yintha arningkwaya
2Sg will be going today or perhaps 3:4 tomorrow
'Will you be going today or tomorrow?'

yipwina nimparrmwantja yinthi yangapwa
3:3(ii) that unseen 3:3(i) (name) or perhaps 3:3(ii) that there

lharrngantjipa alhipwatja
(name) to that side
'[He went to] Nimbarrmanja or perhaps to Larrnganjiba over there on the other side.'

The particle, kwiraya 'try' or 'attempt', modifies the verb and could be considered to be a verbal auxiliary. (It is not a verb because it does not carry inflection.) It usually immediately precedes the verb but can be positioned anywhere in the sentence.

naraka apwina angalya wimpwa
not-INTENS 3:4 that unseen 3:4 place but

ningapwirangkinamwa angarripa kwiraya niyamwa
1ExcSg+3:4 am finding that way try 3:3 said
'"This place is not [suitable] but I am trying to find one over that way," he said.'

wirrakina warnimwamwalya kwiraya niwapwiwarrkatjinginamwa
 3:1 those 3:1 Aborigines try 3:1 are hiding themselves
 'Those Aborigines are trying to hide themselves.'

yakaka yingwa kwiraya nikipathayinamwa
 3:3(ii) this 3:3(ii) crow try 3:3 is lying

nanimwakimwakina
 3:3 kept telling
 'The crow is trying to trick me by telling lies.'

8.2.1.5 Negative: nara

The modal particle for negation is morphologically simple in that it consists of one morpheme and cannot be prefixed. It usually negates an irrealis demonstrative pronoun, a nominal or verb. The word nara precedes the word it modifies. One of the most common occurrences is the use of the negative particle to negate the irrealis demonstrative for 'not visible', with the resultant meaning being 'not here, not there, not existing in present experience of the speaker'. When it negates a demonstrative pronoun it is often inflected by the Intensifying clitic.

naningwimwampwalhpwa nirampwarrpirra nanimwikwirra akwa
 3:3(ii) bat 3:3(ii) flat 3:3(ii) his face and

nara apwina amwinta anilhangwa
 not 3:4 that unseen 3:4 nose 3:3(i)-POSS
 'Bat's face was flat and his nose was not there.'

nara wirripwina yalhakwa
 not 3:1 those unseen here
 'There is no one here.' / 'There are no people here.'

nara apwina angaiya wimpwa ngilhikatja
 not 3:4 that unseen 3:4 place but 1ExcSg go

angarripa ngapwirangkina niyamwa
 that way 1ExcSg+3:4 find 3:3 said
 '"There is no place here but I am going that way to find one,"
 he said.'

nanirringka wirratjitja naraka wirripwina
 3:3+3:1 saw 3:1 bird not-INTENS 3:1 those unseen

warnimwangwirratjitja
 3:1 feathers
 'He saw a bird without feathers.'

Another common usage of nara is in the negated verb (see Section 6.3.1.2). In some instances, the verb is not realised in the surface structure. The particle can be inflected for the peripheral cases, including their usage as conjunctions.

mwanipwirra	ana	amwamwarra	nangakpwirakatjingwina
why	3:4 this	3:4 sore	3:4 makes itself

ngarnimwamwalyimwantja	yiyikwayiwa	yingarna
1IncPl Aborigines-LOC	3:3(ii) small	3:3(ii) snake

anana	nara	arringkamwa
3:4 this	not	not seeing

'The reason why the sores keep recurring in us Aborigines is that we cannot see the scabies mite.'

pwiwawiya	ningilhikanimwirra	nariwiya	anhinga
pre-dawn	1ExcSg was going	not-TPRG	3:4 food

kalyipwarna
1ExcSg+3:4 would eat

'I was going in the pre-dawn before I had eaten breakfast.'

naniwarrkawariyathinimwa	nariwapwa	wirripwina
3:1 were becoming upset	not-CSL	3:1 those unseen

wirrangariya
3:1 children

'They were getting upset because [they had] no children.'

kwirrikwalha	yirrimwinangkirratja	ayakwa	wimpwa
2Pl some	1ExcNsg listen	3:4 word	but

kwirrikwalha	nara
2Pl some	not

'Some of you listen to our words but some [do] not [listen].'

A much rarer usage of the negative particle is its occurrence with a noun phrase. It can be separated from the word it modifies by one or two words.

naniwartiyina	winalhakana	akana	nara	alhingatjirrirra
3:1MascDu fought	3:1MascDu these	however	not	3:4 long

awiyampa
3:4 fight

'The two men fought but, however, not for long.' (Lit: not a long fight)

naningkilyikwakatjiwa angalya warnimwalhika pwiya nara
 3:1MascDu+3:4 encircled 3:4 place 3:1 their tracks then not
 'The two men went right around the place [looking for] their tracks
 and then [found] none.'

8.2.1.6 Interrogative: -pwini ~ -pwirra

The interrogative clitic, -pwini [p(w)ini] ~ -pwirra, is usually suffixed to an interrogative adverb. The alternant form -pwirra may be the result of the addition of the stem formative suffix -rra (with the deletion of ni by the Haplology Rule).

mwiampwanipwina ningkilhikana ampwikwampwiwa
 what purpose?-QM 2Sg went 3:4 (name)-ALL
 'For what purpose did you go to Umbakumba?'

lhakithangwipwina kinilhikana arakpwa
 already-ABL-QM 3:3 went comp.act
 'Has he gone already?'

nirringkamwipwina nakina yimwanta mwakartimwantja
 3:3 was seeing-QM 3:3(i) that 3:3(ii) turtle 3:5 sea-LOC
 'Did he see that turtle in the sea?'

kilhikatjamwipwina ningana athiwapwa
 1ExcSg will be going-QM 1ExcSg this today
 'Will I be going today?'

yakilhikatjamwirripwira ~ yakilhikatjamwirripwina
 1ExcNsg will be going-QM

aritjilhangwa yarnarna
 later 1ExcPl this
 'Are we going later?'

There is an interrogative particle na which occurs sentence finally with a high or rising pitch. This may be a short form of the clitic -pwini but is more likely to be a borrowing from Nunggubuyu or Roper Kriol. Prior to 1987, the word was rarely heard at Umbakumba. It was previously heard constantly at Angurugu when Groote Eylandt Aboriginals and non-Aboriginals were conversing, often tagged on to the end of an English sentence. The usage has increased in the Umbakumba school but mostly through the presence of a Nunggubuyu

teacher. In checking data in 1987, the word na was corrected and replaced by -pwina (see last pair of examples). It is probably best translated as an Echo Question.

nithakinamwa nakina akwalya angwirimwantja na
 3:3+3:4 was cooking 3:3 that 3:4 fish 3:4 fire-LOC QM
 'He was cooking fish on the fire, wasn't he?'

athiwapwa na
 today QM
 'Today?'

arngkarpwarrngarna ningkwana ningkwilhikanimwa na
 3:4 how many times? 2Sg this 2Sg were going QM
 'How many times did you go (to the toilet)?'

arngkarpwarrngarnimwa ningkwanipwina ningkwilhikanimwa
 3:4 how many times?-COM 2Sg this-QM 2Sg were going
 'How many times have you been going (to the toilet)?'

8.2.1.7 Restrictive: yimpwikwa; waka and angkitharrpwa

There are three particles which have been grouped together, more or less, for convenience.

The particle, yimpwikwa 'only, except', has only been found to modify a noun or noun phrase. It limits the number of items involved.

wirrimwirntakakina yimpwikwa wirrapwiyarpwiwa
 3:1 those only 3:1 four

wirriyikwayiwa yirriwirtangimwa
 3:1 children 3:1 were climbing
 'Only four of the children were climbing on up [the hill].'

niwangkirrayina angkiwiya yimpwikwa thakina
 3:1 ran far away-TPRG except 3.2(i) that

thitharrngka
 3:2(i) woman
 'They all ran a long way away except that woman.'

nalyalyingmayinimwa wirrapwapwirnilhangwa yimpwikwa
 3:1 were being happy 3:1 many-ABL except

niwirrwilya
 3:3(i) rainbow
 'Everyone except Rainbow was happy.'

The particle, wilhkwa 'only, just', has been supplied as an entry for the dictionary but has not been found in any texts nor remembered from conversations. It may be a Nunggubuyu word (see Heath 1984:435 wu]guy).

The particle yantha is used to indicate that the action has no real purpose (see also Section 8.1.2.2.) . For example, when the word is used as a response to the question 'Why is the person sitting there?' the meaning is 'for no reason, for nothing, just sitting, just waiting'. In the following examples, the same aimlessness is involved and has been translated as 'just'.

akwa	<u>yantha</u>	ngawa	nimwirrkwilhimwa	arrawa
and	just	cont.act	3:3 was lying	under

akimwantja
3:4 tree-LOC

'And he just continued to lie under the tree.'

ngalhatjaka	angwira	pwi:::ya	<u>yanthaka</u>	niwampwilya
3:4-CofR-INTENS	3:4 fire	and then	just-INTENS	3:4 stayed

niwangkirratjaka
3:4 ran-INTENS

'And then the fire burnt all the grass.' (Lit: the fire just stayed and ran around)

nanakpimwirrakimwirriya	<u>yantha</u>	naka	wimpwa
3:3(i) (name)-ETC	just	3:3(i) this	but

anilhangwa akirra napingkiyikwa
3:3(i)-POSS 3:4 name 3:3(i) (name)

'Just Nanakbimirraka and the others--but his real name is Napingkiyikwa.'

Another particle, waka 'odd, different from others', is rarely used in the texts. It signifies that its referent is the odd one in a group or is set apart from the group. In the last example, waka involves rejection or setting apart of the unwanted item. The word is in apposition with a pronominal, nominal or noun phrase.

anana waka amwarrngwa
 3:4 this odd 3:4 yellow
 'This yellow one is odd.' / 'This odd one is yellow.'

waka anana wimpwa angapwa awilyapwithangwa
 odd 3:4 this but 3:4 that there 3:4 one-ABL
 'Not this one but that one from over there.'

wirriyapwitjapwa wirrakina awarrwalya angalya
 3:1 separate 3:1 those 3:4 shade 3:4 place

namwinampwilyimwirra apwirra waka
 3:1 were staying 3:1PL odd

wirriyathilhangwa
 3:1 separate-ABL
 'They were staying in a shady place apart from the others.'

The particle angkitharrpwa is the free form diminisher which corresponds with the prefix -warrngka. Semantically, the compared item is smaller (decreased largeness) or larger (decreased smallness) than the original. The word consists of two morphemes: a{r}ngka 'eye' and tharrpwi 'short'. It usually immediately precedes or follows a nominal but can be used as a time adverb.

angpwitha angkitharrpwa
 3:4 strong DIMIN
 'Rather strong.' / 'Slightly heavy.'

angkitharrpwa ngakakirimwatjingwimwa
 DIMIN 1ExcSg will be teaching myself
 'In a little while, I will be getting to know more.'

The diminisher is also used to express comparisons which, in Anindilyakwa, are always binary (not ternary as is possible in English). When comparisons of four objects were requested the diminisher angkitharrpwa was used with the words 'small' and 'large'; when comparisons of odd numbers were requested the diminisher could be used with either adjective for the ones intervening between those seen as pairs.

thathirrngwarna thaningwarngkiwilyapwa
 3:2 big 3:2 one thing
 'big one (= biggest one)'

thathirrngwarna angkitharrpwa thaningwarngkiwilyapwa
 3:2 big DIMIN 3:2 one thing
 'Not quite the biggest one.'

thiyikwitjiya angkitharrpwa thaningwarngkiwilyapwa
 3:2 small DIMIN 3:2 one thing
 'Slightly larger than the smallest one'

thiyikwitjiya thaningwarngkiwilyapwa
 3:2 small 3:2 one thing
 'Small one (= smallest one)'

8.2.1.8 Intensifying: -aki

The clitic, -aki [eki], can be suffixed to almost any word in the sentence and it is difficult at times to know what is being intensified or emphasised. Somewhat the same meaning is conveyed by the English words: 'really', 'very' or 'definitely'. The vowel in the penultimate syllable is lengthened and the final syllable stressed.

When the Intensifying particle -aki occurs on a pronominal or one of the words in a noun phrase it functions in the same way as reduplication, i.e., it can pluralise or intensify. (Note that the plurality is cross-referenced in the verb in the last example.)

akinaka aningapwa aningka
 3:4 that-INTENS 3:4 good 3:4 spear
 'That one is the best spear.'

yinimwamwiwaka akwitjina kwirrintjaya amwakwilyiwakpwa
 3:3(ii) eggs-INTENS there truly 3:4 (name)
 'There are really lots of eggs at Bickerton Island.'

naningkwarpwa aringkawaka nakina
 3:3(i) man 3:4 head-ALL-INTENS 3:3(i) that
 'The man was a sorcerer.' (Lit: very good head)

nimwirntakingakpwirakamwilhangwa amwirntakarrpwithaka aningka
 3:3+3:1 was making-ABL 3:4 strong-INTENS 3:4 spear
 'After he was making very strong [tightly-bound] spears...'

ngalhatja mwarimwilhangwa mwitjiyanga
 3:5-CofR 3:5 big-ABL 3:5 boat

namwirntakikwiwarinimwa pwathaka
 3:5 was breaking 3:5 box-INTENS
 'The rope was breaking all the hull of the big boat.'

When the clitic -aki is suffixed to a verb or a particle that modifies the verb it intensifies or emphasises the action of the verb.

pwiya yirriyamwa nimwikwiwarrinaka arakpwa mwama
 then 1ExcNsg said 3:5 broke-INTENS comp.act 3:5 this

mwitjiyanga akiyamwarrkinamwa ngarna
 3:5 boat 1IncNsg are doing what? 1IncPl these
 'And then we said, "This boat is really broken. What are we going to do?"'

anatja niyamwa nanilhikanimwaka winalhakina
 3:3-CofR 3:3 said 3:1MascDu were going-INTENS 3:1MascDu those

naningampayinimwirra athalyimwimwantja
 3:1 were bathing 3:4 river-LOC
 'He said, "Those two men were definitely bathing in the river.'

ngarningkaka ningana kilhawirrathinamwirra
 again-INTENS 1ExcSg this 1ExcSg will be returning

kilhikatjamwa nganyangwiwa
 1ExcSg will be going 1ExcSg-POSS-ALL
 'I will definitely be returning to my [home] again.'

When the clitic -aki is suffixed to an interjection it intensifies or emphasises the word. There is one example where it occurs with the particle wipwirra 'like'.

naraka arakpwa yingilyimwatha thipwina
 not-INTENS comp.act 3:2 disappeared 3:2(i) that unseen
 'Definitely not, she disappeared.'

angampwaka apwina amwikirra akinimwantja angalya
 which?-INTENS 3:4 that unseen 3:4 name 3:4 that-LOC 3:4 place
 'What is the name of that place?'

mwamwintjirratha yingimwalhkayitjiwamwa wipwirraka
 3:5 spear 3:2+3:5 was erecting like-INTENS

warningkwapwa
 3:1 men
 'She was standing the spears very much like men.'

The particle can co-occur on several words in the same sentence and this gives a very dramatic effect to high points in story, captivating the attention of the audience. It has only been observed in narratives by people regarded as excellent storytellers.

ngalhatja mwakarta mwathirrngarnaka
3:5-CofR 3:5 sea 3:5 big-INTENS

nimwiwarmwatjingwinamwaka nimwipwilhipwayinimwaka
3:5 was uprighting itself-INTENS 3:5 was blowing bubbles-INTENS

mwikwimwikwimwantjaka
3:5 ocean-LOC-INTENS

'The very big wave stood very still, blowing lots of bubbles, in the very [middle] of the ocean.'

8.2.1.9 Terminative: -tha

The terminative particle -tha is a clitic which is suffixed to any word class at or near the end of a sentence. It indicates the end of a discourse or a particular activity within a discourse but does not occur in conversations. The syllable is heavily stressed and thus alters the normal word stress.

The clitic -tha commonly occurs in three positions in the discourse: (a) at the end of the discourse; and (b) in the middle of the discourse preceding a change from one set of actors (dramatic personae) to another; and (c) in the middle of a discourse before the same dramatis persona starts a new activity. The Change of Referent pronoun often co-occurs at the beginning of the next sentence.

pwiya animwangmwa nimwingkwilhi^htha apwirringatja
then 3:4 (name) 3:3 slept-TRM 3:1P1-CofR

narringimwirrkwana mwiyarrawiwa
3:1FemDu+3:5 hunted 3:5 kurrajong nut-ALL

'And then Horace slept at Animangma. The two women [in the other group] went looking for Kurrajong nuts.'

kampwirra ningpwitjangina arakpwa kampwirritha. Akwa
 therefore 3:3 jumped comp.act therefore-TRM and

yikinirringkinimwantja yipwirathilhangwa ayarrka
 2Nsg+3:3 can see-LOC 3:3(ii) wallaby-POSS 3:4 hand

apwina nathathinimwa angwira arakpwawiya
 3:4 that unseen 3:4 was being burnt 3:4 fire long ago

amwirrtjingwawitha. Akina ngawitha.
 3:4 black-ALL-TRM 3:4 that cont.act-TRM

'And, therefore, the wallaby jumps. And you can see where the front paws of Wallaby were being burnt black a long time ago. That's all.'

Mwarliwiya yingimwarringkamwantja mwarra
 3:2(ii) emu 3:2+3:5 saw-LOC 3:5 blood

nimwikwilharrinimwantja thakinilhangwa thikwirirrkwa
 3:5 blood:fell-LOC 3:2 that-ABL 3:2(ii) broлга

aringka kampwirra yingarrikwilhitha. Kampwa
 3:4 head therefore 3:2 felt sorry-TRM therefore

yingarrakpitjiwa apwina angwarnta.
 3:2 spat out-ALL 3:4 that unseen 3:4 stone

'When Emu saw the blood flow down from Broлга's head she felt sorry. Therefore she [Emu] spat the stone out.'

One of the Anindilyakwa literates often used -tha at the end of each paragraph in the English story from which she was translating. This caused the skewing of the Anindilyakwa system in some instances. The clitic also seems to be inserted when narrator has come to a stopping point in the story, i.e., when collecting his/her thoughts for the next part of the narrative or assimilating the next chunk of data to be translated. When checking such narratives the author or editor often requests its removal. There are travelogues with the same dramatic personae continuing the same type of travelling and hunting activities where the clitic -tha is not used throughout the whole discourse.

8.3 INTERJECTIONS

Interjections are separate words which can stand alone or be

incorporated into a sentence. In the latter case, they are usually the first word. They fall roughly into three types: responses, attention-seekers and warnings.

8.3.1 Responses

There is a wide variety of particles which can be regarded as responses in Anindilyakwa. These occur mostly in conversation and the stories told by some of the older renowned story-tellers who use them to add a dynamic quality to the reported speech in narratives. In written material, these particles are rarely used.

The expressions fall roughly into two groups: (a) affirmations, denials or questions about what has just been said or done; and (b) empathy. The words in the first group are as follows:

ngarra ~ ngalya	it's hard to believe, it's not true, is it?
kwiraya	only joking, only teasing, you are trying to trick me, it's not true, you're pretending
thangpwa	is it true?
katha ~ karra	I don't know
kayi ~ kaya	say it again, please repeat what you have just said, I beg your pardon?
mwamwa	it's okay, it's all right, it doesn't matter
yinthiyi ~ yinthayi	oops, I'm sorry (it was accidental), I'm sorry I forgot it
yawi ~ yawa ~ yiwi	yes
nara	no
a:::	er, um

As most of the words are used in isolation with the above meanings the following random examples show their usage and position

in sentences.

yawj angapwa anHINGA angalyimwantja
yes 3:4 that there 3:4 food 3:4 place-LOC
'Yes, there is food at the house.'

mwamwa kampwa ngarriwirrana ana
okay therefore 1ncNsg+3:4 throw out 3:4 this

aningwingarrkwimwa nayamwa
3:4 spikeless 3:1 said
'"It doesn't matter that as a result [of its slipping out] we
leave this stingray without a spike," they said.'

nara ampwaka
no not now
'Not yet.'

katha amwiyampana akina
don't know 3:4 what? 3:4 that
'What sort of thing have you lost?'

katha ninganingpwalha ngaya ningana
don't know 1ExcSg ignorant 1ExcSg 1ExcSg this
'I do not know.'

The expression kwiraya is often accompanied by or replaced by the poking out of the tongue. As an interjection, it means 'a trick', 'I/you are pretending', 'a joke' or 'it's not credible'. The speaker uses the word as a statement to inform the addressee that he/she is only joking or the addressee uses it when questioning the veracity of the speaker's statement. This particle has the same form as the Dubitative particle (see Section 8.2.1.4) but any semantic relationship between the two usages has not been discussed with the native speakers.

kwiraya ningkwakina
you're teasing 2Sg that
'I don't believe you!'

The particle, thangpwa 'is it true?', is a short form of the noun, amwanthangwa 'truth'. The final syllable pwj may be a stem

formative or the Comitative clitic 'having'.

Question: thangpwa ningkilhikatjamwa tawiniwa
true? 2Sg are going 3:4 Darwin-ALL
'Is it true you are going to Darwin?'

Answer: amwanthangwa
3:4 truth
'It [is] true.' / 'Truly.'

The interjection, *yinṯhiyi ~ yinṯhayi*, consists of the dubitative particle *yinṯhi* followed by the vocative suffix *-ayi ~ -yi*. It means 'oops, I am wrong' or 'sorry I forgot something', thus maintaining the uncertainty or doubt of the dubitative particle (see Section 8.2.1.4).

The words for sympathy or empathy all appear to have at least two morphemes. The expression, *nganiyarriya* (empathy), can denote 'rejoicing with those who rejoice' but is mainly used to express sympathy. It probably consists of the two morphemes, *nga[r]ni* (1st inclusive plural) and *yarriya* 'bad', with a meaning of 'we feel badly'. The other expressions, *wirrintjaya ~ wintjaya ~ kwintjaya ~ mwarrakpwa* (sympathy), appear to have variants of the prefix *kwirra* (2nd plural) with *tjaya* 'go away'. These particles have been recorded at the beginning and end of a sentence and can co-occur.

ninganingapwatha arakpwa ningana nganiyarriya
1ExcSg became well comp.act 1ExcSg this (empathy)
'I am well again--happy me.'

ngayiwa ngingamwinilhikatjamwa ngalhilhangwa wirrintjaya
1ExcSg 1ExcSg+her am getting 3:2-POSS (sympathy)
'I am getting it instead of her--poor [woman].'

nanipwiwakitha kwintjaya
3:3(i) silly (sympathy)
'He's silly, poor boy.'

nganiyarriya wintjaya ngalhatja
(empathy) (sympathy) 3:2-CofR
'Poor woman.'

8.3.2 Attention-seekers

Anindilyakwa, like many other languages, has several words which are used simply to get someone else's attention. The following words could be translated as 'oh!', 'hey!' or 'hey you!'. The words are often reduplicated to attract greater attention and they can be in apposition.

wayi [waʔ] ~ waya ~ wawi [waʷ] ~ waa ~ ayi [e: ~ aʔ]
 kwiwitja ~ kwitja
 karikwa
 kwirriwa ~ wayi kwirriwa

The most frequent particle wayi and its variants can be lengthened and high-pitched when used in the same way as the Australian cooee to locate others in the bush. The word is commonly used singly or reduplicated to attract attention but there can also be an element of surprise. Unlike what Heath (1984:446) reports for Nunggubuyu, this exclamation does not seem to be used to denote fear.

wayi yarimwa amwanthangwithangwa yantharrnga yingiyamwa
 oh 3:3(ii) big 3:4 truly 3:3(ii) (name) 3:2 said
 '“Oh, Central Hill is really big,” she said.'

ningimwirntatha ningimwirntatha awi wawi wawi wawi
 1ExcSg cold 1ExcSg cold oh oh oh oh

ngarnta ngarnta ngarnta niyamwa
 mother mother mother 3:3 said
 '“Oh, oh, oh, mother, mother, mother, I am so cold,” he said.'

ayi::: yirripwikwinimwinampirrarinamwa yirripwikwalhakana
 oh 1ExcTri+3:3 are waiting 1ExcTri

yingiyamwa ngalhatja thathiyiwangkwa
 3:2 said 3:2-CofR 3:2(i) woman
 'Oh, we three will wait for him,' the old woman said.

The expression kwirriwa has been explained as meaning 'hey, all of you' and this suggests an analysis of two morphemes: kwirra (2nd

plural) and -wa (allative). The word karikwa is used to gain attention before questioning another person about an intended activity, e.g., 'hey, who is getting the soap?'; 'hey, what time are we going?'

kwiwitja yingiyamwarrkinamwa thakina naniyamwa
 hey 3:2 is doing what? 3:2 that 3:1MascDu said
 "Hey, what is she doing?" the two men said.'

The following exclamations involve surprise and/or pain. The word yakayi is common to north-eastern Arnhem Land and is used primarily to draw other people's attention to the fact that the speaker is hurt. It is also used, however, for surprise or when another person swears.

yakayi	ouch!, oh that hurt!, oh what a surprise!
karri	oh what a pleasant surprise!
tjilipwa ~ tjiripwa	down it goes!

Examples are as follows:

wayi	ningkwirringiwa	wayi	yingiyamwa	ayi:::ayi:::
oh	2Pl	oh	3:2 said	hey

yirikwitjilhangwa	yakayi	yingiyamwa
3:3(ii) bandicoot	(surprise)	3:2 said

'"Hey, all of you," she said, "oh, a bandicoot!"'

karri	thathingapwa	tiritja	ningkwilhangwa
(surprise)	3:2(ii) good	3:2(ii) dress	2Sg-POSS

'Oh, what a nice clean dress!'

The exclamation, tjilipwa ~ tjiripwa, is a loanword (probably tjirlipwa) whose origin has not been established. It appears to vary with tjilwitj and tjatj but their final consonants also indicate borrowing.

akina tjiripwa
3:4 that down it goes
'Down it goes!'

tjiwitj tjiwitj nangwirtangmwina akina athirra
down down 3:3+3:4 deepened 3:4 that 3:4 hole
'Oh down he went, he made the hole deeper.'

yakwitjina mwilyarrkayanikpwa natharritha tjilipwa
there 3:5 (name) 3:3 sank down he went

 niwampwilyamwirra akwingwa angwitjiraka
 3:3 is staying 3:4 water 3:4 deep hole
'There at Milyarrkayanikba--oh down he went--he sank and is staying
in a deep freshwater hole.'

The remaining words are used to get the attention of another person when the speaker wants the transfer of something in the possession of either the speaker or addressee. The word kwa is often accompanied by a hand movement in which all the fingers are moved downwards; the word wiya is spoken with an extension of the hand holding the offering.

yintja hurry up!, it's my turn!
yintha show it to me!, let me see it!
wiya this is for you, here you are
kwa (come) here!

The above expressions usually occur in isolation but can co-occur with another particle. The command kwa means 'towards the speaker' and is used as a verbal auxiliary in contrast with tjayi 'away from the speaker'. As a separate utterance it means 'come here to me'.

yintja kwiraya
hurry try
'Hurry up, I want to try.'

kwa / kwa lhikatja
here here 2Sg foot-walk
'Come here!'

kwa kwa winilhawirrathilhangwa ngarripwikwiwartiyinilhangwa
 here here 2MascDu return-ABL 1IncTri fight-ABL

yingiyamwa
 3:2 said

'"Hey, you two men come here and we three will have a fight!" she said.'

8.3.3 Warnings

Warnings or threats are usually said in anger and indicate impending doom if some corrective action is not taken. The words can be said in isolation and are emphatic when the last syllable is lengthened and stressed.

tjayi ~ tjaya ~ tjiyi	scram!, (go) away!
pwarra [p(w)eʀi]	get away and stop annoying me!
kartiyi [kaʀf::]	watch out!, watch what you're doing!, be careful! beware!
kapwa [kapwá::]	be quiet!, silence!
ngwayi [ngwé::]	stop staring at me!

The words, tjiwitj and tjiwi 'scram!', are used on Groote Eylandt but are said to be Nunggubuyu terms. The expression, tjaya is also used as a verbal auxiliary indicating the action is away from the speaker.

<u>tjayi</u>	/	<u>tjayi</u>	lhikatja
away		away	2Sg go
'Go away!'			

<u>kapwa</u>	yamwinthatha
ssshhh	2Sg become quiet
'Be quiet!' / 'Shut up!'	

<u>kartiyi</u>	yingarna
beware	3:3(ii) snake
'Watch out! There's a snake!'	

Nampwilya yakwitjina akana yapwapwirna
 n{i} +ampwilyi yakwitjini akani y{i} +apwapwirna
 3:3(i) stay there however 3:3(ii) REDUP:many
 He stayed there [but] however there were too many

yarrnga. Yapwapwirna yarrnga
 y{i} +arrnga y{i} +apwapwirna y{i} +arrnga
 3:3(ii) cut 3:3(ii) REDUP:many 3:3(ii) cut
 leeches (Lit:to cut). He was

nakpwartha akwa nilhikana.
 n{i} +akpwartha akwi ni +lhik{a} +ani
 3:3 frighten and 3:3 move TNS
 scared of the very large number of leeches and he went on.

Nalhalhikani:::wa. Napwa ngarningka
 n{i} +alhalhik{a} +ani +wa n{i} +a{nga}pwi ngarningki
 3:3 REDUP:move TNS cont.act 3:3(i) that over there again
 He continued to keep on going. He, that one over there, again

nampwirra apwimwantja amwalyikpa
 n{i} +ampwirra {a} +a{nga}pwi +mwantja a +mw{i} +alyikpi
 3:3 settle 3:4 that over there LOC 3:4 INALP tongue
 settled down over there at Amalyikba (Lit: tongue-shaped area).

Nampwirra natharrirtha. Nanthaya angalya
 n{i} +ampwirra n{i} +atharrirtha n{i} +∅ + anthaya a +ngalya
 3:3 settle 3:3 sink 3:3 3:4 look 3:4 tread
 He stayed [but] he sank. He looked around the place

pwiya nara kinirringka. Nara
 pwiyi nari kini +∅ +rringka nari
 then not 3:3 3:4 see not
 and then he could not see any place [to settle]. He did

kinakpwirrangarna apwini angalya.
 kin{i} +∅ +akpwirrang{a} +arni a +p{w}ini a +ngalya
 3:3 3:4 find TNS 3:4 that unseen 3:4 tread on
 not find a place.

Angampwa angalya ana niyamwa.
 {a} +angampwi a +ngalya {a} +ani ni +yamwi
 3:4 which? 3:4 tread on 3:4 this here 3:3 say
 "Which place is this?" he said.

Ngampwiyatha ana angalya
 ngamp{w}iyatha {a} +ani a +ngalya
 when? 3:4 this here 3:4 tread c.1
 "When

katjathiyamwirra niyamwa.
 ka +∅ +tjatha +y{i} +amwirra ni +yamwi
 1Sg 3:4 enter TNS NPIP 3:3 say
 am I going to get to [Lit: enter] this place?" he said.

ningapwipwirangkina niyamwa. Yakwitjina
 ning{a} +∅ +apwipwirangka +ni ni +yamwi yakwitjini
 1Sg 3:4 REDUP:search for TNS 3:3 say there
 There,

kampwirra yimwirntakipwina
 kamp{w}irri yi +mwirntaka +p{w}ini
 therefore 3:3(ii) PL that unseen
 as a result, [are] lots of wild apples

yinimwanhinga nalhkayana
 yi +{a}ni +mw{i} +anhinga n{i} +alkay{a} +ani
 3:3(ii) n-hfem INALP edible 3:3 stand up TNS
 that he planted there

nimwirntakapwirra anilhangwa angalya.
 ni +mwirntaka +p{w}irri ani +lhangwi a +ngalya
 3:3(i) PL wide 3:3(i) POSS 3:4 tread on
 at his place.

Yipwina akwa mwilyilya mwipwina
 yi + p{w}ini akwi m{w}i +lyilyi m{w}a +p{w}ini
 3:3(ii) that unseen and 3:5 ?deliver 3:5 that unseen
 He put the Milyilya

nimwakwimwarnitha. Nara apwina
 ni +mw{a} +akwim{w}i +arni +tha nari a +p{w}ini
 3:3 3:5 put TNS TRM not 3:4 that unseen
 there [in an area near the caves]. He didn't

kiniwilyaka akwalha. Nalhilhikani:::wa.
 kini +∅ +wilyaka a +kwalha n{i} +a(lhi)lhik{a} +ani +wa
 3:3 3:4 carry 3:4 some 3:3 REDUP:move TNS cont.act
 carry any[thing]. He kept going on and on.

Nara apwina angalya wimpwa
 nari a +p{w}ini a +ngalya wimpwi
 not 3:4 that unseen 3:4 place but
 "There is no place [for me to settle] but

ngilhikatjamwirra angarripa
 {ni}nga +lhik{a} +atj{a} + amwirra a + ng{wi} +arripi
 1Sg move TNS NPIP 3:4 ALP forked
 I am going this way

ngapwirrangkina niyamwa. Naka
 ng{i} +∅ +apwirrangka +ni ni +yarwi n{i} +aka
 1Sg 3:4 search for TNS 3:3 say 3:3(i) this here
 to search for one," he said. He

ngarningka amwalyikpa nampwirritha. Akwakwa
 ngarningki a +mw{i} +alyikpi n{i}+ampwirra +tha akwakwi
 again 3:4 INALP tongue 3:3 settle TRM (name)
 settled again at Amalyikba.

akina angalya amwalyikpa. Yakwitjina
 {a} +akini a +ngalya a +mw{i} +lyikpi yakwitjini
 3:4 that there 3:4 tread on 3:4 INALP lips there
 That place, Amalyikba, belongs to the Wurrakwakwa. There

nampwirra yipwina ningwirtjirakina
 n{i} +ampwirra yi +p{w}ini ni +ngwirtjira +ka +ni
 3:3 settled 3:3(ii) that unseen 3:3 deepen CAUS TNS
 he settled [and] made a big well

angalyimwirrimwantja amwalyikpa. Yakwitjinà
a +ngalya +mwirra +mwantja yakwitjini
3:4 tread on COM LOC (name) there
at Angalyimwirra [the camping place], Amalyikba. There

nampwilya pwi:::ya nara. Naraka apwina
n{i} +ampwilya pwiyi nari nar{i} +aki a +p{w}ini
3:3 stay then not not INTENS 3:4 that unseen
he stayed but not [for long]. He really could not see all over

angalya kinirringkaka. Tjatj
a +ngalya kini +ø +rringk{a} +aki
3:4 tread on 3:3 3:4 see INTENS
the place.

nangwirthangmwina akina athirra kampwirra
na +ngwirthangm{w}i +ni {a} +akini {a} +athirri kamp{w}irri
3:4 be open-mouthed TNS 3:4 that there 3:4 mouth therefore
The hole was deepened and, as a result,

ngarrirripwirringkina. Naraka apwina
ngarra +ø +rripwirringka +ni nar{i} +aki a +p{w}ini
1IncPl 3:4 REDUP:see TNS not INTENS 3:4 that unseen
we can look into it. "I [still have] no place

angalya wimpwa ngakpwirrangarnaka
a +ngalya {wi}mpwi ng{a} +ø +akpwirrang{a} +arn{i} +aki
3:4 tread on but 1Sg 3:4 find TNS INTENS
[to settle] but I am really trying to find one

angarripa kwiraya niyamwa. Wirripwina
a +ng{wi} +arripi kwiraya ni +yamwi wirra +p{w}ini
3:4 ALP forked try 3:3 say 3:1 that unseen
somewhere," he said. He

nanakwimwarna yakina
n{i} +an{i} +akwimw{i} +arni y{i} +akini
3:3 3:3 put TNS 3:3(ii) that there
left

yinimwanhinga akwa warnipwarpwa.
yi +{a}ni +mw{i} +anhinga akwi wirra +ani +p{wi} +warpwi
3:3(ii) n-hfem INALP edible and 3:1 n-hfem NSR short-hair
the apples and [the stone named] Warnibarbamba (Lit: short-haired ones).

Wimpwa nanakwimwarna wirrakina
{wi}mpwi na{rra} + n{i} +akwimw{i} +arni wirr{a} +akini
but 3:1 3:3 put TNS 3:1 that there
But he left Warnibarbamba there--

warnipwarpwa athipwina wirrirrakarimwa wimpwa
 athip{w}ini wirra +rrak{a} +arimwi {wi}mpwi
(name) this side 3:1 forehead big but
the big stone on this side but

alhipwatja wirrirrakitjikwa. Yathikina ngawa
alhapwatja wirra +rraka +tjikwi yathikini ngawi
that side 3:1 forehead small there cont.act
the small one on that side. From there

nitjirakamwirra akina angalya
 ni +∅ +tjirak{a} +amwirra {a} +akini a +ngalya
 3:3 3:4 deepen NPIP 3:4 that there 3:4 tread on
 he is continuing to cut (Lit: deepen) the plains (Lit: place),

niringpwirrangimwitha akina angalya
 ni +ring{ka} +pwirr{a} +anga +mwi +tha {a} +akini a +ngalya
 3:3 head scrape TSN PIP TRM 3:4 that there 3:4 tread
 scraping the place out

kampwa nalharrmwirathanamwa. mwapwa
 kampwi na +lharr{ki} +mwirath{a} +an{i} +amwi mw{a} +a{nga}pwi
 therefore 3:4 visible ??? TNS NPIP 3:5 that there
 so that the area is visible right through there.

kampwa mwamwirikwa mwipwina
 kampwi mw{a} +mwi +rikwi mwa +p{w}ini
 therefore 3:5 INALP raw 3:5 that unseen
 As a result, [along] that road

ngarralhalhikatja angwirrkwiwa akwa
 ngarr{a} +alh{i}:alhik{a} +atja angwirrkwi +wi akwi
 1IncP] REDUP:move TNS (name) LOC and
 we can go and go to Angurugu and

ampwikwampwiwa. Yathikina nalhalhikani::wa
 ampwikwampwi +wi yathakini n{i} +alh{i}:alhik{a} +ani +wa
 (name) ALL there 3:3 REDUP:move TNS cont.act
 to Umbakumba. From there [Amalyikba] he continued to go on

apwa kampwirra mwilyarrkayanikpwa
 {a} +a{nga}pwi kamp{w}irri mwa +lyarr{ki} +kay{a} +anikpwi
 3:4 that over there therefore 3:5 visible lift KPOSS
 [to that place] over there and, as a result, [to] Milyerrkayenikba.

aripwiripwarrikpa yaka nampwarra
 a +ripwi +rip{w}arrikpi y{i} +aka n{i} +nampwarra
 3:4 REDUP back:throw 3:3(ii) this here 3:3 settle
 [At] Aribiribarrkba (Lit: where he threw this back, i.e., disembarked),

akwa mwilyarrkayanikpitha. Yakwitjina
 akwi mwa +lyarr{ki} +kay{a} +anikpi +tha yakwitjini
 and 3:5 visible stand KPOSS TRM there
 he settled and [at] Milyerrkayenikba.' There,

mwilyarrkayanikpa natharritha tjiwitj tjiwitj
 n{i} +atharra +tha
 (name) 3:3 pierce INCH down down
 [at] Milyerrkayenikba, he sank--down

niwampwilyamwirra akwingwa angwitjiraka.
 niw{a} +ampwily{i} +amwirra a +kwingwi a +ngwi +tjir{a} +aki
 3:4 stay NPIP 3:4 water 3:4 ALP hollow INTENS
 down--making a deep fresh waterhole (Lit:the water is staying).

Nampwirra akana nara natharrirtha.
 n{i} +ampwirra akani nari n{i} +atharrirtha
 3:3 settle however not 3:3 sank
 He, however, could not [fill] it and] he sank.

Narapwaka angalya apwinitha niyamwa.
 nar{i} +apw{i} +taki a +ngalya a +p{w}ini +tha ni +yamwi
 not EM INTENS 3:4 tread 3:4 that unseen TRM 3:3 say
 "There is really no place [to stay]," he said.

Ngampwi kilhikatja kapwirangkina niyamwa.
 ngampwi ki +lhik{a} +atja k{i} +∅ +apwirangka +ni ni +yamwi
 where? 1Sg move TNS 1Sg 3:4 search for TNS 3:3 say
 "Where will I search for it?" he said.

Angarripa kilhikatja niyamwa.
 a + ng{wi} +arripi ki +lhik{a} +atja ni +yamwi
 3:4 NSR forked 1Sg move TNS 3:3 say
 "I will go this way," he said.

Nalhkani:::wa mwilyarrkayanikpwitha mwipwina
 n{i} +alhik{a} +ani +wi mwa +p{w}ini
 3:3 move TNS cont.act (name) 3:5 that unseen
 He continued to go from Milyarrkayanikpa.

mwipwina nimwalyikpa. Nalhkani:::wi
 mwa +p{w}ini ni +mw{i} +alyikpi n{i} +alhik{a} +ani +wi
 3:5 that 3:3(i) INALP tongue 3:3 move TNS cont.act
 He continued to go on and on

nangapwa angwirra. Angwirra nanakwimwarna
 n{i} +angapwi angwirra n{i} +an{i} +akwimw{i} +arni
 3:3(i) that there (name) (name) 3:3 3:3 put TNS
 [to] Angwirra. [At] Angwirra he left

nanikwiwanikpw nipwina. Kampwa
 n{i} +ani +kwi +w{i} +anikpwi ni +p{w}ini kampwi
 3:3(i) n-hfem ??? son KPOSS 3:3(i) that unseen therefore
 his son. As a

napwingkitjira. Kampwirra nipwina
 n{i} +ap{w}ingki +tjiri kamp{w}irri ni +p{w}ini
 3:3(i) body young therefore 3:3(i) that unseen
 result, he [is] small-bodied. Therefore he

napwingkikwiwakatjingwina angarripa
 n{i} +ap{w}ingki +kwiwak{wi} +atjingwi +ni a +ng{wi} +arripi
 3:3 body drop with splash RECP TNS 3:4 ALP forked
 he [the big Yantarrnga] dropped him [the small Yantarrnga] in the

niwirtanga arakpwitha. Yapwa
 ni +wirt{a} +anga arakpwi +tha y{i} +a{nga}pwi
 3:3 climb TNS comp.act TRM 3:3(ii) that over there
 waterhole [and then] he climbed up this way. He

yipwina nimpwarrimwatja yintha
 yi +p{w}ini nimp{w}arrimwa{n}tja yintha
 3:3(ii) that unseen (name) or perhaps
 [is] at Nimbarrmanja or perhaps

yangapwa lharrngantjipa alhipwatja wimpwa
 y{i} +angapwi lharrngantjipi alhapwatja wimpwi
 3:3(ii) that over there (name) that side but
 he [is] the one over there on that side at Larrnganjiba but

wimpwa	athipwina	nimpwarrimwantja	wimpwa	yapwa
wimpw{}	athap{w}ini	nimp{w}arrimwantja	wimpwi	y{ <i>i</i> } +angapwi
but	on this side	(name)	but	3:3(<i>i</i>) that
but	he[was] on this side	[to] Nimparrimanja	but	

yin+walhiwalyilhangwa.		Nimparrimwatjilhangwa
+{ <i>a</i> }ni +mw{ <i>i</i> } +alhawalya +lhangwi		nimparrimantja +lhangwi
(<i>i</i>) n-hfem INALP REDUP:wide ABL		(name) ABL
he [went to] Yinimaliwalyilangwa.		From Nimparrimanja

yathikina	niwirtanga	nilhikana	pwiya
yathakini	ni +wirt{ <i>a</i> }+anga	ni +lhik{ <i>a</i> } +ani	pwiyi
there	3:3 climb TNS	3:3 move TNS	then
there, he climbed and then he got	(Lit: went)		

nangapwa	karrawara.	Alhipwatja	arakpwa
n{ <i>i</i> } +angapwi	karrawari	alhipwatja	arakpwi
3:3(<i>i</i>) that over there	high	there	comp.act
[to] the top.		On that side,	

nakina	nilhikwayina.	Nilhikwilhikwayina
n{ <i>i</i> } +akini	ni +lhikwaya +ni	ni +lhikwilhikwaya +ni
3:3(<i>i</i>) that there	3:3 dance TNS	3:3 REDUP:dance TNS
he danced.		He really kept dancing

athikinaka	apwirantjarrarra.	Yathikina
athikin{ <i>i</i> } +aki	{ <i>a</i> } +ap{w}iran{gka} +tjarrarri	yathakini
there	INTENS 3:4 ?buttocks	there
on that side [and made] a smooth area.	smooth	

yikiwirtanimwantja	yikakwangpwa	angalya
yik{ <i>i</i> } +wirt{ <i>a</i> } +ani +mwantja	yika +kwangpwi	a +ngalya
2Sg climb TNS LOC	2Sg be excited	3:4 tread on
If you climb up there you will be excited about the place		

akwa	yapwapwirna	yilyakwa.	Ngarningka	arakpwa
akwi	y{ <i>i</i> } +apwapwirna	yi +lyakwi	ngarningki	arakpwi
and	3:3(<i>i</i>) REDUP:many	3:3(<i>i</i>) speech	again	comp.act
and all the bees (Lit: one with speech).			Again [after he	

nakina	niwirtanga	apwalkayiwa.	Apwalkaya
n{ <i>i</i> } +akini	ni +wirt{ <i>a</i> } +anga	apwalkayi +wi	apwalkaya
3:3(<i>i</i>) that there	3:3 climb TNS	high ALL	high
had finished dancing} he climbed right up to the top.			At the top

arakpwa	nangapwa	nampwirra.	Nanthaya
arakpwi	n{ <i>i</i> } +angapwi	n{ <i>i</i> } +ampwirra	n{ <i>i</i> } +∅ +anthaya
comp.act	3:3(<i>i</i>) that there	3:3 settle	3:3(<i>i</i>) 3:4 look at
he settled.			He looked

nanthaya	akina	angalya
n{ <i>i</i> } +∅ +anthaya	{ <i>a</i> } +akini	a +ngalya
3:3(<i>i</i>) 3:4 look at	3:4 that there	3:4 tread on
[and] he looked all over the place		

amwirntakayina	ayangkwilyimwithiwiya	akwa
a +mwirntak{ <i>a</i> } +ayini	a +yangka +lyimwitha +wiya	akwi
3:4 PL	those there	3:4 head be complete TPRG
and could see everywhere (Lit: many places)--across to the mainland and		and

BIBLIOGRAPHY

- Allerton, D. J. 1979. Essentials of grammatical theory. London: RPK.
- Anderson, Stephen R. 1978. Syllables, segments and the Northwest Caucasian languages. In Alan Bell & Joan B. Hooper, (eds.) Syllables and Segments. Amsterdam: North-Holland Linguistic Series 40.47-58.
- Blake, Barry J. 1987. Australian Aboriginal grammar. London: Croom Helm.
- Blake, Barry J. 1977. Case marking in Australian languages. Canberra: AIAS, Linguistic Series 23.
- Breen, G. J. 1977. Andegerembenha vowel phonology. *Phonetica* 34.371-391.
- Breen, G. J. 1979. A re-analysis of Tiwi /o/. *Talanya* 6,76-78.
- Capell, A. 1941-42. Languages of Arnhem Land, North Australia. *Oceania*: XII(4).364-392.
- Capell, A. and Hinch, H. E. 1970. Maung Grammar, Texts and Vocabulary. The Hague: Janua Linguarum, Series Practica 98.
- Chomsky, Noam and M. Halle. 1968. The sound pattern of English. New York: Harper & Row.
- Colarusso, J. 1975. The Northwest Caucasian languages: a phonological survey. PhD Dissertation, Harvard University.
- Cole, E. K. 1971. Groote Eylandt mission. Melbourne: Church Missionary Historical Publications.
- Coleman, Neville. 1981 What shell is that? Sydney: Lansdowne Press.
- Comrie, Bernard. 1976. Aspect: an introduction to the study of verbal aspect and related problems. Cambridge University Press, Cambridge.
- Corbett, Greville G. 1987. An approach to the description of gender systems. to appear in Studies in syntax and universals of language. London: Oxford University Press.
- Craig, Beryl F. 1966. Arnhem Land peninsular region. Canberra: AIAS (Occasional Papers in Aboriginal Studies) 8:1.
- Crystal, David. 1985. A Dictionary of linguistics and phonetics. Oxford: Basil Blackwell Ltd.
- Davidson, D. Sutherland. 1938. An ethnic map of Australia. Philadelphia: Proceedings of the American Philosophical Society, 79.649-679.
- Dench, Alan & Nicholas Evans. 1988. Multiple case-marking in Australian languages. *Australian Journal of Linguistics* 8:1.

- Dixon, R.M.W. 1968. Noun classes. Amsterdam: *Lingua* 21.104-125.
- Dixon, R.M.W. 1980. The languages of Australia. Cambridge: Cambridge University Press.
- Friedrich, Paul. 1970. Shape in grammar. *Language* 46(2).379-407.
- Glasgow, Kathleen. 1964. Four principal contrasts in Burera personal pronouns. In R.Pittman and H. Kerr (eds.) Papers in the languages of Australian Aborigines. Canberra: A.I.A.S. 109-117.
- Gleason, H.A. 1975. An introduction to descriptive linguistics. (Revised edition.) London: Holt, Rinehart & Winston.
- Godfrey, Marie P. & Leeding, Velma J. 1974. Iwi phonology. Typed MS, 70p.
- Grant, E. M. 1982. Guide to Fishes. Brisbane: Department of Harbours & Marine.
- Hale, Kenneth 1973. Deep surface canonical disparities. In T. A. Sebeok (ed) *CTIL* 11. 401-458. The Hague: Mouton.
- Harmer, Jenny. (n.d.) North Australian Plants: wildflowers of the Northern Territory Top End. New South Wales: The Society for Growing Australian Plants.
- Hartmann, R.R.K. 1972. Dictionary of Language and Linguistics. London: Applied Science Publishers.
- Heath, Jeffrey 1984. Functional grammar of Nunggubuyu. Canberra: AIAS, New Series 53.
- Hinch, H. E. and E. G. Pike. 1978. Speaker-addressee versus third person axes with the Maung verb. *Studies in Language*, 2(2).151-64.
- Hockett, Charles F. 1955. A manual of phonology. Baltimore: Waverley Press Inc.
- Hughes, E. J. 1971. Nunggubuyu-English dictionary. Sydney: Oceania Linguistic Monographs 14.
- Hughes, Earl J. & Leeding, Velma J. 1971. The phonemes of Nunggubuyu. Canberra: AIAS (AAS) 38. 72-81.
- Jones, Rhys and Betty Meehan. 1978. Anbarra concept of colour. In Australian Aboriginal Concepts (ed) Les Hiatt. New Jersey: Humanities Press Inc.
- Koch, Harold. 1984. The category of associated motion in the Kaytej verb. *Language in Central Australia* 1.23-24, note 1.
- Ladefoged, P. 1971. Preliminaries to linguistic phonetics. Chicago: University of Chicago Press.
- Leeding, Velma J. 1979. Anindilyakwa phonology: Umbakumba communilect. MA thesis, Macquarie University, Sydney.

- Leeding, Velma J. 1984a. Diagnostic testing of the Anindilyakwa orthography for both reading and writing. Darwin: Work Papers of SIL-AAB, Series B 12. 27-114.
- Leeding, Velma J. 1984b. Loan words: ours or theirs? In G. R. McKay & B. A. Sommer (eds) Further application of linguistics to Australian Aboriginal contexts. (Occasional Paper 8. 7-16). Melbourne: Applied Linguistic Association of Australia.
- Levitt, Dulcie. 1981. Plants and People: Aboriginal uses of plants on Groote Eylandt. Canberra: AIAS.
- Lithgow, D. 1977. Dobu phonemics. Ukarumpa, Papua New Guinea (S.I.L.) Workpapers in PNG Languages 19. 73-96.
- Lindau, Mona. 1978. Vowel features. Language 54.541-63.
- MacKnight, C. C. 1972. Macassans and Aborigines. Oceania 42. 283-321.
- McKay, Graham R. 1979. Gender and the category unit augmented. Oceanic Linguistics 18(2).203-210.
- Moody, Mary L. A. 1954. A descriptive statement of the phonemics and morphology of Anindilyakwa, the language of Groote Eylandt, Northern Territory. MA thesis, University of Sydney.
- Mohrlang, Richard. 1972. Higi phonology. Nigeria: Studies in Nigerian Languages 2.
- Oates, W.J. and L.F. 1970. A revised linguistic survey of Australia. Canberra: A.I.A.S., Australian Aboriginal Studies, 33.
- Pike, Eunice V. 1964. The phonology of New Guinea Highlands languages. American Anthropologist 66(4).121-32.
- Reader's Digest. 1976. Complete book of Australian birds. Sydney: Reader's Digest Services Pty. Ltd.
- Rumsey, Alan. 1980. Prolegomena to a theory of Australian grammatical case systems. Canberra: Pacific Linguistics, Series A, 59.1-29.
- Schane, Sanford A. 1972. Natural rules in phonology. In R. F. Stockwell and R.K.S. Macaulay (eds) Linguistic change and generative theory. Indiana University Press, 199-229.
- Sedlak, P. 1969. Typological considerations of vowel quality systems. Stanford University: Working papers on language universals, 1.1-40.
- Sharpe, Margaret C. 1972. Alawa phonology and grammar. Canberra: AIAS (AAS) 37.
- Sommerstein, Alan H. 1977. Modern phonology. Great Britain: Edward Arnold (Publishers) Ltd.

- Stokes, Judith 1982. Anindilyakwa phonology from phoneme to syllable. Darwin: Work Papers of the Summer Institute of Linguistics, Series A, 5.
- Tindale, Norman B. 1925-8. Natives of Groote Eylandt and of the west coast of the Gulf of Carpentaria. Adelaide: Records of the South Australian Museum, Vol.3, Part II, 61-102.
- Trubetzkoy, N.S. 1939. Grundzuge der phonologie. Translated by C. A. M. Baltaxe (1969) Principles of phonology. California: University of California Press.
- Turner, David, 1974. Tradition and transformation: a study of the Groote Eylandt area Aborigines of northern Australia. Canberra: AIAS, Australian Aboriginal Studies 53.
- Walker, Alan & R. David Zorc. 1981. Austronesian loanwords in Yolngu-matha of Northeast Arnhem Land. Aboriginal history: Aboriginal-Asian Contact Series 5:1-2.
- Waddy, J. A. 1988. Classification of plants and animals from a Groote Eylandt Aboriginal point of view, Vols. 1 & 2. Darwin: ANU North Australia Research Unit.
- Walker, Howell. 1953. From spear to hoe on Groote Eylandt. Washington: National Geographic, CIII.1.131-142.
- Warren, Kathie. 1982. Nunggubuyu nouns. MA thesis, Macquarie University, Sydney.
- Worsley, P. M. 1953/4. Noun-classification in Australian and Bantu: formal or semantic?. Sydney: Oceania, 24.275-288.
- Wurm, S. A. 1972. Languages of Australia and Tasmania. The Hague: Mouton.
- Yallop, Colin. 1982. Australian Aboriginal languages. London: Andre Deutsch.