## A Grammar Of Wik-Mungkan

Alan Everton Ray<br>B.A. (Hon.) (Monash), M.Sc (Melb), Doctorat de Troisième Cycle (Paris VII)

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School of Languages, Literatures, Cultures and Linguistics
Faculty of Arts

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#### Abstract

This thesis is a comprehensive description of Wik-Mungkan, a Middle Paman language spoken primarily on the west coast of Cape York Peninsula, Australia. It is one of the few Australian languages still used as a primary form of communication. Wik-Mungkan was originally spoken in the hinterland on the west coast of Cape York and later in the coastal town of Aurukun, where it now functions as a lingua franca for speakers of other Australian languages in the area. It is also spoken in the township of Coen on the eastern side of Cape York and elsewhere.


This grammar is focused on Wik-Mungkan as spoken in Aurukun in the 1960s and 1970s. The description is based on a corpus of language material and descriptions, including written and audio, collected by linguists and anthropologists. Other data, written and audio, collected in the late 1980s in Aurukun, is also analysed for comparative purposes. Despite the richness of the corpus, various gaps have been found at the lexical and morphosyntactic level. Attempts to fill those gaps with field visits to Aurukun proved fruitless due to changes in the language since the period stated.

In addition, this grammar describes dialect differences between varieties spoken at Aurukun and Coen revealed by a smaller corpus of material collected in 1964, 1974 and 1994. Finally, it examines a corpus of stories collected in the period 1927 to 1934, with some accompanying linguistic description, and compares this with the later Aurukun and Coen dialects. The differences between these sources include phonological, lexical and morphosyntactic variations.

Phonologically Wik-Mungkan has a rich vowel inventory for an Australian language, with five distinct vowel qualities and a length distinction producing ten vowel phonemes. Phonotactically it includes many monosyllabic words, despite these being generally rare in Australian languages.

A distinct feature of Wik-Mungkan is the demonstrative system. This is a very rich
system with four distinct series of demonstratives, each exhibiting a three-way distance distinction. Attaching to these series are nine different suffixes, creating a set of over 100 different forms with distinct semantic features (not all suffixes attach to all series).

At the morphosyntactic level, Wik-Mungkan is predominantly a nonconfigurational language but with a highly preferred word order. In particular it has a fairly rigid noun phrase with case marking occurring at the phrase level. Nevertheless, this structure can be varied for pragmatic reasons and words omitted if the reference is clear from context. Noun phrases in a clause are frequently preceded by a co-referential personal pronoun. Verbs are marked by obligatory portmanteau suffixes denoting subject and either tense or subjunctive mood, followed by optional suffixes denoting direct or indirect objects.

## Declaration

This thesis is an original work of my research and contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signature: $\qquad$

Print Name: Alan Everton Ray

Date: 31/07/2021

## Acknowledgements

I acknowledge the Wurundjeri people on whose land this was written and recognise their continuing connection to land, water and community. I pay respect to elders past and present.

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This goes back over 90 years to those who engaged with Ursula McConnel so that she could record their traditional stories, or 'myths', as McConnel named them. Not every name has been recorded and some names are incomplete but these are the names acknowledged in McConnel's records; Araman, Harry \& Jimmy Andyimban, Kongutam, Kumama (Charlie Bann), Ku'andambin, Ku'eka, Kumita, Lampas, Stephen, Paul Teidyola, Henry Thomson and Yalwintyamamana. In gathering these stories she travelled extensively with Bambegan (a.k.a. Billy Mammus) and his wives Jinny and Rosie.

In 1964 SIL linguists arrived, first in Coen, then Aurukun. No Wik-Mungkan speakers in Coen are named but there is extensive documentation of speakers in Aurukun who engaged with the SIL linguists. Some of these are also credited as co-authors of the 'Dictionary and Source Book of the Wik-Mungkan Language' (Kilham et al 1986), a major input to this thesis. The main collaborators with the SIL linguists were; Winnie Koongotema, Mabel Pamulkan, Jennifer Pootchemunka, Mary Tarpencha and Topsy Wolmby. Topsy Wolmby also assisted Frances Huchet in 1990. On pages xiii to xv of Kilham et al (1986) is an extensive list of others involved.

In 1966 Estrella Chesney recorded Melbourne Marpundin on Palm Island.

Bruce Rigsby in Coen in 1974 recorded Oscar Gordon and, in 1994, Victor Lawrence.

In 1988 and 1989 Steve Johnson and Lucy Kuntz recorded many hours with Annie

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Abbreviations

| Abbreviation | Meaning | Abbreviation | Meaning |
| :---: | :---: | :---: | :---: |
| 1DU | first person dual | INST | instrumental |
| 2DU | second person dual | IPFV | imperfective |
| 3DU | third person dual | ITR | intransitive verbaliser |
| 1PL | First person plural inclusive | LOC | locative |
| 2PL | second person plural | MCC | McConnel corpus |
| 3PL | third person plural | MED | medial |
| 1SG | first person singular | NEG | negation |
| 2SG | second person singular | NF | non-finite |
| 3SG | third person singular | NOM | nominative |
| a | $\mathrm{a}^{1}$ | NP | Noun Phrase |
| ABS | absolutive | OB | older brother |
| ABL | ablative | OPT | optative mood |
| ACC | accusative | POSS | possessive |
| AD | Aurukun dialect | PL | plural |
| ADVERBZ | adverbaliser | PN | used with vocative pronouns |
| ALL | allative | PRDP | partial reduplication |
| ANAPH | anaphoric marker | PRS | present |
| ASP | aspect | PRX | proximal |
| AUX | auxiliary | PST | past |
| AV | aversive | PTL | particle |
| CAUS | causative | PURP | purposive |
| CLF | classifier | Q | question |
| COM | comitative | RCP | reciprocal |
| COMP | comparative | RDP | reduplication |
| CONJ | conjunction | REL | relativiser |
| DAT | dative | REFL | reflexive |
| DEF | definite | reflA | adjunct reflexive |
| DEM | demonstrative | reflO | direct object reflexive |
| DIST | distal | STM | subject-tense-mood |
| DU | dual | SBJV | subjunctive |
| EMPH | emphatic | TOP | topic marker |
| EMO | emotional | TR | transitiviser |
| ERG | ergative | V.AUX | verbal auxiliary |
| EXCL | exclusive | VEG | vegetable |
| FOC | focus | VERBZ | verbaliser |

1 For discussion of the suffix -a see section Error: Reference source not found

| Abbreviation | Meaning | Abbreviation | Meaning |
| :--- | :--- | :--- | :--- |
| FUT | future | VOC | vocative |
| GEN | genitive | VOT | Voice Onset Time |
| IMP | imperative | YB | younger brother |
| INCL | Inclusive | WM | Wik-Mungkan |
| INTJ | interjection |  |  |

## 1 Introduction

Wik-Mungkan is an Australian language spoken in Cape York, Queensland, most notably in the town of Aurukun. This thesis is a grammar of Wik-Mungkan based on historical archival material mostly recorded and / or written and transcribed during the period mid 1960s to late 1970s. The major sources are written descriptions, narratives and recordings made by linguists from the then Summer Institute of Linguistics, now SIL International. These linguists were active in Aurukun, Cape York during this period. This material is supplemented by material from other linguists and data obtained by limited field work in Aurukun. This first chapter provides background on the language and its people, describes the various sources and discusses the constraints on the analysis inherent in relying on these sources. The impact of language change since the late 70s has been a particular limiting factor, in that questions arising from the data can not always be answered by field work today. These limitations are discussed in the relevant sections.

Separate chapters (14 and 15) compare the language in Aurukun in the 60s and 70s with other material on dialects spoken away from Aurukun and with the variety of Wik-Mungkan spoken in the late 1920s and early 1930s.

### 1.1 The Language and Its Speakers

This section gives some background on the Wik-Mungkan people and language.

### 1.1.1 Location and names

Wik-Mungkan is a Middle Paman (see section 1.1.2 for discussion) language of Cape York, spoken today principally in Aurukun as both a primary language and a lingua franca for speakers of Kugu Nganhcara dialects, Pakanh, Wik Ngathan and others. It is one of only 13 Australian languages still being learned by children (Marmion et al $2014^{2}$ p. xii). According to the same source (ibid p. 10) the total number of speakers

[^0] does note Wik-Mungkan as being a strong language (Table 3.5 p .46 ), one of 12 , down from 13.
in 2014 was 1,030. As at the 2011 Australian Bureau of Statistics (ABS) Census, there were 1,085 speakers in Aurukun and 1,355 speakers in Australia as a whole (ABS 2011). The 2016 Census shows 186 speakers in Aurukun and 450 Australia wide (ABS 2016). This apparent precipitous decline may be misleading, as a separate category of 'Cape York Languages, nec' i.e. 'not elsewhere classified' is shown as having 781 speakers in Aurukun and 875 Australia wide. In the 2011 census the number of speakers in this category was 51 in Aurukun and 242 Australia wide (ABS 2011). The decline in reported numbers for Wik-Mungkan and increase in 'Cape York Languages, nec' appears to point to a change in classification rather than a real change. Without supporting detail it not possible to confirm or deny.

Historically Wik-Mungkan was spoken further inland with a wider range than today. McConnel (1936 p. 454) describes it being spoken inland over an area of 100 miles ( $\approx 160 \mathrm{~km}$ ) north to south and 50 miles ( $\approx 80 \mathrm{~km}$ ) east to west between the Archer and Edward rivers, as per the map in Illustration 1, copied from McConnel (1936 p. 343). Sutton (1979 p. 174) also describes the inland nature of Wik-Mungkan and notes its use as a lingua franca.

The only places where the language has been documented, other than Aurukun, are the towns of Coen (Sayers and Godfrey 1964, Rigsby 1974) and Theethinji (Rigsby 1994), both on the east of Cape York, the former inland with the latter on the coast. The 2016 Census reported 8 speakers of Wik-Mungkan in Coen, the local government area which includes the towns of Coen and Theethinji. Illustration 2 is a map from Kilham et al (1986 p. v), with the addition of a pointer to the location of Theethinji. It appears that when the Wik-Mungkan speakers left or were removed from their traditional lands they primarily moved to the mission in Aurukun but some moved east to Coen. Theethinji is on traditional Lamalama country ${ }^{3}$.

[^1]

Illustration 1: Map of Wik-Mungkan territory from McConnel (1936 p. 453)


Illustration 2: Map of Aurukun area from Kilham et al (1986 p. v)

Wik-Mungkan is also variously written in different archives as Wik-Munkan, WikMungkhn, Munkan, Wik Mimungkum, Wik-Mungkana, Wikmunkan, Mimungkum, Munkanj, Munkanu, Monkanu, Munggano, Wikmungkan, Wikmungken, Wik Mongkan, Wik Monkan, Wik-Mungken, Wik-Mongken, Munggan, Mungkañ, WikMungkanha, Mungkanhu ${ }^{4}$. As can be seen, much of the variation is due to the velar cluster [ $\eta k]$ and the choice between [ $u$ ] and [ 0 ] as the second vowel. There is an optional vowel [a], often reduced to a schwa, which can occur at the end of any word in the language (refer section 2.5.4 for more on this vowel ending), hence the variations ending in a vowel. The preferred spelling settled on by the community is that adopted for this thesis; Wik-Mungkan. The word wik means 'word / speech / language' and mungkan means 'to eat/drink' in the language. The name WikMungkan is frequently abbreviated as WM in this thesis.

### 1.1.2 Linguistic affiliation

The first published genetic classification of Wik-Mungkan was by Hale in O'Grady et al (1966) who proposed the groupings of Middle Paman (from Pama-Nyungan pama 'man'), which included Wik-Mungkan, and Northern Paman. In Hale (1976a) he described how Middle Paman is reflected in the current Wik languages, including Wik-Mungkan. The original classification grouped these two groups within a broader group, Paman, itself part of a broader group called Pama-Maric. Subsequent studies into Cape York languages maintained the two sub-groups and included WikMungkan in Middle Paman (see Wurm 1972 pp. 141-143). Black (1974 p. 17) described the basis for establishing a Pama-Maric group as being weak. PamaMaric as a valid grouping was accepted by Oates (1975) however reference to it was not included in subsequent surveys such as Sutton (1979), Walsh (1981) and Wurm (1994). It is possible that they were aware of Black's views but did not directly reference Black (1974).

Later on, Dixon (2002, p. xxxi) proposed a 'North Cape York Subgroup' which included Northern Paman and a Wik subgroup (including Wik-Mungkan) but not a Middle Paman subgroup. The languages he includes in the Wik subgroup is a subset of the languages considered to constitute Middle Paman. He considered the 4 It is possible that some of these names represent different dialects.
evidence for supporting a Pama-Maric group as 'not sustainable' (Dixon 2002 p. 660). The theory he used of regarding Australia as one large linguistic area in his classification has not been widely accepted (see e.g. Evans 2005) and will be discounted for this thesis.

The evidence for proposing a group combining Northern Paman and Middle Paman was reviewed again in more detail in Black (2004 p. 266) who concluded that there is some evidence providing weak support for such a grouping but that the overall classification remains unclear.

Further work undertaken by Verstraete and Rigsby (2015 pp 173 - 194) and Verstraete (2020 pp. 37 - 39) have confirmed the classification as Middle Paman, specifically within a sub-group labelled west Middle Paman.

Sutton (1979 p. 179 ff ) provides more detail on the history and relationships of the Wik group.

### 1.2 Previous Studies

Documented interest in Wik-Mungkan, both anthropological, sociolinguistic and linguistic, dates from at least the 1920s, with some earlier fragments. The earliest significant researcher was an anthropologist, Ursula McConnel, who published a number of descriptions of traditional Wik-Mungkan life and stories. McConnel also trained in linguistics and wrote an unpublished sketch grammar and published a detailed phonetic description (McConnel 1945). Other anthropological authors such as Thomson, Needham and McKnight have published on various aspects of WikMungkan culture and history (e.g. Thomson 1946).

Linguistic interest in Wik-Mungkan grew in the 60s and 70s with SIL and other linguists, especially Marie Godfrey, Harland Kerr, Christine Kilham, Barbara Sayers and Peter Sutton (e.g. Godfrey 1970, Godfrey and Kerr 1964, Kilham 1977, Sayers 1977a, Sutton 1979), publishing accounts of various aspects of the language. This interest culminated in the development and publication of biblical and educational
material in Wik-Mungkan and the publication of a sourcebook with a sketch grammar and dictionary in 1986 (Kilham et al 1986), updated in 1989. Since that time there have been two Honours level theses on phonology (Kuntz 1989) and deixis (Huchet 1990).

The objective of this chapter is to describe the above scholarship. It should be noted that More (2019), Sutton (1979 pp. 36-42), Kilham (1977 pp. 4-6) and Kilham et al (2002) have described some of this history and their descriptions have informed this present chapter.

Some of the above linguists and others recorded spoken Wik-Mungkan at different times; these will be discussed in section 1.4.

### 1.2.1 Anthropological / Sociolinguistic Studies

As discussed above, the earliest recorded studies of the Wik-Mungkan people and language were primarily anthropological but also contained linguistic data. This section is a brief summary of these studies.

### 1.2.1.1 Ursula McConnel

Ursula McConnel, born in Queensland, trained as an anthropologist in London and on her return to Australia undertook field work in Cape York, starting in 1927. She continued her work with different visits until 1934 and produced a number of publications based on this experience. This was a remarkable achievement for a single woman at that period. She spent some of her time at the Aurukun Mission, as it was then, but was highly critical of the treatment of the Indigenous people by the superintendent of the Mission, Bill McKenzie (Perusco 1993 p. 424). The hostility between the two led to her being eventually expelled from the Mission (ibid p. 424). This did not affect her field work because she had already formed a partnership with a local man, Billy Mammus and his wives Jinny and Rosie Mammus. With them as her guide she spent time on country, collecting artefacts and Wik-Mungkan stories. For further details of this remarkable collaboration, see Perusco (1993) and Sutton

McConnel's legacy consists of published works, a collection of artefacts and her unpublished field notes, typescripts and photographs, which were fortuitously found in 2006 (Sutton 2010 p. 101). The unpublished notes included drafts of a sketch grammar and stories in Wik-Mungkan. The majority of the artefacts and the unpublished notes and stories are held in the South Australian Museum and have been accessed for this thesis.

The published works fall into three categories. The first category is anthropological; a description of the Wik-Mungkan way of life (McConnel 1930a); the totems of the various clans (McConnel 1930b, 1936a, 1936b); kinship and marriage (McConnel 1934); social organisation (McConnel 1939, 1940); mourning rituals (McConnel 1937) and a comparative survey of junior marriage systems (McConnel 1950, 1951). The second category are also anthropological but include or are devoted to her collected stories; McConnel (1930c, 1931, 1935, 1936b, 1957). The final category is the paper on Wik-Mungkan phonetics (McConnel 1945), discussed in some detail in section 2.7. McConnel spent time at Yale learning linguistics under Sapir and others and subsequently engaged with Strehlow whose work on Aranda (sic) influenced her analysis of Wik-Mungkan phonetics. A description of these events can be found in Sutton (2012).

An analysis of the McConnel collection is included in chapter 15.

The original wax cylinder recordings for many of the stories in the above publications are kept at the Melbourne Museum. In the 1960s these were copied to tape recordings and are now available at the AIATSIS Library in Canberra. As at December 2020 the necessary approvals to obtain copies of these have not been obtained. As the objective of this thesis is the grammatical description of WikMungkan as spoken in Aurukun in the period 1960 - 1980, this is not a major lacuna.

### 1.2.1.2 Others

Other authors concentrated on anthropological aspects of Wik-Mungkan life, although some contain linguistic data.

Contemporary with McConnel was Donald Thomson, who wrote on, firstly, joking relationships and obscenity in Wik-Mungkan and other communities ${ }^{5}$ in North Queensland (Thomson 1935). This work contains a number of words and expressions considered obscene and used in joking and swearing. A second work was on Fatherhood in the Wik-Mungkan community (Thomson 1936) which also contains some texts in Wik-Mungkan relating to ceremonies. Thirdly he published on names and naming customs in Wik-Mungkan (Thomson 1946). Lastly he wrote on kinship and social organisation in Cape York (Thomson 1972). None of these works will be referred to further.

Rodney Needham published a series of papers on genealogy, kinship and marriage in the Wik-Mungkan community (Needham 1963a, 1963b, 1963c, 1965). These papers challenged aspects of the work of McConnel and also Homans and Schneider (1955), who have in turn disputed Needham's theories (Homans and Shneider 1962). McKnight (1971) also joined the debate. Commentary on the nature of the debate is beyond the scope of this thesis and the skills and knowledge of the author. Von Sturmer (1980) provides a good summary of many of the issues in contention, including his views and those of other authors not mentioned here, as well as the results of his own researches on the economy, territoriality and totemism in Cape York.

McKnight has also written on other aspects of Wik-Mungkan life, including sexual symbolism and food (McKnight 1973), taboos (McKnight 1975) and the concept of nganiwi, (McKnight 1981). The former two are not discussed further but the last is summarised in section 5.2.4.

Jeanie Adams wrote a B.A. (Hon) thesis on changes to Wik-Mungkan kinship in 1970.

5 The literature described in this section make much use of the terms 'tribe' and 'horde'. I have avoided these terns

Peter Sutton has written both anthropological and linguistic material in Cape York generally and Wik-Mungkan in particular; his work, especially Sutton (1979) will be referenced at different points in this thesis, especially in chapter 14.

### 1.2.2 Linguistic Studies

It is convenient to review this material in three periods; up to 1970, 1971 to 1980, 1980 to present.

### 1.2.2.1 Period up to 1970

There are various unpublished items of linguistic interest from pre-1930 which have been located; short word lists, religious items such as the Lord's Prayer translated into Wik-Mungkan etc. As discussed above, there is also the McConnel unpublished sketch grammars and stories and her published work on the phonetics of WikMungkan (McConnel 1945). These sources are mostly in the State Library of South Australia. Due to the differences between the earlier language and the later language these will only be considered further in chapter 15. See Appendix 6 for a list of the McConnel material used.

Kenneth Hale (1960a) recorded word lists and short phrases in audio and manuscript which are located at AIATSIS. Hale (1960b) is a transcription of portions of this by Barry Alpher in 1967. Hale used these recordings as part of his reconstruction of Paman in Hale in O'Grady et al (1966) and the description in Hale (1976a) of how Middle Paman is reflected in Wik languages, including Wik-Mungkan.

The main focus of this thesis is the material collected, published and unpublished, in the 60s and 70s by SIL linguists Sayers, Godfrey, Kerr and Kilham.

The SIL linguists started at Coen in 1961 with the arrival of Barbara Sayers and Marie Godfrey. The time spent in Coen was relatively short (three months) as they were unable to obtain access to language speakers who could assist them (Sayers and Godfrey $1964 \mathrm{pp} .49-50$ ). The result of their investigations in Coen was later
published as Sayers and Godfrey (1964). This paper briefly described the phonology and grammar of the Coen dialect of Wik-Mungkan, one of the few references to distinct dialects in this period. Sutton (1979 p. 179) later described the language Mungkanhu as being the same or very similar to the the dialect described in Sayers and Godfrey (1964). He stated that there was insufficient information to be more precise at to the status of Mungkanhu. These papers and two elicitations by Bruce Rigsby $(1974,1994)$ form the basis of chapter 14 on dialect variations.

As they found conditions at Aurukun more conducive, Sayers and Godfrey moved there and started work on the Aurukun dialect in 1962. They were joined by Harland Kerr at some point in the next two years. The first known output from their investigations was a description of the personal pronoun paradigm in Wik-Mungkan (Godfrey and Kerr 1964). For free pronouns this description corresponds largely with that of section 3.1.2 with the exception of emphatic and reduplicated pronouns (section 3.1.2.5) and vocative pronouns (section 3.1.2.6). The description of pronouns bound on the verb are similar to the description in sections 8.2 to 8.4. A major exception is that the difference in stress between past and future verbal suffixes was not noted. Other differences in the analysis between this thesis and Godfrey and Kerr (1964) are noted in the relevant sections.

Kerr (1964) compares the pronominal systems of four different languages; two Australian being Wik-Mungkan (his spelling Wik-Munkan) and Burarra (ditto Burera) and two Austronesian languages; Lenakel (Lenakol) of Vanuatu and Kunimaipa of PNG. The analysis of Wik-Mungkan is a summary of another paper (Kerr c1964) which is cited in Kerr (1964 p. 21) as having been submitted to the journal Anthropological Linguistics (Indiana University). The submission was unsuccessful as it is not found in any issue of that publication. The conclusion of Kerr (1964) is that the four languages have structural similarities and that this is indicative of a potential, albeit remote, genetic relationship between the Australian languages and the Austronesian. Kerr (1964 p. 18) does acknowledge that such a relationship is not supported by other evidence. It is generally accepted that there is in fact no such relationship (see e.g. Dixon 1980 p. 238).

Sayers and Kerr (1964) described the Wik-Mungkan paradigm of locative, temporal and demonstrative pronouns although later work by Kilham (1977) and Kilham et al (1986) suggests that Sayers and Kerr (1964) were limited to the nominative case. The demonstrative system is extensive and is discussed in detail in chapter 6.

In 1967 an additional linguist who made important contributions to the study of WikMungkan, Christine Kilham, joined the SIL team.

Godfrey (1967) appears to have been the first to describe phrase and sentence structures in Wik-Mungkan however no extant copy of this paper has been located. Godfrey (1970) cites her earlier work while describing the main features of WikMungkan verb morphology. This latter work remains the only work on verbs in WikMungkan; later authors such as Kilham (1977), Sayers (1982a) and Kilham et al (1986) reference this work with minor changes to terminology. Godfrey (1970) provides a good overview of the main paradigm but leaves open a number of questions which later authors have not addressed. The full discussion of verbs in chapter 8 will include the base work by Godfrey.

Although he did not write any linguistic description, Flint as part of his 1960's Queensland Speech Survey recorded and transcribed examples of Wik-Mungkan speech which are held at the Flint Collection at the University of Queensland. At the time of writing, the audio recordings have not been available.

### 1.2.2.2 1971 to 1980

In the late 60's and early 70s SIL linguists, particularly Christine Kilham, Marie Godfrey and Barbara Sayers, joined by Anne Eckert, started a translation of the Bible into Wik-Mungkan, a task which required a linguistic analysis of Wik-Mungkan (e.g. Kilham 1972, an early paper on the case system) which they did not publish. At the same time, in conjunction with a primary school teacher Annette Mitchell (later Pollitt) they developed educational texts such as readers, word lists, test sheets etc, a selection of which is held at the Queensland State Library and in the school at Aurukun. The orthography the above authors developed has been the 'practical
orthography' adopted by subsequent authors and the local community. For this reason, it is the orthography adopted for this thesis and is described in chapter 2, which also discusses other conventions adopted by other authors and the mapping from these to the practical orthography.

A significant event for Wik-Mungkan studies in this period was a symposium on the languages of Cape York held in May 1974, the proceedings of which were published in Sutton (1976). They include Sayers (1976b) and Hale (1976a).

The linguistic studies of Kilham and Sayers covered descriptions of phrase, sentence and discourse in Wik-Mungkan. Firstly, Kilham (1974a) discusses phonological, semantic and grammatical criteria for distinguishing words, compounds and "closeknit phrases". This last term is used to describe word combinations which are not compounds but commonly appear together with specific idiomatic meaning. The distinction she makes is that compounds are semantically more specialised or idiomatic than close-knit phrases and the latter are also semantically linked in a way that a simple verb or noun phrase is not. That is, she posits a continuum from a morphological word with a single meaning, a compound (which could be any word class), a close-knit phrase and a general phrase. This paper also describes the ways that body parts in particular are used to create idiomatic phrases and compounds. These will be discussed further in Chapter 3.1.

The major work by Kilham in this period is her thesis for the degree of Ph.D. at the Australian National University (ANU) (Kilham 1974b), subsequently revised and published as Kilham (1977). This is a an analysis of discourse structures within WikMungkan with an emphasis on methods used by Wik-Mungkan speakers to establish and track topics and themes at the clause, sentence, paragraph and discourse level. The analysis draws on tagmemics and generative semantics with phonological and semantic criteria supporting the analysis. This paper includes the first published sketch grammar of the main, Archer River, dialect of Wik-Mungkan (Kilham 1977 pp. 31-82). This sketch grammar covers the essentials of verb morphology, the case system, major and minor word classes and affixes. Reference to these sections is made in the various relevant chapters in this thesis. There is a wealth of examples
provided to illustrate the concepts, including two narratives. Citation of this work occurs at various places in this thesis.

At the same time, Sayers published a series of articles (Sayers 1973, 1976b, 1976c, 1976c, 1976d, 1977) on sentence structure within Wik-Mungkan, with a particular emphasis on the role of stress, pitch and intonation. Sayers (1976d) is essentially an early draft of the examples in Sayers (1976a). A fourth planned paper, a follow-on to Sayers (1976c), is referenced as Sayers (1973) and does not appear to have been published. Like Kilham, Sayers was also heavily influenced by tagmemics and much of her discussion is within that context. The papers which focus most heavily on phonology (Sayers 1976b, 1976c, 1977) are discussed in section 2.7 and compared with the analysis of this thesis.

Sayers (1976a) is a description on sentence structure within Wik-Mungkan based on a typology devised by Longacre (1970). A diagram copied from that paper (ibid p. 784) is Appendix 1. This typology does not seem to have been widely adopted and has not been adopted for this thesis, primarily because it does not appear to provide information not included in chapters 11, 12 and 13 on simple clauses, constructions and complex clauses respectively. Sayers (1976a) uses the typology as a structure and provides many examples of each sentence type. Many of these examples have been used in this thesis, especially in the above-mentioned chapters.

In parallel with this linguistic analysis, texts in Wik-Mungkan started to be published by the Queensland Education Department and the Aurukun School Press. These texts include myths, stories and descriptions. A list of those published as at 1986 is included in Kilham et al (1986 pp. 424-425). The use of this material and creation of new material was discontinued in 1988, when WM ceased to be taught in school. Recently (since 2013) there has been a revival and renewed use of Wik-Mungkan texts in the school. Some copies of the material are held in the school, as well as the State Library of Queensland. A comprehensive list is not available at the time of writing.

The final work to be mentioned in this period is Peter Sutton's Ph.D. thesis (Sutton
1979) on the Wik peoples in the Cape Keerweer region of Cape York. Primarily an anthropological and sociolinguistic treatise, it contains discussion on the various languages and dialects in the region, especially the rise of Wik-Mungkan as the lingua franca. The then-current geographic distribution of Wik dialects and languages is described in some detail, as well as some of their known history. He also describes the speech varieties or registers and some of the circumstances relevant to the selection of dialects and registers. The thesis also contains a sketch grammar of Wik-Ngathan, one of the neighbouring languages to Wik-Mungkan.

### 1.2.2.3 1980 to present

The main objective of the SIL linguists was to develop a Wik-Mungkan version of the Bible. This was largely complete by the early 1980s, with the New Testament and selected books of the Old Testament being published in 1984. Examples from this translation have been used at various points of this thesis.

Eckert (1981) is the result of observation of native speakers when developing written texts, both as part of the Bible translation process and the creation of school materials in Wik-Mungkan. She observed that there were consistent changes between the written versions and oral versions of stories. These included firstly, changes to organisation; fewer asides, less cyclic repetition, which is a feature of oral Wik-Mungkan, and more careful sequencing of the story and greater use of conjunctions. Secondly, the written versions tended to be more explicit with less use of anaphora. Thirdly word order in written texts more closely followed the preferred word order of SOV when the object is a NP and SVO when the object is a pronoun. Additionally, oral texts with a NP object frequently have a co-referential object pronoun following the verb; this was unusual in the written versions. Finally two stylistic changes were noted; the use of the emotive marker (see section 3.6.3) is much reduced in written text, as are rhetorical questions and the use of English words. Although interesting, these aspects are not developed further in this thesis.

In the same period the Dictionary and Source Book of Wik-Mungkan was produced by Kilham and others (Kilham et al 1986). This contains an extensive lexicon, a
guide to pronunciation and a sketch grammar (almost identical to that in Kilham 1977), together with sections on seasons and kin terms. The lexicon contains nearly 4,000 entries, many with examples and explanatory notes. It is a major resource referred to in this thesis and will subsequently be referenced simply as 'the lexicon'. The sketch grammar contains no information not covered in previous publications but is a convenient summary which will be referenced extensively. The guide to pronunciation will be discussed in section 2.7 as part of a general survey of the literature of Wik-Mungkan phonology.

There are three versions of the lexicon; the printed version in Kilham et al (1986), an HTML version and a data version which has been imported into Fieldworks Language Explorer (Flex), all provided by SIL International. Although almost identical, there are occasional subtle differences between these versions which are noted at appropriate points in this thesis, most notably in section 3.4.1, an analysis of whether adjectives and adverbs are distinct or overlapping word classes in Wik-Mungkan.

Kilham (1987) is a discussion on word order in Wik-Mungkan. It is based largely on Kilham (1977) but focussed exclusively on word order, including preferred word orders, case ranking, new versus old information, topicalisation and tagging (her term). The term word order is primarily at the clause level e.g. noun phrase order is not discussed. Comparison of Kilham (1987) with the analysis of this thesis is covered in sections 7.1 on noun phrase structure and chapter 11 on the syntax of the simple clause.

Sayers in the late 70s and 80s published various articles on the Aboriginal world view as evinced by their language and their potential implications for inter-cultural relations and education (Sayers 1977b, 1980, 1981, 1982b, 1988). These papers and others on learning and language programs, especially in schools, were collected and published in Sayers (1998). These works represent her attempts to bridge the gap between Indigenous culture and white culture. Although interesting, they include limited explicit linguistic material. She also completed a paper on reference in WikMungkan (Sayers 1982a) as part of an M.A. at Sydney University. This paper covers a range of topics which are covered in subsequent chapters of this thesis; pronouns
and ignoratives (section 5) the case system (section 4.1), verbal suffixes (section 8), kinship terms (not included in this thesis), demonstratives (section 6), relative clauses (section 13.1.2) and phoric devices (sections 5.1.2.1 and 6.2.1). Reference to this paper and comparisons with the analysis of this thesis are found in the relevant chapters. The paper included five Wik-Mungkan texts which are used extensively in this thesis for general analysis. Two later published papers by Sayers (1997a, 1997b) are copies of sections of Sayers (1982a).

Lucy Kuntz (1989) produced a thesis as part of a BA at Hampshire College, Massachusetts, on various phonological aspects of Wik-Mungkan, which will be discussed in chapter 2 on phonology.

The last known paper on Wik-Mungkan is a B.A. (Hon) thesis by Frances Huchet (1990) at the University of New England which examined the deixis system in WikMungkan, including a re-analysis of the demonstrative paradigm, and spatial orientation, to be discussed in chapter 6.

Andrew Butcher in 1991 recorded selected words from the lexicon with the purpose of obtaining examples of each consonant and vowel in varying distributions such as word-initial, medial and final. The location where these recordings were made is not known, but is assumed to be Aurukun. These have been annotated by Hywel Stoakes in Praat and are used as part of the analysis in chapter 2 on Phonology.

Bruce Rigsby in 1994 undertook some field work in inland Wik-Mungkan. The field notes from that work have been made available and are discussed in chapter 14 on differences in dialect between the Aurukun dialect which is the focus of this thesis and that of Coen and the east coast of Cape York.

In 1997 Hale provided linguistic evidence of long term residence of the Wik people as part of the submission to the Wik Native Title claim. This includes lexical and morphosyntax evidence of the Wik languages, including Wik-Mungkan.

More recently (2014 +), David Osgarby has been working with the school in Aurukun
to revive the Wik-Mungkan language program, as well as conducting field work into current Wik-Mungkan.

I have also undertaken field trips in July 2015 and May 2017 to Aurukun with two objectives. Firstly I was seeking more detail on issues found in the historical data such as the distance distinctions in the demonstrative paradigm (section 6.4.5) and gaps in relative clause constructions (section 13.1.4). This objective was unsuccessful due to the language having changed in the intervening period.

The second objective was to first obtain permissions so that AIATSIS could release recordings and then translate audio recordings from the 1960s and 1970s. This was more successful but I encountered problems with audio quality and language change (section 1.4.2). I also recorded speakers to elicit the past / future distinction in tense suffixes (see section 2.7.8). This will be archived with the rest of the corpus.

### 1.2.3 Conclusion

The lack of new material on Wik-Mungkan since the 80 s is surprising for a language with a large (for an Australian language) group of native speakers. The material that does exist covers an extensive range but the utility to modern analysis of much of the 70s papers is limited due to the linguistic theory (tagmemics) that the analysis is framed in. There has also been little follow up in a range of areas. For example, the only paper written on verbs is Godfrey (1970) which focused on the basic morphology but left a series of questions open. Similarly, the work of Godfrey, Sayers and Kerr and Huchet on demonstratives revealed a rich paradigm which was not fully explored. A major feature is the extensive documentation on phonology and prosody from McConnel (1945) to the various papers by Sayers discussed above.

The previous scholarship provides a sound base of Wik-Mungkan text, both published and unpublished, with annotations and glosses and in many cases the original recordings. The glosses can be problematic in some of the older texts and there are different standards in use which are normalised in this thesis. The extensive lexicon (Kilham et al 1986) developed by various linguists and the local
community also provides an excellent resource.

### 1.3 Data Sources

The language examples used in this grammar are sourced from the published and unpublished works described in chapter 1.2 and audio data described in section 1.4. See Appendix 2 for a summary. A major source is a set of texts recorded and transcribed by the SIL linguists Christine Kilham and Barbara Sayers. These written texts are published in various places, especially Kilham (1977) and Sayers (1982a). The references in this grammar to these texts are to the copies in Sayers (1982a), apart from one narrative from Kilham (1977 p. 257). The primary reason for this is they are rendered in the practical orthography which is the standard adopted by the community (see chapter 2). Kilham (1977) followed a different standard. Another major source of data is from the lexicon (Kilham et al 1986). Many of the lexicon entries have example sentences and scenarios explaining usage.

These texts and examples from other publications as noted above have been transcribed into an SIL FieldWorks Language Explorer ${ }^{(T M)}$ v 8.3 database (hereafter referred to as Flex). This enables consistent glossing which can be searched and analysed. It is intended that, when complete, this database will be archived at AIATSIS, however the access will be restricted by the need to gain appropriate community and other permissions.

A core component of this database is the lexicon, a copy of which has been imported into Flex. These written texts have been supplemented by translations of audio data, described in section 1.4.

An issue with the corpus is the reliability of the free translations. In many cases the free translation omits words or suffixes in the Wik-Mungkan original and it is not always clear how the meaning relates to the original Wik-Mungkan. A simple example is (1) where there are four words in the Wik-Mungkan text which are not in the free translation, namely ina 'PRX', wanttak 'how', puk 'CHILD' and ee 'excl'. Conversely, the free translation includes the words 'far too' which have no
counterparts in the Wik-Mungkan text.
(1) Kilham et al 1986 p 41
nint ina wanttak puk anhan ee 2SG PRX how CHILD heavy excl 'you're far too heavy'

This thesis has adopted the policy of always showing the free translations provided. Where relevant, modifications or complete alternative free translations are proposed which, in the opinion of the author, better reflect the Wik-Mungkan text and reflect the analysis being proposed for that example. Where necessary, additional explanatory notes are provided.

The Wik-Mungkan (WM) Bible published by SIL in 1984 has contributed some examples. These are referenced by the appropriate biblical referencing of book and verse e.g. John 3.2. The method used by the SIL linguists is not one of translating from English or other versions of the Bible, such as the King James Authorised Version. The exact method is not publicly available. As a result, translating the WikMungkan into English can be problematic. A simple example is the verse John 11.35 Jesus wept. The WM version in this case can be easily translated into English: and he, Jesus, saw that place and then wept. Thus the WM version has many more words than the King James version. Other examples are shown at relevant points in this thesis e.g example (103) on page 131.

The analysis presented here is primarily on the synchronic state of the language in Aurukun in the period mid-60s to mid 80s. Earlier and later material is used where suitable but a full diachronic analysis is not attempted, apart from some discussion of data from the archives of Ursula McConnel in the period 1927-1934 in chapter 15. There is limited reference to the current state of the language in Aurukun. Field trips to Aurukun in August 2015 and subsequently found that there have been sufficient language changes in recent decades to render field work in the current language to be of doubtful assistance in resolving ambiguities in the data in the corpus used in this thesis. Differences in dialect are restricted to the works of Sayers and Godfrey (1964), Rigsby (1974) and Rigsby (1994). This material is analysed in chapter 14 but
is otherwise not addressed. Finally, different registers are not covered, with the exception that some words in the lexicon are marked 'avoidance'. There are no explanations of what circumstances require the use of 'avoidance' speech. Avoidance styles, especially with certain kin relations such as mother-in-law contact are common in Australian languages (see e.g Dixon 1980 pp. 58-68). It is assumed that the WM avoidance styles are similarly based but there is no corroborating evidence. Some discussion of taboo or avoidance items can be found in the anthropological literature but this is not reflected in the lexicon.

All examples given are accompanied by the reference from which it came to the closest extent possible. For examples copied from the above literature, the minimum is page number, with original example reference if available. For audio data the reference is to the time stamp in the recording.

The phonology analysis in chapter 2 is based both on the work described above and various archive recordings obtained from the library at the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), Kuntz and Butcher/Stoakes . These are more fully described in section 1.4.

### 1.4 Audio data

As noted above, recorded audio data has been obtained from AIATSIS and researchers Lucy Kuntz and Hywel Stoakes. The AIATSIS recordings were all gathered in 60s and 70s by Estrella Chesney, Michael Martin, Bruce Rigsby, Christine Kilham and Barbara Sayers. Additional recordings provided by AIATSIS were lodged by Christine Kilham and noted as containing Wik-Mungkan. In fact, they only contained other languages and hence are not relevant. The Kuntz recordings were made by Kuntz in 1988 and Steven Johnson around the same time (actual dates not available). The Butcher/Stoakes material was recorded in 1991 by Andrew Butcher and annotated in Praat by Hywel Stoakes.

Most of the recordings do not have translations and none provide interlinear glosses. Those which recorded elicitations do imply a translation which, with the aid of the
lexicon and the grammatical description in this thesis generally enables a complete translation and gloss. This is not automatic as the elicited Wik-Mungkan can vary from the English stimulus. For example, Chesney (1966) frequently contains pronoun and tense confusion, such as asking the speaker to translate 'you ate yesterday' and the speaker replying with the Wik-Mungkan equivalent of 'I eat yesterday'. That example is relatively easy but others are more problematic. Chesney herself did not seem to be aware of the problems, probably because she was not familiar with Wik-Mungkan.

Tokens extracted from audio recordings will be referenced by the unique identifier of the recording as explained below with the start time of the utterance within that recording. Although the total duration of these recordings is over 24 hours, only about 11 hours have proved useful due to the quality of the recordings and difficulty encountered in translation and glossing to be discussed below.

### 1.4.1 Chesney

This data consists of one recording made in 1966 on Palm Island. It is a set of elicitations of lexical items and simple phrases from a Wik-Mungkan native speaker, Melbourne Marpundin, originally from Aurukun, who had been resident on Palm Island for a number of years. As acknowledged in the recordings, the long absence from Aurukun had affected his fluency in Wik-Mungkan and the elicitation may not be entirely reliable as a result. It nevertheless is of interest due to its age and as a comparison with other sources. Some phonological variations are noted in section 2.7. The quality of this recording is very high, unlike much of the sources, as described below. The AIATSIS identifier is CHESNEY_E01-001302A, abbreviated here to Chesney.

### 1.4.2 Sayers

The Sayers recordings are more extensive and some are the originals for the texts in Sayers (1982a) which are a major source of material for this thesis. The AIATSIS archive numbers are Sayers_B01_018722 to Sayers_B01_018780. The quality of
these recordings is highly variable with much background noise and, in parts, considerable distortion. Hence extracts from these of better quality were used for translation and glossing; the reference will be to those extracts as follows. An extract of one speaker, Benny Yunkaporta, from Sayers_B01_018772 is cited as BS772BY. An extract from Sayers_B01_018774 was of two women, Topsy Wolmby and Maud Yunkaporta and is cited as BS774TWMY. An extract from Sayers_B01_018778 was described as being of two unknown women and is cited as BS7782XW. In fact one of the women has been identified as Topsy Wolmby by her daughter Dorothy Pootchemunka. Finally Sayers_B01_018779 was highly distorted for the first 22 minutes and an extract made of the remainder, cited as BS779min22. Dates are not always known but are generally in the 1967 to 1977 period.

Those recordings were not elicitations and have no translation. A visit to Aurukun in June 2017 was undertaken to obtain translations. Three older native speakers were engaged to translate different texts. The method undertaken was to play sections of the recordings and ask the speakers to repeat slowly what had been said and then translate. This method also provides a secondary source for analysis. While generally successful, there were various instances where either the quality of the recording or changes in the language prevented a full translation. One of the speakers found the process so difficult that it was abandoned.

The sections of these recordings which were taken to Aurukun for translation were selected from the above chiefly on the criterion of reasonable audio quality. They were imported into Elan and annotated prior to export to Flex.

### 1.4.3 Kuntz

As mentioned above, the data provided by Kuntz formed the basis of her analysis in Kuntz (1989). All the recordings are elicitations of lexical items and short phrases. There are two sources of these recordings; those made by Kuntz in October 1988 and those made by Steve Johnson of the University of New England at unknown dates but believed to be late 1980s. The quality of the recordings is variable, with background noise and distortion from the microphone placement. There are 27
recordings in all of about 11 hours duration, numbered Tape 1A, 1B, 2A, 2B etc. These will be identified by the LKxN where x is a number and N is A or B . For instance recording Tape 4A will be identified as LK4A.

### 1.4.4 Martin

These were collected by Michael Martin in the period 1968 to 1970 (AISTIS reference Martin_M03). They primarily contain languages other than Wik-Mungkan but do include about 20 mins of Wik-Mungkan songs. These have not been analysed. AIATSIS also hold another set referenced as Martin_M07 which includes WikMungkan narrative and elicitation but I have not obtained the necessary permissions to access this data.

### 1.4.5 Rigsby

This was recorded in 1974 at Coen. It contains elicitations of lexical items and short phrases. The audio quality is high. It is analysed in chapter 14 on dialects, in conjunction with Sayers and Godfrey (1964) and Rigsby (1994) field notes.

### 1.4.6 Butcher/Stoakes

This material consists of words selected from the lexicon to illustrate the scope of WM phonology. That is, a range of words selected to have examples of all consonants, all vowels and combinations of these in different syllabic positions. These words were given to one of three native speakers, identified by initials NC, SK and PY, who repeated the selected words two or three times. Each of these elicitations have been analysed within Praat by Hywel Stoakes. The reference are to the labels assigned by Butcher/Stoakes which consist of four numbers of two to three digits separated by a full stop e.g. 57.897.61.034 contains the three elicitations of /taatam/ [th $a: t^{\text {th }} a m$ ] 'turtle fat'.

### 1.5 Exclusions

Some topics which might naturally fit into a grammar of this nature have already been covered in extensive detail by earlier authors and hence are excluded from the scope of this thesis, as follows.

This is a synchronic account of the language in the 1960s and 70s. There are some observations of diachronic change revealed by the data but there is no attempt to undertake a more detailed and systematic review.

The Ph.D. dissertation by Christine Kilham "Thematic organization of Wik-Munkan discourse (sic)" Kilham (1974b., 1977) extensively covers issues of information structure such as topic and theme. This thesis has nothing further to add to this analysis.

Barbara Sayers wrote extensively on intonation, stress, discourse structures and their interactions with grammatical structures (Sayers 197b, 1973, 1976a, 1976b, 1976c). These papers are referred to where relevant but otherwise the topics are not addressed at their level of detail.

Other exclusions arise from the nature of the corpus; these are discussed in chapter 16 and include gaps in the data and metadata, no negative evidence, limited discourse types, the effects of language change and legal and ethical constraints.

### 1.6 Structure of this Grammar

The next chapter is a description of the phonology of the language (chapter 2).
Chapter 3 describes the features of the major word classes. Chapter 4 describes the nominal word class, excluding pronouns and ignoratives, with emphasis on the case system. Chapter 5 describes pronouns and ignoratives. Due to the complexity of the demonstrative system in Wik-Mungkan, chapter 6 is devoted to an extensive survey of it. Chapter 7 describes noun phrase syntax. Chapters 8 and 9 examine verbal morphology and tense, aspect and mood respectively. Remaining chapters deal with adverbs (10), simple clauses (11) constructions (12) and complex clauses (13). The
last two chapters deal with the language outside of Aurukun, firstly variations found in Coen and Theethinji in the same era as the Aurukun data (chapter 14) and secondly the language as documented by McConnel in the period 1927 to 1934 (chapter 15). Chapter 16 is a brief discussion on the issues encountered in developing this grammar and hence the limitations of the analysis.

## 2 Phonology

This chapter describes the Wik-Mungkan phonology. Section 2.1 briefly describes the past literature which forms the starting point of this analysis. This analysis is supplemented by independent analysis of a number of recordings made at different times. Section 1.4 above describes these recordings and the process of obtaining translations and subsequent glosses. Section 2.2 describes the basic inventory of consonants and vowels. Section 2.3 describes the minimal pairs in the language while 2.4 describes the allophones of the consonant and vowels defined in section 2.2. Section 2.5 describes the phonotactics and 2.6 some aspects of the suprasegmental phonology. Section 2.7 further reviews the WM literature on phonology, comparing the different authors' findings with each other and with this current analysis.

### 2.1 History Overview

As noted in chapter 1.2, there have been various papers describing the phonology of Wik-Mungkan: McConnel (1945), Sayers and Godfrey (1964), Sayers (1970a, 1970b, 1976, 1976b, 1976c, 1977), Kilham (1977), Kilham et al (1986) and Kuntz (1989). Of these, Sayers and Godfrey (1964) was concerned with the Coen dialect and is considered separately in chapter 14. Sayers (1970a, 1970b) are unpublished with no known extant copies and only cited in Kilham (1977 p. 32) but appear to be early drafts of Sayers (1976, 1976b, 1976c). Kilham (1977 p. 31) and Kilham et al (1986 pp. 399-400) source their material from Sayers (1976b) but include some minor additions. The main papers cited here will accordingly be McConnel (1945), Kilham et al (1986) and Kuntz (1989). In the main, there is agreement across these sources, with exceptions to be noted below. A more detailed discussion of the literature and variances between them and with the current analysis is found in section 2.7.

### 2.2 Phonemic Inventory

The phonemic inventory is not unusual for an Australian language although some
aspects are less common.

### 2.2.1 Consonants

The phonetic consonant inventory is as per Table 1. In general, the practical orthography as used by Kilham et al (1986) is used, as the lexicon was developed using it and it is recognised within the Wik-Mungkan community. The IPA symbol appears in brackets.

|  | Bilabial | Dental | Alveolar | Palatal | Velar | Glottal |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Stop | $\mathrm{p}(\mathrm{p})$ | $\mathrm{th}(\mathrm{t})$ | $\mathrm{t}(\mathrm{t})$ | $\mathrm{ch}(\mathrm{c})$ | $\mathrm{k}(\mathrm{k})$ | $\mathrm{'}(7)$ |
| Nasal | $\mathrm{m}(\mathrm{m})$ | $\mathrm{nh}(\mathrm{n})$ | $\mathrm{n}(\mathrm{n})$ | $\mathrm{ny}(\mathrm{n})$ | $\mathrm{ng}(\mathrm{n})$ |  |
| Trill |  |  | $\mathrm{r}(\mathrm{r})$ |  |  |  |
| Lateral |  |  | $\mathrm{I}(\mathrm{l})$ |  |  |  |
| Glide | $\mathrm{w}(\mathrm{w})$ |  | $\mathrm{r}(\mathrm{\jmath})$ | $\mathrm{y}(\mathrm{j})$ |  |  |

Table 1: Wik-Mungkan consonant inventory
The above inventory is fairly typical of Australian languages as described in e.g. Dixon (1980 p. 135) but differs in two main respects. Firstly, there is no retroflex stop or nasal. Second is the existence of the glottal stop, which is rare in Australian languages in general but more common in Cape York languages (e.g. Dixon 1980 p. 147). The two rhotics will be discussed in section 2.4.4.

Sayers (1976a p. xvii) noted that younger speakers at that time were starting to use the alveolar nasal in place of the dental nasal. This has not been observed in the audio data analysed, probably because the audio is of older speakers who still preserved the distinction.

### 2.2.2 Vowels

The vowel chart in Table 2 is as per Sayers (1976a p. xvi), itself copied from Sayers (1970a). This latter paper appears to be the only paper other than McConnel (1945) and Kuntz (1989) to describe the phonology of Wik-Mungkan, judging by the title
'Wik-Munkan (sic) Phonology: a study in stress'. Unfortunately no extant copy of this paper has been located so there is no detail supporting Table 2. The same table is in Kilham (1977 p. 31), Kilham et al (1986 p. 399) and Kuntz (1989 p. 4). Kilham et al (1986 p. 399) state explicitly that the practical orthography should also be considered as IPA symbols. For this thesis, the vowels in Table 2 will be considered the phonemes of Wik-Mungkan. The phonetic values of these phonemes found in the recorded corpus will be discussed further in section 2.4.6. These values will be further compared with the above mentioned previous analyses in section 2.7.5.

|  | Front | Central | Back |
| :---: | :---: | :---: | :---: |
| High | $\mathrm{i}, \mathrm{i}:$ |  | $\mathrm{u}, \mathrm{u}:$ |
| Mid | $\mathrm{e}, \mathrm{e}:$ |  | $\mathrm{o}, \mathrm{o}:$ |
| Low |  | $\mathrm{a}, \mathrm{a}:$ |  |

Table 2: Wik-Mungkan vowel inventory

All vowels can be long; the difference is phonemic, as will be shown in section 2.3. These are represented in the practical orthography by aa, ee, ii, oo, uu. This ten vowel system contrasts with the majority of Australian languages which have a six vowel system (three plus length contrast); Dixon (2002 p. 63) lists twelve languages with more than three. In the Cape York context the ten vowel system is not unusual e.g Kuuk Thaayorre (Gaby 2017 p. 38), Umpithamu (Verstraete 2020).

### 2.3 Minimal Pairs

To attempt to contrast every phoneme in every syllabic position would be more voluminous than useful. The minimal pairs here will focus on demonstrating contrasts between similar places of articulation, similar manners of articulation, vowel and vowel length. It is assumed that syllabic position is not relevant i.e.
demonstrating a phonemic difference in one syllabic position is sufficient. For consonants, the comparison will be done pairwise first horizontally across place of articulation for each manner of articulation i.e. for each row in Table 1. Following this, different manners of articulation will be compared for each place of articulation i.e. for each column in Table 1. For vowels, words with identical consonants will
show phonemic difference between different vowel qualities and length.

This analysis relies on the lexicon to a substantial degree as not all relevant lexemes are present in the audio data. The different allophones of the phonemes in these minimal pairs are discussed in section 2.4.

Firstly the obstruent series can be contrasted pair-wise to show phonemic differences. Not every possible pair of obstruents has been shown, the focus being on demonstrating phonemic difference between adjacent places of articulation. With 70 different possible pairs of places of articulation, it would be challenging to find sufficient contrasting pairs for each combination. The following contrasts demonstrate pairwise from left to right across the first row of the chart in Table 1.

Firstly the bilabial contrasts with dental in pal 'hither' and tal 'centipede'. Secondly, the dental with alveolar in ta:t-am 'son-EMPH' and ta:tam 'turtle fat'. Thirdly the alveolar contrasts with the palatal in jot 'lots' and joc 'soaking wet'. Fourthly, the palatal contrasts with the velar in pec 'hole' and pek 'below'. Finally, the velar contrasts with the glottal stop in $k u \boldsymbol{k}$ 'scrub tree', $k u$ ' 'dog'.

Similarly with the nasal series the following set of comparative pairs shows each of the places of articulation contrasting with the adjacent place, moving from left to right in row 2 of Table 1. Thus the bilabial contrasts with the dental in mok 'let it be' and pok 'groin'; the dental contrasts with the alveolar in min 'meat' and min 'good'; the alveolar in man 'neck' contrasts with the palatal in тал 'small'; and finally the palatal in an 'fast' contrasts with the velar in a $\boldsymbol{\eta}$ 'DIST'.

The trill $r$ has no contrasting place of articulation, nor does the lateral $/$.

The two glides $w$ and $j$ contrast in クaw 'footprint' and ŋaj '1SG.NOM'. The glide or approximant $\lambda$ is very rare in Wik-Mungkan and has no minimal pair with either of the $w$ or $I$. Where it does appear, it is usually as an allophone of the trill. Based on this, it is not considered a phoneme of the language. See section 2.4.4 for a detailed discussion of the rhotics in Wik-Mungkan.

This completes the minimal pairs showing contrast for places of articulation for any given manner of articulation. Next is the contrasts of manners of articulation for a given place of articulation.

For the bilabial, the stop, nasal and glide (column 1 of Table 1) have the following three-way contrasting set; pak 'small honeyeater', mak 'must' and wak 'grass'.

The dental position (column 2 of Table 1) has a stop and nasal contrast in tam 'also' and pam 'mud (avoidance)'.

For the alveolar place of articulation (column 3 of Table 1), the stop, lateral and trill have the following contrasting trio; wat 'poor quality bush honey' war 'oyster'; wal 'partly'. The nasal and stop also contrast in mat 'go.up-3SG.PST' and man 'neck'. The nasal and lateral contrast in i:jal 'vine' and i:jan 'to go'.

The palatal series (column 4 of Table 1) have the following three-way contrasting manners of articulation; the stop in mac 'waterlily root', nasal in man 'small' and glide in maj 'vegetable food'.

The two velar consonants (column 5 of Table 1) contrast in manner in kan 'now' and yan '1PL.EXC.NOM'.

The glottal stop has no contrasting manner of articulation.

Turning to the vowels; the five short vowels contrast in one series; pac 'soft', pec 'hole' pic 'burst.3SG.PST', poc 'sore' and puc 'Swamp Box'.

The long vowels also contrast with each other but not in a simple five-way set. Firstly the three-way set ta: $?$ 'mouth', te:'? 'throw.3SG.PST' and $\ddagger \mathbf{n} \mathbf{u}: ' ?$ 'waterlily root' show contrast. Secondly a:t 'cheek' contrasts with i:t 'thick bush'. Lastly ma:k 'message stick' contrasts with mo:k 'rubbish'.

6 a type of tree

Vowel length can be seen to contrast in pac 'soft' and pa:c 'end of fish tail'; ep 'lap' and e:p, 'creep.3SG.PST'; pik 'fin' and pi:k 'hit.3SG.PST'; kon 'ear' and ko:n 'Burdekin Duck'; cur 'fearful' and cu:r 'continuously flowing water'.

There are a number of words in the lexicon which are written with geminate consonants, such as pekkuw 'right down' and yippak 'still'. These are relatively rare e.g. 19 entries with $p p$ and do not contrast with the corresponding single consonants. As discussed in section 2.4.5 these orthographic geminates are mostly to denote unusual stress, although they can also be realised as acoustic geminates. Geminate consonants are not phonemic.

### 2.4 Allophones

This section discusses the different variations to the phonemic inventory based on acoustic analysis. Some of these are predictable by environment and hence allophones but many variations are free variants observed in the data. Ladefoged (2003,2006) in particular is relied upon for the supporting analysis of spectrographs and wave forms. The acoustic analysis used Praat ${ }^{(T M)}$ v6.0.40; copies of the Praat images can be found in Appendix 4.

### 2.4.1 Obstruents

There is a degree of commonality in the allophones of the obstruents so they will be dealt with as a group, with the exception of the glottal stop which will be described separately in section 2.4.1.6.

Each of these phonemes have aspirated and unaspirated allophones in the corpus. All except the palatal have an unreleased allophone and all but the velar and dental have a voiced allophone. The environments where these allophones are found have many similarities and some differences.

It should be noted that there are few obvious signals in the acoustic evidence distinguishing /t/ and /t//. The only clear difference in the corpus is length; the dental
tends to be longer. Comparing samples from same speakers, for instance TW, the dental has a mean length of 103 msec and median of 101 msec , while the alveolar has 49 msec and 48 msec respectively. Thus in this case the dental is twice as long on average as the alveolar.

The rest of this section describes the environments where each variant is found, noting that most are free variants which can be found in most environments. Table 3 summarises the allophones and the environments in which they are found in the corpus. Section 2.4.1.1 describes the aspirated; section 2.4.1.2 the unaspirated, section 2.4.1.3 the voiced, section 2.4.1.4 the unreleased. Section 2.4.1.5 describes an exception where one speaker realised the palatal as an affricate.

|  | Velar | Bilabial | Dental | Alveolar | Palatal |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Aspirated | O, C, W | O, C | O, C | O, C | O, C, W |
| Unaspirated | C | O, C | C | C | C |
| Voiced | NF | C, N | NF | N | C |
| Unreleased | O, C | O, C | O, C | O, C | NF |

Table 3: Summary of obstruent allophones
Legend: $\mathrm{O}=$ onset; $\mathrm{C}=$ coda; $\mathrm{N}=$ following nasal; $\mathrm{W}=$ before $/ \mathrm{w} / ; \mathrm{NF}=$ not found

### 2.4.1.1 Aspirated

Aspirated allophones occur as syllable onset as default, including across word and morpheme boundaries. The syllables can be word initial or word medial. When the obstruent is word final, it appears that the syllable structure is altered in continuous speech so that word final stop becomes reanalysed as the onset of the first syllable of the following word. This last allophone naturally only occurs where that following word has an initial vowel. Except for the bilabial this is invariable; no other allophone occurs in that environment. Some examples follow; not all combinations are shown .

The aspirated velar can be seen word initial in ka:w [kna:w] 'east' (BS7782XW7.02) and across word boundaries in aak uwin [a:khwwn] 'place find-3PL.PST' (BS779min22_2.36). The aspirated bilabial and palatal can both be seen word
medially in achanumpan [achanvmphan] 'make attractive' (BS779min22_2.07). The aspirated dental can be seen in thama [thama], 'also' (BS779min22_0.23), the alveolar word initial and word medially in taatam [ $t^{\text {h }}$ a: $t^{\text {h }} a \mathrm{~m}$ ] 'turtle fat' (57.897.61.034). Finally the aspirated palatal can be seen across word boundaries in ngoonch anang [no:nchanaŋ] 'hide-3SG.PST DIST=LOC' (BS774TWMY11.48).

The aspirated allophones can also be found preceding consonants, both in complex onsets and across word boundaries. Which consonants are found following which is constrained by both WM structures, e.g. there are few words with initial /t/, and the available tokens in the corpus. When the sequence is of two obstruents, there is frequently a reduced schwa between them. This vowel is not always audibly apparent to this listener but is clearly present in the wave form and spectrogram. In these cases the first consonant is essentially in onset position and is frequently aspirated, as in thak pung-ø [tak ${ }^{\text {h }}$ 甲prŋ] 'thing wash-3SG.PST' (BS779min22_19.55). In some instances, the aspirated is found when there is no intervening schwa, as in


The aspirated allophones for the velar and palatal are also found preceding the bilabial glide. Respective examples are nungkwey [nvŋk ${ }^{\text {hwej] }}$ 'although' (BS779min22_5.31) and achwey [achwej] 'ugly' (BS779min22_9.18).

### 2.4.1.2 Unaspirated

The unaspirated allophone of the bilabial /p/ can occur in onset position, as in palowan [palowan] 'damper=DEF' (BS7782XW0.01) and ngampar [jampar] '2PL.INCL.DAT' (BS779min22_8.41). As noted in section 2.4.1.1, this does not occur for the other obstruents.

The unaspirated allophones of all obstruents are found as coda, especially word finally, noting that other allophones are also found in that environment. Examples are: mook [mo:k] 'empty' (LK13A12_46); paap [ph a:p] 'breast' (BS774MYTW1.44); kaath piip [kna:tp ${ }^{\text {h}}:$ :p] 'mother father'; wuut [wu:t] 'old man' (BS7782XW11.33) and aawuch nan [a:wvenan] 'house MED' (BS779min22_2.03). This last example is the
only unaspirated realisation of the palatal in the corpus.

### 2.4.1.3 Voiced

The bilabial, alveolar and palatal all have voiced allophones but these are not common so the following should be treated with caution. The bilabial is mostly (see below for an exception) found voiced when following a homorganic nasal, as in umpana [ซmbəna] 'cut=INF-a' (BS779min22_15.15). The voiced alveolar is only found following the homorganic nasal, as in nint [nInd] '2SG' (BS7782XW2.56). Note that both can follow a homorganic nasal and not be voiced, such as umpana [ $\mathrm{mmp}{ }^{\text {hana] }}$ 'cut=INF-a' (BS7782XW0.01) and niiyant [nı.jant] '2PL.INCL=DAT' (BS7782XW1.35). The presence or absence of voicing is a choice made by the speaker.

There are very few instances of the voiced palatal allophone in the corpus. One is aawuch puth [a:woృbut] 'house also' (BS779min22_1.28). This example is also unusual in that the bilabial $/ p /$ is also realised as voiced $[b]$ as onset. This does not reflect a rule, as a similar environment of /c/ preceding /p/ in continuous speech is realised by the aspirated variants: aawuch pokkapang [a:woch ${ }^{\text {h }}$ hok:apay] 'house separately' (BS779min22_6.21).

### 2.4.1.4 Unreleased

Unreleased allophones are found as codas and word medial onsets, the former most commonly when word finally, particularly, but not exclusively, where the following syllable commences with a nasal. Examples of the velar are puk thawa [phok tawə] 'child say-3SG.PST-a' (BS774MYTW2.55) and thuukman [țu:k'man] 'snake-same' (BS774MYTW2.01). The bilabial can be seen in ep [ep] 'really' (BS7782XW0.41); the dental in puth nil [pht nil] 'but 3SG' (BS779min22_19.32); the alveolar in pentan [pentəən] 'go.out-1PL.EXCL.PST' (BS774MYTW8.09). There are no instances of the unreleased palatal in the corpus, possibly reflecting the relative scarcity of this phoneme.

### 2.4.1.5 Affricate

An exception to the analysis above is found in the speaker recorded by Chesney in 1966. This speaker consistently produced the palatal /c/ as the affricate [t] e.g. pench [ $p^{\text {hent }}$ ] 'hair' (Chesney1.16). What is important about this speaker is that he was recorded on Palm Island and had not spoken Wik-Mungkan for a number of years. This absence from Wik-Mungkan speakers may have caused him to retain an earlier variant pronunciation (considered unlikely - see Section 2.7.1.4 for further discussion). Alternatively, the language(s) spoken on Palm Island (including English) may have included the affricate and influenced him to adopt it when speaking WikMungkan. Due to this uncertainty and the lack of other examples, the affricate is not considered a variant of the palatal. This evidence is included here because McConnel mentions the affricate; see section 2.7.1.4 for discussion.

### 2.4.1.6 Glottal stop / $\mathrm{F} /$

The glottal stop is generally found intervocalically or word finally in Wik-Mungkan. Examples are pi'an [phıPən] 'big (BS779min22_0.14) and $k e^{\text {h }}$ [ $k^{\mathrm{h}} e$ ?] 'NEG' (BS774MYTW0.52). The lexicon also lists 14 words with a sequence $/ \mathrm{V}$ ?w/ such as kaa'wal 'face'. In all cases these words are compounds where the first word has a final / $/ /$; for instance the previous example is a compound of $k a a^{\prime}$ 'nose' and wal 'jaw'.

There are instances in the corpus of an initial glottal stop before an initial vowel. For example aawuch [Pa:woch] 'house' (BS779min22_6.21). These are speaker variants as they do not occur in all cases of initial vowels and not at all in continuous speech when the relevant word follows another. There are no words in the lexicon with initial / $/$ /. Refer Section 2.7.1.5 for comparisons with other authors, which discusses evidence that the initial glottal stop was historically obligatory but later became optional.

The acoustic signals seen in Praat for /?/ are highly varied, for example ya'a [jaPa] 'NO' in BS774MYTW0. 56 [jaPa] has three distinct parts - an irregular wave pattern with vertical bars in the spectrogram, silence and a release with apparent aspiration. The initial irregularity is more typical of the acoustic patterns than the remaining two
parts. Different patterns can be seen across the corpus e.g. /ka'athama/ [ $k^{h} a$ Pat $\left.{ }^{h} a m a\right]$ has a semi-regular pattern with vertical bars. These irregular forms appear to indicate different phonation types such as breathy voice and creaky voice (see e.g. Ladefoged 2003 pp. 169-181). An in-depth analysis of these phonation types is considered outside the scope of this thesis.

### 2.4.2 Nasals /m/, /n//n/, /n/, /n/

There are no variants found in the corpus for any of the nasal series $/ \mathrm{m} /$, $/ \mathrm{n} / / \mathrm{n} / \mathrm{l} / \mathrm{n} /$ and $/ \mathrm{\eta} /$. A particular search was done for instances of a nasal following an unvoiced phone, on the assumption that the nasal might assimilate the lack of voicing. Almost no words in the lexicon contain an unvoiced / voiced sequence so the search focused on crossing word boundaries such as $k-m$ in puk many [phk ${ }^{h}$ mani] 'child small' (BS774MYTW7.31) and reduplication such as km in mungkmungkan [mणךkmvクk ${ }^{\text {han }}{ }^{\text {and }}$ 'eat-RDP-3PL.PST' (BS7782XW1.34). Very few such examples were found and all of these retained the voicing on the nasal. All other occurrences of nasals that have been checked found no variation.

### 2.4.3 Lateral /// and Glides /w/, /j/

When in onset position, there are no variants for the lateral and glides detectable in wave forms or spectrographs. For the lateral many of the tokens are the same words produced by the same speakers, so it is understandable that there is little discernible variation. When in the rime the vowel - glide sequences represented in the lexicon as per the practical orthography are realised as diphthongs. The discussion of this is in section 2.4.7, following the acoustic analysis of vowels in section 2.4.6.

### 2.4.4 Rhotics

The rhotic is not common in the lexicon and is also relatively rare in the corpus so the conclusions here need to be treated with caution. The alveolar rhotic is predominantly realised as a trill [r] in both the 60s and 80s data. The exceptions are
where it is realised as an approximant [ $\mu$ ] or is absent. In the last case, only noted following a vowel, the absence of the rhotic results in a lengthening of the preceding vowel.

The trills are identified by spectographic analysis; there are strong vertical bars visible in the spectrogram and irregular wave patterns. The approximants have reduced or no vertical bars, have a regular wave pattern and clear formants.

The variations are not predictable by environment or speaker. For example, the same speaker renders the loan word car (including car=an 'car=DEF' and car=wey 'car=EMO') as [kar] (BS779min22_6.01), [kaı] (BS779min22_5.19) and [ka:] (BS779min22_4.12). In fact, the 60s data only includes [л] in English loan words such as car, Chris, Barbara and truck. It is possible English pronunciations have influenced this but the trill is also found for these same loan words. The 80s data only includes two words waaram 'dugong' (236.061.239.768) and remat 'shellfish' (231.213.234.692) with the rhotic pronounced as [ 1 ]. Neither of these words are found in the 60s data. See section 2.7.4 for further discussion of remat 'shellfish', the only word in the lexicon with initial rhotic. In all other cases in the 80s data the rhotic is realised as a trill.

### 2.4.5 Geminate Consonants

This section describes two types of gemination. Firstly it looks at items found in the lexicon with orthographic geminates. Secondly it describes the effects of morphological geminates i.e. where one morpheme has a final consonant and the following has the same consonant in initial position. The section does not look at consonant length in different environments e.g post-tonic.

Various consonants are represented orthographically in the lexicon as geminate e.g. wanttak 'why/how'. At least some of these geminates (number undefined) are the result of decisions made by the compilers of the lexicon to represent lexemes with stress on a syllable which does not usually attract stress. The normal pattern, as discussed further in section 2.7.8, is for primary stress to fall on the first syllable, with
secondary stress on the third, fifth etc syllables. The intermediate, even-numbered syllables are unstressed. According to Kilham et al (1986 p. 400), there are some words where the secondary stress falls on the second syllable, notably syllables where the nucleus is not a such as kikkiy 'creek' and a few (unspecified) where the second nucleus is a, such as paththam 'very'. The compilers of the lexicon chose to represent this secondary stress orthographically by doubling the onset consonant of the second syllable, as per the above two examples.

In addition to these lexical items, geminate consonants can occur from morphological processes such as reduplication e.g. thaththath 'he/she saw'. This section examines the phonetic evidence in the recorded corpus for both types of geminate consonants.

Where possible, names of speakers and type of recording are provided; I.e narrative vs elicitation. Many of the speakers have not been identified.

### 2.4.5.1 Obstruents

For the stops [c] and [?] there are no geminates in the lexicon or recorded corpus.

### 2.4.5.1.1 Velar $k$

Orthographically, a geminate $k$ appears (always intervocalically) in about 20 lexemes in the lexicon: some are in the current recorded corpus. The orthographic convention of $k k$ may be to show secondary stress as described above (see section 2.6.1 for further discussion on stress) but the phonetic evidence also shows a $[\mathrm{k}]$ which is longer than the case where only a single orthographic $k$ is present. The geminate $k$ also follows the phonological rules for $k$ as discussed in section 2.4.1. For example pekkuw 'down there' is realised as [pek ${ }^{\text {h}} \boldsymbol{\sigma}$ ] (BS779min22_1.13) (unknown woman, narrative) with a duration of $\left[k^{h}\right]$ of 184 msec . By comparison, a single $k$ by the same speaker in BS779min22_5.31 nungkwey [nojk ${ }^{h}$ wej] 'although' has a duration of 67 msec i.e. less than half the duration of $k k$ in pekkuwang. The consonant cluster [ $\left.\mathrm{jk}{ }^{\mathrm{h}}\right]$ in the same sample is 147 msec , (i.e. same speaker) comparable to, albeit shorter than the 'long' $k k$ above. Thus in this instance the orthographic $k k$ represents a
geminate consonant, as well as signalling unusual stress.

There is only one token of a morphological geminate $k$ in the corpus; keenk koman 'first girl' which is realised as a singleton $k$ [ $k^{\mathrm{h}} \varepsilon: \mathrm{nk}^{\mathrm{h}}$ oman] (BS774MYTW3.26) (eitehr Topsy Wolmby (TW) or Maud Yunkaporta (MY), narrative) with duration of 90 msec . That is, the terminal $k$ of keenk is merged, at least partially, with the initial $k$ of koman to produce a singleton [k], as evidenced by the shorter duration. This is an example of continuous speech.

### 2.4.5.1.2 Bilabial $p$

There are ten words in the lexicon spelt with a geminate pp. Only one of these occurs (with several tokens) in the recorded corpus; yippak [jiphak] 'yet' in BS774MYTW12.01 (TW or MY, narrative) where [ $p^{\dagger}$ ] has a length of 124 msec . This compares with a length of 91 msec for a single $p$ in chaapar [ca:par] 'blood' (BS774MYTW4.45) (same), however this shorter length may be conditioned by the long vowel. Comparable instances of words with $p$ as word-medial onsets demonstrate comparable length to $p p$ in yippak e.g. in apang [aphaf] 'I will peel (bark)' (BS7782xw3.35) (unknown woman, narrative) $\left[p^{\dagger}\right]$ is 134 msec and in umpana [umphana] 'she was making' (BS7782xw0.01) (same) it is 126 msec . When $p$ is a word-initial onset or coda it is usually shorter, as in piip [phi:] 'father' (BS7782xw10.10) where the onset is 34 msec (the coda is omitted) and kaap [ $k^{h} a: p^{h}$ ] 'north' (BS774MYTW10.25) (either TW or MY, narrative) where the coda is 86 msec . Given that an intervocalic $p$ and $p p$ are equivalent lengths, the assertion that orthographic $p p$ does not represent a geminate consonant is confirmed, noting that intervocalic $/ p /$ is longer than $/ p /$ in onset or coda position.

Morphological geminate p. i.e. $p p$ created from two adjacent morphemes are rare in the corpus. The only single word, formed by reduplication and a suffix -pul '2SG.PST' (ma' ath) umpumppul 'those two clapped hands' is realised as
 57 msec but the notional pp has a length of 74 msec , which is $30 \%$ longer than the first $\left[p^{h}\right]$, a noticeable change unlike that observed for yippak and apang above.

There are several instances of a word final /p/ followed by a word initial /p/, as in wamp palpal [wamp ${ }^{\text {halp }}{ }^{\text {hal] }}$ 'she came hither-RDP' (BS774MYTW17.48) (either TW or MY, narrative). In this case, as shown, the final [p] of [wamp] merges with the initial [ $p^{h}$ ] of [ $p^{\text {hal }}{ }^{\text {h }}$ al] realised with a combined of duration 99 msec . By contrast the onset of the second syllable [ $p^{h}$ ] in [ $p^{h}$ alp $p^{h}$ al] has a duration on 103 msec , marginally longer. Thus it seems that a /p/ coda followed by onset/p/ in different words or morphemes are realised as short/p/, admitting that the sample is limited. Note that the aspiration does not affect this conclusion.

### 2.4.5.1.3 Dental $t$

The orthographic geminate consonant tt occurs in only four words in the lexicon and only one of these, paththam 'really, very' is found in the audio corpus. As noted above, this is one of the words with an orthographic geminate which is used to signal that stress is on the second syllable. In the admittedly limited data available, it appears that the orthographic geminate is not phonetically geminate. For example, in putha [ $p^{\text {h}} t^{\text {h }} a$ ] 'but" (BS774MYTW0.21.5) (either TW or MY, narrative) the $\left[\mathrm{t}^{\mathrm{h}}\right]$ has a duration of 166 msec , very close to the 163 msec length of [ $\mathrm{t}^{\mathrm{h}}$ ] in paththam [ $\mathrm{p}^{h} a t^{h} a \mathrm{am}$ ] 'very, really' (BS774MYTW18.57) (either TW or MY, narrative). Note that these lengths are only found intervocalically; in other positions the length is reduced e.g. in thuuk [ $\mathrm{t}^{\mathrm{h}} u: k$ ] 'snake' (BS774MYTW1.57) (either TW or MY, narrative), the length of [ $\mathrm{t}^{\mathrm{h}}$ ] is 22 msec , considerably shorter than the 163 and 166 msec noted in the prior sentence.

Also found in the recorded corpus is thth occurring in various reduplications of thathan 'to see' e.g. thaththathana [ $\left.{ }^{\text {th }} a t t^{\text {h}} a t_{n}^{h} a n a\right]$ 'see-RDP-1PL.EXCL.PST' (BS779min22_2.04) (unknown woman, narrative). The variations in measured length suggest that the long thth is sometimes reduced to the short [t] and sometimes is realised as a long [t:]. In the above example the length of [tty is 155 msec while the final $[\mathrm{t}]$ is 186 msec i.e. the 'short' consonant here is longer than the 'long'. By contrast, the corresponding tokens in the same word (and speaker) in BS779min22_1.58 are 122 msec and 75 msec respectively i.e. the 'short' is noticeably shorter than the 'long'. There are insufficient tokens to be confident that observed length differences are other than natural speaker variation or error.

### 2.4.5.1.4 Alveolar $t$

There are 24 words in the lexicon spelt with a geminate $t$, in particular various ignoratives (see section 5.2) such as wanttin 'where'. Additionally, as discussed further in section 2.6.1, some case endings are inherently stressed, regardless of syllable position. Where these case endings are attached to pronouns such as ngant '1PL.EXCL.DAT' and third person plural thant the orthographic convention is to add an additional $t$. Thus adding the ablative affix -am to the above words creates nganttam '1PL.EXCL.DAT.ABL' and thanttam '3PL.ABL' respectively.

With the ignoratives, the phonetic evidence suggests that the geminate orthographic $t$ is not reflective of geminate [t]. For example, in wanttina [wanthina] "where' (BS774MYTW1.59) (either TW or MY, narrative) it is 106 msec but in pentan [phent ${ }^{\text {han }}$ ] 'come-PL.PST' (BS774MYTW8.09) by the same speaker it is 98 msec , a marginal difference. Similarly, the orthographic $t t$ in thanttakam [t ${ }^{\text {h }}$ ant ${ }^{\text {h }}$ akam] 'themselves' in (BS774MYTW20.52) (either TW or MY, narrative) has length of 57 msec, much shorter than both the orthographic $t t$ and $t$ in the previous examples.

The remaining words with orthographic geminate $t t$ in the lexicon are not found in the recorded data. There are no instances of $t$ being followed by $t$ across morpheme or word boundaries in the recorded corpus, reflecting the relative scarcity of words and morphemes with initial $t$.

### 2.4.5.2 Nasals

The only geminate nasal found in the lexicon is ny in winynyang ${ }^{7}$ 'afraid' and variants, including winynyathan 'to frighten'. The phonetic evidence again supports the contention that this an orthographic convention related to stress and not indicative of gemination. Examples of $[\mathrm{n}]$ show wide variation; firstly winynyang [winap] 'afraid' (BS774MYTW8.24) (either TW or MY, narrative) shows a length of [ $n$ ] of 135 msec , while another intervocalic [ n ] in kenya [ $\mathrm{k}^{\mathrm{h}}$ ena] 'high' (BS774MYTW12.15) (either TW or MY, narrative) has a length of 221 msec . Both compare with onset [n] nyiinowa [nı:nowa] 'let her stt' (BS774MYTW22.56) (either TW

[^2]or MY, narrative) of 59 msec duration. This wide variation, where an orthographic nyny can be both much shorter and much longer than an orthographic ny supports the view that the geminate ny is an orthographic convention.

### 2.4.5.3 Rhotics

The lexicon contains five words which are written with an intervocalic double $r r$ such as murruk 'sandal'. They are all bisyllabic and have a vowel other than a as the nucleus of the second syllable. As noted above, this was an orthographic decision by the lexicon compilers to reflect that the second syllable receives secondary stress, as opposed to customary lack of stress on second syllables. This varies from the common practice in Australian language orthography to use $r r$ to denote the trill and $r$ to denote the approximant (e.g. Dixon 1980 p. 144).

No instance of the five words with intervocalic $r$ exist in the 60s recorded data. The 80s data (specifically the Butcher/Stoakes data) contains three words, kurrow 'salmon' (249.173.252.482) (unknown man, elicitation), irrong 'a type of fish' (253.555.256.595) (ditto) and murruk 'sandal' (257.400.260.709) (ditto). Each word is repeated three times and in all cases the rhotic is realised as [r]. Specifically, there is no length distinction between these and other words not spelt with a double $r$ such as karp [ $\mathrm{k}^{\mathrm{h}}$ arp] 'together, close' (583.141.586.191) produced by the same speaker. This confirms that there is no phonetic difference between words spelt with $r$ versus rr.

There are two instances in the lexicon of word final multiple rr, both labelled onomatopoeia; charr 'ripping sound' and warrrr 'tearing sound'. There are no instances in the recorded corpus of either. Given they are onomatopoeia, it is reasonable to assume that these would involve an exaggerated [r] but this is speculation. As all instances of $r$ in the recorded corpus are intervocalic, there are no instances of $r$ occurring across morpheme or word boundaries.

### 2.4.5.4 Lateral I and Glides $\boldsymbol{w}, \boldsymbol{j}$

There are two words in the lexicon with an orthographic II; neither are found in the recorded corpus so no phonetic analysis can be made. Similarly, the six words with orthographic yy are not found in the recorded corpus.

There are no words with ww in the lexicon. The recorded corpus contains two instances of morphological ww; thawthaw-wuna 'you two were talking to yourselves' (BS779min22_10.51) (unknown woman, narrative)and thawthaw-wuntan 'they were talking to themselves' (BS779min22_1.02) (unknown woman, narrative). In both instances, the aw is realised as a diphthong [av] (see section 2.4.7 for further discussion) so that the apparent geminate $w w$ does not occur.

### 2.4.5.5 Summary

This section checked how consonants are realised phonetically when geminate, both lexically and morphologically. With the exception of the velar $k$, the phonetic evidence either was inconclusive or confirmed the orthographic convention in the lexicon where doubling a consonant indicates secondary stress and not the length of the consonant. For the exception, the velar $k$, the phonetic evidence suggested that, irrespective of stress changes, words spelt with an intervocalic $k k$ also show a longer [k] than words spelt with a single intervocalic $k$.

Geminates formed by morphology and across word boundaries in continuous speech vary in length but tend to be realised by a consonant equivalent in length to a single consonant.

### 2.4.6 Vowels

### 2.4.6.1 Vowel Quality - 60s Data

WM Vowel Scatter Chart
Median Values 60s data


Formant 2

Illustration 3: Scatter Chart of 60s vowels

The practical orthography developed for the lexicon in Kilham et al (1986) uses a five vowel system with length distinction, the vowels being a, e, i, o, $u$. This section analyses acoustic data from the corpus to assess the vowel qualities found in that data. A sample of each vowel phoneme in Table 2 in section 2.2.2 (i.e. a,e,i,o,u in the practical orthography) from the 60s data was analysed in Praat to determine formant values, selecting only vowels in stressed syllables; vowels in unstressed syllables are discussed below in section 2.6.1. A minimum of five samples were made for each short and long vowel. To the maximum extent possible, the samples were taken from BS7782XW and the same, unidentified woman. The median values of each set have been plotted on a scatter chart as shown in illustration 3, where the practical orthography is used. The median was chosen to reduce the impact of outliers in the data which can distort the mean measurements.

From Illustration 3 it can be seen that the long and short /i/ share almost identical acoustic properties, as do the long and short/o/. There are gaps between the value of $/ \mathrm{a} /$ and $/ \mathrm{a}: /$, /u/ and $/ \mathrm{u}: /$ and $/ \mathrm{e} /$ and $/ \mathrm{e}: /$. To measure the relative gap between the long and short vowels the Euclidean geometric calculation was used, following e.g. Watson et al (2016):

Distance $=\sqrt{ }\left((\text { F1 long-F1short })^{2}+(\text { F2long-F2short })^{2}\right)$, where F1 and F2 are formants 1 and 2 respectively.

The results of these calculations are in Table 4.

| Vowel | Distance short to long |
| :--- | :--- |
| a | 91 |
| e | 250 |
| i | 43 |
| o | 28 |
| u | 192 |

Table 4: Euclidean distance short to long 60s data

The purpose of Table 4 is to show the relative separation between long and short for the respective vowels. Selecting the shortest gap of 28 found for /o/ as a base, the gap for $/ \mathrm{i} /$ is about $50 \%$ more, for /a/ it is just over three times, for /u/ it is nearly seven times and for /e/ it is nearly nine times. This provides a numerical measure of the distance between the long and short vowels. Given the limited number of tokens used to calculate these values, further calculations such as Vowel Space position Measure used for larger scale data sets are not considered appropriate (e.g. Watson et al 2016 analysed over 700 tokens for specific vowels).

While somewhat subjective the conclusion for this thesis is that long and short phonemes /a/, /i/ and/o/ have comparable acoustic properties and should be considered the same value. The phonetic realisations are considered to be [a], [i] and [ 0 ]. By comparison, long and short /u/ are considered to be distinct phonetic (not phonemic) values, considered to be [u:] and [ v$]$. Similarly, long and short /e/ are considered to be phonetically $[\varepsilon$ :] and [e] respectively. Note that from a phonemic perspective, this thesis retains the 10 vowel analysis. That is, the vowel phonemes are $/ \mathrm{a}, \mathrm{e}, \mathrm{i}, \mathrm{o}, \mathrm{u} /$ with length distinctions for each.

### 2.4.6.2 Vowel Quality - 80s Data



Formant 2

## Illustration 4: Scatter chart - 80s vowels

The above process was repeated on the 80s data, resulting in the scatter chart in Illustration 4. The speakers used are unknown but appear to be older males and are all elicitations. The data was taken principally from the Lucy Kuntz recordings but also supplemented by the Bucther / Stoakes data due to limited tokens in either data set. Where different speakers were used, checks were made to ensure that individual differences did not have an effect on the result i.e. formant values for both were similar.

The results here are somewhat surprising, with the entire vowel space constrained to a small section in the range of mid-central vowels. The only exception is the long /i/ which is closer to the value found in the 60s data shown in Illustration 3. It is difficult to explain such a constrained vowel space, assuming that technical flaws in the recording have not caused issues with the Praat readings. It is not believed that using different speakers had a material effect on this chart.

### 2.4.6.3 Vowel Length

Vowel length in both sets of data has also been calculated to compare short and long
to demonstrate that there is a definite difference in length. The results are shown in Tables 5 and 6 in msec. On the advice of Hywel Stoakes (pc) these lengths were confined to specific speakers in each era and cannot be compared across eras as different speakers are involved in each era.

| Vowel | Short | Long | \%Short/Long |
| :---: | :---: | :---: | :---: |
| a | 0.0895 | 0.2089 | $43 \%$ |
| e | 0.0910 | 0.2008 | $45 \%$ |
| i | 0.0677 | 0.1864 | $36 \%$ |
| o | 0.1094 | 0.1495 | $73 \%$ |
| u | 0.0778 | 0.2171 | $36 \%$ |

Table 5: 60s data vowel length short vs long

As can be seen in Table 5, in the 60s data the long vowels are mostly more than twice as long as the short, the exception being the long and short/o/, where the long is $36 \%(0.1495 / 0.1094=1.36)$ longer than the short. It should be noted that there were very few tokens of the long /o/ in the data; additional data may change this result. As discussed in section 2.3 on minimal pairs, these length differences are phonemic.

| Vowel | Short | Long | \%Short/Long |
| :---: | :---: | :---: | :---: |
| a | 0.0727 | 0.1832 | $40 \%$ |
| e | 0.0802 | 0.1731 | $46 \%$ |
| i | 0.0829 | 0.1726 | $48 \%$ |
| o | 0.0920 | 0.1623 | $57 \%$ |
| u | 0.0758 | 0.2014 | $38 \%$ |

Table 6: 80s vowel data length short vs long
Table 6 shows the 80s data where again the long vowel is more than twice the length of the short, again with the exception of the long /o/. In this case the short [ $0:$ ] is $76 \%$ longer ( $0.1623 / 0.0920 \times 100$ ), more than that found in the 60s data.

### 2.4.6.4 Other Effects on Vowels

Other effects looked for in the data but not found were rhoticisation and nasalisation when vowels were adjacent to rhotics or nasals respectively.

### 2.4.7 Diphthongs

In the lexicon there are a number of words which in the practical orthography contain a combination of vowel (short or long) followed by either $y$ or $w$. Acoustically these vowel-glide sequences are realised as diphthongs ${ }^{8}$ e.g. ay is realised as [ai]. This is not to suggest that the diphthongs are phonemes; phonologically they will be analysed as a sequence of vowel - consonant phonemes. This is similar to the approach adopted by Clynes $(1997,1999)$ in his analysis of vowel - glides / diphthongs in Proto-Austronesian ${ }^{9}$. The remainder of this section describes the acoustic evidence for diphthongs.

The recorded corpus does not contain all of these vowel-glide combinations, specifically the following are not found; ooy, (i)iw, oow and (e)ew (using the orthographic convention of the lexicon). This is not unexpected in that the lexicon contains few or no lexemes with these combinations and hence there is a reduced likelihood of them being present in the corpus of audio material.

The acoustic evidence shows that the formants, especially the second, display a clear rising or falling trajectory, with formant values moving steadily from the first vowel to the second as described in Ladefoged (2003 p. 133). For words in the lexicon spelt with $V y$, these are realised as $\mathrm{V}[\mathrm{i}]$ as in nungkway [nvŋk $\mathrm{k}^{\mathrm{h}}$ war] 'although' (BS779min22_22.40) and woyan [woın] 'road' (BS7782XW9.46).

The glide combination $\mathrm{V} w$ when realised as a diphthong is realised as $\mathrm{V} v$, as in thaw [tav] 'he/she said' (BS779min22_24.18) where V is a and kucharow [k ${ }^{\text {h}} \mathbf{0}$ carov] 'very cold' (BS774MYTW14.04) where V is 0 . As mentioned above, ew and iw are not found in the corpus.

[^3]With the remaining vowel, $u$, the sequence $u w$ is realised as [ v$]$ when word final, as in pikkuw [phik:ঠ] 'crocodile' (BS779min22_0.23). When word-medial, the sequence is [ซw], as in uwin [бwin] 'they found' (BS779min22_2.36). That is, in both cases, the sequence is not realised as diphthong.

Finally, there are some rare examples of different realisations of the combination of the long vowel $i$ : and the glide $y$. Firstly, there are a couple of instances of $y$ being replaced by a glottal stop, as in iiyan [1:Pan] 'it moved' (BS779min22_7.21). Secondly, there is a case of the $y$ being omitted; iiyana [I:na] 'we went' (BS7782XW7.02), where the first $a$ is also omitted.

### 2.5 Phonotactics

### 2.5.1 Syllable Types

This analysis is based on the lexicon and corpus. There are two factors which have not been taken into account; the word initial glottal stop as a speaker variant (see section 2.4.1.6) and the optional word final -a (see section 2.5.4). Each of these could in theory produce different syllable structures.

There has been no consultation with speakers which might have provided different insights into syllable structure.

### 2.5.1.1 Monosyllables

Monosyllables in the Wik-Mungkan lexicon are at least bimoraic, with either a coda or long vowel. The coda is maximally composed of three consonants, this limit only existing where the nucleus is a short vowel. The onset is generally restricted to a single consonant. There are two exceptions to this last rule which will not be considered sufficient to constitute a new rule. The possible structures can be summarised as $(\mathrm{C}) \mathrm{V}:, \mathrm{V}(:) \mathrm{C}(\mathrm{C}), \mathrm{CV}(:) \mathrm{C}(\mathrm{C})$ and (C)VCCC. The rule could be further summarised as $(C) V(;)(C)(C)(C)$ but this obscures some of the detail as not all combinations are permissible e.g. CV:CCC. The following Table 7 provides examples of each type.

| Syllable Type | Example | Gloss |
| :--- | :--- | :--- |
| VC | an | 'DIST' |
| VCC | $e r k$ | 'waterlily root' |
| V:C | a:k | 'place' |
| V:CC | i:nc | 'traditional dance' |
| CVC | wik | 'word' |
| CVCC | $k e m p$ | 'body' |
| CV:C | ka:p | 'wet season' |
| CV:CC | wa:nk | 'dilly bag' |

## Table 7: Monosyllables in Wik-Mungkan

In addition, there are some exceptions to the above, namely; VCCC (e.g. almp 'stick for digging yams'), CVCCC (e.g. wolmp 'loud'), V: (e.g. u: 'thunder'), CV: (e.g. ja: 'yes') and CCV:C (e.g. tru:ク 'noise of snake'). With at most three examples of any of these exceptions, they will not be considered part of the normal pattern.

### 2.5.1.2 Syllable Types in Polysyllabic Words

Table 8 shows the syllable types attested in Wik-Mungkan, based primarily on the lexicon as not all types are found in the recorded corpus. Where a syllable type has only been attested in polymorphemic words, the morpheme boundaries are indicated by hyphens. Where possible, examples with syllables in different word positions (initial, medial and final) are provided. Some word positions are not found; e.g. long vowels are almost only found in word-initial syllables.

| Syllable <br> Type | Example | Meaning |
| :--- | :--- | :--- |
| V | an.-a | 'DIST'-a'10 |
| VC | ak.enc <br> anc.ak.al <br> jak.al | 'back of knee' <br> 'swampfish' <br> 'white wattle' |
| VCC | apk.al.am <br> ku:w.-ank | 'hair' <br> 'in the west' |

10 For a discussion on the role of terminal -a see section 2.5.4

| Syllable <br> Type | Example | Meaning |
| :--- | :--- | :--- |
| VCCC | almp．－an | ＇stick for digging yams＇ |
| V： | ken．－a： | ＇right up high＇ |
| V：C | a：t．al | ＇mad person＇ |
| V：CC | ع：mp．al | ＇lower back＇ |
| CV | ko：t．ra | ＇head，mind＇ |
| CVC | kvc．ek <br> pent．－pul | ＇head＇ |
| CVCC | mvクk．－an | ＇to eat＇ |
| CV： | not found |  |
| CV：C | jo：ク．ap | ＇mangrove goanna＇ |
| CV：CC | ma：クk．am | ＇uninitiated man＇ |
| CCV | not found |  |
| CCVC | trop．am | ＇blocked up＇ |
| CCV：C | not found |  |

Table 8：Syllable types found in polysyllables in Wik－Mungkan
As noted in section 2．4．7，in words containing an orthographic vowel－glide sequence，that sequence is phonetically realised as a diphthong．This means that in syllables containing a vowel＋glide，that sequence functions as the nucleus．For example，koyngkan＇cabbage tree palm＇the syllabification koin．kan，with a nucleus in the first syllable oi and a coda for that syllable of $\eta k$ ．For simplicity，in the rest of this section V will denote vowel or diphthong．

In summary，the the structure rule is $(\mathrm{C}) \mathrm{V}(:)(\mathrm{C})(\mathrm{C})$ or $\mathrm{CCV}(:)(\mathrm{C})$ ．

Syllable types in Wik－Mungkan have not been extensively covered in the WM literature；see section 2．7．7．1．It is worth noting that Hale（1960a，1960b，1976a） adopted a different approach．He systematically notated words with implicit epenthetic vowels．For example，the word kuman＇thigh＇he writes as kum．n， suggesting that the second syllable is $n$ with an implied epenthetic reduced vowel between the two syllables．This is consistent with the corpus，where the nucleus of unstressed syllables frequently reduces to a schwa．

### 2.5.2 Phonotactic Constraints Within the Syllable

### 2.5.2.1 Onset

The restrictions on which of the consonants can function as onset depend on the position of the syllable. With the exception of the glottal stop ${ }^{11}$, all consonants are found in onset position when the syllable is word-initial. All consonants can be onsets when not word initial. Examples are shown in Table 9.

|  | Word-initial | Non-word-initial |
| :---: | :---: | :---: |
| p | pvk 'child' | al.pan 'sick person' |
| t | ta: ${ }^{\text {'mouth' }}$ | In.t-an' to choke' |
| t | ta:tam 'turtle fat' | ta:.tam 'urtle fat' |
| C | ca:par 'blood' | ap.pen.c-an 'to run away' |
| k | ka:? 'nose' | an.kan 'hard' |
| ? | not found | ja. Pa 'no' |
| m | mak.-an 'to stick' | wew.mam 'mutual love' |
| 口 | nam 'mud' | a.pan 'heavy' |
| n | nam 'hairy yam' | el.n-an 'to stand' |
| n | na: 2 'touchy' | e.nan 'placid' |
| $\eta$ | クaı 'l' | О:ו.nor.pan 'Carpet Snake' |
| r | remat ${ }^{12}$ 'periwinkle' | cı.ca.rak 'Willywagtail' |
| I | Iawaman 'to show off' | a:Iam 'deep channel' |
| w | wik 'word' | u.wan 'to find' |
| j | jam 'somewhere' | nع:.j-an 'to hear' |

Table 9: Possible syllabic simplex onsets
Onsets in Wik-Mungkan are almost exclusively a single consonant. The exceptions are firstly the combination $t r$ which is found in tropam 'blocked up'. Secondly, Cw is found where C is $k$ or $I$, as in nup.kwel 'although' and pu.Iweı 'totem' respectively.

[^4]
### 2.5.2.2 Nucleus

Only vowels and diphthongs (phonologically vowel - glide sequences: see section 2.4.7) can function as syllable nuclei. Long vowels are generally restricted to wordinitial syllables with exceptions such as reduplications e.g ka:c.-ka:.c 'he was building' and exclamations such as nı.pa.le:.ı 'hey you two'.

### 2.5.2.3 Coda

As described above, Wik-Mungkan allows clusters of up to three consonants in the coda, with constraints around which clusters are allowed. Before discussing these constraints, Table 10 provides examples of simplex codas of one consonant. All consonants except the glides $w$ and $j$ can be found as codas, word-final and wordmedial, with the sole exception of $\eta$, which is not found in a word-medial.

|  | Word-final | Meaning | Word-medial | Meaning |
| :---: | :---: | :---: | :---: | :---: |
| p | nıp | 'you two' | jıp.mam | 'so that' |
| $\pm$ | a:t | 'cheek' | tat-pul | 'you two saw' |
| t | ŋа:t | 'spider' | mat.-pvl | 'those two climbed' |
| C | a:c.ı: | 'flour' | kvc.-pvl | 'those two calmed down' |
| k | a:k | 'place' | ek.-pvl | 'those two got up' |
| $?$ | ta: ${ }^{\text {l }}$ | 'mouth' | ta:P.pın | 'very generous' |
| m | mın.am | 'well done' | kem.cın | 'mother's mother' |
| ロ | wa:口 | 'liver' | not found |  |
| n | $m ı n$ | 'good' | pap.kun.-wu.namp | 'we fight each other' |
| n | man | 'small' | pen.-pvl | 'those two fanned (something)' |
| $\eta$ | an | 'there' | eग.-pvl | 'those two asked' |
| r | mun.am.ur | 'grass (Graminae)' | kı.r.kan | 'sideways' |
| 1 | a:l | 'kindling' | al.kaı | 'string bag' |

Table 10: Simplex codas
Possible complex codas are shown in Table 11. The permissible ordering of
consonants is from more or equal sonority to less. As can be seen, the only examples of three consonant codas consist of lateral plus nasal plus homorganic stop, the nasals and stops being restricted to the bilabial and velar.

| C1 | C2 | C3 | Example |
| :---: | :---: | :---: | :---: |
| t | c | - | etc 'clean' |
| m | p | - | a:mp 'man's father-in-law' |
| n | $\mathrm{p}, \mathrm{t}, \mathrm{t}, \mathrm{c}, \mathrm{k}$ | - | kunp 'lame', atant 'fish bladder' kant 'Canthium berries', kunc 'own', ke:nk 'first' |
| $\eta$ | k | - | クapk 'heart' |
| $r$ | p, k, ? | - | karp 'close', erk 'waterlily root', a:rP 'spotted stingray' |
| 1 | $\mathrm{p}, \mathrm{k}, \mathrm{n}$, ? | - | kع:Ip 'Leichhardt tree', walk 'spear type', mo:In 'ant', pol? 'Oriental Cuckoo' |
|  | m | (p) | almp 'stick for digging yams' |
|  | $\eta$ | k | teInk 'slim' |

Table 11: Complex codas

### 2.5.3 Phonotactic Constraints at the Word Level

Wik-Mungkan has a high number of monosyllabic words, unusual in the general Australian context (e.g. Dixon 1980 p. 127) but not In the Cape York region e.g. Kuuk Thaayorre (Gaby 2017 p. 62). Words are minimally bimoraic, consisting of at least a long vowel / diphthong nucleus or short vowel plus coda.

Polysyllabic words can be lexical, monomorphemic, items such as aŋ.ka.ra.tan 'rock cod' and ka. Pa.ta.クam 'earlier time'. They can also be polymorphemic words such as mun.t-a.t-an.ta.n-ant 'they blunted it' and aŋ.ka.ra.ta.n-an.ta.m-am 'Rock Cod-POSSEMPH'.

As noted in Section 2.5.2.1, Table 9, all consonants bar $₹$ are found word-initial, albeit $r$ is restricted to a single example. All consonants are found word-final bar the glides $j, w$ which, although orthographically appear word-final, are phonetically realised as diphthongs or omitted (see section 2.4.7). Vowels only appear word-final
in onomatopoeia such as wuwu 'sound of snake coiling', with the exception of a. All words in Wik-Mungkan can optionally finish with a as a speaker variant (see section 2.5.4.

### 2.5.4 Terminal -a

A common feature of spoken Wik-Mungkan is word terminal -a. It can appear on any or all words, regardless of word class, in a phrase with no change in meaning at the word or phrase level. For simplicity, this will be glossed as itself; -a. For example, the word pam 'MAN' when suffixed by -a will be glossed pam-a 'MAN-a', with no change in meaning between the two. In some places it is also found, in compounds, between constituents of the compound, as can be seen in (25) on page 102 where the compound punth-paam 'arm-palm' (aeroplane) includes the terminal -a after punth 'arm', to form punth-a-paam 'arm-a-palm'.

There have been various attempts to determine if there is a pattern to its occurrence or non-occurrence, starting with McConnel in an unpublished draft grammar who stated that almost all words end in -a , an assertion echoed in McConnel (1945 p. 357) where she describes it as the normal ending for words. That this is no longer the case due to language change is the probable origin of this common appearance of terminal $a$. That is, the once mandatory terminal -a is now optional. See chapters 14 and 15 for more detail.

McConnel's assertion is supported by Hale (1976a) reconstruction of Middle Paman and its reflections in Wik languages. He proposes that all words which finished with a vowel in Middle Paman dropped the vowel in Wik-Mungkan e.g *kuna $\rightarrow$ kun (ibid p. 55) 'excrement' and *pari $\rightarrow$ peey 'cry' (ibid p. 57). Specifically, his reconstruction does not include an optional terminal -a. Similarly, his word list in Hale (1976b) has the comment 'add indeterminate V to end of all'. This suggests that he regarded the V as optional. His elicitations in Hale (1976a) do include such words e.g. kucheka 'head' (ibid p.1) and kuna 'excrement' (ibid p. 2), which shows that the optionality of word final -a.

Kilham (1977 p. 34) labels the suffix as the 'rhythmic juncture phoneme', describing it as occurring as a phoneme between words i.e. meaningless. She explicitly rejects the suggestion that it is the default ending for WM words, acknowledging that this may have been the case historically. Her analysis is that there is no connection with syllable structure or other predictable criteria but is rather a question of clause and phrase rhythm, emphasis and style.

Sutton (1979 pp. 238-240) describes a similar feature in Kugu Muminh and Wik Ngathan, related languages of Cape York. A distinction with Wik Ngathan is that Sutton is able to establish some rules governing the distribution of final -a which do not apply to WM. He hypothesises an historical sequence of reanalysis in proto-WIk which led to consonant-final words becoming vowel-final. See sections 14.1 and 15.2 for discussion of evidence from earlier Wik-Mungkan and dialects other than the Aurukun dialect.

As part of her thesis on Wik-Mungkan Kuntz (1989 pp. 27-35) considered a range of phonological hypotheses to explain the distribution of final -a. In summary, the options she considered were: preceding consonant; vowel harmony; following word vowel or consonant initial; syllable weight; stress; skeletal and non-phonological. She also cited the work of Kilham and Sutton cited above. She concluded that none of the hypotheses matches the known evidence and that the use of final -a is optional i.e it matches the description of Kilham (1977).

Analysis of the corpus has provided no additional insight, except to confirm that, whatever the situation may have been when McConnel undertook her analyses, final -a is not a universal aspect of Wik-Mungkan and its use is at the whim of the speaker.

As a side note, an unrelated language, Yalarnnga, a now-extinct Pama-Nyungan language of NE Queensland had a similar suffix -ka, described by Blake (1971 p. 22) as a 'prosodic suffix'. It is always the final syllable, has no semantic effect and can be used 'wherever it is felt that the rhythm of the of the utterance requires it (ibid). He provides the example (2), where the suffix -ka 'ka' attaches to the pronoun ngia 'l' with no change of meaning.
(2) Blake 1971 p. 22
matani ngia-ka
cold I-ka
'I am cold'.

### 2.6 Suprasegmental Phonology

### 2.6.1 Word Stress

Recent developments in phonological analysis have thrown doubt on the traditional stress model of word stress in Australian languages, in which the primary stress falls on the first syllable, with secondary stress on the third, fifth etc syllables (see e.g. Dixon 1980 p. 128). Tabain et al (2014) has shown that in Pitjantjatjara (Western Desert, Pama-Nyungan) the long-held belief in secondary stress patterns is not supported by the phonetic data. The belief in the existence of this secondary stress is attributed by Tabain et al (2014 p. 62) to a phenomenon called 'stress ghosting' identified as arising when a native speaker of a language where stress is common (such as English) hears stress in another language even when it is absent. Replicating the methods used by Tabain et al (2014) is not feasible, as it involved multiple speakers in controlled environments using the same stimuli. The available corpus for this thesis does not meet these criteria: it does not have many repetitions and the recording environments were less than ideal. The following analysis works within the constraints of the corpus and thus is limited in the conclusions which can be drawn.

The description found in the Wik-Mungkan literature (e.g. McConnel 1945 p. 374 and Sayers 1976a) mirrors the description above in Dixon (1980). The impacts of morphology are stated to be in three main processes; reduplication, tense marking and some nominal case markers. Following is an assessment of these descriptions based on available acoustic data.

For this analysis, four correlates of stress were examined; intensity, pitch, vowel length and vowel quality. These indicators generally correlate in the corpus in that syllables with nuclei of shorter duration also have lower intensity and pitch. At the same time, vowel quality tends to be more central and mid in these syllables, i.e.
closer to a schwa. Where these four correlates occur the syllable is considered to be unstressed. For example, in the word ta.ta.na 'they saw' (BS779min22_0.56) the lengths of the three nuclei are $0.097,0.021$ and 0.111 msec respectively. The average pitches are $272 \mathrm{~Hz}, 225 \mathrm{~Hz}$ and 240 Hz and average intensities are 77, 69, 72 dB respectively. So on these three measures the middle nucleus is less stressed, most strongly on vowel length. On vowel quality, Formant 1 for the second nucleus is 481 and Formant 2 is 1951, compared with general median values for a of 908 and 1850 respectively (see section 2.4.6.1), indicating a shift to a more mid-central vowel quality. The other two nuclei are closer to the median values for a i.e. not shifted to the mid-central. Thus in this case all four measures suggest a stress pattern of ŚSS̀. As will be seen, not all words have all four measures correlating and some judgements need to be made in cases where one or two of the measures contradict the others.

With those caveats, primary stress is usually on the first syllable of the lexical head, this includes where the first syllable is partially or fully reduplicated. Partial reduplication can involve the onset and nucleus of the first syllable being prefixed to the lexical head, as in mu.-mup.kang 'I was eating' (BS779min22_19.01).

Alternatively, the entire first syllable or stem can be reduplicated as in munk.-mur.k.an they were eating' (BS779min22_18.41). In each case, the stress is on the second syllable. There are exceptions, however, as in um.p-ump.-pul 'those two beckoned' (BS772BY1.38). In this case, pitch gradually drops across the word (169, 151, 129 Hz ), intensity dips marginally for the second syllable and rises marginally again for the third $(82,77,80 \mathrm{~dB})$ and vowel qualities vary little between the instances of $u$. The relative shortness of the middle nucleus ( 0.038 vs 0.055 for the first and 0.053 for the last) is the strongest indicator of the second syllable being less stressed than the others. It could be argued that the stress pattern for this word is essentially flat or equally that it matches the standard pattern of ŚSS and not the expected pattern of SSS found in other reduplications.

Kilham et al (1986 p. 401) note that certain suffixes are stressed regardless of position in the word. That is, even if the syllable is not an odd-numbered one. The identified affixes are -ak 'ALL', and, at least for pronouns, -am 'POSS', -ang 'COM'
and -akam 'REFL'. For example, the ak in yiipakan 'towards the south' (BS774MYTW9.36) is the allative marker and attracts stress even in a position (second) that would otherwise be unstressed. In this case the pitch declines across the word, as does intensity, while the lengths of the second and third nuclei are 0.072 and 0.056 respectively. The formant values of those two nuclei are comparable. Thus the second syllable carries more stress than the final, on three of the factors assessed here for determining stress (pitch, intensity, vowel length) while the fourth (vowel quality) is inconclusive. This example supports the position of Kilham et al (1986 p. 401), at least for the allative suffix.

Searches of the corpus for the other nominated suffixes which carry secondary stress regardless of syllable position such as the possessive -am and comitative -ang are inconclusive, with no tokens of these suffixes in even numbered syllables. (In odd numbered syllables stress is found as would be expected.)

An important set of suffixes where stress is phonemic are the tense / person suffixes for first and second person. The past and future suffixes are homophones distinguished purely by the future being stressed and the past unstressed. This phenomenon is noted in the Wik-Mungkan literature e.g. Godfrey (1970 p. 744). The 60s and 80s recordings in the corpus unfortunately contain practically no tokens of the future tense, especially the relevant first and second person and never by the same speaker. It is therefore not possible to check the historical veracity of the phenomenon.

Some contemporary supporting evidence of the stated phonemic stress is available from recordings made in 2015 of current Wik-Mungkan speakers in elicitation. These do show some evidence of the difference in stress to confirm the literature. For example, two versions of mun.k-an recorded on a file labelled pstfut (my data) show that the syllable containing the suffix $-a n$ as the second person future in one case (pstfut_8.44) is more stressed compared with the second person past -an in at least the attributes of vowel quality and vowel length. Specifically, on vowel quality the formant values are respectively F1=826, F2=1540 and F1=579, F2=1700 where the latter is more centralised. The respective vowel lengths are 0.101 and 0.062 i.e. the
past suffix is shorter than the future. Thus for those two measures the past suffix is less stressed than the future. Against this, the intensity measures are 80.6dB and 84.6 dB respectively and the pitch measures are 139 Hz and 176 Hz respectively, making the past slightly more intense and slightly higher pitch, so marginally more stressed than the future on these measures. The conclusion is thus of partial support for the contrastive difference between the past and future. It should also be noted that native speakers are clear that the phonemic difference exists. It is possible that phonetic signals they use for this are vowel quality and vowel length, as above and not intensity or pitch ${ }^{13}$. Further research in contemporary Wik-Mungkan might shed more light on this possibility.

There are two small classes of words identified by Kilham et al (1986 p. 400) as always having secondary stress on the second syllable (primary stress remains on the first syllable). The first is where the nucleus of the second syllable is not a such as ku.chek [k$\left.{ }^{h} v c e k\right]$ 'head'. This last example is found in the recorded corpus at BS7782XW5.57. Examining the four correlates for stress provides the following data: length of $e$ is 138 msec against 0.060 for $u$; formant values F1 $=495 \mathrm{~Hz}, \mathrm{~F} 2=2119$ for $e$ align with the average as per section 2.4.6.1 i.e. not centralised to a schwa; intensity of $e$ is 72 dB against 69 dB for $u$, a minor difference; pitch is measured at 190 Hz for $e$ and 147 Hz for $u$. Thus, three correlates for stress, viz length, vowel quality and pitch support the assertion that there is at least secondary stress on the second syllable -chek, while the other measure, intensity, is inconclusive. This example thus supports the description of Kilham et al (1986 p. 400). As noted in section 2.4.5, the orthographic convention for most words in this class (second nucleus not $a$ ) is to double the onset of the second syllable e.g. kikkiy 'creek'. The double letter is orthographic in most cases, to signify secondary stress on the second syllable, not a geminate consonant (see section 2.4.5).

The second class of words with secondary stress on the second syllable noted by Kilham et al (1986 p. 400) is also rare in the corpus; the second nucleus is a but nevertheless demonstrates secondary stress. In these cases the onset consonant of the second syllable is always orthographically doubled in the lexicon (see also section 2.4.5). An example is paththam [ $p^{\text {h }}$ atam] 'really', an example of which is

[^5]found in BS774MYTW15.08. In this case, vowel lengths of both nuclei a are similar; 73 msec for the first syllable and 63 msec for the second. Formant values for the respective vowels are $\mathrm{F} 1=670,704, \mathrm{~F} 2=1025,1552$. This places the vowel quality for the first to be more centralised, at least for F2, than the second (see section 2.4.6.1), i.e. the second is more stressed on this measure. The respective intensity measures are 80 and 76 dB , a minor difference, while the respective pitch levels are 242 and 232 dB , also a minor difference. Given that pitch and intensity tend to fall across a word, the final syllable can be heard as more prominent than would otherwise be the case. This conclusion supports the Kilham et al (1986 p. 400) assertion that the second syllable has secondary stress, as opposed to being unstressed, the standard pattern.

### 2.7 Notes on the Wik-Mungkan Literature

This section reviews the past literature on Wik-Mungkan phonology and compares it with the analysis in this thesis. As noted in section 2.1, three main sources will be referred to in the discussion of phonology in the Wik-Mungkan literature; McConnel (1945), Kilham et al (1986) and Kuntz (1989). This is because other sources such as Kilham (1974a, 1977) are repeated and updated in Kilham et al (1986). For specific topics Sayers (1976a, 1976b, 1976c, 1977) will also be referenced. The orthography(s) of the original sources are maintained unless there is a loss of clarity in so doing.

### 2.7.1 Obstruents

### 2.7.1.1 Velar /k/

The only mention of variation in the unvoiced velar /k/ is in McConnel (1945 pp. 370371) which describes $/ k /$ being realised as the voiced velar [g] as a speaker variant. The variant is described as being rare and only occurring word initial before a long vowel or diphthong. As noted in section 2.4.1.3, there are no instances of $[\mathrm{g}]$ in any environment in the corpus. This could reflect a limitation in the current data or that this variant ceased between 1945 and the 1960s. Neither Kilham et al (1986) nor Kuntz (1989) mention this variant. No source describes the unreleased or aspirated
variants found in the corpus.

### 2.7.1.2 Bilabial /p/

Moving to the bilabial stop, McConnel (1945 p. 368) describes both voiced and unvoiced bilabial stops as occurring in initial and medial, but not final, positions. The unvoiced $[\mathrm{p}]$ is said to be the 'usual' sound, with [b] occurring in few words. Both are described as 'slightly aspirated'. The lack of word final examples can be put down to language change; McConnel provides piipa as 'father' where later Wik-Mungkan has the final vowel optional, hence 'father' is now piip(a).

The examples of voiced [b] provided by McConnel are few but are either not in the modern lexicon such as bu:bu' 'soon' or are now pronounced as [p] (including aspirated and unreleased versions, as in third person dual bulla being now pul. Other words are described as having shades of meaning so that McConnel (ibid p. 368) cites punta as meaning 'arm' but bunta meaning 'arm of creek'. This distinction is not found in the corpus; in the given example both meanings are now punth. The geminate $p p$ is described by McConnel as two instances of $p$, the first being unreleased (ibid p. 368). This is not in contradiction with the analysis in section 2.4.1 but the preferred analysis is of a geminate $p$ :. Finally, whether [b] or [p] is produced is also described by McConnel as being a speaker variation in any position. The realisation [b] found in the corpus is restricted to following the bilabial nasal [m] (see section 2.4.1). McConnel does not mention the unaspirated $[p]$ found in the corpus.

Kilham et al (1986 p. 400) mention that [p] is realised as [b] in 'certain situations' which are unspecified. There is no discussion of aspirated or unreleased variants, as noted in section 2.4.1.

Kuntz (1989 p. 5) does not describe allophones but does cite [b] occurring in the phrase puy iimbi [prji:mbi] 'go away'. I have not located this in her recordings and iimbi does not correspond to any word in the lexicon. This word, if actually iimpi, would align to the finding in section 2.4.1.3 that /p/ can be realised as [b] following [ m ] but this is only speculation.

### 2.7.1.3 Dental /t// and Alveolar /t/

These two phonemes are discussed together as the analysis relies on interpretation of the description in McConnel (1945), which appears to omit the alveolar [t], as follows.

McConnel (1945 pp. 369-370) uses the symbols $t$ and $d$ to describe 'breathed ${ }^{14}$ and voiced dental stops'. The IPA symbols [t] and [d] are ambiguous between dental and alveolar (Pullum \& Ladusaw 1986 p. 146) so the McConnel use and modern use appears similar. She mentions that the voiced variant may occur after a long vowel or unstressed syllable (especially after $n$ ) (ibid p. 369). The corpus only shows the voiced alternative following [n].

McConnel (1945 p. 270) uses a separate pair of symbols to denote 'interdental aspirated breathed stops'. The manuscript is not very clear; below is a scanned image which due to the quality of printing is difficult to make out.

## $t^{\prime}, t t h$

The superscript ' is an old symbol for aspiration (Pullum \& Ladusaw 1986 p. 217). The subscript is amorphous and analysis of old versions of IPA failed to identify possible meanings. As a result, they will be omitted from the rest of the discussion. The final ${ }^{h}$ is also unexplained; it could be aspiration or indicting interdental. The distinction McConnel (1945 p. 370) makes between the first and second symbols is that the $t^{\prime}$ is short and slightly aspirated and appears primarily word initially, occasionally word medially and word finally for abbreviated forms e.g. ku:t' as the abbreviated form of ku:ttha 'mother's younger brother's child'. The usual word medial form, only after a stressed vowel, is the long $t t h$ which is described as 'clearly aspirated, giving the impression of $t$ th' (no subscripts in original) (ibid). The most plausible modern IPA representations for these two sounds seem to be $\left[\mathrm{t}^{\mathrm{h}}\right]$ and $\left[\mathrm{tt}^{\mathrm{h}}\right]$ respectively however this cannot be considered definitive and it remains unclear what McConnel intended.

The above description does not completely match the later authors nor the acoustic
evidence as discussed in sections 2.4.1. The examples McConnel provides of her [ $t$ ] and [d] have different realisations in the corpus. For example, she gives tu:ma as
 'cord' is later kuutan $\left[k^{h} u: t^{h} a n\right]^{15}$. That is, the described interdental stop (voiced and unvoiced) in McConnel is later either a dental or an alveolar stop, both unvoiced. Similarly, McConnel's example of the long interdental aspirated breathed stop $t_{m}{ }^{h}$ of ka:tth ${ }^{\dagger}$ a 'mother' is simply the dental $[t]$ of kaath $\left[k^{h} a: t\right]$ in the corpus.

In summary, the McConnel data included no alveolar stop explicitly but did include dental and interdental stops, assuming the above interpretation of her description and symbols is correct. Further analysis of McConnel recordings (if obtained) may shed further light on this hypothesis.

The distribution of $[t]$ and $[t]$ in in the word lists found Hale (1960a 1960b !976a) matches the distribution found in the corpus. That is, words in those lists with either sound are found in the lexicon and corpus with the same sound.

Moving to Kilham et al (1986 p. 399) they use the symbol [t] to be the alveo-dental stop. In the guide to pronunciation (ibid p. xx), which is intended for non-linguists, this is described as equivalent to English $t$ but unaspirated. The lack of aspiration is not supported by the acoustic evidence (see section 2.4.1). They further use the symbol $t \underset{\sim}{\text { for inter-dental stop, described by Pullum \& Ladusaw (1986 p. 225) as being }}$ identical to [t]. In the guide to pronunciation (ibid p. xx), the sound is described as being with the tongue 'between teeth or just behind teeth'. Interpreting this suggests that to Kilham et al (1986) the sound was either interdental or dental.

Kilham et al (1986 p. 400) describes /t/ as being realised as [d] in 'certain situations'. The only environment mentioned is after or between voiced consonants, giving the example nungantam [nupandam] '3SG.DAT=ABL'. It is not clear if this is meant to reflect a universal rule i.e. always $/ \mathrm{t} / \rightarrow$ [d] or just a speaker variant. As noted above, the guide to pronunciation (ibid p. xx) intended for non-linguists only mentions /t/ as being the same as English $t$ but without aspiration. This seems to imply that the
voicing change is not universal but a speaker variant, in line with the analysis in section 2.4.1.3. Note that the description of $t$ not being aspirated is not in agreement with the acoustic evidence described in section 2.4.1.1.

Kuntz (1989) noted the dental [t] and alveolar [t] and describes the same situation (/t/ $\rightarrow$ [d]) as in wantina ${ }^{16}$ [wandina] 'where' as an optional variant to [wantina], noting the same speaker produced both variants, in line with the analysis in section 2.4.1.3.

### 2.7.1.4 Palatal /c/

McConnel (1945) does not mention the palatal stop [c] but includes two 'affricatives' $t y$ and $d y$ (McConnel 1945 p. 364). She does not describe these sounds but compares them with Aranda (Arrernte) tj and dj, as described by Strehlow (1942 pp. 267), who lists them under the heading 'fricatives'. These symbols are commonly used in Australian language practical orthographies to denote the palatal voiceless and voiced stops (see eg Dixon 1980 p. 138). Strehlow (1942 p. 269) notes that $t j$ is often realised as the affricate /t// in Arrernte.

Returning to McConnel (1945, p. 364) the words she cites can be compared with words in the current lexicon which have the practical orthography ch which is the palatal voiceless stop [c] (see Section 2.4.1). For example McConnel (1945 p. 364) cites wántya 'woman' and kátya 'far off' which are wanch and kech respectively in the lexicon. Thus the only difference between the McConnel (1945) description of [c] and later ones, including this thesis, is the somewhat misleading label of 'affricative'. McConnel (1945) does not record the variant of /t// noted by Strehlow in Arrernte.

Kilham et al (1986 p. 399) define the sound as alveo-palatal, with the IPA symbol of [tj]. They also describe how to pronounce it (for non-linguists) as similar to ch in chip, but unaspirated. Section 2.4.1 describes the acoustic evidence as producing the aspirated, unaspirated and voiced as variants.

Kuntz (1989 p. 3) describes a palatal and uses the symbol [č]. According to Pullum \&

Ladusaw (1986 p. 29) this is the US usage for the voiceless palato-alveolar affricate or [ t ] in non-US usage but this does not seem to be what Kuntz (1989 p. 3) intended. Acoustic evidence of her recording supports the palatal /c/ interpretation e.g. kecham [ $\mathrm{k}^{\text {hecham }}$ ] 'far off-EMPH' (LKA20.05).

### 2.7.1.5 Glottal Stop /?/

The glottal stop is rare in Australian languages outside of the Cape York area and considered a relatively recent innovation (e.g. Dixon 1980 p. 147). The first mention of it in Wik-Mungkan literature is McConnel (1945 p. 372). She describes four environments. Firstly she describes word-initial glottal stops with four words as examples. These words either no longer exist i.e. 'aetta 'honey' or words which exist in the modern lexicon in changed form e.g. 'atyimba 'emu' which became the later achamp 'emu'. As discussed in section 2.4.1.6 the word-initial glottal stop is now an optional speaker variant where the citation form of a word starts with a vowel.

Secondly, McConnel describes the glottal stop occurring between vowels in reduplicated stems such as the reduplication of iya 'to go' to i'iya 'he was going'. The later form of 'to go' has a lengthened vowel iiy with reduplicated form iiyiiy. In both cases reduplication expresses continuous aspect. This description (glottal stops between reduplicated stems) does not match the acoustic evidence as noted in section 2.4.6 but note that as described in section 2.4.7, iiya is sometimes realised as [i:?a],

The third environment, described by McConnel as the most common, is between vowels and between vowels and diphthongs. There are no examples given of the latter; the former is shown by kuu'a 'dog', which in later use has a lenited vowel; ku' 'dog', the final a being also optional. The intervocalic environment is the most predominant in the current description of Wik-Mungkan (see section 2.4.1.6)

Lastly McConnel describes the terminal glottal stop occurring only in the specific environment of abrupt exclamations, giving two examples. One, $\eta k ə r$ ' 'exclamation of surprise or disgust' has no later equivalent. The other, e'!'e'e'! 'look out' is later e'e'
'oh yes'. That is, the final glottal stop has been dropped along with a semantic change. As described in section 2.4.1.6, the final glottal stop is now found in more instances than described by McConnel, primarily it would seem due to dropping of terminal vowels.

The evidence provided by Hale (1960a 1960b) is that words which in the lexicon have initial vowels are shown as having an initial glottal stop. For example, in 'PRX' is shown as ?in (Hale 1960b p. 1). This supports the view that the word initial glottal stop was once obligatory but became optional.

Kilham (1977 p. 32) describes the basic syllable structure of Wik-Mungkan as having an obligatory onset. Words which in the later lexicon of Kilham et al (1986) as vowelinitial are defined in Kilham (1977) as having a glottal stop onset e.g. erkam 'quickly' in the Kilham et al (1986) lexicon is given as Perkam in the earlier Kilham (1977 p. 35). The change between 1977 and 1986 to omit these glottal stops is not explained, as Kilham et al (1986 p. xx) is confined to describing how the glottal stop is pronounced (in a guide for non-linguists) and has no other commentary. As noted in section 2.4.1.6, the corpus contains instances where a glottal stop as a speaker variant is found word-initial despite being not noted as such in the lexicon. It is possible that there has been a tendency to drop the initial glottal stop which led to the decision by the compilers of the lexicon (i.e. Kilham et al) to omit word-initial glottal stops. Complicating the question is that some of these words are present in McConnel (1945) with an initial glottal stop e.g.acimp (lexicon) and Pacimba 'emu' (McConnel 1945 p. 369) but others are without an initial glottal stop e.g. ina 'PRX' (ibid $p$. 367) vs in 'PRX' in the lexicon. That is, some words appear to have been vowel-initial for a considerable time and others have not. Thus the loss of the initial glottal stop has been in progress for some time: from 1927-1934 when McConnel made the recordings she subsequently analysed in McConnel (1945) to the 1970s and probably later. It is not clear on what data Sayers (1977) and Kilham (1977) relied when asserting that all syllables have an onset.

Kuntz (1989 pp. 12-13) summarises McConnel (1945) as above and also notes her own spectographic evidence of glottal stops appearing word initially in some cases, in
agreement with section 2.4.1.6.

### 2.7.2 Nasals /m/, /n//n/, /n/, /n/

McConnel (1945 pp. 366-367) only includes three nasals; $m, n$ and $\eta$. The examples of $n$ which she cites include two words which in later Wik-Mungkan have different nasal realisations. First, she cites manya 'small' which implies she saw this as [manja], that is the final glide distinct from the nasal and not the single nasal $n$ i.e. [man] as in the current analysis. In support of this interpretation, she also (ibid p. 365) mentions the combination ny, without describing it as a single sound. While most examples of many in the the corpus are realised as [man] eg many iiyan [manijanan] 'small went-they' (BS774MYTW4.50), there are several instances which are closer to this interpretation of McConnel's description. For example, manya [manja] 'small' in (BS772BY7.14). Given that McConnel reports most words ending in $a$, it is possible, if highly speculative, that the dropping of the a resulted in [nj] becoming $/ \mathrm{n} /$ over time, the older pronunciation being sometimes preserved when a terminal a (optional in 60s and 80s Wik-Mungkan) is present. Of course, it is alo possible that McConnel did not recognise the difference.

The second word cited by McConnel (1945 p. 367) which later changed is minna 'meat', which in 60s and 80s Wik-Mungkan became minh [min]. Again, this could represent a process of sound change due to loss of obligatory terminal a. This is even more speculative, as there are no instances found in the corpus of minh being realised as [min], with or without terminal a. In that context however Sayers (1976a p. xvii) noted that younger speakers at that time were starting to use the alveolar nasal in place of the dental nasal. As older speakers were used for the audio in this thesis this trend was not detected

Notwithstanding the possible interpretations discussed above, it is most likely that McConnel was simply in error and that Wik-Mungkan in 1945 had the five nasals found in the corpus. For Wik-Mungkan in 1945 to not have nasals corresponding to two of the stop series would have made it highly unusual among Australian languages, which typically has a nasal corresponding to each stop (see e.g. Dixon

1980 p. 137). The later Wik-Mungkan data matches the standard pattern; it seems improbable that this would have evolved from a system with five stops and three nasals.

The word lists in Hale (1960a 1960b 1976a) show the dental nasal [ n ] in words where the lexicon and other sources have the alveolar. This is especially the case in words with consonant clusters. For example Hale (1960b p. 2) has 'river' as [punt], as against [punt] in the corpus. Similarly, the palatal nasal is found preceding the dental alveolar in e.g. [mapc] 'death adder' as opposed to [manc]. That is, in both cases, the dental and stop have the same place of articulation in Hale's word lists but not in the lexicon. Notably for pronouns word initial dental nasal is preferred over the alveolar nasal; e.g. [pint] '2SG' and [nil] '3SG' in place of [nint] and [nil].

Kilham et al (1986, pp. xx, 399) and Kuntz (1989 p. 3) describe the same set of nasal consonants as described in section 2.4.2, with no additional commentary.

### 2.7.3 Lateral /I/ and Glides /w/, /y/

McConnel (1945 p. 366) is somewhat tentative in her description of the lateral /// which she compares with Arrernte as documented by Strehlow (1942 pp. 282-284). She describes three variants based on the analogy but each description is prefaced by the hedging phrase 'would seem'. For example, 'the various types of I described for Aranda (sic) would seem to be present in Wikmunkan (sic)' (McConnel 1945 p. 366). The section on Arrernte in Strehlow (1942 pp. 282-284) similarly is guarded in its description. Given this hesitancy and that the findings of section 2.4.3 of the corpus are based on a narrow range of tokens, there is little useful comparison to be made.

The only mention of the lateral in Kilham et al (1986) is the guide to pronunciation (ibid p. xx ) which states it is similar to English $I$.

Kuntz (1989) does not discuss the lateral.

As to the glides $w$ and $y$, McConnel (1945 p. 363), who labels them as fricatives, and Kilham et al ( $1986 \mathrm{p} . \mathrm{xx}$ ) both describe them in line with the description in section 2.4.3. Kuntz (1989 p. 13) primarily discusses them in relation to establishing syllable structure.

Vowel - glide or diphthong sequences as described in section 2.4.7 are a special case and the historical treatment in the Wik-Mungkan literature is discussed in section 2.7.6.

### 2.7.4 Rhotics

The description of the rhotic in section 2.4 .4 (predominantly a trill, but also approximant) differs from the literature at several points. As pointed out in section 2.4.4, the rhotic is rare in the corpus and additional data may modify some conclusions.

Firstly, McConnel (1945 p. 365) describes the usual Wik-Mungkan rhotic as a 'voiced rolled dental'. The symbol she used was $r$, so it is assumed that she meant a trill, as found in the modern corpus.

Secondly, McConnel (1945 p. 365) also states that the rhotic only appears wordmedial. With one exception (remat 'shellfish' - see below) it remains the case that it does not occur word-initial. It does however appear word-final in both stems such as anar 'really cold' and when the dative clitic =ar occurs e.g. ngamp=ar '1PL.EXCL=DAT'. It is possible that the occurrence of word-final [r] in the corpus is the result of the loss of final a from the time of McConnel to that of the corpus. For example, McConnel renders 'oyster' as warra, not the later war. Thus the statement that the rhotic only occurs word-medial may well have been true in 1945 but change has meant that it is no longer the case and it now does appear word-final due to the loss of the final vowel.

Thirdly, the pronunciation of the rhotic described by McConnel (ibid) of warra 'oyster' and a 'limited number of words' (unspecified) is described as 'voiced retroflex palatal
partially rolled', using the symbol [rr]. This does not appear to be common in Australian languages (e.g. Dixon 1980 pp. 144-145 makes no mention of it) nor is it found in the corpus.

Moving to Kilham et al (1986 pp. 399-400), firstly they state that the rhotic is usually produced as a flap between vowels such as in we'ar-am 'spread out-EMPH'. They use the symbol [ř] to denote this, an earlier version of the IPA symbol [r] (Pullum \& Ladusaw p. 132). In all tokens in the corpus this is not the case, including specific instances of we'ar-am 'spread out-EMPH' (e.g. BS779min22_2.48), where it is a trill. Where the rhotic precedes a consonant Kilham et al (1986 p. 400) state that it is produced as a trill, in line with the analysis in section 2.4.4.

Secondly, Kilham et al (1986 pp. 399-400) use the symbol [r] to denote an 'alveodental semi-vowel'. Pullum \& Ladusaw (1986 p. 131) describe this symbol as meaning a retracted or retroflex [r]. It is possible that Kilham et al (1986 p. 399) intended the symbol to be [r] i.e a voiceless [r]. For a semi-vowel to be voiceless would be inconsistent so this is an unlikely explanation. Alternatively, it seems ${ }^{17}$ that Kilham et al (1986 p. 399) intended this to mean the alveolar approximant [ $\mu$ ]. This sound is mentioned by Kilham et al (1986 p. 399) as only occurring in a few words such as remat 'shellfish' and war 'oyster' and that some individuals were moving to the trill instead even for these words. The former is the only word in Wik-Mungkan with an initial rhotic and Kilham et al (1986 p. 399) suggest it is probably a loan word. Given that the earlier McConnel (1945 p. 365) was apparently unaware of this word (as it would conflict with the assertion that all rhotics are word-medial), the loan word hypothesis (and accompanying pronunciation) is plausible. The only three examples of remat 'shellfish' in the corpus (repeated three times in Butcher Stoakes 80s data 231.213.234.692) confirm the alveolar approximant. Examples of war 'oyster' demonstrate the trill, not the approximant, but given the change in pronunciation mentioned by Kilham et al (1986 p. 399) to the trill this may just be an artefact of the data i.e. that the corpus only includes speakers who had switched to the trill.

Lastly, Kuntz (1989 p. 4) very briefly summarises the Wik-Mungkan literature of the

17 A conclusion inferred from the data and the description but may be corrected if further evidence becomes available.
rhotic and adds that the approximant (or alveolar glide in her terminology) was not found in her data, a finding confirmed in this thesis.

### 2.7.5 Vowels

McConnel (1945 pp. 356-362) described the Wik-Mungkan vowels in IPA terms such as front, back, open, closed etc with examples from English and German to illustrate the target sound. Due to uncertainties regarding interpretation of these examples, the IPA symbols are shown, with some exceptions to be discussed below. Using the descriptions and IPA symbols, the vowels in Wik-Mungkan in her paper are as shown in Illustration 5.

The main point of discussion in her use of IPA symbols is a, which she describes as a 'back, unrounded vowel, intermediate between half-open and open positions' with an acoustic value 'approximate to English "butter"' (McConnel 1945 p. 356). The IPA symbol which most closely matches this description is [ $\wedge$ ], which has been included in illustration 5, and not the front open vowel [a]. Similarly, she describes the long vowel a: as 'an open unrounded back vowel similar to English "father"' (ibid p. 357). This more clearly fits the vowel [a:] as shown in Illustration 5. One other vowel interpreted as different from the assigned IPA value is one of the values of $i$. This symbol is given two descriptions, one corresponding to the front, open cardinal [i], the other described as 'closed front lax unrounded ... (as in) English "pit"' (ibid p. 359), depicted in Illustration 5 as [1]. The other vowels in Illustration 5 are as per the original text.


Illustration 5: Vowels as per McConnel (1945)

As discussed in section 2.2.2, the accepted vowel inventory after McConnel (1945) for Wik-Mungkan consists of the five vowels [a, e, i, o, u] in both short and long variations. The source of this inventory is a paper (Sayers 1970a) with no known extant copy and no later reference elaborates further. Kilham et al (1986 p. 399) includes these 10 vowels and describes them as being the linguistic symbols as well as the practical orthography i.e. that $a, e, i, o, u$ are the IPA vowels, short and long. Note however that these vowels are placed in a table, replicated here as Table 12, where $a$ is described as low and central, not the IPA low and front, a difference which is not unusual in five vowel systems (Simon Musgrave pc).

|  | Front | Central | Back |
| :--- | :---: | :---: | :---: |
| High | i |  | u |
| Mid | e |  | o |
| Low |  | a |  |

Table 12: Vowels as per Kilham et al (1986 p. 399)
Kilham et al (1986 p. xx) also includes a pronunciation guide for the non-WikMungkan speaker, based on English words. As such they are necessarily informal but provide some insights. The following Table 13 shows the vowels in practical orthography, the associated description from Kilham et al (1986 p. xx) and the assessed value in IPA format, assuming a 'standard' Australian English pronunciation. The schwa is also mentioned as a variant of a but that is excluded here as it is discussed in section 2.6.1.

The chosen IPA assessment is as described in Fromkin et al (2009 p. 237). Given the wide variations in Australian English reported by authors such as Harrington et al (1997), Cox (1999) and Cox and Palethorpe (2007) among others, the assessed IPA chosen is open to question. For the purposes of this thesis, these complexities and variations, especially the definition of 'standard' Australian English, will be ignored.

| Vowel | English Equivalent | Assessed <br> IPA |
| :---: | :--- | :---: |
| a | u in cup | $\wedge$ |
| aa | a in father or ar in part | $\mathrm{a}:$ |
| e | e in pet | $\varepsilon$ |
| ee | air in fair (but without final glide) | $\varepsilon:$ |
| i | i in pit | I |
| ii | ee in feet | D |
| o | o in hot | v |
| oo | or in port | u: |
| u | u in put | lengthening of u in put but not very similar to anything in <br> English except perhaps our in gourd |
| uu |  |  |

Table 13: Kilham et al (1986 p. xx) pronunciation guide to vowels
Based on this assessment the vowel chart for Wik-Mungkan according to Kilham et al (1986 p. xx) is as per Illustration 6. Note that the value of a in Kilham et al (1986 p. 399) is an open-central vowel (see Table 2 in section 2.2.2), not the back, open-mid shown here.


Illustration 6: Vowels interpreted from Kilham et al (1986p.xx)

The interpretation in Illustration 6 of Kilham et al (1986) is of course at odds with the stated vowel qualities as shown in Table 12 in several respects, especially between short and long vowels; the short [i] in the latter is [1] in the former, similarly short [ $u$ ] is [ v ]. Also the value of long and short $a$ in Table 12 are very different; long is [a:] while short is [ $\wedge$ ]. Similarly $o$ is instead [ b$]$ and [ $\mathrm{O}:]$. Finally the value $e$ in Table 12 is $[\varepsilon$ ] in both short and long versions.

There is considerable overlap between the reconstructed McConnel (1945) (Illustration 5) and Kilham et al (1986) (Illustration 6) charts. Ignoring length distinctions, both include the back vowels $[\mathrm{u}, \mathrm{\rho}, \wedge]$ and the front vowels $[\mathrm{i}, \mathrm{I}, \varepsilon]$. The McConnel chart includes the additional back vowel [o]. Both include the cardinal open back vowel, McConnel as unrounded [a], Kilham et al as rounded [b]. The difference in rounded vs unrounded could be in the interpretations adopted here in creating Illustrations 5 and 6 . Finally recapping an earlier discussion on a, McConnel (1945 p. 356) used the symbol a, describing it as open, back and unrounded while the Kilham et al (1986) description of open, back and rounded is an interpretation of the English o in hot (Table 13).

Differences between the McConnel (1945) chart (Illustration 5) and the Kilham et al (1986) chart (Illustration 6), again ignoring length, are that the former includes [a, e] which the latter does not and the latter includes [æ].

Moving to the Butcher / Stoakes 80s data, the vowels are consistently annotated as follows, with the practical orthography first; $a \rightarrow e, e \rightarrow \varepsilon, i \rightarrow \mathrm{I}, o \rightarrow \nu$ and $u \rightarrow \tau$. Long and short vowels are annotated the same way, excepting an occasional schwa in unstressed syllables (see Section 2.6.1). These annotations align with both McConnel (1945) and Kilham et al (1986) for vowels [ $\varepsilon$ ], $[1]$ and [ 0 ]. The value [ $\tau]$ is slightly lower and more fronted than the [u] in both McConnel (1945) and Kilham et al (1986) and agrees with the findings from the corpus in section 2.4.6. The value [e] is intermediate between the earlier [a], [æ], [ $\wedge$ ], [a] and [ p ], all noted as values for $a$ in the practical orthography. The Butcher / Stoakes annotations are simpler in that the
values are the same for both long and short vowels, unlike both previous authors and the findings in section 2.4.6.

Finally, Kuntz (1989 pp 21-23) summarises the previous literature with the additional comment that she found $[\varepsilon]$ and $[1]$ in her data.

The different values in the Wik-Mungkan literature are summarised in Table 14, with the exception of the schwa, which is agreed by all authors as an allophone for all vowels in unstressed positions.

| Standard Orthography | Current Analysis | McConnel | Kilham et al | Kuntz | Butcher / Stoakes |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a | a | $æ, \wedge$ | $\wedge$ | a, æ | e |
| aa | a: | a: | a | a : | e: |
| e | e | e | $\varepsilon$ | e, $\varepsilon$ | $\varepsilon$ |
| ee | $\varepsilon$ | e: | $\varepsilon:$ | e: | $\varepsilon$ |
| i | 1 | i, | 1 | i, I | 1 |
| ii | I: | i: | i: | i: | I. |
| 0 | $\bigcirc$ | $\bigcirc$ | D | 0 | $\bigcirc$ |
| 00 | $0:$ | О:, 0: | O: | O: | O: |
| u | v | u | Ј | u | v |
| uu | u : | u: | u : | u: | Ј: |

Table 14: Comparison of WM vowel values in WM literature

In summary, the various historical descriptions of Wik-Mungkan vowels show a general consistency with minor differences. That is, the descriptions of each vowel are usually adjacent in the sense that one may be more or less fronted or somewhat higher or lower than others. There are some variations concerned with vowel length; different authors have long vowels showing different qualities from the short versions. The Butcher / Stoakes analysis is unusual in not having any such distinction in quality. The acoustic evidence presented in section 2.4.6 largely aligns with the
various historical analyses.

The most variation arises from the vowel represented in the practical orthography as a. This is variously described as a front, back or central vowel, either open or openmid, rounded and unrounded. The reasons behind these different values are not clear. The available acoustic evidence in section 2.4.6 shows the value of $a$ and $a$ : to be low and back, at least for the 60s data; the 80s data is less clear.

### 2.7.6 Vowel / Glide sequences and Diphthongs

McConnel (1945 pp. 360 - 362) describes Wik-Mungkan has having the following diphthongs; ei, ai, au, oi, ui, ,oэ and uө. Again, she has been influenced by the analysis of Arrernte by Strehlow (1942 pp. 264-265), linking each diphthong to the corresponding one in Arrernte. Following is a brief discussion of each of these.

The diphthong ei is described as replacing the long vowel $e$ : before a vowel and before a consonant if first preceded by w i.e. in the sequence weiC. It is not clear what she means by 'replacing'. She provides three examples; firstly peiya 'jumps' which in the corpus is peya, i.e. a short e followed by the glide $y$, neither with a long e: as e:y nor a diphthong plus glide eiy. As discussed in section 2.4.7, the combination ey is realised as [ei] in the corpus and never as [eij]. Her second example is weintanakama 'around' which in this corpus is rendered as weentanakam(a). Her third example is similar in that she cites weipa 'sleeps' against the modern weep(a) That is, in both cases the diphthong proposed by McConnel is now considered a long vowel $[\varepsilon$ :]. Given that [e] and [i] are both high front vowels, the acoustic difference between ei and $\varepsilon$ : is minimal and without instrumentation may have been difficult for McConnel to distinguish. McConnel (1945 p. 361) also notes the diphthong ei replacing final a in chants, exclamations, questions and turns of speech e.g. ngalei! 'let's be off, you and I!' in place of ngala. The corpus does not contain any example of this., possibly due to the lack of conversational speech in the corpus.

The diphthong ai is described by McConnel as only occurring in medial position. In
her examples ai corresponds in the corpus to either a (tainty ${ }^{19}$ ala, now tanchal(a) 'Milkwood Tree' and ngaiya, now ngay 'l'), a long e: (wainty ${ }^{19}$ a now weech ${ }^{20}$ 'sick') or have no equivalent (iyaiya now iiyan 'you plural go'). As described in section 2.4.7, the diphthong ai is only found in the corpus as the realisation of ay, which does not match McConnel's description of aiy.

The diphthong au described by McConnel is only found in the corpus as [av]. McConnel's examples, perhaps not coincidentally, mostly have the diphthong au preceding $w$, as in auwa, now aw(a) 'totem place'. The exception to au preceding w is described by McConnel as very specific; it replaces a if a person is shouting to someone at a distance. The corpus contains no such example.

The diphthong oi described by McConnel has varying correspondence in the corpus; as oy in ngoyngk(a) (in practical orthography) (ngoingka for McConnel) 'shade'; as oo in e.g. poonchal(a) (McConnel pointy ${ }^{19}$ ala) 'smell'; as uu in e.g. kuuy (koiya) 'string' or does not exist in the corpus as in intaloi! 'what next!'. Regrettably, none of the examples are found in the corpus of recordings, only in text. There is thus no acoustic evidence which can be adduced for further comment.

The diphthong ui is described by McConnel as sometimes replacing oi (again, what she means by 'replacing' is unclear), sometimes reduced to wi (between consonants) or reduced to uy (before a vowel). The one example of ui replacing oi is in koiya 'string' discussed in the previous paragraph. Other examples are difficult to compare with the corpus due to limited recorded evidence and quite different orthography, as in firstly kwimpi (McConnel) and current kuympayng 'kangaroo', the latter found only in the 80 s data and realised as [ $k^{\text {h}} \mathrm{vlmp}^{\mathrm{h}} \mathrm{e}$ ] ] (732.057.795.35021). Secondly are McConnel kuinta, later koonth 'bamboo' (no recording). Finally, McConnel pwi:pang and current kuypak or possibly kuuymungk 'Bream'. These last are only found in the
 Thus it seems that the diphthong ui described by McConnel is later realised as as ui or uy in the modern orthography.

[^6]The final diphthong is described by McConnel as $u ə$ or oə with only example; the exclamation loəp, the act of slipping involuntarily. There is no corresponding word in the corpus and no such diphthong has been found in the corpus.

In summary, it seems that McConnel (1945) mostly considered what are analysed here as diphthongs to be diphthong - glide sequences. The corpus does not support these analyses.

Moving from McConnel (1945) to Kilham et al (1986) and its precursor Kilham (1977), the next relevant references, we find no mention of diphthongs. Given that Kilham was aware of McConnel (1945) (refer Kilham 1977 p. 5), it is curious that there is no mention of diphthongs, even by way of rebuttal except in a general statement that McConnel (1945) has 'several inaccuracies of transcription' (ibid p. 5). There is no elaboration of what she considered McConnel's inaccuracies to be.

Finally, Kuntz (1989 pp. 24-25) in a short section describes the two sets of vowel glide sequences as per section 2.4.7 i.e. $\mathrm{V} y$ and $\mathrm{V} w$, stating that they can be analysed as vowel - glide or vowel - vowel sequences, describing both as diphthongs. She favours the former analysis on syllabic grounds; the glides fill a slot which is normally filled with a consonant. Syllable structure is discussed in section 2.5.1. Kuntz (1989 p. 25) also rejects McConnel's structures of diphthong - glide discussed above e.g. 'l' is ngaya, not the McConnel ngaiya. Kuntz cites her spectographic analysis for this; ay is the 'normal' vowel length. Thus Kuntz (1989) largely agrees with the analysis in this thesis.

The 80s data in the corpus in the Johnson / Kuntz data includes the above variations with no additional realisations of vowel-glide combinations. In the Butcher / Stoakes data all vowel - glide sequences are analysed as diphthongs. This aligns with the description of the 60s data in section 2.4.7.

In summary, the vowel - glide sequences $\vee y$ and $V w$ have been variously described in the Wik-Mungkan literature as simply vowel + glide (Kilham 1977 and Kilham et al 1986), as diphthongs (Kuntz 1989 and Butcher / Stoakes 1991) and as diphthong -
glide (McConnel 1945). The current analysis as diphthong in section 2.4.7 (with minor other variations) aligns most closely with Kuntz (1989) and Butcher / Stoakes (1991).

### 2.7.7 Phonotactics

### 2.7.7.1 Syllable Structure

McConnel (1945) does not address syllable structure.

Sayers (1977) is a description of what she terms 'contrastive syllables' in WikMungkan. In this sense she is applying the etic / emic distinction introduced by Pike e.g. Pike (1967) to the syllable structure. That is, creating a two-level hierarchy of syllable types where one level corresponds to the emic and the other to the etic. For example, she describes CVC structure as a pattern including CVC, CVCC, CVVC etc. She uses this concept to identify three categories of syllables; independent, defined as being able to be pronounced in isolation; dependent being the reverse and an intermediate 'inter-dependent' category. The independent category is described as having obligatory onset and coda. Following is a brief critique of these concepts.

The examples of the independent category are all, by definition, monosyllabic words such as pam 'MAN'. The examples she gives of inter-dependent category have a word-medial consonant, described as an 'interlude' consonant such as $t$ in mutich 'sting ray'. The analysis is that the $t$ acts as simultaneously being the coda for the first syllable mut and the onset of a second syllable, tich. Both vowels are stressed; primary and secondary respectively. Syllables in the dependent category are unstressed with optional onset and coda. This leads her to analyse koman 'girl' as kom. $a n^{22}$. By comparison the word yokalang 'scrub turkey' is analysed (sayers 1977a p. 138) as yok.a.lang ${ }^{23}$. The Sayers (1977) approach is not an analysis that has been adopted in any identified source and also not for this thesis.

[^7]Putting aside the categorisation, the constraints on onsets and codas noted in section 2.5.2 are also noted by Sayers (1977). A difference in syllabification noted between Sayers (1977 p. 136) and this thesis is that monosyllabic words have obligatory onsets in the former and not in this thesis (see section 2.5.1).

Kilham (1977) has no mention of syllable structure while Kilham et al (1986 p. 410) simply notes that Wik-Mungkan is characterised by closed syllables, with the pattern $\mathrm{CV}(:) \mathrm{C}(\mathrm{C})(\mathrm{C})$, a subset of those in Table 8. The word ja: 'yes' is cited as an exception. This is at variance with the analysis in section 2.5 .1 where syllable types with no onset and double consonant onsets are noted. There is no discussion of permissible onsets, nuclei or codas, however the pattern of $\mathrm{CV}(:) \mathrm{C}(\mathrm{C})(\mathrm{C})$ implicitly excludes syllables with no onsets which is at variance with the analysis in section 2.5.1.2.

Kuntz (1989 pp. 6-7) describes essentially the same structures as identified in Table 8 in section 2.5.1.2 but omits the CCC codas and CC onsets. The discussion of permissible onsets, codas and consonant clusters (Kuntz 1989 pp. 9-18) is in line with that described above in section 2.5.2.

### 2.7.8 Stress

McConnel (1945 p. 26) stated various different stress patterns, depending on word length and morphology; two syllable words have initial stress, multi-syllable words usually have initial stress with weaker stress on the third syllable. She describes the exceptions noted in section 2.6.1 such as verbal suffixes, reduplication and words with atypical stress patterns.

Sayers (1976b) describes the variations she found in stress and pitch across various levels; firstly morphemes, defined as simple stems, compound stems and suffixes; secondly words, defined as stems plus relevant suffixes and clitics; thirdly clauses (undefined) and lastly sentences. Sentences are described based on Longacre (1970) who proposed a cross-linguistic structure for all sentence types. Appendix 1 is a copy of his Figure 1 (ibid p. 784). This same structure is used in Sayers (1976c)
which analyses 26 sentence types based on the Longacre (1970) typology.

Sayers' analyses of stress at the morpheme and word levels align with the stress patterns found in section 2.6.1 and that of McConnel (1945 p. 26).

The analysis of clause level stress and sentence level stress in Sayers (1976b, 1976c) has not been repeated for this thesis, for the following reasons. Firstly, it is not clear how useful this information is in understanding Wik-Mungkan; the Longacre (1970) typology has not been widely adopted and does not seem to add insights into clause structures not found in sections 11, 12 and 13 of this thesis on simple clauses, constructions and complex clauses. Secondly, it is uncertain how representative the data is. Sayers identifies many variations based on the Longacre (1970) typology but does not state how many tokens of each variation were found nor the number of speakers involved. Without this information, it is difficult to be sure how representative the examples are. An analysis of stress across clause or sentence types comparable to hers has not been attempted for this thesis both because of the concerns above and the amount of data available in the corpus.

Kuntz (1989 pp. 26-27) did not have stress as a focus, mostly briefly summarising previous authors. The only exception is an observation that the phonemic stress difference between first and second person past and future suffixes (see section 2.6.1) was not found in her data. She did note that vowel lengths appeared to differ between future (longer) and past (shorter). When contacted, Kuntz (pc) was unable to elucidate further.

## 3 Word Classes

This chapter provides a brief overview of the word classes found in Wik-Mungkan and the morphosyntactic criteria used for assigning word classes. Wik-Mungkan has the following broad classes of words; nominals (section 3.1), demonstratives (3.2), verbs (3.3), adverbs (3.4) and a heterogeneous group of particles (3.5). Attaching to multiple word classes are case clitics and various suffixes / clitics which are also discussed in section 3.6.

### 3.1 Nominals

The nominal class consists of nouns (generic and specific), pronouns, adjectives, ignoratives and quantifiers. The primary morphosyntactic feature of this class is that they are the head of a structure which functions as a referring expression and they inflect for case. Adverbs also can inflect for some cases, to be discussed in section 3.4 but can be distinguished from nouns on other criteria. As discussed below, adjectives form a separate sub-class but are included here as they can substitute for the nouns they modify in cases of null anaphor. As the primary grammatical relations are flagged at the NP level, discussion of case is deferred to chapter 4.1.

Some demonstratives are nominal while others are adverbial. Due to their shared morphology, these will be described in section 3.2 and in detail in chapter 6.

Reduplication occurs for all nominal sub-classes, with varying restrictions and meanings, to be discussed in the subsequent sections.

### 3.1.1 Nouns

There are two broad types of noun; generic and specific. The generic generally precede a specific noun and give the specific nouns a classification. The most common examples of the generic are minh 'meat food' and may 'vegetable food' which classify the following word as edible accordingly, e.g. minh achamp 'MEAT
emu' and may wathiy 'VEG yam'. The specific words are hyponyms of the generic.

Not all specific nouns are found with a generic classifier e.g. kunttow 'stone, rock'. A few specific nouns can be found with different generic nouns to create distinct meanings e.g. kam 'juice' combines with may and minh to create may kam 'VEG juice' (fruit juice) and minh kam 'MEAT juice' (meat juice, gravy, fish or meat soup).

### 3.1.1.1 Generics

The term 'generic' is used here for words which act as classifiers occupying a distinct slot in the NP. For example, the word kampan 'relative' is used to denote all relatives of an individual. It is not used as a classifier for individual kin e.g. 'father' is piip, not *kampan piip 'relative father'. Similarly, nga' 'fish' semantically includes all species of fish but is itself a specific noun, classified by the generic minh 'MEAT' i.e minh nga' 'MEAT fish'. Individual fish species are also classified by minh 'MEAT' e.g. minh wuungkam 'MEAT barramundi'. The sub-class of generic nouns is closed and table 15 lists those identifiable in the corpus.

| Word | Gloss | Denotational Range |
| :--- | :--- | :--- |
| aak | PLACE | Locations |
| aak | TIME | Times of day, night, seasons |
| koch | LIZARD | Any small lizard such as geckos |
| may | VEG | All edible plants |
| minh | MEAT | All edible animals, birds and fish |
| ngak | WATER | Water and its various states |
| pam | MAN | Adult male humans. |
| panch | BIRD | All non-edible birds. Edible birds are classified by <br> minh 'MEAT' |
| puk | SHILD | Immature humans |
| thuuk | GRASS | All grasses |
| wak | WOMAN | Adult female humans |
| wanch | WORD | Human speech, words, language |
| wik | TREE | Any tree species or part thereof, especially stick. |
| yuk |  |  |

Table 15: List of generic nouns
Generic nouns can appear without a specific noun when they are being used without a specific reference, such as in (3), where the speaker believed in error that an animal was a snake thuuk=ant-a 'snake-DAT-a' of unknown species.
(3) Sayers 1976a p. 128 ex 6

$$
\begin{array}{lllll}
\text { ngay } & \text { ke' } & \text { thuuk=ant-a } & \text { puth } & \text { ya'a } \\
\text { 1SG(NOM) } & \text { similar.to } & \text { snake=DAT-a } & \text { but } & \text { NO } \\
\text { 'I thought it was a snake, but it wasn't' } & &
\end{array}
$$

Anaphoric reference is common in Wik-Mungkan and this can be seen when a generic noun is used without the specific noun, as in (4) where the context is of a man hunting for goose eggs, so the eggs are anaphoric with minh 'MEAT' understood to denote the eggs.
(4) Sayers 1982a p. 173 ex 26

| minh $\quad$ yot | yipam | maay-ow |
| :--- | :---: | :--- |
| MEAT lots | so.that | pick.up-3SG.FUT |
| 'he will thus pick up lots of eggs' |  |  |

No reduplicated generic nouns are found in the corpus.

### 3.1.1.2 Specifics

Specific nouns follow the generic where it is present. They constitute the largest subclass with neologisms created by compounding (section 3.7), borrowing and from non-finite verbs (section 3.3).

As discussed above, there are specifics which are never preceded by a generic. For a given generic, some specifics in the corpus are always preceded by a generic but others are not. For example manch 'death adder' is always found preceded by the generic thuuk 'snake' (admittedly only five occurrences) but thaypan 'taipan' is mostly found without the generic thuuk 'snake'. Similarly, nhepan 'egg' appears with and without the preceding generic minh 'MEAT'. There are insufficient examples to formulate what rules, if any, apply to this optionality.

There are also specific nouns which have different meanings when following different generic nouns and hence cannot be glossed separately. Two examples are mantamp and manthalam. When preceded by minh 'MEAT' the former becomes minh mantamp 'MEAT Australian Bustard' and when preceded by may 'VEG' becomes may mantamp 'VEG emu berries'. The latter forms yuk manthalam 'TREE white tree' and may manthalam 'VEG bush honey'. This phenomenon has been found in other Australian languages e.g. Kuuk Thaayorre (Gaby 2017 p. 197).

### 3.1.2 Personal Pronouns

Personal pronouns as a class consist of cardinal, reflexive, possessive, relationship, emphatic and vocative pronouns. The class can be established by shared morphology and indexicality. This section provides an overview of this class.

Subject number and person are also referenced in a portmanteau suffix on verbs, which also encodes tense or mood. Although there are some morphological similarities with cardinal pronouns, they are considered part of verbal morphology
and are dealt with in section 8.2. Similarly, there are verbal suffixes for direct objects and adjuncts ${ }^{24}$ which are restricted to first and third person. These are also considered under verbal morphology in sections 8.3 and 8.4 respectively.

### 3.1.2.1 Cardinal Pronouns

Cardinal pronouns distinguish first, second and third person, with an inclusive / exclusive distinction in first person. There are three number categories; singular, dual and plural. Pronominal case for core grammatical relations is nominative / accusative, with the latter marked by an accusative suffix -ang '-ACC' for all forms bar the first and third person singular. The first person has an alternative form, nganyang '1SG-ACC' while the third person singular has a unique form nun '3SG.ACC' to which optionally also attaches the accusative suffix to form nun-ang which for brevity will be glossed as'3SG-ACC'. These forms are summarised in Table 16, based on Kilham et al (1986 figure 2 p. 403)

| Person | Singular | Dual | Plural |
| :--- | :---: | :---: | :---: |
| 1 Incl |  | ngal | ngamp |
| Excl | ngay/ngany | ngan | ngan |
| 2 | nint | nip | niiy |
| 3 | nil/nun | pul | than |

Table 16: Personal pronoun stems ${ }^{25}$
There is also a set of dative pronominal forms. For singular number, these are special forms, optionally with a dative suffix -ar 'DAT' unique to pronouns. Dual and plural dative pronouns are formed from the nominative forms with the addition of the dative suffix -ant 'DAT' or -ar 'DAT' (second person dual only) with some modifications for phonological reasons. These dative pronouns are the base used for other cases, admitting some variations, as seen below in the summary Table 17.

[^8]| Person | Singular | Dual | Plural |
| :--- | :---: | :---: | :---: |
| 1 Incl |  | ngalant | ngampar |
| Excl | ngath(ar) | ngant(t) | ngant(t) |
| 2 | nungk(ar) | nipar | niiyant |
| 3 | nung(ant) | pulant | thant(t) |

Table 17: Dative pronouns ${ }^{26}$
The cardinal pronouns, their syntax and functions are detailed in section 5.1.

### 3.1.2.2 Reflexive / Reciprocal Pronouns

Reflexive / reciprocal pronouns express either that the subject participant is affected by its own actions or that two actors act on each other symmetrically. The same forms are found in reflexive and reciprocal constructions (see section 12.5). To align with the Wik-Mungkan literature and simplicity they will be referred to as reflexive pronouns. They are formed in two ways, dependent on grammatical relations. When the referent is both subject and object, the reflexive is formed by adding the case affixes =am 'GEN' and -ang 'ACC' to the short dative stems. This can be seen in (5) where the subject is the demonstrative $a /=a n g a m a n ~ ' D I S T=E R G . S A M E ' ~(t h a t ~ s a m e ~$ one) and the object is the reflexive pronoun nung=am-ang '3SG=GEN-ACC' (himself). The case clitic =am is interpreted as genitive rather than the homophonous ablative case primarily on distributional grounds. The ablative is an adjunct case and the accusative is direct object case and does not elsewhere combine combine with the ablative.
(5) Kilham 1977 p. 89 ex 212

| al=angaman | tha'tha'-ow | nung=am-ang |
| :--- | :--- | :--- |
| DIST=ERG.SAME | push-RDP-3SG.FUT | 3SG.DAT=GEN-ACC |
| 'that same one pushed himself' |  |  |

The adjunct reflexive pronouns are formed by adding the allative =ak 'ALL' and ablative $=a m^{\prime}=A B L$ ' case markers to the full dative form, as in (6) where the subject

26 Hale (1960b o 1) describes these as possessive pronouns,
nil '3SG(NOM)' is telling others (unnamed) about himself. The adjunct reflexive pronoun is formed from the third singular dative nung=ant plus the allative and ablative cases markers. The clitic =am is interpreted here as the ablative and not the homophonous genitive on syntactic grounds; the genitive always attaches to the dative directly.
(6) Sayers 1976c ex 30

| nil | nungantakam | waa'- $\varnothing$ |
| :--- | :--- | :--- |
| 3SG(NOM) | 3SG=DAT=ALL=ABL | tell-3SG.PST |
| 'he told about himself' |  |  |

Adjunct reflexive pronouns also have other functions, including emphasis, possession and in some instances, as direct objects. Reflexive pronouns are discussed in more detail in section 5.1.3.

### 3.1.2.3 Possessive Pronouns

Possessive pronouns are formed by encliticising the genitive =am 'GEN' to the dative form. Distributionally they differ from other pronouns by being adnominal. They also have a distinct slot in the NP structure, to be discussed in section 7.1. This slot means that they can also be marked for any of the nominal cases when in NP final position. Possessive pronouns will be further discussed in section 5.1.4.

Possession is also expressed by part/whole apposition with pronouns in relation to body parts (section 7.2.1), special terms for kin relations (section 7.2.2) and a particular use of dative pronouns (section 5.1.4).

### 3.1.2.4 Relationship Pronouns

Relationship pronouns are used to link groups of people together to demonstrate a particular relationship between them. They are formed by taking a cardinal pronoun in nominative, accusative or dative form and suffixing an abbreviated form of the dative pronoun denoting to whom they are related. The cardinal pronoun always agrees with the person and number of the referent, the suffixes are used to encode a relationship with another person or persons. For example, in nil-ar '3SG(NOM)-

1SG.DAT' the referent is 3 SG and the related party is the speaker. The sense then is 'he/she, who is my relative'. Example (7) contains two relationship pronouns; ngay-nung=ant=iy-a '1SG-3SG=DAT=TOP-a' (I, her relation) and nil-ar '3SG(NOM)1SG.DAT' (she, my relation).
(7) Sayers 1976c p. 55 ex 74

| ngay-nung=ant=iy-a | keny=angk | wun-ang |
| :--- | :--- | :--- |
| 1SG(NOM)-3SG=DAT=TOP-a | up=LOC | be-1SG.PST |
| nil-ar | pek=angk |  |
| 3SG(NOM)-DAT $\quad$ down=LOC |  |  |
| 'I (her relation) slept on the top (bunk) and she (my relation) below' |  |  |

Section 5.1.5 describes the full set of relationship pronouns.

### 3.1.2.5 Emphatic and Reduplicated Pronouns

Personal pronouns can be reduplicated and/or have the emphatic clitic =am '-EMPH' attached (as per the usual nominal morphology described in section 3.6.4). For example, nil '3SG' forms nil-nil '3SG-RDP', nil=am '3SG=EMPH' and nil-nil=am '3SGRDP=EMPH'. The interaction between these processes creates different meanings. This will be discussed in detail in section 5.1.6. Note that differentiating the emphatic from the homophonous ablative and possessive requires case by case analysis.

### 3.1.2.6 Vocative Pronouns

Vocative pronouns are used to directly address one, two or more addressees. They are formed from the second person dual and plural pronouns and case endings with a three way distance distinction; proximal, medial and distal. They are described in detail in section 5.1.7.

### 3.1.3 Adjectives

Adjectives can be identified as a class by syntax and morphology. Firstly, adjectives typically follow the noun they modify, as in (8) where the adjective ongk=an 'long=DEF' modifies the noun yuk 'thing' and (9) where the noun kek 'spear' is modified by the adjective pith 'four=pronged'. Adjectives can carry the case marking
for the NP in question when NP final, as will be discussed in chapter 4.1.

```
(8) Sayers 1982a p. 174 ex 34
\begin{tabular}{lll} 
in-a & yuk & ongk=an \\
PRX-a & thing & long(ABS \()=D E F\)
\end{tabular}
than=iy waa'-antan thuul-a
3PL=TOP call-3PL.PRS thuul(ABS)-a
'that (this) long thing they call "thuul"'
(9) Sayers 1982a p. 174 ex 43
\begin{tabular}{llll} 
nil-a & kek & pith & maay- \(\varnothing\) \\
3SG(NOM)-a & spear & four.pronged(ABS) & pick.up-3SG.PST
\end{tabular}
```

A feature of adjectives as a sub-class is that they can be used to derive transitive and intransitive verb stems by suffixing -ath 'TR' or -am 'ITR' respectively. For example (Kilham et al 1986 p. 23), uth 'dead' becomes uth-ath 'dead-TR' (kill) and uth-am 'dead-ITR' (die).

The transitiviser and intransitiviser suffixes cannot be applied to nouns but -ath 'TR' can derive transitive verbs from intransitive. Both these suffixes are discussed further in sections 8.6 and 8.7.

In two instances it appears that an adverb is derived from an adjective by the suffix -am 'ADVZ', homophonous with the intransitive verbaliser, also the emphatic clitic and genitive and ablative cases. These two are the adverb min-am 'good-ADVZ' or 'well' from the adjective min good' and mich-am 'soft-ADVZ' or 'softly' from mich 'soft'. There are other adverbs which end in -am but with no corresponding adjective e.g. yuurpam 'directly' is found but not *yuurp 'direct'. Thus -am 'ADVZ' seems of limited application.

Adjectives can occur alone when the noun they are modifying is anaphoric, as in (10), where the referent who is described as meech 'hungry' is implied as the discourse context is about him. The topic marker =iy 'TOP' is discussed in section 3.6.2.
(10) Sayers 1982a p. 184 ex 161

| meech=iy | puth | nguch-an | nath=an=iy |
| :--- | :--- | :--- | :--- |
| hungry=TOP | CONJ | go.early-3SG.PRS | away=DEF=TOP |
| 'he was hungry because he went (sic) early and far away' |  |  |  |

Kilham et al (1986 p. 403) also state that an adjective can precede the noun it is modifying for emphasis, however there are no examples of this in the corpus.

Another distinguishing feature of adjectives as a class is that they can be derived from nouns by the suffix -athiy, which creates a sense of 'abundance', e.g. kemp 'body' derives kemp-athiy 'lots of body', or 'fat'. Kilham et al (1986 p. 402) also state that -amiy has the same effect, but is restricted to 'meteorological features' and give the example kep 'moon' deriving kepamiy 'moonlight'. A search of the lexicon and corpus failed to find any similar examples so the status of this suffix as a standard morphological feature is questionable.

For adjectives, reduplication suggests intensity such as ongk 'long' which reduplicates to ongk-ongk 'long-RDP' (very long) (e.g. Kilham et al 1986 p. 38) or way 'bad' becomes way-way 'bad-RDP' (very bad) (e.g. Sayers 1982a p. 209 ex 34).

### 3.1.4 Ignoratives

As per Wierzbicka (1977 1980), the main function of ignoratives is to express a lack of knowledge on the part of speaker. This can be done to mark a referent as indefinite (something, somewhere etc.) or to request information form the hearer (what is that?). The ignoratives in Wik-Mungkan are distinguished by the category of information they express ignorance about. Thus ngeen 'what' corresponds to the semantic category of THING, while wee' 'who' corresponds to the category PERSON. There are three inter-related lexemes wanttak 'why/how' which corresponds to the categories 'REASON/MANNER' and wanttin 'where' and wantting 'where in' which correspond to the category PLACE. These three lexemes appear to be case marked forms of a stem wantt- (cases being allative, ablative and locative). Hale (1976a p. 59) noted want as meaning 'where'. This was also noted by Sayers (1982a p. 34), who used the form want-, not wantt-, as being 'the base form for locative reference'. She also made the distinction that wanttin 'where' referred to as being outside
'something' while wantting 'where in' referred to inside 'something'. With no examples of wantting 'where in' available, it is impossible to verify or otherwise this assertion. The stem does not appear in an uninflected form. Note the use of geminate $t t$ as opposed to singleton $t$ is an example of the orthographic convention mentioned in section 2.4.5 as signalling unusual stress, in these cases stress on the second syllable, not the first. This cannot be verified in the corpus or the WM literature.

Ignoratives are included in the nominal class, with one exception to be discussed in section 3.1.4.1, because they can inflect for case as in (11) where wee'antam (who=GEN) 'whose' is placed adnominally. They can also be arguments of the verb in a clause, as in (12), where ngeen 'what' is the subject, marked with ergative case, to the transitive verb thayan-ath-Ø-any-a (strong-TR-3SG.PST-1Sg.ACC-a) 'it (something) held me back'.
(11) Kilham et al 1986 p. 5
in aak pemp wee'=ant=am-a

PRX(ABS) PLACE track who=DAT=GEN-a 'whose tracks are these?'
(12) Kilham et al 1986 p. 212
ngeen=ang nath thayan-ath- $\varnothing$-any-a
what=ERG maybe strong-TR-3SG.PST-1SG.ACC-a
'something held me back'
They can also be indirect objects to the verb as in (13) where wanttak 'why' is indirect object to the verb peey-angan 'you are crying'. They can also function as predicates, as in (14), where wanttin-a 'where-a' is the predicate to the dative pam ngathar=am 'my husband'.
(13) Kilham et al 1986 p. 154

| ninthan-pathalang | wanttak | iiy-an? |
| :--- | :--- | :--- |
| sulky | why | go-2SG.FUT |

'why are you stubbornly continuing to do this?' (why do you go sulkily?)
(14) Kilham et al 1986 p. 13
pam ngathar=am wanttin-a?

MAN 1SG.DAT=GEN where-a?
'where is my husband?'
wanttin-a?

Ignoratives in Wik-Mungkan perform the following functions; interrogative pronoun,
indefinite pronoun, relative pronoun and free choice pronoun.

The full range of meanings, morphosyntax and functions of ignoratives are discussed in further detail in section 5.2.

### 3.1.4.1 yam 'somewhere'

Another lexeme used to express ignorance of PLACE is yam 'somewhere'. This is included here as it reflects a lack of knowledge on the part of the speaker but differs from the above ignoratives in that it is adverbial. This can be seen by distribution, as in (15) where it precedes the intransitive verb iiy- $\varnothing$ 'go-3SG.PST' and the adverb kaaw 'east'. This is the normal distribution for adverbs in Wik-Mungkan (directly preceding the verb; see section 3.4) and yam 'somewhere' is not an argument of the verb, as there is no direct object (the verb is intransitive) and the subject is '3SG', encoded in the verb agreement. Similarly, in (16) the distribution is to precede the adverb nath 'maybe' and the verb maay-ow 'he might', with the arguments of the verb being the subject 'he', encoded in the verb agreement and kek 'spear' being the object (absolutive zero-marked).


The alternative to the adverbial interpretation is that yam 'somewhere' is a nominal as adjunct. This is not preferred as adjunct nominals in Wik-Mungkan are identified by various case markings and yam 'somewhere' is mostly found unmarked. The only case found attached to yam 'somewhere' is the locative =ang. It is not unusual for the locative case to attach to adverbs in Wik-Mungkan, albeit the usual form is =angk 'LOC' (see section 3.4). There are six examples of yamang in the corpus, and five of these include the word 'close' or similar in the free translation, so it appears that the locative case is used to create the meaning 'somewhere close'. The distribution also
follows the normal Wik-Mungkan adverbial distribution of immediately preceding the verb or another adverb, which in turn precedes the verb. Example (17) is typical with yam=ang-a 'somewhere=LOC' (somewhere close) directly preceding the verb thuuch- $\varnothing$ 'he moved slowly'.
(17) Kilham 1977 p. 258 ex 36

| yam=ang-a | thuuch- $\varnothing$ |
| :--- | :--- |
| somewhere=LOC-a | move.slowly-3SG.PST |
| 'he crawled around somewhere near (the man)' |  |

There are homonymous cases to the locative, namely the ergative, instrumental, comitative and vocative. The locative seems to be the closest semantic fit in this situation.

Unlike the nominal ignoratives. yam 'somewhere' only functions adverbially to encode PLACE. The morphology and function of yam 'somewhere' will be discussed in section 5.2.5.

### 3.1.5 Quantifiers

There is a small class of quantifiers; thonam 'one', kucham 'two', ko'alam 'three, a few'; yot 'many', wiy 'some'. They share some characteristics of adjectives in that the are adnominal and modify the word they follow. When at the end of a NP they take the applicable case marking. They distinguish from adjectives in that they occupy a slot in the NP which follows other adjectives and any adverbs modifying those adjectives and precede any demonstratives (see Chapter 7 for more detail). The class is not closed, to the extent that it is open to include English borrowing. There are limited examples in the corpus of this borrowing but this probably reflects the purpose of the original data collection, which was to document the Wik-Mungkan language. Example (18) shows a typical use of a quantifier, in this case thonam 'one', modifying the NP puk many 'CHILD small' and carrying the ergative case marking (=ang '=ERG') of the entire NP.
(18) Kilham et al 1986 p. 215

| puk many thonam=ang | $k u^{\prime}$ | kulliy | manaath- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| CHILD small one=ERG | dog | very.wild | tease-3SG.PST |
| 'a child teased a very wild dog' |  |  |  |

Detailed discussion of quantifiers is found in section 4.3.

### 3.2 Demonstratives

Demonstratives are not a syntactic word class however it is convenient to review them separately. As is attested cross-linguistically (to be discussed in chapter 6), similar morphological forms exist with similar meaning across the nominal (including adnominal) and adverb classes. Other syntactic categories cited in the literature as predicative (verbal and identificational) are not attested in Wik-Mungkan. Due to their complexity, further discussion is deferred to chapter 6.

### 3.3 Verbs

Verbs can be identified by their morphology. All verbs inflect obligatorily for a portmanteau suffix indicating person and number of the subject and either indicative mood plus tense (past, present or future) or subjunctive mood with unspecified tense. Optionally they also inflect for direct object (accusative) and adjunct cases (dative, ablative or comitative). The verbal template is shown in Table 18. The content is discussed in detail in chapter 8.

| Stem (RDP) |  | Derivation | Inflection / Argument | Argument | Argument |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stem | Derivation |  |  |  |  |
| Stem | -VERBZ OR -TR | -RCP | -STM | -Acc or -Dat | -Other case |
| stem adjective or verb | derives transitive or intransitive verb from adjective or from English loan word. OR increases valency by one argument | creates a reciprocal stem | portmanteau suffix denotes subject and (tense or mood) | direct object or adjunct -dative | other <br> cases; <br> Allative, <br> Ablative, <br> Comitative |
| Obligatory | Obligatory if first slot is adjective or English loan, otherwise optional | Optional | Obligatory | Optional | Optional but if present, prior slot must be dative |

## Table 18: Wik-Mungkan verbal template

The stem is either verbal or non-verbal; the latter requires one of three possible verbalising suffixes. The valence of an existing intransitive stem can be increased by one by the use of the transitivising suffix; there is no corresponding detransitivising suffix. Verbs formed from a non-verbal stem are either transitive or intransitive; they take the transitivising suffix to from a transitive verb and can be optionally reduplicated, partly or fully. The reciprocal suffix does not change the valence of the verb but, as the name suggests, creates the sense that subject and direct object are acting on each other.

The obligatory STM (Subject / Tense / Mood) slot is a portmanteau suffix which denotes the number and person of the subject as well either the tense (present, past or future) or the subjunctive mood.

To illustrate, in (19), the intransitive stem is path 'blaze', the transitiviser -ath 'TR' creates a transitive stem and the STM suffix - $\varnothing$ '3SG.PST' combines the subject and
the tense.
(19) Sayers 1982 p. 154 ex 56

```
thum path-ath-Ø
fire blaze-TR-3SG.PST
'(she) lit a fire'
```

In (20) the stem is the adjective thayan 'strong' from which is derived an intransitive stem by the suffix -am 'INTR'. The STM suffix is -an '3SG.PRS' meaning the third person in the present tense. Note that the free translation, including brackets, is as per the original and is very free; the words 'that toddler', 'still' and 'yet' do not appear in the Wik-Mungkan.

```
(20) Kilham et al }1986\mathrm{ p. }21
    ochangan ke'am thayan-am-an
    joint NEG strong-INTR-3SG.PRS
    'that toddler is still unsteady on his feet (knees not firm yet)'
```

In (21) the transitive stem is wak 'be.alike', followed by the reciprocal suffix -uw 'RCP' and the STM pul 'those two' with the past tense. The discrepancy between the past tense on the verb and the present in the translation is not explained.
(21) Kilham et al 1986 p. 240

| pul=am | wak-uw-pul |
| :--- | :--- |
| 3DU=EMPH | be.alike-RCP-3DU.PST |
| 'those two are just like each other' |  |

The optional object slot is a bound pronoun which denotes either the person and number of the direct object or a dative bound pronoun, restricted to first and third person. The latter fulfils two functions; encoding a dative referent and also is an obligatory marker if the 'other case' slot is filled. That is, the final slot is only filled when the object slot is filled by a dative. The corpus has few examples of either use of the dative. An example of the dative alone is (22), where the intransitive stem is mo' 'run', the STM is -in '3PL.PST' and the dative -ar '1SG.DAT' is the first person singular.
(22) Godfrey 1970 p. 752
mo'-in-ar
run-3PL.PST-1SG.DAT
'they ran to me'

Valency is indicated by the case markers on NP arguments or the filling of the accusative slot in the template. Subject NPs, other than pronouns, are marked ergative for transitive verbs and absolutive for intransitive verbs. Subject pronouns are in nominative case for both transitive and intransitive verbs. The same STM suffixes are used to denote the subject for both transitive and intransitive verbs. Direct objects are similarly in absolutive case for NPs, accusative for pronouns and/or marked by the accusative slot.

The majority of verbs are intransitive or transitive. There are also seven verbs marked 'ditransitive' in the lexicon. Of these, six are compounds of aath 'to give', while the last is a specific use of waa' 'tell' which is normally mono-transitive but has a special usage where to 'name' a person or thing, as in (23). Given the paucity of examples, it seems reasonable to describe ditransitive verbs as a very small, probably closed, class.
(23) Sayers 1982a p. 172 ex 19
ngeenwiy anman waa'-antan
sacred.one that.one name-3PL.PRS
'they call him the sacred one (as name avoidance)'
Arguments and adjuncts can be either NPs or marked by suffixes on the verb as described in Table 18 or both.

Verbal morphology is discussed in greater depth in chapter 8 , with supporting examples. The role of the case system in identifying arguments and adjuncts is discussed in greater detail on section 4.1.

The citation form for verbs in the lexicon is homophonous with the third person singular, i.e. with the suffix -an. This is an expressed preference by the WikMungkan community involved in developing the lexicon. In order to properly represent the grammatical rules in Flex, the citation forms have been changed to the stem only.

Various authors, notably Kilham et al (1986 p. 408) have also posited -an as a nominaliser which derives a noun from a verb, as in paanth-an 'to sleep-nominaliser'
or 'sleep' (Sayers 1982a p. 209 ex 28). Kilham et al (1986 p. 408) state further that this is not a frequent occurrence and the only case markers which attach to the 'nominalised' verb are the ablative, allative and locative. This aligns with observations by Nordlinger $(2002,2006)$ regarding non-finite relative clauses, which will be dealt with in section 13.1.5. The citation form of the verb stem-an will therefore be glossed as stem-NF (non-finite). Further discussion is deferred to section 13.1.5.

As with nouns (see section 3.1.1), there is a set of generic nouns which can precede verbs and modify the sense. Body parts such as kon 'ear', mee' 'eye' are common, as in kon aath (ear give) 'remind' and mee' thee'an (eye throw) 'watch for'. Refer Kilham (1974a) for comprehensive lists of noun-verb as well as noun-noun and other combinations.

### 3.4 Adverbs

The class of adverbs modify verbs, adjectives and other adverbs but not nouns. Distributionally, they tend to precede a verb and follow an adjective, although neither of these distributions is universal. Morphologically, they do not take case endings, with three exceptions; the ablative $=a m$, allative $=a k$ and locative $=a n g k$ (applicable only to adverbs; =angk 'LOC' is not found attached to nominals). Not all adverbs have been found with these case markers, as will be discussed in chapter 10. Adverbs can in some circumstances take the definite marker =an, also to be discussed in chapter 10. Some directional adverbs can take an inflection only found on adverbs; -uw 'on'; see section 10.1.

### 3.4.1 Adverbs vs Adjectives

The morphosyntactic criteria for distinguishing adverbs and adjectives from each other are shown in sections 3.1.3 and 3.4 above. The lexicon as compiled by Kilham et al (1986) has 91 entries, including compounds, categorised as both adjective and adverb. Only 12 of these entries have more than one or two examples, many have none at all. This thesis does not agree that these entries are both, maintaining that they are, in fact, either one or the other. That is, the word classes of
adjective and adverb are distinct, with no overlaps. It is suggested that the entries in the lexicon classified as both adjective and adverb reflect uncertainty on the part of the compilers.

Firstly, where there are sufficient examples, the above morphosyntactic criteria can be shown to apply. That is, adjectives are adnominal, can derive verbs by the suffixes -ath 'TR' and -am 'ITR', can be derived from nouns by the suffix -athiy 'abundance' and carry the full range of case marking. Adverbs are almost invariably directly preceding the verb and inflect for a limited set of case markers; allative, ablative and locative, with a form of this last unique to adverbs.

For instance, the lexeme karkan 'hot', listed as both adjective and adverb, has 15 examples in the corpus, all immediately following the noun they modify, mostly not preceding the verb and some with nominal case marking, as in (24) where pung karkan=ang 'sun hot=LOC' is an indirect object NP to the verb, with nominal locative case marking at the end of the NP. The conclusion is that karkan 'hot' is an adjective. Similarly, all other (15) examples meet the criteria of adjective and not adverbs.
(24) Sayers 1976a p. 72 ex 4

| nyiin-anamp | pung | karkan=ang |
| :--- | :--- | :--- |
| sit-1INCL.PL.PRS | sun | hot=LOC | 'we sit in the hot sun'

Similarly, the word paththam 'really, very' has 27 examples in the corpus and all follow the morphosyntactic characteristics of adverbs, as in (25) where it precedes (and modifies) the verb wamp-Ø '3SG.PST'. Hence paththam 'really, very' is considered an adverb, and does not function as an adjective.
(25) Sayers 1976a p. 20 ex 20

| nil | paththam | wamp-Ø | punth-a-paam thamp=ang |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) really | come-3SG.PST | arm-a-palm | with=LOC |

Secondly, some of the 'dual' entries also host transitive and intransitive verbalisers, a feature of adjectives, not adverbs. An example is yaark 'apart' which forms transitive yaark-ath-an 'apart-TR-NF' (to separate) and intransitive yaark-am-an 'apart-ITR-NF'
(to spread out).

Lastly, in the copy of the lexicon provided by SIL for upload to Flex most of these 'dual' entries list the two classes separately, one as adverb and one as adjective. Examples are mostly only provided under one or other class. That is, if the adjectival sense has examples, the adverbial does not, and vice versa. For instance, the entry for manpan 'rotten' is described as an adjective and an adverb, but only the adjectival use is illustrated. This is suggestive that the compilers were unsure as to how to classify these words and hence left open the possibility that they could be both. Unlike this version, the Lexique Pro version and the printed version do not differentiate in the same way, with these entries marked as e.g. adj, adv followed by examples without asserting which examples are adjectival and which adverbial. Again, this is suggestive of uncertainty in the minds of the compilers as to which is which.

In support of this observation, there are examples of words labelled "adjective" and "adverb" where the available evidence is ambiguous. An example is (26) where the word nungapan 'still' could be regarded as adnominal to ma' 'HAND' and hence adjectival, at least syntactically. It could also be a separate constituent, predicated on the NP ma' 'HAND', also a normal syntactic function of adjectives. Alternatively, nungapan 'still' could be regarded as adverbial, as it directly precedes the verb. The verb pi'- $\varnothing$-a 'look.after-IMP-a' is transitive which takes an absolutive direct object. As the absolutive is null marked (see section 4.1) there is no way to decide if the direct object is ma' 'HAND(ABS)' with nungapan 'still' as adverb or an NP ma' nungapan 'HAND still(ABS)'. This is the only example in the corpus so the ambiguity cannot be resolved.

| (26) Kilham et al 1986 p. 156 |  |  |
| :--- | :--- | :--- |
| ma' | nungapan | pi'- $\varnothing$-a |
| HAND(ABS) | still | look.after-IMP-a |
| 'keep your hand still' |  |  |

Notwithstanding ambiguous examples such as (26), there are no pairs of examples which clearly show one of the 'dual' entries as definitely functioning as an adjective in one and an adverb in the other. The conclusion is thus that adjectives and adverbs
are distinct word classes, with no overlap.

### 3.5 Particles

There are a few lexemes which do not fit in the above word classes and are described as particles. This section discusses the main ones.

### 3.5.1 Negation

There are two particles in Wik-Mungkan which function as negators; $k e^{\prime}$ 'NEG' and ya'a 'NO'. The two particles have complementary functions. The particle ya'a 'NO' occurs as an interjection in response to a question or as a rhetorical device. The negator $k e^{\prime}$ 'NEG' is used to negate clauses. Both particles form compounds with other negative senses such as 'none', 'never' etc. The syntax and functions of these particles and compounds will be discussed in more detail in section 12.1.

### 3.5.2 yip 'soon' and related forms

The lexeme yipam 'so that' is a conjunction the function of which is described in section 13.2.3. A curiosity of yipam 'so that' is that the apparent reduplicated form yip-yipam, is translated in the lexicon as 'very soon' and appears to be a reduplication of yip 'soon'; the extra suffix -am is most likely the emphatic clitic =am 'EMPH'. There are no examples of yip 'soon' in the corpus. There are only two examples of yipyipam 'very soon' in the corpus; (27) and (28). In both examples the word yip-yipam 'very soon' functions as an adverb modifying the verb immediately following, not a conjunction.
(27) Kilham et al 1986 p. 74

| aawuch in yiip=an <br> house PRX(ABS) south=DEF | kulal <br> crooked | than-than-an-a <br> stand-RDP-3SG.PRS |  |
| :--- | :--- | :--- | :--- | :--- |
| yip-yipam | ench-ow | ngul |  |
| very.soon fall-3SG.FUT | then |  |  |

(28) Kilham et al 1986 p. 272

| ngamp | yip-yipam | way-ath-amp | nun-ang |
| :--- | :---: | :--- | :---: |
| 1PL.INCL(NOM) | very.soon | bad-TR-1PL.INCL.FUT | 3SG-ACC |
| 'we will lose him very soon' |  |  |  |

There is also the apparently related lexeme yippak 'yet', as in (29) which formally resembles yip=ak or 'soon=ALL'.
(29) Sayers 1982a p. 177 ex 73
ya'a an
NO DIST(ABS)
Ngeen-wiy an=am
no, that sacred one is still over (there) in the east'

While there may have been historical links between yip 'soon' (and yip-yipam 'very soon'), yipam 'so that' and yippak 'yet', they should now be considered distinct, unrelated lexemes.

### 3.5.3 Exclamations

The lexicon includes 36 items listed as 'exclamation'. These are used to express a range of meanings and do not combine with other word classes or participate in clauses. Some of these are: ayyang 'hey',yakkey 'help', chawaa 'curse you', yoow 'hurray, thank goodness' and apiy 'oops'. Example (30) shows two exclamations; koka 'go on', encouraging the hearer, and ee 'EXCL' a general exclamation used at the ends of clauses for emphasis. Example (31) shows the use of chawaa 'curse you'.
(30) Kilham et al 1986 p. 64

| koka! | wik | kan | thaw- $\varnothing$ | ee! |
| :--- | :--- | :--- | :--- | :--- |
| Go.on! | WORD | now | say-IMP | EXCL |
| 'go on! (now) speak up!' |  |  |  |  |

(31) Kilham et al 1986 p. 23
chawaa! ngul uth-am-an-a curse you' then dead-ITR-2SG.FUT-a 'curse you! you will die'

### 3.5.4 Conjunctions

There are several conjunctions in the corpus; a' 'and', an-aniyangan 'at the same time', ma' 'and', nungkway 'although', puth 'various', yipam 'so that' and wiy 'so'.

They are identified as conjunctions by linking either NPs or clauses. They are discussed in detail in sections 7.3 and 13.3. The following section 3.5.4.1 discusses one in some detail as it has various different meanings, depending on context.

### 3.5.4.1 puth

The reason for the gloss of 'various' against puth is that it can variously mean 'because', 'hence', 'and' or 'but' depending on context, with the most frequent being the establishment of a causal connection between two clauses. As such it will not be glossed for the remainder of this section. The various meanings are described in section 13.3.1.2 and the gloss used in each of those sections varies by the specific context.

There are are also three lexemes which appear to be inflections of puth; putham 'again', puthamak 'more' and puthangk 'in return'. The first and last of these appear to be ablative =am and locative =angk case markers on puth. The middle appears to be the allative marking on putham 'again'. It is possible that these are inflections of puth when used with the senses of 'and' or 'but'.

There are 25 tokens of putham 'again', six tokens of puthangk 'in return' and one of puthamak. Firstly, consider examples (32) to (34) of putham 'again'. None of these include the use of putham 'again' as linking NPs or clauses, which would be expected if it is an inflection of puth. In fact they function as adverbs. If there is a connection with puth it is not apparent from this data.
(32) Kilham et al 1986 p. 202

| putham | ke'-ngul | wunp-imp-a |
| :--- | :--- | :--- |
| again | none | put-1PL.INCL.SBJV-a |
| 'we shouldn't put any more in' |  |  | 'we shouldn't put any more in'

(33) Sayers 1982a p209 ex 26

| than | putham ngul | mo'-in | nungant=an=iy |
| :--- | :--- | :--- | :--- |
| 3PL(NOM) again then | run-3PL.PST | 3SG.DAT=DEF=TOP |  |
| 'they again (then) ran after him' |  |  |  |

(34) Kilham 1977 p257 ex 12

| ngay | kan | putham | yaan | mo'-ang-a | yaa' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) now | again | just | run-1SG. | nUT | just |
| '"I will (now) just run on" he (just) said" |  |  |  |  |  |

Similarly, examples (35) to (37) show the use of puthangk 'in.return'. In (35) and (36) the lexeme does not occur between NPs or clauses. In (35) it appears to be modifying the entire clause 'say the word to me' by adding the sense of 'in return' i.e. 'answer'. In (37) it appears between the two clauses, but it could also be modifying either clause i.e. 'don't turn your cheek' or 'hit him'.
(35) Kilham et al 1986 p. 141 wik thaw-an ngathar puthangk=an-a WORD say-2SG.FUT 1SG.DAT in.return=DEF-a 'answer me' (puthangk is not in the free translation)
(36) Kilham et al 1986 p. 203

| ngay | ke' | maal | puthangk=iy | ey? |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | similar.to | tame | in.return=TOP | INT |
| 'do you take me for a fool?' |  |  |  |  |

(37) Kilham et al 1986 p. 257
ke' woolam-an nungant puthangk=an piik-an nun-ang NEG turn.cheek-2SG.FUT 3SG.DAT in.return=DEF hit-2SG.FUT 3SG-ACC 'don't turn your cheek (on him), hit him back'

The sole example of puthamak 'for more' is (38) and is not linking a clause but is adverbial, modifying the verb thaw-thaw-an-a 'say-RDP-2SG.FUT-a', the imperative use of the verbal suffix.
(38) SIL1984 Luke 3.14
puthamak ke' thaw-thaw-an-a
for.more NEG say-RDP-2SG.FUT-a
'do not ask for more'
In summary, the above apparent inflections of puth examined above may have historically had links to puth but they will be considered unrelated for the current analysis and are not considered conjunctions.

### 3.5.5 Kaangk 'like'

The particle kaangk is defined in various places in the Wik-Mungkan literature as one
of four unconjugated verbs (e.g. Kilham et al 1986 p. 407). That description is rejected for this thesis. Section 8.12.1 discusses two of these 'unconjugated' verbs; aw 'lover' and weenth 'lover' which are analysed as adjectives. The third, mak 'OPT' is analysed as an adverb and is discussed in section 9.3.1.3. The fourth 'unconjugated verb' is kaangk 'like' is analysed here as a particle which modifies clauses.

In the corpus there are 99 instances of kaangk 'like'; examples (39) and (40) are typical. In each one it is at the start of a clause with the sense of a person liking what the clause states. In (39) for instance it is before the clause kulak wenkan ee? 'anger=ALL look.for-2SG.FUT INT?' (looking for a fight eh?), giving the sense that the addressee likes to go looking for fights. Note that the initial pronoun nint ' 2 SG' is a common feature of WM; see section 5.1.2. Example (40) is similar, in this case the addressee is marked on the verb as 2SG and kaangk 'like' is modifying the phrase ol puy-pek keekan 'away down.there fall-2SG.FUT INT? ('you will fall down there to mean 'you will like to fall down there'. The addition of the interrogative ey 'Q' creates the implicature that the falling down is undesirable, hence the free translation of 'you don't want to fall down there?'.

| (39) Kilham et al 1986 p. 40 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| nint kaangk kul=ak wenk-an |  |  |  | ee! |
| 2SG(NOM) like anger=ALL look.for-2SG.FUT'you must look (like looking) for a fight, mustn't you?' |  |  |  |  |
|  |  |  |  |  |
| (40) Kilham et al 1986 p. 159 |  |  |  |  |
| kaangk | ol | puy-pek | keek-an | ey? |
| like | away | down.there | fall-2SG.FUT | INT? |
| 'you don't w | want to fall | down there? |  |  |

Thus in all cases kaangk 'like' modifies a complete clause and does not have any verbal properties. Note however, kaangk 'like' can occur in some verbless clauses where it appears to pattern like a verb; see section 11.9.

### 3.6 Clitics and Suffixes

There are various suffixes and clitics which apply to multiple word classes. This section describes each of these, their meaning and distribution across word classes.

### 3.6.1 Definite Marker

The definite clitic =an is very common in Wik-Mungkan. It has a range of distributions, all related to keeping track of a referent in a discourse. It primarily attaches to NPs but can also attach to selected adverbs.

The principal meaning of the definite marker =an is discourse deictic. The first mention of a person or object in a discourse is typically unmarked while subsequent occurrences are marked with =an to signal that the same person or object is being referred to. For instance, example (41) introduces a woman, wanch as the subject of a story and the later example (42) (25 lines later) uses nil=an '3SG=DEF' and wanch=an 'WOMAN=DEF' to refer to that same woman.
(41) Sayers 1982a p. 150 ex 1

| in =an wat'-ang niiy=ant | wik | wath wanch thonam=am |
| :--- | :--- | :--- | :--- |
| PRX=DEF tell-1SG.FUT | 2SG=DAT word old woman one=GEN |  |

(42) Sayers 1982a p. 151 ex 26

| kan-ngul | ngeechan- $\varnothing$ | nil=an=iy-a | wanch=an |
| :--- | :--- | :--- | :--- |
| later | feel-3SG.PST | 3SG(NOM)=DEF=TOP-a | woman=DEF |

In some instances, the first mention of an object or person can also be marked with =an as in (43), which introduces a story about hunting for goose eggs, which have not been mentioned previously. The adverb nguch 'early' is also marked with =an 'DEF', which Kilham (1977 p. 85) describes as occurring frequently with 'time words'. The sense is either referring back to a previous time reference or announcing a new one.
(43) Sayers 1982a p. 171 ex 2

| minh=ak | nguch=ang=an | iiy-antan | ko'an |
| :--- | :--- | :--- | :--- |
| nhepan=ak=an=iy |  |  |  |
| MEAT=ALL early=LOC=DEF | go-3PL.PRS | goose | eggs=ALL=DEF=TOP |

The =an definite marker also plays a role in subordination in WM, as described in section 13.1.

### 3.6.2 Topic

The topic clitic =iy, glossed as 'TOP', is used to bring prominence to an aspect of the discourse at the option of the speaker. It predominantly attaches to NPs, similar to the case clitics (see chapter 4) and so attaches to nouns, adjectives and demonstratives which occur at the end of the NP, as in (44), where it attaches to the two NPs, firstly pam an=angan 'man DIST=PL.ABS' (those men) and secondly to kampan wanch koman=ant=am=an 'relative WOMAN girl=DAT=GEN=DEF' (the relatives of that young woman).
(44) Kilham 1977 p. 156 ex 334

| thaw-in | pam | an=angan=iy |
| :--- | :--- | :--- |
| say-3PL.PST | man | DIST=PL.ABS=TOP |
| kampan wanch | koman=ant=am=an=iy |  |
| relative woman | girl=DAT=GEN=DEF=TOP |  |
| 'they said, those men, the relatives of that young woman' |  |  |

It also attaches to pronouns, as in (45), where it attaches to the pronoun than '3PL', in nominative case.
(45) Sayers 1982a p. 154 ex 46
than=iy waa'-antan kunai grass

3PL(NOM)=TOP call-3PL.PRS kunai grass 'they call it kunai grass'

It can also attach to verbs, as in (46) where it attaches to the verb $u w-\varnothing$ 'find3SG.PST'.
(46) Kilham 1977 p258 ex 12

| man=an | $u w-\varnothing=i y-a$ |
| :--- | :--- |
| neck(ABS)=DEF | find-3SG.PST=TOP-a | 'he found the neck'

Finally, it also attaches to adverbs, as in (47), where it attaches to the adverb nath 'maybe'.
(47) Sayers 1976a p. 155 ex 1

| kaangk | niiy | nath=iy | maay-an-a |
| :--- | :--- | :--- | :--- |
| like | $2 P L(N O M)$ | maybe=TOP | pick.up-2PL.FUT |

'if you would like to pick it up' (you like maybe to pick up)

### 3.6.3 Emotion

The suffix -wey, glossed as EMO, also called the compassionate suffix, is described in Kilham et al (1986 p. 415) as expressing a heightened sensitivity or compassion. Sayers (1982a p. 119) stated that 'the emotional marker -wey .... is impossible to translate into English'. It can attach to any word class, including adverbs such as kan 'NOW' and ngul 'then' as in (48) and conjunctions but most often attaches to nominals, as in the pronoun ngay '1SG' in (49). It also attaches to verbs, after all verbal suffixes, as in (50).
(48) Sayers 1982a p. 184 ex 162

| nil | may | ngul-wey | mungk-an |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | VEG | ngul-EMO | eat-3SG.PRS |

'he then eats the yams'
(49) Sayers 1982a p172 ex 10
ya'a ngay-wey ing=am-a
NO 1SG(NOM)-EMO PRX=EMPH-a
'No I'm staying right here'
(50) Sayers 1982a p. 181 ex 126
kiingk-antan-wey
cook-3PL.PRS-EMO
'they cook (them)'
The earlier work, Kilham (1977 p. 50) describes wey 'EMO' as a separate word, rather than a suffix and its use was to modify the meaning of a clause. One of her examples is (51).
(51) Kilham 1977 p. 91 ex 217
$\begin{array}{lllll}\text { mee' } & y u k=a n g=a n & \text { thu'- } \varnothing \text {-an } & \text { wey } & \text { puk=an=iy } \\ \text { eye(ABS) } & \text { tree=INST=DEF } & \text { poke-3SG.PRS-3SG.ACC } & \text { EMO } & \text { child=DEF=TOP }\end{array}$ 'he poked (sic) the child in the eye with a stick'

Sayers (1976a) also contains over 40 examples with wey 'EMO' as a separate word. The later lexicon Kilham et al (1986) does not contain a separate word wey 'EMO' and no other Wik-Mungkan source describes it as anything but a suffix, including Sayers (1976b, 1976c, 1982a). At what point and why Kilham and Sayers decided that it was a suffix and not a separate word is not known. The recorded evidence is that wey 'EMO' is always in the same intonation contour as the preceding word e.g. ang-wey 'DIST=EMO' (BS779min22_7.08). This thesis therefore adopts the view
that it is a suffix, not a separate word.

The sources cited are not very clear as to the exact semantics of this suffix. Field work might elicit more detail.

### 3.6.4 Emphasis

Extra emphasis to a word or phrase can be added by any of the clitics $=a m,=i m$, =ow. The first two are free variants and mostly attach to the end of NPs, as in (52), where =am 'EMPH' attaches to the NP puk many 'child small' to provide emphasis.
(52) Sayers 1976ap. 41 ex 26

| ngay | puk | many=am=an |
| :--- | :---: | :--- |
| 1SG(NOM) | child | iiy-ang-a |
| small=EMPH=DEF | go-1SG.PST |  |
| 'when I was a child' ('when' not in WM) |  |  |

In (53), the variant =im 'EMPH' attaches to the NP thuuk al=ang=an 'snake DIST=ERG=DEF' (that snake).
(53) Kilham 1977 p. 258

| thuuk $\quad$ al=ang=an=im | thath- $\varnothing$ | than-ang |
| :--- | :--- | :--- | :--- |
| snake $\quad$DIST=ERG=DEF=EMPH | see-3SG.PST | 3PL-ACC |

The clitic also attaches to adverbs, as in (54) where it attaches to the adverb ep 'really' to add emphasis.
(54) Kilham 1977 p. 257 ex 6

| ngul | yimanang-a | ep=am | thath- $\varnothing$ |
| :--- | :--- | :--- | :--- | | thuuk=an=iy |
| :--- |
| then |
| like.this |$\quad$ really=EMPH $\quad$ see-3DG.PST | snake(ABS)=DEF=TOP |
| :--- | 'then he (like this) looked really hard and saw the snake'

The third clitic =ow 'EMPH' is described by Kilham et al (1986 pp. 401-402) as occurring at the end of a phonological clause. There is insufficient recorded data to assess this statement. The examples show that it has a similar distribution to =am/im 'EMPH' in attaching to the end of NPs as in (55), where it attaches to the NP puk many thanchiy 'child small handsome' to add emphasis to the handsomeness.
(55) Sayers 1982a p. 155 ex 63

| kal- $\varnothing$ | puk | many |
| :--- | :--- | :--- |
| bear.child-3SG.PST | thanchiy=ow |  |
| 'she bore a very handsome baby' |  |  |
| small | handsome=EMPH |  |

In a few examples it appears in a phrase with a single word, acting as an exclamation, as in (56) where the speaker is describing a train trip and pauses before saying kuchar=ow 'cold=EMPH' to emphasise how cold the train was, going on to compare with a plane trip.
(56) Sayers774YWMY14.02
kuchar=ow
cold=EMPH
'really cold!'
In three instances the two emphatic clitics are combined, adding extra emphasis, as in (57) where they attach to the demonstrative in 'PRX' (here) to emphasise strongly the arrival of the protagonist. In each instance the sequence is as per this example; =am 'EMPH', followed by =ow 'EMPH' but with such a small sample it is hard to state this as a rule.
(57) Sayers 1982a p. 179 ex $100-101$
in=am=ow pech-ath-wuntan
PRX=EMPH=EMPH shout-TR-3PL.RCP.PRS
'(he is) here, they shout to each other'

### 3.6.5 Sequence of Clitics

According to Kilham et al (1986 p. 402), clitics follow a standard order, following case markers, of =am 'EMPH', =an 'DEF', =iy 'TOP'. Only one example in the corpus contains all three together; yot=am=an=iy 'lots=EMPH=DEF=TOP' (Sayers 1976a p. 111 ex 4).

The combination =am=an '=EMPH=DEF' occurs in 17 examples, such as in (58), where it attaches to the pronoun nil=am=an '3SG=EMPH=DEF'.
(58) Sayers 1982a p. 182 ex 144

| nil=am=an | waa'-an |
| :--- | :--- |
| 3SG(NOM) $=E M P H=D E F$ | tell-3SG.PRS |
| 'he (that very one) tells a story' |  |

The combination =an=iy 'DEF=TOP' is more frequent, with over 170 examples in the corpus, such as yoyk=an=iy-a 'mist=DEF=TOP-a' (Kilham et al 1986 p. 219). This combination is discussed at length by Kilham (1977) with regard to establishing what she describes as 'fronting'.

The Wik-Mungkan literature is silent concerning the place of -wey 'EMO' in this sequence. The corpus contains two examples of -wey 'EMO' following =an 'DEF', one of it following =am 'EMPH' and none of it following =iy 'TOP'. All occurrences of -wey 'EMO' or wey-a '-EMO-a' (> 180) appear at the end of a word.

### 3.7 Compounds

Combinations of words (of all classes) occur in the lexicon in three different ways. Firstly they occur as two separate words, as in kaa' way 'nose bad' to mean 'nasty person'. Secondly they can be hyphenated, as in ma'-wipan 'HAND-to get stuck' or 'to do slowly'. Thirdly, but less commonly, they can be compound words such as kaa'manch 'flat nose', from kaa' 'nose' and manch 'flat'. The criteria for deciding which orthography to use are described in Kilham (1974a) as being three-fold.

The first criterion is phonological; is the stress pattern more like a single word or a phrase? Second is semantic; is the meaning idiomatic or specialised and are the meanings of the separate morphemes clear? Last is grammatical; where do inflections occur and are they as they would be if acting as separate words? Can other words occur between them? For further description of the criteria and how they were applied, refer Kilham (1974a pp. 56-68), which also contains an extensive list of various compounds.

The decisions made for individual combinations based on these criteria are now incorporated in the lexicon. There is no perceived need for this thesis to adopt a different approach so these conventions will be adopted. For glossing purposes, however, the individual component words will be shown for clarity and the combined meaning is usually clear from the free translation. Where it is not clear, additional notes will be provided.

## 4 Nominals

As described in section 3.1, the class of nominals consists of nouns, pronouns, adjectives, ignoratives and quantifiers. Chapter 5 will describe pronouns and ignoratives, while this chapter will describe the case system (4.1), proper nouns (4.2) and quantifiers (4.3).

### 4.1 Case System

This section describes the case system in Wik-Mungkan, excluding the pronominal system, which exhibits some specific features to be discussed in section 5.1.1.

Section 4.1.1 provides a summary overview, section 4.1.2 describes the cases for arguments of the verb, sections 4.1.3 to 4.1.9 describe the various adjunct cases. Section 4.1.10 looks at the vocative case.

### 4.1.1 Overview

Case inflection in Wik-Mungkan is used to encode the major grammatical relations. The cases follow a split ergative / nominative system with personal pronouns following a nominative / accusative pattern and other NPs following an ergative / absolutive pattern. There is considerable syncretism e.g. the same clitic =ang is used to mark both ergative and accusative. There are also some instances of compound cases, as defined by Schweiger (2000 p. 258), where one case is used as a basis for forming other cases. In WM this is apparent in that the dative =ant 'DAT' forms the basis for the comitative, genitive and ablative.

Table 19, adapted from Kilham et al (1986 Figure 8 p. 412) summarises the various cases, many of which are homophonous with other cases; examples will be provided to justify distinguishing the separate cases. Pronominal cases are included here but some discussion is deferred to section 5.1.

| Case | Noun Phrases | Pronouns |  |
| :---: | :---: | :---: | :---: |
|  |  | Nominative Stem | Dative Stem |
| Ergative | =ang | N/A |  |
| Absolutive | null | N/A |  |
| Nominative | N/A | null |  |
| Accusative | N/A | -ang |  |
| Dative | =ant, null ${ }^{27}$ |  | =ant, =ar |
| Instrumental | =ang |  | N/A |
| Locative | =ang |  | = ang |
| Comitative | =ang |  | = ang |
| Ablative | =am |  | =am |
| Genitive | =am |  | =am |
| Allative | =ak |  | =ak |
| $\begin{aligned} \text { Vocative } & =\text { PRX } \\ & =\text { MED } \\ & =\text { DIST } \end{aligned}$ | $\begin{aligned} & =a n g \\ & =e y \\ & =o y \end{aligned}$ | -alang <br> -aley <br> -aloy |  |

Table 19: Case markers
All case markers attach to the last word of a noun phrase (NP), adopting the morphology of the last word. This feature is relatively common in Australian languages e.g. Diyari (Austin 1981) and Kuuk Thaayorre (Gaby 2017). Section 7.1 describes the structure of NPs.

It is important to note that all the adjunct cases (i.e. non core grammatical relations; dative, locative, comitative. ablative, genitive and allative) for pronouns attach to the dative forms of the pronouns. For NPs the instrumental, locative and allative do not attach to the dative. The possessive for NPs obligatorily attaches to the dative, while the comitative and ablative attach to the dative under specific conditions, to be explained below in the relevant sections.

### 4.1.2 Core Grammatical Relations

All transitive (and ditransitive) verbs have their subjects marked by the nominative 27 Only null marked for demonstratives; see section 6.1.1.1.2
case if the subject is a pronoun and ergative case otherwise. Proper nouns are an exception to this (see section 4.2).

The subject of a transitive verb is marked with the ergative case if it is a noun phrase (NP). Case attaches to the end of the NP, as can be seen in (59), where the subject is the NP puk many yot 'CHILD small lots' (many children) and the transitive verb is wak-wak-in 'chase-RDP-3PL.PST'. The initial pronoun than '3PL' is co-referential with this NP and in nominative case, as the subject. This phenomenon of coreferential pronouns and NPs is common in Wik-Mungkan; see section 5.1.2.

```
(59) Kilham et al 1986 p267
\begin{tabular}{lll} 
than puk many & yot=ang \\
3PL(NOM) & CHILD small & lots=ERG
\end{tabular}
```

The direct object of transitive verbs is in accusative case when a pronoun and absolutive case, which is null marked, otherwise. This can also be see in (59), where direct object is minh rooster=an 'MEAT rooster=DEF'.

Ditransitive verbs have two obligatory objects. One is a direct object in accusative case if pronouns and absolutive. The second can also be a direct object. This can be seen in (60), where the ditransitive verb aath-an-a 'give-2SG.FUT' is subject marked with the subject '2SG' and the two objects are the speakers ngan-ang '1PL.EXCL-ACC', in accusative case and ngak 'WATER' in absolutive case. As will be described further in section 9.3.2, the second person future suffix on the verb is often used as the imperative, as it is here.
(60) Sayers 1982a p. 207 ex 4

| ngan-ang | ngak | yaa'anaath-an-a <br> 1PL.EXCL-ACC$\quad$ WATER(ABS) |
| :--- | :--- | :--- |
| 'give | just | give-2SG.FUT-a |

The second object of a ditransitive verb can instead be an indirect object, as in (62) discussed further in the next section.

The subjects of intransitive verbs are always null marked, signifying nominative case for pronouns and absolutive case for NPs. This can be seen in (61) where the subject is both the pronoun nil-a '3SG(NOM)-a' and the co-referential NP puk many=an=iy 'CHILD small(ABS)=DEF=TOP'.
(61) Kilham 1977 p90 ex 216

| nil-a | peey-peey- <br> 3SG(NOM) -a <br> cry-RDP-3SG.PST | puk |
| :--- | :---: | :--- | :--- |
| CHILD |  |  |$\quad$| many=an=iy |
| :--- |
| small(ABS) $=$ DEF=TOP |

### 4.1.3 Dative

The dative case is marked by the enclitic =ant. There are differences with respect to pronouns, to be discussed in section 5.1.1 and demonstratives, to be discussed in section 6.1.1.1.2. The dative case in WM follows a familiar pattern to other PamaNyungan languages (see e.g. Blake 1987 p. 35) and marks an indirect object or adjunct. Following are some examples found in the corpus. Firstly, (62) shows the sense of a beneficiary, where the subject, nil '3SG(NOM)' gave something to the beneficiary, puk many 'CHILD small', the NP marked with the dative case.
(62) Kilham et al 1986 p. 414

| nil | puk | many=ant | thee'- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | child | small=DAT | give-3SG.PST |

Example (63) shows the sense of possession; clothes belonging to men (pam=ant 'MAN=DAT') and women (wanch=ant 'WOMAN=DAT').
(63) BS779min22_11.58

| kulich | pam=ant-a | wanch=ant-a |
| :--- | :--- | :--- |
| clothes | MAN=DAT-a | WOMAN=DAT-a |
| 'men's and women's clothes' |  |  |

Example (64) shows the sense of purpose, the subject will carry (a baby) to a place aak=ak 'PLACE=ALL' for the child's father piip=ant=an 'father=DAT=DEF'
(64) Sayers 1982a p. 159 ex 104

| kan-ngul kal-ow-an | piip=iy=ant=an aak=ak=an |
| :---: | :---: |
| NOW-then carry-3SG.FUT-3SG.ACC | father=TOP=DAT=DEF place=ALL=DEF |
|  |  |

'ready to carry him back to his father at that place'

This thesis has adopted the term dative as it is a widespread term. The WikMungkan literature consistently refers to this case as 'referent', a usage not adopted here.

### 4.1.4 Instrumental

This case is a homophone of the ergative i.e. =ang. This aligns Wik-Mungkan with the observation of Dixon (1980 p. 304) that instrumental case coincides in form with either ergative or with locative in Australian languages 'almost without exception'. The instrumental is differentiated from the ergative by its distribution (e.g.in adjuncts) and the lack of agreement with verbal suffixes. The instrumental is used to indicate the use of the relevant NP as an instrument, as in (65), where the instrument(s) are kunttow 'stone' and they are being used to hit something.
(65) Sayers 1982a p. 162 ex 134

| than | kunttow=ang | piik-antan |
| :--- | :--- | :--- |
| 3PL(NOM) | stone=INST | hit-3PL.PRS |
| 'they hit (it) | with stones' |  |

There are also idiomatic expressions, such as (66), where the subject is wanch-weya 'WOMAN-EMO-a' and the indirect object is iimpan=ang 'stomach=INST' ('with' stomach i.e pregnant.
(66) Sayers 1982a p. 150 ex 3
niiy=iy-a wanch-wey-a iimpan=ang
3SG(NOM)=TOP-a woman-EMO-a stomach=INST
'she (the woman) ${ }^{28}$ was pregnant'
The instrumental does not attach to animate nouns or pronouns.

### 4.1.5 Locative

The locative case for NPs is homophonous with the ergative and the instrumental. It distinguishes from the former by its distribution; it does not mark the subject of transitive verbs, as it does not agree with the verbal suffix denoting subject. It distinguishes from the instrumental by being attached to places, including body parts, as well as objects. The sense is either 'in' or 'on' somewhere or something. The

[^9]sense of 'in' is shown in (67) where the adjunct NP is olot=ang 'hollow.log=LOC' (in the hollow log).
(67) Kilham 1977 p. 257 ex 33

| nil | pam=an-a | olot=ang | ngoonch-Ø |
| :---: | :---: | :---: | :---: |
| 3SG(NOM) | $\mathrm{MAN}=\mathrm{DEF}=a$ | hollow.log=LOC | hide-3SG.PST |
| 'he, the man | hid in the hollow |  |  |

Example (68) shows both senses, where the subject (a baby) is 'in' a string bag, shown by waangk=ang 'string bag=LOC' and the bag is 'on' the mother's neck, shown by monkan=ang 'neck=LOC'.
(68) Sayers 1982a p. 159 ex 105

| waangk=ang | wun-wun- | monkan=ang |
| :--- | :--- | :--- |
| string.bag=LOC | lay-RDP-3SG.PST | nape=LOC |
| hung- | nSG.PST |  |

The locative can also attach to temporal expressions to provide the sense of 'at that time', as in (69) where the time specified is in the NP kinch thonam=ang 'day one=LOC' (on another day).
(69) Kilham et al 1986 p. 414
than ngul wamp-in

| 3PL(NOM) then come-3PL.FUT | 1PL=DAT |
| :--- | :--- |
| kinch thomam=ang $\quad$ an=an=iy |  |
| day one=LOC $\quad$ DIST=DEF=TOP |  |
| 'I predict that they will come to us on another day' |  |

The locative for pronouns is formed from the dative pronouns and the same locative =ang 'LOC'. This can be seen in (70) where the subject puk many=an 'CHILD small=DEF' sat on the speaker's shoulder. The locative is seen twice; once attached to the noun ingk=ang 'shoulder=LOC' and the dative pronoun ngathar=ang '1SG.DAT=LOC'. This part/whole apposition of body part and dative pronoun is standard syntax to denote ownership of the body part. This is discussed further in section 7.2.1.
(70) Kilham et al 1986 p. 414

| nil | puk | many=an |  |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | CHILD | small(ABS)=DEF |  |
| ingk=ang | nyiin- $\varnothing$ | ngathar=ang |  |
| shoulder=LOC | sit-3SG.PST | 1SG=LOC |  |
| 'the child sat on my shoulder' |  |  |  |

A variant of the locative, =angk 'LOC', attaches to adverbs; refer section 10.1.

### 4.1.6 Comitative

The comitative case is homophonous with the locative for pronouns. For NPs it is formed by the clitic =ang, homophonous with the ergative, locative and instrumental. A key difference from these last three is that the comitative is attached to the dative form of NPs, i.e. =ant 'DAT' to form ant=ang 'DAT=COM'.

Example (71) shows the comitative attached to the dative pronoun ngant= '1PL.EXCL.DAT=COM' (with us) to state that the subject was in the company of a group including the speaker.
(71) Sayers 1976a p. 58 ex 5

| nil | an=man | iiy- |
| :--- | :--- | :--- |
| 3SG(NOM) | DIST(ABS)=SAME | go-3SG.PST |$\quad$ ngant=ang 1 1PL.EXCL.DAT=COM

Example (72) shows the comitative on kampan=ant=ang=an 'relations=DAT=COM=DEF' (with relations).
(72) Sayers 1976a p. 40 ex 24
kampan=ant=ang=an relations=DAT=COM=DEF 'we stay with (our) relatives'
wun-amp
stay-1PL.INCL.FUT

Particularly, when used with proper names and kin terms, the comitative is not attached to the dative, as in (73) where the subject is the dual pronoun ngan-wey '1DU.EXCL-EMO' is used to show that there are two people, the speaker and another, while Sam=ang 'Sam=COM' shows that the second person was Sam.
(73) Sayers 1976a p. 64 ex 6 part 10

| ngan-wey | Sam=ang | iiy-an-a |
| :--- | :--- | :--- |
| 1DU.EXCL(NOM)-EMO | Sam=COM | go-1DU.EXCL.PST-a |

Note that the Wik-Mungkan literature (e.g. Kilham 1977 p. 75) treats the affix -ang in examples such as (73) as a special type of co-ordinator. I see no reason to differentiate from the comitative.

### 4.1.7 Ablative

The ablative form =am 'ABL' attaches to the dative form of pronouns and animate nouns and directly to inanimate nouns. Example (74) shows the ablative attached to the dative pronoun thant '3PL' to create thant=am '3PL.DAT=ABL' (from them).
(74) Godfrey and Kerr 1964 p. 27

| wanch | ngul | an | maay- $\varnothing$ | thant=am |
| :--- | :--- | :--- | :--- | :--- |
| woman(ABS) | then | DIST | take-3SG.PST | 3PL.DAT=ABL |
| 'then he took (there) a woman from them' |  |  |  |  |

Example (75) shows the inanimate usage where the inanimate object is waangk 'dilly bag' and the ablative shows that the direct object kunttow=an 'stones=DEF' (the stones) are taken from the dilly bag.
(75) Kilham et al 1986 p. 414

| nil | waangk=am=an | maay- $\varnothing$ | kunttow=an |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | dilly.bag-ABL-DEF | pick.up-3SG.PST | stones(ABS)=DEF |
| 'he took the stones from the dilly.bag' |  |  |  |

Example (76) shows the animate noun pikkuw 'crocodile' as being what the subject pul '3DU' were running from by the affixes =ant 'DAT' and =am 'ABL'.
(76) Sayers 1976a p. 25 ex 5

| pul=an-a | winynyang | mo'-a-pul | pikkuw=ant=am |
| :--- | :--- | :--- | :--- |
| 3DU(NOM)=DEF-a | afraid | run-a-3DU.PST | crocodile=DAT=ABL |
| 'those two were afraid and ran from the crocodile' |  |  |  |

The above examples show the literal sense of movement away from a person, place or animal. The ablative also provides the sense 'because of'. Blake (1987 p. 60) distinguishes this sense as a different case, the causal, but notes that syncretism
with the ablative is common. Authors who distinguish the two cases do so on other than semantic grounds e.g. Dixon (1980 p. 299) justifies the distinction between ablative and causal in Yidiny by examining interrogatives. There is insufficient evidence in this corpus to justify a separate case. Example (77) illustrates this sense for an inanimate noun, ngak=am 'water=ABL' (because of the water (rain)) to show why an object, identified by the demonstrative in 'PRX' (this) is wet.
(77) Kilham et al 1986 p. 414

| in yiinch wun-an | ngak=am |
| :--- | :--- | :--- |
| PRX(ABS) wet be-3SG.PRS | water=ABL |
| 'this is wet because of the rain' |  |

The ablative also attaches to certain adverbs, frequently with temporal senses; see chapter 10.

### 4.1.8 Genitive

The ablative case is homophonous with the genitive i.e. =am 'GEN' and always attaches to the dative forms of pronouns or NPs. The genitive distinguishes from the ablative for NPs by always requiring the dative case, i.e it does not have the animate / inanimate distinction that the ablative has. The majority of the examples of the genitive in the corpus are of pronouns. These are dealt with in more depth in section 5.1.4.

Example (78) shows the usage with a noun phrase, in this case the NP minh Barbara=ant=am 'MEAT Barbara=DAT=GEN' (Barbara's meat).
(78) Sayers 1982a p. 42 ex 7

| ngay | minh | Barbara=ant=am | thon al=ant=an | thee'-ang |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | MEAT | Barbara=DAT=GEN | one DIST=DAT=DEF | give-1SG.PST |

Example (79) shows the genitive affixed to the end of the noun phrase kuutan puk many=ant=am=an=iy 'umbilical cord =DAT=GEN=DEF=TOP' (children's umbilical cords).
(79) Sayers 1982a p156 ex 78

| in-a | piinth=ang | ump-antan |
| :--- | :---: | :--- |
| PRX(ABS)-a | bamboo=INST | cut-3PL.PRS |
| kuutan | puk | many=ant=am=an=iy |
| umbilical.cord | child | small=DAT=GEN=DEF=TOP |
| 'they cut their children's umbilical cords with bamboo' |  |  |

The genitive case can also be formally distinguished from the ablative by its cooccurrence with other cases, including the genitive itself. The genitive is always the second case marked (after the dative) in such instances,. In (80) this is shown on the NP kaath nung=ant=am=ant=ang 'mother 3SG=DAT=GEN=DAT=COM' (with his mother) where the genitive provides the sense of 'his mother' and the comitative provides the further sense of accompaniment.
(80) Kilham 1977 p. 59 ex 90

| nil | kaath | nung=ant=am=ant=ang | iiy- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | mother | 3SG=DAT=GEN=DAT=COM | go-3SG.PST |
| 'he accompanied (went with) his mother' |  |  |  |

Example (81) shows the double genitive marking where the first genitive attached to ngath=ar '1SG=DAT' provides the sense of 'my (mother)' and the second genitive states that the thing in question denoted by the demonstrative nan-a 'MED-a' (that thing nearby) belongs to 'my mother'.

```
(81) Kilham 1977 p. 59 ex 92
nan-a kaath ngath=ar=am=ant=am
MED-a mother 1SG=DAT=GEN=DAT=GEN
'that (is) my mother's thing'
```

This feature of the genitive is described by Sadler and Nordlinger (2006 p. 463) as the most common example of the cross-linguistic phenomenon of 'case stacking', or multiple case marking.

### 4.1.9 Allative

The allative case is marked by =ak 'ALL' for both nouns and pronouns and provides both the sense of 'towards' a place or activity and 'purposive'. There is no distributional evidence of the difference, only the semantic distinction. Example (82) illustrates the movement to a place, in this case $y u k=a k-a$ 'TREE=ALL-a' (to a tree).

Example (83) shows movement to an activity, fishing, represented by minh=ak 'MEAT=ALL'. Example (84) illustrates the purposive; the speaker is asking who came for the purpose of getting a machine, denoted by machine=ak 'machine=ALL'.
(82) Kilham et al 1986 p. 160

| minh | kulan | ongk=am | pey- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| MEAT | possum(ABS) | long=EMPH | jump-3SG.PST |$\quad$| yuk=ak-a |
| :--- |
| TREE=ALL-a | 'the possum jumped a really long way to the tree"

(83) Kilham 1977 p. 62 ex 109
minh=ak iiy-amp-a
meat=ALL go-1PL.INCL.FUT-a
'let's go fishing'
(84) Sayers and Kerr 1964 p. 3

| an | wee' | in-pal | mat- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| DIST(ABS) | who(ABS) | PRX-hither | climb-3SG.PST |
| machine=ak |  |  |  |
| 'who came up here for the | machine?' (DIST demonstrative ane=ALL |  |  |

Kilham (1977 p. 62) states that it can be attached to animate nouns with, or in place of, the dative, for emphasis, as in (85), where the pronoun thant '3PL.DAT' is dative but the same referent wanchinth 'old woman' is marked by the allative.
(85) Kilham 1977 p. 62 ex 111

| nint | iiy-an | thant |
| :--- | :--- | :--- |
| 2SG(NOM) |  |  |
| go-2SG.FUT | 3PL.DAT | wanchinth=ak=an |
| old.woman=ALL=DEF |  |  |

pal iiy-ayn
hither go-3PL.FUT
'you go to (them) those old women (and persuade them) to come here'
The allative also attaches to certain adverbs, frequently with temporal senses; see chapter 10.

### 4.1.10 Vocative

The vocative case for nominals performs the same function as the vocative exclamation ayyang 'hey' (see section 3.5.3) to directly address a group or individual. This case attaches to named individuals, unlike the exclamation, which is more in the nature of a general broadcast. According to Kilham (1977 p. 60), the case attaches solely to kin terms and proper nouns and has a three-way distinction between proximal, medial and distal. As with demonstratives, the exact semantics of proximal,
medial and distal cannot be determined (ref section 6.4.5). The respective forms, again according to Kilham (1977 p. 56) are -ang, 'VOC.PRX' -ey, 'VOC.MED' and -oy 'VOC.DIST'. Unfortunately, only three examples are found in the corpus, all the same: kaath-ang 'mother-VOC.PRX', as in (86), where the speaker is directly addressing their mother, prior to asking a question.
(86) Kilham et al 1986 p. 272

| kaath-ang | nint | ngeen=ak |
| :--- | :--- | :--- |
| mother-VOC.PRX | 2SG(NOM) what=ALL | kerk-kerk-angan-a |
| 'hey mother, why are you hurrying?' |  |  |

There are also different vocative forms for pronouns; see section 5.1.7.

### 4.2 Proper Nouns

Proper names (all English names of people ${ }^{29}$ ) in Wik-Mungkan are anomalous in that their case marking does not always follow the ergative / absolutive pattern described above. Proper names in subject position are found with and without ergative marking with both transitive and intransitive verbs. For example, in (87), the subject is 'Barbara' (Sayers), marked with ergative case, and the verb thath-ow-any 'see-3SG.FUT-1SG.ACC' is transitive, as would be expected. By contrast, in (88), the same person, Barbara, is again marked with the ergative but the verb iiy-Ø 'go3SG.PST' is intransitive.
(87) Sayers 1976a p. 58 ex 3

| Barbara=ang | $k e^{\prime}=a n$ | thath-ow-any |
| :--- | :--- | :--- |
| Barbara=ERG | NEG=DEF | see-3SG.FUT-1SG.ACC |
| '(when) Barbara is not looking at me' |  |  |

(88) BS779min22_9.26

| Barbara=ang | iiy- $\varnothing$ |
| :--- | :--- |
| Barbara=ERG | go-3SG.PST |
| 'Barbara came (sic)' |  |

In (89) is the same intransitive verb but the subject (again Barbara) is null marked, consistent with the expected absolutive case. In (90) the subject is Marie, null marked but the verb wich- $\varnothing$ 'pull.out-3SG.PST' is transitive. The subjects in both these examples are considered to have no case rather than (unmarked) absolutive

[^10]case.
(89) Sayers 1976a p. 113 ex 3

| Barbara puth keenk | iiy- $\varnothing$ |
| :--- | :--- | :--- |
| Barbara but first | go-3SG.PST |
| 'Barbara (but) went first' |  |

(90) Kilham 1977 p. 65 ex 125

| nil | Marie=iy-a | kucham | wich- $\varnothing$ |
| :--- | :---: | :--- | :--- |
| 3SG(NOM) | Marie=TOP | two(ABS) | pull.out-3SG.PST |
| 'As for Marie, she caught two (fish)' |  |  |  |

Kilham (1977 p. 65) notes that ergative marking is 'not strictly obligatory', in that it is sometimes omitted when there is no ambiguity as to who the subject is, particularly if there is a co-referential pronoun, as in (90). This is not uncommon in Australian languages (see e.g. Blake 1987 p. 20). I have not found any examples in the corpus which support Kilham's claim, apart from proper nouns.

Sayers (1982a p. 17) states that proper names follow the same case marking pattern as NPs. This statement is not supported by the corpus with respect to subjects, as shown above. With respect to proper nouns it agrees with the available evidence, albeit with few examples. Proper names as direct objects are always unmarked, consistent with the absolutive case, as in (91), where the person Chris is the direct object of transitive verb thath=iy 'see-3SG.SBJV'.

```
(91) Sayers 1976a p. }90\mathrm{ ex }
engk-ang-ant pilot=ant
ask-1SG.PST-3SG.DAT pilot=DAT
nil Chris=an thath=iy
3SG(NOM) Chris(ABS)=DEF see-3SG.SBJV
'I asked (of him) the pilot if (sic) he has seen Chris'
```

Place names are found with the allative, as in (92) which shows the allative attached to the name Weipa and the ablative, as in (93) where it is attached to the name Edward River.
(92) Kilham et al 1986 p. 80

| kuuny-in | Weipa=ak |
| :--- | :--- |
| move-3PL.PST | Weipa=ALL |
| 'they have moved to Weipa' |  |

(93) Kilham et al 1986 p. 60

| than Edward River=am an-pal=am | palam wamp-in |  |
| :--- | :--- | :--- |
| 3PL Edward River=ABL DIST-hither=ABL | back | come-3PL.PST | 'the came back from Edward River (to Aurukun)'

The locative is not found; the sense of 'at a location' is unmarked, as in (94) where the place name Peret encodes the sense of being at/in Peret.
(94) Sayers 1976a p. 25 ex. 3
pam anangan wun-tan Peret=an-a

MAN DIST.PL.ABS lie-3PL.PRS Peret=DEF-a 'those men live at Peret'

Unmarked place names are also found adnominally, as in (95) where New Guinea is adnominal to Woman.
(95) Sayers 1982 p. 150 ex. 2

| New Guinea | Woman |
| :--- | ---: |
| New Guinea | Woman |
| 'she's a New | Guinea Woman |

### 4.3 Quantifiers

As identified in section 3.1.5, quantifiers are a small class with a defined slot in NP syntax (see also section 7.1). That slot is the penultimate slot after all nouns, adjectives and adverbs and before a demonstrative, if present. A subset of the class also derive adverbs by reduplication; this is the only word class in Wik-Mungkan where reduplication changes word class. The Wik-Mungkan quantifiers are thon 'another', thonam 'one', kucham 'two', ko'alam 'three/some' and yot 'many'. The class is open to the extent that it integrates English numbers, four of which are found in the corpus.

### 4.3.1 Thon 'another' and thonam 'one'

The word thon 'another' is included under quantifiers because it occupies the same syntactic slot as quantifiers. This can be seen (96), where the NP is pam thon al=ant=an 'MAN another DIST=DAT=DEF' (for that other man) and thon 'another' follows the noun pam 'MAN' and precedes the demonstrative al=ant=an 'DIST=DAT=DEF'.
(96) SIL 1984 Matthew 11.3

| ngan | nath | pam thon | al=ant=an |  |
| :--- | :--- | :--- | :--- | :--- |
| 1PL.EXCL(NOM) | maybe | MAN another | DIST=DAT=DEF |  |
| kuup-kuup-an |  | nung=ant | ey? |  |
| wait-RDP-1PL.EXCL.FUT-a | 3SG=DAT | INT? |  |  |
| 'will we wait (maybe) for that other man, for him?' |  |  |  |  |

When in the last position of an NP, thon 'another' carries the appropriate case marking, as in (97) where it takes the allative marker for the NP aak thon=ak 'PLACE another=ALL' (to another place).
(97) Huchet 1990 p. 42 ex 3

| iiy-in | aak | thon=ak |
| :--- | :--- | :--- |
| go-3PL.PST | PLACE | another=ALL |

The word thonak also has acquired a second meaning of 'only' as in (98), where thonak means that the watchers could 'only' see the protagonist's head. Formally identical to thon=ak 'another=ALL', it is not clear how the allative interpretation would explain this meaning.
(98) Sayers 1982a p. 160 ex 60

| thath=iythan | kuchek=am | thonak |
| :--- | :--- | :--- |
| see-3PL.SBJV HEAD=EMPH | only |  |
| 'they could see only his head' |  |  |

Similar to the allative, the locative =ang '=LOC' is found attached to thon 'another' as part of an NP, as in (99), where the NP is aak thon=ang 'PLACE another=LOC' (in another place).
(99) SIL 1984 James 4.13

| aak $\quad$ thon=ang | ngul | wun-wun-ang-a |
| :--- | :--- | :--- |
| PLACE another=LOC | then | stay-RDP-1SG.FUT-a |
| 'I will (then) stay in another place' |  |  |

The word thonang is also found as a synonym for thon 'another', as in (100) where it denotes 'another' emu, the word for emu being null anaphor. In this instance it seems implausible to analyse thonang 'another' as thon=ang 'another=?'. The candidates for =ang are case markers; ergative, locative, comitative or instrumental, none of which are semantically appropriate.
(100) Kilham 1977 p. 145 ex 307

| kaaw thonang $\quad$ ngul | thath- $\varnothing$ |  |
| :--- | :--- | :--- |
| east another | then | see-3SG.PST |
| '(he kept going) east and then saw another (emu)' |  |  |

Another candidate for =ang is the accusative suffix as thonang 'another' is the direct object, but this would be the only place in the language where it is used on other than a personal pronoun. This possibility is not considered reasonable. This is also apparent in example (101) where thonang=an 'another=DEF' is adnominal to pam 'MAN' which is the subject of the clause with an intransitive verb wamp- $\varnothing$ 'come3SG.PST'. Thus the thonang=an 'another=DEF' is not analysable as thon-ang=an 'another-ACC=DEF', nor as thon=ang=an 'another=ERG=an', given the verb is intransitive.
(101) Kilham et al 1986 p. 147

| pam thonang=an | ngul | wamp- $\varnothing$ |
| :--- | :--- | :--- |
| MAN another=DEF | then | come-3SG.PST | 'another man (then) came'

The summary of the above is that in some instances thonang 'another' is analysable as thon=ang 'another=LOC' and possibly other case markers and in other instances as indistinguishable from thon 'another' on syntactic or semantic grounds. Although not commented on Kilham (1977) also has both analyses, in separate examples. Example (100) above is as glossed by Kilham, i.e.not analysed as being thon 'another' with a case marker. In example 392 on page 184 she analysed it as thon=ang 'another=LOC'. Each example of thonang 'another', as for thonak 'only/another=ALL', needs to be reviewed in context to determine which analysis is correct for that context.

Finally the quantifier thonam 'one' also is a candidate to be considered an inflection or derivation of thon 'another', with the analysis thon=am 'another=?' with the candidates for the inflection being the ablative case and the emphatic marker. Neither seem to be plausible so thonam 'one' will be considered a single lexeme.

The standard slot for quantifiers in NP structure is penultimate, before any demonstratives (see section 7.1). In the absence of a demonstrative in an NP the quantifier will attract any case marking. For thonam 'one', this can be seen in (78),
repeated here as (102), where the NP is wik kath wanch thonam=ant=am 'WORD old woman one=DAT=GEN' (one woman's story). where the genitive is attached to thonam 'one' as the last word in the NP.
(102) Sayers 1982a p. 150 ex 1
waa'-ang niiy=ant wik kath wanch thonam=ant=am
tell-1SG.FUT 2PL=DAT WORD old woman one=DAT=GEN
'I will tell you a story about a woman'

The lexeme thon 'another' (and inflections) combine with thonam 'one' in two ways. Firstly, the two form the phrase thonam thonak(=am) 'one only(=EMPH)', as in (103). This example is from the WM version of the Bible and the connection between the verse in the King James version and this is not clear. Other English translations of the Bible consulted are no more helpful.
(103) SIL 1984 John 13.10

| nil | thonam | thonak=am | ep- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | one | only=EMPH | wash-3SG.PST |$\quad$ ya'a

The second combination is thon-thonam, which has two possible analyses and, according to the lexicon, two different meanings. The first analysis is 'another-one' and the second 'PRDP-one' i.e. partial reduplication. There is no basis for deciding between these two; this thesis will adopt 'PRDP-one'. The two meanings are 'one after another' and 'of a different kind'. The lexicon compares this latter sense with the reduplicated pronoun nil-nil '3DG-RDP' which has a similar meaning (see section 5.1.6). Of these two meanings, only the first is found in the corpus, apart from the lexicon, as in (104), where the subject pul ma' kuuncham alalangan '3DU brothers DIST.PL.ERG' (those two brothers) are described as having knocked down a group of others (unspecified but more than two) 'one after the other'. The position of thonthonam 'PRDP-one' in this example; directly preceding the verb and following the subject NP is consistent with an adverb, which is the word class assigned in the lexicon. Apart from quantifiers, reduplication does not change word class for any other class.
(104) Kilham et al 1986 p. 178

| pul | ma' kuuncham | alalangan |
| :--- | :--- | :--- | | thon-thonam |
| :--- |
| 3DU(NOM) brothers | DIST.PL.ERG $\quad$ PRDP-one | tha'-tha'-ath ${ }^{30}$-pul | than-ang |
| :--- | :--- |

### 4.3.2 Kucham 'two'

The quantifier kucham 'two', as for other quantifiers, fills the penultimate slot in the standard NP and hence carries any case marking applicable to the NP unless the demonstrative slot is filled. The former can be seen in (105) where the NP is wanch kucham=ang 'WOMAN two=ERG' with the ergative case marker on the quantifier kucham 'two.
(105) Kilham 1977 p. 65 ex 124
wanch kucham=ang piik-uwpul
WOMAN two=ERG fight-3DU.RCP.PST
'two women were fighting (each other)'

An NP with kucham 'two' and a demonstrative can be seen in (106) where the absolutive case is contained in the demonstrative anangan-a (see section 6.1.1.1.1) for the whole NP pam kucham an-angan-a 'MAN two DIST=PL.ABS-a' (those two men).
(106) Kilham et al 1986 p. 102

| pam | kucham | an-angan-a | ep | minam |
| :--- | :--- | :--- | :--- | :--- |
| MAN two | DIST-PL.ABS-a | really | well | swim-RDPunch-pul |
| 'those two men were swimming very well' |  |  |  |  |

Reduplication gives kuch-kucham 'PRDP-two', meaning 'two by two' as in (107) where it qualifies that the men being sent out (pam 'MAN(ABS) and than-ang '3PLACC') did so two by two. As for thon-thonam 'PRDP-one' above, the reduplication appears to have altered the word class of kuch-kucham 'PRDP-two' to an adverb. With only two examples it is difficult to positively assert that this is an adverb but this is consistent with the lexicon.

[^11](107) SIL 1984 Mark 6.7

| nil | pam | kuch-kucham | kuch-Ø | than-ang |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) | MAN(ABS) | PRDP-two | send-3SG.PST | 3PL-ACC | 'he sent (them,) the men two by two'

The lexeme kucham 'two' also combines with ma' 'HAND' to create the compound ma'-kucham 'HAND-two' (twice), as in (108) where it modifies the verb pech-ow-a 'shout-3SG.FUT-a' in describing how many times the rooster (cock) will shout (crow). This compounding of a noun ma' 'HAND' and a quantifier also appears to have derived an adverb.
(108) SIL 1984 Mark 14.30

| nil | minh | rooster | ma'-kucham |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | MEAT | rooster | HAND-two |

The compound ma'-kucham 'HAND-two' also is used to denote 'two days', as in (109) where it describes how long the subject (3SG marked on the verb wun- $\varnothing$ 'stay3SG.PST') stayed in a hole.
(109) Kilham 1977 p. 61 ex 103

| ma'-kucham | wun- $\varnothing$ | wukar=ang |
| :--- | :--- | :--- |
| HAND-two | stay-3SG.PST | hole=LOC |
| 'he stayed in the hole for two days' |  |  |

As an aside, Sayers (1998 p. 68) notes that kucham 'two' is not 'necessarily an exact two' but can mean 'three' in some contexts.

### 4.3.3 Ko'alam 'three / some'

The lexeme ko'alam sometimes has the precise meaning of 'three' and sometimes the vaguer meaning of 'some'. Which sense is intended in any particular example, for this thesis, usually relies on the free translation but can be clear from context. Thus in (110), the number caught by Barbara ko'alam is 'three' (fish), in contrast to the number caught by Marie, kucham 'two'. The more precise meaning of 'three' seems appropriate given the precise contrast with 'two'. That Barbara is marked with the ergative, as expected for as subject of a transitive verb and Marie, also subject to a
transitive verb, is not, is common with English names in Wik-Mungkan; see section 4.2.


By contrast, in (111) the NP nhepan=an-a ko'alam has the meaning 'eggs=DEF-a some, few' (a few eggs). Here the meaning of ko'alam is only available from the free translation.
(111) Sayers 1982a p. 173 ex 24

| nhepan=an-a | ko'alam | maay=iy |
| :--- | :--- | :--- |$\quad$| puth |
| :--- |
| egg=DEF-a | | some(ABS) |
| :--- |
| 'they (sic) would only pick up a few eggs' |

There are only three examples of the reduplicated form ko'-ko'alam 'PRDP-few'. Two of those examples are in the WM Bible and were impossible to interpret. The remaining example is (112) where the speaker is telling the protagonist that he could / should have (not) picked ko'-ko'alam 'PRDP-few'. The implicature, based on the free translation, is possibly that he has picked too many but the effect of the negator $k e^{\prime}$ 'NEG' is equally unclear. The most likely meaning of ko'-ko'alam 'PRDPfew' is 'fewer' but that is open to debate. Unlike other quantifiers above, reduplication does not alter the word class.
(112) Sayers 1982a p. 181 ex 121

| ko-ko'alam | ke' | maay-in-wey |
| :--- | :--- | :--- |
| PRDP-some(ABS) | NEG | pick-2SG.SBJV-EMO |
| 'you could have picked just a few' |  |  |

Similar to ma'-kucham 'twice, two days' (section 4.3.2), there is also a phrase ma' ko'alam which means either 'thrice' or 'three days' depending on context. The hyphen in the former and lack of hyphen in the latter reflects decisions made in the construction of the lexicon. Refer section 3.7 for further detail.

### 4.3.4 Yot 'many'

The final quantifier is yot 'many'. It is included in the quantifiers because it fills the same slot in the NP structure (section 7.1) i.e. before a demonstrative, if present, and after all others. If no demonstrative is present, any relevant case marking is attached. The most common sense is 'many' or, in reduplicated form, yot-yot=am 'many-RDP=EMPH' (very many). The reduplicated form is always with the emphatic marker, i.e. the form *yot-yot 'many-RDP' is not found.

The quantifier yot 'many' is sometimes translated as 'all', as in (113), where the context is of a film projector having broken down, so the viewers went home. The viewers are denoted firstly by the pronoun than '3PL' and then again by the quantifier yot=am=an 'many(ABS)=EMPH=DEF', translated here as 'all' of the viewers.


As for other quantifiers above, yot 'many' forms a compound with ma' 'HAND'; ma'yot=am 'HAND-many=EMPH' with the sense of 'frequently' or 'all the time', as in (114). The compound here is modifying the clause minh=ak iiy-antan 'MEAT=ALL go-3PL.PRS' (go hunting (habitually)) to mean that this activity is frequent.
(114) Kilham et al 1986 p. 49

| than | Aurukun | punchan |
| :--- | :---: | :--- |
| 3PL(NOM) | Aurukun | people.from |$\quad$| an-angan |  |
| :--- | :--- |
| ma'-yot=am | DIST-PL.ABS |

## 5 Pronouns and Ignoratives

This chapter describes the morphosyntax of personal pronouns (section 5.1) and ignoratives (5.2).

### 5.1 Personal Pronouns

This section describes the pronominal paradigm in Wik-Mungkan. Section 5.1.1 describes the morphology, section 5.1.2 the role of personal pronouns, 5.1.3 describes reflexive pronouns, section 5.1.4 describes possessive pronouns, section 5.1.5 describes relationship pronouns, section 5.1.6 describes emphatic and reduplicated pronouns and finally 5.1.7 describes the vocative pronouns.

### 5.1.1 Morphology

As described in section 3.1.2.1, cardinal pronoun stems for nominative and accusative case are as laid out in table 20, based on Kilham et al (1986 figure 2 p. 403). As can be seen, they include a singular / dual / plural number distinction and an inclusive / exclusive distinction. It is interesting that there is no distinction between dual and plural exclusive. The variants noted for the singular apply to different cases (nominative / accusative respectively).

| Person | Singular | Dual | Plural |
| :--- | :---: | :---: | :---: |
| 1 Incl |  | ngal | ngamp |
| Excl | ngay/ngany | ngan | ngan |
| 2 | nint | nip | niiy |
| 3 | nil/nun | pul | than |

Table 20: Personal pronoun stems
Cardinal pronouns inflect for case on a nominative / accusative pattern, the nominative being unmarked and the accusative being marked by the accusative suffix -ang 'ACC' (homophonous with cases for nouns (ergative) and nouns / pronouns (locative and comitative)). The accusative stem for first person singular,
ngany '1SG.ACC' is a free variant which is relatively rare in the corpus, with five examples against 83 examples of ngay-ang '1SG-ACC'. The third person accusative stem nun '3SG.ACC' is optionally also suffixed with the accusative case to form nunang, glossed as '3SG-ACC' for brevity. The full form is more common in the corpus (102 examples) but the shorter form is still frequent (41).

Dative pronouns have some irregularities as shown in table 21. The singular have different stems from the nominative and are optionally suffixed by -ar 'DAT' or -ant 'DAT'. The -ar 'DAT' suffix is also found on the second person dual and first person plural inclusive and is obligatory to distinguish from the nominative. The other suffix, -ant 'DAT' is found on all other forms. In the case of dual and plural exclusive, the expected form *ngan-ant is abbreviated to ngant. Similarly, the third person plural is not the expected *than-ant but thant.

| Person | Singular | Dual | Plural |
| :--- | :---: | :---: | :---: |
| 1 Incl |  | ngal=ant | ngamp=ar |
| Excl | ngath(ar) | ngant(t) | ngant(t) |
| 2 | nungk(ar) | nip=ar | niiy=ant |
| 3 | nung(ant) | pul=ant | thant(t) |

Table 21: Dative pronouns
The forms shown in table 21 are the stems for all other cases. The full forms are used in the singular i.e. with the otherwise optional suffixes. For example the first person singular allative is formed by ngathar=ak '1SG.DAT=ALL' and not *ngath=ak '1SG.DAT=ALL'.

As discussed in section 2.4.5.1.4, when ngant '1PL.EXCL.DAT' and thant '3PL.DAT' have the genitive $=a m$, comitative $=a n g$ or reflexive $=a k=a m$ (ALL ABL) suffixed, the stress is found on the second syllable, not the first as is usual in Wik-Mungkan. The orthographic convention for this situation is to double the final $t$ so that e.g. the third person plural genitive is thantt=am, '3PL.DAT=GEN', not *thant=am.

Note that the free forms of these pronouns may not be present in a clause but can
instead be marked on the verb (obligatorily for subjects), as discussed in section 8.2, 8.3 and 8.4 for nominative, accusative and dative (also ablative and comitative) respectively.

### 5.1.2 The Role of Personal Pronouns

This section looks at the functions of personal pronouns in Wik-Mungkan. As discussed in section 3.1.2, pronouns can be free-form or bound on the verb. Free subject pronouns can be present even though the verb is always marked with a portmanteau suffix which marks the person and number of the subject as well as tense or subjunctive mood (Section 8.2). According to Dixon (1980 p. 362), Australian languages with both free-form pronouns and bound forms use the former 'sparingly, for particular emphasis'. This is not the case for Wik-Mungkan, which makes extensive use of free-form pronouns, even when co-referential with the bound form on the verb. Indeed, bound non-subject pronouns (Section 8.4) are not obligatory, are restricted to first and third person singular, and are relatively rare in the corpus.

Personal pronouns are frequently the initial word in a clause, with or without a coreferential NP. This may be an artefact of how the data for the corpus has been sourced; many clauses are taken from the lexicon or other publications, chosen by their authors to illustrate a particular usage. There is frequently no context provided. Within the corpus, the total clauses found commencing with a pronoun is of the order of $1,800^{31}$ out of a total of 3,900 . A typical example of a simple use of initial pronoun (without a coreferential NP) is (115), where the free pronoun nil '3SG' is clause initial and co-referential to the verbal suffix - $\varnothing$ '3SG.PST'. (Note aak ngeen 'PLACE what' can mean both 'what place' and 'what time').
(115) Sayers 1976c p. 70 ex 157

| nil aak | ngeen | wamp-Ø |
| :--- | :--- | :--- |
| 3SG(NOM) PLACE | what | come-3SG.PST-a |
| 'when did he come?' |  |  |

The above estimate of the number of pronoun initial clauses excludes examples

[^12]where a particle precedes the pronoun,such as (116) where the particle yaa 'YES' is clause initial, (or a clause on its own) followed by the pronoun ngay '1SG'.

| (116) Sayers774TWMY_10.34 |  |  |  |
| :---: | :---: | :---: | :---: |
| yaa ngay | nungk | waa'-ang | kan |
| YES | 1 SG(NOM) | 2SG.DAT | tell-1SG.FUT |
| 'OK, I will tell you (a story) now' |  |  |  |

Third person pronouns are commonly followed by co-referential NPs, such as in (117) where the 3SG pronoun nil is followed by the co-referential NP pam thum nungk-ar=am=ang 'MAN fire 2SG-DAT=GEN=ERG' (your husband). The verbal suffix is also coreferential with both ${ }^{32}$.

## (117) Kilham 1977

| nil | pam | thum | nungk-ar=am=ang | chint- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) MAN | fire | 2SG-DAT=GEN=ERG | spear-3SG.PST |  |
| 'he, your husband speared (it)" |  |  |  |  |

A third person object pronoun can also be found with a co-referential NP, as in (118) where the direct object is the object pronoun nun-ang '3SG-ACC', with co-referential NP in absolutive case puk many=an 'CHILD small(ABS)=DEF'.
(118) Kilham 1977

| nil | piik- $\varnothing$ | nun-ang | puk many=an |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) hit-3SG.PST | 3SG-ACC | CHILD small(ABS)=DEF |  |
| 'he hit him, the little child' |  |  |  |

As noted by Kilham (1977 p. 43), the third person singular nil can appear as coreferential with a plural subject, as in (119) where the verb is marked with the plural suffix -in '3PL.PST' but with a singular nominative subject pronoun nil-a '3SG(NOM)$a^{\prime}$. These examples are relatively rare in the corpus.
(119) Kilham 1977 p. 43 ex 34

| nil-a | ke'=am | thoo'-ath-in | ya' |
| :--- | :--- | :--- | :--- |
| 3SG(NOM)-a | NEG=EMPH | news-TR-3PL.PST | NO |
| 'they didn't spread the news (no)' |  |  |  |

More usually, where the co-referential subject is plural, the leading pronoun is also plural. Take example (120) where the subject pam wanch 'MAN WOMAN' (people) with ergative case is co-referential with the initial pronoun than ' 3 PL ', in nominative

[^13]case and agrees in person and number.
(120) Kilham et al 1986 p. 136

| than | pam | wanch=ang=an | thath-in | nun-ang-a |
| :--- | :--- | :--- | :--- | :--- |
| 3PL(NOM) man woman=ERG=DEF | see-3PL.PST | 3SG-ACC-a |  |  |
| 'when the people saw her' |  |  |  |  |

A final example, (121), shows two instances of the 3SG pronoun (in nominative case) following two separate co-referential NPs; pam 'man' and the proper noun Tariri, this last marked for definiteness and topicality.
(121) Sayers 1976a p. 2 ex 2

| pam | nil | Tariri=an=iy-a |  |  |
| :---: | :---: | :---: | :---: | :---: |
| man | 3SG(NOM) | Tariri= DEF=TOP-a |  |  |
| nil | ngangk | min | ngul | ya'a |
| 3SG( | NOM) heart | good | then | NO |
| 'the man, he, that Tariri, he was not happy (happy then, no)' |  |  |  |  |

The third person singular can also encode reference to inanimate objects such as in (122) where nil '3SG' is co-referential with the NP wayk in=an-iy-a 'PRX=DEF-TOP-a' (this dye). Thus use is relatively rare in the corpus.
(122) Sayers 1976a p. 26 ex 7

| nil | wayk | in=an-iy-a | yuk-a | pii'an | ya'a |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) dye | PRX=DEF-TOP-a | tree-a | big | NO |  |
| 'this root dye, this tree, is not big' |  |  |  |  |  |

The following section looks at possible explanations for the use of pronouns where the clause includes a co-referential NP which frequently follows directly after the pronoun.

### 5.1.2.1 Third Person Pronouns as Determiners?

A tendency found in some Australian languages is that personal pronouns, especially third person pronouns, acquire a determiner-like function when adnominal. A survey by Louagie and Verstraete (2015) of 75 Australian languages found about half had some adnominal use of personal pronouns in this way. They found that pronouns functioning as a nominal modifier frequently provide information about definiteness and/or specificity, hence meeting the definition of determiner. The evidence they
draw on is positional and functional. Following is a discussion of how Wik-Mungkan fits with this analysis.

Positionally, Louagie and Verstraete (2015 p. 171) describe that in many cases adnominal pronouns feature at the edge (left or right) of a nominal expression, a position generally corresponding to the position of determiners. This certainly is the case with Wik-Mungkan; in most of the examples found the pronoun is at the left edge of an NP, as shown in examples (117) to (119) above. However this could simply be an artefact of the tendency in the corpus (>40\%) to start clauses with a pronoun.

The second test applied by Louagie and Verstraete (2015 p. 176) is functional and more difficult to assess systematically. The criteria used by Louagie and Verstraete (2015 p. 176) are the extents to which the pronouns code definiteness and/or specificity. Here the evidence in Wik-Mungkan is mixed, primarily because of the availability to the speaker of the definite marker =an 'DEF', the topical marker =iy 'TOP', especially when combined as =an=iy 'DEF=TOP', and adnominal demonstratives.

To recap, the definite marker generally attaches to NPs. As discussed in section 3.6.1, its usual ${ }^{33}$ function is discourse deictic, with the first instance of an NP such as pam 'man' being unmarked and later instances marked with =an 'DEF' to denote the same referent, i.e. pam=an 'man=DEF' (the man (who was mentioned previously)). Similarly, the topic marker can be used; pam=iy 'man=TOP' (the man being discussed). A demonstrative can also be used e.g.pam an=an 'man DIST=DEF' (that man). Pronouns typically perform a similar discourse deictic function, so that, say, instead of pam=an 'man=DEF', the third person nil ' 3 ' ${ }^{\prime}$ ' is used. The definite marker can also be found attached to a pronoun e.g. nil=an '3SG=DEF', in cases where the reference of the pronoun is unclear i.e. there is another potential referent in the narrative. The same referent can also be marked on the verb via the STM suffix (see section 8.2). Any of these strategies can be found in any particular narrative.

These different strategies can be seen in the narrative Geese Eggs (Sayers 1982a pp. 171-190), a story about a man who goes to collect geese eggs. (see Appendix 3 for the full text). The main protagonist is the man who volunteers to go and collect the eggs, introduced in line 16 as a quote of the man saying ngay-wey iiy-ang '1SG-EMO go-1SG.FUT' (I will go) and then in line 17 as pam thon=an=iy 'man one=DEF=TOP' (one man, that one). The next reference to him is in line 30 when setting out and the pronoun nil-a '3SG-a' is used. In line 32 he is referred to by a verbal suffix thaampan 'row-3SG.PRS' (he rows). In line 39 he is denoted by by nil=an '3SG=DEF'. Later, in line 57, he is denoted by pam an=an 'man DIST=DEF' (that man), in line 64 by nil-a pam=an=iy-a '3SG-a man=DEF=TOP-a' (he, that man), in line 143 by pam=an 'man=DEF' and in line 144 by nil=am=an '3SG=EMPH=DEF'. These are not all the examples where he is referred to; they are just illustrating each type used in the narrative.

The evidence from the above narrative is that Wik-Mungkan has a range of strategies providing definiteness or specificity to NPs. A co-referential preceding pronoun is not required to provide definiteness or specificity. Where such a pronoun does occur it duplicates the reference rather than adding information. This is particularly clear when the reference is to a named person, as in (121) above and (90), repeated below as (123), where the named person, Marie, is preceded by the co-referential pronoun nil '3SG' and also marked with the topical suffix =iy TOP'. The pronoun here is not required for definiteness or specificity, as that information is contained in the named person. The lack of ergative marking on the name is an anomaly noted by Kilham without explanation. The free translation is as provided by Kilham and the phrase 'as for' is common as a translation of the topical marker =iy '=TOP'. The omission of the word for fish is null anaphor as this clause is part of narrative of three women fishing.
(123) Kilham 1977 p. 65 ex 125

| nil | Marie=iy-a | kucham | wich- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | Marie=TOP-a two(ABS) | pull.out-3SG.PST |  |
| 'as for Marie, she caught two fish' |  |  |  |

The above discussion is concerned with third person singular pronouns in nominative case. The accusative pronoun nun(ang) '3SG.ACC(-ACC)' is less common (156
examples in the corpus) and there are very few instances with a co-referential NP. These few examples are similar to the pattern for nominative third person singular in duplicating reference rather than adding definiteness or specificity. Example (124) illustrates this, with the accusative pronoun nun-ang '3SG-ACC' preceding the coreferential NP piim=an=iy-a 'man (avoidance)=DEF=TOP-a' (that man). Both references can be understood in the context of the narrative (kekwoyang 'echidna man' (Sayers 1982a pp. 207-210)) from which this is taken.
(124) Sayers 1982a p. 209 ex 32

| uw=iyin | nun-ang | piim=an=iy-a |
| :--- | :---: | :--- |
| find-3PL.PST | 3SG-ACC | man(avoidance) $(A B S)=D E F=T O P-a$ |

A co-referential object NP, when it appears, can also precede the verb while the object pronoun usually follows the verb, as in (125) where the NP is puk many=an=iy-a 'child small=DEF=TOP-a' (that child). The pronoun nun '3SG.ACC' repeats the reference rather than adding definiteness or specificity.

| (125) Sayers 1982a p. 194 ex 12 |  |  |
| :--- | :--- | :--- |
| puk many=an=iy-a | pich-ath-antan | nun |
| child small=(ABS)DEF=TOP-a | paint-TR-3PL.PRS | 3SG.ACC |
| morp=ang-a |  |  |
| white.clay=INST-a |  |  |
| 'that child, they paint him with white clay' |  |  |

Thus adnominal use of nil '3SG' or nun-ang '3SG-ACC' is independent of a coreferential NP. That is, where one appears with a co-referential NP, it is not adding information as to definiteness and / or specificity and hence does not have a determiner-like function, using the test of Louagie and Verstraete (2015). Third person dual and plural pronouns follow a similar pattern. Given this conclusion, the existence of a pronoun and a co-referential NP is one of apposition of two syntactically independent phrases. A similar conclusion was reached by Gaby (2017 p. 216) in her analysis of analogous structures in Kuuk Thaayorre, a related language of Cape York.

### 5.1.3 Reflexive / (Reciprocal) Pronouns

Reflexive pronouns, first described by Godfrey and Kerr (1964 p. 16), are formed in
two different ways. The difference between the two is distributional; one is only used as direct objects for singular referents, the other primarily as adjuncts for singular and plural referents. There appears to be a change in usage occurring in that the adjunct reflexive pronouns are also found in direct object position for singular referents, in place of the direct object forms. Note that the historical appellation of 'reflexive pronoun' is retained here, even though they are found in reflexive and reciprocal constructions (see section 12.5).

The direct object form of reflexive pronouns is formed from the short dative form, affixed by =am 'GEN' and -ang 'ACC'. As explained in section 3.1.2.2, the former is the genitive, not the homophonous ablative. The second affix -ang is simply the accusative case, as required for pronouns in direct object position.

The adjunct reflexive pronouns are formed by taking the full dative form of the pronouns and suffixing the allative =ak and the ablative =am. The possibility of $=a m$ being the emphatic marker is inappropriate as the emphatic marker is optional and these reflexive forms are invariant. Additionally, the semantics of the 'to' and 'from' meaning of allative and ablative aligns with the reflexive sense of the pronouns. This morphology should probably be considered as etymology and no longer synchronically active. The extension of the distribution of the forms to other uses underlines this assertion (see section 12.5).

The resultant forms are shown in table 22, from Godfrey and Kerr (1964 p. 16). Godfrey and Kerr (1964) did not consider the distributional evidence and referred to the forms as 'reflexive 1' and reflexive 2'. The lexicon includes the forms with identical definitions e.g. ngatharakam and ngathamang are both glossed as 'myself'. It is curious that the direct object forms only attach to the short dative form, not the long e.g. *ngatharamang 'myself' does not exist. Equally, the indirect reflexive are only formed from the full dative stem e.g. *ngath=ak=am does not exist.

It should be noted that the non-singular direct object pronouns in Table 22 do not exist in the lexicon nor are there any examples in the corpus. It is not clear if the non-singular direct object reflexive pronouns in table 22 were actually observed by

Godfrey and Kerr or if they extrapolated from the singular. The only other mention of reflexive pronouns in the Wik-Mungkan literature is in Kilham et al (1986 p. 404) which states that only the singular direct object forms exist.

| Number | Person | Adjunct | Direct Object |
| :--- | :--- | :--- | :--- |
| Singular | 1 | ngath-ar=ak=am | ngath-am-ang |
|  | 2 | nungk-ar=ak=am | nungk-am-ang |
|  | 3 | nung-ant=ak=am | nung-am-ang |
| Dual | 1 incl | ngal-ant=ak=am | ngal-ant-am-ang |
|  | 1 excl | ngan-t=ak=am | ngan-t-am-ang |
|  | 2 | nip-ar=ak=am | nip-ar-am-ang |
|  | 3 | pul-ant=ak=am | pul-ant-am-ang |
| Plural | 1 incl | ngamp-ar=ak=am | ngamp-ar-am-ang |
|  | 1 excl | ngan-t=ak=am | ngan-t-am-ang |
|  | 2 | niiy-ant=ak=am | niiy-ant-am-ang |
|  | 3 | than-tt=ak=am | than-t-am-ang |
|  |  |  | nar |

Table 22: Reflexive pronouns as per Godfrey \& Kerr (1964 p. 16)
It should be noted that there are very few examples of the direct object reflexive pronouns in the corpus (ten only) against 60 of the adjunct reflexive pronouns. Admittedly these are both small volumes. It is possible that there has been a gradual change from the direct object forms to the adjunct forms since 1964. This question is expanded in section 12.5.

Reflexive pronouns are used to form reflexive / reciprocal constructions, described in section 12.5. They are also used to encode possession; see section 5.1.4.

As the forms are not considered synchronically active, and for ease of reading, the full morpheme analyses in Table 22 will not be used. The adjunct reflexive pronouns will be glossed as simply PNrefIA, where P is person and N is number. For example, the first singular adjunct will be glossed 1SGreflxA. Similarly the direct object forms will be glossed PNreflO. For example the third person singular will be 3SGreflO.

The adjunct reflexive pronouns are also used to add emphasis to the reference. This can be seen by comparing (126) with (127). In both the speaker is asking about others being angry with them. In the first, the speaker uses the reflexive pronoun ngatharakam '1SGreflA' (myself) as emphasis. In the second, the speaker uses the simple dative form ngath '1SG.DAT' (with me).
(126) Kilham et al 1986 p. 231

| kul ngatharakam an-man | thaw-thaw-an | ey? |  |
| :--- | :--- | :--- | :--- |
| angry 1SGreflA | DIST-SAME | say-RDP-3SG.PRS | INT? |
| 'why be angry with me all the time?' |  |  |  |

(127) Kilham et al 1986 p. 32

| nint | kul | ngath |
| :--- | :--- | :--- |
| 2SG(NOM) angry | 1SG.DAT | ey? |
| INT? |  |  |
| 'are you angry with me?' |  |  |

There are two idiomatic expressions which use adjunct reflexive pronouns. The first is shown in (128). The adjunct reflexive pronoun ngatharakam '1SGrefIA' (myself) could be interpreted here as signifying possession i.e. the speaker owning his own flesh and hence being his own boss. It seems more reasonable to consider it purely idiomatic.
(128) Kilham et al 1986 p. 57
ngay kemp ngatharakam
1SG flesh 1SGreflA
'I am my own boss / I do what I like'
The second idiomatic use occurs with the phrase ma' kenth-an 'HAND chase-NF' (to start a fight). The lexicon entry for this phrase states that it is 'sometimes followed by a reflexive pronoun', i.e. the pronoun is optional. This phrase can be seen in (129), where the speaker is telling the addressee to not start a fight (the verbal suffix -an '2SG.FUT' also means the imperative). The final reflexive pronoun does not appear to add any semantic content to the rest of the clause and could be omitted with no obvious loss of meaning. It is possibly being used to add emphasis.
(129) Kilham et al 1986 p. 101

| nint | ngay-ang | ke' | ma' | kench-an | nungkarakam |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2SG(NOM) | 1SG-ACC | NEG | HAND | chase-2SG.FUT | 2SGreflA |
| 'don't start a fight with me' |  |  |  |  |  |

### 5.1.4 Possessive Pronouns

As discussed in section 3.1.2.3, possessive pronouns are formed by adding the genitive case ending =am '=GEN' to the the dative stem of the relevant pronoun, e.g. ngathar=am '1SG.DAT=GEN' (my). They follow any adjectives in a NP (see section 7.1 for the syntax of the noun phrase) and precede any quantifiers or adnominal demonstratives. Where they are the last word in the noun phrase, they carry any case marking applying to the noun phrase. This can be seen in (130), where the NP is puk ngathar=am 'child 1SG.DAT=GEN' (my child). in ergative case as the subject of the transitive verb yump-an 'make-3SG.PRS'.
(130) Kilham et al 1986 p. 5

| puk | ngathar=am=ang | way | yump-an |
| :--- | :--- | :--- | :--- |
| child | 1SG.DAT=GEN=ERG | bad | nake-3SG.PRS |$\quad$ 1SG-ACC-ang-a

Other cases on the NP can also be found. Example (131) shows the allative added to the NP piip thant=am 'father 3PL.DAT=GEN' (their father).
(131) Godfrey and Kerr 1964 p. 29

| nil piip | thant=am=ak | wenk-wenk-an |
| :--- | :--- | :--- |
| 3SG(NOM father | 3PL.DAT=GEN=ALL | search-RDP-3SG.PRS |
| 'she is looking for their father' |  |  |

The only case not found attached to the possessive adnominal pronouns is the ablative but this is likely an artefact of the corpus and not a language constraint. As suggested by Jane Simpson (pc), it could also reflect a haplology constraint on -am$a m$.

Although the usual position of the possessive pronouns is adnominal, as discussed above, there are instances where the possessive pronoun follows the verb, as in (132), where the possessive pronoun nungk-ar=am '2SG-DAT=GEN' follows the verb and denotes possession of the language wik 'WORD'. This construct is similar to body part possession by part/whole apposition, as discussed in section 7.2.1.
(132) Sayers 1976c p36 ex 12

| wik | mam-an | nungk-ar=am |
| :--- | :---: | :---: |
| WORD(ABS) | learn-1PL.EXCL.FUT | 2SG-DAT=GEN |

There are some examples, almost all in Sayers (1982a) where the possessive pronoun precedes the possessum, as in (133) where the possessum is imp 'bark' is preceded by the possessive pronoun ngamp-ar=am '1PL.INCL-DAT=GEN'
(133) Sayers 1982a p. 162 ex 132

| ngamp-ar=am | imp |
| :--- | :--- |
| 1PL.INCL-DAT=GEN bark | thayan |
| 'our bark (is) hard' |  |

Possession is also sometimes shown by the dative, often in verbless clauses, as in (134) where ball nung-ant 'ball 3SG.DAT' is used to signify that the ball belongs to a person. This is followed by (135) where the addressee is told not to want that ball (anaphor) because it doesn't belong to them, shown by the dative nungkar '2SG.DAT'.
(134) Kilham et al 1986 p. 108
an ball nung-ant-a yuk nungantakam-a
DIST ball 3SG-DAT-a thing 3SGreflA-a
'that is his ball, his own (thing)'
(135) Kilham et al 1986 p. 108

| ke' mee'=ang | wak-wak-an-a. | nungkar | ya'a |
| :--- | :--- | :--- | :--- |
| NEG eye=INST | chase-RDP-2SG.FUT-a. | 2SG.DAT | NO |
| 'don't be wanting (it). it's not yours' |  |  |  |

Possession is also encoded by adjunct reflexive pronouns. This use is similar to the dative but appears to add emphasis. In (134) the dative nung-ant-a '3SG.DAT-a' is used to state that an ball 'DIST ball' belongs to an (unknown) referent, followed by the use of the reflexive pronoun nungantakam '3SGrefIA' to emphasise that the ball emphatically belongs to the unknown referent.

### 5.1.5 Relationship Pronouns

There is a set of pronouns labelled relationship pronouns first discussed by Godfrey and Kerr (1964 pp. 22-24). These pronouns are used to associate two groups as being related in some way. They are mostly formed by combining a pronoun in nominative form with another pronoun in dative form, as shown in Table 23, compiled by analysing the lexicon.

| Nominative | Dative | Relationship pronoun |
| :---: | :---: | :---: |
| nint 2SG |  |  |
|  | ngath(ar) 1SG | nintar 'you sing. me' |
|  | nungant 3SG | nintnungant 'you sing. him' |
|  | pulant 3DU | nintpulant 'you sing. them du' |
|  | thant 3PL | nintthant 'you sing. them pl' |
| nip 2DU |  |  |
|  | ngath(ar) 1SG | nipangar 'you dual me' |
| niiy 2PL |  |  |
|  | ngath(ar) 1SG | niiy(ang)ar 'you pl me' |
| nil 3SG |  |  |
|  | ngath(ar) 1SG | nilar 'he me' |
|  | ngampar 1 PL INC | nilngampar, nilamp 'he us incl' |
|  | ngant 1 PL EXCL | nilngant 'he us excl' |
|  | nungk(ar) 2SG | nilungk 'he you sing.' |
|  | nipar 2DU | nilnipar 'he you dual' |
|  | niiyant 2PL | nilniiyant 'he you pl' |
|  | nung(ant) 3SG | nilnungant 'he him' |
|  | pulant 3DU | nilpulant 'he them dual' |
|  | thant 3PL | nilthant 'he them pl' |
| pul 3DU |  |  |
|  | ngath(ar) 1SG | pular 'they dual me' |
|  | nungk(ar) 2SG | pulnungkar 'they dual you sing.' |
|  | niiyant 2DU | pulniiyant 'they dual you pl' |
|  | nungant 3SG | pulnungant 'they dual him' |
|  | thant 3PL 3PL | pulthant 'they dual they pl' |
| than 3PL |  |  |
|  | ngath(ar) 1SG | thanar 'they pl me' |
|  | nungkar 2SG | thannungkar 'they pl you sg' |
|  | nipar 2DU | thannipar 'they pl you dual' |
|  | niiyant 2PL | thanniiyant 'they pl you pl' |


| Nominative | Dative | Relationship pronoun |
| :--- | :--- | :--- |
|  | nung(ant) 3SG | thannungant 'they pl him' |
|  | pulant 3DU | thanpulant 'they pl them du' |
|  | than 3PL | thanthant 'they pl them pl' |

## Table 23: Relationship pronouns

The six forms above where the second (dative) party is the first person singular uses for the most part the dative suffix -ar rather than the full dative form, or an alternative form -angar. This latter suffix avoids homophonous forms of other pronouns in the second person e.g. nip-angar '2DU-1SG' avoids nipar '2DU.DAT'. There are no forms where the first pronoun is in the first person and relatively few in the second person. It is not clear if the many gaps in table 23 are because those forms are explicitly not allowed or just not customary. There are few examples in the corpus of any of the forms. The standard gloss in the lexicon for these forms is to treat the second, dative, form as a possessor, so that e.g. nilar is glossed as 'he-mine'.

Godfrey and Kerr (1964 Chart VI p. 22) listed the third person nominative forms above, not the second person, stating explicitly that they didn't exist in the language. They did include first person forms. The only example they provide for this last is (136), where the speaker is the first singular ngay to which the suffix the dative nip-ar '2DU-DAT' to indicate that the speaker considers the two addressees to be friends.
(136) Godfrey and Kerr 1964 p. 33

| ngay-nip-ar | kan |
| :--- | ---: |
| 1SG(NOM)-2DU-DAT | now |
| 'I, your mate, (am going) now' |  |

The referent for each of the pronouns in table 23 is represented by the nominative part. That is, the standard nominative pronoun in the first column could be used in place of the relationship pronoun. The second, dative, part of the relationship pronoun provides additional information in assigning a relationship between the two parties. In example (137) for instance, the referent for the pronoun nil-amp '3SG1PL.INCL.DAT' is a particular person; the suffix -amp '-1PL.INCL.DAT' is used to identify him as having a relationship with the speaker and addressees.
(137) Sayers 1982a p. 172 ex 13

| nil-amp | nan ya'a ey |  |
| :--- | :---: | :---: |
| 3SG-1PL.INCL.DAT | MED NO | INT |
| 'maybe that relative of ours would go' |  |  |

Similarly, in (138), the speaker is addressing a person using the second person singular pronoun nint '2SG' with added suffix -ar '-1SG.DAT' to indicate that the speaker considers the addressee to be a friend. There would be no change of referent if the speaker used the bare pronoun nint '2SG' instead.
(138) BS779min22_2.04

| aawuch thath-thath- $\varnothing$ | nint-ar-a | thaw-an |
| :--- | :--- | :--- |
| house see-RDP-IMP | 2SG-1SG.DAT-a | say-2SG.PST |
| 'you, my friend, said "look at the houses"' |  |  |

Relationship pronouns are not limited to where the first pronoun in the compound is in nominative case. They can also be in accusative case and dative case. There are no examples in the corpus of these but the lexicon contains some entries, but only some combinations. Examples are nung-ant-ar '3SG-DAT-1SG-DAT' (his/her-mine) and nunangal, a compound formed from nun-ang '3SG-ACC' and ngal '1DU.EXCL' (geminate velar nasal $n g$ produced as singleton) with the translation of 'him-ours'.

Godfrey and Kerr (1964 Chart VII p. 24) present a table of forms which apply if the first pronoun is in ablative and comitative case. Examples they give, with their translations, are nung-ant-ar-am '3SG-DAT-1SG.DAT-ABL' (from him, my mate) for the ablative and pul-ant-ar-ang '2DU-DAT-1SG.DAT-COM' (with them dual, my mates). There are no such entries in the lexicon nor examples in the corpus.

### 5.1.5.1 Cross-Linguistic Comparison

It is interesting to compare this method of combining nominative and dative forms with a similar combination recorded by Gaby (2017 p. 227 ff) in Kuuk Thaayorre, another language of Cape York. She notes only seven forms, (Gaby 2017 p. 84 Table 58) whereas the Wik-Mungkan set of forms is more extensive. In Kuuk Thaayorre, these forms combine a subject superset and an adjunct subset in a single lexeme and thus constitute 'inclusory pronouns', as defined by Lichtenberk (2000) and Singer (2001). For example, ngal 1DU.INCL.NOM combines with nhangkun

2SG.DAT to form ngalngun with a sense of 'we two including you', as in (139).

```
(139) Gaby }2006\mathrm{ p. }91\mathrm{ ex }7
nhunt ngalngun pam.thaw
2SG.NOM 1DU.INCL-2SG friend.NOM
'you and I are good friends together'
```

Although six of the seven inclusory pronouns identified by Gaby follow the above semantics, the seventh is semantically different. The form is pelnathun (peln 3PL + ngathun 1SG), as in (140).
(140) Gaby 2006 p. 313 ex 479

| pelnathun kanpa | $y a<a>t$ |
| :--- | :--- |
| 3PL1SGINCL before | go<RDP>:P.PFV |
| 'they and I all went previously' |  |

As Gaby (2017 p. 230) notes, although pelnathun is formally the same as the other six inclusory pronouns, the dative referent is not a subset of the nominative but additional. As this is a single anomaly, Gaby does not discuss further.

The key difference between the Wik-Mungkan forms and the Kuuk Thaayorre forms is that in the latter, all the parties forming the pronoun are included in the reference, whereas the Wik-Mungkan referent excludes the second party. Conversely, there are no inclusory pronouns in Wik-Mungkan.

### 5.1.6 Emphatic and Reduplicated Pronouns

Personal pronouns can be reduplicated and have the emphatic affix =am '=EMPH' attached (see section 3.6.4). The interaction between these processes creates different meanings.

Firstly the emphatic enclitic provides the usual sense of emphasis when attached to the nominative forms. For example, nil=am '3SG=EMPH' is used to emphasise the referent.

Secondly, reduplicating the nominal form provides the sense that there is something unique or specific to the referent. The evidence for this is limited to the description of
the entries in the lexicon as most of these forms have no examples in the corpus. An exception is nil-nil '3SG-RDP' which translates as 'different', as in (141), where it describes the mentioned place as different.
(141) BS779min22_11.21
aak-a nil-nil-a
PLACE-a 3SG-RDP-a 'this place is different'

Thirdly, reduplication of the nominative form, combined with the emphatic suffix, provides the sense of the referent being on their own. This can be seen in (142) where the referent is a denoted by nil-nil=am '3SG-RDP=EMPH' to emphasise that she is on her own.
(142) Sayers 1982a p. 158 ex 80

| nil-nil=am | pi'-pi'- $\varnothing$-an | ang-man |
| :--- | :--- | :--- |
| 3SG-RDP(NOM)=EMPH | mind-RDP-3SG.PST-3SG.ACC | DIST-SAME |
| 'she, by herself, looked after him in that same place' |  |  |

Finally, reduplication of the dative form provides emphasis, as in (143), where reduplication of the third person plural dative thant '3PL.DAT' emphasises that the fight in question is emphatically 'theirs'.
(143) Kilham et al 1986 p. 50

| kul | nungkar | ya'a | kul | thant-thant-a |
| :--- | :--- | :--- | :--- | :--- |
| fight | 2SG.DAT | NO | fight | 3PL.DAT-RDP-a |
| 'it's not your fight, it's theirs' |  |  |  |  |

Note that the emphatic affix never attaches to the dative form, perhaps to avoid confusion with the homophonous genitive affix. For example, ngathar=am is analysed as '1SG.DAT=GEN' (my), and not '1SG.DAT=EMPH'.

### 5.1.7 Vocative pronouns

Vocative case marking on nominals (specifically kin terms and proper nouns) other than pronouns was discussed in section 4.1.10. To recap, the vocative case endings are used for the speaker to directly address one or more addressees. There is a three way distance distinction; proximal (-ang 'VOC.PRX'), medial (-ey VOC.MED') and distal (-oy 'VOC.DIST'). As for demonstratives, the exact meanings of proximal,
medial and distal are not known (section 6.4.5). There appears to be no etymological connection between demonstrative proximal, medial and distal forms and these. For pronouns, the above cases attach firstly to suffix -al 'PN ${ }^{341}$ and then to the nominative forms of second person dual and plural pronouns to form -al-ang 'PN-VOC.PRX', -aley / al-eey 'PN-VOC.MED' and -al-oy / al-ooy 'PN.VOC.DIST'. According to Kilham et al (1986 p. 413), they are said with heavy stress. There are no recorded examples in the corpus to test this assertion. The variants with geminate vowels are not explained, but are consistent with strong stress. There are only six examples in the corpus of these forms. Examples (144) to (146) shows the proximal, medial and distal respectively.
(144) Godfrey and Kerr 1964 p. 25

| nip-al-ang | Jim | ke' | thath-ow | an | ey |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2DU-PN-VOC.PRX | Jim | NEG | see-2DU.FUT | DIST $^{35}$ | INT |
| 'hey you two, will you be seeing Jim (there)? |  |  |  |  |  |

(145) Godfrey and Kerr 1964 p. 26

| niiy-al-ey | puk | many | karp kal-an |
| :--- | :--- | :--- | :--- | :--- |
| 2PL-PN-VOC.MED | child | small | together take-2PL.IMP |
| 'you take the child (with you)' |  |  |  |

(146) Kilham 1977 p. 60 ex 97
nip-al-ooy
2DU-PN-VOC.DST
'hey you two over there'
The variant -al 'VOC.PRX' is not described in the Wik-Mungkan literature but appears in two examples. It can be seen in (147) where it attaches to niiy ' 2 PL' to address a group.
(147) Kilham 1977 p. 116 ex 260

| niiy-al-a | ngamp-a | ke' | want-amp |
| :--- | :---: | :--- | :--- |
| 2PL-VOC.PRX | 1PL.INCL | NEG | leave-1PL.INCL.FUT |
| 'hey you all, let's not leave' |  |  |  |

In addition, there is a form described by Kilham et al (1986 p. 412) as 'free form vocative', ayyang 'VOC' which is not described as having a distance distinction. There is only one example in the corpus, (148) where it appears in a quote of a father using the vocative aayang 'VOC' to address his son and tell him to come.

[^14](148) Kilham 1977 p. 169 ex 351

| piip | kunch | thaw- $\varnothing$-ant |  |
| :--- | :--- | :--- | :--- |
| father | own(ABS) | say-3SG.PST-3SG.DAT |  |
| "aayang | kan | nint-a | pal iily-an-a" |
| "VOC | NOW | 2SG(NOM)-a hither go-2SG.FUT-a" |  |
| 'his father said (to him) "hey you, (now) come here".' |  |  |  |

### 5.2 Ignoratives

As discussed in section 3.1.4, ignoratives are used by speakers to express a lack of knowledge, see e.g Mushin (1995) (who calls them epistememes), Wierzbicka (1977, 1980). The base nominal ignoratives are ngeen 'what', wee' 'who', wanttak 'why/how', wanttin 'where' wantting 'where in'. These forms take various inflections, especially for case, and can be reduplicated to provide a wider range of meanings. There is also the phrase aak ngeen 'PLACE what' which translates as 'when'.

The semantics of nominal ignoratives will be described in section 5.2.1 the morphology and syntax in section 5.2.2 and the functions in 5.2.3, while 5.2.4 reviews two special uses of nominal ignoratives.

Additionally, there is an adverbial ignorative yam 'somewhere' which will be discussed in section 5.2.5.

### 5.2.1 Semantics of ignoratives

The ontological categories ${ }^{36}$ of ignoratives are summarised in Table 24.

[^15]| Ontological Category | Ignorative | Gloss |
| :--- | :--- | :--- |
| PERSON | wee' | 'who' |
| THING | ngeen | 'what' |
| REASON | ngeenam, wanttak | 'why' |
| PURPOSE | ngeenak | 'why' |
| PLACE | wanttin | 'where' |
| PLACE (as container) | wantting | 'where in' |
| MANNER | wanttak | 'how' |
| QUANTITY | ngeenngeen | 'how many' |
| TIME (repetition) | ma' ngeenngeen | 'how many times' |
| TIME | aak ngeen | (PLACE what) 'when' |

Table 24: Ontological categories of ignoratives
Wee' 'who' encodes the category PERSON and includes only humans, as in (149). In this example wee' has the ergative case to mark that it is the subject to the transitive verb maay 'pick up'. The reduplication of the verb normally signifies continuous aspect; the free translation is ambiguous in this instance.
(149) Sayers 1982a p. 178 ex 85
wee'=ang ma-maay=iy
who=ERG RDP-pick.up-3SG.SBJV
'who will pick (them) up?'
The category REASON is encoded by ngeen=am (what=ABL) 'why', as in (150). The phrase thaa' wak-an 'mouth growl-NF' is idiomatic for 'to argue'. The verbal suffix -wuniy '-2PL.RCP.PRS' means that all the members of the group (unspecified but more than two) are arguing with each other.
(150) Kilham et al 1986 p. 205
niiy $\quad$ ngeen=am thaa' wak-wuniy-a
2PL(NOM) what=ABL mouth growl.at-2PL.RCP.PRS-a
'why are you all arguing back and forth?

The category REASON is also encoded as wanttak 'why', as in (151). According to the lexicon, the phrase yelkang mangk thanan 'boisterously important to be' is specifically used to describe strong winds or big waves.
(151) Kilham et al 1986 p. 269

| wunt=an | wanttak | yelkang | mangk | than-an-a |
| :--- | :--- | :--- | :--- | :--- |
| wind(ABS)=DEF | why | boisterously important | be-3SG.PRS-a |  |
| 'why is the wind blowing so hard?' (mangk 'important' is not explained) |  |  |  |  |

The category PURPOSE is encoded by ngeen=ak (what=ALL) 'why' as in (152), where the speaker first states that the group is making mats from pandanus, then poses the question ngeen=ak (what=ALL) 'why?'.
(152) Sayers 1982a p. 215 ex 1 \& 2

| ngan mats in=angan <br> 1PL.EXCL(NOM) mats PRX=PL.ABS |  |  |
| :--- | :--- | :--- | :--- |
| yump-anan | kunchan=am=an-a | ngeen=ak? |
| make-1PL.EXCL | pandanus=ABL=DEF-a | what=ALL? |
| 'we make these mats from pandanus. Why?' |  |  |

The category PLACE is encoded in two different ways; by wanttin 'where' as a location and wantting 'where in' as a container. The former can be seen in (153) where the speaker is asking for the location of his dinghy by the use of wanttin 'where'.
(153) Kilham et al 1986 p. 53

| ngathar=am | dinghy | an-a | kech-ath-in <br> 1SG(DAT)=GEN |
| :--- | :--- | :--- | :--- |
| dinghy | DIST(ABS)-a |  |  |
| far-TR-3PL.PST |  |  |  |

The latter is only found in the Wik-Mungkan bible (four examples) and the examples do not provide clarity on the semantic difference between the two forms due to the reliance on an unrelated free translation from the King James version. Example (154) illustrates this; the free translation translates wantting 'where in' as 'where' which would be the same if wanttin 'where' was used.
(154) SIL 1984 Matthew 2.4

| nil | Christ=an-a | aak |
| :--- | :--- | :--- |
| 3SG(NOM) | Christ(ABS)=DEF-a | PLACE |

wantting mee'-pench-ow?
where.in EYE-ripen-3SG.SBJV?
'where should Christ be born? (mee-pench 'eye-ripen' means both 'open eyes' and 'be born')

MANNER is encoded by wanttak 'how' (also as above 'why'), as in (155). This is one
of the few examples of wanttak encoding 'how' in the corpus. The reduplication in this example is curious as the lexicon describes want-wanttak 'RDP-what' as meaning 'whatever' as shown below in example (156). It is possible that this use of reduplication is to create emphasis, as noted elsewhere in Wik-Mungkan; see e.g section 5.1.6. The presence of want-wanntak 'RDP-how' turns the phrase 'I will put this box under the bed' into the question 'how will I put this box under the bed?'.
(155) Huchet 1990 p. 36 ex 2.29

(156) Kilham et al p. 245

| ngay | wik | want-wanttak=an | thaw-ang | nungk-a |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | WORD | RDP-what=DEF | say-1SG.PRS | 2SG.DAT-a |
| nint |  | ngeey-an-a |  |  |
| 2SG(NOM) | hear-2SG.FUT-a |  |  |  |
| 'whatever (word) I say to you, you will listen (and obey)' |  |  |  |  |

The category QUANTITY is encoded by the reduplicated ngeen 'what' i.e ngeenngeen (what-RDP) 'how many', as in (157) (only three examples in the corpus). The context of which items are being asked about in this example is not available, only that the speaker and hearer do not have the knowledge of how many the third party will bring.

```
(157) Sayers 1976a p. }148\mathrm{ ex 3
\begin{tabular}{lllll} 
engk-an & nungant & \begin{tabular}{l} 
ngeen-ngeen
\end{tabular} & pal & kal-ow \\
ask-2SG.FUT & 3SG.DAT & what-RDP & hither & bring-3SG.FUT
\end{tabular} 'ask him how many he will bring (here).'
```

The category TIME is encoded by aak ngeen (PLACE what) 'when', as in (158). The primary meaning of aak is 'PLACE' but a secondary meaning is 'time' and the phrase aak ngeen (PLACE what) does not appear to mean 'what place', presumably because there are separate terms wanttin and wantting for 'where' and 'where in' respectively.
(158) Sayers 1976a p. 147 ex 1

| engk-an | nungant | aakngeen | wamp=iy |
| :--- | :---: | :--- | :--- |
| ask-2SG.FUT | 3SG.DAT | PLACE what | come-3SG.SBJV |
| 'ask him what time he will come.' |  |  |  |

The category TIME is also encoded as repeated events, according to the lexicon, in ma' ngeen-ngeen 'HAND RDP-what' (how many times). This is similar to the use of ma' 'HAND' with quantifiers (see section 4.3). There is only one example of this in the corpus; (159). Here the NP ma' ngeen-ngeen 'HAND RDP-what' applies to nguta 'night-a' to make the expression 'how many nights'. The 3SG subject marked on the verb kon-ngath-an-a 'ear-block-3SG.PRS' is expletive; see section 8.11.
(159)

BS774MYTW14.18

| ma' | ngeen-ngeen | ngut-a |
| :--- | :--- | :--- |$\quad$ paanth-an-a

### 5.2.2 Morphosyntax of nominal ignoratives

Nominal ignoratives mostly function pronominally; there are few examples of adnominal use in the corpus. Ignoratives can be marked for case, with some restrictions to be discussed below. According to the lexicon and Sayers (1982a pp. 31-33), the ngeen 'what' and wee' 'who' can take the full range of cases apart from the locative. The corpus does not have examples of all of these combinations. Following are selected examples with all available cases represented. Examples (12) (repeated here as (160)) and (167) show the ergative case for ngeen 'what' and wee' 'who'.
(160) Kilham et al 1986 p. 212
ngeen=ang nath thatan-ath-any-a what=ERG away strong-TR-1SG.ACC-a 'something is holding me back'
(161) Kilham et al 1986 p. 113

| an | wee'=ang | ngay-ang |
| :--- | :--- | :--- |
| DIST(DAT) who=ERG | 1SG-ACC | cepep-an-a |
| call-RDP-3SG.PRS-a |  |  |

The unmarked absolutive case as subject of an intransitive verb can be seen with
ngeen 'what' in (162) and with wee' 'who' in (163). The free translation of the verb tense in (162) is the present despite the verb being in past (continuative) tense.
(162) Kilham 1977 p. 257

| in ngeen $\quad$ thuu-thuuch- $\varnothing$ ? | yaa | thaw- $\varnothing$ |
| :--- | :--- | :--- |
| PRX what(ABS) $\quad$ RDP-crawl-3SG.PST? | yes | say-3SG.PST |
| 'what is this crawling along, he said.' |  |  |

(163) Sayers 1976a p. 128 ex 4
wee' pech-an-a? who(ABS) shout-3SG.PRS? 'who is shouting?'

The absolutive use as the direct object ngeen 'what' to the verb want- $\varnothing$ 'she left' is shown in (164). Similarly, (164) shows the absolutive use of wee' 'who' as the direct object of uwan 'he finds'.
(164) Sayers 1976a p. 181 ex 5

| Louisa=ang | ngeen | want- $\varnothing$-a? |
| :--- | :--- | :--- |
| Louisa=ERG | what(ABS) | leave-3SG.PST-a? |
| 'what did Louisa leave behind?' |  |  |

(165) Sayers 1976a p. 176 ex 4

| Andrew=an=iy, | nil | ka'atham | wee' | uw-an |
| :--- | :--- | :--- | :--- | :--- |
| Andrew=DEF=TOP | 3SG(NOM) | first | who(ABS) | find-3SG.PRS |

An example of the dative marked wee'=ant 'who=DAT' is (166) where it is indirect object to the verb thee'angan 'I gave it', the 'it' being thaa' oyngk 'MOUTH vomit' (bait), in unmarked absolutive case.
(166) Sayers 1976a p. 175 ex 1

| thaa' oyngk wee'=ant | thee'-ang-an |
| :--- | :---: | :--- |
| MOUTH vomit who=DAT | give-1SG.PST-3SG.ACC |
| 'to whom did I give the bait?' |  |

The ablative case can be seen in (167) attached to ngeen 'what'. The expression ngangk pathan (SOUL bite) translates as 'hate', with ngangk being the object of the verb pathan 'to bite' in unmarked absolutive case. There are no examples in the corpus of wee'=am 'who=ABL'.
(167) Kilham et al 1986 p. 136

| nint | ngeen=am | ngangk path-path-an | ngathar-a | kan? |
| :--- | :--- | :--- | :--- | :--- |
| 2SG(NOM) what=ABL | SOUL bite-RDP-2SG.PST | 1SG.DAT-a | now? |  |
| 'why do you hate me?' |  |  |  |  |

Example (168) shows the genitive case for wee' 'who'.
(168) Kilham et al 1986 p. 13

| waangk $i n=a n$ <br> dilly.bag $P R X(A B S)=D E F$ | wee=ant=am-a |
| :--- | :--- | :--- |
| 'whose dilly bag is this?' | who=DAT=GEN-a |

There is only one example of the instrumental =ang attached to an ignorative in the corpus; (169), where it is attached to ngeen 'what' to ask the question 'with what'. This is part of a description of a film about a woman giving birth in New Guinea. It is a rhetorical question as the speaker is describing the film and knows the answer. The lexicon describes the word thak as 'etc, and other things'. It is not clear what sense it is adding to this example.
(169) Sayers 1982a p. 156 ex 72\&73

| kuutan | thak=an | $n i=a m$ | ump- $\varnothing$. |
| :--- | :--- | :--- | :--- |
| umbilical.cord | etc $(\mathrm{ABS})=\mathrm{DEF}$ | 3SG(NOM)=EMPH | cut-3SG.PST. |

ngeen=ang?
what=INST?
'she cut the umbilical cord. What with?'
The allative case =ak 'ALL' attaching to ngeen 'what', is shown in (170). As can be seen in this example, ngeen=ak 'what=ALL' has the sense of 'why?' or 'to what purpose?. This compares with the above ablative form ngeen=am 'what=ABL' meaning 'from what cause'.
(170) Kilham et al 1986 p. 50

| nint | ngeen=ak | karkan pey-angan |
| :--- | :--- | :--- |
| 2SG(NOM) what=ALL | hot | jump-2SG.PRS |$\quad$| store $=a k$ |
| :--- |
| store=ALL |

The lexicon describes a form wee' 'who' which combines the dative and the allative to make $w e e^{\prime}=a n t=a k$ 'who=DAT=ALL'. This is unusual in Wik-Mungkan; only reflexive pronouns (see section 5.1.3) show this combination and they are further suffixed with the ablative e.g. pulantakam (3DU=DAT=ALL=ABL) 'yourselves'. The lexicon explains that this is an emphatic form of wee'=ant 'who=DAT' which is again a
method of adding emphasis in Wik-Mungkan. There is no example in the corpus of wee'=ant=ak 'who=DAT=ALL'.

As discussed in section 3.1.4, the ignoratives wanttin 'where', wanttak 'how/why' and wantting 'where in' are presumed to be cases attached to a stem wantt. As such, they cannot host separate cases, with the exception of wanttin 'where' which can be marked by the allative, as in wanttin=ak 'where=ALL'. Wanttin 'where' can be seen in (171).
(171) Kilham et al 1986 p. 18

| nil | wanttin | yaaka' | iiy-iiy-an-a |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | where | perhaps | go-RDP-3SG.PRS-a |

In (172) wanttak 'why' modifies the clause yot=ang ngany maay-in 'many=ERG 1SGACC pick.on-2PL.SBJV' (you are picking on me). The pronoun ngany '1SG' is an allomorph of ngay '1SG' which only occurs with the accusative case and is relatively rare.
(172) Kilham et al 1986 p. 88

| yot=ang | ngany-ang | wanttak |
| :--- | :--- | :--- | | many=ERG | 1SG-ACC |
| :--- | :--- |$\quad$ why $\quad$ pick.on-2PL.SBJV?

There are six examples of wanttin=ak 'where to' in the corpus. In example (173) wanttin=ak 'where=ALL' (to where) is adjunct to the verb thee'-Ø-a 'throw-3SG.PST' and the clause is a question of to where did the subject throw something (a fishing line).
(173) Sayers 1976a p. 176 ex 6

| wanttin=ak | ngul | thee- $\varnothing$-a |
| :--- | :---: | :--- |
| where=ALL | then | throw-3SG.PST-a |
| 'where (then) did she throw it?' |  |  |

There are few instances of ignoratives being used adnominally; (174) shows ngeen 'what' modifying way 'bad' to ask 'what bad thing'? The free translation omits the meaning of puth which has various meanings, including 'but', 'because', 'and' and 'hence' (see section 3.5.4.1. The likely meaning here is 'but'.
(174) Kilham et al 1986 p. 186

| ngay puth way | ngeen | yump-ang | mee'? |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | CONJ bad | what(ABS) | make-1SG.PST |

Another two clitics noted on nominal ignoratives are -pal '-hither' and -nath '-maybe' although these are not common in the corpus'.

For nominal ignoratives the suffix -pal 'hither' is only found attached to wanttin 'where' (according to the lexicon) to create wanttin-pal 'where-hither'. Example (175) is one of two examples of wanttin-pal 'from where' in the corpus and describes a fire as coming towards the speaker, from an unknown location.
(175) Huchet 1990 p. 66 ex 4.13

| nhoom=an | wanttin-pal | aath= $\varnothing$-a? |
| :--- | :--- | :--- |
| bushfire(ABS)=DEF | where-hither | spread-3SG.PST-a |
| 'where did that bushfire spread from?' |  |  |

The suffix -nath '-maybe' only attaches to wee' 'who' to from wee'-nath 'who-maybe' (someone) as in (176) and to wee'=ang 'who=ERG' to form wee'=ang-nath (who=ERG-maybe) 'someone=ERG' which is not found in the corpus (other than the lexicon entry). Note that the combination wee' nath 'who maybe' is also found in one example in the corpus, (177). The sense of wee' 'who' in this example is 'whoever' and nath 'maybe' retains its usual sense hence the combination is not the sense of 'someone'. I rely on the given translation for this interpretation; the actual meaning is obscure.
(176) Kilham et al 1986 p. 197

| puy pal wee'-nath | yaaka' iiy-iiy-an-a |  |
| :--- | :--- | :--- |
| thither hither | who-maybe(ABS) | maybe go-RDP-3SG.PRS |
| 'someone is coming (here) from over there' |  |  |

(177) Sayers 1982a p. 178 ex 89

| pam wee' nath=an | thaw-an-wey | nil=am=an |
| :--- | :--- | :--- |
| MAN who maybe(ABS)=DEF | say-3SG.PRS-EMO | $3 S G(N O M)=E M P H=D E F$ |
| 'whoever they say maybe he (will come).' |  |  |

Many of the ignoratives can be reduplicated, with varying effects. The reduplication of ngeen 'what' to form ngeen-ngeen 'what-RDP' is translated in the lexicon as 'how many?' while the phrase ma' ngeen-ngeen 'HAND what-RDP' is translated as 'how many times?'. The former can be seen in (178). The context is not explained but the
example consists of two clauses; the first is the imperative engk-an nung=ant 'ask2SG.FUT 3SG=DAT' (ask him) while the second represents what to ask ngeenngeen pal kalow 'what-RDP hither bring-3SG.FUT' (how many will he bring).
(178) Sayers 1976a p. 148 ex 3

| [engk-an | nung=ant] | [ngeen-ngeen pal | kal-ow] |
| :--- | :--- | :--- | :--- | :--- |
| ask-2SG.FUT | 3SG=DAT what-RDP | hither | bring-3SG.FUT |
| 'ask him how many he will bring (hither).' |  |  |  |

The phrase ma' ngeen-ngeen 'HAND what-RDP' (how many times) is found in one example; (159), as discussed on page 159.

Reduplication of wee' 'who', translated as 'who-plural' is defined in the lexicon but there are no examples in the corpus.

Reduplication for wantting 'where in' is not noted in the lexicon but the other wantt forms are; want-wanttak 'RDP-why', translated as 'whatever' and want-wanttin 'RDPwhere', translated as 'which one', 'whichever' or 'wherever'. Only the reduplicated form want-wanttak 'whatever' is found in the corpus (four examples only), as in (156), repeated here as (179). This is an instance of the ignorative being adnominal, here to wik 'WORD'. This provides the sense that the hearer is enjoined to obey the speaker's instruction, 'whatever' it may be.
(179) Kilham et al p. 245

| ngay | wik | want-wanttak=an | thaw-ang | nungk-a |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | WORD | 'RDP-what=DEF' | say-1SG.PRS | 2SG.DAT-a |
| nint |  | ngeey-an-a |  |  |
| 2SG(NOM) | hear-2SG.FUT-a |  |  |  |
| 'whatever I say to you, you will listen (and obey)' |  |  |  |  |

Example (179) is also unusual as one of the rare instances of the definite marker attached to an ignorative. It is semantically reasonable for the definite marker to not attach to ignoratives as the definite marker is usually used to link a referent to a prior referent or to a generally understood context (see section 3.6.1). By definition, ignoratives are used where the speaker lacks knowledge of some aspect of the referent. In this example, the definite marker is being used to flag a subordinate clause and not definiteness; see section 13.1.2.

There are no examples in the corpus of ignoratives with other common clitics such as the topic and emphatic markers (see sections 3.6.2 and 3.6.4) which are generally not restricted to any particular word class. This omission may be an artefact of the corpus. There is no obvious semantic / pragmatic reason for the constraint.

### 5.2.3 Functions of ignoratives

Ignoratives fulfil a range of functions in Wik-Mungkan; interrogative, indefinite pronoun, conjunction and free choice pronoun. These are similar to those found in other languages e.g. Kuuk Thaayorre (Gaby 2017 p. 84).

### 5.2.3.1 Interrogative

An essential function of ignoratives is interrogative. All of the nominal ignoratives can be used interrogatively.

The lexeme ngeen 'what' can appear in verbless questions such as (180) and (181).

```
(180) Sayers 1982a p. }150\mathrm{ ex }
    nil-a ngeen-a?
    3SG(NOM)-a what-a?
    'what did she do?'
```

(181) Sayers and Kerr 1964 p. 7
in ngeen?
PRX(ABS) what?
'what is this?'

Similarly, the inflected form ngeen=ak 'what=ALL' (why) is used to create questions, as in (182), which combines ngeen=ak "what=ALL' (why) and the statement 'you put (something unspecified) into a hole in the tree there'.
(182) Huchet 1990 p. 73 ex 4.32
\(\left.\begin{array}{lccl}nint \& pek \& ngeen=ak \& ngul <br>

2SG(NOM) \& down \& what=ALL \& then\end{array}\right]\)| wunp-an yuk | uuyan | ang=an? |
| :--- | :---: | :--- |
| put-2SG.PST | tree hole | DIST=DEF? |
| 'why then did you put it into (down into) the hole in the tree there?' |  |  |

There are only six examples of ngeen=am 'what=ABL' or 'wherefore' in the corpus, as in (183) and (184). Although both ngeen=am 'what=ABL' and ngeen=ak 'what=ALL' can be translated as 'why', the former is asking about the cause of something while the latter is concerned with the purpose. Thus in (183), the speaker is seeking the cause of the hearer hating him, while in (184), a man is asking (his wife) what has made her frightened.
(183) Kilham et al 1986 p. 136
nint ngeen=am ngangk path-path-an ngathar-a kan? 2SG(NOM) what=ABL SOUL bite-RDP-2SG.PST 1SG.DAT-a now? 'why do you hate me (now)?'
(184) Kilham et al 1986 p. 5

| nint | ngeen=am | winynynang | $e ?$ |
| :--- | :--- | :--- | :--- |
| 2SG(NOM) | what=ABL | afraid | INTJ |
| 'what are you frightened of? |  |  |  |

Similarly, wanttak 'why' can be used interrogatively, as in (185). The usage is analogous to ngeen=am 'what=ABL' in that both are asking about cause, not purpose.
(185) Kilham et al 1986 p. 29
nint wanttak peey-angan?
2SG(NOM) why cry-2SG.PRS 'why are you crying?'

Also wanttin 'where' can be used interrogatively in verbless clauses, as in (14) copied here as (186) and with verbs as in (187).
(186) Kilham et al 1986 p. 13
pam ngathar=am $\quad$ wanttin-a?
MAN 1SG.DAT=GEN
'where is my husband?'
(187) Kilham et al 1986 p. 18

| nil $\quad$ wanttin yaaka' | iiy-iiy-an-a? |
| :--- | :--- | :--- |
| 3SG(NOM) where perhaps | go-RDP-3SG.PRS-a? |
| 'where (perhaps) is he?' |  |

Example (187), as for many tokens of wanttin 'where', has a word expressing doubt (either nath 'maybe' or yaaka' 'perhaps') between wanttin 'where' and the verb. It is not clear what effect this has on the meaning, but it is optional, as seen in (188).
(188) Kilham at al 1986 p. 68

| ngook=an | wanttin | want-an-a? |
| :--- | :--- | :--- |
| dress(ABS)=DEF | where | leave-2SG.PST? |
| 'where did you leave that dress?' |  |  |

The inflection wanttin-pal 'where-hither' has only two instance in the corpus; (175) above, and (189). In this example the speaker is asking the addressee from where they found something (not stated).
(189) Sayers 1976c p. 71 ex 159
nint $\quad$ wanttin-pal maay-an?
2SG(NOM) where-hither pick-2SG.PST?
'where did you get that?'

The lexeme wee' 'who' appears as subject to transitive verbs in questions such as (161), repeated here as (190) where it is marked with ergative case to identify the subject as an unknown person who is calling out to the speaker. This example could also be translated as 'someone is calling out to me'; there is possibly some prosody which indicates that it is a question, not a statement.
(190) Kilham et al 1986 p. 113
an $\quad$ wee'=ang ngay-ang $\quad$ mep-mep-an-a?
DIST(DAT) who=ERG 1SG-ACC call-RDP-3SG.PRS-a?
'who is calling out (there) to me?'

In (84), repeated here as (191), wee' 'who' is in unmarked absolutive case and refers to an unknown person who came to the speech situation for a machine, the allative marking on 'machine' having the purposive interpretation. The distal demonstrative (not mentioned in the free translation) is in unmarked dative case and presumably refers to the place where the unknown person came from.
(191) Sayers and Kerr 1964 p. 3

| an | wee' | in-pal | mat- $\varnothing$ | machine=ak |
| :--- | :--- | :--- | :--- | :--- |
| DIST(DAT) | who(ABS) | PRX-hither | climb-3SG.PST | machine=ALL |
| 'who came up here for the machine?' |  |  |  |  |

The dative wee'=ant 'who=DAT', with the sense of 'to/of whom' appears in six examples in the corpus, four being slight variants of example (192), a verbless question. The adverb kaangk 'loving' is described in the lexicon and the sketch grammar in Kilham et al (1986 p. 407 - 408) as a verb which does not conjugate; refer section 8.12 .1 for a discussion as to why this interpretation is rejected.
(192) Sayers 1982a p221 ex 17

| niïy | kaangk |
| :--- | :--- |
| 2PL(NOM) loving | wee'=ant |
| who=DAT |  |

The genitive wee'=ant=am 'who=DAT=GEN', or 'whose', using the pronominal form of the genitive (refer section 4.1.8) is also used interrogatively. There are five examples of this in the corpus such as (193) and (194). In each case the ignorative is adnominal to a relevant NP; aak pemp 'PLACE tracks' in (193) and waangk in=an 'dilly bag PRX=DEF' (this dilly bag).
(193) Kilham et al 1986 p. 5

| in | aak | pemp | wee'=ant=am-a |
| :--- | :---: | :---: | :---: |
| PRX | PLACE track | who=DAT=GEN |  |

(194) Kilham et al 1986 p. 13

| waangk | $i n=a n$ | wee'=ant=am-a |
| :--- | :--- | :--- |
| dilly.bag | $P R X=D E F$ | who=DAT=GEN-a |
| 'whose dilly bag is this?' |  |  |

### 5.2.3.2 Indefinite pronoun

When used as an indefinite pronoun, an ignorative refers to an entity which is known to exist but the identity of which is not known. As expressed by Gaby (2017 p. 171), the indefinite pronoun asserts the existence of some referent belonging to the relevant category. There are few examples in the corpus but this can be seen in (160), repeated as (195) where ngeen 'what' represents an unspecified emotion or intuition which is constraining the speaker from action.
(195) Kilham et al 1986 p. 212

| ngeen=ang | nath | thayan-ath-any-a |
| :--- | :---: | :--- |
| what=ERG | away | strong-TR-1SG.ACC-a |
| 'something is holding me back' |  |  |

Similarly, in (196), wee'=ang 'who=ERG' refers to a hypothetical person who could have picked the dress off the line, but did not, resulting in it becoming wet from the rain. The hypothetical nature of the person is reinforced by the subjunctive mood marked on the verb. An alternative free translation is 'someone could (should?) have picked up my dress (but did not) and so the rain made it wet'.
(196) Kilham et al 1986 p. 32

| kulich ngath-a <br> dress <br> 1SG.DAT-a | ngak=ang <br> water=ERG | ep- <br> wet-3SG.PST |
| :--- | :--- | :--- |
| wee'=ang | puth | maay=iy |

### 5.2.3.3 Conjunction

Ignoratives can also function to connect clauses. This is not a common function found in the corpus. In example (197) some people have put an (unspecified) thing somewhere. The speaker in the first clause (clauses identified by [] brackets) asks a third party (the addressee) to ask those people where this place is by the use of wanttin 'where'.
(197) Sayers 1976a p. 148 ex 4

| [engk-an | thant] | wanttin | [wunp-in] |
| :--- | :--- | :--- | :--- |
| ask-2SG.FUT | 3PL.DAT | where | put-3PL.PST |
| 'ask them where they put it.' |  |  |  |

The reduplicated form want-wanttak 'RDP-why' (whatever) also functions in this way, as in (198) where it links the clause 'he told you (something)' to the imperative first clause 'tell me (that something)'. The pronoun nil '3SG' is an example of coreferential pronouns common in WM (see section 5.1.2)
(198) Kilham et al 1986 p. 245

| [waa'-an | ngathar] | [nil |
| :--- | :--- | :--- |
| tell-2SG.FUT | 1SG.DAT | 3SG(NOM) |$\quad$| want-wanttak=an |
| :--- |
| thaw- $\varnothing$ |
| RDP-why=DEF |

### 5.2.3.4 Free choice pronoun

Following Gaby (2017 p. 171), the 'free choice' pronoun function of ignoratives provides the sense that, for a given ontological category, 'for any entity in this category, the following is true'. This sense appears to be noted in the lexicon in the definition of want-wanttak as 'what(ever) and the definitions of wantwanttin as 'whichever' and 'wherever'. There is only one example (179), repeated as (199), in the corpus which contains the free choice pronoun
function, where want-wanttak-an 'RDP-what=DEF' (whatever) is adnominal to wik 'word' with the sense of 'whatever (word) I say'. As can be seen by (198) above, not all tokens of want-wanttak 'RDP-why' function as free choice pronouns.
(199) Kilham et al 1986 p. 245

| [ngay | wik | want-wanttak=an | thaw-ang | nungk-a] |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | word | 'RDP-what=DEF' | say-1SG.PRS | 2SG.DAT-a |
| [nint |  | ngeey-an-a] |  |  |
| 2SG(NOM) | hear-2SG.FUT-a |  |  |  |
| 'whatever I say to you, you will listen (and obey)' |  |  |  |  |

The ignorative wee' 'who' can also function as free choice pronoun, as in (200), where wee' 'who' represents the category of person who does not obey the speaker (and will then be killed as a result). The link to the referent in the second clause is the 3SG accusative suffix on the verb.
(200) Sayers 1976a p. 89 ex 4

| [nil | wee'=ang | ke' | wik |
| :--- | :--- | :--- | :--- |$\quad$ ngeey-ow-any-a] $n$ hear-3SG.SBJV-1SG.ACC-a

Similarly, in (201), wee' 'who' refers to the category of white men who come into the speaker's country, specified in the first clause. The function of the second clause 'he would crush with (his) feet' may be additional to the act of coming into the country or may describe how the speaker expects white men in that category to behave. The final clause states that the speaker will kill any such man, the link again being the 3SG accusative suffix on the verb.
(201) Sayers 1976a p. 90 ex 6


In all the above examples, the two clauses are simply juxtaposed with no formal
subordination.

### 5.2.4 Other uses of ignoratives

There are two special uses of ignoratives to be noted. The first is the compound ngeen-wiy 'what- ${ }^{371}$ which has a complex range of spiritual meanings. These include the ritual name of the Rainbow Serpent, a certain type of sickness or a taboo use to substitute for other words such as the name of an absent relative or an initiation place. This is explained in depth in McKnight (1981). The corpus has some examples of this. Example (202) shows the use of sickness created by spiritual power. Ngeen-wiy 'sickness' (subject of verb as marked by ergative case) is described by the speaker as 'finding' the hearer (object of the verb), coming from the speaker (in ablative case).
(202) Kilham et al 1986 p. 23

| chawaa! | ngeen-wiy=ang | uw-ow | nint-ang | ngathar=am-a |
| :--- | :--- | :---: | :--- | :---: |
| Curse.you! | sickness=ERG | find-3SG.FUT | 2SG-ACC | 1SG.DAT=ABL-a |
| 'curse you! you will get stomach ache from the power within me' (curse you! the |  |  |  |  |
| sickness will find you from me) |  |  |  |  |

The story 'Geese Eggs' in Sayers (1982a pp. 171-185) features the story of a man going in search of geese eggs for the community. Throughout the story he is referred to not by name but as ngeen-wiy, as in (203) where a woman is looking for the man's return. This is an example of the taboo use to avoid naming someone.
(203) Sayers 1982a p178 ex 93

| kan thath-an | ngeen-wiy puy-pal ya'a ey |
| :--- | :--- | :--- |
| now see-3SG.PRS sacred.one thither-hither NO INT? |  |
| '(now) does she not see the sacred one coming from far to here?' |  |

Example (204) shows the ceremonial use; the first clause describes that the participants are painted red and proceeding to 'make' the ceremony, as stated in the second clause.
(204) Kilham et al 1986 p. 264

| [kemp | wu'-wu'ath | ngul | pal | iiy-antan] |
| :--- | :--- | :--- | :--- | :--- |
| FLESH | RDP-painted.red | then | hither | go-3PL.PRS |

37 The suffix -wiy could mean 'some' or be a variant of the emotional suffix -wey 'EMO'

```
ngeen-wiy=an yump-ayn
ceremony=DEF make-3PL.FUT
'they are painted red, now they are coming (hither) to perform a sacred ceremony'
```

The second special case of ignorative use is the form wee'anang or wee'-anang where wee' is 'who' and the suffix -anang appears to be a variant of the comitative case =antang. Wee'anang is defined as 'those with him and his/her mob'. There are two examples in the lexicon; (205) and (206) where the name (Fred and Mama respectively) is followed by wee'anang 'his/her.mob' to refer to a group associated with the name.
(205) Kilham et al 1986 p. 112

| Fred wee'anang | koyam | epank-in | Weipa=ak |
| :--- | :--- | :--- | :--- |
| Fred 'his.mob'(ABS) | back | return-3PL.PST | Weipa=ALL |

'Fred and his family have gone back to Weipa'
(206) Kilham et al 1986 p. 20

| ngan | Mama | wee'anang=an |
| :--- | :--- | :--- |
| 1PL.EXCL(NOM) | Mama | 'her.mob'=DEF |

Kilham (1977 p. 75) analyses -anang as =an=ang 'DEF=COM' but this is not preferred over the analysis above because it violates the standard rule that the definite marker follows all case marking. Additionally there is an example in Kilham et al (1986 p. 20) of the form wee'anangan which, following Kilham's analysis would be wee'=an=ang=an 'who=DEF=COM=DEF', a semantically odd result.

### 5.2.5 yam 'somewhere'

As discussed in section 3.1.4.1 yam 'somewhere' is distinct from the other ignoratives in being purely adverbial and restricted to the indefinite function, at least in the corpus. It is included as an ignorative because it reflects a lack of knowledge on the part of the speaker. Semantically it is in the category PLACE. There are 11 examples in the corpus; see (15) and (16) on page 95 and (207) where yam 'somewhere' is an unknown place where the speaker suggests that the group should go fishing.
(207) Kilham et al 1986 p. 109
ngamp $\quad$ mee-ngaarpang
1PL.INCL(NOM) minh
for.company

yam iiy-amp-a | nga'=ak |
| :--- |
| fish=ALL |

The range of inflections is also restricted to the one case marker; =ang 'LOC' which, as discussed in 3.1.4.1 adds the semantic sense of 'close', so that yam=ang has the sense of 'somewhere close', as shown in (17) and (208), where yam=ang (somewhere=LOC) 'somewhere close' refers to a place nearby where a ghost comes.
(208) Sayers 1976a p. 125 ex 8

| thath-antan-a oonya | paththam=an | yam=ang | wamp-an |
| :--- | :--- | :--- | :--- |
| see-3PL.PRS | spirit(ABS) very=DEF | somewhere=LOC | come-3SG.PRS |
| 'they see the ghost comes somewhere (very) close' |  |  |  |

Also noted in the corpus is a clitic form of the directional adverb pal 'hither'; see section 10.3.1 for a description of this lexeme. There are three examples in the corpus of yam-pal 'somewhere-hither', also abbreviated to yamp in (209). In this example the speaker is showing that he does not as yet know where he will find the (unspecified) object but that when he does, he will bring it to the speech situation, as encoded in yamp(al) 'somewhere-hither'. He will then place the object at a place near by, as encoded in the medial demonstrative nang 'MED'. The clitic ngul 'then' on nang 'MED' means that the speaker will do this as soon as he arrives with the object.
(209) Huchet 1990 p46 ex 3.10

| ngay | yamp | nang-ngul thee'-ang |
| :--- | :--- | :--- |
| 1SG(NOM) | somewhere.hither $\quad$ MED-then | throw-1SG.FUT |
| 'I (will get it) from somewhere and then put it there' |  |  |

An idiomatic use of yam-pal 'somewhere-hither' is noted in the lexicon as meaning 'up to about here', as in (210) where the free translation provides the context of the speaker requesting that a cup be filled up to a level indicated by pointing.
(210) Kilham et al 1986 p. 267

| yam-pal | thee'-an'-a |
| :--- | :--- |
| somewhere-hither | throw-3SG.FUT-a |
| 'just give me half a cup, up to here (pointing)' |  |

The only other morphology noted with yam 'somewhere' is reduplication of yam-pal 'somewhere-hither' to form yam-yam-pal 'somewhere-RDP-hither' which is defined in the lexicon as 'from different directions'. There are no examples of this use in the corpus.

Functionally, yam 'somewhere' is analogous to the indefinite pronoun function of nominal ignoratives, discussed in section 5.2.3.2. That is, its use proposes that there exists a place for which the statement is true. Consider example (211), where the speaker is suggesting that he will go and fish at a place designated by yam pek 'somewhere down there'. The implicature is that the speaker will decide later where he will actually fish i.e there is a place where he will fish but it is not known at the time of speaking.
(211) Kilham et al 1986 p. 213

| ngay | yam | pek $\quad$ uk-ang-a |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | somewhere | down descend-1SG.FUT |
| minh | nga' | wich-ang |
| MEAT | fish(ABS) | pull.out-1SG.FUT |
| 'I will go somewhere down there and fish' |  |  |

Similarly, in example (212) yam=ang 'somewhere=LOC' refers to a place (nearby) where a crocodile has vomited. The existence of this place is known by the smell detected in the first clause iiy in unchunchana 'there's a fishy (crocodile) smell around here' but the exact location of the crocodile vomit is unknown.
(212) Kilham et al 1986 p. 35

| [iiy | in | unch-unch-an-a] <br> throw.on.ground-RDP-3SG.PRS-a |
| :--- | :--- | :--- |
| fishy.smell(ABS) | PRX | threr |
| [pikkuw=ang | oyngk | yam=ang |
| crocodile=ERG | vomit(ABS) somewhere=LOC | yeech- $\varnothing$-a] |
| 'there's a crocodile smell around here, a crocodile has vomited around here |  |  |

## 6 Demonstratives

As discussed in section 3.2, demonstratives in Wik-Mungkan, as for many other languages (see e.g. Diessel 1999) share morphological and semantic features across different syntactic word classes. It is therefore convenient to address them as a single category.

The structure of this chapter is: section 6.1 provides an overview of the morphosyntax of demonstratives in Wik-Mungkan while section 6.2 describes the pragmatic uses within Wik-Mungkan, using a typology based on Diessel (1999), Himmelmann (1996) and Dixon (2003). Section 6.3 describes some demonstratives which are separate from the main paradigm. Section 6.4 describes some of the alternatives to the current analysis that exist in the Wik-Mungkan literature and why the current analysis is preferred.

An important point to be acknowledged is that the analysis of these forms is necessarily limited by many of the examples from the archives being decontextualised examples. Where possible, examples from texts are used but these are a small part of the corpus. As demonstratives are deictic in function, the lack of context here renders analysis of semantics and pragmatics somewhat problematic.

### 6.1 Morpho-syntax

As described initially by Sayers and Kerr (1964 p. 1), the demonstrative morphology in Wik-Mungkan builds on stems which indicate a distance distinction of proximal, medial and distal; $i$-, na- and $a$ - respectively. The specific meaning of proximal, medial and distal will be discussed in section 6.4.5. To these stems are added -an, -ang, -/ or -aakanak, to form four series of stems, as shown in table 25. Although -aakanak can possibly be analysed as -aak=an=ak 'PLACE=DEF=ALL', the clitics are not optional and so -aakanak should be regarded as a single suffix. The stems in table 25 interact with the case system, the definiteness clitic =an, the emphatic clitic
=am, a 'sameness' suffix -man, a movement suffix -pal and a temporal suffix -ngul and reduplication for emphasis and plurality. Not all suffixes attach to every stem ${ }^{39}$, to be discussed below; a summary of which suffixes attach to which stems is in section 6.1.6. The semantic and pragmatic effects of these suffixes are discussed in section 6.2.2.

| Prefix | IN | L | GOAL | ING |
| :--- | :--- | :--- | :--- | :--- |
|  | -an | -I | -aakanak | -ang |
| i- PRX | in | il- | ilkanak | ing |
| na- MED | nan | nal- | naakanak | nang |
| a- DIST | an | al- | aakanak | ang |

Table 25: Base demonstrative morphology
All forms in table 25 are used as stems; all forms except il-, nal- and al- also being full lexemes. For convenience, in, nan, an will be called the $\mathrm{IN}^{40}$ series, il-, nal-, al- the L series, the aakanak column the GOAL series and the ing, nang, ang column the ING series.

The differences between the series are various and quite complex. They will be described in detail in the following sections but can be summarised as follows. Firstly the first three columns i.e. the IN, L and GOAL series are nominal while the ING series is adverbial. The GOAL series is the only series in allative case and restricted to that case. The $L$ series takes all cases bar the absolutive, ablative and allative while the IN series takes the absolutive, dative, locative and ablative. Various clitics are found attached to some or all of the series.

### 6.1.1 The IN Series

The IN series is nominal, including adnominal and takes the full range of suffixes described in section 6.1 with the exception of some of the case markers, to be discussed below. Multiple affixes are possible, as is reduplication, which provides extra emphasis. Where applicable, the plural is formed by the suffixes -angan and

[^16]-angaman. The full set of attested forms for the IN series is in table 26.

|  | in PRX | nan MED | an DIST |
| :--- | :--- | :--- | :--- |
| -Ø 'ABS', 'DAT', 'NOM' | in | nan | an |
| $=$ ang 'LOC' | inang | nanang | anang |
| =am 'ABL'41 | imanam | namanam | amanam |
| $=$ angan 'PL.ABS' | inangan | nanangan | anangan |
| =angaman <br> 'PL.ABS.SAME' | inangaman | nanangaman | anangaman |
| =an 'DEF' | inan | nanan | anan |
| (RDP) -man SAME | (in)inman | (nan)nanman | (an)anman |
| -am EMPH | inam | nanam | anam |
| -pal hither (=an DEF) | inpal(an) | nanpal(an) | anpal(an) |
| -ngul then (=an DEF) | inngul(an) | nanngul(an) | anngul(an) |

Table 26: IN series
The following sections describes these forms in more detail, with appropriate examples.

### 6.1.1.1 Case Marking

The IN series can be marked for nominative, absolutive, dative, ablative and locative case. This section presents these. The suffixes described above attach to the IN series without affecting the case marking.

### 6.1.1.1.1 Absolutive Case

The lexemes in(an), nan(an), an(an) and plural inangan, nanangan, anangan form the nominative and absolutive cases, as in (213) to (215). The plural suffix -angan 'PL.ABS' is unusual in that there is no absolutive plural elsewhere in Wik-Mungkan.

Example (213) shows the singular in 'PRX(ABS)' adnominal to aak 'PLACE' as the direct object to a transitive verb thathan 'to see'. Note that the other demonstrative

41 Irregular - see section 6.1.1.1.3
ang=an 'DIST=DEF' is adverbial and coreferential with aak in-a 'PLACE PRX-a'.
(213) Sayers 1982a p173 ex 3

| aak | in-a | ngay | ang=an | thath-ang-a |
| :--- | :--- | :--- | :--- | :--- |
| PLACE | PRX(ABS)-a | 1SG(NOM) | DIST=DEF | see-1SG.PST-a |
| 'I have seen this place there' |  |  |  |  |

Example (214) shows the medial absolutive adnominal to may 'VEG' as subject of the intransitive verb ooy-ooyam-an-a 'RDP-burn-3SG.PRS'.
(214) Kilham et al 1986 p. 68
may nan ooy-ooyam-an-a

VEG MED(ABS) RDP-burn-3SG.PRS-a 'that food is burning'

Example (215) shows an 'DIST(NOM)' as nominal subject to a transitive verb pathan 'to bite'. This use of the nominative is usually confined to personal pronouns, which have a nominative / accusative pattern. The accusative does not attach to any demonstrative.
(215) Kilham et al 1986 p. 91

| nint | ngak=ang | ngul=an | uk-an-a | an |
| :---: | :---: | :---: | :---: | :---: |
| 2SG(NOM) | water=LOC | then=DEF | descend-2SG.FUT-a | DIST(NOM) |
| path=iy |  | -ang |  |  |
| bite-3SG.SB |  | -ACC |  |  |
| 'then when | go to the | ater that o | codile) will bite you' |  |

Example (216) shows the plural absolutive case as the subject of an intransitive verb. The form in-angan 'PRX-PL.ABS' is adnominal, modifying minh 'MEAT', which in context refers to goose eggs, hence the plural. In (217) the distal absolutive plural is also adnominal and object of the transitive verb mungk-an 'eat-1PL.EXCL.PST'. There are no examples of the absolutive plural medial in the corpus.
(216) Sayers 1982a p. 178 ex 84
minh in-angan $\quad$ wun-wun-tan
MEAT PRX-PL.ABS lie-RDP-3PL.PRS
'those (sic) (eggs) lie there'
(217) Sayers 1976c p. 49 ex 66

| mungk-an | ngul | minh | nga' |
| :--- | :--- | :--- | :--- |
| eat-1PL.EXCL.PST then | an-angan |  |  |
| '(then) we ate those fish' |  |  |  |

### 6.1.1.1.2 Dative

The dative for this series is irregular in being null marked, like the absolutive and nominative. They can be distinguished by distribution. Example (218) the proximal is specifying the location for the action of cutting umbilical cords. In examples (219) and (220), the medial and distal are adjuncts to the verbs iiy-an 'go-1PL.EXCL.PST' and wun- $\varnothing$ 'stay-3SG.PST' respectively.

```
(218) Sayers 1982a p. 156 ex 78
\begin{tabular}{lll} 
in-a & \multicolumn{1}{l}{ piinth=ang } & ump-antan \\
PRX(DAT)-a & bamboo=INST \(\quad\) cut-3PL.PRS
\end{tabular}
small=DAT=GEN(ABS)=DEF=TOP
'here they cut their children's umbilical cords with bamboo'
(219) Sayers and Kerr 1964 p. 7
\begin{tabular}{lll} 
nan & kuuw & iiy-an \\
MED(DAT) & west & go-1PL.EXCL.PST \\
'We went west to that place'
\end{tabular}
(220) Sayers and Kerr 1964 p. 7
\begin{tabular}{llll} 
nil & an & ya' & wun- \(\varnothing\) \\
3SG(NOM) & DIST(DAT) & NEG & stay-3SG.PST \\
'He does not live in that place now'
\end{tabular}
```


### 6.1.1.1.3 Ablative

The ablative forms imanam 'PRX.ABL', namanam 'MED.ABL' and amanam 'DIST.ABL' are irregular. For instance, the expected form for the ablative proximal is in=am 'PRX=ABL' or in=am=an 'PRX=ABL=DEF' but an undefined process of sound change has modified it to the unanalysable imanam 'PRX.ABL'. According to the lexicon, they only exist in the singular, as shown in examples (221) to (223), the first and last showing nominal use while the middle shows adnominal use, modifying waangk 'dilly bag'. The namanam 'MED.ABL' in (221) is an extended use and means 'for that reason' See section 6.2.3 for further discussion.
(221) Kilham 1977 p. 131 ex 280

| kungk iiy-antan | pam | imanam |  |
| :--- | :---: | :---: | :---: |
| north | go-3PL.PRS | MAN | PRX.ABL |
| 'these men are going north (from this place)' |  |  |  |

(222) Kilham et al 1986 p. 13

| nil may | waththiy | maay- $\varnothing$ | waangk | amanam |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | VEG | yam | pick-3SG.PST | dilly.bag |$\quad$ DIST.ABL

(223) Sayers 1982a p. 173 ex 25
nil $\quad$ namanam
3SG(NOM)

MED.-Wuntan $\quad$| ngaanwiy=an=iy |
| :--- |
| (tell-3PL.RCP.PRS |$\quad$ sacred.one=DEF=TOP

There are few examples of these forms in the corpus.

### 6.1.1.1.4 Locative

The only other case which attaches to the IN series is the locative to form in=ang 'PRX=LOC', nan=ang 'MED=LOC' and an=ang 'DIST=LOC'. It is a curiosity that the absolutive plural is formed by IN -angan with no locative sense (see section 6.1.1.1.1). Presumably to avoid ambiguity with the absolutive plural, the definite marker =an 'DEF' does not follow $\operatorname{IN}=$ ang 'IN=LOC'. Examples (224) and (225) show the forms as nominal, while in (226) an=ang 'DIST=LOC' is adnominal to aak 'PLACE'.

| (224) Sayers and Kerr 1964 p. 8 |  |
| :--- | :--- |
| yuk in=ang | ngathar |
| thing PRX=LOC | 1SG.DAT |
| 'these things in this place are mine' |  |

(225) Huchet 1990 p. 47 ex 3.12
than nan=ang iiy-in 3PL(NOM) MED=LOC go-3PL.PST
wik ke'anang yipam nyiin-ayn-a
word without so.that sit-3PL.SBJV
'they moved to that place so that they could sit without speaking'
(226) Sayers and Kerr 1964 p. 9

| than ko'alam aak | an=ang | wun=iyin |
| :--- | :--- | :--- |
| 3PL(NOM) three PLACE | DIST=LOC | stay-3PL.PST |
| 'those three stayed in that place' |  |  |

Other cases attach to the $L$ series while the allative only exists in the GOAL series, as will be discussed in the sections 6.1.2 and 6.1.3. Refer to section 6.1.4 for a summary of case marking across the different series.

### 6.1.1.2 Definiteness

As discussed in section 3.6.1, the definite marker is a clitic =an 'DEF' used to mark a referent as previously mentioned in the narrative or a generally understood context. It attaches to the IN series with these same meanings, as in (227) to (229). In (227) in=an 'PRX(ABS)=DEF' is nominal and refers to a (proximal) identified object as direct object of the verb ump-an 'cut-2SG.FUT (imperative use of -an '2SG.FUT)'.
(227) Sayers and Kerr 1964 p. 8

| in=an | omp | ump-an |
| :--- | :--- | :--- |
| $\operatorname{PRX}(\mathrm{ABS})=\mathrm{DEF}$ | half | cut-2SG.FUT | 'cut this in half'

In (228) nan=an 'MED(DAT)=DEF' is also nominal, referring to an identified place as indirect object to the intransitive verb iiy-pul 'go-3DU.PST'.
(228) Sayers and Kerr 1964 p. 8

| pul | nan=an <br> 3DU(NOM) |
| :--- | :--- |
| 'those two went there' | MED(DAT)=DEF | | iiy-pul |
| :--- |
| go-3DU.PST |

Finally, example (229) shows the distal an=an 'DIST(ABS)=DEF' being adnominal to identify a specific tree previously mentioned which is the subject of the intransitive verb kath-am- $\varnothing$-a 'rot-ITR-3SG.PST-a'.
(229) Sayers 1982a p. 175 ex 55

| yuk an=an | ke'-am | yippak | kath-am- $\varnothing$-a |
| :--- | :--- | :--- | :--- |
| tree DIST(ABS)=DEF | NEG-EMPH | yet | rot-ITR-3SG.PST-a |
| 'that tree is not old yet' |  |  |  |

### 6.1.1.3 Emphasis

The emphatic clitic =am with the IN series as in (230) to (232) is used purely to add emphasis, as described in section 3.6.4. In each example, the usage is nominal and the clitic =am 'EMPH' is used to provide emphasis to the references, which are proximal, medial and distal respectively.

Note that, according to Kilham et al (1986 p. 13), an=am 'DIST=EMPH' has acquired the special sense of 'back there', as in (232).
(230) Kilham 1977 p. 258 ex 34

```
thath-\varnothing-a in=am pek-a wun-\varnothing-ey
see-3SG.PST PRX(ABS)=EMPH down-a be-3SG.PST-<?>42
'he looked right down here (and saw) that he was there'
```

(231) Huchet 1990 p. 50 ex 3.14

| nint | nan=am | pek | wunp-an |
| :--- | :--- | :--- | :--- |
| 2SG(NOM) | MED(DAT $)=E M P H$ | down | aawuch=ang |

(232) Kilham et al 1986 p. 13

| ngay | gun=an | an=am |
| :--- | :--- | :--- |
| 1SG(NOM) gun=DEF | DIST(DAT)=EMPH | want-ang |
| 'I left my (the) gun back over there' |  |  |

### 6.1.1.4 The suffix -man 'SAME'

There are different interpretations of this suffix in the literature; see section 6.4. This thesis adopts the position that this suffix adds the sense of 'sameness' i.e. it is the same reference as previously mentioned, as in (233) to (235). In each case the use is nominal; (233) and (234) show the proximal and medial in dative case respectively, while (235) is in the absolutive case, being the subject of the intransitive verb iiy 'go'. Note that the authors had iiy as iiy- $\varnothing$ 'go-2:s:em'. This is the only place that the verbal suffix - $\varnothing$ is glossed as other than '3SG.PST' or 'IMP' and is unexplained.
(233) Huchet 1990 p. 57 ex 3.32
than in-man $\quad$ wanp-ayn
3PL(NOM) PRX(DAT)-SAME come-3PL.FUT
'they will be coming to this same place'
(234) Sayers and Kerr 1964 p. 6

| nint | nan-man | wun | ey? |
| :--- | :---: | :---: | :---: |
| 2SG(NOM) | MED(DAT)-SAME | stay | INT |
| 'did you stay in that same place?' |  |  |  |

(235) Sayers 1982a p. 152 ex 23

| nil-a-wey | work | an-man | iiy-iiy- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3SG(NOM)-a-EMO | work | DIST(ABS)-SAME | go-RDP-3SG.PST |
| 'she, that same one, kept working' |  |  |  |

### 6.1.1.5 The -pal 'hither' suffix

As described in section 10.3.1.1, pal 'hither' defines movement towards a deictic

42 -ey glossed as 'tag' in the original. This suffix is not cited in any other reference. There is a free particle ey 'Q' used for questions but that does not seem related to the above use
centre, typically but not necessarily the speaker situation. See section 6.2.2.2 for a discussion of the semantic / pragmatic impact of this suffix. Examples (236) to (238) (proximal, medial and distal respectively) show nominal use in dative case. In (236) the deictic centre is interpreted as the university, not the speech situation, while in (237) it is the place indicated by the medial nan 'MED' and in (238) it is the speech situation which the boat is coming to.
(236) Sayers and Kerr 1964 p. 3

| ngay in-pal | iiy-ang | university=ak |
| :--- | :--- | :--- |
| 1SG(NOM) | PRX(DAT)-hither | go-1SG.PRS |
| 'I am going from here to the university' |  |  |
| university=ALL |  |  |

(237) Sayers and Kerr 1964 p. 4

(238) Sayers and Kerr 1964 p. 4

| chukun | an-pal | wamp-an |
| :--- | :--- | :--- |
| boat(ABS) | DIST(DAT)-hither | come-3SG.PRS | 'the boat is coming from there'

The definite marker =an 'DEF' can also be attached, as in (239) where an-pal=an 'DIST(DAT)-hither=DEF' is adnominal to wench 'sore', forming an indirect object to the verb weech-an-any 'hurt-3SG.PRS-1SG.ACC'. Note that the subject of the verb is expletive; see section 8.11.
(239) Kilham et al 1986 p. 248

| ngay yangk | weech-an-any | wench an-pal=an |  |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) leg | hurt-3SG.PRS-1SG.ACC | sore | DIST(DAT)-hither=DEF |
| 'my leg is aching from that sore' |  |  |  |

### 6.1.1.6 The -ngul 'then' suffix

As will be explained in section 10.2.2 the lexeme ngul has a meaning of 'then' in the sense of 'following, after'. Ony two examples of the medial are found in the corpus. Examples (240) and (241) show the nominal use as dative adjuncts to the verb iiyang 'go-1SG.PRS' for proximal and medial respectively, while (242) shows -ngul attached to the dative adjunct to the verb $m^{\prime}{ }^{\prime}-\varnothing$ 'run-3SG.PST'. In each case it adds a temporal sense to the demonstrative.
(240) Sayers and Kerr 1964 p. 5

| ngay | in-ngul | iiy-ang |
| :--- | :--- | :--- |
| 1SG(NOM) | PRX(DAT)-then | go-1SG.PRS |
| 'I just came here' |  |  |

(241) Sayers and Kerr 1964 p. 5

| nil | nan-ngul | iiy- |  |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | MED(DAT)-then | go-3SG.PST | library=ant |
| library=DAT |  |  |  |

(242) Kilham et al 1986 p16

| nil | an-ngul | kan-am | mo'- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | DIST(DAT)-then | now-EMPH | run-3SG.PST |
| 'he's already gone there' |  |  |  |

There is one example of the definite marker =an being added; (243) where the distal is nominal dative adjunct to the transitive verb thath-an 'see-3SG.PRS'.
(243) Sayers 1982a p. 198 ex 55

| an=an | nath an-ngul=an | thath-an |
| :--- | :--- | :--- |
| DIST(DAT)=DEF | maybe DIST(DAT)-then=DEF <br> see-3SG.PRS |  |

puk many=an kuutan=ang=an=iy

CHILD small(ABS)=DEF umbilical.cord=COM=DEF=TOP 'then maybe at last he sees the baby with the umbilical cord'.

### 6.1.2 The L Series

The $L$ series also takes case suffixes, excluding the absolutive, allative ${ }^{43}$ and ablative cases as these cases attach to the IN and GOAL series, with the addition of either the definite clitic =an or -man 'SAME'. Reduplication creates the plural form. The L series does not allow the suffixes ngul 'then' or pal 'hither'. The full set of the $L$ series is shown in table 27.

43 one exception for the allative to be discussed below.

|  | il PRX | nal MED | al DIST |
| :--- | :--- | :--- | :--- |
| (RDP) =ang ERG / INST / <br> LOC =an DEF | (il)ilangan | (nal)nalangan | (al)alangan |
| (RDP =ang ERG / INST / <br> LOC -aman SAME | (il)ilangaman | (nal)nalangaman | (al)alangaman |
| (RDP) =ant=am <br> DAT=GEN | (il)ilantam | (nal)nalantam | (al)alantam |
| (RDP) =ant DAT (=an) <br> DEF | (il)ilant(an) | (nal)nalant(an) | (al)alant(an) |
| (RDP) =ant=ang <br> DAT=COM (=an DEF) | (il)ilantang(an) | (nal)nalantang(an) | (al)ilantang(an) |

Table 27: The L series
The $L$ series is nominal (including adnominal) as subject or adjunct in a clause.
Examples of the L series are (244) to (248), illustrating the ergative, locative, dative, genitive and comitative respectively. Other cases are not attested, either in the corpus or in the Wik-Mungkan literature. Examples (244) and (248) illustrate nominal use, while the remainder are adnominal. Note that the emphatic suffix -im, a variant of the usual -am 'EMPH' is shown in (244) which is the only example in the corpus of the emphatic attaching to the $L$ series. This may just be an artefact of the corpus, as the $L$ series is not as common as the other series.
(244) Kilham 1977 p. 258 ex 28

| al=ang=an-im | thath- $\varnothing$ | than-ang |
| :--- | :--- | :--- |
| DIST=ERG=DEF-EMPH | see-3SG.PST | 3PL-3SG.ACC |
| 'that one saw them' |  |  |

(245) Kilham et al 1986 p13

| ngay | pillow | al=ang=an <br> 1SG(NOM) | pillow |
| :--- | :--- | :--- | :--- |$\quad$ DIST=LOC=DEF $\quad l$| nyiin-ang |
| :--- |
| 'I sat on that pillow' |

(246) Sayers 1982a p. 184 ex 158

| than-a | pam | al=ant=an=iy-a | may-a wathiy-a | keenk-a |
| :--- | :--- | :--- | :--- | :--- |
| 3PL(NOM)-a | man | DIST=DAT=DEF=TOP-a | VEG-a yam-a | first-a |
| ma'=ang | pi'-in | nung=ant |  |  |
| hand=LOC | keep-3PL.PST | 3SG=DAT |  |  |
| 'they kept yams for that man (far over there), (for him)' |  |  |  |  |

(247) Kilham et al 1986 p. 13

| waangk | $i n=a n$ | wee'=ant=am-a? | wanchinth |
| :--- | :--- | :--- | :--- |
| dilly.bag | al=ant=am-a |  |  |
| PRX(DAT)=DEF | INT=DAT=GEN-a | old.woman | DIST=DAT=GEN-a |
| 'whose dilly bag is this? It's that old woman's |  |  |  |

(248) Kilham et al 1986 p. 13

| nil | an=an-a | al=ant=ang=an | nyiin-an |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | DIST(DAT)=DEF-a | DIST=DAT=COM=DEF | sit-3SG.PRS |
| 'she is sitting there, with that one.' |  |  |  |

There is a single example of the allative with the $L$ series; (249). There is no entry for this in the lexicon and no mention in any source outside of this example. There is also no other example of the dative and allative being combined in this way, except when also followed by the ablative to form reflexive pronouns (see section 5.1.3). Pending more data, this example will be treated as an anomaly.
(249) Kilham et al 1986 p. 136

| than ngangk | peey-peey-in | nung=ant | puk | many |
| :--- | :--- | :--- | :--- | :--- |
| 3PL(NOM) SOUL | cry-RDP-3PL.PST | 3SG=DAT | CHILD | small |
| al=ant=ak=an-a |  |  |  |  |
| DIST=DAT=ALL=DEF-a |  |  |  |  |
| 'they really loved (her) that baby'. |  |  |  |  |

### 6.1.3 The GOAL Series

The GOAL series is the simplest of the four series and is only in allative case. It consists of the forms iikanak 'PRX.ALL', naakanak 'MED.ALL' and aakanak 'DIST.ALL', optionally suffixed with =an 'DEF'. The GOAL series is nominal and adnominal as adjuncts. Examples of the proximal, medial and distal are as (250) to (252). Examples (250) shows the nominal use of iikanak 'PRX.ALL' while in example (251), the medial naakanak=an=iy 'MED.ALL=DEF=TOP' is also nominal. Example (252) is an adnominal use of aakanak=an=iy 'DIST.ALL=DEF=TOP', modifying minh 'MEAT', in context referring to goose eggs.
(250) Kilham et al 1986 p34

| nan-pal iikanak thongs | ngathar-a |
| :--- | :--- | :--- |
| MED-hither PRX.ALL thongs | 1SG.DAT-a |
| '(now) give those thongs to me' |  |

(251) Sayers 1982a p. 177 ex 80

| puk uuy | naakanak=an=iy | maay-antan |
| :--- | :--- | :--- |
| CHILD many | MED.ALL=DEF=TOP | pick-3PL.PRS |
| 'he ${ }^{44}$ picked many (eggs) for the children' |  |  |

[^17](252) Sayers 1982a p. 179 ex 105

| wiy yalkangpek-antan | minh | aakanak=an=iy |
| :--- | :--- | :--- |
| some dance.shake.a.leg-3PL.PRS | MEAT | DIST.ALL=DEF=TOP |
| 'some dance 'shake a leg' because of those eggs' |  |  |

### 6.1.4 Summary of Demonstrative Cases

Table 28 highlights the unusual nature of this paradigm. There are three series of stems to which attach different cases, with two cases, the dative and locative, attaching to two series.

| Series | ERG / <br> INST <br> $=a n g$ | ABS / <br> NOM <br> $=\varnothing$ | DAT <br> $=\varnothing / a n t$ | LOC <br> $=a n g$ | COM <br> $=a n t a n$ <br> $\boldsymbol{g}$ | GEN <br> $=a n t a m$ | ABL <br> $=a m$ | ALL / <br> PURP <br> $=a k$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IN |  | X | X | X |  |  | X |  |
| L | X |  | X | X | X | X |  |  |
| GOAL |  |  |  |  |  |  |  | X |

Table 28: Case by demonstrative series
There is no obvious explanation as to why this paradigm exists, rather than a single series supporting all the case endings. Equally, it is not clear why the plural of the IN absolutive should be formed by the -angan suffix. There is no absolutive plural elsewhere in Wik-Mungkan; it is possible that this suffix was more widespread in the past but is now confined to this usage. There is no evidence available to assess this speculation.

### 6.1.5 The ING Series

The ING series is purely adverbial. Morphologically it is very similar to the IN series but does not take case suffixes, the -pal 'hither' suffix, the plural is not applicable and reduplication does not occur. The presence or absence of suffixes does not affect the syntax. See section 6.2 for a discussion of the semantic / pragmatic uses of the ING series. Table 29 contains all the variants of the ING series.

|  | ing PRX | nang MED | ang DIST |
| :--- | :--- | :--- | :--- |
| -Ø | ing | nang | ang |
| =an 'DEF' | ingan | nangan | angan |
| -am 'EMPH' | ingam | nangam | angam |
| -man 'SAME' | ingman | nangman | angman |
| -ngul 'TEMP' | ingngul | nangngul | angngul |

Table 29: The ING series
As can be seen in (253) to (255), the ING series frequently directly precedes the verb, the most common position for adverbs in Wik-Mungkan. The examples demonstrate the proximal, medial and distal respectively. Note that in (255) the distal ang is not adnominal to woyin 'road'.

```
(253) Sayers and Kerr 1964 p. 10
    puk ing kuup-in
    child PRX stay-3PL.PST
    'the children stayed here'
(254) Sayers and Kerr 1964 p. 10
    nang iiy-an
    MED go-IMP
    'go over there (and stay)'
(255) Sayers and Kerr 1964 p. 10
woyin ang \(\quad\) wun-wun-im \({ }^{45}\)
road \(\quad\) DIST
'he left him there, lying on the road'
```


### 6.1.5.1 Definiteness

The =an DEF marker adds the usual sense of linking the reference to a previously mentioned referent, as in (256) to (258) illustrating the proximal, medial and distal respectively. In (256) the definite marker is used to confirm that ing 'PRX' refers to the previously mentioned aak way 'bad place'. In (257) nang=an 'MED=DEF' links to a place mentioned earlier in the narrative while in (258) ang=an 'DIST=DEF' refers to a river previously mentioned.

45 As per Sayers and Kerr. The suffix is not noted in any other reference.
(256) Sayers and Kerr 1964 p. 11

| aak | way | ing=an | wun-wun-ang |
| :--- | :--- | :--- | :--- |
| PLACE | bad | PRX-DEF | stay.RDP-1SG.PRS |

'I stay here in this awful place'
(257) Sayers and Kerr 1964 p. 11
nang=an mat-anpul
MED=DEF go.up-3DU.PST
war almost pull.up-3DU.PST
'they almost pulled (it) up to stay there'

8) Sayers 1982a p. 157 ex 83
ang=an ngak thaa'
DIST=DEF water mouth cold-ar-a

### 6.1.5.2 Emphasis

As for the IN series, the emphatic clitic =am attaches to the ING series, as in (259) to (261) for the proximal, medial and distal respectively.

```
(259) Sayers 1982a p. }172\mathrm{ ex }1
    ya'a ngay-wey ing=am-a
    NO 1SG(NOM)-EMO
    PRX-EMPH-a
    'No I (will stay) right here'
```

(260) Huchet 1990 p. 52 ex 3.19

| nang=am | weep | wun-an |
| :--- | :--- | :--- |
| MED=EMPH | sleep | lie-2SG.FUT |
| 'go to sleep there' |  |  |

(261) Kilham et al 1986 p. 14

| nil | ang-am | ngul | wun-ow |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | DIST-EMPH | then | stay-3SG.FUT |
| 'he will stay right there then' |  |  |  |

### 6.1.5.3 The -man 'SAME' suffix

Similarly to the above suffixes, the suffix -man 'SAME' attaches to the ING series, as seen in (262) to (264), illustrating the proximal, medial and distal respectively. In example (263) nang-man 'MED-SAME' is not modifying the verb mat-ath-in 'go.up-TR-3PL.PST'; rather it is modifying the implicit verb 'to stay'. Example (264) shows ang-man 'DIST-SAME' following the verb.
(262) Sayers and Kerr 1964 p. 9

| ing-man | want-an |
| :--- | :--- |
| PRX-SAME | leave-2SG.IMP | 'leave (it) in that (sic; this?) same place'

(263) Sayers and Kerr 1964 p. 9

| mat-ath-in | kuuw | nang-man |
| :--- | :---: | :---: |
| go.up-TR-3PL.PST | west | MED-SAME |
| 'they took it up and stayed (in that same place) in the west' |  |  |

(264) Sayers 1982a p. 157 ex 80
nil-nil=am pi'pi'-Ø-an ang-man 3SG-RDP(NOM)=EMPH look.after-3SG.PST-3SG.ACC DIST-SAME 'she looked after it there (that same place)'

### 6.1.5.4 The -ngul 'then' suffix

As for the IN series, the suffix -ngul 'then' can attach to the ING series and adds a temporal sense, as in (265) to (267). In (265) and (266) the respective proximal and medial forms directly precede the verb while in (267) a NP pek thomp=ang 'down beach=LOC' occurs between the ang-ngul 'DIST-then' and the verb than-than-an 'stand-RDP-1PL.EXCL.PST'.
(265) Kilham et al 1986 p. 38
nint $\quad$ ing-ngul $\quad$ wunp-an-a
2SG(NOM)
PRX-then $\quad$ put-2SG.FUT-a
'put (food) on here right now'
(266) Huchet 1990 p. 46 ex 3.10

| ngay | yamp | nang-ngul thee'-ang |
| :--- | :--- | :--- |
| 1SG(NOM) from.somewhere | MED-then |  |
| 'I (will get it) from somewhere and then put it there' |  |  |

(267) Huchet 1990 p. 45 ex 3.9

| ngan <br> 1PL.EXCL(NOM)$\quad$ma'mangkaman <br> everyone | a' ang-ngul pek <br> and DIST-then down |
| :--- | :--- | :--- |
| thomp=ang than-than-an | kuup=kuup-an |
| beach=LOC stand-RDP-1PL.EXCL.PST | wait-RDP-1PL.EXCL.PST |
| peey-peey-an |  |
| cry-RDP-1PL.EXCL.PST with |  |
| 'we all of us were then standing there on the beach, waiting and crying as well' |  |

### 6.1.5.5 Exception

A form which is not in the lexicon but occurs in three examples is ingamak(an). The gloss of this form is ing=am=ak(=an) 'PRX=?=ALL=DEF' where the =am is
ambiguous between the emphatic and ablative. First consider examples (268) to (270). In each case there is a sense of being in a place 'here' and not moving from it. In example (268) the staying in place is voluntary, while in (269) and (270) the speaker fears being prevented from moving. The interpretation of the $=a m$ as ablative brings the sense of 'coming and going' and thus seems to fit better than the emphatic.
(268) Kilham et al 1986 p. 3

| nint | min=iy | weem-weem-angan | ing=am=ak |
| :--- | :--- | :--- | :--- |
| 2SG(NOM) | good=TOP $\quad$ mope-RDP-2SG.PRS | PRX=ABL=ALL |  |

(269) Kilham et al 1986 p. 12

| nip | ngay-ang | ke' | ak-wich-ow | ing=am=ak=an-a |
| :--- | :---: | :--- | :--- | :--- |
| 2DU(NOM) | 1SG-ACC | NEG | stop-2DU.FUT | PRX=ABL=ALL=DEF |
| 'don't you two make me stay here' |  |  |  |  |

(270) Kilham et al 1986 p. 270

| nint | ke' | ngay-ang | yench-ath-an |
| :--- | :--- | :--- | :--- |
| 2SG(NOM) NEG | 1SG-ACC | tight-TR-2SG.FUT | ing=am=ak=an-a |
| 'don't hold me up here' |  |  |  |

There are no examples of the medial or distal being used in this way (i.e. nangamak and angamak do not exist in the corpus). Thus ing=am=ak(=an) appears to be an exception.

### 6.1.6 Summary of Demonstrative Morphology

Table 30 below summarises which suffixes / clitics and reduplication apply to which series. See section 6.1.4 for further details as to which case markers attach to which of the nominal series. For simplicity, the table does not show the various occurrences of multiple suffixing e.g. -pal=an 'hither=DEF'. Refer to the description of each series above for this detail.

[^18]|  | Nominal |  |  | Adverbial |
| :--- | :---: | :---: | :---: | :---: |
|  | IN | L | GOAL | ING |
| Case Marking | X | X | X |  |
| =an 'DEF' | X | X | X | X |
| -am 'EMPH' | X | X |  | X |
| -man 'SAME' | X | X |  | X |
| -pal 'hither' | X |  |  | X |
| -ngul 'then' | X |  |  |  |
| -angan <br> 'ABS.PL' | X |  |  |  |
| RDP | X (emphasis) | X (plural) |  |  |

Table 30: Summary of WM Demonstrative Morphology

### 6.2 Usage and Meaning

This section reviews how Wik-Mungkan speakers use the above demonstratives. This will be achieved by applying definitions from various authors, notably Diessel (1999), Dixon (2003) and Himmelmann (1996). Terms will be defined as they are introduced. As noted in the introduction to this chapter, the lack of context limits the analysis. Thus the interpretation of the examples relies on lexicon definitions, the free translation and plausibility.

A major gap in this section is description of the meaning of proximal, medial and distal in Wik-Mungkan. This is because there is no conclusive evidence as to what the different meanings are. This will be discussed in further detail in section 6.4.5.

This section is organised as follows; section 6.2.1 discusses the situational or exophoric use of the four series described in section 6.1, while section 6.2.2 describes the effect on those uses of the various suffixes described in section 6.1. Section 6.2.3 describes various pragmatic extensions of the basic meanings while section 6.2.4 describes non-situational or endophoric uses.

### 6.2.1 Situational / Exophoric

Often argued as the basic or unmarked use, situational use of demonstratives is commonly accompanied by a gesture, where the speaker indicates a referent in the speech domain (for discussion and a counter-view, see Himmelmann 1996). As no contextual information such as video or descriptions is available it is not possible to confirm any example where the demonstrative definitely references something in the speech situation but it is reasonable to assume that this is widespread. For example the place referred to by the proximal demonstrative in (271) would appear to be in the speech situation.
(271) Huchet 1990 p. 27 ex 2.9

| ngay | may | apples | kucham | in |
| :--- | ---: | :--- | :--- | :--- |
| 1SG(NOM) | VEG | apples | two | PRX(DAT) |
| 'I have two apples here' |  |  |  |  |

It has been reported (e.g. Diessel 1999 p. 94, Levinson 1983 p. 66) that the situational use is often extended in order to refer to shared knowledge of an object which may or may not be present in the speech situation. There are no clear-cut examples of this usage in the corpus. This function can be performed in WikMungkan by use of the $=a n$ 'DEF' clitic (refer section 3.6.1). It is possible that demonstratives are not used or are sparsely used to evoke shared knowledge because this alternative device is available. Of course, the =an 'DEF' marker itself is plausibly a grammaticalisation of the distal an 'DIST'.

Starting with the IN series, in (272) the demonstrative in 'PRX(DAT)' refers to a place in a story so the deictic centre has shifted from the speaker to the man in the story, a shift described as deictic projection by Himmelmann (1996 p. 222).
(272) Kilham 1977 p. 257 ex 15

| kuchek $=a n$ | thath- $\varnothing$-a | yaa' | in | wu-wun- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| head(ABS $)=$ DEF | see-3SG.PST | just | PRX(DAT) | lie-RDP-3SG.PST |
| 'he saw the head; it just lay in this place' |  |  |  |  |

As can be seen from the above, in 'PRX' in exophoric use has the senses of 'this (thing or person)' or 'this place'. Similarly, nan 'MED' and an 'DIST' have the sense of 'that (thing or person)' or 'that place'. Example (273) shows the medial with locative case referring to a place some (indeterminate) distance away. Similarly (274) shows the distal plural absolutive being used to refer to a specific group of children (puk
many an-angan 'CHILD small DIST-PL.ABS') who have run past quickly.
(273) Sayers and Kerr 1964 p. 8

| mook | nan=ang | wunp-Ø |
| :--- | :---: | :--- |
| rubbish(ABS) | MED=LOC | put-IMP |
| 'put the rubbish in that place' |  |  |

(274) Kilham et al 1986 p. 14

| puk many an-angan | kamp | mo'-mo'-in-a |  |
| :--- | :--- | :--- | :--- |
| CHILD small | DIST-PL.ABS | fast | RDP-run-3PL.PST-a |
| 'those children ran fast' |  |  |  |

The $L$ series is similar and $i l$ - has the sense of 'this or these (thing(s) or person(s))' as in (275), where the comitative plural proximal refers to a group of children, presumed to be in the speech situation. The medial and distal similarly have the sense of 'that (thing or person)'. There are no examples of the medial being used in this way in the corpus; the distal is shown in example (276) where the ergative distal is adnominal to onion to form 'that onion'
(275) Huchet 1990 p. 62 ex 4.4

| ing | kee'-ow | puk |
| :--- | :--- | :--- |$\quad$ wiy | il-il=ant=ang=an |
| :--- |
| PRX play-3SG.FUT CHILD |
| 'here he will play with some of these children' |

(276) Kilham et al 1986 p. 61

| onion al=ang=an | mee' | anch-an |
| :--- | :--- | :--- |
| onion DIST=ERG=DEF | EYE | ngay-ang |
| sting-3SG.PST |  |  |
| 'that onion stung my eye' |  |  |

The L series, unlike the IN series, only has spatial reference as an attribute of the referent.

The GOAL series in exophoric use is restricted to mean movement 'to this (place), that (place)'. For example, in (277) the proximal iikanak 'PRX.ALL' refers to moving to 'this place' or 'here'. In (278) the distal aakanak=an 'DIST.ALL=DEF' is adnominal to yellow house to describe movement to that yellow house. There is no example of the exophoric use of the medial naakanak 'MED.ALL' in the corpus ${ }^{47}$.

[^19](277) Sayers and Kerr 1964 p. 4

| ngay | an-pal | iiy-ang | iikanak |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | DIST(DAT)-hither | go-1SG.FUT | PRX.ALL |
| 'I will be going from there to here' |  |  |  |

(278) Kilham et al 1986 p. 42

| nint | um | kaaw | yellow house | aakanak=an |
| :--- | :--- | :--- | :--- | :--- |
| 2SG(NOM) | iiy-in-a |  |  |  |
| chest east | yellow house | DIST.ALL | go-2SG.SBJV |  |
| 'should you go east towards that yellow house' (part of much longer sentence) |  |  |  |  |

The basic meaning of the ING series is 'here', 'there (MED)' and 'there (DIST)'. The key semantic difference between the IN and ING series is that the latter also encodes a sense of duration; that is, the sense that a person or thing stays at the place referred to or takes time to move to or from a location. In example (279) there is a contrast between the medial nang and the proximal ing as places to sit, again presumably in the speech situation. With each there is an associated time period.
(279) Huchet 1990 p. 21 ex 2.2

| ngay | nang | nyiin-ang | nint | ing | nyiin-an |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | MED | sit-1SG.FUT | 2SG(NOM) | PRX | sit-2SG.FUT |
| 'I will sit there and you will sit here' |  |  |  |  |  |

Example (280) shows the use of the in 'PRX' as meaning 'this place' with no sense of duration to mark the arrival of a man and woman 'here'. By contrast, ing 'PRX' in the second clause means 'here' with the added sense of duration; the man and woman will be 'here' while they work. This is also an example of the exophoric use described as 'wider context' by Diessel (1999 p. 94, citing Levinson 1983 p. 66) where both in 'PRX' and ing 'PRX' refer to the general locality, most likely the town of Aurukun, as opposed to a specific location in the speech situation.
(280) Huchet 1990 p. 28 ex 2.11

| pam wanch | in | wamp-pul | Weipa=am-aa' <br> MAN <br> WOMAN(ABS) | PRX(DAT) |
| :--- | :--- | :--- | :--- | :--- |
| come-3DU.PST | Weipa=ABL-a and |  |  |  |

Finally (281) shows the distal ang, with the definite marker =an 'DEF' which describes the speaker as putting a book on an identified table and leaving it for a period of time.
(281) Kilham et al 1986 p. 15

| ngay | lat=an | table | ang=an |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | paper=DEF | table | wIST=DEF |
| 'I left that book there on the table' |  | leave-1SG.PST |  |

### 6.2.2 Suffixes and Clitics

The various suffixes and clitics described in section 6.1 modify the the usage of the four series in different ways. The definite clitic =an 'DEF' is well described in section 3.6.1; similarly for the emphatic -am 'EMPH' in section 3.6.4. There is no sense specific to demonstratives that requires further elaboration for either of these. The effects of the remaining suffixes are discussed in the following sections.

### 6.2.2.1 -man 'SAME'

This suffix attaches to the IN, L and ING series. According to the lexicon, it has various senses, depending on context. Firstly, it acts in a similar way to the definite marker =an as linking to a previous reference, as in (282) and (283). This occurs primarily with the medial and distal of the IN series, but also with the ING series, as in (284).
(282) Sayers 1982a p. 197 ex 43

| pam=an=iy-a | um | keny-a an-man | wun- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| MAN(ABS)=DEF=TOP-a chest | high-a DIST(ABS)-SAME | lie-3SG.PST |  |
| 'the man, chest up, that same one lay there' |  |  |  |

(283) Huchet 1990 p. 56 ex 3.31

| nil | nan-man | kuup-kuup-an |
| :--- | :--- | :--- | | nungk=ar-a |
| :--- |
| 3SG(NOM) |
| MED(DAT)-SAME |$\quad$| wait-RDP-3SG.PRS |
| :--- |$\quad$ 2SG=DAT-a

(284) Sayers and Kerr 1964 p. 9

| ing-man | want-an |
| :--- | :--- |
| PRX(DAT)-SAME | leave-2SG.FUT |
| 'leave it in this same place' |  |

When used with the proximal of the IN series it has the sense of an emphatic 'right here in this place', as in (285). It is equally plausible that the above examples are also providing added emphasis, i.e. stressing to the hearer that the referent is definitely the relevant place.
(285) Huchet 1990 p. 57 ex 3.32

| than | in-man |
| :--- | :--- |
| 3PL(NOM) | PRX(DAT)-SAME | come-ayn

Similarly, some of the examples of ing 'PRX' have the sense of 'right here', as in (286).
(286) Huchet 1990 p. 38 ex 2.33

| puk | nungk=ar=am | ing-man | weep | wun-wun-Ø |
| :---: | :---: | :---: | :---: | :---: |
| CHILD | 2SG=DAT=GEN(ABS) | PRX-SAME | sleep | lie-RDP-3SG.PST |
| 'your ch | was sleeping right here' |  |  |  |

The main problem in examining the sense of this suffix is the lack of adequate translations in the corpus. In many of the examples of IN-man there is no distinction between the form with the suffix and the bare form without the suffix. For example, in (285), the free translation of in-man 'PRX(DAT)-SAME' is simply 'here' which is as would be expected if the suffix -man 'SAME' were not there.

The same problem arises when analysing the $L$ series. When looking at the ergative / locative / comitative forms such as il=angaman 'PRX=ERG.SAME', there are only two examples in the corpus, one being (287) which translates the distal ergative alangaman as 'he'. The referent in this case is to a man looking for geese eggs, the main protagonist in the story.
(287) Sayers 1982a p. 174 ex 37

| an=an | yuk | ongk | an=an | thoon=am=ang |
| :--- | :--- | :--- | :--- | :--- |
| DIST(DAT)=DEF | stick | long | DIST(DAT)=DEF | canoe=GEN=LOC |

There are only five examples of the dative al=antaman 'DIST=DAT.SAME' and in none of them can the additional sense provided by -man 'SAME' be determined. Examples (288) and (289) are typical; in the first case the free translation renders the dative as 'from that' while the second free translation gives 'of those' with no indication as to why it would differ in meaning from the simple dative alantan 'DIST.DAT'. There are no examples of the proximal and medial dative forms.

[^20](288) Kilham et al 1986 p. 247

| kuchek | way-ath-wuntan | ngak | way |
| :--- | :--- | :--- | :--- |
| head(ABS) | bad-TR-3PL.RCP.PRS | water | bad |
| 'they lose their heads from that bad drink' |  |  |  |

(289) Kilham et al 1986 p. 141

| nint ma' thayan pam al=antaman | ngul |  |
| :--- | :--- | :--- | :--- | :--- |
| 2SG(NOM) HAND strong MAN DIST=DAT.SAME | then |  |
| ngeengk-an ey? |  |  |
| endure-2SG.FUT INT? |  |  |
| 'can you stand up to the hard fists of those men?' |  |  |

Most of the examples of the ING series are similarly unhelpful for analysing the sense of ING-man, as the free translations make no distinction between the form with the suffix or without, as in (290) where the translation of ing-man 'PRX-SAME' as 'here' is identical to what it would be if the suffix were not there i.e. ing 'PRX' would also be translated as 'here'. Again, in (291) the translation of ang 'DIST' i.e 'there' would be identical to the one offered for ang-man 'DIST-SAME'.
(290) Huchet 1990 p. 57 ex 2.33

| nil | aawuch | ing-man | wun-ow |
| :--- | :---: | :--- | :--- |
| 3SG(NOM) | house | PRX-SAME | to.be-3SG.FUT |
| 'he will stay here in this house' |  |  |  |

(291) Sayers 1982a p. 200 ex 78

| ang-man | wun- $\varnothing^{49}$ | nung=ant |
| :--- | :--- | :--- |
| DIST-SAME | lie-3SG.PST | 3SG=DAT |
| 'it lies there for him' |  |  |

Similarly, the nang-man 'MED-SAME' in (292) has the same free translation as it would if substituted by nang 'MED', although a reasonable speculation would be that it represents 'right there', as in 'there's someone right there'.
(292) Kilham et al 1986 p. 149

| ngurp-thonam | nang-man | engk-an | pul=ant |
| :--- | :--- | :--- | :--- |
| someone | MED-SAME | ask-2SG.FUT | 3DU=DAT |
| 'they are there, ask them' |  |  |  |

In (293), the exclamation mark in the free translation could be interpreted as favouring a 'right here', as in 'don't sit right here' but again this is speculation, as the use of the topic marker could also be a factor.

[^21](293) Kilham et al 1986 p. 114

| nint | kan | iiy- $\varnothing$-a | ing-man=iy-a |
| :--- | :--- | :--- | :--- |
| 2SG(NOM) now | go-IMP-a | PRX-SAME=TOP-a |  |
| 'don't sit here (now)!' |  |  |  |

In fact, there are very few examples in the corpus where any change in meaning between the bare IN; L or ING forms and the affixed forms IN-man, L-man and INGman can be stated with confidence. There are enough examples, supported by the lexicon, to assert that 'same' and 'emphatic' are valid descriptions of the meaning but it has to be conceded that the evidence is limited.

### 6.2.2.2 -pal 'hither'

The -pal suffix only attaches to the IN series, where it maintains its core sense of movement to a deictic centre (see section 10.3.1). This deictic centre may be the place identified by the demonstrative or movement may be from the place identified by the demonstrative towards the deictic centre. For example, in (294) the deictic centre is the speaker and the people mentioned as coming are coming to the speaker. In (295) the deictic centre is also where the speaker is and the medial nan=Ø-pal 'MED-DAT-hither' indicates that the emu is at a place (not far away) and is moving to the speaker. In (296), the deictic centre is the school and the children are running from a medial place to the school. In (297) the deictic centre is again the speech situation and the hearer is instructed to bring groceries from a distal place to the speaker.
(294) Sayers 1982a p. 208 ex 22

| in-pal | kuuw | wamp-ayn | ngath-a |
| :--- | :--- | :--- | :--- |
| PRX(DAT)-hither | west | come-3PL.FUT | 1SG.DAT-a |
| 'they will be coming here to me from the west' |  |  |  |

(295) Huchet 1990 p. 63 ex 4.6

| minh | achamp $\quad$ nan-pal | iiy-an |
| :--- | :--- | :--- |
| MEAT | emu(ABS) MED(DAT)-hither | go-3SG.PRS |
| 'an emu is coming from there' |  |  |

(296) Huchet 1990 p. 62 ex 4.5

| nan-pal | kamp | othamayan | mo'-mo'-antan | school=ak |
| :--- | :--- | :--- | :--- | :--- |
| MED(DAT)-hither | fast | hard | RDP-run-3PL.PRS | school=ALL |
| '(from there) they are running very fast to school' |  |  |  |  |

(297) Kilham et al 1986 p. 102

| may | ngath | an-pal | maay-an-a |
| :--- | :--- | :--- | :--- |$\quad$ ma'meym

### 6.2.2.3 -ngul 'then'

When ngul 'then' is attached to the IN series, it generally adds a temporal sense of 'just now' or 'already'. This is considered to create a compound rather than treating -ngul 'then' as a suffix or clitic. As explained in section 3.7, the orthographic convention in the lexicon of using a hyphen is phonologically based. Example (298) shows the sense of 'just arrived' from the beach at the place designated by the proximal in. Similarly, example (299) describes Bruce and Harland as having 'just gone' to the place referenced by the medial nan. Example (300) describes the (unspecified) actors 'they' as having 'already gone' to the distal location referenced by an, here also identified as Weipa.
(298) Huchet 1990 p. 44 ex 3.7

| ngan | in-ngul | kan=am | matan |
| :--- | :--- | :--- | :--- |
| 1PL.EXCL(NOM) | PRX(DAT)-then | now=ABL | climb-1PL.EXCL.PST |

(299) Sayers and Kerr 1964 p. 5

| Bruce | pul | Harland ${ }^{50}$ | nan-ngul | iiy-pul |
| :---: | :---: | :---: | :---: | :---: |
| Bruce | 3DU | Harland | MED(DAT)-then | go-3DU.PST |
| Those | Bruc | Harland | ne there" |  |

(300) Kilham et al 1986 p80

| than | an-ngul | kan | kuuny-in |
| :--- | :--- | :--- | :--- |
| 3PL(NOM) | DIST(DAT)-then | now | Woipa=ak |
| 'they have already gone there to Weipa' |  | Weipa=ALL |  |

The only other series which has -ngul 'then' attached is the ING series, where the sense is equivalent to that of the IN series, as in example (265), repeated here as (301), where the presence of the suffix -ngul 'then' provides the sense of immediacy to the proximal, hence 'right now'. However, in (210), repeated as (302), the suffix provides the sense that the speaker will put the (unspecified) object in the place represented by the medial nang as soon as he/she has obtained it. ${ }^{51}$
(301) Kilham et al 1986 p. 38

| nint | ing-ngul | wunp-an-a |
| :--- | :--- | :--- |
| 2SG(NOM) | PRX-then | put-2SG.FUT-a |

'(you) put (food) on here right now'
(302) Huchet 1990 p. 46 ex 3.10

| ngay | yamp | nang-ngul |
| :--- | :--- | :--- |
| 1SG(NOM) | from.somewhere | MED-ang |
| 'I (will get it) from somewhere then put it there' | put=1SG.FUT |  |

Example (303) shows the distal with -ngul 'then' and followed by the free lexeme ngul 'then'. The latter provides the sense that there will be a time in the future for the speaker to give 'it' (unspecified) to the addressee while the suffix provides the sense of 'immediately' (at the future time), at a place specified by the distal ang.
(303) Kilham et al 1986 p. 15

| ngay | ang-ngul | ngul | thee'-ang |
| :--- | :--- | :--- | :--- | | nungk-a |
| :--- |
| 1SG(NOM) |
| 'I will give it to you over there later' |

Example (304) is, as Huchet (1990 p. 42) points out, a demonstration of the contrasting effects of the IN and ING series. The ang-ngul 'there then' implies a period of time required to take the person to a place, starting at the current time. The later an-ngul 'there then' is a point in time when 'they' will see him 'at that place'. This is also the only example of IN -ngul with the future tense.
(304) Kilham et al 1986 p. 15

| ang-ngul | kal-an | nunang-a | an-ngul | thath-ayn-a |
| :--- | :--- | :--- | :--- | :--- |
| DIST-then | take-IMP | 3SG.ACC-a | DIST(DAT)-then | see-3PL.FUT |
| 'take him over there then. | Then they'll see him there'. |  |  |  |

### 6.2.3 Extended Uses

Some of the demonstratives can have their sense extended to temporal and reason. The IN series has the multiple senses shown in Table 31, which is based on the definitions in the lexicon. Case marking is ignored for the purposes of this table.

| Demonstrative | Referential | Locational | Temporal | Other |
| :--- | :--- | :--- | :--- | :--- |
| inman PRX- <br> SAME | this same one | right here | right now |  |
| nanman MED- <br> SAME | that same one <br> (MED) | right there | at that same <br> time (not long <br> ago) |  |
| anman DIST- <br> SAME | that same one <br> (DIST) | right there | a long time ago |  |
| an-anman RDP- <br> DIST-SAME |  | from here | from this time | for this reason |
| in-pal PRX-hither |  | from there <br> (MED) | from that time | for that reason |
| nan-pal MED- <br> hither | from there <br> (DIST) | from a long <br> time ago | for that reason |  |
| an-pal DIST- <br> hither | from this | from here | from now | for this reason |
| imanam <br> PRX.ABL | from that <br> (MED) | from there <br> (MED) | from then (not <br> long ago) | for that reason |
| namanam <br> MED.ABL | from that <br> (DIST) | from there <br> (DIST) | from then (a <br> long time ago) | for that reason |
| amanam <br> DIST.ABL |  |  |  |  |

Table 31: Summary of IN series pragmatic extensions
Examples (305) to (308) show the temporal use; examples in the corpus are scarce.
Example (305) shows the use of -man 'same' to create the sense 'soon', although the use of the distal here would seem to suggest a longer time frame.
(305) Sayers and Kerr 1964 p. 6

| nint | an-man | iiy-an |
| :--- | :--- | :--- |
| 2SG(NOM) | DIST(DAT)-SAME | go-2SG.FUT |
| 'are you going soon?' |  |  |

Example (306) shows how -pal 'hither' adds to in 'PRX' to provide the sense 'from now', while (307) similarly uses -pal 'hither' and an 'DIST' to provide the sense of 'from that time' or 'after that'. Example (308) shows the use of the ablative to achieve the same sense of 'from that time'. There are few examples in the corpus of the IN
ablative being used in this way and no proximal or medial examples.
(306) Sayers and Kerr 1964 p. 4

| ngal | In-pal | work | iiy-al | kinch |
| :--- | :--- | :--- | :--- | :--- | | keny=ak-am |
| :--- |
| 1DU(NOM) |
| PRX(DAT)-hither |$\quad$ work | go-1DU.FUT | day |
| :--- | :--- |
| 'we two will work from now until the day is over' |  |

(307) Sayers 1982a p. 161 ex 128
an-pal=an-a koyam waanch- $\varnothing$-an DIST(DAT)-hither=DEF-a back hang-3SG.PST-3SG.ACC 'after that she hung (the bag) back'
(308) Kilham et al 1986 p. 147

| ngul amanam=an=iy-a | pam an=an=iy-a |
| :--- | :--- | :--- |
| then DIST.ABL=DEF=TOP-a | MAN $\quad$ DIST(ABS)=DEF=TOP-a |
| thaw- $\varnothing \quad$ puk | kunch=ant |
| speak-3SG.PST $\quad$ CHILD | own=DAT |
| 'then after that the (that) man spoke to his child' |  |

The causative usage is similarly rare in the corpus; (309) and (310) being the only examples. In the former the nanpalan 'for that (MED) reason' explains that the people did not see a film because the projector broke down. That is, the demonstrative in this instance is referring back to the clause yukan ya' wayam 'the thing broke down'. In the latter anpalan 'for that (DIST) reason' is adnominal to bomb and explains that people died because of that bomb.
(309) Kilham et al 1986 p. 125

| yuk=an <br> thing=DEF | ya' <br> really | way-am- $\varnothing$ | bad-ITR-3SG.PST |
| :--- | :--- | :--- | :--- |

(310) Kilham et al 1986 p. 226

| pam wanch | puk | many=iy | yotam | an-ang=an | ya' |
| :--- | :--- | :--- | :--- | :--- | :--- |
| MAN WOMAN | CHILD | small | many | DIST-ABS.PL | really |
| thuuyp-in | bomb | an-pal=an |  |  |  |
| die-3PL.PST | bomb | DIST(DAT)-hither=DEF |  |  |  |
| 'those many people really died because of that bomb' |  |  |  |  |  |

Similarly, the GOAL series, which encodes the allative case, can also encode the purposive; there are only the following three examples in the corpus. In (311), the proximal iikanak=an 'PRX.ALL-DEF' is used to show that the desire of the addressee is for the speaker's beer. In (312) the unnamed actor is said to be picking eggs for
the purpose of (giving them to) children, the medial naakanak=an=iy
'MED.ALL=DEF=TOP' expressing that purpose. Finally, in (252), repeated here as (313), distal aakanak=an=iy 'DIST.ALL=DEF=TOP' is shown to be the cause for the people to start dancing.
(311) Kilham et al 1986 p. 136

| ngangk | ke' | peey-peey-ow niiy=ant |
| :--- | :--- | :--- | :--- |
| SOUL | NEG | RDP-cry-3SG.SBJV 2SG=DAT |

(312) Sayers 1982a p. 177 ex 80

| puk uuy $\quad$ naakanak=an=iy | maay-antan ${ }^{52}$ |
| :--- | :--- | :--- |
| CHILD many MED.ALL=DEF=TOP | pick.up-3PL.PRS |
| 'he picks (many (eggs)) for those children' |  |

(313) Sayers 1982a p. 180 ex 105
wiy yalkangpek-antan minh aakanak=an=iy some dance-3PL.PRS MEAT DIST.ALL=DEF=TOP 'some were dancing because of those (eggs)'

The $L$ and ING series do not have extended senses.

### 6.2.4 Non-situational / Endophoric

Non-situational or endophoric use occurs when a demonstrative refers to an entity previously mentioned in the discourse or part of the discourse itself. A simple example is for anaphoric tracking such as in example (314) where the reference 'that same one' is to a tree already introduced in the narrative.
(314) Sayers 1982a p. 175 ex 54

| an=an-man | tha-than- $\varnothing$ |
| :--- | :--- |
| DIST(ABS)=DEF-EMPH | stand-RDP-3SG.PST |
| 'that same one still (sic) stands' |  |

Himmelmann (1996) found in his sample that the proximal form was generally the only one used for this anaphoric tracking. Shupbach (2013 p. 32) points out that the sample of 5 languages used by Himmelmann was too small to draw conclusions. Wik-Mungkan uses all three forms; the proximal, as in (315) where in 'PRX' refers

[^22]back to a type of bark mentioned earlier in the narrative (reference repeated after the verb); the medial, as in (316) where nan 'MED' refers to a type of grass (kunai) mentioned earlier and the distal as in (314) above. ${ }^{53}$
(315) Sayers 1982a p. 162 ex 133

| in thant $\quad$ wiy-wiyam | imp-a |  |
| :--- | :--- | :--- |
| PRX | 3PL.DAT(ABS) different-RDP | bark-a |
| 'this bark of theirs is very different' |  |  |

(316) Sayers 1982a p. 154 ex 47

| $n g a m p=a r-a$ | nan | yimanang=an |
| :--- | :--- | :--- |
| 1PL=DA'a | ya'a |  |
| 'we don't have that (kunai grass)' (ours there is like this no) |  |  |

The $L$ series can also function anaphorically, as in (317) where the demonstrative ilil=ang=an 'PRX-RDP=ERG=DEF' is adnominal to wanch 'WOMAN', referring to women mentioned in the previous sentence. Similarly in (318) the distal demonstrative is adnominal to 'sacred one', the main protagonist in the story.
(317) Mary Tarpencha cited in Gaby pc 2014

| than | wanch | il-il=ang=an |
| :--- | :--- | :--- |
| 3PL(NOM) | WOMAN | RDP-PRX=ERG=DEF |$\quad$| puk yot-yot-am |
| :--- |
| CHILD RDP-many-EMPH |

(318) Sayers 1982a p. 177 ex 81
ngeen-wiy al=ang=an thath-thath-an sacred.one DIST=ERG=DEF see-RDP-3SG.PRS 'that sacred one saw (eggs)'.

There are no examples of the medial $L$ series being used anaphorically.

There are few examples, such as (319), of the GOAL series being used as an anaphoric device. The medial naakanak=an 'MED.ALL=DEF' refers to geese eggs previously mentioned at the start of the narrative. The other examples are from the

[^23]same story and very similar.
(319) Sayers 1982a p. 179 ex 106

| ngangk | kuupam-antan | naakanak=an |
| :--- | :--- | :--- |
| SOUL | rejoice-3PL.PRS | MED.ALL=DEF=TOP |
| 'they are glad for those (eggs)' |  |  |

There are no clear examples of the ING series being used anaphorically or cataphorically, except examples such as (320) where ing=an 'PRX=DEF' is an anaphoric reference to 'their place'. (The first demonstrative in 'PRX(ABS)' is an anaphoric reference to a type of grass mentioned earlier in the narrative).
(320) Sayers 1982a p. 154 ex 49

| $\boldsymbol{i n}$-a | thantt=ang | aak | ing=an | em-an |
| :--- | :--- | :--- | :--- | :--- |
| PRX(ABS)-a | 3PL.DAT=LOC | PLACE | PRX=DEF | grow-3DG.PRS |
| 'this (kind) grows here in their place' |  |  |  |  |

As is common in Wik-Mungkan, word order can vary, as in (321), where the demonstrative nang-man 'MED-SAME' precedes 'on your nest'.
(321) Huchet 1990 p. 59 ex 3.37

| nint | puth | nang-man | wurp | nungk-ar=am=ang | niiyin-nyiin-an |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2SG(NOM) CONJ MED-SAME nest | 2SG=DAT=GEN=LOC | sit-RDP-2SG.FUT |  |  |  |

The above two examples could, on a narrow definition, constitute anaphora / cataphora. They are not considered as such for this thesis because the immediacy in word order (before or after the relevant NP) is not considered to be providing a tracking reference.

Diessel (1999 p. 102) claims that, cross-linguistically, tracking is limited to previously mentioned referents i.e. anaphoric tracking and not referents yet to be mentioned, or cataphoric tracking. Wik-Mungkan appears to conform to this observation; no cataphoric examples have been found in the corpus.

The second type of endophoric use is that of discourse deixis where the demonstrative refers to a segment of discourse. Firstly, Wik-Mungkan demonstrates anaphoric discourse deixis, as in example (322) which is the end of a story and the medial nan-man 'MED-SAME' refers to the entire preceding discourse. It is
interesting that it uses the MED form, as does (323), the end of another story. In (324), an=an 'DIST=DEF' refers back to the statement than peetanan kanam wampin 'they came yesterday'.
(322) Sayers 1982a p. 185 ex 169

| kan | nan-man-a | ya'a | ngul |
| :--- | :--- | :--- | :--- |
| now | MED(ABS)-SAME-a | really | then | 'that's all then'

(323) Sayers 1982a p. 162 ex 141

| ya'-ngul puk many-ant=am | nan=iy |  |
| :--- | :--- | :--- |
| finished child | small=DAT=GEN | MED(ABS)=TOP |

(324) Sayers 1976c p. 67 ex 142

| than | peetanan | kan-am | wamp-in |
| :--- | :--- | :--- | :--- |
| 3PL(NOM) | yesterday | now-EMPH | come-3PL.PST |

Discourse deixis can also be used in a purposive or causative sense, as in example (325) where the demonstrative an-pal=an 'DIST-hither=DEF' refers back to the clause describing the woman getting wet from the rain and hence becoming ill. Similarly, (326) and (327) show nan-pal=an 'MED-hither=DEF and namanam 'MED.SAME.ABL' being used as causative discourse deixis. In the former, there has been an extended discourse about using the dye they have been digging to make pandanus mats which they sell to provide money for food. In the latter the discourse was about not using someone's name when that person was out hunting.
(325) Kilham et al 1986 p. 16

| ngak=ang ep-an  <br> water=INST wet-3SG.PRS ngut ongk-a nil=an <br> night long-a $3 S G(N O M)=D E F ~$ | ke'-paal <br> CONJ |
| :--- | :--- | :--- | :--- |
| an-pal=an kootra ench-Ø <br> DIST-hither=DEF head become-3SG.PST |  |

'she is wet from the rain all night so from that she became ill' NB; the 'head become' meaning 'ill' is idiomatic
(326) Sayers 1982a p. 215 ex 13

| nan-pal=an-a ngan=an=iy <br> MED-hither=DEF-a 1PL.EXCL(NOM)=DEF=TOP | wayk <br> dye |  |
| :--- | :--- | :--- |
| in=an we'-anan |  |  |
| PRX(ABS)=DEF | dig-1PL.EXC.PRS |  |
| 'for that reason we dig this dye'. |  |  |

## (327) Sayers 1982a p173 ex 25

| nil | namanam | waa'-wuntan |
| :--- | :--- | :--- |
| 3SG(NOM) | MED.SAME.ABL | say-3PL.RCP.PRS |

Wik-Mungkan also exhibits the cataphoric discourse deictic use as in example (328) where the phrase 'this story' refers to the entire discourse to come. This is a traditional way to start telling stories in Wik-Mungkan. Similarly, example (329) introduces a quotation niïy mak ngeeyana 'you must listen' by use of the proximal demonstrative in=an 'PRX(ABS)=DEF'.
(328) Sayers 1982a p. 193 ex 1

| in=an | wik | kath |
| :--- | :--- | :--- |
| PRX(ABS) $=$ DEF | word | old(ABS) |$\quad$ waa'-ang | tell-1SG.FUT |
| :--- |
| 'I will tell you this story ("old word")'. |

(329) Sayers 1976c p. 66 ex 137

| nil |  | in=an | thaw-Ø | thant |
| :---: | :---: | :---: | :---: | :---: |
| 3SG(NOM) |  | PRX(ABS) $=$ DEF | say-3SG.PST | 3PL.DAT |
| niiy | $m a k^{54}$ | ngeey-an-a |  |  |
| 2PL(NOM) | OPT | listen-2PL.FUT |  |  |
| 'he said this | to them | ou must listen"' |  |  |

There are no examples of the L, GOAL or ING series being used as discourse deixis.

A further type of endophoric use found in the literature (eg. Himmelmann 1996 p. 233 or Diessel 1999 p106) is the recognitional. In recognitional use a demonstrative is used adnominally to refer to shared knowledge of a referent which has not been mentioned previously and is not located in the speech situation. Shupbach (2013 p. 34) provides the example 'so I saw that cat again' where the speaker invokes shared knowledge for the hearer to determine which cat is being referred to. Himmelmann (1996 p. 231) points out that some Australian languages have specific demonstratives for recognitional use rather than recognitional being an extended sense of other demonstratives. This use is mentioned for completeness only, as there are no examples of this use found in the corpus.

### 6.3 Other Demonstratives

This section describes two other other demonstrative types; section 6.3.1 describes manner demonstratives, section 6.3.2 discusses phrases found in the lexicon with few or no text examples while section 6.3.3 discusses a class of demonstratives found in the literature but not in Wik-Mungkan. This last discussion is purely for completeness.

### 6.3.1 Manner Demonstratives

There are four lexemes; ke', yimanam, yimanang, and yinang (variant of yimanang), all glossed as 'like, similar to'. There is no explanation as to any semantic or syntactic difference between these lexemes. The lexeme ke' 'like' is used to form adverbial clauses and is discussed in section 13.2.5. The remaining three are adverbial manner demonstratives, to be discussed below.

The form yimanam 'like this' can be seen in examples (330) and (331). In example (330) the form functions adverbially with deictic reference back to a previous action, a man paddling a canoe, collecting geese eggs. Example (331) is a statement that a particular girl likes going at night to visit her boyfriend 'like this'. So, in this context yimanam 'like this' appears to refer to the manner in which she visits. Without more context it is difficult to be definitive.


Yimanam 'like this' also appears in reduplicated form in three examples in the corpus, two in the in the same example; (332) where the reference 'like this' is to how a child
climbed high up a tree. That yim-yimanam 'RDP-like.this' is repeated is probably not significant, merely a repetition for narrative effect.
(332) Sayers 1976a p. 19 ex 14

| last year=an | yim-yimanam-a | puk thonam=an | yim-yimanam |
| :--- | :--- | :--- | :--- |
| last.year=DEF | RDP-like.this-a | CHILD one(ABS)=DEF | RDP-like.this |

The third example of the reduplicated form appears to be an example of cataphoric discourse deixis; (333). The round brackets () are in the original but seem to mark an initial clause, as marked by []. In that clause, yim-yimanamaniy 'RDPlike.this=DEF=TOP' refers to the situation described in in the second clause; a group of people tried one by one to dig a well.
(333) Sayers 1976a p. 27 ex 3
\(\left.\left.$$
\begin{array}{lllll}{[(\text { yim-yimanam=an=iy }} & \text { ngan-a) }\end{array}
$$\right] \quad \begin{array}{lll}[ngak \& thon-thon <br>

[RDP-like.this=DEF=TOP \& 1PL.EXCL(NOM)\end{array}\right]\)| water | RDP-one |
| :--- | :--- | :--- |

The form yimanang(=an) 'like this' is more frequent in the corpus with 13 examples, although only two without the =an 'DEF' clitic. These examples are more clearly referring to a manner of doing something, as in (334) where it refers to a method of tying bush torches and (335) where it refers to making huts of grass.
(334) Sayers 1982a p152 ex 33
kath-in yimanang=an
'tie-3PL.PST like.this=DEF 'they tied (them) the same way'
(335) Sayers 1982a p. 154 ex 45

| aawuch | many-a | thantt=am=an | yimanang | wak=ang |
| :--- | :--- | :--- | :--- | :--- |
| house | small-a | 3PL.DAT=GEN=DEF | like.this | grass=INST |
| '(they make) their small houses like this, with grass' |  |  |  |  |

### 6.3.2 Demonstrative Phrases

According to the lexicon, the basic proximal, medial and distal forms in, nan and an also combine with the directionals keny 'up', pek 'down' and yoon 'outside' to create a
set of seven phrases such as an keny 'DIST up' (way up there), in pek 'PRX down' (down here) and nan yoon 'MED outside' (just outside). The phrases nan pek 'MED down' (down there close by) and nan keny 'MED up' (up there close by) are not in the lexicon. There are no examples in the corpus of any of these phrases.

### 6.3.3 Predicative

This syntactic category, with two sub-categories, the verbal and the identificational, are included for completeness as they have been noted in other languages and included in demonstrative typologies.

The verbal category is defined by Dixon (2003 p. 72) as having a meaning of 'do it like this', usually accompanied by a mimicking action. Dixon only cites examples from two languages and believed that category to be rare. Others such as Shupbach (2013 p. 25) consider them to be examples of adverbs of manner. In either case, there are no examples in the corpus which match the description.

The identificational sub-category is described by Diessel (1999 pp. 78-79) as consisting of 'demonstrative identifiers embedded in a specific grammatical construction, a copular or non-verbal clause'. They have also been described for e.g. Logea (Dawuda 2009) and Dalabon (Cutfield 2011).

The best fit for this sub-category can be seen in examples (336) and (337). However there are no separate forms for these demonstratives in Wik-Mungkan. As such, they are classified as nominal demonstratives, following Diessel (1999 p. 79). There are thus no predicative demonstratives in the corpus.
(336) Sayers 1982a p. 179 ex 102

| ngaan-wiy | in-pal-ow |
| :--- | :---: |
| sacred-some | PRX-hither-EMPH |
| 'the sacred one is coming here' |  |

(337) Kilham et al 1986 p. 260

| in puk | nung=ant=am |
| :--- | :--- |
| PRX CHILD | 3SG=DAT=GEN |
| 'this is his child' |  |

### 6.4 Notes on the Wik-Mungkan literature

A review of the literature on WM demonstratives, essentially Huchet (1990), Kilham (1977), Kilham et al (1986), Osgarby (2014), Sayers (1982a) and Sayers and Kerr (1964) reveals a number of differences between them. This section summarises these and any differences from the above description. It should be noted that, apart from Sayers and Kerr (1964) all of the sources consider 'demonstrative' as its own word class i.e. they do distinguish between nominal and adverbial usage. Sayers and Kerr (1964 p. 1) describe them as pronouns.

This section is organised generally by the different authors, apart from the last which reviews the various definitions of proximal, medial and distal.

### 6.4.1 Kilham 1977 / Kilham et al 1986

Kilham et al (1986 p. 405) provides a very short (<one page) description of demonstratives with little supporting explanation. It is largely copied from Kilham (1977 p. 44). The latter also includes the gloss of anman as 'only', which is not found elsewhere. Apart from this, the summary generally accords with the above descriptions.

One difference from the current account is that Kilham et al (1986 p. 405) state that the dative forms of the $L$ series are formed by either =ant or =antan, which differs from the standard =ant. The set (il)ilant, (nal)nalant and (al)alant are not found in the lexicon nor are there any examples in the corpus so it is not clear if =ant and =antan are allomorphs. The morpheme breakdown of (il)ilantan as PRX-(RDP)=DAT(=DEF) is most consistent with other examples and so will be used, rather than treating =antan as an allomorph of =ant 'DAT' (similarly for the MED and DIST). Similarly, although the ergative il=ang without the $=a n$ is not attested, the preferred structure of ilangan will be il=ang=an 'PRX=ERG=DEF' (analogously for MED and DIST).

Another difference is that Kilham et al (1986) makes no mention of the =ang 'LOC' suffix being attached to the IN series without additional =an 'DEF'. That is, the forms inang, nanang and anang are not shown but inangan, nanangan and anangan are.

Both Sayers and Kerr (1964) and Huchet (1990) provide examples of the unsuffixed forms; see section 6.1.1.

The meaning of the -pal 'hither' suffix in the literature is varied. As described in section 10.3.1 the sense can vary based on where the deictic centre is located and hence can be translated as movement 'to' or 'from'. Kilham et al (1986 p. 405) confines the sense to 'from'.

Kilham et al (1986) does not describe the -man suffix explicitly but the lexicon (major part of Kilham et al 1986) translates in-man as either 'right here', 'right now' or 'this same one', similarly for nan-man and an-man. For the ING series, the lexicon describes ing-man 'PRX-SAME' as 'here in (or on) this place' while nang-man 'MEDSAME' and ang-man 'DIST-SAME' as 'there in or on that (same) place'. For the L series the description is 'this or that same one'.

### 6.4.2 Sayers and Kerr 1964; Sayers 1976a, 1982a

The Sayers and Kerr (1964) paper is the first attempt to describe demonstratives. The essentials for IN and ING series are mostly as described above, but the L and GOAL series are not mentioned.

One difference from the current description concerns the clitic =an 'DEF'. This has various meanings in WM (see section 3.6.1) but a primary one is to bring the sense of 'definiteness', in particular as an anaphoric device to link to an earlier referent in the discourse. Sayers and Kerr (1964 p. 6) define this suffix differently, claiming that it has the sense of 'in sight' or creates a pronoun / determiner meaning 'dual'. Neither Kilham et al (1986) nor Huchet (1990) mentions either interpretation and the examples provided by Sayers and Kerr (1964) are not conclusive. As for the 'dual' sense, Sayers and Kerr (1964 p. 6) further noted that the 'dual' is ambiguous and may be accompanied by a dual free form for emphasis. Later, Sayers (1982a p. 26) states that there is no clearly marked dual, speculating that the usage has been discontinued. The only example from Sayers and Kerr (1964 p. 8) with a dual gloss is (338), where their gloss of nan=an is 'those.DU' but a gloss of 'MED=DEF' is more
plausible as the dual is already marked by the free pronoun pul and the verbal suffix -pul. The comparison with (339) where the sense is 'there' is also persuasive. The 'dual' interpretation appears to be an error, a view supported by Huchet (1990 p. 52) who also interprets the =an suffix as the definiteness marker, as also does the lexicon.
(338) Sayers and Kerr 1964 p. 8

| pul | nan=an | kee'-pul | yuk=ang |
| :--- | :--- | :--- | :--- |
| 3DU(NOM) | MED-DEF | play-3DU.PST | thing=INST |
| 'those two played there with that thing' |  |  |  |

(339) Sayers and Kerr 1964 p. 8

| pul | nan=an | iiy-pul |
| :--- | :--- | :--- |
| 3DU(NOM) | MED=DEF | go-3DU.PST |
| 'they two went there' |  |  |

Sayers and Kerr (1964 pp. 3-4) report pal 'hither' as meaning 'to' and 'from' but do not describe why this can occur.

Sayers and Kerr (1964 p. 9) omit the suffix -ngul 'then' attaching to the ING series.

Sayers and Kerr (1964 p. 2) describes the suffix -man 'SAME' as indicating a place in time or space, conditioned by context. When attached to the IN series such as inman 'PRX-SAME' the sense is 'right here' within 'a close radius' or 'right now' if within a 'short segment of time'. By contrast, if the context is 'a large radius' in-man 'PRXSAME' means 'here - general'. If the context is 'in a long segment of time', the meaning is 'any time to-day'. The forms nan-man, an-man are stated to follow similar patterns. When attached to the ING series, the suffix -man is described (ibid p. 2) as indicating a specific location for a continuing period of time e.g. an-man 'DIST-SAME' is described as meaning 'staying in that place there'. No other authors have adopted these descriptions and it is unclear how these meanings were elicited. The L series is not mentioned.

Although not explicitly stated Sayers (1976a p. 72 ex. 3) glosses ang as 'there-stay', supporting the assertion of this thesis that the ING series has a sense of duration as well as place.

Finally, Sayers (1982a) does not discuss the -man suffix directly but uses different glosses across five narratives and all three series (IN, L, ING). These glosses are 'same', 'only', 'emph', 'emph(same one), 'def(just)' 'like-that' and 'emph (only)'. Given these variations, the following examples (340), (341) can be glossed / translated differently; the original glosses and translations are provided but are not very helpful.
(340) Sayers 1982a p. 221 ex 5

| in-man | ngut=ang=an=iy-a | ngaantamngeey-amp-a |
| :--- | :--- | :--- |
| now/here-emph | night=LOC=DEF=TOP-a | think.about-1PL.INCL.FUT-a |
| 'tonight we will think about ...' |  |  |

(341) Sayers 1982a p. 183 ex 146

| ngay-wey | an-man punth |
| :--- | :--- |
| 1SG(NOM)-EMO | that-emph creek |


| an-man | wak-ang-an |
| :--- | :--- |
| that-emph(same one) follow-1SG.PST-3SG.ACC |  |
| 'I went up that creek there' |  |

### 6.4.3 Huchet 1990

Huchet (1990) describes deixis in Wik-Mungkan as evidenced by the IN and ING series. She makes no mention of the L or GOAL series.

A major difference of this thesis from Huchet (1990) is the treatment of the suffix -ang, which I have glossed as locative case, attaching to the IN series as nominals. Huchet (1990 p. 46) glosses -ang as 'extended event' (Huchet 1990 pp. 46-48), meaning that it marks a situation as enduring. So in (342) (Huchet 1990 p. 47 ex 3.11), which she does not attribute to Sayers and Kerr (1964), she glosses an-ang as 'there-EXT.EV' and provides the free translation 'those three stayed in that place for a while'. She does not explain why she rejects the Sayers and Kerr (1964) interpretation. Her argument is that -ang is adding a durative element which differs from the imperfective nature of the ing series and explains why the -ang suffix does not combine with the ing series. Similarly she provides (343) to support the idea that the protagonists moved in a period of time to the given place. Finally she cites (344) to show that there is a period of time elapsing, a fact already implied by the reduplication of the verb, which denotes continuative aspect.
(342) Sayers and Kerr 1964 p. 9

| than ko'alam aak | an=ang | wun=iyin |
| :--- | :--- | :--- |
| 3PL(NOM) three PLACE | DIST=LOC | stay-3PL.PST |
| 'those three stayed in that place' |  |  |

(343) Huchet 1990 p. 47 ex 3.12

| than nan=ang | iiy-in |  |  |
| :--- | :--- | :--- | :--- |
| 3PL(NOM) | MED-LOC | go-3PL.PST |  |
| wik | ke'anang | yipam | nyiin-ayn-a |
| word | without | so.that | sit-3PL.SBJV |
| 'they moved to that place so that they could sit quietly' |  |  |  |

(344) Huchet 1990 p. 47 ex 3.13

| than | nan=ang yoon | th |
| :---: | :---: | :---: |
| 3PL(NOM) | MED-LOC outside | stand-RDP-3PL.PRS |
| kuup-kuup- | -antan nungk-a |  |
| wait-RDP-3P | 3PL.PRS 2SG.DA |  |
| 'they are st | tanding in that place | utside waiting for you |

The strongest argument she raises in favour of this interpretation is that it explains why the forms *ING-ang does not exist, as it would add a durative element to an already durative (imperfective) meaning. The key objection is that she is treating the demonstratives in the above examples as adverbial, not nominal, without apparently being aware of it and certainly not providing a supporting argument.

Similarly, Huchet defines the clitic =am which I have glossed as 'EMPH', as representing a presupposed reference. By this she means that, when affixed to a demonstrative, the reference is to a place both speaker and hearer are aware of. For example, in (345) she asserts that the location is already recognised by the participants in the speech event. It is not explained what the difference would be without the suffix. This thesis rejects this interpretation and prefers the glossing of emphatic as it matches the general use of the emphatic marker and there is no convincing support for Huchet's interpretation.
(345) Huchet 1990 p. 51 ex 3.17

| ngan | ang-am | than-an |
| :--- | :--- | :--- |
| 1PL.EXCL(NOM) | DIST-? | stand-1PL.EXCL.PST |
| 'we stood there'. |  |  |

She also limits the translation of pal 'hither' to the sense of 'to' (Huchet 1990 p. 62) and not 'hither'.

She describes =an as providing 'explicit specification' which appears to be just a change of terminology for 'definite marker'.

She includes in her data a form not mentioned by any other author; nan-pal-man 'MED-hither-SAME'. This only occurs in example (346) and is for the moment considered an anomaly rather than part of the standard pattern.
(346) Huchet 1990 p. 63 ex 4.8

| nil | nan-pal-man | kaaw | iiy-an | ngampar |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) MED-hither-SAME | east | go-3SG.PRS | 1PL.INCL.DAT |  |
| 'he is coming to us from the east' |  |  |  |  |

Also, Huchet (1990 p. 24) describes the difference between the IN series and the ING series as being aspectual. This aligns with the observation in section 6.1.5.4.

Finally she (Huchet 1990 p. 55) describes the suffix -man 'SAME' as providing 'contrastive emphasis' for place (gloss 'CONTR'), not mentioning time, and uses a similar translation to that of Sayers and Kerr (1964); 'right here' but includes the inference that it is 'nowhere else'. Thus her translation of (233), repeated as (347) with her gloss and translation includes the suggestion that the woman is waiting 'there' and 'not anywhere else'. It is unclear how this interpretation was arrived at but it appears plausible and supports the view of Osgarby (2014) that this suffix means EMPH.DEF (see next section).
(347) Huchet 1990 p. 56 ex 3.31

| nil | nan-man | kuup-kuup-an | nungkar-a |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | MED-CONTR.EMPH | wait-RDP-3SG.PRS | 2SG.DAT |

### 6.4.4 Osgarby 2014

Osgarby (2014) is a poster designed for classroom use in teaching Wik-Mungkan. As a summary table it includes most of the relevant material discussed above, combining the morphology with abbreviated glosses. There are two areas which differ from the current description; Osgarby prefers to describe in 'PRX', nan 'MED' and an 'DIST' as nominal in some contexts and adverbial in other contexts. As discussed in section 6.1.1.1.2, this thesis prefers to describe them as always
nominal. The other area of difference is the description of -man 'SAME' as recognitional. Refer section 6.2.2.1 for further discussion.

### 6.4.5 Distance Alternatives

This section summarises the different interpretations in the Wik-Mungkan literature of the meaning of proximal, medial and distal. It finishes by describing some field work on this question.

Sayers and Kerr (1964) first described the proximal, medial and distal distinction without specifying the nature of the definition. Cross-linguistically, there is considerable variation as to what constitutes proximal, medial and distal, including relative nearness to addressee, relative distance, visibility etc (see e.g. Anderson and Keenan 1985 pp. 282-286).

The only paper to mention visibility as a feature of Wik-Mungkan is Sayers and Kerr (1964 p. 1 and p. 7), however there is no evidence presented to support this description. The other relevant authors describe one of two major competing systems; one being 'speaker based' i.e. near speaker, away from speaker and far away from speaker, the other being 'addressee-based' i.e. near speaker, near addressee and away from both.

Huchet (1990) examined spatial deixis in Wik-Mungkan and came to the conclusion that Wik-Mungkan is actually a mixed system. She claimed that addressee-based ('person orientation' in her terminology) was applicable for the 'speech act zone' where participants in a discourse were in direct contact. Outside of that zone, 'speaker-based' ('distance orientation') is in effect. She summarised this in the following table 32, based on Huchet (1990 Table 2.4 p. 22).

| Person Orientation <br> (inside speech act zone) | Deictics | Distance Orientation <br> (outside speech act zone) |
| :--- | :--- | :--- |
| near to speaker | in/ing | near to participants |
| near to addressee | nan/nang | mid-distant from participants |
| distant from both | an/ang | far-distant from participants |

Table 32: Mixed distance system according to Huchet (1990 p. 22)
Unfortunately, the evidence presented to support this position is limited to an appeal to plausibility, based on the following two examples (348) and (349) (original gloss) claiming to show the inside speech act zone system working.
(348) Huchet 1990 ex 2.1 p. 20

| nint | mal | thapangk $^{55}$ |  | nan | kathan-an |
| :--- | :--- | :---: | :--- | :--- | :--- |
| 2SG(NOM) | side | one.end | just.there | tie-IMP |  |

(349) Huchet 1990 ex 2.2 p. 21

| ngay nang | nyiin-ang | nint | ing |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | there | sit-1SG.FUT | 2SG(NOM) | here | sit-2SG.an |
| :--- |
| 'I will sit there (where you are now) and you will sit here (where I am now) |

For (348), Huchet asserts that the two close locations can 'only plausibly be seen to be differentiated on a person-oriented basis'. For (349) she similarly asserts that this is a person-oriented example. Neither example on its own seems to be sufficiently convincing to confirm or refute the analysis. It is equally plausible to state that both examples reflect an orientation to the speaker as the deictic centre. Her examples for the 'speaker-based' system concur with the other authors so are not relevant.

Sayers (1982a p. 26) further elaborates on the three-way distinction as being context dependent; citing the example that, for a young child, the other side of a room might be considered 'far'. She cites no evidence for this.

[^24]To attempt to resolve the question, specific elicitation was undertaken in Aurukun in August 2015, using the framework from the Max Planck Institute "Cross-linguistic Questionnaire on Demonstratives" (Pederson and Wilkins 1996). Two elder speakers were separately consulted, one the recognised owner of the language. The primary result of this elicitation was the discovery that the medial is no longer in use. When presented with three objects leading away from the speaker (see Pederson and Wilkins 1996 p. 5 scenario a) each speaker used the proximal in form for the nearest and the distal an form for both the other objects. When pressed (and only when pressed) as to whether they could distinguish the two further objects, they then produced the distal=definite form anan for the more remote. When specifically asked about the medial form nan one speaker declared it did not exist. The other mentioned a specific usage where one person is looking for an object and another knows where it is and says nanan accompanied by a pointing gesture. Apart from this usage the speaker denied the use of the medial. Given this disappearance of the medial, there was no attempt made to elicit exact meanings of the proximal and distal as it was deemed probable that language change had affected their meanings as well.

Unless further material comes to light, the findings of Sayers (1982a) and Huchet (1990) have to be considered the most likely description, although the evidence is not substantial.

## 7 Noun Phrase Syntax

This chapter describes the syntax of the noun phrase in Wik-Mungkan, starting with noun phrase structure (section 7.1) then the specific features of possession (7.2) and coordination (7.3).

This chapter does not address aspects of information structure. As noted in section, this is covered extensively in Kilham (1977).

### 7.1 Noun Phrase Structure

Louagie and Verstraete (2016) undertook a typological study of Australian languages in terms of word order types for noun phrases; fixed word order, restricted flexibility and flexibility (ibid p. 38). Wik-Mungkan fits the classification of fixed word order, noting that, as in other such languages (ibid p. 38) Wik-Mungkan allows changes in word order for discourse purposes, as follows.

Noun phrases are identifiable in Wik-Mungkan by the case system and preferred word order. Firstly, case is marked at the end of a NP, as in (350) where the (subject) NP pam manthayan 'MAN important' has the ergative case marker =ang.
(350) Sayers 1982a p. 194 ex 11

| pam manthayan=ang | kee'-ath-an | nun |
| :--- | :--- | :--- |
| man important=ERG | plays-TR-3SG.PRS | 3SG.ACC |
| 'the important man plays with him' |  |  |

Pragmatic considerations can alter word order, however the following template is the most common pattern, where 'deg' represents a degree adverb and Nos represents a pronoun or NP with genitive marking, denoting possession. AdjP represents an adjectival phrase, consisting of (deg)Adj(deg). Where multiple components can occur in one NP, it is noted in the template by *.

As noted in section 5.1.2.1, an NP is frequently preceded by a co-referential pronoun. The template below shows this by describing the pronoun as an alternate to a full NP.

$$
N P \rightarrow\left\{\begin{array}{l}
\left(\left(\mathrm{GEN}^{*}\right)(\mathrm{SPEC})^{*}\right)(\mathrm{AdjP})^{*}(\text { Npos }) \text { (Quantifier) (Dem) } \\
\mathrm{Pn}
\end{array}\right.
$$

There is flexibility as to which constituents are present in any one phrase. The template shows all elements are optional; this shows that any one item, excepting a degree adverb can constitute a NP. There are no examples showing all of the possible constituents of the template. Following are some indicative examples showing each of them, taking the template from left to right.

The pronoun can function on its own but is frequently included before a coreferential NP, as in (351) where the pronoun nil '3SG' precedes the coreferential NP wanch $a l=a n g=a n ~ ' W O M A N ~ D I S T=E R G=D E F ' ~(t h a t ~ w o m a n) ; ~ t h i s ~ c o r e f e r e n t i a l ~ u s a g e ~ i s ~$ discussed above in section 5.1.2. This example also shows the case-marked demonstrative $a /=a n g=a n$ 'DIST=ERG=DEF' as the the last word in the NP.
(351) Kilham et al 1986 p. 43

| nil | panch | $\begin{array}{l}\text { al=ang=an } \\ \text { 3SG(NOM) }\end{array}$ WOMAN | DIST=ERG=DEF |
| :--- | :--- | :---: | :--- |$]$

As discussed in 3.1.1, it is possible for the generic noun to function on its own either in a general sense such as minh 'MEAT' meaning any kind of meat or as anaphoric reference where the type of meat is clear in the context. The generic noun is also optional. Constructions can be productive in assimilating new words e.g. minh bullock 'MEAT bullock' (Kilham et al 1986 p. 248). The generic and specific can be non-contiguous for pragmatic reasons, as in (43), repeated as (352), where the generic minh 'MEAT' should be considered a separate NP introducing the topic with a co-referential NP with the specific ko'an nhepan 'goose eggs'.

| minh=ak | nguch=ang=an | iiy-antan |
| :--- | :--- | :--- |
| MEAT=ALL | star=LOC=DEF | go-3SG.PRS |

The template shows that multiple generic nouns can exist in a single NP, but these are limited to set expressions such as pam wanch (puk many) 'MAN WOMAN (CHILD small)', generally translated as 'people'.

Some words can fill either the generic or specific noun slots. For example, panch 'BIRD' can be generic, as in panch pak 'BIRD honeyeater' but also fill the specific slot, as in minh panch 'MEAT BIRD'.

Similarly multiple specific nouns can be found in a single NP but these are usually set expressions where the two words combine to create a new meaning, as in the combination of paap 'breast' and thap 'fork' (usually fork of a tree) to create paap thap 'breast fork' which means 'firm breast' (Kilham et al 1986 p. 209). Alternatively, one of the nouns can act as a qualifier for the other, as in (352) above, where ko'an 'goose' qualifies nhepan 'eggs'.

Similar to pam wanch 'MAN WOMAN' the two word expression kaath piip 'mother father' is often translated as 'parents', as in (353), where kaath piip 'mother father' is in the plural, not dual, as shown by the verbal suffix -in '3PL.PST', not -pul '3DU.PST'.
(353) Kilham et al 1986 p. 256

| kaath $\quad$piip=an  <br> mother father(ABS)=DEF | wiy | iiy-in | thant |
| :--- | :--- | :--- | :--- | :--- |
| so | go-3PL.PST | 3PL.DAT |  |

The template shows that the NP can only take two adverbs modifying an adjective, one before and one after. This constraint may be an artefact of the corpus, not a constraint of the language, although a similar constraint is found in other languages e.g. Kuuk Thaayorre (Gaby 2017 p. 195). Also similar to Kuuk Thaayorre (Gaby 2017 p. 195), the number of adverbs capable of filling these slots is limited; ep 'really', paththam 'very', pattakam 'very' (only found following many 'small'), wuut
'very' (only found modifying pi'an 'big'), wal 'partially' and thaa' 'very'. This last is homophonous with thaa' 'mouth' but there is no obvious semantic connection.

The position of adverbs modifying adjectives appears to depend on the adverb. For instance, wal 'partly' is only found preceding an adjective in a NP, as in (354) where it precedes and modifies the adjective kath 'old'. The eggs referred to in the free translation are anaphoric, denoted by the demonstrative an-angan=iy-a 'DIST-PL.ABS=TOP-a', which also illustrates the position of demonstratives in the NP syntax and is the absolutive form, being the last word in the NP and hence carrying the case marking for the NP.
(354) Sayers 1982a p. 181 ex 135

| nil | wal | kath |
| :--- | :--- | :--- | | an-angan=iy-a |
| :--- |
| 3SG(NOM) partly old |$\quad$ DIST-PL.ABS=TOP-a

By contrast, paththam 'very' usually follows the adjective it is modifying, as in (355) where it follows and modifies the adjective thayan 'strong'. This is the only example in the corpus where the adverb ep 'really' modifies an adjective and also the only example where one adjective has two modifying adverbs.
(355) Kilham et al 1986 p. 105

| puth | nil=an | ep |
| :--- | :--- | :--- |
| because | $3 S G(N O M)=D E F$ | really |
| thayan | strong | paththam-a |
| very-a |  |  |


| kul=an-a | nil |  |
| :--- | :--- | :--- |
| fight=DEF-a | 3SG(NOM) | minch-ath- |
| 'he was strong and beat them (sic) | OR because he was really very strong, he ended |  |
| the fight' |  |  |

The maximum number of adjectives modifying a noun found in the corpus is two, many of the examples including the adjective many 'small', as in (356) where the two adjectives are many menth 'small pretty'. It is not known if the limit of two adjectives is an artefact of the corpus or a constraint of the language; the Wik-Mungkan literature is silent on the question.
(356) Kilham et al 1986 p. 136

| wanch thonam=ang puk many menth | kal- $\varnothing$ |  |
| :--- | :--- | :--- | :--- |
| WOMAN one=ERG | CHILD small pretty(ABS) | bore-3SG.PST |
| 'a woman bore a very (sic) pretty little baby' |  |  |

The next position in the template is the possessive NP or pronoun. Example (357) shows the noun kampan 'relation' modified by the possessive NP wanch koman=ant=am=an=iy-a 'WOMAN girl=DAT=GEN=DEF=TOP-a' (that young woman's).
(357) Kilham 1977 p. 156 ex 334

| thaw-in | pam | an-angan=iy-a |
| :--- | :--- | :--- |
| say-3PL.PST | MAN | DIST-PL.ABS=TOP-a |

$\begin{array}{lll}\text { kampan } & \text { wanch } & \text { koman=ant=am=an=iy-a } \\ \text { relation } & \text { WOMAN } & \text { girl= } D A T=G E N=D E F=T O P-a \\ \text { 'they said, those men, the relatives of that young woman' }\end{array}$
Example (358) shows the possessive pronoun syntax, with the possessive pronoun ngal=ant=am '1DU.INCL=DAT=GEN' modifying the noun moom 'boss' and having the dative marker attached as the last word in the NP.
(358) Sayers 1976a p. 38 ex 12

| ngal | nung=ant | iiy-al | moom |
| :--- | :--- | :--- | :--- |
| 1DU(NOM) | ngal=ant=am=ant |  |  |
| 3SG=DAT | go-1DU.INCL.PST | boss | 1DU.INCL=DAT=GEN=DAT |

The possessive pronoun slot can also be filled by an ignorative, as in (359) where the possessive marked ignorative $w e e^{\prime}=a n t=a m-a$ 'who=DAT=GEN-a' modifies the noun pemp 'tracks'.
(359) Kilham et al 1986 p. 5

| in aak | pemp | wee'=ant=am-a? |
| :--- | :--- | :--- |
| PRX PLACE | tracks | who=DAT=GEN-a? |
| 'whose tracks are these?' |  |  |

Example (360) shows the normal word order for quantifiers with thonam 'one' following the noun kep 'month' and having the case marker =ang 'ERG' as it is the last element in the NP. Example (361) shows the quantifier thonam 'one' before the noun wanch 'WOMAN' which also has the ergative marker as the last word in the NP. The example also shows coreferential NPs all attract the same ergative marker, in this case manthayan 'important person'.
(360) Sayers 1982a p151 ex 16

| kep thonam=ang ngul thee'- $\varnothing$-a |  |
| :--- | :--- | :--- |
| month one=ERG | then |
| throw-3SG.PST-a |  |
| 'a month went past' |  |

(361) Sayers 1982a p178 ex 91
thonam wanch=ang
one $\quad$ woman=ERG
mangk=ang-wey
mportant.person=ERG
important=ERG-EMO
send-3SG.PRS

Quantifiers are defined as having a specific slot, as opposed to being classed as adjectives, because of distribution; they are not found preceding adjectives.

### 7.2 Possession

As described in section 4.1.8 above, possession in Wik-Mungkan is primarily denoted by the genitive case. This section describes two other methods of expressing possession; body part part/whole apposition (section 7.2.1) and kin relations (section 7.2.2).

### 7.2.1 Body Part Possession

The possessor / possessum relation for body parts is realised by part/whole apposition. This part/whole apposition has been noted elsewhere in Australian languages (see e.g. Evans (1996). Where the body part is not inflected for case, it most frequently occupies the position of directly preceding the verb, a position usually occupied by adverbs. The position of the possessor is variable, depending on grammatical relations. In the corpus the possessor is most frequently a pronoun (free and / or bound) but this is just an artefact of the corpus and not a rule.

Firstly, where the possessor is encoded as a direct object pronoun, it typically follows the verb, as is usual for object pronouns. Take example (362) where the subject marked on the verb is -an '3SG.PRS', the referent being a hunter who has caught a goose and is breaking its neck. The body part man 'neck' is the neck of the goose, which is apposed to the accusative pronoun nun '3SG.ACC' which refers to the whole goose.
(362) Sayers 1982a p. 173 ex 45
man pip-an $\quad$ nun
neck break-3SG.PRS
3SG.ACC
'he (hunter) broke (sic) its neck (goose)'

Thus in this case the possessor / possessum relation is expressed by part / whole apposition. Meronymic or part / whole apposition is a well documented feature of many Australian languages (see e.g. Dixon 2003 p. 293), especially in regard to inalienable possession, including body parts.

The object pronoun can precede the verb. When a body part is present and the object pronoun precedes the verb, the pronoun frequently precedes the body part, as in (363) where the object pronoun is ngay-ang '1SG-ACC' (also marked on the verb by -any '1SG.ACC') and the body part is ma' 'hand'.
(363) Kilham et al 1986 p. 119
ngay-ang ma' mungk- $\varnothing$-any
1SG-ACC hand eat-3SG.PST-1SG.ACC
'my hand was caught (by fishing line)'
The normal Wik-Mungkan pattern is for case marking to attach to the end of a NP and the constituents of NPs to be contiguous (see section 7.1). The body parts and pronouns in these examples are not contiguous, do not have NP-final case marking ${ }^{56}$ or both. This adds support to the argument that possession is denoted by part/whole apposition rather than forming a phrase.

Where the possessor is encoded as the subject, the syntax follows normal WikMungkan structure. For example, in (364) the pronoun nint ' 2 SG(NOM)' (you) is the subject and tha' 'foot', the possessed body part, is the direct object, in absolutive case.
(364) Kilham et al 1986 p. 109

| nint $\quad$ tha' | thuth-an | kunttow=ang | ey? |
| :--- | :--- | :--- | :--- |
| 2SG(NOM) foot(ABS) $\quad$ hurt-2SG.PST | stone=LOC | INT? |  |
| 'did you stub your foot on a stone?' |  |  |  |

Example (365) is different from (364) in that the subject nint '2SG' is not the same as 56 Noting thai it could be argued that man 'NECK' in 227(362) and ma' 'HAND' in (363) are in absolutive (null marked) case.
the owner of the body part tha' 'foot' which is the speaker ngay-ang '1SG-ACC'. Thus the relation between the body part and its owner is shown by part/whole apposition. In the absence of the speaker in accusative case the sentence would become similar to (364) 'you trod on your foot just now'.
(365) Kilham et al 1986 p. 86

| nint | puth | nyiingk=an | tha' | maak-an |
| :--- | :--- | :--- | :--- | :--- | | ngay-ang |
| :--- |
| 2SG(NOM) thus just.now=DEF |$\quad$ foot | tread-2SG.PST |
| :--- |
| 1SG-ACC |

Similarly, in (366) the subject is a NP pam al=ang=an-a 'MAN DIST=ERG=DEF-a' (that man) and the body part ma'=an 'hand=DEF' is the direct object in absolutive case.
(366) SIL 1984 Luke 6:10

| nil | puth pam | al=ang=an-a <br> DIST=ERG-DEF-a | ma'a=an <br> hand(ABS)=DEF |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) thus man |  |  |  |
| ongk-ar-ath- $\varnothing$ |  |  |  |
| long-AR ${ }^{57}$-TR-3SG.PST |  |  |  |
| 'the then) that man stretched out his hand' |  |  |  |

The apposed possessor pronoun can also be in other cases such as the dative case seen in (367). Here the bound dative pronoun -ar'-1SG.DAT' is the whole, i.e. the speaker. The body part mee' 'eye' is arguably the subject in absolutive case as the verb wampan 'to come' is intransitive. The alternative is that the subject marked on the verb -an '3SG.PRS' is expletive (refer section 8.11 for discussion on expletive verbal suffixes). This is also one of the few instances in the corpus of a body part being modified by an adjective, in this case weep 'sleepy'.
(367) Kilham et al 1986 p. 111

$$
\begin{array}{ll}
\text { mee' weep } & \text { wamp-wamp-an-ar } \\
\text { eye sleepy } & \text { come-RDP-3SG.PRS-1SG.DAT } \\
\text { 'I am getting sleepy' } &
\end{array}
$$

There are no examples of body parts with ergative case marking in the corpus. This appears to be because the agent is considered to be the possessor of the body part, not the body part itself. For example, in (368), the experiencer (unnamed referent nun-ang '3SG-ACC') is being hit by (also unnamed) others (marked on verb as -in '3PL.PST') both with feet (i.e. kicked) and with billy cans. The body part tha'a=ang 57 See section 8.8 for discussion of this suffix
'foot=INST' (with feet) are instruments used by the attackers, the possessum / possessor relationship by implicature. The body part is also not adjacent to the verb, unlike the previous examples where there is no inflection for case.
(368) Kilham et al 1986 p. 3
tha'=ang thanpanam ${ }^{58}$ paath=ang thak=an piik-in nun-ang foot=INST partly billy.can=INST thing=DEF hit=3PL.PST 3SG-ACC 'they kicked him and hit him with billy cans'

Body parts with other case markers, specifically locative, ablative and allative are also generally not found directly preceding the verb. In (369) the body part is ma'=ang 'hand=LOC' (in hand) and the possessor is the speaker, marked on the verb by the adjunct suffix -ar '1SG.DAT'. Again, the relation between the two is by apposition and the body part is not immediately before the verb.
(369) Kilham et al 1986 p. 255

| yuk | ya' | wip- $\varnothing$-ar |
| :--- | :--- | :--- |
| tree(ABS) | really | stick-3SG.PST-1SG.DAT |$\quad$| ma'ang |
| :--- |
| hand=LOC |

There are a few examples of body parts with ablative case, such as (370), where the possessor is the speaker, as shown by the verbal suffix -ar '1SG.DAT' and the possessum is kuchek=am 'head=ABL'. The subject is wik 'word', in absolutive case.
(370) Kilham et al 1986 p. 118

| kuchek=am | ya' | wik | mo'- $\varnothing$-ar |
| :--- | :--- | :--- | :--- |
| head=ABL | really | word(ABS) | run-3SG.PST-1SG.DAT |
| 'I quickly forgot the word.' ('the word really ran from my head') |  |  |  |

There is one example of the allative attached to a body part in the corpus; (371). This describes the result of putting a tourniquet on a girl's arm for snakebite, thus preventing the poisoned blood (chaapar=an-a way=an 'blood=DEF-a bad=DEF' (the bad blood)) going to the heart (ngangk=ak=an 'heart=ALL=DEF'). In this case the possessor (although there is no overt possessive marking) is an anaphoric reference to a girl who was bitten by a death adder.

[^25]
## (371) Sayers 774TWMY_4.32

| chaapar=an-a <br> blood=DEF-a$\quad$way=an <br> bad=DEF | $n g u l=a n$ <br> then=DEF | mat- $\varnothing$ <br> climb-3SG.PST |
| :--- | :--- | :--- | :--- |
| $k e^{\prime} \quad$ ngangk=ak=an |  |  |
| NEG heart=ALL=DEF |  |  |
| 'the blood did not go up to her heart' |  |  |

In summary, the possessor / possessum relation for body parts is expressed by part / whole apposition. Where the body part is not inflected for case it appears directly before the verb in almost all instances. It is analogous to adverbs in this respect, as adverbs almost always directly precede the verb. Body parts also take similar cases to adverbs in Wik-Mungkan; see section 3.4. This is not to suggest that they are adverbial, it is just analogous syntax.

### 7.2.2 Kin Relations

Possession in regard to kin relations has two strategies. Firstly, the adjective kunch ${ }^{59}$ 'own' is used to describe a person's kin relation, typically close blood relations. For example, in (372), the subject puk many=ang 'child small' has forgotten his kaath kunch 'mother own'. The combination of kon 'ear' and ngath- $\varnothing$ 'block-3SG.PST' is idiomatic for 'forgot'. The Wik-Mungkan literature variously has kaath kunch 'mother own' as separate words but also as kaath-kunch 'mother-own' and kaathkunch 'mother.own'. Similarly with piip kunch 'father own' etc. There is a note in the lexicon entry for kunch 'own' that it is usually spoken quickly without stress ${ }^{60}$, hence the orthographic convention of it acting as a suffix or a compound.
(372) Godfrey 1970 p. 754

| puk many=ang | kon ngath- $\varnothing$ | kaath kunch |
| :--- | :--- | :--- |
| child small=ERG | ear block-3SG.PST | mother own |

In the corpus, only piip 'father', kaath 'mother', kuunch 'sibling' and kemwayyow 'mother's mother' are found with kunch 'own' describing possession, and in the singular. This may be an artefact of the data or may be a rule; it is not possible to tell.

Mostly, examples involving possession with respect to kin use the normal WikMungkan genitive case. This includes examples similar to (372) where a singular close kin relation is involved. For example in (373), the genitive is marked on the pronoun nungant '3SG.DAT' to become nungant=am '3SG.DAT=GEN' (his) to which is added the comitative case to become nungant=am=ant=ang '3SG.DAT=GEN=DAT=COM' (with his). If kunch 'own' has been used, the NP would presumably have been kaath kunch=ant=ang 'mother own=DAT=COM' (with own mother). There are no instances of kaath kunch=ant=ang 'mother own=DAT=COM' (with own mother) in the corpus.
(373) Kilham 1977 p. 59 ex 90

| nil | kaath | nung=ant=am=ant=ang | iiy- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) mother | 3SG=DAT=GEN=DAT=COM | go-3SG.PST |  |

Possession involving plural kin terms requires the genitive, at least in the corpus, as in (374). Here there are two kin; kaath 'mother' and piip 'father' and their children are referenced by niiy '2PL' and their 'possession' of their parents is marked by the genitive suffix =ant=am 'DAT=GEN' to make niiy=ant=am '2PL=DAT=GEN' (your).

| (374) Kilham 1977 p. 99 ex 230 |  |
| :--- | :--- | :--- | ---: |
| niiy yoon pent-an | ngul |
| 2PL(NOM) outside | come-2PL.FUT then |
| kaath piip | niiy=ant=am=ant-a |
| mother father | 2PL=DAT=GEN=DAT-a |
| 'you come out and then (go) to your parents' |  |

In summary, possessor / possessum kin relations use the normal Wik-Mungkan genitive case or the adjective kunch 'own'.

### 7.3 Noun Phrase Coordination

Coordination between noun phrases is expressed in Wik-Mungkan by juxtaposition (described by Payne 1997 p. 337 as the 'zero strategy'), comitative construction and by the use of coordinators or (English loan word) a' 'and' and puth 'and'. There is also a specific use of $m a$ ' 'hand' to coordinate nouns representing social relationships, especially kin.

### 7.3.1 Juxtaposition

Example (375) shows the zero strategy with the two nouns ma'-atiy ${ }^{61}$ 'HAND-lots' (big hands) and tha'-atiy 'foot-lots' (big feet) adjoined to form a single NP meaning 'big hands and feet'.
(375) Sayers 1982a p. 155 ex 64

ma'-atiy tha'-atiy thath-an $\quad$ nung $\quad$| maany=ang=an-a |
| :--- |
| HAND-big foot-big see-1PL.EXCL.PST 3SG.DAT |
| image=LOC=DEF-a |
| '(he had) big hands and big feet - we saw him in the film.' |.

The zero strategy can also be used to implement disjunctive coordination, as in (376) where thonam wanch 'one WOMAN' is juxtaposed with pam-wey 'MAN-EMO' to create the sense of either one climbs the tree, but not both (as shown by the singular STM suffix on the verb).
(376) Sayers 1982a p. 175 ex 57
\(\left.\begin{array}{lllll}yuk \& mat-an-wey \& thonam \& wanch \& pam-wey <br>

tree \& climb-3SG.PRS \& one \& WOMAN(ABS) \& MAN-EMO(ABS)\end{array}\right]\)| DIST |  |
| :--- | :--- |
| 'one woman climbs the tree (there), maybe a man' |  |

### 7.3.2 Comitative Coordination

Payne (1997 p. 339) notes that comitative constructions, whether by case marking or a lexeme similar to 'with' can form conjoined NPs. This has also been noted in Australian languages e.g. Kuuk Thaayorre (Gaby 2017 pp. 223-224). The use in Wik-Mungkan is restricted to the specific use of linking proper names, as described in section 4.1.6 and shown in example (73). The coordination of two proper names also uses the pronoun pul '3DU', as in (377) where firstly, two names are marked in comitative case (minus dative marking) and linked with the pronoun pul '3DU', marked with the dative in the second phrase.


61 -atiy 'lots' is a variant of -athiy 'lots' only found in this example.

In fact the comitative case marker is optional, as can be seen in (299), repeated here as (378), where pul '3DU' links two proper names, neither marked with the comitative. This is in line with the general optionality of case marking on proper names (see section 4.2). Note that there are very few examples of pul '3DU' being used in this way.
(378) Sayers and Kerr 1964 p. 5

| Bruce pul | Harland | nan-ngul | iiy=pul |  |
| :--- | :--- | :--- | :--- | :--- |
| Bruce | 3DU | Harland(ABS) | MED-then | go-3DU.PST |
| 'Bruce and | Harland have just gone there' |  |  |  |

There is a lexeme thamp 'with/also' with allomorphs tham, thamang, thampang ${ }^{62}$ which is used to create a comitative sense, as in (379) where it appears to combine kuchek=an 'head=DEF' with kon 'ear' to form a single NP. Similarly, in (380), 'wallet' and wukal 'with' are conjoined by thamang 'with'.
(379) Kilham 1977 p. 257 ex 14

| kuchek=an-a | kon | tham=an | thath- $\varnothing-a$ |
| :--- | :---: | :---: | :--- |
| head=DEF-a | ear | with=DEF | see-3SG.PST-a |
| 'he saw the head and ear (of a snake)' |  |  |  |

(380) Kilham et al 1986 p. 68

| an | wanttin | want-an | wallet | wukal thamang=an | ey? |
| :--- | :--- | :--- | :--- | :--- | :--- |
| DIST(DAT) where leave-2SG.PST | wallet | money with=DEF | INT? |  |  |
| 'where did you leave your wallet and money?' |  |  |  |  |  |

Example (381) is different in that thul tham 'woomera with' is not adjacent to kek pith 'spear four pronged', forming a discontinuous NP,
(381) Sayers 1982a p. 174 ex 43

| nil-a | kek | pith | maay- $\varnothing$ | thul | tham |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM)-a | spear | four.pronged pick.up-3SG.PST | woomera | with |  |
| 'he picked up his spear and woomera as well' |  |  |  |  |  |

As discussed above the comitative case is not generally used in the corpus for comitative coordination. Each use of comitative case is to form an adjunct to the verb, as evidenced most commonly by the verbal agreement. For instance, example (382) shows the comitative case attached to 'Chris' to indicate that the speaker was 'with Chris' but the speaker and 'with Chris' do not form an NP, as shown by the

[^26]verbal suffix, which agrees with the first person, not a combined NP of 'first person and Chris'. The first person is an argument of the verb and Chris=ant=ang 'Chris=DAT=COM' is an adjunct. That the speaker was with Chris at his place and not somewhere else appears to be an inference.
(382) Kilham et al 1986 p. 144

| ngay | ang=am | ngikam-ang | Chris=ant=ang | kinch ongk=an-a |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | DIST=EMPH stay-1SG.PST | Chris=DAT=COM | sun | long=DEF-a |

### 7.3.3 Coordinators

As mentioned above, there are several lexemes which act as coordinators ${ }^{63}$. Example (383) shows the use of the use of a' 'and' to join kek 'spear' and thul 'woomera' to form a conjoined NP. Note that this is not a common use of $a$ ' 'and'; refer section 13.3.1.
(383) Kilham et al 1986 p. 207

| kek $\quad$ a' | thul | thamp | iiy-iiy- $\varnothing$-a |  |
| :--- | :--- | :--- | :--- | :--- |
| spear | and | woomera | with | go-RDP-3SG.PST-a |
| 'he took | spear and woomera' |  |  |  |

Similarly, puth 'and' is not commonly used for phrasal coordination but there are examples such as (384) where it is used to join minh wel 'blue tongue lizard' and minh thintow 'water python' to form a single NP with genitive case marking on the combined NP.
(384) Kilham et al 1986 p. 194

| wik | kath in | pul=ant=am |
| :--- | :--- | :--- | :--- |
| WORD old | PRX(ABS) |  |
| 3DU=DAT=GEN |  |  |

### 7.3.3.1 ma' 'HAND' as coordinator

The lexeme ma' has the basic sense of 'hand' but is used in many (>150) phrases and compounds. Its use as a coordinator is very specific; it is used to connect two or more people, usually kin related, as a group in a single NP. The last word in the 63 arguably tham 'with' described in 7.3.3 could be included in this category.
phrase is frequently, but not always, suffixed with -am. Examples from the lexicon are ma' kaal oth-am 'hand uncle nephew-am' (uncle and nephew); ma' kuunch-am 'hand siblings-am' (a group of) siblings'; ma' pam-am 'hand man-am' (all the men); ma' kaath puk 'hand mother child' (mother and child). It is not clear what function, if any, the suffix -am fulfils in these expressions nor why it can be omitted. The usual meanings of ablative or genitive case markers or the emphatic suffix do not seem relevant. There is only one example in the corpus; (385) which shows the father son combination ma' piip nhengk (hand father son) 'father and son'.
(385) Kilham et al 1986 p. 86

| pul | ma' | piip nhengk aak man |  |
| :--- | :--- | :--- | :--- |
| 3DU(NOM) | HAND father son | PLACE NECK |  |
| ngath-pul |  | woyan=ang |  |
| block-3DU.PST | track=LOC |  |  |
| 'a man and his son lay in wait on the track' ${ }^{\prime 64}$ |  |  |  |

64 The phrase aak man ngathan 'PLACE NECK block' is listed in the lexicon with the meaning 'lie in wait'

## 8 Verbal Morphology

This chapter describes the morphology of verbs in Wik-Mungkan. Much of this chapter draws heavily on previous studies, as noted in each section.

### 8.1 Overview

As explained in section 3.3, verbs consist of a stem and an obligatory portmanteau suffix which encodes the subject person and number and either tense (past, present or future) or subjunctive mood. These suffixes will be discussed in section 8.2. Coreferential noun phrases and pronouns which agree with the person and number of the suffix can also be present in a clause but are not required.

These portmanteau suffixes (hereafter referred to as Subject Tense Mood or STM) can also be followed by optional suffixes noting agreement with direct objects (section 8.3) and various classes of adjuncts (sections 8.4). There are restrictions on co-occurrences of these additional (to STM) suffixes.

Reduplication, whether partial or full of the stem or the conjugated verb inflects the verb for continuous aspect or emphasis (section 8.5)

Verbs can be derived by several morphological processes: a transitiviser suffix to create verbs from adjectives and transitive verbs from intransitive (section 8.6); an intransitiviser suffix to form intransitive verbs from adjectives (section 8.7), a comparative suffix found only attached to verbs derived from one adjective (section 8.8), a suffix which creates reciprocal verbs (section 8.9) and a suffix which creates a Wik-Mungkan verb stem from an English verb or noun (section 8.10). Section 8.11 describes a set of verbs where the STM suffix is expletive. The final section 8.12 reviews some specific topics from the Wik-Mungkan literature.

### 8.2 Subject Tense and Mood suffixes

Table 33 shows the Subject Tense and Mood (STM) suffixes, based on Kilham et al (1986 Figure 5 p. 406), itself based on Godfrey (1970 Chart 2 p. 745) but with the addition of the free pronoun column. The free pronoun shown in table 33 shows the regular derivation of the suffixes from the pronouns from an underlying paradigm of -an 'PRS', -Ø 'PST', -ow 'FUT' and -iy 'SBJV'65. Where two or more forms are listed, the last is relatively rare.

| Person |  | Free <br> Pronoun | Present | Past | Future | Subjunctive |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Sing | ngay | -ang | -ang / -angan | -ang | -ing |
|  | Dual incl | ngal | -anal | -al | -al | -il |
|  | Plur incl | ngamp | -anamp | -amp | -amp | -imp |
|  | excl | ngan | -anan / <br> angan $^{66}$ | -an | -an | -in /-iyin /-iy ${ }^{66}$ |
| 2 | Sing | nint | -anan | -an | -an | -in /-iyin |
|  | Dual | nip | -anip | -uw | -ow | -iw |
|  | Plur | niiy | -aniy | -an | -an | -in /-iyin |
| 3 | Sing | nil | -an | $-\varnothing$ | -ow | -iy /-iw /-in |
|  | Dual | pul | -anpul | -pul | -owpul | -iypul / iwpul |
|  | Plur | than | -antan / <br> tan $^{66}$ | -in /-iyin / <br> - -im $^{66}$ | -ayn | -iythan / iwthan |

Table 33: Subject tense and mood suffixes
The distinction between future and past forms for the first and second person is that the past form is unstressed while the future takes secondary stress, as in múngk-ang 'eat-1SG.PST' (I ate) and múngk-àng 'eat-1SG.FUT' (I will eat) (Godfrey 1970 p. 744). The phonetic evidence for this distinction was discussed in section 2.6.

A striking feature of the paradigm in table 33 is the amount of syncretism, with the same forms occurring in multiple positions, especially -an, which is also the non-finite

[^27]suffix. This morpheme is part of every present tense suffix except first person singular and is also on its own used for the past and future first person plural exclusive, second person singular and plural. Context is essential for resolving the ambiguity created by this syncretism.

The STM suffixes are mandatory on the verb stem, whether or not a pronoun or NP subject is also present. Example (386) shows the STM suffix for third person singular past where there is no explicit subject and the subject is contained in the STM suffix.
(386) Kilham et al 1986 p. 155
kan noch-am-ø
NOW settled-ITR-3SG.PST 'he is settled now'

By contrast, in example (387) the same third person singular past STM agrees with the subject wanch thonam=ang 'WOMAN one=ERG', also the pronoun nil '3SG(NOM). This use of pronoun plus NP to reference the same subject is discussed in section 7.1.
(387) Kilham et al 1986 p. 94

| nil | wanch thonam=ang | may | bread | yump-б |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) | WOMAN one=ERG | VEG | bread(ABS) | make-3SG.PST | 'that (one) woman made bread'

The future second person is also used for the imperative, to be discussed in section 9.3.2.

The subject in the STM suffix can be expletive for particular verbs and circumstances; see section 8.11.

An STM suffix not shown above occurs only in two examples in Kilham (1977 pp. 118, 126). The form is -anal, identical to the first person dual present suffix and is glossed as '1SG.EMO'. Kilham (1977 p. 125) describes this as showing strong emotion, usually found in hortatory discourses. It has not been recorded elsewhere and hence not included in table 33.

### 8.3 Accusative Suffixes

There are two suffixes -any '1SG.ACC' and -an '3SG.ACC' which optionally follow the STM suffix for transitive verbs and denote the direct object. These are essentially bound pronouns and since pronouns follow a nominative / accusative pattern (as opposed to NPs which follow an ergative / absolutive pattern) these will be glossed as accusative. The direct objects for all plurals and second person are expressed by NPs and not marked on the verb. The accusative suffixes can occur with any tense and also with the subjunctive. Example (388) shows the first singular accusative suffix -any, where the transitive stem want 'leave' has been inflected by the STM suffix for the second person dual to create the meaning 'you two will leave me'. Similarly, (389) shows the same verb and inflection but with the third person accusative suffix -an to create 'you two will leave him'.
(388) Godfrey 1970 p746
want-aw-any
leave-2DU.FUT-1SG.ACC
'you two will leave me'
(389) Godfrey 1970 p746
want-aw-an
leave-2DU.FUT-3SG.ACC
'you two will leave him'
In (390) the direct object is absolutive (null marked) punth anman 'that same creek' with agreement with the third person singular accusative suffix -an attached to the inflected verb wak-ang 'follow-1SG.PST'.
(390) Sayers 1982a p. 182 ex 146

| ngay-wey | an-man | punth |
| :--- | :--- | :--- |
| 1SG(NOM)-EMO | DIST-SAME | creek(ABS) |
| an-man | wak-ang-an |  |
| DIST-SAME(ABS) | follow-1SG.PST-ACC |  |
| 'I followed that creek (that same one)' |  |  |

Example (391) is an example of a verb with subjunctive STM -ow '3SG.SBJV' and the accusative suffix -an '3SG.ACC'. The accusative suffix is co-referential with the direct object kemwayyow nung=ant=am=an 'mothers.mother 3SG=DAT=GEN=DEF' (her grandmother) in absolutive case.
(391) Kilham et al 1986 p. 166


### 8.4 Dative Suffixes

The first person and third person singular dative case can optionally be marked on the verb by suffixes -ar first person singular and -ant third person singular, homophonous with the dative case marking for pronouns (see Table 19 on p. 116). They follow the STM suffix and do not co-occur with the accusative suffix. Example (392) shows the first singular while (393) shows the third singular dative. The direct object in this example is understood from context.
(392) Kilham et al 1986 p. 26

| nil | kan | chir |
| :--- | :--- | :--- |
| 3SG(NOM) | NOW | quickly |
| 'she came quickly (now) (to me)' |  | come-3SG.PST-1SG.DAT |

(393) Kilham 1977 p. 169 ex 354
yaa ngay wunp-ang-ant
yes 1SG(NOM) put-1SG.PST-3SG.DAT
'yes I put it (sic) on her'
A dative referent can also be expressed by a NP with or without the corresponding verbal agreement suffix. The dative for all plurals and second person are only expressed by NPs ${ }^{67}$.

### 8.4.1 Ablative / Genitive Suffix

The ablative and genitive for nominals, including pronouns are clitics which always attach to the dative. This is also true for bound ablative and genitive suffixes, with the same form as the clitic but in this instance is the suffix -am 'ABL/GEN'. Which interpretation, ablative or genitive, is determined from context. As the bound ablative and genitive always attach to the bound dative suffix, they have the same constraint as the dative i.e. they only occur in first and third person singular. Example (394) shows the ablative suffix attached to the first person dative suffix on the verb mo'- $\varnothing$ -

[^28]ar-am 'run-3SG.PST-1SG.DAT-ABL' (it ran from me).
(394) Kilham et al 1986 p404

| wik $\quad$ kuchek=am | ya' | mo'- $\varnothing$-ar-am |
| :--- | :--- | :--- | :--- |
| word head=ABL | really | run-3SG.PST-1SG.DAT-ABL |
| 'it went right out of my mind' |  |  |

Example (395) shows the ablative attached to the third person dative verbal suffix on the verb mo'- $\varnothing$-ant-am 'run-3SG.PST-3SG.DAT-ABL' (he ran from her).
(395) Godfrey \& Kerr 1964 p. 32

| puk | many | an | kech | mo'- $\boldsymbol{\varnothing}$-ant-am |
| :--- | :--- | :--- | :--- | :--- |
| CHILD small | DIST(ABS) | far | run-3SG.PST-3SG.DAT-ABL |  |
| 'that child ran a long way from her' |  |  |  |  |

There are only eight examples of the verbal ablative suffix in the corpus and no examples of the genitive. The existence of the genitive is mentioned in the WikMungkan literature e.g. Kilham et al (1986 p. 404) but with no examples this cannot be confirmed. At the least, it would seem to be rare.

### 8.4.2 Comitative Suffix

Godfrey and Kerr (1964 p. 22) noted that the comitative case ending for pronouns and nouns, -ang 'COM' can be affixed to the dative verbal suffix with the same comitative meaning. That is, they form the combined verbal suffixes -ar-ang '1SG.DAT-COM' and -ant-ang '3SG.DAT-COM'. This is also repeated in Kilham et al (1986 p. 404). The only two examples in the corpus of this comitative verbal suffix are both of the third person and both come from Godfrey and Kerr (1964 p. 32) which describes the Coen dialect and so may not be representative (see chapter 14).

Example (396) is one of the Godfrey and Kerr examples, with the comitative -ang 'COM' attached to the third person dative -ant '3SG.DAT to mean 'with him'.
(396) Godfrey \& Kerr 1964 p. 32

| ngay | kaangk | ke' | iiy-ang-ant-ang |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | like | NEG | go-1SG.PRS-3SG.DAT-COM |
| 'I don't like going with him' |  |  |  |

### 8.5 Reduplication

Reduplication of the stem, as first noted by Godfrey (1970 p. 744), provides a continuous aspect, (see section 9.2.1) as in (397), where the stem wun 'lie' is reduplicated so that the whole verb is wun-wun-tan 'lie-RDP-3PL.PRS' (they are lying).
(397) Sayers 1982a p. 178 ex 84

| minh in=ang=an | wun-wun-tan |
| :--- | :---: | :---: |
| MEAT $\quad$ PRX $=A B S . P L=D E F ~$ | lie-RDP-3PL.PRS |
| 'those (sic - these?) (eggs) are lying there' |  |

Reduplication normally consists of reduplicating the first syllable. In some instances this can be reduced further; compare (397) and (398) below. In (397) the full syllable wun is reduplicated while in (398) it is reduced to wu- RDP.
(398) Kilham 1977 p. 257 ex 15

| kuchek=an thath- $\varnothing$-a | yaa' in | wu-wun- $\varnothing$ |  |
| :--- | :--- | :--- | :--- |
| head=DEF | see-3SG.PST | just | PRX |
| 'he saw the head, it (just) lay there (here?)' |  |  |  |

Godfrey (1970 p. 749) also notes that the full conjugated verb can sometimes be reduplicated for emphasis, as in (399) This is not found elsewhere in the corpus and it may be better considered as being the same word tengk-an 'we laughed' said twice rather than a formal reduplication.
(399) Godfrey 1970 p. 744
tengk-an-tengk-an
laugh-1PL.EXCL.PST-.RDP
'we laughed and laughed'
Finally, according to Godfrey (1970 p. 749) reduplication of the verb stem can derive a reciprocal stem but she provides no examples and no examples have been found in the corpus.

Further discussion of the reduplication and the continuative aspect is found in section 9.2.1.

### 8.6 Transitiviser

Another process for modifying verb stems is the transitiviser -ath 'TR' which can be added to an intransitive stem to create a transitive stem. For example wamp-ath 'come-TR-NF' (bring or 'cause to come') is derived from wamp 'come-NF', as in (400) where the subject is the speaker ngay '1SG' who has brought a group of children.

| (400) Sayers 1982a p. 42 ex 5 |  |  |
| :--- | :--- | :--- | :--- |
| ngay puk many | yot | wamp-ath-ang |
| 1SG(NOM) child small | lots(ABS) | come-TR-1SG.PST |

Not all transitive / intransitive verb pairs are formed with this suffix; there are pairs of unrelated forms (noted by Kilham et al p. 407) such as pench 'to burn' (intransitive) and kiingk 'to burn' (transitive). The transitiviser has two functions; causative as in the above examples and also applicative as in peey 'cry' and peey-ath 'cry with/for' and thengk 'laugh' and thengk-ath 'laugh at' (examples included in Austin's survey of causative and applicative in Australian languages (Austin 2005 p. 21)). There are few examples of the applicative in the corpus and they all involve the verbs identified by Austin; one of them is (401) which shows the transitive verb thengk-ath- $\varnothing$ 'laugh-TR-3SG.PST' (made fun of) derived from the intransitive verb thengk-an 'laugh-NF'.
(401) Godfrey \& Kerr 1964 p. 30 ex 43

| piny | nung=ant=am=ant=am | thaa' | thengk-ath- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| uncle | 3SG=DAT=GEN=DAT=GEN(ABS) | MOUTH | laugh-TR-3SG.PST |
| 'she made fun of her uncle's (things)' |  |  |  |

The same transitiviser can derive transitive verbs from adjectives, as in min 'good' deriving min-ath 'good-TR' (make good) and otang 'short' deriving otang-ath 'shortTR' (shorten) (examples from Godfrey 1970 p. 744). A full example is (402) where the adjective path 'clean' is suffixed with -ath 'TR' to form the transitive verb pach-ath- $\varnothing$ 'clean-TR-3SG.PST' (she cleaned).
(402) Sayers 1982a 153 ex 39

| aak $=a n$ | pach-pach-ath- $\varnothing$ | nungant=ak=am=an |
| :--- | :--- | :--- |
| place(ABS)=DEF | clean-RDP-TR-3SG.PST | 3SG.DAT=ALL=ABL=DEF |
| 'she cleaned the place for herself'. |  |  |

There are no examples in the corpus of applicative use of the transitive verbs derived
from adjectives.

The transitiviser suffix is not used to increase the valency of transitive verbs and hence create ditransitive verbs. As noted by Blake (1987 p. 67) this restriction in the application of the transitiviser is typical of Australian languages. Equally there is no morphology decreasing the valency of transitive or ditransitive verbs.

### 8.7 Intransitive Verbaliser

Intransitive verbs can also be derived from adjectives by the suffix -am 'ITR'. For example, way 'bad' becomes way-am-an 'bad-ITR-NF' (to go bad or break), as in (403) where the subject plane=an 'plane=DEF' is described as having broken down.
(403) Kilham et al 1986 p224

| plane $=$ an | kan | thuth- $\varnothing$ | ya' | way-am- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| plane=DEF(ABS) | now | pull.out-3SG.PST | really | bad-ITR-3SG.PST |
| 'the plane (now) has broken down, it's out of action' |  |  |  |  |

Similarly, in (404), the adjective uth 'dead' becomes the intransitive verb uth-am-an-a 'dead-ITR-2SG.FUT-a' (you will die).
(404) Kilham et al 1986 p. 23

$$
\begin{array}{ll}
\text { chawaa! ngul } & \text { uth-am-an-a } \\
\text { curse.you then } & \text { dead-ITR-2SG.FUT-a } \\
\text { 'Curse you! (now) You will die' }
\end{array}
$$

There is one apparent instance of an intransitive verb being derived from an adverb by the same suffix. The example is nhuuyan-am-an 'over.and.over-ITR-NF' (to do repeatedly) which is derived from nhuuyan 'over.and.over', which is listed as an adverb in the lexicon. It is doubtful that this is correct as the only example suggests that nhuuyan 'over.and.over' is an adjective, thus making the verb nhuuyan-am-an 'over.and.over-ITR-NF' (to do repeatedly) aligning with normal Wik-Mungkan morphology.

That example, (405), is from the lexicon entry for nhuuyan 'over.and.over'. Distributionally, nhuuyan 'over and over' here is more aligned to being an adjective, following the pronoun nip '2DU', rather than an adverb, which typically directly
precedes the verb. The verb in this case is $k e e^{\prime}-o w '-a$ 'perform-2DU.FUT-a', the suffix here being interpreted as the imperative (see Section 9.3.2). With only one example, it is impossible to conclude that nhuuyan 'over and over' is an adverb or adjective.
(405) Kilham et al 1986 p. 152

| nip | nhuuyan | yaam |
| :--- | :--- | :--- |
| 2DU(NOM) | over.and.over | long.time |
| ke' maarich | kee'-ow-a |  |
| NEG | love(ABS) | perform-2DU.FUT-a |
| 'don't be constantly playing up together!' |  |  |

The verb derived from nhuuyan 'over and over' is nhuuyan-am 'over.and.over-ITR' (do repeatedly), as in (406), one of two examples from the lexicon entry for nhuuyanam 'over.and.over-ITR' (do repeatedly), which also has the curious note: 'context is male / female relationships, especially adultery'. In this example, the subject nil '3SG(NOM)' is described as doing repeatedly (the action of) of wanting to be with the reflexive object pronoun nungantakam-a '3SG=DAT=ALL=ABL-a' (him/herself). The use of the reflexive here is not explained; see section 5.1.3 for more on reflexive pronouns.
(406) Kilham et al 1986 p. 152

| nil | nhuuyan-am-an | nungantakam-a |
| :--- | :--- | :--- |
| 3SG(NOM) | over.and.over-ITR-3SG.PRS | 3SGRefIA | 'he wants her all of the time'

There are no other intransitive verbs in the lexicon derived from adverbs so the single instance above should be considered an anomaly, especially given that the base word nhuuyan 'over and over' cannot be confirmed as an adverb. See also section 3.4.1 for a discussion on potential doubt about classifying words as adjectives or adverbs.

### 8.8 AR Suffix

A curiosity is the suffix -ar 'AR' which is attested suffixed to one adjectival root, ongk 'long'. The derived form 'long-AR' (longer) is followed by either the transitiviser -ath 'TR' or intransitiviser -am 'ITR' (see section 3.1.3). These two verbs can be compared with two other verbs formed from the same adjective by the addition of just
the transitiviser or intransitiviser. The suffix is glossed as 'AR' as the semantics and function of the suffix are unclear.

Firstly there is ongk-ar-ath-an 'long-AR-TR-NF' (to stretch out), as in (407) where the addressee nint '2SG(NOM)' is being told to stretch out his hand. The STM suffix -an '2SG.FUT' is used as the imperative here; see section 9.3.2 for discussion.
(407) SIL 1984 Luke 6:10

| nint | ma'=an | ongk-ar-ath-an-a |
| :--- | :--- | :--- |
| 2SG(NOM) hand=DEF | long-AR-TR-2SG.FUT-a |  |
| 'stretch out your hand' |  |  |

This compares with the verb ongk-ath-an 'long-TR-NF' (to lengthen), as in (408), where the addressee is being told to not 'lengthen' the words.
(408) Kilham et al 1986 p. 161

| wik ont-ontan ${ }^{68} \quad$ thaw-an-a | yaam |
| :--- | :--- | :--- |
| word PRDP-straight say-2SG.FUT-a | long.time |
| ke' ongk-ath-an-a $^{\text {NEG long-TR-2SG.FUT-a }}$ |  |
| 'say it once and for all, don't drag it out' |  |

The distinction in meaning between the two above forms is subtle. The best that can be said from the limited examples is that the former ongk-ar-ath-an 'long-AR-TR-NF' corresponds to the English word 'stretch' and the latter ongk-ath-an 'long-TR-NF' corresponds to the English 'lengthen'. The only examples in the corpus for the former are similar to (407) in that it is a hand that is stretched out. The lexicon definition in full is 'stretch out (leg, arm)' so the examples in the corpus match that description. The lexicon entry for the latter form is 'make something longer, lengthen'. The difference in meaning then is between 'stretch out' and 'lengthen'.

The adjective ongk 'long' also, when combined with the suffixes -ar 'AR' and the intransitiviser -am 'ITR', forms an intransitive verb ongk-ar-am-an 'long-AR-ITR-NF'. There is only one example in the corpus of this verb, (409) which describes a snake (anaphoric reference in suffix -Ø '3SG.PST' on verb) stretching itself upwards.

[^29]| kan ongk-ar-am- $\varnothing$ | keny | an=an=iy |
| :--- | :--- | :--- |
| NOW long-AR-ITR-3SG.PST | high | DIST=DEF=TOP |
| 'then he stretched high up there' |  |  |

There is also an intransitive verb formed from ongk 'long'; ongk-am-an 'long-ITR-NF' with dual senses of 'go a long way' and 'grow long'. This use can be seen in (410) where a younger brother is described as 'grown long' i.e. tall by the verb ongk-am- $\varnothing$ 'long-ITR-3SG.PST'. The growing taller is compared with his older brother, referenced by the genitive pronoun nungant=am '3SG.DAT=GEN'
(410) Kilham et al 1986 p. 176

| nil | pont | kunch=an | ya' | ongk-am- $\varnothing$ | nung-ant=am |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) | YB | own=DEF | really | long-ITR-3SG.PST | 3SG-DAT=GEN |
| 'the younger brother has grown taller than his (elder brother)' |  |  |  |  |  |

In summary, the adjective ongk 'long' is the basis of two transitive verbs and two intransitive verbs with distinct meanings, one each including the suffix -ar 'AR' and one each not. How this suffix originated and came to be used like this is not explained. Given it's only found in this one place, it may well be a borrowing from another language or a relic of a formerly productive morpheme.

There are some other words in the corpus which formally appear to contain the suffix -ar '-AR' but on closer examination the analysis is not supported. For example there are two verbs we'arathan 'to widen' (transitive) and we'araman 'to spread out' (intransitive). The respective endings are certainly analysable as -ath-an 'TR-NF' and -am-an 'ITR-NF' but the stem is we'ar 'wide', not *we'-ar '?-AR'. There is no adjective *we'. The verb we'-an 'dig-NF' (to dig) exists but does not seem to be related.

Gaby (pc, 2021) has suggested an alternative analysis that -ar 'AR' is not a separate morpheme and the form ongkar should be considered an allomorph of ongk 'long', including the conjecture that the latter is a reduced form of the former. A search of the older McConnel corpus (see chapter 15) has not found any instance of ongkar, only ongk 'long' but the data is not extensive. This thesis prefers the above analysis but the evidence is admittedly not strong.

### 8.9 Reciprocal

Transitive verbs can have reciprocal STM marking to encode that the subject and the object are the same. The base reciprocal suffix is $-w u$ 'RCP', with allomorphs $-w$ and $-u w$, the selection being phonologically dependent on the STM suffix which follows it. The present reciprocal STMs are regular; the initial vowel $a$ in the base STM suffix is replaced by the base reciprocal wu-. For instance the second person dual present STM -anip '2DU.PRS' becomes wunip 'RCP.2DU.PRS'. The same rule applies for the future / past except for the third person dual and plural which are irregular (see table 34). For the subjunctive, the base STM suffix is retained and the allomorph $w$ 'RCP' applies. Where there are two allomorphs of the base subjunctive STM suffix, the first listed is the most common (see section 8.2)..

Table 34 shows the resultant set, noting that the past and future forms are identical except for the third person plural and there are obviously no singular forms. The difference between future and past in standard STM marking is that the future is stressed (see section 2.7.8). The literature is silent as to whether this difference is retained for the reciprocal and there are no recorded examples in the corpus to examine. A reciprocal STM suffix can be optionally followed by a dative or ablative suffix but cannot be followed by the accusative suffix as the direct object is coreferent with the subject in the reciprocal form. Table 34 is based on Godfrey (1970 Chart 3 p. 750) and Kilham et al (1986 Figure 6 p. 407).

| Person | Present |  | Past / Future |  | Subjunctive |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Base STM | Reciprocal | Base STM | Reciprocal | Base STM | Reciprocal |
| 1 Dual incl | -anal | -wu-nal | -al | -wu-I | -il | -w-il |
| Plur incl | -anamp | -wu-namp | -amp | -wu-mp | -imp | -w-imp |
| excl | -anan | -wu-nan | -an | -wu-n | -in / =iyin | -w-in |
| 2 Dual | -anip | -wu-nip | -uw | $\begin{aligned} & \hline-w u-w / \\ & \text {-uw } \end{aligned}$ | -iw | -w-iw |
| Plur | -aniy | -wu-niy | -an | -wu-n | -in / =iyin | -w-in |
| 3 Dual | -anpul | -wu-npul | -pul | -wu-wpul / <br> - uwpul | =iypul / iwpul | -w=iypul |
| Plur | -antan | -wu-ntan | -ayn <br> (future) <br> -in / -yin <br> (past) | -w-ayn (future) -w-in (past) | =iythan / <br> iwthan | -w=iythan |

Table 34: Reciprocal plus subject tense mood suffixes
A simple example is (411) where the reciprocal dual present is attached to the verb stem thath 'see' to mean that the speaker and another are looking at each other.
(411) Godfrey 1970 p. 749
thath-wunal
look-1DU RCP.PRS
'we are looking at each other'
In most examples in the corpus, the co-referential NP is not marked for case. For instance in (412) the co-referential NP is ku' many=iy 'dog small=TOP', unmarked for case. The initial co-referential pronoun than '3PL' is a common feature in WM; see section 5.1.2.1. Also in this example the semantics of the verb have been modified by the reciprocal suffix to mean, as shown, 'follow each other'. The verb with nonreciprocal STM suffixes means 'catch' or 'pull out'.
(412) Kilham et al 1986 p. 251
than ku' many=iy
3PL(NOM) dog $\quad$ small=TOP $\quad$ wich-wich-win $\quad$ follow-RDP-3PL.RCP.PST

Example (413) shows that the ergative marker can occur with the co-referential NP also encoded in the verbal suffix. The NP wanch kucham=ang 'WOMAN two=ERG' is co-referential with the verbal suffix -uwpul '3DU.RCP.PST'.
(413) Kilham 1977 p. 65 ex 124

| wanch | kucham=ang | piik-uwpul |
| :--- | :--- | :--- |
| WOMAN | two=ERG | hit-3DU.RCP.PAT |
| 'the two women were fighting' |  |  |

The semantics of the reciprocal suffixes are varied. In (411) two individuals are looking at each other while in (414), the individuals are looking with each other.
(414) Kilham et al 1986 p. 39
irpam thath-wuntan
together see-3PL.RCP.PRS
'they are both (sic) looking in the same direction'
The phenomenon of a reciprocal construction multiple functions is widely attested in the world's languages. For details, see Majid et al (2011a, 2011b).

Where the verb is ditransitive with reciprocal marking, one of the objects is coreferential with the subject but the second object is as normal. For instance, in (223), repeated below as (415), the ditransitive verb is waa' 'say/call', the reciprocal suffix -wuntan '3PL.RCP.PRS' encodes the subject and one object and the other object (null marked absolutive case) is ngeeenwiy=an=iy 'sacred.one=DEF=TOP' and the co-referential namanam 'MED.ABS' (that one). Thus the meaning is that the people present, when speaking about the protagonist to each other (reciprocal suffix), refer to him by the name ngeenwiy=an 'sacred one=DEF' as to name him would be taboo.
(415) Sayers 1982a p. 173 ex 25

| nil | namanam | waa'-wuntan |
| :--- | :--- | :--- |$\quad$| ngeenwiy=an=iy |
| :--- |
| 3SG(NOM) |
| MED.ABS | say-3PL.RCP.PRS $\quad$ sacred.one(ABS)=DEF=TOP

Kilham et al (1986 p. 407) includes the claim that there is a small class of verbs
which obligatorily take the reciprocal suffix, citing the example of the verb pekan 'to fight' and the present pek-wuntan 'fight-3PL.RCP.PRS' (they are fighting each other). A search of the lexicon has found one other verb which is claimed to only take the reciprocal; wakan 'to be alike'. As noted in section 8.9 both of these verbs can be used without reciprocal suffixes; the distinction is that the semantics of the verbs change when they take a reciprocal suffix. Gaby (pc 2021) points out that the form with the reciprocal suffix has now been lexicalised as a different verb.

### 8.10 English Borrowing

Finally, verbs can be derived from English loan words (nouns or verbs) by adding the suffixes -im probably related to the Kriol use derived from the English 'him' and -pung, originally a verb 'to spear', 'to thrust', 'to wash' or 'to act thus'. These meanings are now grammaticalised in a single suffix -impung 'VERBZ', as in torch-impung 'torchVERBZ' (to shine a torch on) and double-impung 'double-VERBZ' (to make two of something) (Kilham et al 1986 p. 408). Normal verbal morphology as described above applies e.g. the STM suffixes.

Other examples from Godfrey (1970 p. 748) are (416) where -impung 'VERBZ' makes WM verbs from the English verbs 'win' and 'pay' to make the stem win-impung 'to win-VERBZ' (to win) and pay-impung 'pay-VERBZ' (to pay). In the first, the STM suffix -ang '-1SG.PST' is added to make win-impung-ang 'win-VERBZ-1SG.PST' (I won) and in the second, the STM suffix -in '3PL.PST' and first person dative suffix -ar to make pay-impung-in-ar 'pay-VERBZ-3PL.PST-1SG.DAT' 'they paid (winnings) (to) me ). There are only 5 examples and only one is clearly transitive; the others may be transitive or intransitive. The ambiguity arises from the absence of case marked subjects and objects. For instance, in (416) the subject of win-impung-ang 'win-VERBZ-1SG.PST' is the speaker and is only marked on the verb via the STM suffix -ang '1SG.PST'. The subject of pay-impung-in-ar' 'pay-VERBZ-3PL.PST-1SG.DAT' is the pronoun than '3PL(NOM)' which, as pronouns follow the nominative / accusative' pattern would be the same whether the verb is transitive or intransitive. There are no direct objects in the example, either marked on the verb or as NPs.
(416) Godfrey 1970 p. 748

| win-impung-ang | than | pay-impung-in-ar |
| :--- | :--- | :--- |
| win-VERBZ-1SG.PST | 3PL(NOM) | pay-VERBZ-3PL.PST-1SG.DAT |
| 'I won (and) they paid me' |  |  |

The one example where transitivity is clear is (417) where the subject is pam $a l=a n g=a n$ 'MAN DIST=ERG=DEF' (that man) is ergative and hence the verb rake-impung- $\varnothing$ 'rake-VERBZ-3SG.PST' (he raked) is transitive, with object aak=an 'place=DEF' null-marked i.e. in absolutive case.
(417) Godfrey 1970 p. 748

| pam $a l=a n g=a n$ | aak=an | rake-impung- $\varnothing$ |
| :--- | :--- | :--- |
| MAN DIST=ERG=DEF | place(ABS)=DEF | rake-VERBZ-3SG.PST |
| 'that man raked the place' |  |  |

Another English borrowing found in the corpus is the specific use of the word 'work' which combines with the intransitive verb iiy-an 'go-NF' (to go) to create an intransitive compound verb work iiy-an 'work go-NF' (to work), as in (418).
(418) Sayers and Kerr 1964 p. 5

| ngamp | ko'-alam | in-man | work | iiy-amp |
| :--- | :--- | :--- | :--- | :--- |
| 3PL.INCL(NOM) | three | PRX-(DAT)-SAME | work | go-1PL.INCL.PST |
| 'we three work in this place' |  |  |  |  |

### 8.11 Expletive Verbal Suffixes

There are three verbs where the Subject / Tense / Mood (STM) marking is always 3SG + tense/mood and the 3SG subject is expletive, in the sense that it is syntactically required but semantically null. They are weechan 'to be hurt/sick', angkangkan 'to be hurt/sick (avoidance)' and achumpan 'to look beautiful'. The English translations provided imply a passive voice or intransitivity, but the verbs are in active voice.

Firstly, with weechan 'to be hurt' the object, whether marked on the verb or as a distinct NP, is the one, normally a person, who is feeling pain but there is no NP which is co-referential with the 3SG subject marked on the verb. In (419) the hurt is unspecified. The speaker is the object ngay-ang '1SG-ACC' and is being hurt but the only subject is in the STM subjunctive suffix =iy '3SG.SBJV'. The use of the subjunctive shows the hypothetical nature of the illness but there is no entity co-
referent with the 3SG encoded in the suffix. The STM suffix is syntactically obligatory and does indicate tense or mood (subjunctive mood in this example) but the 3SG has no referent.
(419) Kilham et al 1986 p. 124

| ngay-ang | nath |
| :--- | :--- |
| 1SG-ACC | weech-weech=iy-a |
| 'if I am sick' |  |

Frequently a body part such as ma' 'hand' or kon 'ear' appears before this verb in a clause with the possessor of the body part as direct object. As discussed in section 7.2.1, the body part and the possessor of the body part constitute part/whole apposition. For example, in (420), the speaker is the object, marked on the verb by the accusative suffix -any '1SG.ACC'. Again, the 3SG subject agreement is expletive rather than referential. Note that it is not coreferential with ma' 'hand', which takes unmarked absolutive case in agreement with the 1SG.ACC object it is apposed to, rather than the expected ergative case of a free subject NP.
(420) Godfrey 1970 p. 753

```
ma' weech-ow-any
hand(ABS) hurt-3SG.FUT-1SG.ACC
'(my) hand will hurt' (it hurts me on the hand)
```

Example (421), part of a longer phrase, further illustrates this. The direct object, here with both the pronoun than-ang '3PL-ACC' (them) and the co-referent NP puk many=iy an-angan 'child small=TOP DIST-PL.ABS' (those small children) are plural, hence the body part thip 'stomach' is also plural. The subject marked on the verb is nevertheless singular, with no referent in the context.

```
(421) Kilham et al 1986 p. }13
thip ngul weech=iy than-ang
    stomach then hurt-3SG.SBJV 3PL-ACC
    puk many=iy an-angan
    child small=TOP DIST-PL.ABS
    'they will get sick in their stomachs (then), those small children'
```

The experiencer of the hurt is always encoded by a bound or free accusative pronoun, as above. Optionally, the experiencer may be referenced additionally, by a pronoun in the nominative case, as in (422), where the person who is sick is
referenced both by the accusative pronoun nunang '3SG.ACC' but also the nominative pronoun nil '3SG(NOM)'. This dual reference of nominal and accusative pronouns has not been found to occur with any other verb. The initial pronoun may be an example of clause initial pronoun as discussed in section 5.1.2.1 but with a coreferential accusative pronoun in place of a co-referential NP.
(422) Kilham et al 1986 p. 132

| nil | nath | weech-an |
| :--- | :--- | :--- |
| 3SG(NOM) | manange |  |
| 'maybe he is sick' (as for him, maybe (it) | hurts him) |  |

A word marked as a synonym of weechan 'to hurt', noted as 'avoidance language', is angkangan 'sick'. There is only one example in the corpus; (423) where, as for weechan 'hurt', the person who is hurt is the object, marked with the accusative suffix =ang. The subject marked on the verb is 3SG, an expletive subject.
(423) Kilham et al 1986 p. 15

| namppiny nint-ang | angk-angkang-an | ey? |
| :--- | :--- | :--- |
| daughter 2SG-ACC | PRDP-sick-3SG.PRS | INT? |
| 'daughter, are you ill?' |  |  |

The other transitive verb which takes an expletive subject is ach-umpan-an 'make attractive / look nice-NF' (sic), as in (424) where the subject is marked as 3SG on the verb while what is being described as beautiful are panch in-angan 'bird PRXPL.ABS' (these birds), in plural absolutive case. Thus the 3SG subject has no coreference. The reduplication on the verb is continuative aspect but also appears to provide intensification, hence the 'really beautiful' in the free translation.
(424) Sayers 1976c p69 ex 150

| nil=an=iy | thaw- $\varnothing$ | panch | in-angan | ach-ump-ump-an-a |
| :--- | :--- | :--- | :--- | :--- |
| 3SG=DEF=TOP | say-3SG.PST | bird | PRX-PL.ABS | look.nice-RDP-3SG.PRS-a |
| 'he said these birds are really beautiful' (it makes those birds beautiful?) |  |  |  |  |

As an aside, there is an adjective ach-umpanam 'beautiful' which is related to the verb ach-umpan-an 'make attractive-NF'. This can be seen in (425) where the adjective is modifying yuw 'cloud'.
(425) Kilham et al 1986 p. 10

| yuw | in | keny=an | ach-umpanam |
| :--- | :--- | :--- | :--- |
| cloud(ABS) | PRX | high=DEF-wun-tan-a |  |
| hen | beautiful | lie-RDP-3SG-3PI.PRS |  |

Morphologically, there appears to be a suffix -am added to the verb stem to make the adjective however there are no other examples of this sort of morphological change. The suffix -am 'ITR' is usually applied in reverse to derive an intransitive verb from an adjective (see section 8.7). The verb ach-umpan-an 'make beautiful is transitive so it is very unclear how these forms are related despite similarities in form and semantics.

It is possible for other verbs to have expletive subjects as well as non-expletive subjects, e.g. maakan 'to crush'. The expletive can be seen in example (426) where the verb maak- $\varnothing$-any-a 'crush-3SG.PST-1SG.ACC-a' is transitive, with the direct object being the speaker, as marked on the verb by the accusative suffix -any '1SG.ACC'. The body part kuchek 'head' is apposed to this, preceding the verb.

Refer to section 7.2.1 for discussion on body part syntax. The 3SG subject marked on the verb has no referent.
(426) Kilham et al 1986 p. 86

> kuchek $\quad$ maak- $\varnothing$-any-a head(ABS) crush-3SG.PST-1SG.ACC-a 'I have a bad headache'

By contrast, in (427), the 3SG subject marked on the verb by the null suffix - $\varnothing$ '3SG.PST' is co-referent with the subject marked with ergative case tractor=ang=an=iy-a 'tractor=ERG=TOP-a'. The direct object is puk many=an-a 'child small=DEF-a' in (null marked) absolutive case, co-referent with the object suffix -an '3SG.ACC' on the verb. Thus the verb maakan 'to crush' can take both actual and expletive reference.
(427) Kilham et al 1986 p. 86
puk many=an-a keny=angk child small=DEF-a high=LOC

### 8.11.1 Idiomatic Phrases

There are various idiomatic phrases with a combination of another element, usually a noun, plus verb where the verb normally encodes a participant in the event as subject but when combined with the particular noun takes an expletive subject instead. Consider the phrase wol wantan 'to subside'. The etymology of this phrase is obscure, as there is no separate definition of wol ${ }^{69}$. The transitive verb wantan 'stop, leave' has over 30 instances in the corpus. Example (428) is typical where the speaker is announcing that a group (three or more) are about to leave the speaker's father, addressing the father as nint '2SG' with accusative case marking. Here the suffix -an '1PL.EXCL.FUT' (we) on the verb refers to a group of people.
(428) Sayers 1976a p. 9 ex 4

| kan want-an | nint-ang | piip |
| :--- | :--- | :--- |
| NOW leave-1PL.EXCL.FUT | 2SG-ACC | father |
| 'now we leave you father' |  |  |

The change resulting from the combination with wol can be seen in (429) where the subject of wol want- $\varnothing$ 'subside-3SG.PST-1SG' is 3SG as marked on the verb. There is no NP with ergative marking, the 3SG subject marked on the verb again is expletive. The object is ngak 'water' in absolutive case.
(429) Kilham et al 1986 p. 257

| ngak | kan=am | wol want- $\varnothing$ |
| :--- | :--- | :--- |
| water(ABS) | NOW=ABL | subside-3SG.PST |
| 'the tide is going out' |  |  |

The phrase kon ngathan 'ear shut' (forget, forgive) is cited by Godfrey (1970 p. 754) as functioning as a normal transitive verb when what is being forgotten is a person and as having expletive subject otherwise. Apart from those provided by Godfrey, there are only two examples in the corpus of the latter usage and none of the former.

An example where a person is being forgotten is (430) from Godfrey (1970 p. 754). Here the person forgetting is the subject puk many=ang 'child small=ERG' (a child) and the person being forgotten is kaath kunch 'mother own' (his own mother). The 3SG in the verbal suffix is co-referential with the subject.

69 There is an entry in the lexicon wol 'blowfly' but this does not appear relevant. It is also possible that wol in the phrase is not nominal
(430) Godfrey 1970 p. 754

| puk many=ang | kon ngath- $\varnothing$ | kaath kunch |
| :--- | :--- | :--- |
| child small=ERG forget-3SG.PST | mother own(ABS) |  |
| 'the child forgot his own mother' |  |  |

An example where something other than a person is being forgotten is (431) where what is being forgotten is an indirect object way ngamp=ar=am an-pal=an 'bad 1PL.EXCL=DAT=GEN DIST-hither-DEF' (for our sins). The subject of 3SG, marked on the verb in the suffix -ow '3SG.FUT', has no reference. The person doing the forgetting is God (in context), referenced by the object pronoun nun-ang '3SG-ACC'. Although there are so few examples, they do support the observation by Godfrey (1970 p. 754). The effect of the demonstrative an-pal=an 'DIST-hither=DEF' is not explained.
(431) Kilham et al 1986 p. 67
\(\left.\begin{array}{lll}ngul \& kon ngath-ow \& nun-ang <br>

then \& forget-3SG.FUT \& 3SG-ACC\end{array}\right]\)| way | ngamp=ar=am |
| :--- | :--- |
| bad | 1PL.INCL=DAT=GEN $\quad$ DIST-hither=DEF |
| '(then) he will forget (forgive) our sins' |  |

In summary, some verbs in Wik-Mungkan always have expletive subjects, such as weechan 'to hurt', some take expletive subjects when combined with a noun to make an idiomatic phrase, such as wol wantan 'subside' and others take expletive subjects in particular circumstances e.g. kon ngathan 'forget/forgive'.

### 8.12 Notes on the Wik-Mungkan Literature

There are various statements in the literature of Wik-Mungkan verbs which have not been adopted for this thesis. This section briefly describes these and justifies the variation. Sayers (1977b) also formulated a different view of tense, aspect and mood. As this is closely linked to the use of temporal adverbs, especially kan 'NOW' and ngul 'then', discussion is deferred to section 10.2.4.

### 8.12.1 Unconjugated verbs

There are various lexemes identified in the literature as verbs with the caveat that they do not conjugate. This was first described by Godfrey (1970 p. 751) in relation
to two lexemes; kaangk and weenth both glossed as 'to like', the distinction being that the former can refer to actions as well as people or things, which both encode.

Kilham (1977 p. 48) described these same lexemes as 'verb-like' and added that they usually are followed by a verb in the future tense, but this was not obligatory. She also included two other lexemes; mak and aw, the latter glossed as 'fond of'. Kilham et al (1986 pp. 407-408) contains the same description. The description of these lexemes as verbs is rejected for this thesis. For a discussion of mak 'OPT', analysed as an adverb, refer section 9.3.1.3. The lexeme kaangk 'like' is analysed as a clausal modifier; see section 3.5.5.

The remaining 'unconjugated verbs' are aw and weenth, both glossed as 'fond of, like' and described as synonyms. In the corpus they all align with the observation of Kilham et al (1986 p. 408) that they always follow a noun or the non-finite form of a verb, as in pam weenth 'man lover i.e. fond of men', engkan aw and engkan weenth 'to ask loving' i.e. 'inquisitive'. As such they match the distribution of adjectives (see section 3.1.3), and will be considered adjectives for this thesis.

### 8.12.2 'Personal Verbs'

Godfrey (1970 p. 753) identified two verbs she described as 'impersonal'. It is assumed by this she meant that the verbs have expletive subjects. The verbs are weechan 'to hurt' and achumpan 'to be beautiful' as discussed in more detail and with similar verbs in section 8.11. This agrees with the description in section 8.11. Kilham (1977 p. 48) essentially repeats the same two examples, as do Kilham et al (1986 p. 408), with the unexplained change of terminology from 'impersonal' to 'personal', additionally noting intransitive as well as transitive 'personal' verbs. The two latter sources do not refer to the expletive nature of the subject.

As noted in in section 8.11.1, most of the entries in the lexicon marked 'personal' are idiomatic phrases combining an NP and a verb, each with separate entries in the lexicon which, when combined, have an idiomatic meaning. The only 'personal intransitive verb' which is not a phrase is angkangan 'sick (sic)' which is actually transitive, as it takes a direct object, as can be seen in (423) on page 254.

In summary, the Wik-Mungkan sources align with the description in section 8.11. The terminology of 'impersonal' and 'personal' is not preferred for this thesis.

## 9 Tense, Aspect and Mood

This chapter describes the morpho-syntax used to encode tense (section 9.1), aspect (9.2) and mood (9.3).

### 9.1 Tense

Wik-Mungkan has three tenses; present, past and future. This section describes the basic use of these tenses. Various adverbs are used to provide additional information and implicatures to these tenses; these are discussed in section 10.2.

### 9.1.1 Present

The present tense is generally used to describe events occurring at the same time as the speech event, as in (432), where the subject is in the process of hunting. The implicature is that he has been hunting for a while and will continue to do so for a period.
(432) Kilham et al 1986 p. 6
minh=ak yippak wenk-an-a
MEAT=ALL still search-3SG.PRS-a
'he is still hunting (searching for meat)'
There can be ambiguity as to whether the present tense encodes an exactly contemporaneous event or can also extend to events in the immediate future. Consider example (433) where the speaker is stating that he is going to a place on the west side. The implicature could be that he/she is already moving or that he/she intends to leave in the very near future.
(433) Huchet 1990 p. 69 ex 4.21

| ngay | mal | kuuw=angk | iiy-ang | thantt=ang |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | towards west=LOC | go-1SG.PRS | 3PL.DAT=COM |  |
| 'I am going to the west side with them' |  |  |  |  |

Narratives in the past tense are sometimes found to shift to the present tense; that is, although the event described is in the past, the verb is expressed in the present to suit the style of the narrator. For example, in (434) and (435), the narrator is
describing a trip she took in the past by aeroplane. In (434) the narration is in the past tense but in the following clause, (435) she changes to the present tense to describe landing at Laura, a town on Cape York.
(434) Sayers774TWMY15.34

| kungk $\quad$ mo'-an |  |
| :--- | :--- |
| north | run-1PL.EXCL.PST |
| 'we flew north' |  |

(435) Sayers774TWMY16.28
Laura keek-anan
Laura fall-1PL.EXCL.PRS 'we land at Laura'

The present tense also encodes habitual aspect, described in section 9.2.2.

### 9.1.2 Past

The past tense describes events earlier than the speech event. Distinctions between near and remote past are encoded in the use of temporal adverbs, especially kan 'NOW', ngul 'then', inflections and combinations of the two, and others as described in section 10.2. An example of the basic use is (436) where the event described by wamp- $\varnothing$ 'come-3SG.PST' (he came) has a specific reference point of Wednesday.
(436) Kilham et al 1986 p. 96
wednesday in=an
wamp- $\varnothing$
wednesday $\mathrm{PRX}=\mathrm{DEF}$ came-3SG.PST
'he came (here) Wednesday'
Adverbs other than kan 'NOW' and ngul 'then' can also be used to provide contextual information as to the past time period intended by the speaker. One such adverb is yaan 'just', as in (437) where the speaker is asking the addressee whether a third person had just finished talking.
(437) Kilham et al 1986 p. 96

| nil | yaan | thaw- $\varnothing$ |
| :--- | :--- | :--- |
| 3SG(NOM) just | say-3SG.PST | ey? |
| 'was he just talking?' |  |  |

### 9.1.3 Future

The future encodes events that will be occurring at a time after the time of the speech event. The basic use can be seen in (448) where the speaker describes an event that will happen after the time of the speech event; waa'-ayn 'tell-3PL.FUT' (they will tell).
(438) Sayers 1976c p. 66 ex 134

| wik kath $\quad$ min | waa'-ayn |  |
| :--- | :--- | :--- |
| WORD old | good(ABS) | tell-3PL.FUT |
| 'they will tell a good story' |  |  |

In narratives, the deictic centre can shift so that the current time is in the past. This can be seen in (439) where the narrative, in the past, describes one event; nyiin-nyiin- $\varnothing$ 'sit-RDP-3SG.PST' (she sat down). The narrative then describes an event that will occur after the first event; kal-ow 'bear.child-3SG.FUT' (she will give birth), the future tense being used to mark that the second event is after the first event.
(439) Sayers 1982a p. 156 ex 69

```
nyiin-nyiin-\varnothing pokkapang=an-wey
sit-RDP-3SG.PST alone=DEF-EMO
puk many=an kal-ow
CHILD small(ABS)=DEF bear.child-3SG.FUT
'she sat down alone to have that child'
```

The future tense can also encode the hortative, imperative and jussive moods (see section 9.3.2).

### 9.2 Aspect

Aspect in Wik-Mungkan is not marked by morphology, with one exception; reduplication of the stem expresses continuative aspect, discussed in section 9.2.1.

Habitual aspect is encoded by the present tense, discussed in section 9.2.2. Other aspects are pragmatic inferences expressed by specific temporal adverbs which are discussed in section 10.2. In particular, habitual events that occurred over a period of time in the past but have now ceased are discussed in section 10.2.5.

### 9.2.1 Continuative Aspect

The continuative is expressed by fully or partially reduplicating the verbal stem, as described in section 8.5. The past can be seen in (440) where the reduplication of wak 'follow' expresses that the speaker is describing that a period of time elapsed while the group followed the road. Similarly the partial reduplication of mungk 'eat' in (441) expresses the continuity of eating over a period of time.
(440) BS7782XW09.46

| woyan wak-wak-an <br> road follow-RDP-1PL.EXCL.PST | kan |
| :--- | :--- | :--- |
| NOW |  |
| 'we (at that time) followed the road' |  |

(441) BS779min22_19.01

| ngay-a | kan | ongk | mu-mungk-ang |
| :--- | :---: | :--- | :--- |
| 1SG(NOM)-a | NOW | long | PRDP-eat-1SG.PST |
| 'I kept on eating )at that time)' |  |  |  |

Example (442) shows full reduplication of the stem maay 'pick.up' to express that the protagonist continues to pick up eggs. This is part of the story 'Goose Eggs' which is primarily narrated in the past tense; the use of the present is an example of deictic shift. Similarly, the partial reduplication of ko'ang 'wait' in (443) encodes the continuity of the act of waiting.
(442) Sayers 1982a p. 177 ex 74

| minh $\quad$ an=an=iy-a | maay-maay-an | nhepan |
| :--- | :--- | :--- | :--- |
| MEAT $\quad$ DIST(ABS)=DEF=TOP-a | pick.up-RDP-3SG.PRS | eggs(ABS) |
| 'he continues to pick up eggs' |  |  |

(443) BS779min22_5.18

| car=an | ang=an | ko'-ko'ang-an |
| :--- | :--- | :--- |
| $\operatorname{car}($ ABS $)=D E F$ | DIST=DEF | PRDP-wait-3SG.PRS |
| 'the car is waiting (there) for them' |  |  |

The future continuative can be seen in (444) and (445). In the former the full reduplication of eench 'ill' shows the speaker is predicting the addressee will be groaning continuously through the night. Similarly, in the latter example the partial reduplication of pek 'fight' expresses the concept that a group of people may be fighting each other for ever, i.e. continuously from the time of the speech event, posed as a question. In the context this is an appeal to stop fighting.
(444) Sayers 1976a p. 165 ex 2

| nint | nan-pal=an | ngul <br> thaa' | eench-eench-an <br> 2SG(NOM) |
| :--- | :--- | :--- | :--- |
| MED-hither+DEF | ill-RDP-2SG.FUT |  |  |

(445) Kilham 1977 p. 153 ex 327

| ngamp-a | yaam | pe-pek-wump | ey? |
| :--- | :--- | :--- | :--- |
| 1PL.EXCL-a | long.time | PRDP-fight-1PL.INCL.RCP.FUT | INT? |
| 'shall we fight for ever?' |  |  |  |

### 9.2.2 Habitual Aspect

Habitual aspect refers to events that are regularly performed in a customary or habitual way. For verbs in the present tense, habitual aspect is a pragmatic inference. For example, (446) is a statement in the present tense describing that two third parties are treating the speaker badly. It is ambiguous whether this is just a one-off current event or a recurring 'habitual' one. There is no ambiguity in (447), where the chopping of the tree is happening in the present and is not an habitual event. By contrast, example (448) is part of a description of the kuutan 'umbilical cord' ceremony attending a birth. That is, it is a ritual which includes rubbing the newborn with sweat and hence an habitual event. In all three examples, actual, habitual and ambiguous the present tense suffix is used with no added morphology or syntax as to which aspect is meant.
(446) Kilham et al 1986 p. 156

| nint way yump-angan | ngant-a |
| :--- | :--- |
| 2SG bad make-2SG.PRS | 1PL.EXCL.DAT-a |
| 'you are doing us wrong' |  |

(447) Kilham et al 1986 p. 16
an-a wee'=ang ap ump-an-a
DIST-a who=ERG chopping.sound cut-3SG.PRS-s 'who is chopping that (the tree) down?'
(448) Sayers 1982a p. 198 ex 56
aawul=ang thee'-an nun sweat=INST throw-3SG.PRS 3SG.DAT 'he rubs him with (underarm) sweat'

There are no instances in the corpus of habitual aspect in the future tense. Habitual aspect in the past tense is a pragmatic inference of various temporal adverbs (see
section 10.2).

### 9.3 Mood

Moods in Wik-Mungkan are expressed via morphology and lexical items. Section 9.3.1 describes the moods expressed by the subjunctive verbal suffix. Section 9.3.2 describes the three related moods of hortative, imperative and jussive which are expressed in syntax.

### 9.3.1 Subjunctive

As noted in section 8.2, the subjunctive is expressed within the Subject Tense Mood (STM) verbal suffixes. To recap, the STM suffixes are portmanteaux which attach to the verb stem and encode the person and number of the subject as well as either tense or the subjunctive mood. The subjunctive usage in Wik-Mungkan matches the description by Palmer (2001 p. 360) as expressing 'something other than a statement of what is certain'. The following meanings can be found expressed by the subjunctive: conditional, potential, optative, interrogative and counterfactual.

### 9.3.1.1 Conditional

The conditional is implemented by use of the subjunctive mood in the protasis and the future tense in the apodosis, as in (449) where the condition is that 'if you take the medicine' has the consequence 'you will get better'. Similarly, in (450) the protasis is 'if a jellyfish stings you', followed by the consequence clause 'you should pick the stings out'. Note that in the second example there is no explicit syntactic coordination between the two clauses. The first is an example of =an 'DEF' finite relative clause (see section 13.1.2).
(449) Kilham et al 1986 p. 115

| [nint | opar=an | mungk-in-a | an] |
| :--- | :--- | :--- | :--- |
| 2SG(NOM) | medicine(ABS)=DEF | eat-2SG.SBJV-a | DIST(DAT) |
| ep-paththam miyal-ath-ow nint-ang]  <br> really well-TR-2SG.FUT 2SG-ACC  <br> 'if you take the medicine (there), it will (really) heal you'    (2) |  |  |  |

(450) Kilham et al 1986 p. 170

| [yulamul=ang <br> jellyfish=INST | pench-in-wey-a] |  |  |
| :--- | :--- | :--- | :--- |
| burn-2SG.SBJV-EMO-a |  |  |  |

### 9.3.1.2 Potential

The potential is defined as expressing the possibility of some event occurring. It is shown in example (451) where the speaker is raising the possibility of someone going (to look for geese eggs), expressing doubt as to whether that person is able or wiling. As noted by Godfrey (1970 p. 746), the combination of $k e$ ' 'NEG' plus subjunctive can also suggest that a favour is being requested, which is possible in example (451) as the speaker may be asking a favour but is more evident in (452). In this latter example, the speaker is asking the addressee, as a favour, to ask a third person to come over. The subjunctive suffix on wamp-ow 'come-3SG.SBJV' denotes uncertainty as to whether the third person referred to will come or not.
(451) Sayers 1982a p172 ex 15

| nil-amp | ke' | iiy=iy |
| :--- | :--- | :--- |
| 3SG(NOM)-2PL.DAT NEG | go3SG.SBJV | ey |
| 'what about that (other) relative of ours going?' |  |  |

(452) Sayers 1976a p. 149 ex 1

| nint-a | ke' | engk-in | nungant |
| :--- | :---: | :---: | :---: |
| 2SG(NOM)-a $\quad$ NEG | ask-2SG.SBJV | 3SG.DAT |  |

### 9.3.1.3 Optative

Particularly when combined with the temporal adverb kan 'NOW' (refer section 10.2.1 for more on kan 'NOW') the subjunctive can express the optative, as in (453), where the speaker wishes a third person would come.
(453) Sayers 1976c ex 130
kan wamp-ow-a NOW come-3SG.SBJV-a 'I wish he would come'

The directional adverb pal 'hither' when preceding a verb in the subjunctive also expresses a wish. This can be seen in example (454) where the speaker wants someone come to send him/her something, the verb being in the subjunctive. For further discussion see section 10.3.1, where there are further examples (530) and (531).
(454) Sayers 1976c p. 35 ex 10
pal kuch-in-a
hither send-2SG.SBJV
'I wish you would send it here'
This optative use can be distinguished from the use of the adverb kaangk 'like' which is often translated as 'want' but is only used with verbs in the indicative, such as in (455) where the verb is in the present tense, indicative mood. This example is then a statement of fact that the speaker wants to hit someone rather than an aspirational wish. Refer to section 3.5 .5 for further discussion on the lexeme kaangk 'like'.
(455) Kilham et al 1986 p. 136

| kaangk $\quad$ pam | piik-ang-a |
| :--- | :--- |
| like $\quad$ MAN(ABS) | hit-1SG.PRS |
| 'I want to hit a man' |  |

### 9.3.1.4 Interrogatives

The most common verbal form used for interrogatives is the indicative; see section 12.2 for further detail. The subjunctive can also appear in interrogatives where there is an element of doubt as to the reality of what is said such as (456) which is in the context of first seeing bullocks and not knowing what they were.
(456) Sayers 1982a p. 176

| nil-a | minh | ngeen | thath=iythan? |
| :--- | :---: | :--- | :--- |
| 3SG(NOM)-a | MEAT | what(ABS) | see-3PL.SBJV? |
| 'what (meat) ${ }^{70}$ did they see?' |  |  |  |

Similarly, example (457) expresses uncertainty as to whether the two addressees will
70 As per Sayers original; 'animal' is a better translation'
speak to the other men or not. Again, the combination of $k e^{\prime}$ 'NEG' and verb thaw-iw 'speak-2DU.SBJV' in the subjunctive indicates a favour is being asked. Whether the favour is granted or not is unknown, hence the subjunctive rather than the indicative.

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(457) Kilham 1977 p. }203\mathrm{ ex 444
```

| pam wiy nath $\quad$ ke' | thaw-iw | thant | ey? |
| :--- | :--- | :--- | :--- | :--- |
| MAN some maybe NEG | speak-2DU.SBJV | 3PL.DAT | INT? |
| 'you wouldn't speak to those (some?) men would you?' |  |  |  |

### 9.3.1.5 Counterfactual

In the counterfactual, the counterfactual event is in the protasis followed by the conjunction puth 'but ${ }^{711}$ and ya'a 'NO', then the actual event in the apodosis. The hypothetical event in protasis is expressed by a verb in the subjunctive and the actual event in the apodosis, typically with a verb in past tense. For example, in (458) the counterfactual event in the protasis is 'they were about to kill him' (but didn't) and the actual past event 'they left him' in the apodosis linked by puth ya'a 'but NO'.
(458) Kilham et al 1986 p. 60

| [than=an | ke' | mul-ath=iythan <br> 3PL(NOM)=DEF | about.to | dead-TR-3PL.SBJV |
| :--- | :--- | :--- | :--- | :--- | | nun-ang-a] |
| :--- |
| 3SG-ACC-a | | puth |
| :--- |
| but |

Similarly, in (459), the counterfactual is 'the child could have died' (but didn't) in the subjunctive and 'I looked after him very well' is the actual event.
(459) Kilham et al 1986 p. 100

| [nil | puk | many=an | uth-am-iy-a] |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | CHILD | small=DEF | dead-IVR-3SG.SBJV-a but |

### 9.3.2 Hortative, Imperative and Jussive

The hortative, imperative and jussive are considered distinct from each other on the basis of convention and syntax. All are expressed by verbs in the future tense (with
some exceptions to be noted below). By convention, the imperative is confined to the second person. Although this terminology convention has been questioned (e.g. Palmer 2001 p. 81), it is adopted for this thesis. The hortative (first person) and jussive (third person) are distinguished from each other by syntax; the latter requires the use of the adverb mak 'OPT' while the former does not.

This analysis relies on the free translations given, as the literal translation of the WikMungkan could equally be simple statements of future actions. For example, in (460) below the translation of 'let's close our eyes, ready for sleep' could equally read 'we will now close our eyes, ready for sleep'. The Wik-Mungkan literature is silent as to how to distinguish the two.

The hortative is expressed by the future tense in first person dual, plural exclusive and plural inclusive, as shown in the following examples. In (460) for the dual, the speaker includes one other person in the exhortation to go sleep. The plural exclusive future can be seen in (461), an exhortation to pick up rubbish. The plural inclusive is seen in (462) where the exhortation is for all to pursue a certain path.

(462) Kilham 1977 p. 194 ex 420

| ngamp-a | woyan | in | wak-amp-a |
| :--- | :--- | :--- | :--- |
| 1PL.INCL(NOM)-a | track | PRX | follow-1INC.PL.FUT |
| 'let's follow this road' |  |  |  |

The imperative is most commonly expressed by the second person future singular, dual or plural. Example (463) shows the second person singular where the speaker describes an order he gave to someone to leave two other people alone. The second person dual future as imperative can be seen in (464) where the order is for the two addressees to not force the speaker to stay. The second person plural as imperative is seen in (465), which is again an instruction, in this case to give
something.


As first noted by Godfrey (1970 p. 746) the singular imperative is also expressed by the verb stem, as in (466) where the stem thaw 'talk(IMP)' is an order, in this case not to talk. There are no instances of the dual or plural imperative being expressed by the bare stem in the corpus.

| (466) Sayers774TWMY_13.46 |  |  |
| :---: | :---: | :--- | :--- |
| kaath ke' thaw <br> mother NEG say(IMP) | yimanang <br> like.that |  |
| 'mother don't you talk like that' |  |  |

The jussive is expressed using the adverb mak and, as for the hortative and imperative, a verb in the third person future. There are ten examples in the corpus, the majority expressing a wish as in (467) where the speaker expresses a wish to the addressee to leave a third party alive. The preferred gloss for this lexeme will be 'OPT'72 for optative. The subject can be third person singular, as in (467) or third person plural, as in (468) where the wish is to allow goose eggs to remain where they are. There are no examples of the third person dual jussive in the corpus but this is probably reflects the limits of the corpus rather than an inherent restriction in the language.

[^30](467) Kilham et al 1986 p. 88

| [niiy nun-ang kuch-an] | [mak | man-yetham | iiy-ow] |
| :--- | :--- | :--- | :--- |
| 2PL(NOM) 3SG-ACC send-PL.FUT | OPT | alive | be-3SG.FUT |
| 'Send him away, let him stay alive' |  |  |  |

(468) Sayers 1982a p. 178 ex 86
mak wun-ayn
OPT lie-3PL.FUT
'let them lie there'
The gloss of optative is less obvious in (469) where in the free translation the speaker is suggesting that a third person (who has been wronged) has a right to retaliate.

Perhaps this could be translated as 'let him hit you (you deserve it)'.
(469) Kilham et al 1986 p. 194

| nil mak thep-ow | nint-ang |
| :--- | :--- | :--- |
| 3SG(NOM) OPT hit-3SG.FUT | 2SG-ACC |
| 'he has every right to hit you' |  |

Although rare (three examples in the corpus), the imperative and jussive can also be expressed by the subjunctive The imperative can be seen in (470) where the speaker is directing a group to build a house. Equally, the subjunctive jussive can be seen in (471), where the speaker expresses the exhortation to light a hot fire. The use of the subjunctive in these examples is not explained but perhaps suggests that there is some uncertainty whether the instructed events will occur or not.
(470) Sayers 1976a p. 158 ex 4

| aawuch many=iy kaach=iy <br> house small(ABS)=TOP build-2PL.SBJV | pul=ant |  |
| :--- | :--- | :--- | :--- |
| 'build a small house for these two' |  | 3DU=DAT |

(471) Sayers 1982a p. 179 ex 99

Godfrey (1970 p. 746) provides two examples which she described as 'permissive' but could in fact be the jussive expressed by the subjunctive. Example (472) describes the subjects as being permitted to touch (something), while example (473) describes a couple as being allowed to hear (something). The free translations for these two could equally be 'let them touch' and 'let them hear' respectively. There is no evidence in the corpus of a 'permissive' mood.

[^31](472) Godfrey 1970 p746
mam=iythan
touch-3PL.SBJV
'they are allowed to touch'
(473) Godfrey 1970 p746
ngeey-iypul
hear-3DU.SBJV
'they are allowed to hear'

## 10 Adverbs

This chapter describes the morpho-syntax of adverbs in Wik-Mungkan in general (section 10.1) and then two types which have a number of specific features; temporal (section 10.2) and spatial adverbs (section 10.3).

Adverbs of manner are described in section 13.2.5 on adverbial clauses of manner.

### 10.1 Overview

As discussed in section 3.4, adverbs as a class are distinguished primarily by distribution and taking a limited range of case markers.

Distributionally, the most common position for an adverb is directly preceding the verb it modifies, as in (474) where the adverb nath 'maybe' directly precedes the verb engk-iy-a 'ask-3SG.SBJV-a'
(474) Kilham et al 1986 p. 5

| nil pam nung=ant=am | nath engk-iy-a | nung=ant |  |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) MAN | 2SG=DAT=GEN | maybe ask-3SG.SBJV-a | 3SG=DAT |
| 'Her husband might ask her' |  |  |  |

It is possible to have multiple adverbs preceding the verb, as in (475) where there are three adverbs puy 'thither', kech 'far' and nath 'maybe' preceding the verb.
(475) Kilham et al 1986 p. 125

| puy kech | nath | iiy- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| thither far | maybe | go-3SG.PST |
| 'he has gone, maybe a fair way' |  |  |

When found together there is a tendency for the spatial adverbs of movement pal 'hither' and puy 'thither' (see section 10.3) to be first, followed by directional adverbs such as kuuw 'west' and temporal adverbs kan 'NOW' and ngul 'then' (section 10.2) to follow them.

The most common distribution is not obligatory and some exceptions can be found,
as in (476) where the adverb keenk 'long.ago/first' follows the verb.

$$
\begin{array}{llll}
\text { (476) Sayers 1982a p. } 221 \text { ex } 12 & \\
\begin{array}{llll}
\text { ngay } & \text { an=an } & \text { thaw-ang } & \text { keenk } \\
\text { 1SG(NOM) DIST=DEF } & \text { say-1SG.PST } & \text { long.ago } \\
\text { 'I have said (that) before' } & &
\end{array} .
\end{array}
$$

A reduced set of adverbs are also found to modify adjectives, as discussed in section 7.1.

Another distinguishing feature of adverbs is that a subset can be inflected for case, the cases involved being =ak 'allative', =am 'ablative' and =angk 'locative'. The first two are standard case markers as applied to nominals, while the last applies only to adverbs (the locative for nominals is =ang 'LOC'). Also only applying to adverbs is the suffix -uw 'on'. The semantics of this suffix are not clear, to be discussed below. The subset of adverbs which inflect for case and -uw 'on' consists of temporal adverbs kan 'NOW' and ngul 'then' (section 10.2) , spatial adverbs of movement pal 'hither' and puy 'thither' (see section 10.3) and directional adverbs such as kuuw 'west', keny 'high' and pek 'down'. Not all of these adverbs are found in the corpus with all inflections; the following examples illustrate one; keny 'high'.

Firstly, (477) shows the uninflected form where it modifies the verb mo'- $\varnothing$ 'run3SG.PST' to show that the subject flew high.
(477) Kilham 1977 p. 35 ex 17

| nil nath keny | mo'- $\varnothing$ |
| :--- | :--- | :--- |
| 3SG(NOM) away high | run-3SG.PST |
| 'he flew really high up' |  |

Secondly, example (478) shows the ablative, where the subject, ngak theth=an-a 'WATER spray=DEF-a' is described as having fallen into the dinghy 'from high', i.e. keny=am 'high=ABL'.
(478) Kilham et al 1986 p. 216

| ngak | theth=an-a | keny=am | pey- $\varnothing$ | dinghy |
| :--- | :--- | :--- | :--- | :--- |
| WATER | spray(ABS)=DEF-a | high=ABL | jump-3SG.PST | dinghy | 'water splashed into the boat'

Thirdly, example (479) shows the locative where the speaker is instructing an
addressee to throw fish (minh 'MEAT') onto a fire using the adverb keny=angk 'high=LOC' to mean on top of the fire.
(479) Kilham et al 1986 p. 218

| minh=an | keny=angk | ngul |
| :--- | :---: | :--- | | thee'-an |
| :--- |
| MEAT(ABS)=DEF |
| high=LOC |$\quad$ then | throw-2SG.FUT |
| :--- |

There are a few examples of keny 'high' with the nominal locative =ang 'LOC', not =angk 'LOC' but only following the definite marker =an 'DEF'. This is an unusual sequence as normally the definite marker follows case markers. Example (480) illustrates the use with keny 'high', modifying a verbless subordinate clause and describes the sun being 'above', that is, 'high".
(480) Sayers 1976a p. 2 ex 3
[kinch=ang=an-iy-a

day=LOC=DEF-TOP-a kinch $\quad$ kun $\quad$\begin{tabular}{l}
karkan=ang-iy-a <br>
hot=LOC?-TOP-a

$\quad$

kinch <br>
sun

 keny=an=ang] 

high=DEF=LOC
\end{tabular}

Fourthly, example (481) shows the allative keny=ak=an-a 'high=ALL=DEF-a' (to high). The translation of this example is a little obscure because it is from the King James version of the Bible.
(481) SIL 1984 Timothy 6.7

| ngeen <br> what | ngul <br> then$\quad$karp=am <br> together=EMPH |
| :--- | :--- | :--- |
| aak bring-1PL.INCL.SBJV |  |

Lastly, example (482) illustrates the rare suffix -uw 'on' where the speaker is warning the addressee that a snake might drop towards the addressee (pal 'hither') and fall on top of them. The adverb keny-uw 'high-on' describes where the snake will fall. The exact semantics of -uw 'on' in this example as against =angk 'LOC' in example (479) are not clear and there are insufficient examples in the corpus to clarify further. It is also found on cardinal directions (section 10.3.5). It may be relevant that all examples (9) in the corpus suffixed with -uw '-on' immediately follow pal 'hither'.
(482) Kilham et al 1986 p. 201

| thuuk | pal | keny-uw | ngul | ench- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| SNAKE(ABS) | hither | high-on | then | fall-3SG.PST | | nungk-ar-a |
| :--- |
| 2SG=DAT |

### 10.2 Temporal adverbs

The meaning of some temporal lexemes has caused some difficulty with analysis in the Wik-Mungkan literature. This section will discuss the main ones; kan 'NOW', ngul 'then' and their various inflections, described in the literature as 'verbal auxiliaries'. This thesis prefers to describe them as adverbs as will be discussed further in section 10.2.4.

### 10.2.1 kan 'NOW' and inflections

This section describes the adverb kan 'NOW' and various inflections. The initial subsection discusses it status as an adverb.

### 10.2.1.1 Word Class

The Wik-Mungkan literature describes kan 'NOW' as a "verbal auxiliary" without specifying what is meant by that term (e.g. Kilham et al 1986 p. 408). This thesis prefers to classify it as a temporal adverb, for the following reasons. Firstly, the dominant distribution is that kan 'NOW' directly precedes the verb, a feature of adverbs (section 3.4). Another adverb can appear between kan 'NOW' and the verb, as in (483) where the adverb chir 'quickly' comes between kan 'NOW' and the verb wamp- $\varnothing$-ar 'come-3SG.PST-1SG.DAT'. The juxtaposition with the verb is not obligatory, as in (484) where it is the first word in the phrase, perhaps for emphasis, as suggested by the free translation of 'right now'. It can also occur in verbless predicates, such as (485).
(483) Kilham et al 1986 p. 26

| nil | kan chir | wamp- -ar |
| :--- | :--- | :--- |
| 3SG(NOM) | NOW | quickly |$\quad$ come-3SG.PST-1SG.DAT

(484) Kilham et al 1986 p. 48

| kan ngay | David=ant | wenk-ang-a |
| :--- | :---: | :--- |
| NOW 2SG(NOM) | David=DAT | look.for-1SG.PRS-a |
| 'I will look for David right now' |  |  |

(485) Sayers 1982a p172 ex 12
kan niiyar ${ }^{74}$-a $\quad$ puy
NOW 2PL. 1 SG.DAT-a thither
'you, my relatives, should go'

The examples in this section show that kan 'NOW' meets one criterion for adverbial status; it modifies verbs. There are no examples of modifying adjectives or other adverbs. It also generally matches the dominant distribution of directly preceding the verb. The next section describes the various inflections of kan 'NOW' which match the third criterion of what inflections occur, especially the allative, locative and ablative cases.

### 10.2.1.2 kan 'NOW'

The uninflected form kan 'NOW' places an event at specific point in time, whether past, present or future. With a verb in the present this corresponds closely with the English 'now', as in example (486) where the the speaker is announcing that (something) is making her tired at that moment.
(486) Kilham et al 1986 p. 181

| ngay-ang | kan | pik $^{75}$ chint-an |
| :--- | :--- | :--- |
| 1SG-ACC | NOW | tire-3SG.PRS |
| 'it is making me tired' |  |  |

With verbs in the past or future tense, the sense shifts to a specific point in time in the relevant tense. For that reason, the gloss adopted here is 'NOW' to highlight these shifts while preserving the general sense of 'point in time'. An example of the past is (487) where the context is of the speaker having arrived at a place and, at that moment, looked for Barbara.
(487) BS774MYTW17.24

| ngay | Barbara puth | kan | thath-ang |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | Barbara hence | NOW | see-1SG.PST |
| 'I (hence) looked for Barbara' |  |  |  |

[^32]With the future, there is frequently an implicature that the point in time is imminent, as in (488) where the speaker is announcing that he will be leaving at a point in time in the future with the implicature that that moment is 'soon'.
(488) Sayers 1977b p77 ex 1

| ngay | kan | iiy-ang |
| :--- | :--- | :--- |
| 1SG(NOM) | NOW | go-1SG.FUT |
| 'I'm going now' |  |  |

The sense of kan 'NOW' does not change with the subjunctive, as in (489) where the point in time to light the ant bed is understood from the context to be the present. Similarly with the imperative in (490) the speaker is telling the addressee to poke a spear at the time of the speech event.
(489) Sayers 1982a p. 179 ex 97

| pi'=an | kan | path-ath=iyin |
| :--- | :--- | :--- |
| ant.bed(ABS)=DEF | NOW | light-CAUS-2PL.SBJV |
| 'let us light this ant bed' |  |  |

(490) Kilham et al 1986 p. 227

```
kan thu'-\varnothing-a
NOW poke-2SG.IMP
'poke (with your spear)'
```


### 10.2.1.3 Locative

A rare (four examples in the corpus) variant of kan 'NOW' is kan-kan=ang, with variant kan-kan=angk ${ }^{76}$ 'NOW-RDP=LOC'. The translation provided in the lexicon is 'almost, about to'. There is no instance of the unreduplicated inflected form kan=ang(k) 'NOW=LOC'. The suffix =ang(k) is the locative case so the implied meaning is 'located at now' with the reduplication as a form of emphasis. Consider example (491) where kan-kan=angk 'NOW-RDP=LOC' translates as 'almost', the implicature being that, although the protagonist is 'ready to go', there is some uncertainty about the exact time. That is, there is an interval of time during which the subject will go, with high probability, but the exact time is unknown. Similarly in (492), kan-kan=angk 'NOW-RDP=LOC' expresses that the sores in question are about to burst, with the exact time unknown.

76 =angk 'LOC' is a variant of ang 'LOC' primarily attached to adverbs
(491) Kilham et al 1986 p. 49

| nil | kan=kan=ang | iiy-ow-a |
| :--- | :--- | :--- |
| 3SG(NOM) | NOW-RDP=LOC | go-3SG.FUT |
| 'he is almost ready to go' |  |  |

(492) Kilham et al 1986 p. 186

| kan-kan=angk | wench | an-angan | polpey-antan |
| :--- | :--- | :--- | :--- |
| NOW-RDP=LOC | sore | DIST-PL.ABS | ripen-3PL.PRS |
| 'those sores are almost ripe i.e. full of pus' |  |  |  |

### 10.2.1.4 Ablative

The inflected form kan=am 'NOW=ABL', translated in the lexicon as 'already done, finished'. Note that the alternative interpretation of the affix =am as 'EMPH', the emphatic marker, is rejected as that would not change the sense of kan 'NOW'. The emphatic marker only provides emphasis, it does not change the meaning, hence a hypothetical kan=am 'NOW=EMPH' would be the same as kan 'NOW'. In fact kan=am 'NOW=ABL' denotes the period of time from kan 'NOW'. Note also that the next section 10.2.1.5 describes the allative kan=ak 'NOW=ALL', a symmetry which supports the ablative interpretation.

Consider example (493), where the speaker describes that he has written a letter. That is, he, for a period in the past, was writing a letter but he completed it. As expressed by kan=am 'NOW=ABL', the completion will continue into the future.
(493) Kilham et al 1986 p. 102

| ngay | letter | kan=am | ump-ang-a |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | letter | NOW=ABL | write-1SG.PST |
| 'I've written a letter' |  |  |  |

Predominantly, kan=am 'NOW=ABL' appears with verbs in the past tense but there is one example where the verb is in the present tense; example (494). The free translation is in the past and occurs in a story otherwise told in the past tense which suggests that this is also a past event. Either way, the subject is described as having left early to go east and has now completed that i.e, he is now in the east.
(494) Sayers 1982a p. 173 ex 30

| nil-a | kan=am | nguch-an | kaaw |
| :--- | :--- | :--- | :--- |
| 3SG(NOM)-a | NOW=ABL | go.early-3SG.PRS | east |
| 'he went east early' |  |  |  |

There are thirteen examples of kan-kan=am 'NOW-RDP=ABL' in the corpus; (495) is typical. The reduplication adds emphasis, without changing the underlying meaning of $k a n=a m$ 'NOW=ABL'
(495) Kilham et al 1986 p. 5

| ngay-ang | weech-an | kan-kan=am-a |
| :--- | :--- | :--- |
| 1SG-ACC | hurt-3SG.PRS | NOW-RDP=ABL-a |
| I'm truly sick! (it is really hurting me)' |  |  |

### 10.2.1.5 Allative

The allative marker =ak affixes to $k a n$ 'NOW' to create $k a n=a k$ 'NOW=ALL' and contrasts with the use of the ablative. Unlike potential ambiguity between =am 'ABL' and 'EMPH', there are no alternative interpretations for the affix =ak. The lexicon definition of kanak is 'ready'. The allative is rarer than the ablative in the corpus; only 12 examples of the former against 33 of the latter. In example (496) the free translation of 'are we ready?' describes that the subjects are now able to do something (not explained). That is, the point in time represented by 'NOW' represents the start of an activity. The free translation provided says the activity is 'to go' but that is not overtly expressed.
(496) Kilham et al 1986 p. 49

| ngamp | kan=ak | ey? |
| :--- | :--- | :--- |
| 1PL.INCL(NOM) | NOW=ALL | INT |
| 'are we ready to go?' |  |  |

Similarly, in (497) the subject will be going to see his wife and child, a process that will take time and kan=ak 'NOW=ALL' means that he is about to start the process.
(497) Sayers 772BY2.38

| ngay | kan=ak | iiy-ang | wanch puk | thath-an-a |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | NOW=ALL | go-1SG.FUT | woman child | see-NF-a |
| 'I will go now to see my wife and child' |  |  |  |  |

### 10.2.1.6 Definite Marker

The use of the definite marker =an to mark adverbial clauses is discussed in section 13.1.3. The examples of $k a n=a n$ 'NOW=DEF' in the corpus all fit the pattern described there of =an attaching to the last word preceding the verb in a subordinate
clause. Example (498) is typical, where kan=an precedes the verb thee'- $\varnothing$-a 'throw-3SG.PST-a', marking the clause indicated by [] as subordinate. The inflection kan=an 'NOW=DEF' does not alter the meaning of kan 'NOW'. (The compound kanngul 'NOW-then' in (498) is described in section 10.2.3.)
(498) Sayers 1982a p. 152 ex 25

| $[k e p$ | $k a n=a n$ | thee'- $\varnothing$-a] |
| :--- | :--- | :--- |$\quad$| an-a kan-ngul |
| :--- |
| [month(ABS) |
| NOW=DEF throw.3SG.PST-a] |$\quad$| DIST-a NOW-then |
| :--- | :--- |

### 10.2.1.7 Summary

In summary, kan 'NOW' is a temporal adverb which refers to points in time from immediate past to near future relative to the deictic centre. The three case markers =am 'ABL', =ak 'ALL' add a durative sense 'from NOW' and 'to NOW' while =ang 'LOC' has a punctual meaning of 'at the current time'.

The above should make clear the reasons that this thesis adopts the analysis of =am being ablative and not the emphatic marker. Firstly the sense can be analysed as being 'from now', an interpretation not available to the emphatic marker. Secondly, it is clear that the allative and locative do attach to kan 'now' and it would create an anomaly if the ablative did not also attach.

Kilham et al (1986 p. 48) report that as an exclamation kan! also means 'all right' as in 'it's all right, it doesn't matter', a meaning apparently unrelated to its normal use. This also applies to the inflected form kanak 'enough', as can be seen in (499), which can perhaps be construed as inceptive aspect, if one considers this to be a exclamation to cease an activity.
(499) Kilham et al 1986 p. 49

> kan=ak-a! NOW=ALL-a 'enough!'

A standard expression to end a story is kan plus a demonstrative, as in (500), the end of a narrative about Papua New Guinea.
(500) Sayers 1982a p. 162 ex 140
kan nan-man-a NOW MED-SAME-a 'that's all'

### 10.2.2 ngul 'then'

The lexeme ngul has the primary meaning of 'then' in the sense of 'following after', as seen in examples (501) to (503) where events are in the past, future and present respectively. As for kan 'NOW', the sense is relative to the deictic centre.
(501) Kilham et al 1986 p. 84

| ngul yuk punth=an | ya' | thuth- $\varnothing$ |
| :--- | :--- | :--- |
| then TREE arm(ABS)=DEF | really | break-3SG.PST |
| 'then the tree branch broke' |  |  |

(502) Sayers 1982a p. 172 ex 12

| ngaa' | thon | nath | ngul | iiy-ang-a |
| :--- | :--- | :--- | :--- | :--- |
| night | another | maybe | then | go-1SG.FUT | 'maybe another night then I will go'

(503) Sayers 1982a p. 184 ex 16

| nil may | ngul-wey | mungk-an |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | VEG then-EMO | eat-3SG.PRS |
| 'then he eats the food' |  |  |

The definite marker =an DEF' also attaches to ngul 'then'. With a verb in the past tense ngul=an 'now=DEF' identifies the event as relative to a previously mentioned event, as in (504).
(504) Sayers 1982a p. 150 ex 7

| aak | chil | ngul=an | mich-ath- $\varnothing$-a |
| :--- | :--- | :--- | :--- |
| PLACE | sand(ABS) | then=DEF | soft-TR-3SG.PST-a |
| 'then she softened the sand' |  |  |  |

With a verb in the future tense, as in (505) and (506) the sense becomes 'later'.
(505) Sayers 1982a p. 178 ex 88
than ngul=an iiy-ayn
3PL(NOM) then=DEF go-3PL.FUT 'they will come later'
(506) Kilham et al 1986 p. 91

| nint | ngak=ang | ngul=an | uk-an-a |
| :--- | :--- | :--- | :--- |
| 2SG(NOM) | water=LOC | then=DEF <br> go-2SG.FUT-a |  |
| an path=iy | nint-ang |  |  |
| DIST bite-3SG.SBJV | 2SG-ACC |  |  |

There are three examples in the corpus where ngul 'then' adds a predictive sense to the verb. The lexicon entry explains this occurs with verbs in the past tense and ngul 'then' is heavily stressed. This can be seen in (507) where the verb is keek- $\varnothing$ 'fail3SG.PST' and ngul 'then' changes the meaning to 'predict he will fail.
(507) Kilham et al 1986 p. 147

| nil $\quad$ ngul | keek-Ø |
| :--- | :--- |
| 3SG.NOM then | fail-3SG.PST |
| 'I predict he will fail' |  |

Unlike kan 'NOW', ngul 'then' does not generally take case suffixes, with the exception of $n g u l=a k=a m$ 'then=ALL=ABL', translated as 'forever', as in (508). The ending =am is not considered to be the emphatic marker. The semantics appear to be 'from then and to then' i.e. forever.
(508) SIL 1984 John 6.40

| than | ngul=ak=am | wun-ayn |
| :--- | :--- | :--- |
| 3PL(NOM) then=ALL=ABL | be-3PL.FUT | nung=ant=ang |
| 'they will be with him forever' |  |  |

The only current example of ngul 'then' appearing to take a case suffix is (509). With just the one example, it is difficult to speculate as to the exact sense.
(509) Sayers 1982a p. 181 ex 133

| ngul=ak=an | nath=ak | palam | yipam kal-antan |
| :--- | :--- | :--- | :--- | :--- |
| then=ALL=DEF | away=ALL | back | so.that carry-3SG.PRS |
| 'later they will bring them back' |  |  |  |

There are two compounds for ngul; ya'-ngul 'NO-then' (finished) and ke'-ngul' 'NEGthen' (never), both literally 'no then'. Examples are (510) and (511).
(510) Sayers 1982a p. 162 ex 141

| ya'-ngul puk | many=ant=am <br> finished child <br> small=DAT=GEN | nan=iy |
| :--- | :--- | :--- |
| MED=TOP |  |  |
| 'that is the end of that child's (story)' |  |  |

(511) Kilham et al 1986 p. 97

| putham | ke'-ngul | wunp-imp-a |
| :--- | :--- | :--- |
| again | never | put.in-1PL.INCL.SBJV-a |
| 'we shouldn't put in any more' |  |  |

There are other compounds of ngul 'then' formed with demonstratives in, ing 'PRX', an, ang 'DIST' and nan, nang 'MED', as discussed in sections 6.1.1.6 and 6.1.5.4 respectively.

### 10.2.3 Interaction between kan 'NOW' and ngul 'then'

The contrast between the two lexemes kan 'NOW' and ngul 'then' can be seen in example (512) where ngul is relevant to the past and future while kan addresses the present.

| ngay | ke' | ngul | iiy-ing |
| :---: | :---: | :---: | :---: |
| 1SG(NOM) | about.to | then | go-1SG.SBJV |
| ing $=a m$ | kan | aak | mak-ang-a |
| PRX=EMPH | H NOW | PLACE | stick-1SG.FUT |
| ngul iiy | iiy-ang | aak | -an-a |
| then go | go-1SG.FU | UT PLA | =ALL=DEF-a |
| 'I was about to go then, now I will stay right here and then later go ho |  |  |  |

The two also form a compound, kan-ngul 'NOW-then' which is described in the lexicon as a "verbal auxiliary" meaning 'begin to'. As for kan 'NOW' ngul 'then', this classification is rejected in favour of the classification as adverb (see section 10.2.1.1). The sense of 'begin to' arises from the sense of kan 'NOW' being a deictic point in time, followed by the sense of 'then' provided by ngul.

Examples (513) and (514) illustrate the use. In (513) the subject nil '3SG' is described as needing to 'settle down', with kan-ngul 'NOW-then' adding the sense it should start at the time of speaking and then continue in the future.
(513) Kilham et al 1986 p. 155
$\begin{array}{lll}\text { nil } & \text { kan-ngul } & \text { noch-am-ow } \\ \text { 3SG(NOM) } & \text { NOW-then } & \text { settled-ITR-3SG.SBJV }\end{array}$
'she should settle down'

Similarly, in (514) speaker is stating that he is about to go i.e. after 'now'.
(514) Sayers 1977b ex 9

| ngay | in=am | wun-ang | yippak puth | kan-ngul | iiy-ang |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | PRX=EMPH | be-1SG.PRS | yet | CONJ | NOW-then |
| 'I am right here but I am about to go' |  |  |  |  |  |

The evidence from these examples supports the lexicon definition of 'beginning' in that in each case a point in time is identified where a particular state or action commences but with indefinite ending. The inverse form of ngul-kan 'then now' is not attested although the unhyphenated ngul kan 'then NOW' occurs in a couple of examples such as (515). It is not entirely clear what this sequence means.
(515) Sayers 1982a p. 221

| ngamp | in | New Year | ngul | kan | pey-amp |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1PL.INCL(NOM) | PRX | New Year | then | NOW | jump-1INCLPL.PST |
| 'we have just launched into the New Year' |  |  |  |  |  |

### 10.2.4 Notes on the Wik-Mungkan Literature

The first mentions of the lexemes kan 'NOW' and ngul 'then' are by Ursula McConnel in her translations of Wik-Mungkan myths (e.g. McConnel 1931) where she consistently translated kan as 'now' and ngul(a) as 'by and by' and 'lest'.

The first detailed description is believed to be in Godfrey (1967), a paper for which no copy has been found but is referenced in Kilham (1977 p. 53). Kilham (1977 pp. 5355) discusses kan and ngul as being verbal auxiliaries acting as aspect markers. It is not clear what is meant by the term 'verbal auxiliary' as opposed to 'adverb'. 'Verbal auxiliary' is presumably not meant to mean 'auxiliary verb' as there are no verbal characteristics to these lexemes.

Kilham (1977 p. 53 Figure 9) copies a table from Godfrey (1967), reproduced here as Table 35, showing how kan 'now' and ngul 'then' function as aspect markers depending on tense.

|  | Past | Present | Future |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| kan | Punctiliar | Temporal; now, <br> then | a) Immediate <br> Future <br> b) Desiderative |  |  |
| kanam | Completive |  |  |  |  |
| ngul | a) Predictive <br> b) Temporal; then <br> c) Conjunction; so, <br> so then, well then | a) Temporal; later <br> on <br> b) Intentional | Temporal; later on |  |  |
| kanan | after |  |  |  |  |
| ngulana <br> ngulaniya 77 | Temporal; after <br> that, then |  | Near Future |  |  |
| kan-ngul | a) Inchoative <br> b) Completive |  |  |  |  |

Table 35: kan and ngul with tense by Godfrey (1967), reported by Kilham (1977 p. 53)

Note that sense a) in past tense of ngul 'then' is described by Kilham (1977 p. 54) as occurring when ngul 'then' is the intonation centre of the clause and precedes a verb in past tense.

Sayers (1977b) combined a different view of these two adverbs with a separate view merging tense, mood and aspect. The philosophy behind her categorisation was that the Aboriginal world view did not see time as linear, but rather as cyclic. In that philosophical view the concepts of past, present, future and 'aspect' are all subsumed under a general concept of aspect. Table 36, a copy of (Sayers 1977b p. 76 Diagram 1) summarises this view by mapping the tense, mood concepts onto aspect concepts. Thus the concepts of past and future tense map onto 'accomplished' and 'projected' aspect and subjunctive maps onto 'hypothetical' aspect. The final two columns are the same 'customary' and 'continuous / repetitive' aspect. As noted in section 9.2, where the nomenclature of 'habitual' and 'continuative' aspect are used for these terms respectively, they are not limited to the present tense, as seems to be implied in table 36. Equally, the use of the present

[^33]tense is not limited to habitual and continuative aspects (see section 9.1.1). Additionally, moods in Wik-Mungkan are not limited to the subjunctive and the subjunctive is used to express different moods (see section 9.3). This thesis has retained the more usual classifications of tense, mood and aspect.

| Tense |  | Mood | Aspect |  |
| :---: | :---: | :---: | :---: | :---: |
| Past <br> (Non-Fut) | Fut | Subjunctive | Customary <br> (Pres. continuous) | Continuous / <br> repetitive |
| Aspect |  |  |  |  |
| Accomplished | Projected | Hypothetical | Customary | Continuous / <br> repetitive |

Table 36: Sayers 1977b p. 76 Diagram 1
Sayers (1977b) also disagreed with this categorisation of ngul 'then', kan 'NOW' and kan-ngul 'NOW-then' described by Kilham (1977 pp. 53-55). She preferred to see ngul 'then', kan 'NOW' and kan-ngul 'NOW-then' as forming a temporal sequence (Sayers 1977b p. 79 Diagram 2) as shown in table 37, interacting with the aspect categories in table 36. Although there are overlaps with the descriptions of tense, mood and aspect and the use of the temporal adverbs, the nomenclature of Sayers (1977b) has not been adopted.

| ngul | kan-ngul | kan | kan | kan-ngul | ngul |
| :--- | :--- | :--- | :--- | :--- | :--- |
| past remote <br> to close | specific past | immediate <br> past | immediate <br> future | immediate <br> future | future |
| 'and then' | 'already' <br> 'at last' <br> 'began to' | 'now' | 'now' | 'about to' | 'later' |

Table 37: Time sequence for kan, ngul as per Sayers 1977b p79
Later, Sayers (1982a p. 8) cites the analysis in Sayers (1981), an unpublished manuscript which has no known extant copy. In Sayers (1982a p. 8) she states that 'kan was always seen as punctiliar and ngul was seen to have a primary temporal meaning (but) recent analysis has however shown that the basic meaning of ngul is "successive"'. The exact meaning she intends to convey with these terms is unclear. She further states that Kilham had been persuaded of this view but there is no corroboration of this assertion. In fact, the later work Kilham et al (1986), which
would be expected to mention this interpretation, does not do so.

Both Kilham (1977 p. 54) and Sayers (1977b p. 82) mention the use of kan=an 'NOW=DEF' in subordinate clauses but not within the context of the standard marking of finite subordinate clauses.

In summary, there is no significant conflict between the general semantics and distribution described by Kilham (1977) and Sayers (1977b, 1982a) and the earlier description in this chapter. Some inflections are not included e.g. kanak 'NOW=ALL', kan-kan=ang 'NOW-RDP=LOC' or not correctly analysed e.g. kanan 'NOW=DEF' as marking subordinate clauses. A difference between the current analysis and that of these past authors is the categorisation. The term 'temporal adverb' is preferred over 'verbal auxiliary'. The glosses for kan as 'NOW' and ngul as 'then' are considered sufficient, even if more idiomatic English is required for free translations.

### 10.2.5 kuyam 'used to'

As for kan 'NOW' and ngul 'then', the lexeme kuyam 'used.to' is classified in the lexicon as a 'verbal auxiliary'. As discussed further in section 10.2.4, it is not clear what this terminology is intended to mean. For this thesis kuyam 'used.to' is considered an adverb, primarily on the basis of distribution and the absence of inflected or derived forms; see section 3.4 for further discussion. Example (516) demonstrates that kuyam 'used.to' is directly adjacent to the verb ump-in 'cut3PL.PST', the typical distribution for adverbs. In this example, it provides the implicature of an habitual meaning of 'they used to cut the umbilical cords with mud shells'.
(516) Sayers 1982a p. 156 ex 76


Similarly, example (517) describes a person as having habitually prayed in the past; the adverb kuyam 'used.to' providing the meaning of the verb being an habitual
event.
(517) Sayers 1976c p. 43 ex 43

| nil=an | kuyam | al=ant=am |
| :--- | :--- | :--- |
| 3SG(NOM)=DEF | used.to | DIST=DAT=GEN |
| mee'-wuthanam- $\varnothing$ | pungk=ang |  |
| pray-3SG.PST | knee=LOC |  |
| 'He used to pray on his knee to that one' |  |  |

There are four examples of kuyam 'used.to' in the corpus which seem to express an event as being continuous rather then recurring. Three are from the one story 'The Snake' in Kilham (1977 p. 258). Example (518) is one of these, describing the eponymous snake as having seen a woman straining yams. It is not clear what sense kuyam 'used.to' adds to this example; omitting it would not appear to change the free translation.

## (518) Kilham 1977 p. 258 ex 30

| thon kuyam thath- $\varnothing$ | an may | ka'ar | inth-an-ey |
| :--- | :--- | :--- | :--- |
| other used.to see-3SG.PST DIST VEG | hairy.yam(ABS) | squeeze-INF-TAG |  |
| 'another he saw (there) straining yams' |  |  |  |

The fourth anomalous example was also in Kilham (1977 p. 249), repeated in Sayers (1982a p. 159 ex 101); example (519). The reduplicated verb mungk-mungk- $\varnothing$ 'she was eating' expresses continuative aspect (see section 9.2.1) so it is unclear what kuyam 'used.to' expresses in this example. It is perhaps reinforcing the continuity of eating to express the idea that the woman in question was eating a lot.
(519) Sayers 1982a p. 159 ex 101

| thaa' $\quad$ an=an | kuyam | pi'an-wey | mungk-mungk- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| mouth $\quad$ DIST=DEF | used.to | big-EMO | eat-RDP-3SG.PST |
| 'she just ate and ate' |  |  |  |

Notwithstanding these four examples, the usual meaning of kuyam 'used to' is to imply a recurring or customary event.

As an aside, there is a possibly related lexeme kuyak 'beforehand' and the word kuy '?' which only appears in a phrase in the lexicon kuy thee'-an '? throw/give-NF' with the definition of 'to accompany'. Speculatively, this suggests that kuyam and kuyak should be analysed as kuy=am '?=ABL' and kuy=ak '?=ALL', which would also
explain why neither are found with inflections, especially case.

There are three examples of kuy thee'-an '? throw/give-NF' (to accompany) in the corpus, all from the Wik-Mungkan Bible. Example (520) illustrates this with the phrase being used as a statement that a group (of three) will go with the subject (Jesus in context).
(520) SIL 1984 Mark 5.37

| thaw- $\varnothing$ | thant | kuy thee'-ayn | nun-ang |
| :--- | :--- | :--- | :--- |
| say-3SG.PST | 3PL.DAT | accompany-3PL.FUT | 3SG-ACC |
| 'he said to them that they will accompany him' |  |  |  |

There is only one example of kuyak 'beforehand' in the corpus; (521), where it describes the subject as having hit another person, before leaving for Cairns. The free translation provided does not translate kuyak 'beforehand' so its exact meaning remains unclear.
(521) Kilham et al 1986 p. 82

| nil | kuyak | piik- $\varnothing$-an | chaapar | nil |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) | beforehand | hit-3SG.PST-ACC | blood | 3SG(NOM) |
| an-ngul | mo'- $\varnothing$-ant-am | Cairns=ak-a |  |  |
| DIST-next | run-3SG.PST-DAT-ABL | Cairns=ALL-a |  |  |
| 'He hit him and made him bleed before he left for Cairns' |  |  |  |  |

Apart from kuy '?', kuyam 'used.to' and kuyak 'beforehand' appearing to be related formally and the latter two expressing temporal information, it cannot be definitively stated that they are related.

### 10.2.6 Other Temporal Adverbs

Kilham (1977 p. 56) also claims three other lexemes are used to provide aspectual information; murkanam 'constantly' and ngoongkam 'constantly' for iterative aspect and ngoontan 'always' for durative aspect. They are briefly discussed here but in each case there are so few examples in the corpus that no conclusions are drawn. In fact it is doubtful that ngoongkam should be translated as 'constantly', as will be discussed below.

Firstly, in the lexicon, murkanam is defined as 'keep on doing something' or 'constantly', as in (522), the only example. The translation that the subject worked constantly is, on the face of it, not supportive of an iterative aspect. The verb stem iiy 'go' is reduplicated, indicating continuative aspect (see section 9.2.1); the role of murkanam 'constantly' seems to add emphasis rather than aspect. With one example little more can be said.

## (522) Sayers 1982a p. 150 ex 11

| murkanam | an-man |
| :--- | :--- |
| constantly | DIST-SAME.DEF | | iiy-iiy- (Ø-wey |
| :--- |
| go-RDP-3SG.PST-EMO |

The other lexeme noted by Kilham (1977 p. 56) as providing iterative aspect is ngoongkam 'constantly'. This sense is not found in the lexicon; the gloss is ngoongk=am 'don't.know=EMPH' and best translated as 'unaware'. All examples in the corpus support this latter definition, as in (523) where it modifies the verb iiy-iiyan 'go-RDP-3PL.PST' (they went) to express that they were going along without being aware of a snake.
(523) Kilham et al 1986 p. 44

| than | kaa' | ngoongk=am | iiy-iiy-an |
| :--- | :--- | :--- | :--- |
| 3PL(NOM) | nose | don't.know=EMPH | go-RDP-3PL.PST |$\quad$| woyan |
| :--- |
| track |

There is a compound $k e^{\prime}$-ngoongk=am in the lexicon which has two definitions 'not taking any notice' and 'keep on doing something', which is closer to Kilham's meaning. The initial word $k e$ ' can be either 'NEG' or 'similar.to' (see section 12.1.1); the latter is preferred as being semantically more reasonable. This compound can be seen in (524) where again the reduplication of the verb provides continuative aspect so it is unclear what $k$ e'-ngoongk=am 'similar.to-don't.know=EMPH' adds.
(524) Kilham et al 1986 p. 61

| nil | ke'-ngoongk=am | kulich | pung-pung-an-a |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | similar.to-don't.know=EMPH | dress(ABS) | wash-RDP-3SG.PRS-a |
| 'she keeps on washing clothes'. |  |  |  |

The lexicon contains three examples of the adverb ngoontan, the third lexeme noted by Kilham and stated to provide durative aspect. The translation in the lexicon is 'keep on and on' which is not significantly different from Kilham's 'always'. Two of
these examples are (525) and (526). In the former the reduplication on the verb iiy-iiy-an 'go-RDP-3SG.PRS' encodes the continuative aspect and on its own would be translated as 'he is hunting'. The full translation of 'he is constantly going hunting' i.e. the subject goes again and again appears to be more an iterative aspect than a durative in this example. In the latter example the suffix -ang on ngoontan 'constantly' is not explained; the typical meaning with adverbs is the locative case which is semantically odd here. It is possible that it should be a distinct lexeme ang which is a distal demonstrative 'there'. The use of the present tense, stem unreduplicated, on mungk-an 'eat-3SG.PRS' can also have an habitual reading (see section 9.2.1) which renders the translation 'he keeps eating' ambiguous. As with murkanam 'constantly' above, the lack of examples prevents definitive comment.
(525) Kilham et al 1986 p. 145

| nil | ngoontan | iiy-iiy-an | minh=ak |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | constantly | go-RDP-3SG.PRS | MEAT=ALL |

(526) Kilham et al 1986 p. 145 lexicon example

| nil | ngoontan-ang | may | mungk-an |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | constantly-? | VEG | eat-3SG.PRS | 'he keeps eating vegetable food'

### 10.3 Spatial adverbs

There are two spatial adverbs of movement pal 'hither' and puy 'thither'. These are glossed by Kilham et al 1986 (p. 166, 196) as 'here' and 'there' respectively but this does not adequately describe the semantics of these lexemes. This section first discusses the use of the words when used in isolation, then the various inflections which apply, especially case marking. Then there will a discussion of how the two lexemes interact with each other and in compounds. Finally there will be a brief discussion of cardinal directions and other spatial adverbs.

### 10.3.1 Pal 'hither'

This lexeme expresses the meaning of movement towards the deictic centre, which is pragmatically determined. The most common deictic centre is the speaker, as in (527) where the speaker is asking the addressee to come to them. For this reason
pal will be glossed as 'hither'.
(527) Kilham et al 1986 p127

| nint | pal | iiy-an |
| :--- | :--- | :---: |
| 2SG(NOM) | hither | go-2SG.FUT |
| 'come to me and be company for me (sic) |  |  |

The deictic centre can be extended from speaker to encompass others in the speech situation, as in (528) or the general locality, as in (529).
(528) Kilham et al 1986 p. 21

| ngak bul $^{78}$ | emp-an | pal | kal-an | ngamp-ar |
| :--- | :--- | :--- | :--- | :--- |
| water water(ABS) | draw-2SG.FUT | hither | bring-2SG.IMP | 1PL.INCL-DAT |
| 'draw water and bring it to us to drink' |  |  |  |  |

(529) Kilham et al 1986 p. 40

| kaap | pal | kuuw |
| :--- | :--- | :--- |
| storm(ABS) | hither | west |
| 'a storm is coming from the west' |  |  |

When combined with a verb in subjunctive mood the deictic centre can become the desired outcome, as in (530) where the desired outcome is for the speaker to go to Darwin.
(530) Kilham et al 1986 p. 87

| ngay | pal | Darwin=ak | mo'-ing |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | hither | Darwin=ALL | run-1SG.SBJV |
| 'I wish I could go to Darwin' |  |  |  |

The deictic centre does not necessarily shift from speaker in this use, as in (531), where the desired outcome is for the speaker to be able to buy things, the adverb pal 'hither' encoding that the things would come to the speaker.
(531) Kilham et al 1986 p. 14

| ngay | an-angan | pal | piiy-ing |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | DIST-PL.ABS | hither | buy-1SG.SBJV |
| 'I wish I could buy those things' |  |  |  |

The deictic centre can also be addressee based, as in (532) where the addressee is being told that a snake will fall from high (keny-uw 'high-on') towards the addressee, not the speaker. The combination of ngul 'then' with past tense is predictive; see

[^34](532) Kilham et al 1986 p. 201

| thuuk | pal | keny-uw | ngul | ench- $\varnothing$ | nungkar-a |
| :--- | :--- | :--- | :--- | :--- | :--- |
| snake(ABS) | hither |  |  |  |  |
| high-on | then | fall-3SG.PST | 2SG.DAT-a |  |  |
| 'a snake will then fall on you' |  |  |  |  |  |

Finally the centre can be a place external to the speech situation, as in (533) which is a narrative describing that a group (encoded by the verbal suffix -in '3PL.PST') put firewood towards the top of a fire place pi'-a 'ant-bed'.
(533) Sayers 1982a p. 180 ex 109

| thum | wunp-in | pi'-a | pal |
| :--- | :--- | :--- | :--- |$\quad$| keny-uw |
| :--- |
| fire(ABS) | put-3PL.PST | ant.bed-a | hither |
| :--- | :--- | high-on

In summary, of a sample of 74 tokens, 49 had speaker as the deictic centre, 18 had a different deictic centre and 7 were metaphoric or temporal uses.

### 10.3.1.1 Inflections of pal 'hither'

The common inflection of $p a l$ 'hither' is $p a l=a m$ which is glossed as 'hither=ABL' and means to return to the deictic centre from somewhere else, as in (534).
(534) Kilham et al 1986 p. 147

| ngay | pal=am <br> 1SG(NOM) | ngul |
| :--- | :--- | :--- |
| hither=ABL | iiy-ang-a |  |
| I will come back later' |  |  |

As with pal 'hither' alone, the deictic centre for pal=am 'hither=ABL' is usually the speech situation but can be something different, as in (535) where the snake has stretched high then coiled back to where it started on the ground.
(535) Kilham 1977 p. 259 ex 35

| kan-a | kalam- $\varnothing$ | pal=am |
| :--- | :--- | :--- |
| NOW-a | coil-3SG.PST | hither=ABL |
| 'then it coiled back (down)' |  |  |

In a few instances (four in the corpus) the definite marker is added to palam to make $p a /=a m=a n$ 'hither=ABL=DEF' to identify the place being returned to as being previously mentioned, as in (536).
(536) Kilham et al 1986 p. 6

| ngamp | aak | umpuyam | iiy-amp-a |
| :--- | :--- | :--- | :--- |
| 1PL.INCL(NOM) | PLACE | forever | go-1PL.INCL.FUT |
| pal=am=an | ke'-ngul | wamp-amp |  |
| hither=ABL=DEF | never | come-1PL.INCL.FUT |  |
| 'we are leaving this place forever and not coming back' |  |  |  |

There is a single example of $p a l=a m=a k$ 'hither=ABL=ALL'; (537). Without further examples it is difficult to analyse further.
(537) Kilham et al 1986 p. 265

| ngay | yaam=ak | ya'a | ngay | pal=am=ak |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | long.time=ALL | NO | 1SG(NOM) | hither=ABL=ALL |
| 'I'm not going for long. I'm coming back' |  |  |  |  |

Finally there is the form pal=angk 'hither=LOC'. There are only three examples in the corpus; (538) is one. In each case the meaning appears to be movement to the deictic centre with the added sense of staying in that place following that movement.
(538) Kilham et al 1986 p. 166

| wonk pal=angk | nyiin-an | ngathar=ang | thinth |
| :--- | :--- | :--- | :--- |
| side hither=LOC | sit-2SG.IMP | 1SG.DAT=LOC | close |
| 'sit on this side close to me' |  |  |  |

Reduplication can be used for emphasis, as in (539).
(539) Kilham et al 1986 p. 121

| pal-pal | dinghy | kal- $\varnothing$-a |
| :--- | ---: | :--- |
| hither-RDP | dinghy | bring-2SG.IMP-a |
| 'row the dinghy closer' |  |  |

There are also a number of compounds and phrases which include pal 'hither', notably in demonstratives (see section 6.1.1.5) and with puy 'thither' (see next section). The interactions between pal 'hither' and puy 'thither' and other lexemes will be discussed in section 10.3.3.

### 10.3.2 Puy 'thither'

The lexeme puy 'thither' is the mirror image of pal 'hither' in expressing movement away from the deictic centre, as in (540) and (541). In each example the deictic centre is the speech situation and the addressee is being told to go away. As for pal
'hither', the deictic centre is most commonly the speaker so the gloss of 'thither' will be used.
(540) Kilham et al 1986 p. 169

| puy | iiy- $\varnothing$-a |
| :--- | :--- |
| thither | go-IMP-a |
| 'go away' |  |

(541) Kilham et al 1986 p. 241

| niiy | puy | kech |
| :--- | :--- | :--- |
| 2PL(NOM) | thither | mon-a |
| 'run far away (from here)' |  |  |
| run-2PL.IMP-a |  |  |

Like pal 'hither', puy 'thither' can also be static i.e. there is not necessarily movement involved, as in (542).
(542) Sayers 1982a p176 ex 70

| ngeen-wiy puy thath-antan |  |
| :--- | :--- | :--- |
| avoidance.name(ABS) | thither see-3PL.PRS |
| 'they see the sacred man further away' |  |

There are insufficient examples in the corpus to understand how shifts in the deictic centre are manifested in the use of puy 'thither'. Example (543) shows that it does occur, as the deictic centre is the origin of the fire.
(543) Kilham et al 1986 p. 197

| thum | puy=am=am | ngul | pench-pench- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| fire(ABS) | thither=ABL=EMPH |  |  |
| 'the fire burnt further and further' |  |  |  |

There are also some interesting metaphorical uses, such as (544) where it is used to describe the 'words' going from the subject at a greater and greater volume.
(544) Kilham et al 1986 p. 197

| nil | puy-puy=am | wik | pech- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | thither-RDP=EMPH | WORD | shout-3SG.PST |
| 'he shouted out all the louder' |  |  |  |

### 10.3.2.1 Inflections of puy 'thither'

As for pal 'hither', puy 'thither' can be marked for case, especially the ablative, and the emphatic marker =am 'EMPH'. Both can be seen in (543) above.

There is one example in the corpus of the puy 'thither' with the locative case; (545).
(545) Kilham et al 1986 p. 204

| ngay puy=ang=am | pek | wunp-ang-an-a |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) thither=LOC=EMPH |  |  |
| 'I | down | put-1SG.PST-3SG.ACC-a |

There are also three examples of the use of the definite marker, as in (546).
(546) Kilham et al 1986 p196
puy=an ke' iiy-al-a
thither=DEF NEG go-1INCL.DU.FUT
'let's go no further'
Unlike pal 'hither', puy 'thither' does not combine with demonstratives. As noted above, the two lexemes do combine in various forms, to be described in section 10.3.3.

Huchet (1990 p. 64 ex 4.10 - see example (547)) includes an inflection not found anywhere else; the suffix -man which probably means 'the same' (refer section 6.2.2.1 for further discussion). Her interpretation of -man is that it means 'contrastive emphasis' so that the translation implies that 'he's somewhere else'. As also discussed in section 6.2.2.1 this interpretation is rejected but the usage in (547) is not clear. Pending further data this appears an anomaly.
(547) Huchet 1990 p. 64 ex 4.10

| nil thaa' $\quad$ puy-man | iiy- $\varnothing$-a |
| :--- | :--- | :--- |
| 3SG(NOM) really thither-same | go-3SG.PST |
| 'he has gone far away' |  |

### 10.3.3 Compounds / Phrases with pal 'hither' and puy 'thither'

The most common combination of these lexemes is pal puy 'hither thither', which in the various sources is also rendered pal-puy 'hither-thither'. As the majority of uses are without the hyphen, this will be the standard use in this thesis. The general meaning of the phrase is similar to the English 'hither and thither' or 'to and fro', as in (548) and (549). It can also be metaphorical, as in (550) where the speaker is describing their hand as going to and fro, meaning they are busy.
(548) Kilham et al 1986 p. 267

| yanth mo'-mo'- $\varnothing$ | pal | puy thant=am-a |
| :--- | :--- | :--- | :--- |
| quickly run-RDP-3SG.PST | hither | thither 3PL.DAT=ABL-a |
| 'it (a chicken) ran quickly back and forth, evading them (children)' |  |  |

(549) Kilham et al 1986 p. 167

| wunt | pal | puy |
| :--- | :--- | :--- |$\quad$ peny-an

(550) Kilham et al 1986 p. 66

| ngay | ma' | pal | puy iiy-ang |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) HAND | hither | thither | go-1SG.PRS |
| 'I am so busy' |  |  |  |

When the order is inverted to puy pal 'thither hither' the sense can be the same as pal puy 'hither thither', as in (551) or it may become 'hither from over there', as in (552).
(551) Huchet 1990 p. 66 ex 4.13

| puy pal kech ang mal kaaw an-pal=an-a |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| thither hither far | DIST side east | DIST-hither=DEF-a | 'it (spread) in all directions from there on the east side'

(552) Kilham et al 1986 p. 197

| puy pal $\quad$ wee'-nath yaaka' | iiy-iiy-an-a |
| :--- | :--- | :--- |
| thither hither $\quad$ who-maybe perhaps | go-RDP-3SG.PRS |
| 'who is coming from over there?' |  |

The combination pal=am puy=am 'hither=EMPH thither=EMPH ${ }^{791}$ also exists. As for pal puy the sources use the form palam-puyam and palam puyam with no explanation as to the distinction. This thesis adopts the convention of not using the hyphen. Examples of this usage are (553) and (554).
(553) Sayers 1982a p. 174 ex 37

| tha'-tha'-ow | nung=am=ang | itangam |
| :--- | :--- | :--- |
| push-RDP-3SG.FUT | 3SG.DAT=GEN-ACC | slowly |

pal=am
puy=am
thither=EMPH
'he pushes himself (slowly) backwards and forwards (in a canoe)'
(554) Sayers 1982a p. 177 ex 75

| pal=am | puy=am <br> hither=EMPH$\quad$thither=EMPH | MEAT kaath pi'an | chint-an |
| :--- | :--- | :--- | :--- |
| 'backwards and forwards he spears the big mother (goose)' |  |  |  |

[^35]The reverse form puyam palam 'thither=EMPH hither=EMPH' is not attested in the corpus.

The spatial adverb pek 'down' combines with puy 'thither' to give the sense of moving down from the deictic centre, as in (555). Similarly keny 'high' combines with pal 'hither' to give the sense of movement down to the deictic centre, as in (556). The reverse combinations of puy keny 'thither high' and pal pek 'hither down' are not attested in the corpus but this absence does not suggest that the combinations are impossible.
(555) Kilham et al 1986 p. 204

| nyeeny-a | thaa'=ang | puy pek ngul | ngoonch- $\varnothing^{80}$ | nungk=ar-a |
| :--- | :--- | :--- | :--- | :--- | :--- |
| fly-a | mouth=LOC | thither down then hide-3SG.PST | 2SG=DAT-a |  | 'the flies will get in your mouth'

(556) Sayers 1982a p. 153 ex 43

| pal | keny-uw=an | kang- $\varnothing$ | wak=ang |
| :--- | :--- | :--- | :--- |
| hither | high-on=DEF | cover-3SG.PST | grass=INST |
| 'she covered it with grass' |  |  |  |

Both pal and puy combine with um 'chest', as in (557) and (558) to mean 'facing hither' or 'facing thither'.
(557) Kilham et al 1986 p. 231

| um pal | than-an |
| :--- | :--- |
| chest hither | stand-NF |
| 'turn face to' |  |

(558) Kilham et al 1986 p. 232

| um puy | than-an |
| :--- | :--- |
| chest thither | stand-NF |
| 'turn back on' |  |

### 10.3.4 Cross-linguistic comparison

The lexeme pal 'hither' and variation pala has been noted in other Pama-Nyungan languages such as Kuuk Thaayorre (Gaby 2017 p. 338), Wik-Ngathan (Sutton 1979 p. 279) and Yir-Yoront (Alpher 1991 p. 401). This last author identifies the form *pala as Proto-Pama-Nyungan. All of these authors report similar semantics i.e. movement towards the deictic centre.

[^36]Similarly, Sutton (1979 p. 279) and Alpher (1991 p. 492) identify puy(a) in the respective languages as having similar semantics to puy 'thither'.

### 10.3.5 Cardinal Directions

The four cardinal points of the compass are adverbs in Wik-Mungkan; kungk 'north', kaaw 'east', yiip 'south' and kuuw 'west'. Other directions are formed by combinations of these e.g. kuuw yiip 'south west'. The words encode the sense of 'towards' the stated direction. The four are all found in the corpus inflected by =am 'ABL' and =angk 'LOC' and uw 'on'. The allative =ak 'ALL' is not found, which is not surprising given that the words themselves encode the sense of 'towards'. The inflection =uw 'on' is only found on kungk 'north' and yiip 'south'. It is probable that the lack of all inflections (apart from =ak 'ALL') on all compass points is an artefact of the corpus, rather than any restriction in the language.

The normal sense of these adverbs is of 'towards' the relevant point, as in (559) where the subject ngan '1PL.EXCL' went towards yiip 'south'.
(559) Kilham 1977 p. 142 ex 295

| ngan | yiip | iiy-an |
| :--- | :--- | :--- |
| 1PL.EXCL(NOM) | south | go-1PL.EXCL.PST |
| 'we went south' |  |  |

The locative changes the sense to 'toward the side' indicated by the direction, as in (560) where the speaker will be going towards kuuw=angk 'west=LOC' (west side).
(560) Huchet 1990 p. 4 ex 21

| ngay mal $\quad$ kuuw=angk | iiy-ang | thantt=ang |  |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | towards west=LOC | go-1SG.FUT | 3PL.DAT=COM |
| 'I am going with them to(wards) the west side' |  |  |  |

The ablative =am 'ABL' changes the direction from 'towards' to 'from', as in (561) where the subject, the wind, is described as coming from the east.
(561) Kilham et al 1986 p. 42

| wunt | pal | kaaw=am | wunp-an-a |
| :--- | :--- | :--- | :--- |
| wind(ABS) | hither | east=ABL | blow-3SG.PRS |
| 'the wind is blowing hither from the east' |  |  |  |

As noted in above, the inflection -uw 'on' is rare (13 examples in total) and the exact semantics are not clear. There are only two examples in the corpus attached to cardinal adverbs; in both the inflected direction is preceded by pal 'hither' which may or may not be significant; it is not clear in either example what this word adds. Example (562) shows this in the second clause (indicated by []). The inflected form yiip-uw 'south-on' encodes where the custom of marrying relatives is to be found.
(562) Kilham et al 1986 p. 6

| [aak | thant | yimanang=an | wun-an | pal |
| :---: | :---: | :---: | :---: | :---: |
| PLACE | 3PL.DAT | like.this=DEF | to.be-3SG.PRS | hither |
| yiip-uw] | [al-al=ant |  | kampan | ngent-ngent-wuntan] |
| south-on | DIST=RD | =DAT=DEF | relation | marry-RDP-3PL.RCP.PRS |

'the custom of the people to the south is to marry any kind of relative' (in their place like this it is, in the south, those (people) marry relatives)

### 10.3.6 Other Spatial Adverbs

Various other adverbs provide spatial information. The word keny 'high' was discussed in 10.1 to illustrate various features used to classify words as adverbs. Similar to that is pek 'down' although this word has fewer inflections, at least in the corpus; of the allative, ablative and locative, only the locative pek=angk 'down=LOC' (underneath) is found. Example (563) illustrates this with contrast to keny=ang 'high=LOC', the latter with the meaning 'on the top bunk' and the former meaning 'on the low bunk', the word 'bunk' being an inference. The subject pronoun ngaynung=ant=iy=a '1SG(NOM)-3SG=DAT=TOP-a' is a relationship pronoun (see section
5.1.5) meaning 'I, her friend' which is only translated as 'I' in the original.

| (563) Sayers 1976a p. 179 ex 6 |  |  |
| :--- | :--- | :--- | :--- |
| ngay-nung=ant=iy=a | keny=angk | wun-ang |
| 1SG(NOM)-3SG=DAT=TOP-a | high=LOC | lie-1SG.PST |
| nil $\quad$ Dora pek=angk |  |  |
| 3SG(NOM) Dora down=LOC |  |  |
| 'I slept on the top bunk, Dora slept on the bottom' |  |  |

A clitic =am can be attached to pek 'down. pek=am. The gloss of 'down=EMPH' is preferred to the homophonous gloss 'down=ABL'. The preference is due to the lexicon translations of 'right down, inside' and examples such as (564) where a reading of ablative would more likely mean 'from down' i.e. coming up, not going down.

| thuch-thuch- $\varnothing$ | pek=am |
| :--- | :--- |$\quad$| ngak=ang=an=iy-a |
| :--- |
| sink-RDP-3SG.PST down=EMPH |$\quad$ WATER=LOC=DEF=TOP=a

The word pek 'down' does take the inflection -uw 'on' although the lexicon makes the velar /k/ a geminate i.e. the word becomes pekk-uw 'down-on' with the translation 'down inside'. As discussed in section 2.4.5.1.1 an orthographic geminate consonant can be conventional to mean that the stress should be on the second syllable, not the first. As discussed above in section 10.1 the exact semantics of -uw 'on' are unclear. The examples in the corpus are not helpful here in elucidating the meaning. This can be seen in (565) where the translation of pekk-uw 'down-on' is merely 'down'.
(565) BS774MYTW19.28

| ngul pekk-uw | an | thath-an |
| :--- | :--- | :--- |
| then down-on | DIST | see-1PL.EXCL.PST |
| 'we looked down (there)' |  |  |

Both keny 'high' and pek 'down' can be reduplicated for emphasis i.e keny-keny 'highRDP' (very high) and pek-pek 'down-RDP' (right down).

There are some instances where pek 'down', especially when reduplicated, is also translated in the corpus as 'inside', as in (566) where pek 'down' modifies the verb ngoonch-an-a 'enter-1PL.EXCL.PST' and means in this instance that the speaker's group went inside'.
(566) Kilham 1977 p. 151 ex 320
ngul pek ngoonch-an-a then down enter-1PI.EXCL.PST 'then we went inside'

Another word which means 'inside' is waap 'inside' but this word is listed in the lexicon as a noun. It appears most often (10 out of 11 examples) in the phrase kuchek waap 'head inside' (brain) but also appears in (567). In this example it appears to be adverbial; as a nominal it would be reasonable to expect adjunct case marking such as =ak 'ALL' or =ang 'LOC'. It is difficult to draw any conclusions from a single example.

The antonym of waap 'inside' and pek 'down', when interpreted as 'inside', is the adverb yoon 'outside', as in (568) where the speaker is stating their intention of going outside. That the antonym is an adverb strengthens the suggestion that waap 'inside' is an adverb.
(568) Huchet 1990 p71 ex 4.26

| ngay | yoon | iiy-ang |
| :--- | :--- | :--- |
| 1SG(NOM) outside | go-1SG.FUT |  |
| 'I'm going outside' |  |  |

Finally, there are four adverbs with complementary spatial deictic meaning; umputh 'front', koyam 'back', koyyuw 'last' and menhang 'in between'. The middle pair seem formally and semantically related via a potential *koy '?' i.e. koyam would be koy=am '?=ABL/EMPH' and koyyuw as koyy=uw '?-on'. However koy in the lexicon is a nominal defined as 'sacred', as in aak koy 'PLACE sacred' which is clearly unrelated. The pair koyam 'back' and koyyuw 'last' will be treated as unrelated adverbs.

Related spatial concepts of 'side' (various lexemes), 'left' (mal thak) and 'right' (mal) are nominal in Wik-Mungkan.

### 10.3.7 Body Part / Spatial Adverb Phrases

There are two words for body parts which combine with spatial adverbs to provide special meanings. Firstly, the body part um 'chest', when combined with various of the above spatial adverbs, takes the sense of 'facing' e.g. um keny 'chest high' (face up) um keny=angk 'chest high=LOC' (sitting up), um kuuw 'chest west' (facing west), um pal 'chest hither' (facing here) and um puy 'chest thither' (facing away). This includes inflected forms of the spatial adverbs. Example (569) illustrates um kaaw 'chest east' (facing east) to describe the direction the subject punth-paam an=an 'airplane $\operatorname{DIST}(A B S)=$ DEF' (that airplane) is facing as it is flying.
(569) Kilham et al 1986 p. 18

| punth-paam | an=an | $m o '-m o '-a n$ |
| :--- | :--- | :--- |
| airplane | DIST(ABS)=DEF | run-RDP-3SG.PRS |

um kaaw Cairns=ak-a
chest east Cairns=ALL-a 'that plane is flying east to Cairns'

Secondly, the body part kon 'ear' combines with keny=angk 'high=LOC' to mean 'alert', as in (570) where the addressee is asked whether they are alert.
(570) Kilham et al 1986 p. 67

| nint | kon | keny=angk | wun-wun-angan |
| :--- | :--- | :--- | :--- | ey?

## 11 Syntax of the Simple Clause

This section describes simple verbal and non-verbal clauses in Wik-Mungkan. The main verbal clause types are intransitive (section 11.1), semitransitive (11.2), transitive (11.3) and ditransitive (11.4). A specific class of intransitive verbs is the set of 'postural' verbs which cross-linguistically have been found to have similar semantic extensions. These are discussed in section 11.5. The remaining sections describe clause types which can be verbal or non-verbal. These are ascriptive (section 11.6), equative (11.7) and existential (11.8). Section (11.9) describes a construction, apparently unique for Wik-Mungkan verbless clauses, featuring the clausal modifier kaangk 'like'. Section 11.10 describes locative clauses.

### 11.1 Intransitive Clauses

Intransitive clauses consist minimally of an intransitive verb with a subject marked on the verb in the STM suffix ${ }^{81}$ with optionally an absolutive subject NP and/or nominative subject pronoun (both null-marked). Where there is an NP and a pronoun, the latter is co-referential with the former and is usually clause-initial (see section 7.1) and both are co-referential with the STM suffix. Also optional are adverbs and adjuncts, the latter marked on the verb and/or as NPs, noting that if marked on the verb, it is rare to have a co-referential NP.

Example (571) is one of the few examples in the corpus of both an adjunct NP, in this case the free pronoun ngath-ar=ang '1SG-DAT=LOC' and a co-referential dative suffix -ar '1SG.DAT' on the verb.

## (571) Sayers 1976a p. 59 ex 11

| nyiin- $\varnothing$-ar | thinth | ngath-ar=ang |
| :--- | :--- | :--- |
| sit-3SG.PST-1SG.DAT | close | 1SG-DAT=LOC |
| 'she sat close to me' |  |  |

There is a strong tendency in Wik-Mungkan to omit constituents where they are clear from context. While there is always a subject marked on the verb (null marked for the

81 Subject/Tense/Mood: see section 8.2 for a description of these portmanteau suffixes
third person singular past and some imperatives), the referent frequently needs to be inferred when the subject is third person. In example (572) the subject on the verb is 3SG, included in the portmanteau STM suffix on the verb. The referent here is a plane which is not specified in this clause.
(572) Kilham et al 1986 p. 28
pek-pek eep-eep-am-an-a
down-RDP low-RDP-ITR-3SG.PRS-a
'(the plane) is very low'

### 11.2 Semitransitive Clauses

Austin (1993) posited a class of verbs in Australian languages he called 'semitransitive'. This class consists of a verb with intransitive syntax (i.e. for WikMungkan an NP subject is absolutive marked or a pronoun subject is nominative) but with an obligatory dative or locative complement. The only verb in Wik-Mungkan which appears to fit this definition is engk-an 'ask-NF" (to ask). There are 21 examples of this verb in the corpus all found with a dative complement, whether an NP, free pronoun or bound pronoun on the verb, as in (573) which has both a dative NP (in [ ]) and a co-referential bound pronoun -ant '3SG.DAT' on the verb.
(573) Sayers 1976a p. 163 ex 3

| nil | wanchinth=an | engk- $\varnothing$-ant |
| :--- | :--- | :--- |
| 3SG(NOM) | old.woman(ABS)=DEF | ask-3SG.PST-3SG.DAT |

## [wanch koman al=ant]

WOMAN girl DIST=DAT
'the old woman asked that young woman ... (remainder of sentence omitted)'

### 11.3 Transitive Clauses

Transitive clauses are identified by a subject that is encoded in the bound STM suffix on the verb and an NP that is ergative marked and/or a pronoun in nominative case. Where both are present, they are co-referential, as described in section 7.1.

Additionally, there is a direct object, one or more of an NP in absolutive case, a (coreferential) pronoun in accusative case or a bound (co-referential) accusative pronoun on the verb. The majority of the examples found in the corpus only have two of the three, as in (574) where the speaker (subject) has seen oony 'a spirit' in absolutive case and a co-referential accusative suffix -an '3SG.ACC' is marked on
the verb.
(574) Kilham et al 1986 p. 5

| ngay $\quad$ oony | thath-ang-an-a |
| :--- | :--- |
| 1SG(NOM) | spirit(ABS) |$\quad$ see-1SG.PST-3SG.ACC

Similarly, (575) shows a free pronoun ngay '1SG' in accusative case and a bound accusative pronoun -any '1SG.ACC' on the verb.

## (575) Kilham et al 1986 p. 32

ngay-ang ngak=ang ep-Ø-any
1SG-ACC water=ERG wet-3SG.PST-1SG.ACC
'I'm soaked through from the rain (the rain wet me)'
Example (576) is one of the few examples with an object $k u^{\prime}$ 'dog' as an NP in absolutive case, a bound pronoun -an '3SG.ACC' on the verb and the free accusative pronoun nun-ang '3SG-ACC'.
(576) Godfrey 1970 p. 747

| ku' | uw-pul-an | nun-ang |
| :--- | :--- | :--- |
| dog(ABS) find-3DU.PST-3SG.ACC | 3SG-ACC |  |
| 'they found the dog' |  |  |

As observed in the Wik-Mungkan literature (e.g. Kilham 1987 p. 363), the tendency for transitive clauses in Wik-Mungkan is for SOV word order when the O is a NP. This can be seen in (574), where ngay '1SG' is the subject and oony 'spirit' is the object. Where O is a pronoun, the tendency is for SVO order, as in (577) where the subject is ngan '1PL.EXCL' and nun '3SG.ACC' is the object.
(577) Sayers 1982a p. 161 ex 126

| ngan | thath-thath-an | nun |
| :--- | :--- | :--- |
| 1PL.EXCL | see-RDP-1PL.EXCL.PST | 3SG.ACC |
| 'we saw him' |  |  |

As the subject is always marked on the verb, there is not necessarily an independent NP or pronoun as subject, as in (576) which is an example of NP plus coreferential pronoun (see section 5.1.2).

Other orders are allowable. Example (575) has the object ngay-ang '1SG-ACC' first,
followed by the subject ngak=ang 'water=ERG' then the verb. Similarly VS order can be seen in (578).
(578) Sayers 1976a p. 96 ex 4

| path-ayn | me'=ang |
| :--- | :--- |
| bite-3PL.FUT | mosquito=ERG |
| 'the mosquitoes will bite.' |  |

There is a strong tendency in Wik-Mungkan to omit constituents where they are clear from context ${ }^{82}$. As for intransitive clauses, there is always a subject marked on the verb but the referent frequently needs to be inferred when the subject is third person. In example (579) the subject on the verb is 3 SG, included in the portmanteau STM suffix on the verb. The referent here is a woman who is the protagonist in story. As the story is all about her, in many places she is only marked on the verb in this way.
(579) Sayers 1982a p. 155 ex 57
thum path-ath-Ø fire(ABS) light-TR-3SG.PST 'she lit a fire'

There is also a small class of transitive verbs where the subject is expletive and only marked on the verb; see section 8.11.

Similarly, if the direct object is clear from context, it too is often omitted, as in (580) where the direct object is not stated but is food, which the speaker is telling (-an '2SG.FUT' is imperative; see section 9.3.2) the addressee to put 'it' up high.
(580) Kilham et al 1986 p. 9

| keny achantang | wunp-an-a |
| :--- | :--- |
| high raised | put-2SG.FUT-a | 'put (it) up there'

### 11.4 Ditransitive Clauses

There are two ditransitive verbs in Wik-Mungkan; aath-an 'give-NF' which also appears in some compounds with idiomatic meaning and waa'-an 'tell'. For aath-an 'give', the lexicon includes the note that what is given is usually food or water, as in (581) where ngan-ang 'PL.EXCL-ACC' is in accusative case and ngak 'water' is in

82 A tendency noted in many Australian languages see e.g. Austin and Bresnan (1996)
absolutive case,
(581) Sayers 1982a p. 207 ex 4

| ngan-ang | ngak | yaa'am | aath-an-a |
| :--- | :--- | :--- | :--- |
| 1PL.EXCL-ACC | water(ABS) | just | give-2SG.FUT |
| 'just give us water' |  |  |  |

The lexicon also includes the homonym aath-an 'spread-NF' as an intransitive verb. There is no obvious semantic link between the two. The lexicon also includes the verb thee'-an 'throw/give-NF' as ditransitive. Regardless of gloss, this latter verb is purely transitive.

The verb waa' 'tell' appears in clauses such as (570) where the direct object is wik=an 'WORD=DEF' (the story) and the story is being told to the dative addressee nungk '2SG.DAT'.
(582) Kilham et al 1986 p. 74

| puth-putham | wik=an | waa'-waa'-ang | nungk |
| :--- | :--- | :--- | :--- |
| RDP-again | WORD(ABS)=DEF tell-RDP-1SG.PRS | 2SG.DAT |  |
| 'I am telling the story over and over (to you)' |  |  |  |

The verb waa'-an 'tell-NF' is also found in a specific construction where a particular person or object is assigned a name. For instance, in (8), repeated her as (583) yuk ongk=an 'stick long=DEF' (a mangrove paddle in context) in absolutive case is one object. It is described as having the name thuul 'thuul' which is the second object, also in absolutive case.
(583) Sayers 1982a p. 174 ex 34

| in-a | yuk | ongk=an |  |
| :--- | :--- | :--- | :--- |
| PRX-a stick | long(ABS)=DEF |  |  |
| than-iy | waa'-antan | thuul-a |  |
| 3PL(NOM)-TOP | tell-3PL.PRS | thuul(ABS)-a |  |
| 'they call this stick "thuul"' |  |  |  |

The lexicon also describes waa'-an 'tell-NF' as a synonym for the verb thee'-an 'give/throw-NF' but there are no examples of the latter usage in the corpus.

### 11.5 Postural Verbs

The canonical verbs designated as 'postural' are sitting, standing and lying (e.g. Newman 2002). These verbs are found cross-linguistically to have many semantic extensions with some common patterns but many variations (ibid for a general summary and some language specific examples). The corresponding Wik-Mungkan verbs are nyiin-an 'sit-NF', than-an 'stand-NF' and wun-an 'lie-NF'.

For the verb nyiin-an 'sit-NF', it is generally ambiguous as to whether the usage is stative or includes a change of posture. For example, the free translation in (584) suggests a change of posture, from standing to sitting, but the verb nyiin-nyiin- $\varnothing$ 'sit-RDP-3SG.PST' could also mean the stative 'we were sitting', especially as the reduplication encodes continuative aspect (see section 9.2.1).
(584) Sayers 1976a p. 39 ex 17

| nyiin-nyiin- $\varnothing$ | minh | nga' $=a k$ |
| :--- | :--- | :--- |
| sit-RDP-3SG.PST | MEAT | FISH=ALL |
| 'We sat down to fish' |  |  |

The only unambiguous change of posture is in (585) where the transitiviser -ath 'TR' creates a transitive verb where the third person plural subject (encoded in the verbal suffix -in '3PL.PST') changes the posture of a dead woman to sitting up. This is the only example of nyiin-ath-an 'sit-TR-NF' in the corpus.
(585) Kilham 1977 p. 74 ex 173

| mul=an-a | wanch-a | nyyin-ath-in | nun |
| :--- | :--- | :--- | :--- |
| dead=DEF-a | WOMAN(ABS)-a | sit-TR-3PL.PST | 3SG.ACC |
| 'they sat up the dead woman' |  |  |  |

There are only ten examples of the verb than-an 'stand-NF' in the corpus with the primary postural meaning. All of these have a stative sense with minimal apparent ambiguity. For instance, in (586) a group of people are standing together; it is possible but unlikely to interpret this as 'they are standing up from sitting together'.
(586) Kilham et al 1986 p. 39

## irpam than-tan

together stand-3PL.PRS
'they stand close (sic) together'

Similar to nyiin-ath-an 'sit-NF', the transitiviser creates the sense of a change of posture, with the affected item being in all but one (out of ten) case an inanimate object. The exception is (587) where the object nun '3SG.ACC' is a baby being stood up by a man.
(587) Sayers 1982a p. 196 ex 32

| than-ath-an | nun |
| :--- | :--- |
| stand-TR-3SG.PRS | 3SG.ACC |
| 'he stands him up' |  |

The primary meaning of wun-an 'lie-NF' can be seen in (588) where a number of people (yot 'lots') have lain down to sleep.
(588) Kilham 1977 p. 41 ex 32

| yot | kan=an | weep | wun-in |
| :--- | :--- | :--- | :--- |
| lots | NOW=DEF | sleepily | lie-3PL.PST |
| 'many had already gone to sleep' |  |  |  |

The verb is also found with inanimate subjects, as in (589) where the subject is may=an-a 'VEG=DEF-a' (food) and the verb wun-in 'lie-3PL.PST' is part of question asking where the food lay. The use of wurp 'nest' to mean 'table' reflects modern usage.
(589) Kilham 1977 p. 205 ex 455

| may=an-a ngeen=ang-a <br> VEG=DEF-a what=LOC-a | wun-in <br> lie-3PL.PST? |
| :--- | :--- | :--- |
| wurp=ang-a bunk=ang thak=im <br> nest=LOC-a bunk=LOC etc=EMPH <br> 'where did the food stay? On the tables and bunks(etc).'   , |  |

Unlike nyiin-an 'sit-NF' and than-an 'stand-NF', the transitiviser is not found with wunan 'lie-NF'.

The verb iiy-an 'go-NF' is most commonly found in Wik-Mungkan with its basic meaning of 'to go', 'to move' (intransitive), as in (590) where the subject ngal '1DU.INCL(NOM)' (we two) are described as having gone to their boss. The verb is included here as a postural verb because it can have extended meanings similar to the other postural verbs (see next section). Such extensions are also found in other Australian languages e.g. Kuuk Thaayorre (Gaby 2017 p. 382) and Martuthunira
(590) Sayers 1976a p. 38 ex 12

| ngal | nungant | iiy-al |
| :--- | :--- | :--- |
| 1DU.INCL(NOM) $\quad$ 3SG.DAT | go-1DU.INCL.PST |  |
| moom ngal=ant=am=ant |  |  |


| boss $\quad$ 1DU.INCL=DAT=GEN=DAT |
| :--- | :--- |
| 'we went to our boss' |

The transitiviser is not found with the verb iiy-an 'go-NF'.

### 11.5.1 Secondary Senses of Postural Verbs

The postural verbs all have extended meanings. Firstly, wun-an 'lie-NF' can take the meanings 'to be' or 'reside'. The former is seen in (591) where the speaker describes themselves as 'being' (wun-wun-ang 'lie-RDP-1SG.PRS') lonely (adjectival complement iingk 'lonely') for another person (dative nungant-a '3SG.DAT').
(591) Kilham et al 1986 p. 35

| ngay | iingk | wun-wun-ang | nungant-a |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) lonely | lie-RDP-1SG.PRS | 3SG.DAT-a |  |
| 'I am lonely for him' |  |  |  |

The second extended meaning of 'reside' can be seen in (592) where wun-an 'lie3SG.PRS' describes that the person in question lives somewhere, in this case a long way away from others.
(592) Kilham et al 1986 p. 240
wachan wun-an thantt=am
long.way lie-3SG.PRS 3PL.DAT=ABL
'he lives a long way from them'
The majority of the instances in the corpus of nyiin-an 'sit-NF' have the basic meaning of 'to sit'. In a handful of exceptions the meaning is 'to be', as in (593). The subject here is the NP ngangk min 'HEART good' (glad) in part/whole apposition to the pronoun ngan '1PL.EXCL', denoting possession (see section 7.2.1).
(593) Sayers 1976a p. 171 ex 4

| ngan | ngangk | min | nyiin- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 1PL.EXCL(NOM) | HEART | good(ABS) | sit-3SG.PST |
| 'we were glad' |  |  |  |

Similarly, in (594), the verb nyiin-nyiin-Ø-wey 'sit-RDP-3SG.PST-EMO' expresses that the subject was hungry.
(594) Sayers 1982a p. 158 ex 97

| meech | nyiin-nyiin- $\varnothing$-wey <br> sit-RDP-3SG.PST-EMO |
| :--- | :--- |
| hungry |  |
| 'she was hungry' |  |

Most of the instances of the postural verb than-an 'stand-NF' have the canonical sense with animate subjects, such as (595), where the (human) protagonists are standing together.
(595) Kilham et al 1986 p. 39
irpam than-tan
together stand-3PL.PRS
'they stand together'

The inanimate subjects tend to be upright, such as trees or houses, or high, such as clouds and wind. Example (596) is an example of a house standing.
(596) Kilham et al 1986 p. 75

| aawuch | in | yiip=an | kulal |
| :--- | :--- | :--- | :--- |$\quad$ than-than-an-a

In some instances the verb iiy-an 'go-NF' has the sense of 'to be' and can be considered a fourth postural verb. This can be seen in (597) where the speaker is talking about herself when she was young, using the clause puk many=am=an iiy-ang-a 'CHILD small(ABS)=EMPH=DEF go-1SG.PST-a' ('I was a child', literally, 'I, a child, was going / went').
(597) Sayers 1976a p. 41 ex 26

| ngay | puk | many=am=an | iiy-ang-a |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | CHILD | small(ABS)=EMPH=DEF | go-1SG.PST-a |
| ngay | in=an | thath-ang |  |
| 1SG(NOM) |  |  |  |
| (wRX(ABS)=DEF | see- I was a child, I saw this' |  |  |

Similarly, in (598) the verb combines with man-yatham 'alive' to create the meaning 'is alive'.
(598) Sayers 1976a p. 78 ex 1

| wiy-a | puth | in-man | man-yatham |
| :--- | :--- | :--- | :--- |
| some-a but | iiy-antan |  |  |
| 'some are alive today' | PRX-SAME | alive $^{83}$ | go-3PL.PRS |

### 11.6 Ascriptive Clauses

Ascriptive clauses contain a subject NP with a verbal or non-verbal predicate ascribing an attribute to the subject NP, typically with an adjectival complement. Example (599) is a typical non-verbal clause, where the subject is the proximal demonstrative in 'PRX' and the complement is the adjective pi'an-aa 'big-INT', modified by the adverb wuut 'really' to ascribe the attribute 'really big' to the referent encoded by the demonstrative.
(599) Sayers 1976a p. 7 ex 3

$$
\begin{aligned}
& \text { in=an wuut pi'an-aa? } \\
& \text { PRX=DEF really big-INT } \\
& \text { 'this one is really big, isn't it?' }
\end{aligned}
$$

Ascriptive verbal clauses typically contain one of the postural verbs, as in (600), where the subject nil '3SG' is ascribed the quality of kul=am 'angry=EMPH', translated in the free translation as 'serious'. The postural verb is nyiiy-an-a 'sit-3SG.PRS-a'.
(600) Kilham et al 1986 p. 216

| nil $\quad$kul=am <br> angry=EMPH | nyiin-an-a <br> sit-3SG.PRS-a |
| :--- | :--- |
| 'he is so serious' |  |

In (601) the subject 3SG is encoded in the verbal suffix - $\varnothing$ '3SG.PST' and is ascribed the attribute kuchar 'cold'.

[^37](601) Kilham 1977 p. 257 ex 3
kuchar iiy-iiy- $\varnothing$
cold go-RDP-3SG.PST
'it became cool'
The verb ween-an 'become-NF' is similar to the postural verbs in generally requiring an adjectival complement. This can be seen in (602) where the subject is aak=an 'PLACE=DEF' and the complement is way 'bad'.
(602) Kilham et al 1986 p. 249

| aak=an | way | ween- $\varnothing$ |
| :--- | :---: | :--- |
| PLACE=DEF | bad | become-3SG.PST |
| 'this place has become bad' |  |  |

There are 14 examples in the corpus of the verb ween-an 'become-NF' and all bar one have an adjectival complement. The sole exception is (603), where the attribute the subject nil '3SG(NOM)' is the noun pikkuw 'crocodile'.
(603) Kilham et al 1986 p. 249

| nil | pikkuw | ngul | ween-Ø |
| :---: | :---: | :---: | :---: |
| 3SG(NOM) | crocodile | then | become-3SG.PST |
| 'he (then) be | came a cr | dile' |  |

### 11.7 Equative Clauses

As noted by Kilham (1977 p. 189), equative clauses in Wik-Mungkan are verbless, consisting of a nominal predicate which makes definite reference to the entity encoded by the subject. Example (604) shows the subject as namp nungant=am 'name 3SG=DAT=GEN' (his name) with the predicate being the name David.
(604)

BS774MYTW14.22
[namp nung=ant=am] [David]
name 3SG.DAT=GEN David
'his name was David'
Similarly (605) shows the equative where 'my mother' is identified as Mary.
(605) Kilham 1977 p. 191 ex 410

| [kaath | ngathar=am=an] | [Mary] |
| :--- | :--- | :--- |
| mother | 1SG.DAT=GEN=DEF | Mary |
| 'my mother is Mary' |  |  |

### 11.8 Existential Clauses

An existential clause refers to the existence or presence of an entity, frequently inanimate. These consist minimally of a subject with an optional verbal predicate and no complement. Where present the verb is, in all instances found, a postural verb. A verbless existential clause is (606) which asserts the presence of a big boat.

```
(606) BS779min22_3.49
    chukkun pi'=pi'an
    boat RDP-big
    '(there was) a very big boat'
```

Two examples of verbal existential clauses are (607) and (608). Both describe the existence of yuw 'cloud'; pi'an 'big' in (607) and yot 'many' in (608). The first example has the postural verb wun- $\varnothing$ 'lie-3SG.PST' with the sense of 'to be' while the postural verb in is than-than'an 'stand-RDP-3PL.PRS' (are standing). The choice of verb in the latter seems to reflect the idea of 'becoming tall'.
(607) Kilham et al 1986 p. 84

| yuw ngul=an | pi'an | wun- $\varnothing$ |
| :--- | :--- | :--- |
| cloud then=DEF | big | lie-3SG.PST |
| 'there was a big black (sic) cloud' |  |  |

(608) Kilham et al 1986 p. 161
yuw yot $\quad$ than-than-an
cloud many stand-RDP-3PL.PRS
'many clouds bank up'

Existential clauses are negated by the negator ya'a 'NO', rather than ke' 'NEG' (see section 12.1), as in (609) where the existential (verbless) clause nil in '3SG PRX' (he (is) here) is negated by ya'a 'NO'. This may be an artefact of the corpus; there are a total of 109 clauses containing ke' 'NEG' and none negate an existential clause but the latter are relatively rare so the absence is not proof that it is not allowed. A useful comparison is with Kuuk Thaayorre, a related language of Cape York, where a similar constraint is found i.e. only the comparable negator is found with existential clauses (Gaby 2017 p. 396). This lends weak support to the proposition that this is a constraint in Wik-Mungkan.
(609) Huchet 1990 p. 36 ex 2-30

| nil | in | ya'a |
| :--- | :--- | :--- |
| 3SG | PRX | NO |
| 'he is not here' |  |  |

## 11.9 kaangk 'like' Verbless Clauses

The word kaangk 'like' is analysed in section 3.5 .5 as a particle which modifies clauses. It is mostly found in verbal clauses, including those where the verb is elided. While not numerous, kaangk 'like' also appears in a verbless construction linking two NPs. In all examples in the corpus the first NP is a nominative pronoun, although this is considered an artefact of the corpus rather than a constraint. The second NP is usually either a pronoun in accusative case or an NP in absolutive case. That is, the clause patterns as a transitive clause, despite the non-verbal nature of kaangk 'like'. The negator ke' 'NEG' also appears in most examples, again simply considered an artefact of the corpus. Example (610) is typical where the subject, the speaker (ngay '1SG(NOM)'), states that they don't like the object, the addressee nint-ang '2SGACC'.
(610) Kilham et al 1986 p. 33

| ngay | kaangk | ke' | nint-ang-a |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) like | NEG | 2SG-ACC-a |  |
| 'I can't stand you' |  |  |  |

Example (611) shows an NP in absolutive case: pam kemp pach=am-a 'MAN flesh white=EMPH-a'.
(611) Sayers 1976a p. 29 ex 1

| nil | kaangk | ke' | pam | kemp | pach=am-a |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) | like | NEG | MAN | flesh | white(ABS)=EMPH-a |
| 'he doesn't like white men' |  |  |  |  |  |

No other verbless clauses have been found with a similar structure i.e. patterning as a transitive clause.

By comparison, in (612), kaangk 'like' combines with the postural verb wun-ow 'lie2SG.FUT' and the negator ya'a 'NO' to express the same meaning as (611) i.e. not liking people. Rather than marked as direct object (i.e. than-ang '3PL-ACC') the people being disliked are encoded by the dative thant '3PL.DAT', reflecting the
intransitivity of the verb. The discrepancy between the future tense marked on the verb and the past tense in the free translation is as per the original but unexplained.
(612) Sayers 1976a p. 176 ex 5

| kaangk | wun-ow | thant | ya'a |
| :--- | :--- | :--- | :--- |
| like | lie-3SG.FUT | 3PL.DAT | NO |
| 'he didn't like them' |  |  |  |

The exceptions to the above rule of verbless kaangk 'like' clauses patterning like transitive clauses are all found in a single narrative 'Mabel's New Year Message' from Sayers (1982a p. 221). In all examples in this narrative the first NP remains a nominative pronoun (specifically niiy '2PL(NOM)' in all instances) while the second NP is in dative, not accusative, case. Example (613) is typical, where the dative complement is oony=ant 'spirit=DAT'. The fact that all these examples are in the one narrative attributed to the one speaker may mean that this is an idiolectic use.
(613) Sayers 1982a p. 221
niiy kaangk oony=ant
2PL(NOM) like spirit=DAT 'you love Satan.'

### 11.10 Locative Clauses

Locative clauses describe a place where the subject or object NP is situated, the place being described by a complement NP in locative case or a locative adverb. In Wik-Mungkan a locative clause is always within a verbal clause. The verb is frequently wun-an 'lie-NF' as in (614) where the subject (a baby) is located in the place waangk=ang 'bag=LOC' (in the bag).
(614) Sayers 1982a p. 159 ex 105

| waangk=ang | wun-wun-Ø |
| :--- | :--- |
| bag=LOC | lie--RDP-3SG.PST |
| 'he was lying in the bag' |  |

An example of a locative clause with an adverb is (615), where the adverb ang=am 'DIST=EMPH' (right there) provides the future location of the 3SG subject.
(615) Sayers 1976a p. 70 ex 2

| ang=am | wun-ow |
| :--- | :---: |
| DIST=EMPH | stay-3SG.FUT |
| 'he will stay (right) there' |  |

### 11.11 Word Order Tendencies

As noted in Kilham (1987, p. 362) word order in Wik-Mungkan 'at times appears to be unrestricted' but there are preferred word orders. This section describes these preferred word orders, drawing on Kilham (1987), supplemented by analysis of the corpus. The structure of NPs is discussed in section 7.1 and will not be discussed further here.

The predominant clause pattern is SOV when the object is an NP and SVO where the object is a pronoun. As noted in section 5.1 .2, both $S$ and $O$ frequently occur as a pronoun and co-referential NP; this does not affect the clause pattern; the pronouns and NPs retain the same positions. Within this basic pattern, there are additional tendencies relating to adverbs and negation and questions.

Firstly, adverbs are mostly found directly preceding the verb. Where multiple adverbs exist, as noted in section 10.1, the tendency is for spatial adverbs of movement to precede directional adverbs, followed by temporal adverbs.

As will be discussed below in section 12.1, there are two negators in Wik-Mungkan; ke' NEG' and ya'a 'NO'. The first (and inflections) is usually found in front of the verb in verbal clauses. In the corpus, of a total of 355 tokens of $k e^{\prime}$ 'NEG' (plus inflections), 220 directly precede the verb and 31 precede an adverb which precedes the verb. The remaining tokens are in verbless clauses, where there are insufficient tokens to discern a pattern, or idiomatic phrases such as (616) where ke' 'NEG' precedes the noun oyngk 'vomit', which forms a phrase with yeech-ang-a 'pour out-1SG.PRS-a' with the meaning 'to vomit'.
(616) BS774MYTW22.12

| ngay | ke' | oyngk | yeech-ang-a |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | NEG | vomit | pour.out-1SG.PRS |
| 'I do not vomit' |  |  |  |

Thus the most common distribution of $k e^{\prime}$ 'NEG' found in the corpus is directly before a verb, noting that 125 out of 355 tokens are found in different distributions.

As will be shown in section 12.1.2, the other negator ya'a 'NO' is either an exclamation or is found at the end of clause, negating the entire clause.

Questions can be formed by the use of ignoratives, discussed in section 5.2.3.1; there is no discernible pattern as to word order. Questions can also be formed with the particle ey 'Q' which is almost invariably clause final; see section 12.2.

Variations from the preferred word order are common but have not been analysed for this thesis. According to Kilham (1987 p. 367), factors affecting word order are case ranking (e.g core vs non-core grammatical case), new versus old information and prominence given to marked themes. The reader can find more detail in Kilham (1977) and Kilham (1987).

## 12 Constructions

This chapter describes various constructions found in Wik-Mungkan; negation (section 12.1), questions (12.2), evitative (12.3), inclusory (12.4) and reflexive / reciprocal (12.5).

### 12.1 Negation

Negation is effected in one of two ways. The particle $k e^{\prime}$ 'NEG' functions as negating clauses as will be seen in section 12.1.1. The particle ya'a 'NO' negates clauses, including copulas and is used as an interjection as is shown in section 12.1.2. Both particles form compounds and phrases and can carry various inflections, as seen in section 12.1.3. Finally, in the the lexicon there is a lexeme ya' with a primary meaning of 'really' and an apparent secondary meaning of 'NO'; this is reviewed in section 12.1.4.

### 12.1.1 The particle $k e$ ' 'NEG'

The particle $k e^{\prime}$ 'NEG' is used to negate clauses and most frequently directly precedes the verb, as in (617) to (619). In each of these, the particle is negating the VP, which can be simply the verb as in (617) where it negates the verb iiy-iiy-ow 'go-RDP-3SG.SBJV' (she should go). In (618) it negates the VP ek-an-am yippak 'get.up-3SG.PRS-EMPH yet' and in (619) it negates uth-am-Ø ngampar-a 'dead-ITR3SG.PST 1PL.INCL.DAT-a' (he died for us).
(617) Kilham et al 1986 p. 68

| nil | kon | uth | $\boldsymbol{k e}^{\prime}$ |
| :--- | :--- | :--- | :--- |
| iily-iiy-ow |  |  |  |
| 3SG(NOM) ear | dead | NEG | go-RDP-3SG.SBJV |
| 'she shouldn't go off unheeding (lit. 'dead ear')' |  |  |  |

(618) Sayers 1982a p. 173 ex 29

| pam wanch | wiy | ke' | ek-an-am | yippak |
| :--- | :--- | :--- | :--- | :--- |
| MAN WOMAN | some(NOM) | NEG | get.up-3SG.PRS-EMPH | yet |
| 'no one is up yet' |  |  |  |  |

(619) Sayers 1982a p. 221 ex 13

| oony-a | way | $\boldsymbol{k e}$ | uth-am- $\varnothing$ | ngampar-a |
| :--- | :--- | :--- | :--- | :--- |
| spirit | bad | NEG | dead-ITR-3SG.PST | 1PL.INCL.DAT-a |
| 'Satan did not die for us' |  |  |  |  |

The negation can be rhetorical, as in (620), where the literal meaning is the person referred to should not go but with the implicature that he should go.
(620) Sayers 1982a p. 172 ex 15

| nil-amp | ke' | iiy=iy | ey |
| :--- | :--- | :---: | :--- |
| 3SG-2PL.INCL(NOM) | NEG | go-3SG.SBJV INT |  |
| 'that one of ours should go' (he, our relative, should he not go?) |  |  |  |

Other lexemes can follow ke' 'NEG' and precede the verb, as in (621), where yipam kuchar 'so that cold' is between the negator and the verb wun-ow 'to.be-3SG.SBJV' (he should be).
(621) Kilham et al 1986 p. 117

| nil | pek- $\varnothing$ | nun-ang-a |
| :--- | :--- | :--- | | ngook=ang-a |
| :--- |
| 3SG(NOM) put-3SG.PST 3SG-ACC-a |
| blanket=LOC-a |

In some instances it can occur in verbless clauses, such as (622), where it negates the kaangk 'liking'.
(622) Sayers 1976c p. 38 ex 23

| ngay | kaangk | ke' | kaa' | pach |
| :--- | :--- | :--- | :---: | :--- |
| 1SG(NOM) | liking | NEG | nose | white |

Note that $k e$ ' is also an homophonous lexeme meaning 'similar to', as discussed in section 13.2.5. It has been suggested by Gaby (pc) that this perhaps is the result of a process of grammaticalisation from $\mathrm{ke}^{\prime}$ 'NEG' similar to that found in Kuuk Thaayorre for the particle kar 'like' being derived from the negator kaar (Gaby 2017 p. 328). While plausible, there is no available historical reference to support the proposition.

### 12.1.2 The particle ya'a 'NO'

The negator ya'a 'NO' firstly functions as an interjection or response to a question, as in (623) and (624). The negator $k e^{\prime}$ 'NEG' is not found in these positions.

## (623) Kilham et al 1986 p. 13

ya'a! ngay al=ant=an thee'-ang-a
NO 1SG(NOM) DIST-DAT=DEF give-3SG.PST
'No! (I can't give you a loan) (sic). I have already given to that person'
(624) Kilham et al 1986 p. 248

| ya'a than | wa' | ik-ath-an |  |
| :--- | :--- | :--- | :--- |
| NO | 3PL(NOM) | one.side | split-TR-3PL.PST |
| 'No they cut off one side' |  |  |  |

It also is used to negate constituent NPs, as in (625) and (626), where it follows the NP it is negating. Examples (625) and (626) are also verbless clauses; it is common to find ya'a 'NO' in such clauses. It is not found negating verbs, unlike ke' 'NEG' as described in the preceding section.
(625) Kilham et al 1986 p. 127

| ngan uuy ya'a | ngan | chil | ngaarpang |  |
| :--- | :--- | :--- | :--- | :--- |
| 1PL.EXCL(NOM) many | NO | 1PL.EXCL(NOM) | few | company |

(626) Kilham et al 1986 p. 265

| ngay | yaam=ak | ya'a | ngay |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | long.time=ALL | NO | 1SG(NOM) |$\quad$ pal=am=ak | hither=ABL=ALL |
| :--- |
| 'I am not going for a long time, I'm coming back' |

It can also be used in conjunction with the negator $\mathrm{ke'}^{\prime}$ 'NEG', as in (627), where $\mathrm{ke}^{\prime}$ 'NEG' negates the clause keek-antan puk many thaantt=am=an waangk=am=am 'the children fall out of dilly bags' and ya'a 'NO' acts as an interjection reinforcing this negation.
(627) Sayers 1982a p. 160 ex 114

| $\boldsymbol{k} \boldsymbol{e}^{\prime}$ | keeek-antan | puk many | thaantt=am=an |
| :--- | :--- | :--- | :--- |
| NEG fall-3PL.PRS | CHILD small | 3PL.DAT=GEN |  |

### 12.1.3 Compounds, phrases and inflections

Both negators discussed above combine with other lexemes and inflections. In all cases ya'a 'NO' is reduced to $y^{\prime}$ '-.

First to be considered is ngul 'then' which forms the compounds ke'-ngul and ya'-ngul (refer section 10.2.2 for a discussion of ngul 'then'). Although both can be glossed as 'no/not then', the semantic results are quite different; ya'-ngul means 'finished' while ke'-ngul means 'never'. Examples are (510) and (511) from section 10.2.2, repeated here as (628) and (629). In the first ya'-ngul 'NO-then' flags that the story of the small child is finished (noting that a literal translation is that the child is 'finished'). In the second, the compound $k e^{\prime}-$ ngul 'NEG-then' means that the action of 'putting in' will not happen again. In other words, ya'-ngul 'NO-then' refers to a past event now complete, ke'-ngul 'NEG-then' refers to an event not to occur in the future.
(628) Sayers 1982a p. 162 ex 141

| ya'-ngul puk | many=ant=am | nan=iy |
| :--- | :--- | :--- |
| NO-then child | small=DAT=GEN | MED=TOP |
| 'that is the end of that child's (story)' |  |  |

(629) Kilham et al 1986 p. 97
putham ke'-ngul wunp-imp-a
again NEG-then put.in-1PL.INCL.SBJV-a 'we shouldn't put in any more'

The emphatic clitic =am attaches to both ke' and ya' 'NEG', as in (630) to (632), noting the reduplication for extra emphasis in (631). The lexicon translation of ke'am is 'didn't', which is odd as it is not verbal.
(630) Kilham et al 1986 p. 38

| than | ka'atham | $\boldsymbol{k e}$ '=am | waa'-in |
| :--- | :--- | :--- | :--- |
| 3PL(NOM) first | NEG=EMPH | tell-3PL.PST | ngathar |
| 1SG.DAT |  |  |  |

(631) Kilham et al 1986 p. 40

| ngay | kaangk | ke-ke'=am | nun-ang-a |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | like | NEG.RDP=EMPH | 3SG-ACC-a |
| 'I do not like her' |  |  |  |

(632) Kilham et al 1986 p. 84

$$
\begin{array}{lll}
\text { ya'=am } & \text { ngak=ang } & \text { muunch- } \varnothing \\
\text { NO=EMPH water=LOC } & \text { swim-3SG.PST } \\
\text { 'it (crocodile) disappeared into the water' }
\end{array}
$$

Both particles have suffixes which may have derived from case markers. For ke' 'NEG' the suffix is -anang to form ke'anang 'none, without' as in (633).
(633) Sayers and Kerr 1964

| pul | an-man karp | puk ke'anang |
| :--- | :--- | :--- | :--- |
| 3DU(NOM) | DIST-SAME together | CHILD without |
| 'those two stayed together and had no child' |  |  |

There are two possible analyses of -anang. The first is =an=ang 'DEF-INST'). This seems unlikely as nowhere else in the corpus is this sequence of the definite marker and case marker found; in all instances the sequence is case marker then definite marker. A more likely but still speculative explanation is that it is a variant of the comitative case marker =antang 'COM'. Thus in (633) puk ke'-anang 'child without' can be interpreted as 'child NEG-with' or 'not with child' which is semantically plausible. With no supporting evidence the suffix will be considered unanalysable. The form does have a variant, ke'an 'without'. This form is found in a handful of examples (eight in the corpus) as in (634) and (635). Example (634) is straightforward; the imperative instruction is to sit without (being) restless. There is a lexicon entry yaam ke'an(ang) which is translated as 'soon'; it is not clear how that is realised in (635) with the given free translation. To align with the lexicon definition of yaam ke'an(ang) 'soon' the free translation would be more like 'you will soon be crowding (us) from far away - don't cling to us'.
(634) Kilham et al 1986 p. 276

| yuup | ke'an | nyiin- $\varnothing!$ |
| :--- | :--- | :--- |
| restless | without | sit-IMP |
| 'sit still!' |  |  |

(635) Kilham et al 1986 p. 166

| niiy | yaam ke'an | woonch-woonch-an | nath-nath-pal=an <br> 2PL(NOM) long.time without |
| :--- | :--- | :--- | :--- |
| crowd-RDP-2PL.FUT | far-RDP-hither=DEF |  |  |

It also seems that phrase yaam ke'an(ang) can also mean 'not a long time', as in
(636). The verb ngeengkan is defined in the lexicon as a transitive verb meaning 'to stay away'; the transitivity requires an argument representing what is being stayed away from; in this example the speaker ngay '1SG' marked with accusative case =ang.
(636) Kilham et al 1986 p. 135

| nint $\quad$ yaam ke'anang | ngeengk-an | ngay-ang |
| :--- | :--- | :--- |
| 2SG(NOM long.time without | stay.away-2SG.FUT | 1SG-ACC |

For ya'a 'NO' the suffix is -angam (possibly =ang-am 'LOC=EMPH') to form ya'angam meaning 'in vain', as in (637). The -am is possibly optional, as in (638) but this is the only example of ya'ang 'in vain' in the corpus and so one needs to be cautious about the optionality. The lexicon only lists the full form ya'angam 'in vain'.
(637) Kilham et al 1986 p. 119

| minh | wuungkam | pi'an=an-a |
| :--- | :--- | :--- |
| MEAT | barramundi | big(ABS)=DEF-a |

ya'angam wich-wich-ang-an-a
in.vain pull.out-RDP-1SG.PST-3SG.ACC-a
'I pulled in a big barramundi in vain'
(638) Kilham et al 1986 p. 267

| than | nun-ang | ya'ang | wak-wak-in |
| :--- | :--- | :--- | :--- |
| 3PL(NOM) | 3SG-ACC | in.vain | chase-RDP-3PL.PST |
| 'they chased it in vain' |  |  |  |

A derivation of ya'a 'NEG' is the use of the verbaliser -am to create the verb ya'aman 'to go away', as in (639). This does not occur with ke' NEG.
(639) Kilham et al 1986 p. 84

| ngul=an-a | lam lam | ya'-am-an |
| :--- | :--- | :--- |
| then=DEF-a | quickly.disappear | NEG-ITR-3SG.PRS |
| 'then it (a cloud) quickly disappears' |  |  |

### 12.1.4 The particle ya' 'really'

The lexicon entry for ya'a 'NO' lists two meanings; the above sense of negation and a second sense of 'really', qualified as a 'negative intensifier'. The examples given in the second entry have two characteristics; they only feature ya', not ya'a and they do not have any particular sense of negation. The majority of the 47 examples of ya'
found in the corpus such as (640) to (642) similarly only reflect an intensification, not negation.
(640) Kilham et al 1986 p. 18

| wik ya' | appench- $\varnothing$ | ngathar=am-wey |
| :--- | :--- | :--- |
| WORD really run.away-3SG.PST | 1SG.DAT=ABL-EMO |  |
| 'that word has gone out of my mind' |  |  |

(641) Kilham et al 1986 p. 196

| ma' | puu' | ya' | pungkam- $\varnothing$-ar |
| :--- | :--- | :--- | :--- |
| HAND | blistered | really | swell-3SG.PST-1SG.DAT |
| 'the blister on my hand is really swollen' |  |  |  |

(642) Kilham et al 1986 p. 139

| wo'uw=an | ya' | ngath- $\varnothing$ | dinghy=ang=an-a |
| :--- | :---: | :---: | :---: |
| river(ABS)=DEF | really | fill.up-3SG.PST | dinghy=ERG=DEF-a |
| 'the river is really full of dinghies (dinghies really fill up the river)' |  |  |  |

There are four examples where the sense of $y a^{\prime}$ ' is 'NO', as in (643) and (644). The discrepancy between the past tense marked on the verb and the present tense in the translation is not explained.
(643) Kilham et al 1986 p. 204

| in | ya' | chiika |
| :--- | :--- | :--- |
| PRX(DAT) | NO | tobacco |

(644) Sayers and Kerr 1964 p. 7

| nil $\quad$ an | ya' | wun- $\varnothing$ |
| :--- | :--- | :--- |
| 3SG(NOM) | DIST(DAT) | NO |
| (he does not live there now' |  |  |

Given the preponderance of instances where ya' has the sense of 'really' as opposed to 'NO', it is questionable whether the four remaining examples were correctly transcribed i.e. should have been ya'a 'NO'. Unless recordings of these examples are located, an unlikely event, this is purely speculation. Similarly the 'really' sense is quite possibly an extension of ya'a 'NO'. This would be analogous to the tendency noted by Sommer (1978) for the languages of Cape York to extend the meaning of 'bad' to refer to 'great abundance'. That is, in both instances, a negative lexeme is extended to an intensifiaction. In the absence of any evidence the glosses of the corpus will be respected and ya' will be considered to have the two senses.

### 12.1.5 Other Compounds

This section discusses some compounds formed with $k e^{\prime}$ - but it is unclear how or whether there is a connection between the $k e^{\prime}$ in these compounds and $k e^{\prime}$ 'NEG' or indeed $k e$ ' 'similar to'. The discussion is for completeness.

There are three other compounds formed with $k e^{\prime} ; k e^{\prime}-$ ngoongkam, ke'-murkanam and ke'-paal. The first, ke'-ngoongkam uses the lexeme ngoongk, an adjective meaning 'ignorant' as in (645), the only example in the corpus, from which is derived adverb ngoongkam by the suffix -am 'ADVERBZ' to mean 'unawarely',as in (646).
(645) Kilham et al 1986 p. 44

| niiy | ngay-ang | kaa' | ngoongk | waa'-an |
| :--- | :---: | :--- | :--- | :--- |
| 2PL(NOM) | 1SG-ACC | nose | ngay |  |
| ignorant | tell-2PL.PST | 1SG(NOM) |  |  |

(646) Kilham 1977257 ex 1

| pam | keenk-a | aak | eep-an=ang | iiy-iiy- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| MAN(ABS) | long.ago-a | PLACE | creep-NF=LOC | go-RDP-3SG.PST |

ngoongk-ngoongk-am-a
ignorant-RDP-ADVERBZ-a
'long ago a man went hunting (sic), not knowing what would happen'
The compound $k e^{\prime}-n g o o n g k a m$ has two definitions in the lexicon; 'not taking any notice of what's going on or unaware' and 'keep on doing something'. The only example of the first meaning in the corpus is (647) which seems to suggest that the ke'- 'NEG' prefix is just reinforcing the lack of awareness.
(647) Sayers 1982a p. 161 ex 129
ke'-ngoongk-am work iiy-iiy- $\varnothing$
not-ignorant-ADVERBZ work go-RDP-3SG.PST
'she became absorbed in her work'
The second meaning of $k e^{\prime}-$ ngoongkam 'keep on doing' seems unrelated; there is only one example in the corpus; (648).

84 kaa' ngoongk waa'an literally 'nose ignorant tell' has the idiomatic translation of 'talk behind (someone's) back'
(648) Kilham et al 1986 p. 61

| nil | ke'-ngoongkam | kulich | pung-pung-an-a |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) |  |  |  |
| continually |  |  |  |$\quad$ dress | wash-RDP-3SG.PRS-a |
| :--- |
| 'she keeps on washing clothes' |

The next compound of $k e$ ' 'NEG' is $k e^{\prime}$-murkanam which has the same meaning as the first sense of $k e^{\prime}$-ngoongkam, namely 'unaware'; there are no examples in the corpus. The free lexeme murkanam means 'continually', as in (649) one of two examples in the corpus. The semantics of $k e^{\prime}$-ngoongkam, ke'-murkanam and the derivation from their components is unclear.
(649) Sayers 1982a p. 150 ex 11

| murkanam | an-man | iiy-iiy- $\varnothing$ |
| :--- | :--- | :--- |
| constantly | DIST-SAME | go-RDP-3SG.PST |
| 'she (that same one) | was constantly working (sic)' |  |

The final compound of $k e^{\prime}$ 'NEG' is $k e^{\prime}$-paal glossed as 'therefore', as in (650). It too seems unrelated to the negation sense. The lexicon does not assist as the definition of paal is that it is an abbreviated form of ke'-paal 'therefore'. There is also paalak, where the suffix -ak is possibly the allative case. It is defined as '(go) for a little while' and marked as a synonym of $p a l=a m$ 'hither=ABL' (see section 10.3.1.1 for a discussion of $p a l=a m$ 'hither=ABL'). This opens the question of whether the extended vowel really exists and paal 'therefore' is a mis-analysis or an historical grammaticalisation of $p a l$ 'hither'. Unless phonetic or other evidence is found, no further analysis is possible.
(650) Kilham et al 1986 p. 61

| onion al=ang=an <br> onion DIST=ERG=DEF | mee' | anchan- $\varnothing$ | ngay-ang |
| :--- | :--- | :--- | :--- |
| sting-3SG.PST | 1SG-ACC |  |  |

### 12.2 Questions

Questions are formed in Wik-Mungkan by the use of a clause-final interrogative particle ey 'Q' or the use of ignoratives such as ngeeen 'what', wanttak 'why' and wee' 'who'. The ignorative use as interrogative was discussed in section 5.2.3.1. This section presents the use of ey ' Q '.

The simplest way to create a question in Wik-Mungkan is to add the particle ey 'Q' at the end of a clause or sentence. This can be a verbless clause such as (651) where it turns a word into a question or a clause with a verb such as (652) where the clause aak anman thathan 'you saw that place' becomes the question 'did you see that place?'.
(651) Kilham et al 1986 p. 29
ek-mich ey?
soft.skin INT
'are you a soft skin?'
(652) Sayers and Kerr 1964 p. 8

| aak | an-man | thath-an | ey? |
| :--- | :--- | :--- | :--- |
| PLACE | DIST(ABS)-SAME | see-2SG.PST | INT |
| 'did you see that (same) place?' |  |  |  |

More complex sentences can also be turned into questions, as in (653) where the main clause nint kan ngeechngeechangan 'you can feel' has a subordinate clause pik manyan yuupyuupaman nungkar 'the baby moving in you' and is turned into a question by the use of ey ' Q '.

| (653) Kilham et al 1986 p. 140 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| nint | kan | ngeech-ngeech-angan |  |  |
| 2SG(NOM) | NOW | feel-RDP-2SG.PRS |  |  |
| puk $\quad$ many=an | yuup-yuup-am-an | nungk-ar | ey? |  |
| CHILD small=DEF | restless-RDP-ITR-3SG.PRS | 2SG-DAT | INT |  |
| 'can you feel the baby moving in you?' |  |  |  |  |

The word ey 'Q' does not occur in clauses where an ignorative is used interrogatively.

### 12.3 Evitative Construction

The evitative construction in Wik-Mungkan has the following structure; a clause, typically in the imperative and negative (i.e. don't do X), followed by a clause with the verb preceded by ngul 'then' and in the past tense which states the consequence of not following the imperative instruction, as in (654) to (656) (consequence clause in bold).
(654) Kilham et al 1986 p. 28

| yuk=an | ke' | eep-ath-an-a | ngul | thuth- $\boldsymbol{\sigma}-\mathrm{a}$ |
| :--- | :--- | :--- | :--- | :--- |
| tree=DEF | NEG | low-TR-2SG.FUT |  |  |
| 'don't |  | then | break-3SG.PST-a |  |
| 'dond that branch. It will break' |  |  |  |  |

(655) Kilham et al 1986 p. 204

| thaa' pa'ant | ke' | nyiin- $\varnothing$-a <br> sit-IMP-a nyeeny-a |
| :--- | :--- | :--- | :--- |
| mouth open | NEG |  |

(656) Kilham et al 1986 p. 201

| thaa' | ath-ath=iy | ke' | mungk-an-a | thuuk |
| :--- | :--- | :---: | :---: | :---: |
| mouth | snap-RDP=TOP | NEG | eat-2SG.FUT-a | snake |
| hither |  |  |  |  |

It is not essential that the first clause be in the negative, as in (657), which also confirms that the second verbs in (654) to (656) are in the past tense and not some other form of null marking on the verb such as the imperative.
(657) Kilham et al 1986 p. 9

| keny achantang <br> high high | wunp-an-a, <br> put-IMP-3SG.ACC-a |  |  |
| :--- | :--- | :--- | :--- |
| than $\quad$ ku' | il-il=ang=an | ngul | mungk-in-a! |
| 3PL(NOM) dog | PRX-RDP=ERG=DEF | then | eat-3PL.PST-a |
| 'Put it up high, or else these dogs will eat it!' |  |  |  |

An historical comparison is provided by (658) from McConnel (1936b p. 91 ex 38); the glosses are based on the analysis in Chapter 15. This example is a very similar construction but with the interesting difference that the verb following ngula 'then', is in the subjunctive mood rather than the past tense. Note the original McConnel gloss of ngula is 'lest' but 'then' is preferred as it aligns with the general usage.
(658) McConnel 1936b p. 91 ex 38

| ngula tat-uwa-ng | nila-ra |
| :--- | :--- | :--- |
| then see-3SG.SBJV-1SG.ACC | 3SG-DAT |
| 'lest sees-he-me' |  |

Two examples are found in the corpus which have a similarity with the evitative construction in the use of ngul 'then', followed by a verb in the past tense. Example (659) has the clause order reversed. In this example the imperative clause (don't $852^{\text {nd }}$ person future also used as imperative
cry) is a potential reaction to the possibility in the first clause (that the medicine might sting).
(659) Kilham et al 1986 p. 14

| opar=ang medicine=ERG | ngul then | anch-ø <br> hurt-3SG.PST | nint-ang 2SG-ACC |
| :---: | :---: | :---: | :---: |
| ke' wik | peey-an-a |  |  |
| NEG WORD | cry-2SG.FUT-a |  |  |
| 'the medicine wil | 1 sting | , but don't cry' |  |

A related construction is described in the lexicon entry for ngul 'then' which states that when ngul 'then' is at the intonation centre of a clause and followed by a verb in past tense it provides the sense of prediction as per the free translation in (660). This is the only instance of this 'predictive' construction in the corpus. The use of ngul 'then' with past tense suggests a parallel with the above evitative construction and example (660) as all invoke hypothetical statements.
(660) Kilham et al 1986 p147

| nil $\quad$ ngul | keek-Ø |
| :--- | :--- |
| 3SG(NOM) then | fail-3SG.PST |
| 'I predict he will fail' |  |

### 12.3.1 Comparison with other Australian languages

Expressions similar to the evitative occur in a number of Australian languages, using a variety of linguistic means. Following is a brief discussion of some of those.

Firstly, Dixon (1980 pp. 293-299) describes the aversive case as being characteristic of Australian languages. He describes this case as being used to express fear, as in 'I'm afraid of that dog' as well as sentences like 'don't go outside for fear of the storm'. The latter is similar to the evitative above. Discussing Yidiny, he provides example (661), where the aversive case is marked by the suffix -yida to note the referent being avoided.
(661) Dixon 1980 p. 299

| yingu $\quad$ waguuja | garba-ng | bama-yida |
| :--- | :--- | :--- |
| this.ABS man.ABS | hide-PRS | people-AVERS |
| 'this man is hiding for fear of the [strange] people (i.e. so that he will not be |  |  |
| seen by them)' |  |  |

Secondly, for Yir-Yoront Alpher (1991 p. 474) uses the terms lest and admonitive to describe how the adverb poyn, which has a primary gloss of 'soon', combines with verbs in the non-past tense to create an evitative sense. Example (662) illustrates this (no interlinear gloss provided in the original).

## (662) Alpher 1991 p. 474

$$
\begin{array}{ll}
\text { ngala; yor, poyn } & \text { yennwal } \\
\text { 'don't, you might } & \text { cut your hand' }
\end{array}
$$

Finally, in Mangarayi, Merlan (1981 p. 177) uses the term evitative-anticipatory to describe a particle balaga, as illustrated by example (663).
(663) Merlan 1981 p. 177

| ngala | -yag | balaga | $\varnothing$ | -ngani |
| :--- | :--- | :--- | :--- | :--- |
| 1PL.INCL go | lest/before | -yug |  |  |
| 'let's go before / lest he talk' | 3SG | talk | AUX |  |

This is not a definitive survey but illustrates the varied linguistic tools adopted by Australian languages to implement an evitative construction.

### 12.4 Inclusory

Inclusory constructions are defined by Lichtenberk (2000 p. 2) and Singer (2001 p. 1) as constructions with two elements; one referring to a group, or superset, and the other to a subset of the superset. Singer provides an example, (664), from Roper River Kriol where dubala '3.DU' is the superset and M . is the name of an individual of the group.
(664) Singer 2001 p. 1 ex 1

| dubala | M. | bin go |
| :--- | :--- | :--- |
| 3.DU | proper name | PST go | 'M. and someone else went'

A similar construction occurs in Wik-Mungkan using the comitative case marker. This can be seen in (73) on page 122 and (665). In the latter the superset is the plural pronoun ngan '1PL.EXCL(NOM)' and the subset is Winnie, as noted by the comitative case marker =ang 'COM'.
(665) Sayers 1976a p. 114 ex 9

| ngan | Winnie=ang | kaangkAnne=ak <br> 1PL.EXCL(NOM)$\quad$ Winnie=COM | like | Anne=ALL |
| :--- | :---: | :--- | :--- | :--- |
| Winnie and I wanted to see (go to?) Anne' |  |  |  |  |
| WiPL.EXCL.PRS |  |  |  |  |

### 12.5 Reflexive and Reciprocal Constructions

These are described together due to their related semantics and common morphosyntax. The constructions are based on reflexive pronouns (section 5.1.3) and reciprocal verbal suffixes (section 8.9). The terminology of 'reflexive pronoun' and 'reciprocal verbal suffix' are retained from the Wik-Mungkan historical sources, especially Godfrey and Kerr (1964) on pronouns and Godfrey (1970) on verbal morphology. In fact either can be found in reflexive and reciprocal constructions as will be shown in this section. This section first describes the morpho-syntax (section 12.5.1), direct reflexive / reciprocal constructions (12.5.2), adjunct reflexive / reciprocal constructions (12.5.3) and some exceptions (12.5.4).

The typology and terminology used here is based on that of Gaby (forthcoming).

### 12.5.1 Morpho-syntax

To recap, there are two types of reflexive pronouns; adjunct object pronouns formed from full dative forms i.e. dative stem plus dative case (either -ar or =ant) and the allative and ablative case markers. As discussed in section 5.1.3 these forms are considered not synchronically active so e.g. ngatharakam will not be treated as ngath-ar=ak=am and glossed '1SG-DAT=ALL=ABL' but instead glossed as '1SGreflA' (myself). The second form is a direct object form, only found in the singular, and is formed by adding =am 'GEN' and -ang 'ACC' to the dative stem i.e. without the dative suffix e.g nung=am-ang '3SG.DAT=GEN-ACC' (himself). Again, these will be glossed as e.g. '3SGreflO'.

The verbal reciprocal suffixes are variations of the STM suffixes and are formed by the suffix -wun 'RCP' and the usual STM suffixes, with extensive phonological variations (see section 8.2). For example the second dual present tense suffix is formed from -wun 'RCP' and -nip '2DU.PRS', abbreviated to -wunip '2DU.RCP.PRS'.

The reciprocal suffixes encode the subject and co-referent direct object. They only exist for non-singular referents transitive verbs.

In general, reflexive pronouns and reciprocal verbs do not co-exist in the same clauses; exceptions are discussed below in section 12.5.4. For transitive clauses, there is a single / multiple person distinction. Reflexive / reciprocal constructions for transitive verbs generally use the direct object form of the reflexive pronouns with the usual STM verbal suffixes for single person referents. Reciprocal STM verbal suffixes are used for dual and plural referents. Reflexive / reciprocal constructions with intransitive verbs use the adjunct object reflexive pronouns for singular, dual and plural.

### 12.5.2 Direct Reflexive / Reciprocal

The term reflexive is used in the sense of an Agent also being Undergoer in an event. This is most clearly seen in single person events such as (666) where the subject / Agent is nil '3SG(NOM)' and the direct object / Undergoer is co-referential, encoded by the reflexive pronoun nungamang '3SGreflO'.
(666) Kilham et al 1986 p. 230

| nil ulp-ath-an | nungamang |
| :--- | :--- |
| 3SG(NOM) swell.up-TR-3SG.PRS | 3SGreflO |
| 'he puffs himself up' |  |

With more than one participant, an event is considered reflexive if each participant acts upon themselves individually. By contrast, reciprocal events involve more than one Actor and there is a symmetry between participants in an event so that actor A acts on Actor B in the same way that Actor B acts on Actor A. The difference in WikMungkan between reflexive and reciprocal for multiple Actors relies on semantic interpretation as the morpho-syntax is the same.

For instance in example (667) the participants are a group (of children, more than two) who rubbed their eyes, as encoded in the verbal suffix -win '3PL.RCP.PST'. It is feasible to interpret this as them rubbing each other's eyes but that seems implausible and it is more likely that each is rubbing their own eyes. Hence this is
considered a direct reflexive construction.
(667) Sayers 1976c p. 63 ex 120

| ma'=ang | mee' | namp-namp-win |
| :--- | :--- | :--- |
| HAND=INST | eye(ABS) | rub-RDP-3PL.RCP.PST |
| 'they rubbed their eyes with their hands' |  |  |

By contrast, (668) could be reflexive if mam-wuntan 'rub-3PL.RCP.PRS' is interpreted as each member of the group rubbing themselves. Alternatively, it could be interpreted as reciprocal if members of the group are rubbing other members of the group. The free translation supports the latter interpretation but the morpho-syntax is ambiguous.
(668) Sayers 1976a p. 33 ex 4

| mam-wuntan | morp=ang-a' | wu'=ang |
| :--- | :--- | :--- |
| rub-3PL.RCP.PRS | white.clay=INST-ans | ochre=INST |
| 'they rub each other with white clay and ochre' |  |  |

A clearer example of a reciprocal construction is (669) where the subject, marked with the ergative case, is wanch kuchan=ang 'WOMAN two=ERG', which is also the direct object, as encoded in the verbal suffix -uwpul '3DU.RCP.PST'. In this example it is remote that each is hitting themselves and more likely that each is hitting the other, a symmetric event.
(669) Kilham 1977 p. 65 ex 124

| wanch | kuchan=ang piik-uwpul |
| :--- | :--- | :--- |
| WOMAN | two=ERG hit-3DU.RCP.PST |

The adjunct reflexive pronouns are mostly found in indirect reflexive / reciprocal constructions (see section 12.5.3) but can also be found with other direct reflexive / reciprocal constructions namely transitive, intransitive, copular and verbless, as follows.

The transitive reflexive / reciprocal construction with adjunct reflexive pronouns are relatively rare and in some cases occur where the direct object reflexive pronouns would be expected. It is possible that there has been a move to use the former instead. Example (670) illustrates this; the subject is wanch=ang 'WOMAN=ERG', the adjunct reflexive pronoun encodes 'herself' and appears to fill the position of
direct object, in place of the expected direct object reflexive pronoun nungamang '3SGreflO'. This is a reflexive construction.
(670) Kilham 1977 p. 65 ex 123

| wanch=ang | nungantakam | uuk-uuk- $\varnothing$ |
| :--- | :--- | :--- |
| WOMAN=ERG | 3SGreflA | scratch-RDP-3SG.PST |
| 'the woman scratched herself' |  |  |

Similarly a full direct reflexive can be seen in (671) where the subject ngay '1SG(NOM)' is warming himself as direct object encoded by the adjunct reflexive ngatharakam '1SGrefIA' (myself).
(671) Kilham et al 1986 p. 169

| ngay | park-ath-ang | ngatharakam | thum=ang |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) warm-TR-1SG.PRS | 1SGreflA | fire $=$ INST $^{86}$ |  |
| 'I am warming myself by the fire' |  |  |  |

Examples of the adjunct reflexive as direct object are rare and there are no examples of the reciprocal construction.

The more numerous examples of the use of the adjunct reflexive pronouns as direct reflexive / reciprocal constructions are with intransitive verbs.

For example, in (672), two people are described as talking to each other, a reciprocal construction. The verb thaw-an 'say-1DU.EXCL.PST' is intransitive.
(672) BS7782XW6.57

| thaw-an | ngantakam |
| :--- | :--- |
| say-1DU.EXCL.PST | 1DU.EXCL.refIA |
| 'We were talking to each other' |  |

Example (673) demonstrates the copular reciprocal construction. The intransitive copular verb wun-wun-anip 'to.be-RDP-2DU.PRS', together with the clausal modifier kaangk 'like' provides the meaning of 'those two like'. The adjunct reflexive pronoun niparakam '2DUrefIA' adds the sense of 'each other', creating the reciprocal sense of 'liking each other'.

86 Could also be =ang 'LOC'
(673) Kilham et al 1986 p. 40

| nip | wanttak | kaangk | $k{ }^{\prime}=a m$ |
| :--- | :--- | :--- | :--- |
| 2DU(NOM) why | like | NEG=EMPH |  |
| wun-wun-anip | $\quad$ niparakam |  |  |
| to.be-RDP-2DU.PRS | 2DUreflA |  |  |
| 'why won't you love each other?' |  |  |  |

Verbless clauses can also form a reciprocal construction, as in (674) where the nominal pronoun ngal '1DU.INCL' and the adjunct reflexive pronoun ngalantakam '1DU.INCLrefIA' (ourselves) are co-referential. The adverb mee'am 'known' encodes the relationship each has with the other.
(674) Kilham et al 1986 p. 108
ngal mee'am ngalantakam
1DU.INCL known 1DUreflA
'we know each other well'

### 12.5.3 Indirect Reflexive / Reciprocal

As described by Gaby (forthcoming p. 19) in an indirect reflexive / reciprocal the Actor is encoded in an oblique semantic role such as Beneficiary rather than Undergoer. In Wik-Mungkan these roles are encoded solely in the adjunct reflexive pronouns.

The most common oblique reflexive / reciprocal role is Beneficiary, which can be seen in (675). Here the subject is a woman, marked on the verb with the STM suffix - $\varnothing$ '3SG.PST', co-referent with the adjunct reflexive nungantakam=an '3SGreflA=DEF' (for herself). The action is cleaning a space, for her own use.
(675) Sayers 1982a p. 153 ex 39

| aak=an | pach-pach-ath- $\varnothing$ | nungantakam=an |
| :--- | :--- | :--- |
| place(ABS)=DEF | clean-RDP-CAUS-3SG.PST | 3SGreflA=DEF |
| 'she cleaned the place for herself' |  |  |

The GOAL role can be (676) seen in where the Actors/subject are 2 people who write each other letters, the reciprocal GOAL encoded in nip-niparakam '2DU-RDPrefIA' (yourselves).
(676) Kilham et al 1986 p. 152

| lat=an | ump-ump-anip | nip-niparakam |
| :--- | :--- | :--- |
| paper(ABS)=DEF | write-RDP-2DU.PRS | 2DU-RDPrefIA |

### 12.5.4 Reciprocal Verbs / Reflexive Pronouns Combined

There are four clauses in the corpus containing both a reciprocal verb and an adjunct reflexive pronoun. This appears to be a form of emphasis, considering that adjunct reflexive pronouns are also used as an emphatic form of the dative possession; see section 5.1.4. Consider example (677) where the second person plural addressees are marked on the verb yump-wuniy 'make-2PL.RCP.PRS' and are being asked if they are making themselves meek 'bossy' or self-important. In addition there is the adjunct reflexive pronoun niiyantakam '2PLreflA' (yourselves). Apart from emphasis, it is not clear what the reflexive pronoun adds to the meaning.
(677) Kilham et al 1986 p. 107

$$
\begin{array}{lcl}
\text { meek yump-wuniy } & \text { niiyantakam ey? } \\
\text { bossy make-2PL.RCP.PRS } & \text { 2PLreflA } & \text { INT } \\
\text { 'are you trying to act as though you are important?' }
\end{array}
$$

In (678) a group are described via the reciprocal verb suffix -wayn '3PL.RCP.PRS' as about to paint themselves with ochre. In addition there is the reflexive pronoun thanttakam '3PLrefIA' (themselves), in apposition to the body part kemp 'flesh', indicating possession (see section 7.2.1). Again it is not clear what this reflexive pronoun adds, other than emphasis, especially by comparing it with (679). In the latter, part of a longer clause, is the same scenario of people painting themselves mam-wuntan 'touch-3PL.RCP.PRS' and does not include a reflexive pronoun.
(678) Kilham et al 1986 p. 263

| kemp thanttakam kan wu'=ang | man-wayn |  |
| :--- | :--- | :--- | :--- |
| flesh $\quad$ 3PL.reflA | NOW ochre=INST | touch-3PL.RCP.FUT |
| 'they are about to paint themselves up' |  |  |

(679) Sayers 1976a p. 48 ex 1

| $\ldots$. | munth=ang mam-wuntan |
| :--- | :--- |
| coals=INST $\quad$ touch-3PL.RCP.PRS |  |
|  | 'they rub themselves with charcoal' |

An alternative interpretation of (677) and (678) is that the combination of a reflexive pronoun with a reciprocal verb reinforces or disambiguates a reflexive interpretation.

According to Gaby (forthcoming p. 9) this is a common strategy in Australian languages. One example appears to show that this is not the case in Wik-Mungkan: (680). In this example the interpretation of the verb path-wuniy 'bite-2PL.RCP.PRS' as reflexive i.e. 'you each bite yourselves' is semantically implausible and contradicted by the free translation. The reciprocal interpretation of 'you bite each other' is far more plausible. The reflexive pronoun niiyantakam '2PLrefIA' is not in this case reinforcing a reflexive interpretation but seems to be adding emphasis to the clause.
(680) Kilham 1977 p. 167 ex 348

| niiy-a | koonh=ang | path-wuniy | niiyantakam |
| :--- | :--- | :--- | :--- |
| 2PL(NOM) | tooth=INST | bite-2PL.RCP.PRS | 2PLreflA |

Supporting the emphatic explanation preferred here is that reflexive pronouns elsewhere have an emphatic reading (see sections 5.1.3 and 5.1.4). Additionally, the free translations given in the data sources are frequently inadequate or misleading (see section 1.3) and hence can be unreliable for determining distinctions such as this. This is probably not the case for (680) but in (677) and (678) the free translations provide no insight into the distinction between reflexive and reciprocal.

## 13 Complex Clauses

This chapter describes various complex clause types in Wik-Mungkan. Subordination is described in section 13.1, including finite and non-finite subordination, finite adverbial clauses and a note on current usage in Aurukun. Various other types of adverbial clauses are described in section 13.2 and finally section 13.3 discusses coordination.

### 13.1 Subordination

As there is a range of terms used in linguistic literature, a brief description of terminology follows in section 13.1.1. The following sections describe WM in line with the terminology; finite relative clauses (13.1.2), finite adverbial clauses (13.1.3), the current situation in Aurukun (13.1.4) and non-finite subordinate clauses (13.1.5).

### 13.1.1 Terminology

The term 'adjoined relative clause' was first used in Hale (1976b) in describing their use in Warlpiri as being typified by the relative clause being positionally distinct from the main clause. He further classified them as 'NP-relative' and 'T-relative'. Since then the phenomenon has been described in a wide range of languages and appears in a number of grammars. There has been some ambiguity in terminology so the following will adopt that of Nordlinger (2006) as follows. 'Embedded' will mean syntactically embedded i.e. the clause is truly subordinated, irrespective of linear position. 'Central' will mean that the subordinate clause is contained within the main clause and 'marginal' that the clause is discontiguous with the main clause. To be clear, this means that a clause can be both 'marginal' and 'embedded'. The terms 'NP-relative' and 'T-relative' will be replaced by the more traditional terms 'relative clause' and 'adverbial clause'.

Nordlinger (2006 p. 6) points out the term 'adjoined relative clause' has been applied
to describe constructions across different languages which have similar but different features, both across Australian languages and other language groups. For example Kayardild in (681), marks the subordinate clause by a complementiser. The subordinate clause is also central, not marginal. Overt markers are not required, as in Wambaya (682). (Both examples cited in Nordlinger 2006).
(681) Kayardild, Evans 1995: 49

Marl-da nyingka [ngalaw kuna-walath-inja kurri-juu-ntha ] hand-NOM 2.SG.NOM 1.PL.S.COBL child-LOT-COBL see-POT-COBL
kala-tha kujiji.
cut-IMP spearhead(NOM)
'Cut out a wooden spearhead, so we children can watch you'
(682) Wambaya, Nordlinger 1998p. 220, ex. 844
llinga gin-a [galyurringi gi-n bardbi]
hear 3.SG.M.A-PAST water.I 3.SG.S-PROG run
'He heard the water which was running'
Nordlinger (2006 p. 9) also distinguishes finite and non-finite subordinate clauses, based on the form of the verb in the subordinate clause. The next section describes finite subordinate clauses then non-finite subordinate clauses will be described in section 13.1.5.

### 13.1.2 Finite Relative Clauses

The definite marker (refer section 3.6.1) is used in WM to identify finite subordinate clauses to the main clause and, for relative clauses, assists in identifying which NPs are co-referential in the subordinate clause. Sayers (1982a pp. 59-65) provides a number of examples and also points out that the subordinate clauses also drop case markings on the arguments. The current analysis draws on this work but differs in various respects which will be explained at the appropriate places.

For finite relative clauses, the word prior to the verb in the subordinate clause is suffixed by =an 'DEF'. The co-referential NP in either clause can be any of; the subject of that clause, a direct object or an adjunct. The definite marker can also be used to remove ambiguity of the reference. The following pair of examples illustrate the point; they are identical except for the location of =an in the main clause;
attached to the pam 'MAN' in (683) it shows that he came yesterday and in (684) it is attached to ku' 'dog' to show it is the dog that came. In both examples the coreferent is not explicit but marked by the STM suffix on the verb in the subordinate clause; the definite marker =an resolves the ambiguity. Note that the free translation in (683) given by Sayers (in brackets) is misleading; the clause peetan=an wamp- $\varnothing$ 'yesterday he came' is a relative clause modifying pam=ang=an 'MAN=ERG=DEF'. The translation provided by Sayers inverts the relationship between main clause and relative clause. Other examples where the translation is misleading have been similarly modified.

```
(683) Sayers 1982a p. }58\mathrm{ ex }
\begin{tabular}{lll} 
pam=ang=an & \(k u^{\prime}\) & piik- \(\varnothing\) \\
MAN=ERG=DEF & \(\operatorname{dog}(A B S)\) & hit-3SG.PST \\
peetanan=an & wamp- & \\
yesterday=DEF & come-3SG.PST & \\
'The man who came yesterday hit the dog (The man who hit the dog came \\
yesterday)' &
\end{tabular}
```

(684) Sayers 1982a p. 58 ex 8

| pam=ang | $k u^{\prime}=a n$ | piik- $\varnothing$ | peetanan=an |
| :--- | :--- | :--- | :--- |
| MAN=ERG dog(ABS)=DEF | hit-3SG.PST | wamp- | yesterday=DEF |
| 'The man hit the dog which came yesterday' |  |  |  |

Similarly, (685) shows =an attached to pam 'MAN' and panch 'bird' to show that it was the man who shot the bird (also obvious from the semantics).
(685) Sayers 1982a p. 59 ex 9

| pam=ang=an | $k u^{\prime}$ | piik- $\varnothing$ | panch=an | pung- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| MAN=ERG=DEF | dog(ABS) | hit-3SG.PST | bird(ABS)=DEF | shoot-3SG.PST |
| 'The man who shot the bird hit the dog' |  |  |  |  |

Any NP in the subordinate clause which is co-referential to an NP in the main clause will not have the case marking that would normally be expected. By contrast, a NP which is introduced by the subordinate clause will attract the normal case marking. So in (686) the second occurrence of pam 'man' would normally be marked ergative but is unmarked while in (687) ku' 'the dog' is marked ergative as it is not in the main clause.
(686) Sayers 1982a p. 54 ex 2

| nil | pam=ang=an | minh | kurow thee'- $\varnothing$-ar-a | pam |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) | MAN=ERG=DEF | MEAT | salmon give-3SG.PST-DAT-a | MAN |
| ku'=an | thamp- $\varnothing$ |  |  |  |
| dog(ABS)=DEF | kick-3SG.PST |  |  |  |
| 'the man who kicked the dog gave me salmon (he, the man who gave me salmon, |  |  |  |  |
| kicked the dog).' |  |  |  |  |

(687) Sayers 1982a p. 55 ex 3

| nil | pam=ang=an | minh kurow | thee'- $\varnothing$-ar-a |
| :--- | :--- | :--- | :--- |
| 3SG(NOM) | MAN=ERG=DEF | MEAT salmon(ABS) | give-3SG.PST-DAT-a |
| pam | $k u^{\prime}=a n g=a n$ | thamp- $\varnothing$ |  |
| MAN(ABS) | dog=ERG=DEF | bite-3SG.PST |  | 'he, the man whom the dog bit, gave me salmon (he, the man who gave me salmon, the dog bit).'

The 'case dropping' applies to all cases, not just ergative, such as (688) where the second occurrence of gun 'gun' would be marked =ang 'INST' in an independent clause but is unmarked here. (The first occurrence is a NP with the demonstrative aakanak marking the allative / purposive).
(688) Sayers 1982a p. 56 ex 6

| ngay gun | aakanak=an | wenk-ang |
| :---: | :---: | :---: |
| 1SG(NOM) gun | DIST.ALL=DEF | look-1SG.PST |
| kuympayng=an | pung-ang |  |
| kangaroo=DEF | shoot-1SG.PST |  |
| 'I looked for the g | ith which I shot th |  |

An exception to 'case dropping' is where the co-referent NP in the subordinate clause is a pronoun, as in (689), where the usual accusative form of the 3SG pronoun is used.
(689) Sayers 1982a p. 59 ex 10

| pam=ang | $k u^{\prime}=a n$ | piik-Ø | nun-ang=an | path-Ø |
| :---: | :---: | :---: | :---: | :---: |
| MAN=ERG | $\mathrm{dog}(\mathrm{ABS})=\mathrm{DEF}$ | hit-3SG.PST | 3SG-ACC=DEF | bite-3SG.PST |
| 'the man hit | he dog which bit |  |  |  |

An interesting comparison with (689) is (690), which is identical to (689) except the the subject of the subordinate clause $k u^{\prime}$ 'dog' is repeated rather than being only marked by the STM suffix on the verb. In this case the =an 'DEF' marking in the main clause is on pam 'MAN' and not $k u^{\prime}$ 'dog'. Note also that $k u$ ' 'dog' is not marked with the ergative case in the subordinate clause, as it would be in an independent clause. It is not clear what triggers this change of =an marking.
(690) Sayers 1982a p. 59 ex 11

| pam=ang=an $k u^{\prime}$ piik- $\varnothing$ | $k u^{\prime}$ <br> MAN=ERG=DEF | dog(ABS) | hit-3SG.PST |
| :--- | :--- | :--- | :--- |
| dog |  |  |  |

Under some circumstances, the main clause may have no =an marking, as in (691). Sayers (1982a p. 61) claims that this is because the co-referent pronoun in the main clause follows the verb. An alternative explanation is that the relative clause immediately follows the pronoun, as an adjective normally would and hence there is no ambiguity to resolve. As this is the only known example of =an marking being absent in the main clause, it is not possible to be certain.
(691) Sayers 1982a p. 61 ex 18

| nil | piik- $\varnothing$ | nun-ang | ku' | puk=an |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) | hit-3SG.PST | 3SG-ACC | dog | CHILD=DEF |
| 'he hit the dog which bit the child' |  |  |  | bite-3SG.PST |

Another finding by Sayers (1982a p. 61) is that the =an 'DEF' marking in the relative clause is attached to the first 'non-coreferential item' in that clause. I have chosen to describe it as attaching to the last item before the verb, which is true in all known examples and explains why it attaches to temporal terms as well as NPs filling argument or complement slots. It also holds for examples such as (690) where both ku' 'dog' and nunang '3SG.ACC' are co-referential with NPs in the main clause, indicating that Sayers' rule requires further refining.

### 13.1.2.1 Pre-posed Clauses

The relative clause is not necessarily post-posed, as in all the examples above. In some examples provided by Sayers (1982a), the relative clause precedes the main clause, with the difference that a demonstrative is used in the main clause, as in (692), which is similar in sense to (686), where the demonstrative al=ang 'DIST=ERG' refers to the earlier pam 'man'. The evidence that this involves subordination and not just marginal clauses is the absence of ergative marking on pam 'man'. Sayers (1982a p. 62) also asserts that =an marking is absent in the main clause when the relative clause is pre-posed. Because I have adopted a different analysis to demonstratives than previous authors, I disagree that it is absent, as per
my gloss in (694). See chapter 6 for a full discussion of demonstratives.
(692) Sayers 1982a p. 62 ex 21

| pam | $k u^{\prime}=a n$ | piik-Ø | al=ang=an |
| :---: | :---: | :---: | :---: |
| MAN | dog(ABS) $=$ DEF | hit-3SG.PST | DIST=ERG=DEF |
| minh | wamp-ath- $\varnothing$ |  |  |
| MEAT | come-TR-3 | PST-DAT |  |
| 'the ma | an who hit the do | hat one) brou | t me meat' |

Example (694) is similar in word order to the post-posed example (684), repeated here as (693), the differences being that (694) lacks ergative marking on pam 'man', which indicates the relative clause, reinforced by the demonstrative an=an 'DIST=DEF' in the main clause. Also (693) includes the adverb peetanan=an 'yesterday=DEF'.
(693) Sayers 1982a p. 58 ex 8

| pam=ang $\quad k u '=a n$ | piik- $\varnothing$ | peetanan=an | wamp- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| MAN=ERG dog=DEF | hit-3SG.PST | yesterday=DEF | come-3SG.PST |
| 'The man hit the dog which came yesterday' |  |  |  |

(694) Sayers 1982a p. 62 ex 20

| pam ku'=an | piik- $\varnothing$ | an=an | wamp- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| MAN dog=DEF | hit-3SG.PST | DIST=DEF | come-3SG.PST |
| 'the man who hit the dog came' |  |  |  |

### 13.1.2.2 Central Clauses

Sayers (1982a p. 63) also claims that finite relative clauses can be central, i.e. not at the margins of the main clause as per the above examples. The evidence is not conclusive and consists of one example taken from a narrative and two examples elicited by translating sentences from Hale (1976b pp. 91-92).

The example from the narrative is shown, in abbreviated form as (695) (the long coreferential NP in (696) is omitted for clarity). Sayers' analysis is that the clause in bold is a relative clause despite the lack of =an marking before the verb. The primary evidence she cites is a drop in pitch and the ergative marking on the demonstrative $a /=a n g=a n$ 'DIST=ERG=DEF'. The verb iiy 'go' is designated intransitive in the lexicon and so the demonstrative is thus considered by Sayers to apply to the second clause, nyeeny=an kent-an nungant=am 'she brushes the flies away'. This example may just be simple apposition; 'she (NP in example (696)), that one, carries a fan and
brushes flies away (with the fan)'. Given the complexity of this single example, especially with the full NP included, it is considered insufficient to prove the existence of central subordination. The ergative demonstrative $a l=a n g=a n ~ ' D I S T=E R G=D E F ' ~ i s ~$ interpreted as being the subject of the second verb kent-an 'send.away-3SG.PRS'.
(695) Sayers 1982a p. 63 ex 24

| nil | $(N P)$ | al=ang=an <br> 3SG(NOM) |
| :--- | :--- | :--- |
| (NP) | DIST=ERG=DEF |  |


| punthapaam <br> fan | thampang <br> with | iiy-an <br> go-3SG.PRS |  |
| :--- | :--- | :--- | :--- |
| nil | nyeeny=an | kent-an | nungant=am |
| 3SG(NOM) | fly=DEF | send.away-3SG.PRS | 3SG.DAT=ABL |
| 'she (NP), that one who goes with a fan, brushes flies from him (the baby)' |  |  |  |

(696) Sayers 1982a p. 63 ex 24
kem kunch=an-a or nath-wey $\quad$ wanch manthay=an nath
$m-m$ own=DEF-a or maybe-EMO woman important=DEF maybe
'her mother's mother or maybe an important old woman maybe'

The problem with the second example, elicited text based on Hale, is that the WM strictly follows the English word order which is not natural to WM, as in (697). Sayers analyses this as a central clause as shown in bold. The NP gun an=an 'gun DIST=DEF' is not marked with instrumental case which is indicative of subordination as described above. It is therefore also reasonable to propose that it is also part of the relative clause and hence, with the clause in bold, forms a pre-posed clause. In any case, this elicited example based on English word order is not considered conclusive evidence of the existence of central relative clauses in WM.
(697) Sayers 1982a p. 64 ex 24

| gunan=an <br> gun <br> DIST=DEF <br> 2SG=DEF | pung-an <br> shoot-2SG.PST | kuympayng=an-a <br> kangaroo=DEF-a |  |
| :--- | :--- | :--- | :--- |
| ngay | wenk-wenk-ang | yuk | aakanak=an |
| 1SG(NOM) look-RDP-1SG.PST thing | DIST.ALL=DEF |  |  |

### 13.1.3 Finite Adverbial Clauses

The above sections describe relative clauses, however similar features apply to adverbial clauses, as in (698), where the word before the verb is =an marked, as is the pronoun which is co-referent with the subject of the subordinate clause. Sayers (1982a p. 60) did not recognise this as an adverbial clause.
(698) Sayers 1982a p. 60 ex 14

| ngay | nung=ant=ang=an | iiy-ang | kan=an | wamp-ow |
| :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) $3 S G=D A T=C O M=D E F$ | go-1SG.FUT | now=DEF | come-3SG.FUT |  |
| 'I will go with her when she comes' |  |  |  |  |

### 13.1.4 Current Wik-Mungkan

As noted in various places, there are open questions in regard to some of the examples above and some possibilities to be explored. Two field trips to Aurukun attempted to fill these gaps but were unsuccessful. Attempts were made to elicit subordinate clause with no success. Following this, the above examples were shown to three separate native speakers, none of whom recognised the structure and struggled to understand the meaning. The above description will therefore remain incomplete, failing additional data.

### 13.1.5 Non-finite Subordinate Clauses

A large number of Australian, particularly Pama-Nyungan languages also have a non-finite subordinate clause construction headed by a 'nominalised' verb (see e.g. Nordlinger 2002, p. 1). Nordlinger (2002) points out that the nominalisation is generally (but not universally) of a restricted nature; while the nominalised verbs can have case markers attached and hence be considered nominal, they are generally constrained to a subset of available cases. For example, in Wambaya, only the dative, ablative and locative are found. Further, in many Australian languages, the cases are used to encode tense relative to the main clause as in (699) to (701) where the event in the subordinate clause is respectively before, after or contemporaneous with the event in the main clause. (Subordinate clauses marked by [ ] and all examples cited by Nordlinger (2002).
(699) Wambaya, Nordlinger 1998: 214, ex. 8-8

Gumarra g-u nyagaj-ba [yarru-nnga].
calf 3SG.S-FUT be.tired-FUT go-ABL
'His calves will be tired from walking.'
(700) Martutjarra Luritja, Blake 1987: 141, ex. 8.18

Wati-ngku waru kalarnu, [kuka pawu-nytya-ku]. man-ERG fire lit meat cook-NMLSR-DAT 'The men lit the fire to cook the meat.'
(701) Warlpiri, Simpson 1988: 205, ex. 2

Ngarrka-ngku marlu pantu-rnu [marna nga-rninja-kurra]. man-ERG kangaroo spear-PAST grass eat-NMLSR-ALL 'The man speared the kangaroo while it was eating grass.'

A similar pattern is found in WM; consider example (702). The subordinate clause in bold has the non-finite form of the verb marked with the ablative case which encodes the subordinate clause event as occurring before the event in the main clause, as also occurs in the Wambaya example (699). In this case there is also a cause effect relationship; the hands are sore because they have been digging dye.
(702) Sayers 1982a p. 215 ex 8

| ma' wench | uw-anan-a | wayk | we'-an=am=an-a |
| :--- | :--- | :--- | :--- |
| hand sore(ABS) | find-3PL.EXCL.PRS-a | dye | dig-NF=ABL=DEF-a |
| 'we get sore hands from digging dye' |  |  |  |

Similarly, the allative in (703) and (704) mark events after the event in the main clause and, in these cases, encode the purposive. This differs from Warlpiri, where the allative is used for concurrent events (see (701) above) but is similar to the use of the dative in Martutjarra Luritja (Nordlinger 2002 p. 3).
(703) Kilham et al 1986 p. 408

```
nil engk-an=ak wamp-Ø
3SG(NOM) ask-NF=ALL come-3SG.PST
'he came to ask'
```

(704) Sayers 1982a p. 182 ex 138

| ni ${ }^{87}$ | an=ang=an | pi'=ang=an=iy |
| :--- | :--- | :--- |
| 3SG(NOM) | DIST=ERG=DEF | ant.bed=LOC=DEF=TOP |
| kaamp-antan | mungk-an=ak=an=iy |  |
| bury-3PL.PRS | eat-NF=ALL=DEF=TOP |  |
| 'they bury (cook) them in the ant bed to be eaten' |  |  |

The above examples of non-finite subordinate clauses are adverbial, while the subordinate verb in (705) is modifying the head wom=ang 'wax=LOC' and hence forms a relative clause.
(705) Sayers 1982a p. 199 ex 74

| kuutan | nung=ant=am | puk many | al=antaman=iy-a |
| :--- | :--- | :--- | :--- | :--- |
| umbilical.cord | 3SG=DAT=GEN | CHILD small | DIST=DAT.SAME=TOP-a |

87 An example of the singular nil '3SG' with plural reference; see section 5.1

| wom=ang | kath-an=an=iy-a | nil | an=iy |
| :--- | :--- | :--- | :--- |
| wax-LOC | wrap-NF=DEF=TOP-a | 3SG(NOM) | DIST=TOP |
| pi'-an | pam $\quad$ al=ang=an |  |  |
| look.after-3SG.PRS MAN | DIST=ERG=DEF |  |  |
| 'that man looks after the (that same one) child's umbilical cord, wrapped in wax' |  |  |  |

The only other case found in the corpus is the locative, as in (706) and (707), where the event in the subordinate clause is contemporaneous with the event in the main clause.
(706) Kilham 1977 p. 257 ex 1

| pam | keenk-a | aak | eep-an=ang | iiy-iiy- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- |
| MAN(ABS) | long.ago-a | country | creep-NF=LOC | go-RDP-3SG.PST |
| 'a man long ago went hunting (idiomatic use of creep)' |  |  |  |  |

(707) Sayers 1982a p. 173 ex 28
yaa nguch-an=ang chang pey-an
yes go.early-NF=LOC water jump-3SG.PRS
'oh yes he jumps into the canoe ${ }^{88}$ early'
The above phenomenon of attaching a limited set of case markers to the 'nominalised' verb was very briefly noted in Kilham et al (1986 p. 408) who defined the available cases as those noted above; ablative, locative and allative. They describe the first two as forming past and present participles respectively and the last as 'purposive forms of the verb' (arguably future). They did not analyse their occurrence as constituting subordinate clauses as described above but they provide support for the proposition that only the named cases can attach to the 'nominalised' verb.

It is not essential for the subordinate verb to be marked by case, as in (708) to (710), where, similarly to the locative, the event in the subordinate clause is contemporaneous with that of the main clause. Nordlinger (2006 p. 15) mentions a similar feature of Wambaya where the locative is used where the subject of the subordinate clause is controlled by that of the main clause and unmarked where it is the object of the main clause controlling the subject of the subordinate clause. This appears to be replicated in WM, based on these examples; in (706) and (707) the subordinate clause modifies the subject but in (708) to (710) it is the object.
(708) Sayers 1982a p. 153 ex 41

| peench-aakam | wak=an | grass(ABS)=DEF |
| :--- | :--- | :--- |
| whole | weent-an-am <br> turn-NF-EMPH | thuth- $\varnothing$ <br> 'she went around pulling up all the grass' | | pull-3SG.PST |
| :--- |

(709) Sayers 1982a p. 182 ex 141

| meen-ump-an-am-wey | pi'-antan |
| :--- | :--- |
| sort.out-NF-EMPH-EMO | look.after-3PL.PRS |
| 'they look after (geese eggs) sorted out' |  |

(710) Sayers 1982a p. 209 ex 28-29

| aak-a | paanth-an | thump=an | pent- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| COUNTRY-a | sleep-NF | $s t a r(A B S)=D E F$ | come.out3SG.PST |

'at daybreak the star came out'
Unlike finite relative and adverbial clauses, non-finite clauses are not constrained to be marginal as can be seen in (705), (706) and (710).

### 13.2 Other Adverbial Clauses

The use of =an 'DEF' marking described in sections 13.1.2 and 13.1.3 provides formal evidence of subordination. There are also adverbial clause constructions which are formally indistinguishable from clausal coordination. This is not unusual in Australian languages, as will be discussed in section 13.2.1. Other sub-sections describe various types found in the corpus, using the semantic typology of Payne (1997 pp. 316-320).

### 13.2.1 Background

As described in section 13.1.1 above, Hale (1976b) coined the term 'adjoined relative clause' and included examples such as (711). In this example, as also pointed out by Nordlinger (2006 p. 43), the only marker of subordination is the complementiser kujaIpa 'COMP-AUX'. The two translations show the ambiguity between interpreting the second clause as a relative clause, modifying 'emu' or an adverbial clause modifying the verb phrase 'drinking water'.
(711) Hale 1976 b p. 78 (Warlpiri)

Ngajulu-rlu rna yankirri pantu-rnu, [kuja-lpa ngapa nag-rnu] I-ERG AUX emu spear-PAST COMP-AUX water drink-PAST 'I speared the emu which was drinking water.'
'I speared the emu while it was drinking water.'
Similarly, Evans (2003 p. 646) in his description of Bininj Gun-wok states that subordinate clauses are frequently indistinguishable from main clauses and coordinate clauses in that language group. He groups the types found in Bininj Gunwok on semantic grounds, ignoring the distinction between main, subordinate and coordinate clauses. These semantic groups are similar to those proposed by Payne (1997 pp. 316-320) which are used here.

### 13.2.2 Simultaneous

Simultaneous describes two (or more) clauses describing events coincident in time. In Wik-Mungkan they can be expressed by use of the lexeme an-aniyangan 'at the same time', as in (712) to (714). In each case there are two clauses describing separate events and an-aniyangan 'at the same time' precedes the second clause to show it happened at the same time as the first. In (712) the first clause is 'the plane lands' while the second clause is 'there was a heavy storm' and both events are coincidental.
(712) Kilham et al 1986 p. 14


Example (713) is more complex as it involves a hypothetical; the first clause invokes the eventuality (marked by the subjunctive on the verb) that a child might come and start fidgeting, the second clause being that the hearer should then immediately take the child to her mother, the suffix -an '2SG.FUT' being the imperative.

[^38](713) Kilham et al 1986 p. 97

| [nil | nath putham | ma' yuup-am-ow-a |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) maybe again | HAND restless-ITR-3SG.SBJV |  |
| may min mam-ow-a] | an-aniyangan |  |
| and |  |  |
| bad good hold-3SG.SBJV-a | at.the.same.time |  |
| [kal-an nun-ang kaath kunch=ant=an] <br> bring-2SG.FUT 3SG-ACC mother own=DAT=DEF] <br> 'if she comes again (fidgeting and) touching things, take her to her mother'    |  |  |

Example (714) is slightly different; the first clause is 'a month went past' with which the second clause coincides; 'her labour pains will soon begin'. Thus the coincidence in time implied by an-aniyangan 'at the same time' is of one of immediacy or imminence rather than strict punctual overlap.
(714) Sayers 1982a p. 181 ex 16 \& 17

| $[k e p$ | thonam=ang ngul thee'- $\varnothing$-a] |
| :--- | :--- |
| month one=ERG then throw-3SG.PST | an-aniyangan |
| at.the.same.time |  |

[kan-ngul iimpan pek-ow-an]
now-then stomach hurt-3SG.FUT-3SG.ACC
'a month went past and it was almost time for her labour pains to start'

Not noted in the lexicon but appearing in example (715), part of a very long example from Sayers (1976a p. 50 ex 6), is a similar lexeme nan-naniyangan with the same meaning 'at the same time'. The difference between the two is that the former appears to be based on the distal demonstrative an 'DIST' and the latter on the medial nan 'MED'. I assume that this single example is not an error i.e. the example should not have been an-aniyangan 'at the same time'. The difference between the two is not clear but the use of the medial perhaps signals that the events are closer in time than would be intended by the use of the distal. In the given example, the first clause is 'they now bring out the dance' which is coincident with washing themselves, the children and the siblings. The free translation and the glossing of the second clause are dubious, as discussed below.
(715) Sayers 1976a p. 50 ex 6 (partial)

| [dance=an=iy | kan | pent-ath-antan] | [than | nan-naniyangan |
| :---: | :---: | :---: | :---: | :---: |
| [dance=DEF=TOP | now | come.out-TR-3PL.PRS | [3PL(NOM) | at.the.same.time |
| paththam muunch-antan |  |  | kuunch=an |  |
| really wash-3PL.PRS children ${ }^{90}=$ LOC siblings $=$ L |  |  |  |  |
| 'now they bring out | the dan | nce and, at the same tim | e, wash the | dren and the |

[^39]The meaning of case marking =ang on otham 'children' ${ }^{10}$ and kuunch 'siblings' in (715) is ambiguous. Sayers marked it as ergative which seems an error as they are not subjects of a transitive verb. The verb muunch-an 'to wash' is intransitive, noting that the transitive form muunch-ath-an (wash-TR-NF) 'to wash someone/thing' is used elsewhere in the example so this use of the intransitive is assumed to be deliberate. The use of the intransitive rules out the interpretation of =ang being accusative, a use restricted to pronouns. Other cases homophonous with the ergative are the locative and instrumental. The latter seems unlikely which leaves the locative, possibly with a temporal sense, rather than a spatial sense. This would mean that otham=ang 'children=LOC' would have the interpretation 'the children at that time' or the whole free text to be 'they came out to dance and at that same time they washed themselves and the children washed (themselves)'. The temporal use of the locative is noted in Kilham et al (1986 p. 412). This option is the one chosen here.

Note that there are no instances of the proximal in 'PRX' being used in this way i.e. *in-iniyangan 'at this same time?' does not occur in the corpus.

### 13.2.3 Purpose / Reason

As noted by Payne (1997 p. 318), most languages treat these alike. Both are implemented in Wik-Mungkan by the lexeme puth 'hence'. Consider first examples (716) and (717). In each of these a clause describes an event or state (ground wet from rain in (716), an old woman vomited in (717)) and is followed by puth 'hence' and a clause with the consequence of the event (heat shimmer finished in (716), messed up blankets in (717)).
(716) Kilham et al 1986 p. 32
[ngak=ang kan ep aak=an-a] puth [pung ling ling ya'-ngul] rain=INST now really PLACE=DEF-a hence sun shimmer finished 'the ground is really wet from the rain so the heat shimmer has gone'
(717) Kilham et al 1986 p. 134


Now consider (718) and (719). In each of these a clause describes an event or state (not going to the store in (718) and being tired in (719)), followed by puth 'because' and a clause describing an event or state being the reason for the first event or state (looking after a child in (718) and coming back from a long journey in (719)). Thus the causal link created by puth 'hence/because' can be in either direction between the clauses.
(718) Kilham et al 1986 p. 110

| [ngay | ke' | yippak | iiy-ing | store=ak=an-a] |  |
| :--- | :--- | :--- | :--- | :--- | :--- |$\quad$ puth

(719) )Kilham et al 1986 p. 123

| [ngay | nal | iiy-angan-a] | puth |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | tired | go-2SG.PRS-a | because |
| [aak | kech=am | iiy-iiy-ang-wey-a] |  |
| PLACE | far=ABL | go-RDP-1SG.PST-EMO-a |  |
| 'I am tired from a long journey (sic)' |  |  |  |

There is a separate lexeme wiy 'so' which also occurs between clauses, the second of which which is the consequence of the preceding clause. Examples (720) to (721) illustrate this. In (720) the first clause describes an event 'march flies bit me' followed by wiy 'so' and a second clause describing the consequence 'my skin is stinging'. Similarly, in (721) the first clause poses a question 'are you fond of women?', followed by a second question wiy 'so' asking 'is that why you left your wife?'. Unlike puth 'hence/because', the use of wiy 'so' is unidirectional; the second clause is always presented as a consequence of the first.
(720) Kilham et al 1986 p. 14

| [ngay-ang | puuny=ang | kemp path-in-a] | wiy |
| :--- | :--- | :--- | :--- |
| 1SG-ACC | march.fly=ERG | flesh bite-3PL.PST | so |
| [kemp=an | anch-anch-an | ngay-ang-a] |  |
| flesh=DEF | sting-RDP-3SG.PRS | 1SG-ACC-a |  |
| 'march flies bit me so my skin is stinging (me)' |  |  |  |

(721) Kilham et al 1986 p. 205

| [in | nint | thaa' | wanch | ey?] |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| PRX(DAT) | 2SG(NOM) | MOUTH | WOMAN | INT? |  |
| wiy | $[$ nint | wanch | too | want-an-a] |  |
| so | 2SG(NOM) | WOMAN alone leave-2SG.PST-a |  |  |  |
| 'are you fond of women? Is that why you left your wife?' |  |  |  |  |  |

A third lexeme marking adverbial clauses is yipam 'so that'. Examples (722) to (724) are typical of most of the 42 tokens in the corpus. In each case the lexeme yipam 'so that' is adjacent and prior to the verb in an adjacent clause, generally the second clause in a sequence. The distributional evidence is thus that of an adverb and does not appear between clauses but within a clause. Nevertheless the presence of yipam 'so that' marks the clause that it is in as semantically modifying the main clause. For example, in (722), the clause ngamp-ar yipam wunp wun-ow '1PL.INCLDAT so.that heaped lie-3SG.FUT]' (so that it will be in a heap for us) provides the reason for the action in the main clause thum yalmath-an than-ang 'fire(ABS) gather.up-2SG.FUT3PL-ACC' (gather up the firewood). Similarly in (723) the first clause 'the women sing the mourning song' is for the purpose 'that the ghost will hear'. Finally, in (724) the clause 'they are digging a wide well' has the purpose that 'it will fill up with water'.
(722) Kilham et al 1986 p. 259

| [thum | yalmath-an | than-ang] |
| :--- | :--- | :--- |
| fire(ABS) | gather.up-2SG.FUT | 3PL-ACC |
| [ngamp-ar | yipam | wunp wun-ow] |
| 1PL.INCL-DAT | so.that | heaped lie-3SG.FUT] |
| 'gather up the firewood together (sic) so that it will be in a heap for us' |  |  |

(723) Kilham et al 1986 p. 262

| [wanchinth | al-al=ang=an | wuungk path-antan |
| :--- | :--- | :--- |
| old.woman | DIST-RDP=ERG=DEF | mourning.song sing-3PL.PRS |

[mul al=ang=an | yipam ngeey-ow]] |
| :--- |
| dead DIST=ERG=DEF |
| so.that hear-3SG.FUT |

(724) Kilham et al 1986 p. 251

| $[p a n t a m$ | we'ar thee'-antan | [ngak yipam uunth-ow]] |
| :--- | :--- | :--- | :--- |
| waterhole wide throw-3PL.PRS water so.that fill.up-3SG.FUT |  |  | 'they are digging a wide well so that it will fill up with water'

This distribution is not invariable. In example (725) the free translation suggests that yipam 'so that' is modifying the second verb pi'-ayn 'look after-3PL.FUT' and not the clause thap=ang wunp-ayn 'branch=LOC put-3PL.FUT'. The expected distribution
then would be that yipam 'so that' appear after the the first verb and before the second.
(725) Sayers 1982a p. 181 ex 131
thap=ang $\quad$ yipam
branch=LOC $\quad$ wunp-ayn $\quad$ pi'-ayn

There are a few examples where the lexeme is more remote from the verb such as (726) and (727). In both yipam 'so that' appears after the initial pronoun in the second clause and is separated from the verb by a NP minh nga'a yot 'MEAT FISH lots' (lots of fish) in (726) and, in (727) by a NP woyan Godantaman 'path God=DAT=GEN' (God's path) and an adverb koochanam 'truly'. This does not appear to affect the semantics, also noting that (726) includes two separate but related questions.
(726) Kilham et al 1986 p. 272

| [kaath-ang | nint | ngeen=ak | kerk-kerk-angan-a?] |  |
| :--- | :--- | :--- | :--- | :--- |
| mother-VOC | 2SG(NOM) | what=ALL | hurry-RDP-2SG.PRS |  |
| [nint | yipam | minh | nga'a yot | wich-wich-an-a |
| 2SG(NOM ) so.that | MEAT | fish lots | pull.out-RDP-2SG.FUT INT |  |
| 'why are you hurrying mother? So you can catch lots of fish?' |  |  |  |  |

(727) Kilham et al 1986 p. 137

| [ngay | ngangk | thayan-ath-ang | niiy-ang] | [niiy | yipam |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1SG(NOM) | SOUL | strong-TR-1SG.FUT | 2PL-ACC | 2PL(NOM) | so.that |
| woyan | God=ant=am=an | koochan-am | iiy-an-a] |  |  |
| track | God=DAT=GEN=DEF straight-ADVZ | go-2PL.FUT-a |  |  |  |
| I will encourage you so that you will follow God's path truly' |  |  |  |  |  |

There are a few instances of paal and ke'-paal, both glossed as 'therefore' which can also be used to create reason constructions, as in (728) and (729). In (728) the first clause is puk many kal- $\varnothing$ 'CHILD small bear.child-3SG.PST' (she had borne a child) and the consequence is meech '(she is) hungry'. In (729), the first clause is onion alangan mee' anchan ngayang 'that onion is stinging my eye' with the consequence clause being ngay achiy thawthawanga 'I sneezed'. The difference in meaning, if any, between the two lexemes paal and ke'-paal 'therefore' is not known. Ke' can be glossed as a clausal negator or 'similar to' or 'about to'. None of these glosses appear relevant to the meaning. See section 12.1.5 for more discussion.
(728) Sayers 1982a p. 158 ex $98 \& 99$

| [puk | many=an | kal-Ø] | paal | meech |
| :---: | :---: | :---: | :---: | :---: |
| CHILD | small(ABS)=DEF | bear.child-3SG.PST | therefore | hungry |
| she had | t borne a child the | she was hungry' |  |  |

(729) Kilham et al 1986 p. 61

| [onion al=ang=an | mee' | anch-an | ngay-ang] |
| :--- | :--- | :--- | :--- |
| onion | DIST=ERG=DEF | eye | sting-3SG.PRS |$\quad$ 1SG-ACC

### 13.2.4 Concessive

Concessive conjunction can be formed by use of the lexeme nungkway/nungkwey 'although'. There are eleven examples of this lexeme in the corpus. Three of these examples are (730) to (732) below. In each case, nungkway 'although' introduces the concessive clause which appears before the main clause. Analysis of the first two examples is complicated by the presence of puth 'but' and puth=an 'but=DEF' respectively (refer section 3.5.4.1) which is untranslated in the free translation but appears to be providing the sense of 'but'. Thus (730) has an initial clause nint way yumpangan nganta 'you are doing wrong to us' is preceded by nungkwey 'although' and followed by puth 'but' and the second clause ngan nintang ke' piikina 'we won't hit you'. A similar structure is seen in (731). In (732) the first clause is nil iimpananga 'she was pregnant' with nungkwey 'although' contained within the clause. The second clause is then the action she undertook despite the condition; nil kankanam work iiyiiy 'she really worked'.
(730) Kilham et al 1986 p. 156

| nungkway [nint | way | yump-angan | ngant-a] |
| :--- | :--- | :--- | :--- |
| although | 2SG(NOM) | bad | make-2SG.PRS | 1PL.EXCL.DAT-a


| puth [ngan | nint-ang | ke' | piik-in-a] |
| :--- | :--- | :--- | :--- |
| but 1PL.EXCL(NOM) | 2SG-ACC | NEG hit-1PL.EXCL.FUT |  |
| 'although you are doing wrong to us, (but) we won't hit you' |  |  |  |

(731) Sayers 1982a p. 215 ex 7-9

| nungkway | [ngan | ngeen ma' | wench uw-anan-a |
| :--- | :--- | :--- | :--- |
| although | 1PL.EXCL(NOM) | what hand |  |
| sore find-1PL.EXCL.PRS |  |  |  |
| wayk | we'-an=am=an] | puth=an | [mak- $\varnothing$-ant] |
| dye | dig-NF=ABL=DEF | but=DEF | stick.to-IMP-DAT | 'but what happens? Even if we get sore hands from digging dye, we must (keep on)' (although we get sore hands from digging dye, but we must (keep on))

(732) Sayers 1982a p. 150 ex 9

| [nil | nungkwey | iimpan=ang-a] | [nil | kan-kan=am |
| :---: | :---: | :---: | :---: | :---: |
| 3SG(NOM) | although | stomach=LOC-a | 3SG(NOM) | NOW-RDP=ABL |
| work iiy-iiy=Ø] |  |  |  |  |
| work go-RDP-3SG.PST |  |  |  |  |
| 'although pr | gnant she r | y worked' |  |  |

### 13.2.5 Manner

There are four lexemes; ke', yimanam, yimanang, and yinang (variant of yimanang), all glossed as 'like, similar to'. The last three are adverbial demonstratives of manner, discussed in section 6.3.1. The first ke' like' is used to form adverbial clauses of manner.

In (733) the subordinate clause is the NP puk many-a mup-a 'child small low'. As for the Hale example (711) described above, this can be interpreted as either a forming a relative clause, modifying the pronoun nun '3SG.ACC' or an adverbial clause modifying the verb thath=iythan 'see-3SG.SBJV'.
(733) Sayers 1982a p176 ex 59

| [thath-iythan | nun] | ke' | [puk many-a | mup-a] |
| :--- | :--- | :--- | :--- | :--- |
| [see-3PL.SBJV | 3SG.ACC | like |  |  |
| [CHILD small | low-a] |  |  |  |

In (734) the subordinate clause aak ngaa' nyim=ang=an 'PLACE darkness black=LOC=DEF' (in darkness) is central (see above section 13.1.1 for definition) to the main clause 'the men and women are living'. The coordinator ke' 'like' identifies the manner in which the men and women are living. In this case the relative clause interpretation is not available.
(734) Kilham et al 1986 p. 60

| [ $[$ than | pam | wanch] | [ke' |  |
| :---: | :---: | :---: | :---: | :---: |
| [[3PL(NOM) | ) MAN | WOMAN] | like |  |
| aak <br> [PLACE | ngaa' <br> darkness | $\begin{aligned} & \text { nyim=ang= } \\ & \text { black=LOC } \end{aligned}$ |  | wun-wun-tan] be-RDP-3PL.PRS] |
| 'they, men and | and women | n, are living | if in |  |

Example (735) shows ke' like' coordinating two finite clauses, the first 'he is threatening you' with the second 'he would spear you'. The use of ke' like' here is modifying the verb, describing the manner in which the man is threatening.
(735) Kilham et al 1986

| [nil | ngaap-ngaap-an | nint-ang] | ke' | [chint=iy | nint-an] |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) | threaten-RDP-3SG.PRS | 2SG-ACC | like | spear-3SG.SBJV | 2SG-ACC |

Ke' 'like' also combines with yimanang(=an) 'like this' (refer section 6.3.1) to form a comparison construction $\mathrm{A} \mathrm{ke}^{\prime} \mathrm{B}$ yimanang which means there is a similarity between A and B, as in (736), where the first clause A 'I wish I could have a slim figure' is compared with B 'like my cousin'. Similarly, in (737) A is the clause 'going a long way east' which is compared with B 'like a snake'.
(736) Kilham et al 1986 p. 166

| [ngay | pal | kemp | many | weem-ing] |
| :--- | :--- | :--- | :---: | :---: |
| [1SG(NOM) | hither | flesh | small $\quad$ become-1SG.SBJV] | ke' |
| like |  |  |  |  |

(737) Sayers 1982a p175 ex 50

| [ke' | [thuuk | yimanang] | mana-paant | aakanak=am |
| :--- | :--- | :--- | :--- | :--- |$\quad$| kaaw=an] |
| :--- |
| $[$ like |
| [snake | like.this] | long.way ${ }^{91}$ |
| :--- | | DIST.ALL=EMPH | east=DEF] |
| :--- | :--- |

### 13.3 Coordination

Payne (1997 p. 337) defines two phrases as grammatically coordinated if they are of equal grammatical status (i.e. neither is dependent on the other) and
(1) the two clauses have more or less the same function in terms of the event structure of the text .... and (2) they are presented as being conceptually linked in some way.

Payne (1997 p. 337) further distinguishes between phrasal and clausal coordination, disjunction and exclusion. Section 7.3 describes how Wik-Mungkan exhibits phrasal coordination while section 13.3.1 describes clausal coordination.

### 13.3.1 Clausal Coordination

Clausal coordination is the term to describe coordination of two (or more) clauses,

91 As per Sayers original but lexicon only includes man paant 'limb high in tree'
specifically where neither is subordinate to the other. The formal possibilities are juxtaposition (Payne's 'zero strategy') and by the use of a coordinator. The next two sections describe these in Wik-Mungkan.

### 13.3.1.1 Juxtaposition

Clauses can be coordinated by simple juxtaposition, as in (738) where the first clause is 'come here' and the second clause is 'take this off' with no overt coordination.
(738) Sayers 1976a p. 37 ex 3

| [pal iiy-an] $\quad$ [in | thapath-an-a] |
| :--- | :--- | :--- |
| hither go-2SG.FUT $\quad$ PRX(ABS) | take.off-2SG.FUT-a |
| 'come here and take this off' |  |

### 13.3.1.2 Conjunction by coordinator

The lexeme $a^{\prime}$ 'and', as noted in section 7.3.3 can be used to conjoin NPs however the most common use ( 57 of 59 tokens in the corpus) is to combine clauses in a sequential way, as in (739), the full version of (383). The first instance of $a^{\prime}$ 'and' links the nominals kek 'spear' and thul 'woomera', the second links the clause 'he went with spear and woomera' with the next 'he saw a very big barramundi' which is linked in turn by a' 'and' to the final clause 'he speared it in the neck, killing it'. All known examples follow the pattern of temporal sequence i.e. each clause represents an event which occurs after the previous clause.
(739) Kilham et al 1986 p. 207


Similarly, in (740) a' 'and' links the two clauses 'the tree broke' and 'the child fell'.
(740) Kilham et al 1986 p. 84

| ngul   <br> then tree punth=an <br> arm(ABS) $=$ DEF   | ya' <br> really | thuth- $\varnothing$ <br> break-3SG.PST | a' <br> and |  |
| :--- | :--- | :--- | :--- | :--- |
| puk=an | keek- |  |  |  |
| CHILD(ABS)=DEF | fall-3SG.PST |  |  |  |
| 'then the branch broke and the child fell' |  |  |  |  |

Similarly, the lexeme puth 'and' can function as coordinator of two clauses, as in (741) where it links a 'young woman had a baby' and 'she brought him up well'. This is not the most common use of puth; refer section 3.5.4.1. The final clause 'she took care of him properly' is assumed to be a new sentence, as per the free translation.
(741) Kilham et al 1986 p. 100

| [nil | wanch koman=ang puk many | kal- $\varnothing]$ | puth |
| :--- | :--- | :--- | :--- | :--- |
| 3SG(NOM) WOMAN young=ERG CHILD small | bear.child-3SG.PST | and |  |
| [min-min=ak-am | em-ath-an], | [ma'kaa'nyiin- $\varnothing$ | nung=ant] |
| good-RDP=ALL-EMPH | grow-TR-3SG.PRS | do.well-3SG.PST | 3SG=DAT | 'A young woman had a child and she brought him up really well. She took care of him properly'

Puth can also have the sense of 'but' to coordinate two clauses, as in (742). In this example, the first clause describes a state 'we are all sick here', followed by a second with the puth 'but' embedded describing another state 'we have no doctor'. This in turn is followed by the final clause 'hence we thought you could be a doctor for us'. The instances of the pronoun ngan '1PL(NOM)' are co-referential with the subjects but not part of the clauses. See section 5.1.2 for discussion of this usage in WM. See also section 13.2.3 for more on this second use of puth 'hence'.
(742) Kilham et al 1986 p. 194


## 14 Dialects

As discussed in section 1.3 the data sources used elsewhere for this thesis do not discuss dialect. In particular the lexicon contains no variant lexical items marked for dialect. Some items have alternative spellings such as yipam and yipmam 'so.that' but these are free variants rather than dialect differences. This chapter reviews the few sources available which discuss dialect variations with accompanying data and compares them with the other data presented in this thesis. These sources are Sayers and Godfrey (1964), Rigsby (1974) and Rigsby (1994). This is not to assert that what these describe are / were the only dialects; they are the only ones for which data is available. For instance, there is a recording held in the AIATSIS library of the Uwan dialect of Wik-Mungkan. Unfortunately permission to access this has not been obtained. For this chapter, the term 'Aurukun dialect' will be used to refer to the description in the other chapters of this thesis. This section gives a brief background of each of the above sources. Additionally, Sutton (1979) discusses Wik languages and dialects in general but does not provide any additional data. A brief summary of Sutton (1979) is included in this section.

An overview map of the various locations mentioned below is provided in illustration 2 on page 4.

Sayers and Godfrey (1964) is entitled 'Outline description of the alphabet and grammar of a dialect of Wik-Munkan (sic) spoken at Coen, North Queensland'. Coen is 272 km by road south east of Aurukun on the East coast of Cape York. The paper is in two parts; a phonological description by Barbara Sayers and a 'tentative' outline grammar by Marie Godfrey. It is based on three months spent in Coen in the period September to November 1961. The introduction (ibid p. 50) makes it clear that the authors had difficulty finding speakers who could or would help them, due to language difficulties and financial circumstances. These difficulties eventually forced the authors to cease their efforts in Coen and move to Aurukun. The resulting paper reflects their difficulty; there are various gaps and inconsistencies in the descriptions which will be noted in the relevant sections of this chapter. Nevertheless there is
enough material to provide interesting comparisons with Rigsby $(1974,1994)$ and the Aurukun dialect.

Rigsby (1974) is a 14 minute elicitation recording made by Bruce Rigsby on June 11 1974 in Coen with one language speaker, Oscar Gordon. It contains various elicitations of lexical items and short phrases. The dialect described by Sayers and Godfrey (1964) and Rigsby (1974) will be referred to as the Coen dialect. Differences between the two sources will be noted by section.

Rigsby (1994) consists of field notes made by Bruce Rigsby of Wik-Mungkan at Theethinji, a township near Port Stewart, Cape York. Theethinji is about 54 km south east from Coen, on the coast. The date on the first page is 11/12/94 and on a later page is 12/12/94 which also notes the location as 'Udh'. I have failed to find this location. The note book is mostly elicited lexical items with some short phrases. All words are notated in IPA. The data collected by Rigsby (1994) consists of one speaker (Victor Lawrence) dialect is unknown. As noted above, Theethinji is on traditional Lamalama country, which is his wife's country ${ }^{92}$.

Sutton (1979) is entitled 'Aboriginal society, territory and language at Cape Keerweer. Cape York, Australia'. There is one section relevant to this chapter; (ibid pp. 166 185), which is a broad description of all the Wik languages and dialects in that area. As such there is little specific data on Wik-Mungkan as spoken at Aurukun, Coen and elsewhere to assist the analysis of this chapter. One point to note is that he describes (ibid p. 179) a dialect Mungkanhu being probably the same or similar to the dialect described in Sayers and Godfrey (1964).

The structure of this chapter will be topic based; phonology (section 14.1), vocabulary (14.2), morphosyntax (14.3) and simple clauses (14.4). The analysis will show that there are three distinct dialects; Aurukun, Coen and the variety recorded by Rigsby (1994). The major caveat against this assertion is that the descriptions of the latter two are based on limited data (one speaker in the case of Rigsby (1994), as will be discussed in each section.

92 My thanks to Jean-Christophe Verstraete (pc) for this information

### 14.1 Phonology

This section discusses the phonemes (section 14.1.1) gleaned from the different sources, followed by a brief discussion of phonotactics (14.1.2).

### 14.1.1 Phonemes

### 14.1.1.1 Coen Dialect as per Sayers and Godfrey (1964)

The phoneme inventory of the Coen dialect presented in Sayers and Godfrey (1964 p. 51) is largely the same as that in section 2.2. The main exception is the absence of the dental place of articulation i.e. the dental stop $t$ and dental nasal $n{ }_{n}$ are omitted in the former. The lack of these phonemes may be an error on the part of Sayers and Godfrey i.e. they did not recognise the difference between the dental and the alveolar stop and nasal due to the limited time spent there. This is deemed unlikely as the analysis is detailed and appears thorough. Additionally, they had not been to Aurukun at the time of the Coen visit and did observe the dentals in their work at Aurukun. Alternatively the omission of the dental may be a feature of that dialect. They also report voiced allophones (ibid p. 51) for all stops bar the glottal stop, which agrees with the analysis of the Aurukun dialect in section 2.4.

A minor difference in the consonants is the preference for the alveopalatal stop in place of the palatal stop. As discussed in section 2.7.1.4 this a variation of the palatal found in other authors on Wik-Mungkan.

They describe a wider variation of the rhotic phoneme /r/ than that described in section 2.4.4 which found the trill [r] to predominate with the approximant [r] in some instances. Sayers and Godfrey (1964 p. 52) did not report the approximant but found the trill [r], the flap [ 4 ] inter-vocalically and a voiced alveolar trill [r] in consonant clusters. Somewhat confusingly they also use the symbol [ $\ddot{R}]$ which they describe as a voiceless alveolar trill occurring finally. As the trill $[r]$ is the alveolar voiceless trill it is not clear what is meant. The IPA symbol $[\ddot{\beta}]$ is defined as an unvoiced uvular trill. It may be relevant that of the four words used as examples, only one, ma'-piir 'fingernail' is found in the Aurukun dialect.

The vowel inventory (Sayers and Godfrey 1964 p. 52) is identical to that found generally in the Wik-Mungkan literature; see section 2.7 .5 for an extensive discussion and comparison with the analysis of this thesis. Similarly the two glides [j] and [w] are the same as elsewhere reported, including this thesis. There is no mention of the glides being realised as diphthongs as described in section 2.4.7 for the Aurukun dialect.

### 14.1.1.2 Coen dialect as per Rigsby (1974)

Rigsby (1974), recorded at Coen, consists of a 14 minute recording of elicited words and simple phrases. As such not all phonemes which are found in the Aurukun dialect (see section 2.2) and the Coen dialect as described in Sayers and Godfrey (1964) are found in this data. Equally, most examples are single word elicitations; there are only a few elicitations of two or more words such as keka ongka [ $k^{\mathrm{h}} e k^{\mathrm{h}} a$ ojk $\left.{ }^{\mathrm{h}} \mathrm{a}\right]$ 'spear long' (4.42). This means that examples across word boundaries are rare. With those caveats, the following describes the results of acoustic analysis of the data. All examples provided will have the relevant time stamp shown in brackets.

Firstly, the obstruents /p/, /t/, /t//, /c/, /k/ and/?/ are all found, almost exclusively in onset position. Nearly all words end in a vowel and most words found are monosyllabic or disyllabic. In onset position the most common realisation of all obstruents, except the dental and glottal stop, is aspirated. For example pama 'man' (0.31) is realised as [ $\mathrm{p}^{\text {hama] }}$, ninta ' $2 \mathrm{Sg}^{\prime}$ (1.59) is realised as [ninth${ }^{\text {ha] }}$, wancha 'woman' (0.38) is realised as [wanc ${ }^{h} a$ ] and kucham 'one' (0.54) is realised as [ $\left.k^{h} u c^{h} a m\right]$. There is one instance of a voiced allophone; kuna 'faeces' (2.45) is realised as [guna]. There is one example of an unaspirated stop which is in aak neka ${ }^{93}$ 'today' (6.34) [a:knekha] where the first velar $k$ is unaspirated. This is also the only example of a stop as coda, which agrees with the findings of the Aurukun dialect in section 2.4.1.

For most of the remaining consonants found, namely nasals i.e. $/ \mathrm{m} /, / \mathrm{n} /, / \mathrm{h} /$ and $/ \mathrm{h} /$, and glides $/ \mathrm{w} /$ and $/ \mathrm{y} /$ and lateral $/ / /$ there are no allophones, consistent with the findings for the Aurukun dialect (see sections 2.4.2 and 2.4.3 respectively). There are no examples of the rhotic in the data, which is unsurprising, in that the phoneme 93 Word not found in the Aurukun dialect
is rare in the Aurukun dialect. There are no instances where the rhotic would be expected, based on Aurukun data, and is absent. That is, the absence of data in the sample is not proof of absence in the dialect.

The dental nasal is not found, despite the presence of words which normally contain it, where the alveolar nasal $[\mathrm{n}]$ is found instead. For example, in the Aurukun dialect 'MEAT' is [min(a)] but in the Rigsby (1974) data it is [mina] (0.45, 0.46). Bruce Rigsby explicitly asks if the word is [mina] and Oscar Gordon repeats it as [mina]. This absence matches the absence in the work of Sayers \& Godfrey (1964) discussed above in section 14.1.1.1.

Rigsby 74 Vowels


Formant 2

## Illustration 7: Scatter chart of vowels in Rigsby (1974)

The scatter chart for vowels is shown in Illustration 7, labels in the practical orthography. This is based on a single speaker so should be treated with caution. That said, as for the Aurukun dialect, there are few examples (two) of the long vowel /oo/. The overall chart is similar to that of the Aurukun data (see Illustration 3 on page 45) with some minor differences, as follows. The values of $/ \mathrm{i} /$ and /ii/ are further apart and both are more central; the values of /e/ and /ee/ are closer, with the latter being higher; /a/ and /aa/ are higher and further apart; /u/ and/uu/ are much closer and with similar formant values to the Aurukun data and /o/ and /oo/ both close together and with similar values to the Aurukun data.

The vowel - glide combinations are not common but are realised as diphthongs as described in section 2.4.7 for the Aurukun dialect.

In summary, there is a great similarity between the Aurukun data and this data, noting again the relative paucity of examples in the Rigsby (1974) data, especially in connected speech.

### 14.1.1.3 Rigsby (1994)

The phoneme inventory of the variant spoken by a single speaker at Theethinji is arrived at by analysing the various items in the notebooks of Rigsby (1994). There is no audio data to analyse but the elicitations are all recorded in IPA and are assumed to be accurate.

All of the consonants in Table 1 and the vowels in Table 2 are found, including length distinctions. Unlike the Coen dialect but like the Aurukun dialect, the dental place of articulation is present, in both the stop and nasal series.

Some words contain voiced stops in place of the voiceless stops; these are assumed to be allophones and not extensions to the consonant inventory. Examples of voiced allophones are: [b] in place of [p] in [acamba] 'emu' (Rigsby 1994 p. 55); [d] in place of in [t] in [tanada] 'stand it up' (ibid p. 77) (which is analysable as than-ath- $\varnothing$-a 'stand-TR-IMP-a'), and [孔] in place of [c] in [jumati] 'black headed python' (ibid p 55). Other stops are all transcribed as voiceless. In particular the voiced alveolar [d] and velar [g] are not found.

The nasal and glide consonants found in Rigsby (1994) do not vary from the Aurukun inventory discussed in section 2.2.1. The rhotic does not appear frequently in Rigsby (1994) but is consistently represented as a trill, as in [arki] 'waterlily root' (ibid p. 56), which matches the acoustic evidence in section 2.4.4.

For the vowels the only variations from Table 2 are $/ \mathrm{e} /$ and $/ \mathrm{o} /$. The phoneme $/ \mathrm{e} /$ is [e] for long vowels and [ $\varepsilon$ ] when short, the reverse of that found in section 2.4.6.1 for
the Aurukun dialect, but agreeing with the evidence of Rigsby (1974) in section 14.1.1.2 above. The phoneme $/ 0 /$ is generally transcribed as [ 0 ] in initial syllable i.e. when stressed and [o] elsewhere. The analysis in section 2.4.6.1 found that /o/ was [ 0 ] in all positions but noted a lack of data hindered the analysis.

The vowel - glide combinations are not noted as being realised as diphthongs as described for the Aurukun dialect (see section 2.4.7). This is likely because almost all words have a final vowel. In the Aurukun dialect a vowel - glide - vowel is usually realised as such and not as diphthong - vowel. Thus the Rigsby (1994) data seems to follow the same pattern.

### 14.1.1.4 Summary

The phoneme inventory for the Coen dialect (Sayers and Godfrey 1964, Rigsby 1974) and Theethinji data (Rigsby 1994) recording align closely to that of the Aurukun dialect. The main difference is the dental place of articulation; the nasal dental is not found in the two Coen sources while the first source also excludes the dental stop. The loss of the nasal dental was also noted as a trend in the Aurukun dialect by Sayers (1976a p. xvii) with younger speakers at that time starting to use the alveolar nasal in place of the dental nasal.

### 14.1.2 Phonotactics

This section discusses the phonotactics described in Sayers and Godfrey (1964) and gleaned from Rigsby (1994). The data in Rigsby (1974) is insufficient to undertake meaningful comparisons.

### 14.1.2.1 Coen Dialect (Sayers and Godfrey 1964)

Some interesting differences from the Aurukun dialect can be found in the phonotactics observed by Sayers and Godfrey (1964 pp. $53-55$ ). Firstly the distribution of vowels is described as being in all syllable types, word initially, medially and finally. This contrasts with the Aurukun dialect, where the only words found finishing in a vowel other than /a/ are onomatopoeia. For example, 'place' is aaku in

Coen dialect but aak(a) in Aurukun dialect and 'VEG' (vegetable food) is mayi in Coen and may(a) in Aurukun.

Sayers (1977 p. 136) states that all monosyllabic words in the Aurukun dialect have obligatory onsets. Kilham (1977 p. 32) goes further and states that all syllables in Aurukun dialect have an onset. This again contrasts with the later lexicon (Kilham et al 1986) where many lexical items have vowel initial syllables as does the Coen dialect. Section 2.7.1.5 discusses this difference and speculates that there was a process of change whereby many initial glottal stops were dropped between 19271934 (when McConnel made her recordings) and the late 1970s. See section 15.2 for discussion of the McConnel data. Note that even in McConnel's data some words are found which are vowel initial. Sayers and Godfrey (1964 p. 54) states explicitly that the glottal stop does not occur word initially in the Coen dialect. The conclusion is that the glottal stop in word initial position has been a feature in some dialects and not others but the tendency is for it to be progressively dropped in all dialects. This is supported by Sutton (1979 p. 181) where he states that Proto Wik must be reconstructed such that words may begin with a vowel e.g *aaku 'place, time'.

Consonants are described in the Coen dialect as occurring in word initial position, bar the glottal stop, the glide /I/ and the rhotic /r/. The glottal stop is discussed in the preceding paragraph. The word-initial glide is uncommon in the Aurukun dialect and the rhotic is word initial for one word only, believed to be a loan word. This is consistent with the findings of Sayers and Godfrey (1964 p. 54).

Word final consonants are described by (Sayers and Godfrey 1964 p. 54) as limited to $/ \mathrm{m} /, / \mathrm{n} /$ and $/ \mathrm{n} /$. This is despite them elsewhere (ibid p.54) citing the word kuchek 'head', with final velar. This limitation is definitely at variance with the Aurukun dialect where only the glides are not found word finally. This variance is likely due to the prevalence of words with vowels in word final position in the Coen dialect. In particular, many words in the lexicon with no final vowel are also in Sayers and Godfrey (1964) with a word final /a/ in the latter. As noted in section 2.5.4 the word final /a/ is optional in the Aurukun dialect. In general it appears that there has been an historical trend of final vowels being dropped as obligatory.

Sayers and Godfrey (1964 pp. $59-60$ ) note that word final vowels can be dropped in continuous speech, especially, but not exclusively, if the following word begins with a vowel. Utterance final vowels are also described as sometimes being dropped. The most common vowel to be dropped is said to be a.

Syllable types described by Sayers and Godfrey (1964 p. 54) are restricted to V, VC, CV and CVC. The list of syllable types is less than reported in section 2.5.1. Although consonant clusters are identified (ibid p.55), they are limited to two consonants and 'ambisyllabic' i.e. the cluster only exists as coda for one syllable and onset for the following syllable. This statement is at variance with the citation of the word kalmp 'quickly' (ibid p. 64) which has a three consonant coda. This is not the case for the Aurukun dialect (see section 2.5.1) where CC and CCC are found in single syllables.

The description of the stress pattern in Sayers and Godfrey (1964 pp. 53-54) is very short but consistent with all descriptions of Wik-Mungkan (see section 2.6.1). Specifically they state stress occurs on the first syllable, noting two exceptions; kuchek 'head', wanchinta 'old woman' (ibid p. 54). They do not discuss the stress pattern for words of more than two syllables.

### 14.1.2.2 Rigsby 1994

Like Sayers and Godfrey (1964), Rigsby (1994) contains syllables without an onset, especially word initial, in line with the Aurukun dialect. Like Sayers and Godfrey (1964) and unlike the lexicon, all vowels are found word final. Rigsby (1994) is a list of words and very short phrases and does not describe syllable types. The words found generally have cognates in the lexicon and hence similar syllable structures. No word was found with a syllable structure different from those described in section 2.5.2.

Rigsby (1994) consistently marks primary stress on the first syllable, in line with Sayers and Godfrey (1964) and section 2.6.1. He does not usually mark secondary stress except some words where the stress pattern is unusual e.g. in [ku.cek] 'head'
(ibid p. 60) the primary stress is marked on the second syllable and secondary stress on the first syllable. This exception to the usual stress pattern has been observed elsewhere; see sections 2.6.1 for the Aurukun dialect and 14.1.2.1 for the Coen dialect as per Sayers and Godfrey (1964).

### 14.2 Lexical Items

The lexical items gleaned from the Coen dialect sources and the Theethinji data do not, unsurprisingly, form complete lexicons nor do they cover the same range. Appendix 3 provides a table of words found, with the English translation and the equivalent Aurukun dialect form in Kilham et al (1986). Some of the items are verbs with specific person tense suffixes, especially from Rigsby (1994). The verbs from Sayers and Godfrey (1964) have only been included in the non-finite or in the equivalent tense to Rigsby (1994). Verbs will be further discussed in section 14.3 on morpho-syntax. The words are shown in the practical orthography adopted for this thesis from Kilham et al (1986 p. 399) to allow for comparison. See section 2.2 for detail on the practical orthography.

Analysis of the table in Appendix 3 shows that most of the lexical items across the four sources are very similar. The main differences are four-fold. Firstly, the place of articulation for consonants varies but usually to an adjacent place. Section 14.1.1 noted that Sayers and Godfrey (1964) omitted the dental place of articulation; where dental stops and nasals are found in the lexicon the cognate in Sayers and Godfrey have adjacent alveolar stops and nasals. For example, the pronoun than '3PL' in the Aurukun dialect is tan in Sayers and Godfrey (1964 p. 76) and minh 'MEAT' in the Aurukun dialect is mina in Sayers and Godfrey (1964 p. 70) and Rigsby (1974 2.56). Conversely, want-an 'leave-IMP' in the Aurukun dialect is wantanh in Rigsby (1994 p. 76).

Secondly, variation in vowels are found in both length and quality. Vowel length variations can be seen iiy-an 'go-NF' which is shown with the short initial vowel iyan in both Coen dialect (Sayers and Godfrey 1964 p. 64) and Theethinji data (Rigsby 1994 p. 80). Vowel quality variation is unpredictable. For example, the e in wel
'blue-tongue lizard' in the lexicon is a in wali in Rigsby (1994 p. 54) while the reverse is true for the lexicon word po'am 'wild plum' and Rigsby (1994 p. 59) po'em. Thus there does not seem to have been any systematic sound change.

Thirdly, the Aurukun dialect has only one word-final vowel (apart from a handful of onomatopoeia), a, which can occur on all words but is optional and has no semantic content. Although that vowel a predominates word finally in the other dialects all other vowels are also found word finally. Words with no final vowel in the dialects other than the Aurukun dialect are relatively rare. Examples of word final vowels in Sayers \& Godfrey (1964) data are mayi 'VEG', atanye 'give-IMP', yoyiko 'hill' and pungku 'knee'. Rigsby (1974) has examples such as pungko 'knee', kape 'moon' and yimpu 'three' while Rigsby (1994) has examples arki 'waterlily', polpo 'white' and kumpu 'urine'.

The above can be compared to the reconstruction of Middle Paman in Hale (1976a), which shows that Middle Paman had other word final vowels. Some examples are mayi 'VEG' (ibid p. 56) and pungku knee (ibid p. 58) as noted above by Sayers \& Godfrey.

Finally, some words are specific to one source i.e. are not related to the words for the same things in one or more of the other sources. For example, the word for 'white' in the Aurukun dialect is pach while in Coen (Sayers and Godfrey 1964 p. 69) and I Rigsby 1994 p. 64 it is polpo. The lexicon can also have multiple words of similar meaning, one or more of which may be found in the other sources. For example the Aurukun dialect has four words for 'short', including murkan and koch. The former is also found in Coen (Rigsby 1974 4.58) and the latter in the Theethinji data (Rigsby 1994 p. 73). Some words are perhaps related to place e.g. Rigsby (1994 p. 49) has konthe 'fresh water lobster' which is not found in other sources. It is possible that this is a species that exists on the east coast of Cape York but not the west coast. Equally possible, it could be a borrowing.

There are limited mentions of demonstratives in the non-Aurukun sources and limited evidence of the three-way distance distinction and rich morphology of the Aurukun
dialect (see chapter 6). Sayers and Godfrey (1964 p. 78) note three words for 'here': inu, inuma and inguma with no commentary of any difference. These words appear to be variants of in 'PRX', in=am 'PRX=EMPH' and ing=am 'PRX=EMPH' in the Aurukun dialect. They also (ibid p. 78) note two words for 'over there'; ana and anama, cognates of an 'DIST' and an=am 'DIST=EMPH' of the Aurukun dialect (see section 6.1.1 and 6.1.5 for a full discussion of the cognate demonstratives in Aurukun dialect respectively). Rigsby (1974) has aak inu 'here' (ibid 8.45) and nana 'there' (ibid 10.28), the latter apparently cognate with Aurukun dialect medial demonstrative nan(a) 'MED(a)'. It seems likely then that the medial did exist in the Coen dialect but may have been becoming less used. As noted in section 6.4.5, the medial is no longer used in the Aurukun dialect and is less frequent in the Aurukun corpus (1960s/70s data) than the proximal and distal. There is no mention in Sayers and Godfrey (1964) of a medial demonstrative. Rigsby (1994) has no elicited demonstratives.

A minor but interesting point of difference is that Rigsby (1974) includes a word for 'four' in the Coen dialect. This is generally considered unusual in Australian languages in which the numeral system is usually restricted to 'one', 'two', 'three/some' and 'many' (see e.g. Dixon 2002 p. 106 and Bowern and Zentz 2012 p. 136). The latter work, a survey of number systems in 189 Australian languages found exceptions to the generalisation but confirmed its overall accuracy. The word for 'four' in Rigsby (1974 0.57) is ko'alam, the word for 'three' in all other WikMungkan sources. The word for 'three' in Rigsby (1974 0.55) is yimpu, probably a borrowing. In Sayers and Godfrey (1964 p.76) the numbers are similar to the Aurukun dialect. In particular the word for 'three' is ko'olam and there is no word for 'four'. The discrepancy in the two descriptions of the Coen dialect in this regard is not explained.

Despite these variations, overall the vocabulary of each of the sources is very similar in that words for the same things usually share close or identical phonological features. This is particularly true of common words such as pronouns, cardinal directions, pam(a) 'man' and wanch(a) 'woman'.

### 14.2.1 Summary of Lexical Comparison

Attempting a statistical analysis of commonality across the different sources / dialects is problematic because the different sources are frequently silent on specific lexemes. That is, two or three sources may have a particular lexeme while the remainder do not. The absence is an artefact of the different timelines and methods used; the various authors did not attempt to elicit a standard set of words which could be compared. With that caveat, it is still notable that of the 402 rows in the table in Appendix 3, 57 have variations i.e. one or more of the sources have a word different from the remainder. This is a percentage of $14 \%$, which tends to support the assertion that there is sufficient evidence of shared vocabulary. The language data in the four sources discussed here can thus be described as being from three different dialects i.e. Aurukun, Coen and the unknown dialect of Rigsby (1994), and not different languages.

### 14.3 Morpho-syntax

This section discusses the morpho-syntax of the different dialects as revealed by these sources. Only Sayers and Godfrey (1964) contains an explicit grammatical description so that will be the main focus. It is important to repeat that the authors express uncertainty at various points in the description due to the limited time they had had to analyse the language. This means that discrepancies between their description and that of the Aurukun dialect in this thesis may not reflect actual differences in the dialects. The other sources will be discussed where they have data for comparison.

The word classes across all sources align with the Aurukun dialect as described in chapter 3 , namely nominals, including pronouns, adjectives, ignoratives and quantifiers, demonstratives, verbs, adverbs and particles. The focus for the rest of this section is on the nominal and verbal morphology.

### 14.3.1 Noun Phrase

The noun phrase structure described by Sayers \& Godfrey (1964 pp. 68-71) is
generally consistent with that in section 7.1, with some differences. The first difference is the absence of a distinction between generic nouns such as minh 'MEAT' and specific nouns such as ko'an 'goose' (see section 3.1.1). This is unlikely to reflect an actual difference as can be seen in an example on ibid p. 69; mintuka is translated as 'egg', rather than decomposed as min tuka 'MEAT egg'. The word mina is translated as 'meat' elsewhere in the paper (ibid p. 53). The later Rigsby (1974) also elicited mina as well as maya as words for 'food'. The conclusion is that the apparent compounding of mintuka 'MEAT egg' was based on an impression and reflects the limited time spent in Coen. There are no other examples of words which are generic in the Aurukun dialect

The adjective word class and its slot in the NP, following the noun, is the same as in section 7.1 but no modifying adverbs of degree are recognised. Multiple adjectives are described as being possible (ibid p. 68), which agrees with the Aurukun dialect described in section 7.1.

The next two slots in the NP structure described by Sayers and Godfrey (1964) are for quantifiers and possessive pronouns e.g. ku' ko'alam ngatu 'dog three 1SG.DAT' (my three dogs) (ibid p. 69). This is the reverse order to that described in section 7.1 i.e. the order in the Aurukun dialect is possessive pronoun then quantifier.

The final slot in the NP structure according to Sayers and Godfrey (1964 p. 68) is a colour slot, to be filled by a colour adjective, providing the example ku' pii'an ngaatu ngoton 'dog big 1SG.DAT black' (my big black dog). There are no examples in the Aurukun corpus of an NP with a colour adjective and a quantifier so it is not possible to confirm or otherwise whether such a rule should apply to the Aurukun dialect.

The final slot described in section 7.1 is for demonstratives; these are not mentioned as being part of the Noun Phrase by Sayers and Godfrey (1964).

Nominative pronouns are listed in Appendix 3 and follow the same person / number / inclusive / exclusive distinctions across all sources, where they exist in the source. There are some minor phonetic differences. Sayers and Godfrey (1964 p. 76) state
that the same forms are used as object pronouns, which differs from the Aurukun dialect (see section 5.1) in two ways. The first difference is the absence of the accusative suffix -ang 'ACC' present in the Aurukun dialect. The second is that the third person singular object form in the Aurukun dialect is nun(-ang) '3SG.ACC(ACC)', i.e. not nil-ang '3SG-ACC'. The case systems will be compared in section 14.3.2.

The dative pronouns in Sayers \& Godfrey (1964 p. 77) also have similar forms to those of the Aurukun dialect (see section 5.1). These forms are described as possessive pronouns in Sayers and Godfrey (1964 p. 77) but Sayers and Godfrey also include examples of canonical dative use e.g. (743) where nungkuru '3SG.DAT' has a translation typical of dative use; 'to you' (see section 5.1).
(743) Sayers \& Godfrey 1964 p. 63
taka nungkuru kala-nga
stick 2SG.DAT bring-l
'I bring the stick to you'

Rigsby (1974) also has one example of a dative pronoun used as the possessive; (744). In this example the dative pronoun ngatha '1SG.DAT' is used to denote possession of wik 'WORD' (language).
(744) Rigsby 19749.08

| ngay wik | ngatha | thaw-ang |  |
| :--- | :--- | :--- | :--- |
| 1SG | WORD | 1SG.DAT | say-1SG.PRS |
| 'I am speaking my language' |  |  |  |

Similarly, Rigsby (1994 p. 65) has three examples of a dative pronoun denoting possession, in this case of kin relations e.g. wanhchu ngathu 'WOMAN 1SG.DAT' (my wife). Thus both Coen and Theethinji data show the dative to denote possession.

Possessive pronouns in the Aurukun dialect are formed from the dative pronouns with the additional genitive suffix -am 'GEN' (see section 5.1.4). Dative pronouns without the genitive suffix are also used to denote possession but this use is rare (see section 5.1.4). For kin relations it is usual to not use the genitive or dative but a different word kunch 'own' (see section 7.2.2), a usage not found in the other dialects
but this may be an artefact of the limited data for those dialects.

### 14.3.2 Case System

The description of the case system in Sayers \& Godfrey (1964) is limited to the locative -ng and ablative -m, which are both described as 'noun suffixes'. The corresponding cases in the Aurukun dialect are =ang 'LOC' ${ }^{194}$ and $=a m$ 'ABL'. All nouns in the Aurukun dialect finish with a consonant or the optional ending -a where the cognates in Sayers and Godfrey (1964) all finish with one of the five vowels used in the language. This explains the difference in the forms for the locative and ablative in the two dialects. For example, in the Aurukun dialect 'from the place' is aak=am 'PLACE=ABL' but in the Coen dialect it is aaku-m 'PLACE-ABL'. Note that Coen dialect aaku 'PLACE' is a step between Middle Paman Raaku 'PLACE' (Hale 1976a p. 58) and aak 'PLACE' in the Aurukun Dialect. Thus the sequence of change for the ablative appears (Hale did not reconstruct case) to be Raaku-m aaku-m $\rightarrow$ aak-am 'PLACE-ABL'. Similarly for the locative. Note that Hale (1960a p. 16) in his elicitation in Aurukun showed 'PLACE' as [?a:k], the glottal stop being a possible other step in the sequence of change.

No other noun suffixes or cases are mentioned in Sayers \& Godfrey (1964). It is odd that the allative (=ak 'ALL' in the Aurukun dialect) is absent given that the ablative is present. This lacuna might reflect the size of the corpus collected i.e. the allative existed in the Coen dialect but was not captured in the data. Supporting this, there are no sentences where the allative would be expected and is absent. One curiosity is that the verb stem wampa 'come' (ibid p. 73) is inflected in what appears to be an imperative clause to wampaka 'come-?' in (745). The word is analysable as wampaka 'come-ALL'. The description of McConnel supports this interpretation: locational 'case' markers are describes as attaching to all word classes, including verbs (see section 15.5.5). Note that case markers attaching to verbs are not unknown in world languages (see e.g. Aikhenvald 2008) and Australian languages in particular (see e.g. Blake 1993).

94 Cases in the Aurukun dialect are mostly clitics (see section 4.1). Whether or not that is true of other dialects is not known and is ignored for this analysis.
(745) Sayers \& Godfrey 1964 p. 64
ngula wampaka
by and by come
'come by and by'
The caveat that (745) 'appears' to be an imperative clause is because later (ibid p . 74) the imperative is given as wampa-yi 'come-IMP'. The suffix -yi 'IMP' is perhaps cognate with -iy '2PL.SBJV' in the Aurukun dialect. The subjunctive can be used in Aurukun dialect as the imperative (see section 9.3.2).

In the Aurukun dialect the core grammatical relations of subject and object are encoded in a mixed system of ergative / absolutive case for NPs and nominative / accusative case for pronouns (see section 4.1.2). The absolutive and nominative are unmarked and ergative and accusative are homophonous; =ang 'ERG' and -ang 'ACC' respectively.

The evidence for the ergative in the Sayers and Godfrey (1964) data consists of one example. All other examples are either (i) intransitive clauses with a subject NP which would be expected to be in the null marked absolutive or (ii) transitive and intransitive clauses with a subject pronoun, also unmarked as would expected in the nominative case. There is only one example of an NP (i.e. not a pronoun) as subject of a transitive clause; (746). In this example the subject is the ignorative waa'eng 'who'. Elsewhere (ibid pp. 68, 76) the ignorative is given as wa'e 'who'. Ignoring the difference in vowel length, it seems plausible to analyse waa'eng 'who' in (746) as waa'e-ng 'who-ERG' but one example is hardly definitive.
(746) Sayers \& Godfrey 1964 p. 66

| maya waa'eng | kiingka-n(a) |
| :--- | :--- | :--- |
| food who | cook he |
| 'who is cooking food?' |  |

The evidence for pronouns not following a nominative / accusative pattern is stronger. Firstly, Sayers \& Godfrey (1964 p. 76) explicitly state the pronominal forms are both subject and object. Secondly, the one example (747) of a pronoun in object position is not marked with an accusative suffix. The subject in this example is ngaya 'I' (or '1SG') and the object is ninta 'you' ('2SG'). The latter is the same as the subject form of the pronoun (ibid p. 76). In the Aurukun dialect ninta '2SG' would be
in accusative case i.e. nint-ang '2SG-ACC'. Again, only one example is not definitive.

| (747) Sayers \& | Godfrey | 1964 p. 62 |
| :---: | :--- | :--- | :--- |
| ngaya | ninta | piik-nga(a) |
| I | you | hit I |

In summary the evidence for the case system in the Coen dialect, as described by Sayers \& Godfrey (1964) is limited to the locative and ablative, with weak evidence for the ergative. The accusative is not present. There is no description or evidence of any other cases, apart from the dative / possessive pronouns described in section 14.3.1. Neither of the Rigsby sources have evidence of case marking, probably reflecting the limitations of the data collected.

### 14.3.3 Verbal Morphology

The section on verbs in Sayers and Godfrey (1964 pp. $72-75$ ) is prefaced by the comment that 'little analysis has yet been attempted'. This statement needs to be kept in mind in the following as some of their findings are unexpected when compared with the Aurukun dialect and may well be incorrect.

Firstly, the verbal morphology is said to not indicate tense (ibid p. 73), with temporal adverbs being used to denote time. This does not accord with the Aurukun dialect (section 8.2) nor the evidence in Rigsby $(1974,1994)$ for the Coen and Theethinji data. There is some similarity with the verbal morphology described in section 8.2 in that verbal suffixes are described as indicating person or mood, but not tense. There are also some similarities in form, as can be seen in Table 38, copied from Table 33, which shows the Subject / Tense / Mood (STM) suffixes for the Aurukun dialect and those from Sayers and Godfrey (1964 p. 73), omitting the subjunctive which will be addressed separately.

|  |  | Aurukun Dialect |  |  | S\&G 1964 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Person |  | Present | Past | Future | No tense |
| 1 | Sing | -ang | -ang / -angan | -ang | -nga |
|  | Dual incl | -anal | -al | -al | -li |
|  | Plur incl | -anamp | -amp | -amp | -mpu |
|  | DU/PL excl | -anan / angan | -an | -an | -na |
| 2 | Sing | -anan | -an | -an | -na |
|  | Dual | -anip | -uw | -ow | -wa |
|  | Plur | -aniy | -an | -an | -na |
| 3 | Sing | -an | -ø | -ow | -na /-Ø /-wa |
|  | Dual | -anpul | -pul | -owpul | -pula |
|  | Plur | -antan / tan | -in /-iyin / im | -ayn | -wa |

Table 38: Comparison between Aurukun dialect and Sayers \& Godfrey (1964)
Coen verbal suffixes
A significant difference is that the Aurukun verbal stems end in a consonant and those of Sayers and Godfrey (1964) end in a vowel, with all vowels allowed. As an example, the Aurukun stem for 'swim' is muunch- while the Sayers and Godfrey (1964 p. 73) stem is munchi-. Thus for Aurukun dialect 'I swim' is muunch-ang(-a) while in Sayers and Godfrey (1964 p. 73) it is munchi-nga. There has likely been a shift in the Aurukun dialect for these stems analogous to that described for nominal stems discussed in section 14.3.2 above. That is, a convergence of stem-final vowels to -a and a reanalysis of the stems to be consonant final and the suffixes to start with $a$.

As noted in section 8.2 there is a high degree of syncretism in the verbal suffixes of the Aurukun dialect. Further, where past and future have the same form, the future in the Aurukun dialect is stressed and the past and present are not (see section 2.6.1). Once this, the difference between vowel-final and consonant-final stems and the optional final -a in the Aurukun dialect are allowed for, many of the suffixes show distinct similarities. For instance, the form for the first singular is identical across all
tenses in the Aurukun dialect i.e. -ang(-a) while the tense-less form in Sayers and Godfrey (1964 p. 73) is -nga. The remaining first and second person suffixes also show many similarities, but not all; e.g anip '2DU.PRS' against -wa '2DU'. The third person, especially the singular and plural, have some distinct differences. A potentially important observation regards the options for third person singular in Sayers and Godfrey (1964 p. 73) (-na / - $\varnothing$ / -wa). In a separate note these are described as being alternatives rather than the separate tenses in the Aurukun dialect (present, past and future respectively). In summary, the high degree of syncretism in the verbal suffixes and the stress pattern of the future / past distinction may well have led Sayers and Godfrey (1964) to misunderstand the paradigm, especially tense distinctions, in the short time available to them.

The STM suffixes in the Aurukun dialect have a fourth option to the tenses, being the subjunctive mood. These are shown in Table 39, copied from Table 33. Sayers and Godfrey (1964 p. 74) define three 'mood' suffixes which each form the imperative i.e. no other moods such as those described in section 9.3.1 and no person / number distinction. These suffixes are $-y i,-n e$ and $-\varnothing$. The final, null, suffix is consistent with one form of the imperative in the Aurukun dialect (see section 9.3.2). The Sayers and Godfrey (1964 p. 74) example iya-Ø 'go!' compares then with the Aurukun equivalent of iiy- $\emptyset\left(-a^{95}\right)$ 'go-IMP(-a)'. The other form of the imperative in the Aurukun dialect is -an '2SG.FUT'. Allowing for vowel changes this can be compared with the Sayers \& Godfrey (1964 p. 74) form -ne. For example nampa-ne 'touch!' compares with Aurukun dialect namp-an(-a) 'rub-3SG.FUT(-a)' (rub!). There is no equivalent in the Aurukun dialect for the Sayers \& Godfrey (1964 p. 74) form -yi, although there are some subjunctive suffixes in Table 39 which include -iy.

| Person |  | Subjunctive |
| :--- | :--- | :--- |
| 1 | Sing | -ing |
|  | Dual incl | -il |
|  | Plur incl | -imp |
|  | excl | -in / -iyin |
| 2 | Sing | -in /-iyin |
|  | Dual | -iw |
|  | Plur | -in / -iyin |
| 3 | Sing | -iy / -iw / -in |
|  | Dual | -iypul / -iwpul |
|  | Plur | -iythan / -iwthan |

Table 39: Subjunctive person suffixes in the Aurukun dialect
Sayers \& Godfrey (1964 p. 74) also note another verbal suffix -nga which they describe as having an undetermined meaning. Their examples all include an additional -n e.g wuna-nga-n 'you lie down' it is possible that there is an error and -nga is actually -nga-n. They provide four examples, only one of which is comparable to Aurukun forms. That example is mama-nga-n 'I touch' which, using the alternative form for the first person present would be mam-angan 'touch-1SG.PRS' ('I touch') in the Aurukun dialect. The other three examples are all second person (number unknown) such as yumpi-nga-n 'you make' which in Aurukun dialect would be yumpanan/aniy) 'make-2SG.PRS/2PL.PRS' (you make). It really is not clear how the Sayers \& Godfrey (1964 p. 74) suffix -nga-n compares with the Aurukun dialect.

The use of the verbal suffixes in Rigsby $(1974,1994)$ is limited to specific elicited examples rather than systematic descriptions. Those few examples (see Appendix 3) which are found with tense elicited mostly align with the Aurukun dialect e.g. 'he/she fell' is keek- $((-a)$ 'fall-3SG.PST' in Aurukun dialect and keeka 'he fell' in Rigsby (1994 p. 76). Similarly, 'you leave' is want-an 'leave-2SG.PRS' in Aurukun dialect and wantan 'you leave' in Rigsby (1974 13.44).

### 14.4 Simple Clauses

As with the previous sections, this section is primarily focused on Sayers and Godfrey (1964) as the other sources have insufficient data on clauses to comment. Only simple clauses are discussed as there is no data or description of complex clauses.

The word order is described by Sayers and Godfrey (1964 p. 60) as 'appearing to be quite rigid' and following an SOV pattern. Indirect objects are said to follow the direct object and benefactive objects to precede it. Adverbs are described as preceding the verb with a fixed order of manner, location and time adverbs, where multiple adverbs are present.

The word order described generally fits the description of the Aurukun dialect but the order is a strong tendency, not rigid, as described above for the Coen dialect. The tendency in the Aurukun dialect is for the direct object to precede the verb when it is a NP but follow when it is a pronoun. Indirect objects vary in position, whether pronouns or NPs. Pragmatic considerations can cause the speakers to vary word order as they wish. See chapter 11 for a full discussion.

The position of adverbs before the verb is a very strong tendency in the Aurukun dialect and generally the locational adverbs precede temporal but again not universally (see section 10.1). This aligns with Sayers and Godfrey (1964 p. 60).

### 14.5 Summary

The evidence across the four sources of Wik-Mungkan data (i.e including the Aurukun dialect) discussed in this chapter strongly supports the view that the descriptions are of dialects of the same language. The phonological data is consistent across all four, with some exceptions as noted in section 14.1.1.4. The lexical evidence is also strong, with many cognates for the same lexical items across the four (see section 14.2). The evidence from the morpho-syntax (sections 14.3 and 14.4 ) is less consistent as Sayers and Godfrey (1964) was the result of an abbreviated stay in Coen while Rigsby $(1974,1994)$ are elicitations, mostly of lexical
items and short phrases. Nevertheless, there are no major variations across the sources which would question that the varieties were not mutually intelligible and hence different dialects, as opposed to separate languages.

## 15 Wik-Mungkan in the Period 1927-1934

This chapter describes Wik-Mungkan as it was in the period 1927-1934 and compares it with the Aurukun Dialect (AD) of the 1960s and 1970s which forms the main focus of this thesis. The material used for the analysis in this chapter are the published and unpublished texts of Wik-Mungkan traditional stories recorded by Ursula McConnel on audio and transcribed in the period 1927 to 1934. The stories were mostly collected on traditional Wik-Mungkan territory (see section 1.1.1) and appear to include dialectical variations. Any such variations are not explicitly stated and can only be inferred, as will be discussed in the relevant sections.

Some background into McConnel's movements and other activity can be found in Sutton (2012), which is also referenced specifically where relevant.

The structure of the chapter is as follows; section 15.1 describes the corpus of data used, section 15.2 analyses the phonology, section 15.3 discusses aspects of the lexical items, section 15.4 describes nominals, including nominal morphology, section 15.5 on verbal morphology and section 15.6 on some syntactic differences.

### 15.1 Description of the Corpus

Some of the audio versions can be found in AIATSIS (permissions pending). The published written works are found in McConnel (1935, 1936a, 1936b) and include transcriptions of the Wik-Mungkan in IPA, literal translations and free translations. The stories are broken into numbered clauses so that the references will be to publication, page number and clause number.

The unpublished stories are typescripts from her personal papers and have been provided by the South Australian Museum (SAM). They also include the WikMungkan transcriptions in IPA and all bar one of them include a literal translation, with a few including a free translation. Due to difficulty in interpretation, the one missing a literal translation has not been analysed. The references to these stories
will be the SAM reference number AA191/nn/nn where AA191 is the reference of the McConnel archive, $n n / n n$ is the SAM number within that archive. For instance the story 'Myth of Mai Maitya the Bush Nut' is found in a document with the reference AA191/12/24. The references to specific examples will include the page number of the Wik-Mungkan transcription, the example numbers being for the whole story. McConnel's practice was to break up the texts (WM and literal translations) into different clauses by separating them with the symbol •, enabling a numbering system for clauses to be established, linking the WM with the literal translations. A sample example is (748) which is the second clause from the 'Myth of Pukmanya, The Making of a Baby', SAM reference AA191/13/02. This clause is found on page 1, noting that clause numbers are continuous through the manuscript and do not reset on each page.
(748) AA191/13/02 p. 1 ex 2

| wantya | pal | tyipauwa | wampa |
| :---: | :---: | :---: | :---: |
| WOMAN | hither | from.the.south | was.coming |
| 'a woman | as comid | from the south' |  |

In order to retain the original texts it was not feasible to include these texts in the FieldWorks Language Explorer (Flex) ${ }^{\text {TM }}$ database used for the bulk of this thesis. This is because of numerous differences in orthography and analysis between the the two sets of underlying data. This will be further explained in the relevant sections of this chapter. Given the volume of data a separate Flex database was established to facilitate searching and analysis. Not all texts were input; one did not have a translation and two had too many, not very legible, hand-written corrections. A list of all the SAM texts used is in Appendix 6. The database contains 696 lexemes, 2,421 unique words (i.e. including inflections), 9,705 tokens and 2,844 segments (clauses). The Flex database includes both the SAM material and the published stories in McConnel (1936a, 1936b, 1936c) and will be referred to as the McConnel corpus (MCC).

Apart from the texts described above, there are various notes and two short draft grammars (AA191/11/10 and AA191/11/18) in the SAM material which will also be referenced in the relevant sections. As for the examples in AD, the free translations in the examples are as per the original texts. Where required this is supplemented by
alternative suggestions.

A full list of all the McConnel material held by SAM, relevant associated information and commentary can be found in Sutton (2012).

### 15.2 Phonology

McConnel (1945) is her description of Wik-Mungkan phonology and has already been described in section 2.7 and compared with that of the Aurukun dialect as described in chapter 2. There are some discrepancies between that description and the data found in this corpus. There is also a description in McConnel (1935 pp. 71-72) of the 'phonetic symbols' used in the texts of that publication. It is assumed that her descriptions in the latter publication represent her approach to all the other texts. It should be noted that she described the phonetic symbols used as having been adapted to suit the requirements of the printer, are approximate only and 'intimate phonemic distinctions rather than phonetic exactitude' (McConnel 1935 p. 72). She describes the situation as 'not ultimately satisfactory' (ibid). These comments will be reflected in this analysis.

A relevant observation is that McConnel felt the need to extend her linguistic knowledge and travelled to the U.S. in 1931-33 to study at Yale. A second relevant observation is that McConnel, even after that travel, was aware that phonology was a gap in her education and later worked with Theodor Strehlow when writing McConnel (1945). This may also account for some of the variations between the texts and her later analysis in McConnel (1945). The focus of this section will be on the variations between the texts and McConnel (1945) rather than an exhaustive description duplicating the analysis in section 2.7.

### 15.2.1 Consonants

The consonant inventory is similar to that described for the Aurukun dialect (AD) in section 2.2.1, with the exceptions of the dental /t/ and two nasals. With respect to the former, in words where the Aurukun dialect has a /t//, the MCC material has the
alveolar /t/. For example, 'mother' is [ka:t] in AD but [ka:ta] in the MCC material. McConnel (1935, 1936a, 1936b) i.e. later transcribes this word as katth 'mother'. In McConnel (1945, p. 270) the word is in IPA as [katta] (see section 2.7.1.3 for further discussion of the symbols used in McConnel 1945). Several other words are also found to have the alveolar in MCC material. The interpretation of this shift is that McConnel did not detect the difference in the earlier work but corrected this later.

As noted in section 2.7.2, McConnel (1945) only identified three nasals in the inventory, namely $m, n$ and $\eta$. The dental and palatal nasals were not described. As is to be expected, the MCC also does not include these latter two. See section 2.7.2 for a discussion that this is probably an error on McConnel's part.

Voicing, as for the AD, is not contrasted in MCC but is more common than found in the AD corpus. This is particularly marked in the bilabial stop where, as in [pul] / [bul] ' 3 dual', the latter is almost always preferred. The voicing distinction is the only evidence of allophonic variations in MCC, although the later McConnel (1945) includes examples of other allophones; see section 2.7 for detail.

McConnel (1935 p. 72) says that her notation convention was that a full stop following a consonant denotes length e.g. $n$. denotes a geminate $n n$. It is not clear that this is always the case. For example the full stop in the word nyin.nyin 'sitRDP.3SG.PST' (he was sitting) (AA191/16/05 p. 3 ex 120), if interpreted as denoting a geminate $n$, would imply a very long $n$. In that example it seems to reflect a reduplication boundary. Other instances of the full stop following a consonant occur at morpheme breaks where the same consonant is both coda of one syllable and onset of the next. One example is kaamp.ula 'cook.2DU.PST', analysed as kaamppula 'cook-2DU.PST' (e.g. AA191/12/26 p. 2 ex 74). That is, the $p$. represents a long $p$. Not every such morpheme break has the same treatment e.g. wunpula 'put.2DU.PST' (e.g. AA191/12/25 p. 1 ex 36) is analysed as wunp-pula 'put-2DU.PST' but written as wunpula not wunp.ula. Whether the $p$ was actually pronounced as long is not known.

### 15.2.2 Vowels

The vowel inventory found in MCC aligns with the description in McConnel (1945) which is discussed in depth in sections 2.7.5 and 2.7.6, including diphthongs.

What is unclear is the treatment of long vowels in the MCC. The description in McConnel (1935, p. 72) describes that her notation of a., $i$. and $u$. is that the full stop denotes vowel quality, not length. For example, she describes $a$. to be 'as in father', while a she describes to be 'as in but'. She then adds that in some words e.g. i.bula 'those two went' the full stop denotes length as well as quality. The example shows an elision as the verb generally is iya, as shown elsewhere in the MCC (e.g AA191/12/25 p. 1 ex 1) when the word is iyabula 'those two went' (iiypul in AD). There is no full stop in iyabula i.e. it is not i.yabula because McConnel (ibid) considered that the $y$ gave the required quality to $i$. She does not elaborate in which words the full stop denotes length as well as quality. This means that it is impossible to decide for any given word in MCC whether the full stop denotes length or not.

The later McConnel (1945) does include an extensive discussion on vowel length. The words she uses to illustrate this such as [ka:mpa] 'cook, bury' (ibid p. 356) are found in the MCC with the full stop, e.g. the given example is written as ka.mpa. The corresponding word in AD is kaampan. The conclusion adopted for this analysis is that McConnel in 1935 was mistaken about the existence of long vowels and later corrected this in McConnel (1945). To determine whether the vowel in a particular MCC example is short or long will be decided by the existence of the same word in $A D$. Thus words found in MCC with cognates in AD where the latter have long vowels will be treated as having long vowels in the former. For example, a.ka 'place' in MCC has the cognate aak 'place' in AD and so a. will be considered to represent the long vowel aa. Other examples where the full stop is not considered to denote length are yo.ta 'many' (AA191/16/05 p. 1 ex 32) and u.ka 'go.down.3SG.PST' (AA191/16/05 p. 1 ex 7). The AD cognates are yot(a) 'many' and uk(a) respectively hence the decision to consider the respective vowels in MCC as short, absent evidence to the contrary. This heuristic of comparing given MCC words with AD is not entirely satisfactory as it may conceal diachronic change but there is no better alternative available.

### 15.3 Lexical Items

The analysis of words in the MCC is complicated by variations in orthography. For instance in the first two lines of one story (McConnel 1935 p. 76) a place name is spelt both Kangini and Kangina. Because McConnel was aiming at an accurate phonetic transcription it is not always clear whether variations are individual variations, allomorphs or errors. Other examples are wanta and wunta 'wind'; there is one instance of the former and two of the latter across three different texts with no obvious reason. The AD word for 'wind' is wunt.

That said, there is considerable alignment between lexical items in MCC and AD. The main variations between the two are, firstly, vowel / diphthong variations, secondly some changes arising from phonological change such as elisions and finally some lexical items in MCC are not found in AD. Not included in these categories are those items which end in $a$ in MCC and not in AD. This is because word final $a$ is optional in AD so that a word such as ma'a 'hand' in MCC is ma'(a) 'hand' in AD. See section 2.5.4 for a discussion of this phenomenon. It appears that it was optional in MCC as well, but to a lesser extent.

Firstly, vowels / diphthongs variation in cognates between MCC and AD are common. Examples of vowel variations are (MCC / AD respectively) ngaana / ngeen(a) 'what', konta / kuunt 'mangrove', koorka / kurk(a) 'ashes' and mampa / momp(a) 'afterbirth'. Diphthongs found in AD are realisations of vowel - glide combinations as described in section 2.4.7. Words with diphthongs in MCC frequently show the diphthong explicitly rather than as a vowel - glide, sometimes with a corresponding glide, sometimes without. Examples with a glide are tauwa / thaw(a) 'say.3SG.PST', ngaiya / ngay(a) '1SG' and kaiyaman / kayaman 'dry season'. Examples without a glide are mai / may 'VEG' and moipaka / muypak(a) 'bullroarer'. Some diphthongs in MCC have cognates in AD with long vowels in place of the diphthong, e.g. mointya / muuncha 'swim.3SG.PST', weika / weeka 'block.3SG.PST'. As discussed in section 15.2.2 it is not certain that these differences are due to actual vowel quality variations or McConnel's then lack of training in phonetic analysis.

The second type of variations between MCC and AD are phonological change.

These are not as common as the first type of variations. Examples include dropping or addition of glottal stops in words such as wi'ingka / wiingk(a) 'arrowroot and kora / kor' 'brolga' respectively. They also include elision of syllables such as ka'atanama / ka'atham(a) 'first' and elision or change of consonants; yantampa / yantap(a) 'firm', chiipa / yiip(a) 'south'.

Thirdly, there are 40 words (out of 696) in MCC which are not found in AD, excluding place names. Most of these words only occur once in MCC such as nicha 'feather' and wiwa 'under (eyes)'. Others occur only in one narrative such as ampamba 'bundled' and boiya 'to growl'. Others are found across multiple stories e.g. mi'a 'to clear' appears in five and takan 'above' in four stories respectively. The relative rarity of most of these words suggests that they were either dialectic or borrowings from an adjacent language. See Appendix 7 for a list of divergent lexical items.

The word classes in MCC align with those found in AD (chapter 3), the Coen dialect and the Theethinji data (section 14.2), namely nominals, including pronouns, adjectives, ignoratives and quantifiers, demonstratives, verbs, adverbs and particles. The focus for the next sections is on the nominal and verbal morphology.

As for the Coen and Theethinji data discussed in chapter 14, the stems for words in all classes almost invariably finish with a vowel, predominantly but not exclusively a. As a result, suffixes such as case endings and verbal inflections are analysed as $C(C) V$ rather than VC(C). For example the accusative suffix is $-n g(a)$ 'ACC' as opposed to AD -ang 'ACC'. In many instances this appears an arbitrary distinction e.g bulang '3DU.ACC' is analysed as bula-ng '3DU-ACC' and not bul-ang '3DU-ACC'. This will be further discussed in section 15.4.2.

### 15.4 Nominals

### 15.4.1 Pronouns

As can be seen in Table 40, the nominative, accusative and dative pronouns in MCC are almost identical to those in AD, allowing for the orthographic differences
discussed in section 15.2 and 15.3, especially -aiy in MCC for -ay in AD, the absence of th in MCC and the more frequent presence of terminal -a in MCC. One exception to the similarity in both sets is the second person singular nominative form in MCC, nyinta '2SG' against the AD form nint '2SG'; the latter is restricted to the accusative in MCC but is nominative as well in AD. The other exception is the third person singular dative, to be discussed below. The apparent voicing in bul '3DU' in place of pul '3DU' and -nda 'DAT' in place of -nta 'DAT' merely reflects the frequency of the former in MCC, relative to the latter. It is assumed that the choice of voiced allophones was deliberate by McConnel.

|  |  | Nominative / Accusative |  | Dative |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Person | Aurukun | McConnel | Aurukun | McConnel |  |
| 1 | Sing | ngay(a) / <br> ngany(a) | ngaiya /nganya | ngath(ar)(a) | ngata(ra) |
|  | Dual <br> incl | ngal(a) | ngala | ngalant(a) | ngalanda |
|  | Plur <br> incl | ngamp(a) | ngampa | ngampar(a) | ngampara |
|  | DU/P <br> L excl | ngan(a) | ngana | ngant(t)(a) | nganta |
| 2 | Sing | nint(a) | nyinta /ninta | nungk(ar)(a) | nungk(ar)a |
|  | Dual | nip(a) | nipa | nipar(a) | nipara |
|  | Plur | niiy(a) | niya | niiyant(a) | niyanda |
| 3 | Sing | nil(a) /nun(a) | nila /nuna | nung(ant)(a) | nunga(nda), |
| nunta |  |  |  |  |  |

## Table 40: AD/MCC pronoun comparison

All of the nominative forms in Table 40 are found in MCC but there are relatively few instances of free pronouns in accusative case in MCC. There are relatively more bound accusative pronouns, to be discussed in section 15.5.3. The only examples of free accusative pronouns found are the singular first, second and third person and dual third person. The accusative suffix is -nga 'ACC' which is optional for first and third person singular, as for AD, as they have specific accusative forms nganya
'1SG.ACC' and nun '3SG.ACC' respectively.

The forms and functions of pronouns in MCC and AD are generally identical. This section will focus on differences.

### 15.4.1.1 Dative Pronouns

The MCC dative pronouns are very similar in form and function to the AD dative pronouns. A major difference is that the dative suffixes -ra and -nda 'DAT' attach not only to the dative stems as shown in Table 40 above but also to nominative forms, mostly for the third person singular. The third person singular has three different forms with dative suffixes; nila-ra, nila-nda and nunga-nda, all glossed '3SG-DAT'. There are cognates to the first and third combinations in AD but not the second. There is also another third person singular form nunta '3SG.DAT' which may be an elision of nunga-nta '3SG.DAT-DAT'. This form occurs in two examples as an independent pronoun but 15 times as a bound pronoun (see section 15.5). Each of these forms has different functions, some of which are found in AD and others not.

The only cognate of nila-ra '3SG-DAT' in AD is nil-ar '3SG-DAT' (he-mine), a relationship pronoun. See section 5.1.5 for a full description of relationship pronouns in AD. In brief, they are formed by attaching a dative form to a nominative form to encode a relationship between two referents. For example nil-ar '3SG-DAT' encodes that the referent nil ' 3 SG' is connected to the speaker i.e. it is translated as 'he-mine'. In AD the connection is either friendship or kin although that is an implicature rather than a semantic meaning. It is not clear that the nila-ra '3SD-DAT' is a relationship pronoun in MCC.

The form nila-ra '3SG-DAT' in example (749) is somewhat analogous to a relationship pronoun if it is interpreted as meaning an assailant - victim relationship. That is the nominative nila '3SG' is the assailant who might kill the speaker and the dative suffix -ra 'DAT' encodes the speaker, as per AD relationship pronouns. On the other hand, it may just be adding emphasis.
(749) McConnel 1936a p. 91 ex 33

| peku-wi-nya | nila-ra |
| :--- | :--- |
| kill-3SBJV-1SG.ACC | 3SG-DAT |
| 'might kill me he (he might kill me)' |  |

The interpretation of emphasis is reinforced by example (750), where the dative suffix on the subject nila-ra '3SG-DAT' (himself) appears to add the sense of the subject being alone or as an emphasis. The other example in this story is similar.
(750) AA191/12/26 p. 2 ex 131

| tu-tutya-n | nila-ra |
| :--- | :--- |
| RDP-sink-3SG.PRS | 3SG-DAT |
| 'he sinks down himself' |  |

The conclusion is that, although there may have been relationship pronouns in the given period, there are none in MCC. The only equivalent form has two functions; emphasis and a usual dative sense.

The dative sense is found in two examples in different stories where nila-ra '3SGDAT' replaces the expected nunga-nda '3SG-DAT'. This can be seen in example (751) where the subject is the speaker and nila-ra '3SG-DAT' encodes an indirect object. This is the only example in that story.
(751) McConnel 1936b p. 100 ex 47

| mo'a-ng | nila-ra |
| :--- | :---: |
| run-1SG.FUT | 3SG-DAT |
| 'I will run away with him' |  |

In the same story, there is one example of nila-nda '3SG-DAT' (for her), also encoding an indirect object; see example (752). There the subject is 3SG marked on the verb, the object is mala 'hand signal' and the indirect object is nila-nda '3DGDAT', also co-referentially marked on the verb by -nda 'DAT'. It is unclear why nunga-nda '3SG-DAT' was not used, especially as other clauses in that story do contain nunga-nda '3SG-DAT' as an indirect object.
(752) McConnel 1936b p. 100 ex 49

| nila-nda | mala | tei'a |
| :--- | :--- | :--- |
| 3SG-DAT | hand.signal | throw.3SG.PST |$\quad$ tauwa-nda | say.3SG.PST-DAT |
| :--- |
| 'for her a sign he gave answering her (he answered her with a sign)' |

There are two other stories with examples of nila-nda '3SG-DAT' with a different meaning again. In (753) there are two instances of nila-nda '3SG-DAT' where each is the subject of a clause. The context is of two men going hunting and carrying two spears each. Thus each instance of nila-nda '3SG-DAT' has a different referent. It appears that the dative suffix is being used to indicate that each has a different referent. Admittedly, this is based on interpreting the literal translation.
(753) McConnel 1935 p. 76 ex 18

| pita | nila-nda | kuchema | kala |
| :--- | :--- | :--- | :--- |
| bamboo.spear | 3SG-DAT | two | carry.3SG.PST |

This is reinforced in a later example, (754) where nila-nda '3SG-DAT' is the subject denoting that each of the two men said the same thing, shown by the translation 'each one'. It is unclear how the dative came to be used in this way.
(754) McConnel 1935 p. 76 ex 31

| nila-nda | tauwa | "niyanda |
| :--- | :--- | :--- |
| 3SG-DAT say.3SG.PST | ina" |  |
| 'each one said "for you all these"' |  |  |

In summary, there are three different forms involving 3SG pronouns and dative suffixes, all with a range of meanings. In AD these have been reduced to two; the relationship pronoun nil-ar '3SG-DAT' (he-mine) and the dative nung(ant) '3SG.DAT'.

The above discussion has focussed on the third person singular.

Other examples of nominative stem and dative suffix in MCC are limited to bula-ra 3DU-DAT', nyinda-ra '2SG-DAT' and nil-nunga-nda '3SG-3SG.DAT-DAT'. The first two have the same ambiguity between emphasis and relationship pronouns as nilara '3SG-DAT' above, while the meaning of the third is unclear.

Firstly, bula-ra '3DU-DAT' is found in four examples, two in the one example: (755). In this example the bula-ra '3DU-DAT' is only translated as 'those two', so the meaning added by the dative suffix is not explained. The suffix -n on ngaiya '1SG' is
possibly the definite marker but that is unclear.
(755) AA191/16/04 p. 1 ex 9
bula-ra kula yaka'a ngaiya-n
3DU-DAT enemy pula-ra
'those two grudge against me must have those two (those two must have a grudge
against me)'

Similarly, in its only example, the dative suffix on nyinda-ra '2SG-DAT' in (756) is untranslated, although it should be noted that the addressee is the speaker's younger brother, so potentially a relationship pronoun is indicated. That is, the form might be interpreted as 'you-mine'. Alternatively, this may be an emphatic form
(756) McConnel 1935 p. 84 ex 106

| -ra |  |  |
| :---: | :---: | :---: |
|  |  | G-DAT east |
| 'you up-riv | (a) | t) |

Finally the meaning of the only example of nil-nunga-nda '3SG-3SG.DAT-DAT' is obscure. It is found in (757) and again the two suffixes are not translated.
(757) AA191/13/02 p. 1 ex 52

| nil-nunga-nda | wancha impana-nga i'iya |  |
| :--- | :--- | :--- |
| 3SG-3SG.DAT-DAT | WOMAN | stomach-COM |
| 'sRDP-go-3SG.PST |  |  |

Examples of other nominal pronouns with dative suffixes will be discussed in section 15.4.1.3 on possessive pronouns. The meanings of the dative forms in MCC are otherwise identical to those in AD (see section 5.1.1) and are not discussed further.

### 15.4.1.2 Reflexive Pronouns

Reflexive pronouns for AD are described in detail in section 5.1.5. The term 'reflexive pronoun' is used to match AD terminology but the forms can be used in reflexive and reciprocal constructions in $A D$ (section 12.5). There are only three equivalent forms found in MCC; tanta-ka-ma '3PL.DAT-ALL-ABL' (themselves), bul-bula-nda-ka-ma 'RDP-3DU-DAT-ALL-ABL' (those two to each other) and nungka-ra-ka-ma '2SG-DAT-ALL-ABL' (for yourself). The paucity of examples is presumed to be an artefact of MCC, not reflective of the language. This is similar to AD in that the formation of
reflexive pronouns is regular but not all possible combinations are observed. In AD there are two types of reflexive pronouns; one set cognate to the above, used in indirect object phrases, and a different set used as direct objects (see sections 5.1.3 and 12.5.2). This latter set has no cognate in MCC. Again, this could be an artefact of the corpus.

The first form above can be seen in (758), where the subject is wantya koman 'WOMAN girl' and tanta-ka-ma '3PL.DAT-ALL-ABL' (themselves) is an indirect object with the same referents. This is an example of a reciprocal construction. All four examples in MCC of reflexive pronouns are reciprocal constructions.
(758) McConnel 1936b p. 103 ex 52

| tauwi-yan | tanta-ka-ma | wantya | koman |
| :--- | :--- | :--- | :--- |
| say-3PL.PST | 3PL.DAT-ALL-ABL | WOMAN | girl |
| 'they (the girls) said to each other' |  |  |  |

There are some examples of the singular third person dative appearing where a reflexive pronoun would appear in AD. Example (759) shows this where the subject '3SG' is encoded on the verb and is also encoded in the dative pronoun nunga-nda '3SG-DAT' (for himself). In AD the reflexive pronoun nungantakam '3SGreflA' would be used instead of the dative pronoun.
(759) AA191/16/09 p. 1 ex 72

| naka tantya | nunga-nda |
| :--- | :--- | :--- |
| water hide.3SG.PST | 3SG-DAT |
| 'water he hid for himself' |  |

The dative nunga-nda '3SG-DAT' in (760) is not translated in the original but appears to be providing emphasis i.e. the translation should perhaps read 'she herself went back north'. The example is similar to (757) without the hyphen between the first two words; it is not clear if this is important or not. There is no equivalent in AD to compare with.
(760) AA191/16/13 p. 1 ex 44

| nil | nunga-nda | wantya | koyam | kungka | iiya |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3SG | 3SG-DAT | woman | back | north | go.3SG.PST |
| 'she the woman went back north' |  |  |  |  |  |

### 15.4.1.3 Possessive Pronouns

In both MCC and AD pronominal possession is expressed by the genitive suffix, which attaches to the dative stem and also by the dative on its own (see section 5.1.4). The difference is that the genitive predominates in $A D$ while the dative predominates in MCC.

An example in MCC is (761) where the dative nunga-nda '3SG-DAT' encodes that the woman (lily - this is a mythological story) was the wife of the 3SG referent encoded on the verb.
(761) AA191/16/05 p. 1 ex 2

| mai tu'a wantya | nunga-nda | iiya |  |
| :--- | :--- | :--- | :--- |
| VEG lily | WOMAN | 3SG-DAT | go-3SG.PST |
| 'lily wife his was (the lily was his wife)' |  |  |  |

Example (762) shows the use of the genitive -m(a) where nungka-m '2SG.DAT-GEN' encodes that the addressee possesses ak 'PLACE', a place of their own.
(762) AA191/16/13 p. 1 ex 7

| ak | nungka-m | iiy-an |
| :--- | :--- | :--- |
| PLACE | 2SG.DAT-GEN | go-IMP |
| 'ground your own go to (go to your own place)' |  |  |

In MCC there is one form where a dative suffix attaches to a nominative pronoun to express possession. This can be seen in example (763), where the nominative ngaiya '1SG' with the dative suffix -nta 'DAT' is used to form ngaiya-nta '1SG(NOM)DAT'. In all 10 examples in MCC this is translated as 'my son' or 'my very own son'. This is unlike any form found in AD. The possessive pronoun in AD is formed from a dative stem. The combination of nominative stem and dative suffix is analogous in form to relationship pronouns in AD (see section 15.4.1.1) but there are two differences here; in AD the nominative stem is never in first person and is always the referent, the dative suffix just adds information. Here the referent is the speaker's son, where the son may be elided or may be encoded in the whole form. There are no other examples in MCC of any similar forms (i.e. nominative stem plus dative suffix) denoting possession.
(763) AA191/16/10 p. 1 ex 14

| ngala! | ngaiya-nta! | iiya-la! |
| :--- | :--- | :--- |
| 1DU(NOM) | 1SG(NOM)-DAT | go-1DU.FUT |
| 'you and I! my-very-own-son! we'll be getting along |  |  |

Possession for the first person is otherwise the dative ngata(ra) '1SG.DAT', with or without the genitive suffix -ma 'GEN', as in (764) where ngata-ra '1SG-DAT' (my) is adnominal to mina 'MEAT' (fish) and denotes possession of the fish. This is similar usage to AD.
(764) AA191/16/04 p. 1 ex 15

| mina | ngata-ra | nganika | maiyu-wa? |
| :--- | :---: | :---: | :---: |
| MEAT | 1SG.DAT | why | steal-2DU.PST? |
| 'you two fish mine why did you steal? | (why did you two steal my fish?)' |  |  |

### 15.4.1.4 Inclusory Pronouns

As discussed in section 5.1.5.1 morphology similar to relationship pronouns in other languages creates inclusory pronouns. Inclusory pronouns are not found in AD and MCC, with one possible exception found in McConnel (1936b p. 101 ex 78). The one example (see example (765)) is ngan-bula-na '1PL.EXCL-3DU-?' (I and those two together those 2) which appears to meet the definition of an inclusory pronoun. The gloss and meaning of the final suffix -na is unclear. As the only example of a potentially inclusory pronoun it is considered a curiosity rather than showing a feature of the language. The verbal suffixes appear to also have an inclusory meaning; see section 15.5 for discussion of verbal morphology.
(765) McConnel 1936b p. 101 ex 78

$$
\begin{array}{lll}
\text { ngana pinya=na } & \text { inga tucha-na-bula-na } & \text { ngan-bula-na } \\
\text { 1PL.EXCL fathers.sister } & \text { PRX descend-1PL.EXCL.FUT-3DU-? } & \text { 1PL.EXCL-3DU-? } \\
\text { 'we your father's sisters here those two will go down we (I and those two together)' }
\end{array}
$$

### 15.4.1.5 Emphatic and Reduplicated Pronouns

In AD reduplicated pronouns are used to denote that the referent is, in some sense, on its own (see section 5.1.6). In MCC the same sense is found in emphatic pronouns i.e. where the emphatic suffix -ma 'EMPH' is added to a non-reduplicated base. This can be seen in (766) where nila-ma '3SG-EMPH' is translated in the free translation as 'for himself'.
(766) AA191/16/04 p. 1 ex 33

| wunya | kuncha | nila-ma | ka'a | iyumpa-na |
| :--- | :--- | :--- | :--- | :--- |
| OB | own | 3SG-EMPH | NEG | make-3SG.PRS |

'older brother own for himself can't do anything (his older brother can't do anything for himself)'

The only two examples of reduplicated pronouns in MCC are the reflexive pronoun bul-bula-nda-ka-ma 'RDP-3DU-DAT-ALL-ABL' (those two to each other) (McConnel 1935 p. 73 ex 16) discussed in section 15.4.1.2 and bul-bula-nda-ka 'RDP-3DU-DATALL' (to those two) (ibid p. 73 ex 17). The latter is shown in example (767). There is no indication in either of the translations what meaning is attached to the reduplication.
(767) McConnel 1935 p. 73 ex 17

| wolkolan tauwa bul-bula-nda-ka | nipa peka | uka-uwa |  |
| :--- | :--- | :--- | :--- |
| bonefish say | RDP-3DU-DAT-ALL | 2DU down | go.down-2DU.FUT |
| 'the bonefish said to those two you two go down' |  |  |  |

### 15.4.2 Nominal Morphology

As discussed in section 15.3, stems in MCC almost invariably end in a vowel, most commonly -a. Next most common vowel endings are -i and $-u$. As a result, case markers are analysed as $C(V)$ rather than the VC found in AD. This is similar to the situation in the Coen and Theethinji data described in Chapter 14. For example the word tuli 'stick, club, woomera' in (768) is in instrumental case to form tuli-nga 'clubINST'.
(768) AA191/16/09 p. 1 ex 47

| tuli-nga | kutyeka pika |  |
| :--- | :--- | :--- |
| club=INST | head | hit.3SG.PST |
| 'with the spear-thrower the head (he) knocked (he knocked the head with the spear- |  |  |
| thrower)' |  |  |

There is a very close correspondence between the AD and MCC systems, as can be seen in Table 41. In both sets cases are clitics marked on the end of NPs, wth the exception of accusative case. The vocative case is rare in MCC and there is no evidence of the distance distinctions found in AD. This is not to say the distinctions were not present in the language, just not found in this data set.

| Case | Aurukun Dialect |  | McConnel Texts |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Noun Phrases | Pronouns | Noun Phrases | Pronouns |
| Ergative | =ang | N/A | =nga | N/A |
| Nominative | N/A | null | N/A | null |
| Accusative | N/A | -ang | N/A | -nga |
| Dative | =ant, null ${ }^{96}$ | =ant, =ar, =t | =nda | =nda, =ra |
| Instrumental | =ang | N/A | =ng(a) | N/A |
| Locative | =ang | =ang | $=n g(a),=n(a)$ | =nga |
| Comitative | =ang | =ang | =ng(a) | =nga |
| Ablative | =am | =am | $=m(a)$ | = $m$ a |
| Genitive | =am | =am | = $m$ a | = $m$ a |
| Allative | =ak | =ak | =ka | =ka |
| $\begin{aligned} \text { Vocative } & =\text { PRX } \\ & =\text { MED } \\ & =\text { DIST } \end{aligned}$ | $\begin{aligned} & =a n g \\ & =e y \\ & =o y \end{aligned}$ | -alang <br> -aley <br> -aloy | $=n g(a)$ | $\begin{aligned} & =n g a,=e y, \\ & \text {-lang } \end{aligned}$ |

## Table 41: AD vs MCC case comparison

McConnel in her draft grammar (AA191/11/10 p. 5) also described another case / suffix -t 'up against' with the example yuk-t 'tree-up-against'. There is only one other example in MCC and no equivalent in AD. She also (ibid) describes $-y$ - (sic) as a locative used with certain nouns and adjectives with the sole example weip-y 'sleep-?' (at sleep, asleep). There are no other examples in MCC and no equivalent in $A D$.

Other AD nominal affixes found with MCC cognates are the emphatic marker =am / =ma "EMPH' (AD / MCC respectively), the intransitive verbaliser which attaches to adjectives to derive intransitive verbs -am / -ma 'ITR', the transitive verbaliser -ath / -ta 'TR' and the definite marker =an / -na 'DEF'. The AD topic marker -iy 'TOP' and emotive -wey 'EMO' are not found in MCC but again their absence may just be an artefact of the corpus.

It should be noted final -a in the more common forms of nominal suffixes / clitics in
$\overline{96}$ Only null marked for demonstratives; see section 6.1.1.1.2. No such demonstratives are found in MCC.

MCC is frequently dropped. This aligns with AD where final -a is optional for all words (see section 2.5.4). This supports the discussion in section 14.3.2 on the Coen and Theethinji data, that the Aurukun dialect evolved by a process of a) all final vowels standardised on $-a$ and became optional b) clitics were reanalysed as $-a C(C)$ and stems as consonant final. As an example e.g thuli-ng(a) 'club=INST' becomes thula-ng(a) 'club=INST' then analysed as thul-ang(a) 'club=INST'. As also noted in section 14.3.2, this is supported by Hale's (1976a) reconstruction of Wik-Mungkan from Middle Paman.

### 15.5 Verbal Morphology

Analysis of the verbal morphology in MCC is challenging because of differences between and within texts and incomplete coverage of the possible differences. The analysis is further complicated by the draft grammars written by McConnel (AA191/11/10, AA191/11/18) which appear in part to contradict the evidence from the texts. This section will explain some of these complications while attempting to arrive at as accurate a description as possible.

This section first looks at the verbal template, section 15.5.1, the subject, tense or mood (STM) suffixes (15.5.2), accusative suffixes, which show a wider variety than in AD (15.5.3), dative suffixes which again have a wider range than $A D$ (15.5.4), other suffixes (15.5.5) and other verbal morphology.

### 15.5.1 Verbal Template

The template for verbal morphology in MCC is shown in Table 42, modelled on Table 18 on page 98 for AD. Differences between the two are; the Subject Tense Mood (STM) suffixes are optional vs obligatory in AD, accusative suffixes can occur before the STM suffixes and other cases can occur in the absence of the dative, which is false for AD. As with AD, there are no instances of the co-occurrence of dative and accusative suffixes. Each of the differences will be discussed below.

| Stem (RDP) |  | Derivation | Argument | Inflection / <br> Argument | Argument | Argument |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Root | Derivation |  |  |  |  |  |
| Root | -VERBZ <br> or <br> -TR | -RCP | -ACC | -STM | -ACC <br> OR <br> -DAT | -Other <br> case |
| adjective or <br> intransitive <br> verb | derives <br> verb from <br> adjective <br> or <br> increases <br> valency <br> by one <br> argument | creates a <br> reciprocal <br> stem | direct <br> object | portmanteau <br> suffix <br> denotes <br> subject and <br> (tense or <br> mood) | direct <br> object <br> OR <br> indirect <br> object <br> -dative | other <br> cases |
| Obligatory | Obligatory <br> if first slot <br> is <br> adjective <br> otherwise <br> optional | Optional | Optional | Optional | Optional | Optional |

## Table 42: MCC verbal template

Firstly, the STM suffixes in AD are obligatory, noting that the bare stem encodes the third person singular past tense and occasionally the imperative (see section 9.3.2). Within MCC the STM suffixes can be omitted. For example, in (769) the subject wantya koman 'WOMAN girl' (the girls) is in the plural from context but the two verbs mointya 'swim' and tata 'see' are bare stems without the expected third person plural past STM -yan '3PL.PST', as seen in the final verb ta-tati-yan 'RDP-see-3PL.PST'. There are various possibilities which explain this such as verb chaining / serialisation but the main point is that similar constructions do not occur in AD.
(769) McConnel 1935 p. 76 ex 79

| wantya koman mointya | tata | mupam | ta-tati-yan |
| :--- | :--- | :--- | :--- | :--- |
| WOMAN girl | swim | see bottom | RDP-see-3PL.PST |
| 'the girls swam and saw the bottom they saw' |  |  |  |

To further illustrate the point, consider examples (770) and (771). In the former there is no STM in the dyinta-linta 'spear-2SG.ACC' (I will spear you). By comparison, in the latter, the STM -nga '1SG.FUT' is present in dyinta-linta-nga 'spear-2SG.ACC1 Sg.FUT' (I will spear you), the same meaning as in (770).
(770) McConnel 1935 p. 72 ex13

| ngaya | dyinta-linta | wolkolan | tauwa- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | spear-2SG.ACC | bonefish | say-3SG.PST |
| 'I will spear you the bonefish said' |  |  |  |

(771) AA191/16/04 p. 1 ex 16

| ngaiya | keka-na-ma | ngula | dyinta-linti-nga |
| :--- | :--- | :--- | :--- |
| 1SG(NOM) | spear-DEF-EMPH | then | spear-2SG.ACC-1SG.FUT |
| 'I with the spear soon will spear you' |  |  |  |

Example (771) also shows the second person singular accusative suffix -linti '2SG.ACC' preceding the STM suffix, which does not occur in AD, where the accusative suffix, if present, always follows the STM. Accusative suffixes are discussed further in section 15.5.3. This phenomenon (accusative before STM) is found in seven different texts so does appear to be a widespread feature of the language at that time.

A third difference in the verbal templates of MCC and AD is the range of cases which can attach in MCC. In AD, the final slot can only be filled by another case if the third slot is filled with a dative suffix (-ar 'DAT' or -ant 'DAT'). The cases in the final slot are restricted to the ablative, genitive and comitative. See section 8.4 for further detail. In MCC the constraint that the ablative, genitive and comitative require a preceding dative bound pronoun also applies but other cases do not require the preceding dative. The difference is that the allative and locative can attach to the verb in MCC, but not in AD. That said, these latter two are relatively rare, the most common being the allative, as in (772), where it attaches to the verb wumpa-nga-ka 'bring-1SG.FUT-ALL' (I will bring it). The allative is not translated but appears to give the meaning 'towards you (the addressee)'.
(772) McConnel 1935 p. 72 ex 7

The locative can be seen in (773) and (774). In the former the locative attaches to a bound pronoun tani '3PL' to make the verb mama- $\varnothing$-na-tani-nga 'rub-3SG.PST-3SG.ACC-3PL-LOC' (he rubbed it on them). Admittedly, it is possible that the fact that the pronoun is bound to the verb may be a perception of McConnel and tani-nga '3PL-LOC' is in fact a free pronoun.
(773) McConnel 1936b p. 100 ex 70
pipiya-nga nila-ma $\quad$ mama- $\boldsymbol{\sigma}$-na-tani-nga
father-ERG 3 3SG-EMPH
'the father himself rubbed it on them'

In (774) the evidence is clearer as the locative is attached to the verb and not a pronoun, making akapanta-na-nga 'dawn-3SG.PRS-LOC' (dawn comes (hither)).
(774) McConnel 1935 p. 89 ex 73

| akapanta-na-nga | pala | pa-pach-ma-nda |
| :--- | :--- | :--- |
| dawn-3SG.PRS-LOC | hither | RDP-white-ITR-DAT |
| 'dawn comes, lighting them up' |  |  |

### 15.5.2 STM Suffixes

Table 43 shows the forms of the STM suffixes in MCC, as compared with AD. There are gaps in the MCC suffixes as not all were found in the MCC, especially the subjunctive, to be discussed below. As would be expected, there is substantial alignment between MCC and AD, allowing for minor changes, probably phonetically motivated but possibly just the choice of orthography by McConnel. Exceptions are the future for second person plural and third person singular. In AD the difference between past and future for first and second person is that the future is stressed and the past is unstressed (see Sections 2.7.8 and 8.2). It is not known if this distinction exists in MCC but McConnel did not indicate stress in the tokens of the future, although she did indicate primary and secondary stress extensively on other words.

| Person |  | Present |  | Past |  | Future |  | Subjunctive |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | AD | MCC | AD | MCC | AD | MCC | AD | MCC |
| 1 | Sing | -ang | nga(na) | -ang / -angan | -nga | -ang | -nga | -ing | -(y)inga |
|  | Du incl | -anal |  | -al | -la | -al | -la | -il |  |
|  | Pl incl | -anamp | -nampa | -amp | -mpa | -amp | -mpa | -imp |  |
|  | Pl excl | -anan / angan | -ngana | -an | -na | -an | -nal | $\begin{aligned} & -\mathrm{in} / \\ & -\mathrm{iyin} \end{aligned}$ |  |
| 2 | Sing | -anan |  | -an | -na | -an | -na | $\begin{aligned} & -\mathrm{in} / \\ & -\mathrm{iyin} \end{aligned}$ |  |
|  | Dual | -anip | -nipa | -uw | -uwa | -ow | -uwa | -iw | -uwa |
|  | Plur | -aniy |  | -an |  | -an | -iya | $\begin{aligned} & \text {-in / } \\ & \text {-iyin } \end{aligned}$ |  |
| 3 | Sing | -an | -na | -Ø | -Ø | -ow | -uwa | $\begin{aligned} & -i y / \\ & -i w /-i n \end{aligned}$ | -uwa / -iya |
|  | Dual | -anpul | $n(a) b u l$ | -pul | bula(ng) | -owpul |  | -iypul / iwpul |  |
|  | Plur | -antan / tan | -ndana | $\begin{aligned} & \text {-in / } \\ & \text {-iyin / } \\ & \text {-im } \end{aligned}$ | -yina / <br> -yana | -ayn | -iyana <br> -iyina | iythan / iwthan | -uwa <br> -yan |

Table 43: Subject, tense / mood suffixes compared - AD vs MCC
The MCC STM suffixes in Table 43 have been inferred from the literal translations in MCC and notes in McConnel's draft grammar notes (AA191/11/10, AA191/11/16, AA191/11/17, AA191/11/18). The grammar notes are very rough drafts which contain some statements which do not align with the texts in MCC. For example, she states that the suffix -a becomes -i to indicate past tense, giving the pair of examples in (775) where the only difference is the verb stem changes from tepa 'hit' to tepi 'hit' with the consequent change of tense.
(775) AA191/11/18 p. 13
tepa-linta-nga
hit-2SG.ACC-1SG.PST
'I hit you (present)
tepa-linta-nga 'I hit you (present)
tepi-linta-nga
hit-2SG.ACC-1SG.PRS
I hit you (past)'

While all examples of tepi 'hit' in MCC are in the past, there are some examples where the stem is tepa 'hit' in the past, e.g. (776). In this example the verb tepa-bula 'hit-3DU.PST' is in the past but the verb stem is tepa 'hit', not tepi 'hit'.
(776) AA191/16/10 p. 1 ex 79

| tepa-bula | wancha,nga |
| :--- | :--- |
| hit-3DU.PST | WOMAN-ERG |
| 'they two blocked them, the women (the two women blocked them)' |  |

With other verbs the stem more frequently does not change from terminal -a to terminal -i. This can be seen in (777) where the verb stem is mungka 'eat', not mungki 'eat' but is in the past.
(777) AA191/13/02 p. 1 ex 16
ka'anda mungka-bula
catfish eat-3DU.PST 'they ate the catfish'

In short, there is no discernible pattern to word stems ending in -i as opposed to -a.

Another statement by McConnel (AA191/11/16 p. 7) is that the subjunctive / optative suffix is -iya 'SBJV'. This compares with Table 43 where some of the suffixes are -iya 'SBJV', or variations thereof, and others are -uwa 'SBJV'. Some entries have both e.g. the third person singular and plural can be either -iya 'SBJV' or -uwa 'SBJV'. There is limited evidence in MCC to support the analysis, primarily because most of the narratives are in the indicative mood and there is homophony between the future suffixes and subjunctive suffixes in some cases. The decision to gloss a verb as being in subjunctive mood in MCC is influenced by comparison with AD and McConnel's literal translations. In total, only 20 verbs in MCC have been glossed as being in the subjunctive. There is an almost even split between verbs with STM suffixes based on -uw(a) 'SBJV' (nine) and those based on -iya 'SBJV' (eleven). The use of each suffix is found in multiple narratives and both are found in four narratives. No pattern as to the choice of subjunctive STM has been observed, but that may be an artefact of the limited data.

Examples (778) and (779) are from the same narrative 'The Myth of the Rainbow Serpent' (McConnel 1936b pp. 100-103), both showing conditional mood and the two different STM subjunctive suffixes. In AD the conditional has the subjunctive mood in the protasis and the future in the apodosis (section 9.3.1.1). Example (778) does not have this pattern, as the protasis kancha ta-tata 'bone RDP-point' (if the bone he used to point) has no STM on the verb and is most likely the past tense. The
apodosis yipa utha-ma-uwa 'soon dead-ITR-3SG.SBJV' (soon that man would be dead) is in the subjunctive mood. Note that -ma 'ITR' derives intransitive verbs from adjectives. The decision to gloss the second verb as subjunctive in this case relies on the McConnel translation which includes an implied 'if' and translates the verb as 'would be dead' and not 'will be dead'.
(778) McConnel 1936b p. 100 ex 10
[kancha ta-tata] yipa utha-ma-uwa
bone RDP-point soon dead-ITR-3SG.SBJV
'the bone he used to point soon that man would be dead (if he pointed the bone soon
the man pointed at would be dead)'

In example (779), the verb in the protasis kula nunga-nda taipana=ka wampi-iyi-nda 'enemy 3SG-DAT taipan=ALL come-3SG.SBJV-DAT' is in subjunctive mood while the verb in the apodosis nila kuya kancha ta-tata '3SG string bone RDP-point', as in (778) has no STM. This use of subjunctive in protasis aligns with AD while the apodosis in AD would be in the future, here it is not marked. The lack of STM marking here probably reflects the optionality of the STM in MCC, rather than the past tense, based on the McConnel translation.
(779) McConnel 1936b p. 100 ex 11

| [kula nunga-nda |
| :--- |
| enemy $\quad$ 3SG-DAT |$\quad$| taipana=ka |
| :---: |
| taipan=ALL |


| wampi-yi-nda] |
| :--- |
| come-3SG.SBJV-DAT |

3SG suya kancha ta-tata]
'(if) an enemy of his to the taipan came he (the taipan) string bone would point'

Another example of -uwa '3SG.SBJV' is (780), where the final vowel has changed in pek-uwi-nya 'kill-3SG.SBJV-1SG.ACC'. The interpretation of subjunctive here is from the McConnel translation of 'might'.
(780) McConnel 1936b p. 91 ex 33

$$
\begin{array}{ll}
\text { pek-uwi-nya } & \text { nila-ra } \\
\text { kill-3SG.SBJV-1SG.ACC } & \text { 3SG(NOM)-DAT } \\
\text { 'might kill me he (he might kill me)' }
\end{array}
$$

A final example, (781), this time of -iya 'SBJV' as defined by McConnel (AA191/11/16 p. 7) where the verb waiyai-iya 'spoil-SBJV' denotes that the spoiling is a possibility, rather than a definite prediction.
(781) AA191/11/16 p. 7

### 15.5.3 Accusative Verbal Suffixes

In AD accusative suffixes are restricted to the first and third person singular; -any '1SG.ACC' and -an '3SG.ACC' respectively and follow the STM. The MCC also has first person singular, with form -nya '1SG.ACC', seen in (780) above on the verb pek-uwi-nya 'kill-3SG.SBJV-1SG.ACC', again following the STM suffix. The MCC has two third person singular -na '3SG.ACC' and -nuna '3SG.ACC' which also follow the STM suffix. The former can be seen in (782) where the accusative suffix on the verb bunga- $\varnothing$-na 'spear-3SG.PST-3SG.ACC' denotes a person who has been speared. The latter can be seen in (783), where the accusative suffix -nun '3SG.ACC' denotes the taipan that the subject pama=ng 'MAN=ERG' (the men) have seen. No pattern has been discerned as to the distribution of these two forms. It is possible that -na is a reduced form of -nuna '3SG.ACC'.
(782) McConnel 1936b p. 92 ex 16
pala=ngka bunga-Ø-na
hither=LOC spear-3SG.PST-3SG.ACC
'in the side he speared him'
(783) McConnel 1936b p. 100 ex 44

| mina | taipan $\quad$ pama=ng tati-yan-nuna |  |
| :--- | :---: | :---: | :---: |
| MEAT | taipan | MAN=ERG see-3PL.PST-3SG.ACC |
| 'taipan the men saw him (the men saw the taipan)' |  |  |

In addition to the first and third singular accusative suffixes, MCC has the second person -linta '2SG.ACC' with the difference that this suffix precedes the STM suffix rather than following it. The form -linta '2SG.ACC' appears to be based on the free pronoun ninta '2SG'. Its use can be seen in example (784) where -linta '2SG.ACC' appears on both verbs preceding the STM suffixes -nga '1SG.FUT' and -nga '1SG.PRS' respectively. Note that the glossing of each STM suffix is based on the English translations.
(784) McConnel 1936b p. 103 ex 10

| ka'a weicha-linta-nga | ngaiya | wanta-linta-nga |
| :--- | :--- | :--- |
| NEG follow-2SG.ACC-1SG.FUT | 1SG(NOM) | leave-2SG.ACC-1SG.PRS |
| 'not will I follow you. I let you go' |  |  |

The second dual accusative suffix is -lipa '2DU.ACC' (based on nipa '2DU') and like -linta '2SG.ACC', appears before the STM, as in (785) where the stem is etya 'rape', followed by -lipa '2DU.ACC' and then the STM suffix -nga '1SG.FUT'.
(785) McConnel 1936b p. 96 ex 154
etya-lipa-nga rape-2DU.ACC-1SG.FUT' 'I will rape you two'

Other dual and plural accusative suffixes, where found, are indistinguishable from free accusative pronouns and always follow the STM suffix. It is plausible that they were perceived as bound suffixes but were intended as free pronouns. There are very few examples. Example (786) is one of two where the suffix -ngana-ng '1DU/1PL.EXCL-ACC' follows the STM suffix - $\varnothing$ '3SG.PST'. There would be no change in meaning if -ngana-ng '1DU/1PL.EXCL-ACC' were a free pronoun.
(786) McConnel 1936b p. 94 ex 195

| ngana | pikuwa=ng | echa- $\boldsymbol{\varnothing}$-ngana-ng! |
| :--- | :--- | :--- |
| 1DU.EXCL | crocodile=ERG | rape-3SG.PST-1DU.EXCL-ACC |
| 'we two pikuwa raped (the crocodile raped both of us)' |  |  |

Similarly, the suffix -bula-ng '3DU-ACC' on the verb in (787) denotes the direct object of two protagonists and could equally be a free pronoun with no change in meaning.
(787) McConnel 1936b p. 103 ex 20
tata-Ø-bula-ng
see-3SG.PST-3DU-ACC
'he saw those two'
Most of the narratives in MCC feature two protagonists which reveals variations of the 3DU suffixes. Firstly, -bulang in (788) is glossed '3DU.PST', not analysed as '3DU-ACC' although the form of the verb is identical to (787) i.e. tatabulang.
(788) AA191/16/10 p. 1 ex 45

## tata-bulang

see-3DU.PST
'those two saw him'
The ending -ng on the 3DU.PST STM suffix is optional, as can be seen in (789) where the meaning of the verb tata-bula 'see-3DU.PST' is the same as tata-bulang 'see-3DU.PST' in (788).
(789) McConnel 1935 p. 76 ex 12

| min | wuka | tata-bula |
| :---: | :---: | :---: |
| MEAT | flying.fox | see-3DU.PST |
| 'flying fox those two saw. |  |  |

### 15.5.4 Dative Verbal Suffixes

In AD the dative suffixes which attach to the verb follow the STM and are restricted to the first and third person singular; -ar '1SG.DAT' and -ant '3SG.DAT' respectively. Two equivalents also occur in MCC; -ra 'DAT' and -nda 'DAT', with similar meanings but wider application. That is, they are found more widely than first and third singular dative, as follows.

The sense of first person singular dative of -ra 'DAT' can be seen in (790) where it appears on the verb uka-na-ra 'come.down-3SG.PRS-DAT' and denotes the speaker as indirect object with the sense 'for me'.
(790) McConnel 1936b p. 100 ex 47

| marichi | pama | kan | uka-na-ra |
| :--- | :--- | :--- | :--- |
| sweetheart | MAN | NOW | come.down-3SG.PRS-1SG.DAT |
| 'for sweetheart a man has come down for me (a man has come to be my lover)' |  |  |  |

The suffix -ra 'DAT' is also found in five examples with -lungk '2SG.DAT', as in (791) where -lungka-ra '2SG-DAT' encodes the possessive, as for possessive pronouns in MCC (section 15.4.1.3). In this case it denotes the addressee as being the possessor of her vagina. Note that in this example there is no STM suffix on the verb; the subject is assumed from context. There is no suffix in AD corresponding to -lungka-ra '2SG-DAT'
(791) McConnel 1936b p. 94 ex 139
pu'a ma'a-nga tu'a-lungka-ra vagina hand-INST poke-2SG-DAT' 'vagina with hand I (want to) poke (I want to poke your vagina with my hand)'

There are three examples where the exact meaning of -ra 'DAT' is unclear, as in (792) where the suffix -ra 'DAT' is attached to the verb iya-Ø-ra 'go-3SG.PST-DAT'. It is not translated but could perhaps link to wanti 'where' and denote 'to where'. Alternatively it could denote the speaker, meaning 'on me'. Neither explanation is convincing and there are insufficient examples to draw any conclusions.
(792) AA191/16/09 p. 1 ex 37
wancha wanti iya- $\varnothing$-ra?
WOMAN where go-3SG.PST-DAT?
'wife where has she gone?'

The other dative suffix is -nda '3SG.DAT'. As for the corresponding suffix -ant '3SG.DAT' in AD this denotes third person singular indirect objects, as in (793) where it denotes a third person singular indirect object that the dual addressees are being told to call for. The STM suffix -uwa '2DU.FUT' is the imperative in this instance.

## (793) McConnel 1936b p. 95 ex 205

putthama tauwa-uwa-nda
again say-2DU.FUT-DAT
'again call to him you two'
The suffix -nda 'DAT' also attaches to bound pronouns other than third person singular to form indirect objects, as in (794) where it attaches to -bula '3DU' to denote the indirect object bula-nda '3DU-DAT'. As noted above for accusative suffixes (section 15.5.3) there would be no change in meaning if the bula-nda '3DU-DAT' was a free pronoun (as occurs elsewhere) and not a bound pronoun. Thus it may be a question of perception whether it is a bound pronoun or not.
(794) AA191/16/10 p. 2 ex 112
wampa- $\varnothing$-bula-nda
come-3SG.PST-3DU-DAT 'he came up to those two'

### 15.5.5 Other Verbal Suffixes

In AD there are three other suffixes which attach to verbs, all obligatorily following a
dative suffix. These are the homophonous ablative and genitive -am 'ABL' / 'GEN' (section 8.4.1) and the comitative -ang 'COM' (section 8.4.2). These three are very rare in MCC but do not require a preceding dative. The ablative can be seen in (795) where the suffix -ma 'ABL' is attached to the verb uka- $\varnothing$ 'go.down-3SG.PST' to denote that the subject chabara 'blood' is running down 'from' the nose.
(795) AA191/16/04 p. 1 ex 28

| chabara | ka'a | uka- $\varnothing$-ma |
| :--- | :--- | :--- |
| blood | nose | go.down-3SG.PST-ABL |
| 'blood the nose ran from' |  |  |

The genitive verbal suffix can be seen in (796) where it attaches to the bound dative pronoun bula-nda '3DU-DAT'to express that the direct object keka 'spear' etc belongs to the two protagonists denoted by bula '3DU'.
(796) AA191/16/10 p. 1 ex 26
keka woiya morkana maiya-Ø-bula-nda-ma
spear club fighting.stick pick.up-3SG.PST-3DU-DAT-GEN
'spears clubs fighting sticks he picked up of theirs (he picked up their spears etc)'
The comitative verbal suffix is very rare in AD and always follows a dative suffix. There are no examples in MCC of a comitative verbal suffix

The allative does not attach to verbs in AD, but does in the Coen dialect (section 14.3.3) and is found in a few examples in MCC, as stated by McConnel in her draft grammar (AA191/11/10 p. 4). There she states that 'all locative and directional suffixes are affixed to all parts of speech'. The ablative in MCC is shown above in example (795); the allative can be seen in (797) where -ka 'ALL' attaches to the intransitive verb wun 'stay' to express that the subject mee 'eye' is staying towards the north.
(797) AA191/11/10 p. 4

| mee | um kunk |
| :--- | :--- |
| eye | wan-ka |
| facing north | stay-ALL |
| 'eyes facing north stay towards ((he) remains facing north)' |  |

The locative is found in two examples in MCC; (773) and (774) above.

### 15.5.6 Other Verbal Morphology

Other verbal morphology in AD has similar or identical counterparts in MCC; reduplication, reciprocal suffix and transitivisers. This section briefly summarises these.

### 15.5.6.1 Reduplication

Reduplication, typically of the first syllable, in AD encodes continuative aspect (section 9.2.1). This also occurs in MCC, as can be seen in (798) where the first syllable of kala 'carry' is reduplicated and the reduplicated verb is in continuative aspect.

```
(798) McConnel 1936b p. }100\mathrm{ ex }5
    ngana ka-kala-na?
    what RDP-carry-3SG.PRS?
    'what is he carrying?'
```


### 15.5.6.2 Reciprocal Suffix

In AD reciprocal suffixes are based on the suffix -uw (see section 8.9). The effect of the reciprocal suffix is that the subject and direct object are co-referential. In MCC the reciprocal suffix is $-w u$ 'RCP', noting that there are only 22 examples. Example (799) is typical (19 examples include the bula '3DU'); the stem is peka 'fight', the subject is bula '3DU' and the reciprocal suffix -wu 'RCP' entails that the subject and the direct object map to the same referent, that is, the two protagonists are fighting each other.
(799) McConnel 1936b p. 92 ex 5

## peka-wu-bula

'fight-RCP-3DU.PST'
'those two fought (each other)'

### 15.5.6.3 Transitivisers

There are three transitivisers in AD: -am 'ITR' which derives intransitive verbs from adjectives (section 8.7); -ath 'TR' which derives transitive verbs from adjectives and intransitive verbs (section 8.6) and impung 'VERBZ' (section 8.10) which derives
verbs from English borrowing. All three have cognates in MCC.

Firstly, the intransitive verbaliser in MCC is -ma 'ITR' as can be seen in (800), where the intransitive verb uta-ma 'dead-ITR' (to die) is derived from the adjective uta 'dead'.
(800) AA191/13/04/ p. 1 ex 39

| pipa | kata | uta-ma-bula |
| :--- | :--- | :--- |
| father | mother | dead-ITR-3DU |

The transitiviser in MCC is -ta 'TR' (-ath 'TR' in AD) and, similar to AD, derives transitive verbs from adjectives and intransitive verbs. The former can be seen in (801); from the adjective waiya 'bad' derives the transitive verb waiya-ta 'bad-TR' (to spoil). The latter is seen in (802) where the verb tana-ta- $\varnothing$ 'stand-TR-3SG.PST' is derived from the intransitive verb tana 'to stand' by the -ta 'TR".
(801) McConnel 1936b p. 103 ex 100

$$
\begin{array}{ll}
\text { aka } & \text { waiya-ta-nga } \\
\text { PLACE } & \text { bad-TR-1SG.FUT } \\
\text { 'the ground I will spoil' }
\end{array}
$$

(802) AA191/16/13 p. 1 ex 81

| aka-nga | keka | tana-ta- $\varnothing$ |
| :--- | :--- | :--- |
| PLACE-LOC | spear | stand-TR-3SG.PST |
| 'in the camp he stood his spear' |  |  |

The suffix -impung 'VERBZ' in AD is used to derive verbs from English words. The believed etymology is that this suffix is a compound of im 'him' and pung 'to spear / to shoot'. There are no English borrowings in MCC, however the cognate bung 'to spear / to make' is used as a transitiviser of intransitive WM verbs, generally with an additional sense of force. Example (803) shows that the transitive epan-bunga 'return-make' is derived from the intransitive verb epan 'to return'. The resultant transitive verb has the sense that the speakers were forced to return by the subject pikuwa-nga 'crocodile-ERG'. This use of bung/pung is not found in AD.
(803) McConnel 1936b p. 95 ex 183

| pikuwa-nga | ana | koiya-ma | epan-bunga- $\varnothing$ |
| :--- | :---: | :---: | :---: |
| crocodile-ERG | DIST | back-ABL | return-make-3SG.PST |
| 'pikuwa the crocodile back made (us) turn (the crocodile made us turn back)' |  |  |  |

### 15.6 Syntax

Many features of MCC syntax are similar to AD. Word order has preferred, but not obligatory structure, which can be varied as the speaker sees fit. There is extensive use of null anaphor. Chapters 7, 11, 12 and 13 describe the features of AD syntax. This section focuses on differences found in MCC.

Firstly, a common feature of AD (see section 5.1.2) is that many clauses start with a pronoun, especially third person, followed by a co-referential NP. This feature occurs in MCC but much less commonly; (804) is one of the few examples; nila '3SG' is coreferential with pikuwa 'crocodile'.
(804) McConnel 1936b p. 94 ex 32

| nila pikuwa $\quad$ mointya- | aka | nunga |  |
| :--- | :--- | :--- | :--- |
| 3SG crocodile | swim-3SG.PST | PLACE | 3SG.DAT |
| 'he, the crocodile, swam to his ground' |  |  |  |

While in AD this feature appears in over 40\% of clauses the figure for MCC is less than $5 \%$. This of course could be artefact of the MCC data and not fully reflective of the language at that time.

Secondly, in AD there are various conjunctions such as a' 'and', puth 'because, but, and, hence' and ma'a 'HAND' (see sections 3.5.4 and 7.3). This last is the only conjunction found in MCC (one example) and, as for AD, is restricted to kin relations. Coordination in MCC is by juxtaposition, a feature of AD as well. Example (805) is typical: clauses one and two (in []) are juxtaposed but form a single complex clause.
(805) McConnel 1936b p. 92 ex 45

| [kattha | kuncha | wampa-Ø-nda] | [intina-Ø] |
| :---: | :---: | :---: | :---: |
| [mother | n | came-3SG.PST-3DAT] | squeeze-3SG.PST |
| 'mother | e | him) and squeezed |  |

An apparent cognate of puth 'because, but, and, hence' in MCC is puta 'more', seen in (806). It is not used as a conjunction but there are only four examples, so evidence is limited. An alternative analysis proposed by Verstraete (pc) is that puta 'more' can be reconstructed from Proto Middle Paman *puca 'first, front'.

Lastly, finite relative clauses in AD, described in section 13.1.2 are identified by the presence of the definite marker =an 'DEF' attached to the last word preceding the verb in the subordinate clause. This construction has not been found in MCC. By contrast, non-finite relative clauses similar to those in AD (section 13.1.5) have been found. In both corpora the non-finite form of the verb in the subordinate clause is marked with a directional case i.e allative, ablative or locative. An example in MCC is (807) where the matrix clause is kicha wunpa-bula 'ti-tree put-3DU.PST' and the subordinate clause is in bold.
(807) AA191/12/25 p. 1 ex 95

| kicha wunpa-bula aka | wuna-na-ka |
| :--- | :---: | :---: |
| ti-tree put-3DU.PST PLACE | lie-NF-ALL |
| 'ti-tree bark they two laid down the ground for lying on' |  |

No other significant differences between AD and MCC syntax have been found.

## 16 Conclusion

This grammar of Wik-Mungkan is based on historical data, written and audio, and linguistic descriptions prepared over the periods 1927 to 1934 and 1964 to 1991, the bulk in the period 1964 to 1977. The aim of the thesis was to provide a comprehensive grammar of Wik-Mungkan, expanding on the previous descriptions and analysing the data to provide descriptions of topics not covered or covered briefly.

As Evans (2009, p. 223) has pointed out, a comprehensive grammar is inherently impossible to complete. In addition to this impossibility, there were other constraints encountered in developing this thesis. These are: the lack of negative data, gaps in the data and metadata, language change and legal/ethical constraints. Each of these is discussed below in the context of this thesis.

Firstly, there is no negative evidence. For example, there are no examples in the corpus of ignoratives with the topical marker or the emphatic marker (Chapter 5.2.2). Is this absence inherent in the language or merely an artefact of the corpus? Himmelmann (2006, p. 23) claims that in a large corpus absence is sufficient to establish the structure to be illicit. The corpora used for this thesis, especially the Coen and Theethinji data and McConnel corpora are not large, so Himmelmann's assertion does not apply. The various absences such as those above cannot be categorically said to demonstrate the ungrammaticality of the structure in question.

Secondly, at various points in this thesis there are identified limitations in the data. Concerning the Aurukun dialect, these are of various types. The first type concerns details of known lexemes published in the lexicon. Examples here are: the exact meanings of the three-way distance distinctions in demonstratives and vocatives; the word class of nungapan 'still' (chapter 3.4.1) and the meanings of various adverbs (section 10.2.6). A second known gap concerns 'avoidance' language. Some lexemes in the lexicon, e.g. yawant 'foot', are identified as 'avoidance' but no details are provided of the nature of that avoidance. The third gap concerns the type of
data; the available data is predominantly narratives and elicitations, with very limited conversational data, no video and no songs. Finally, although there are over 24 hours of audio, less than half is of sufficient quality to support acoustic analysis. The audio data of the Coen dialect is limited to a single speaker.

Gaps also exist in metadata across all the corpora, notably place and time of recording and details of participants such as sex and age. Which dialect was being recorded is rarely described. This last is a particular issue for the McConnel corpus which is believed to have been gathered at different places in the traditional WikMungkan country.

The third constraint arose from language change. The first two constraints are of course common to any grammars which have been developed from historical material. Recent examples are grammars of Yintyingka (Verstraete and Rigsby 2015) and of Yuwaalaraay and Gamilaraay (Giacon 2014). What is different here is that Wik-Mungkan is still an actively spoken language, principally in Aurukun, including speakers literate in the language. The intent when starting this grammar was that gaps in the historical data such as those noted above would be filled by field visits to Aurukun. This expectation proved unfounded due to language change. For example, the three-way (proximal, medial and distal) distance distinctions in demonstratives in the data are now two way (section 6.4.5), Other changes noted were in relative clause constructions (section 13.1.2) and the various lexical items referred to above.

The last constraints encountered are ethical and legal. Much of the data used was obtained from the AIATSIS library and the South Australian Museum (SAM). It was only provided when permission from speakers recorded in the data (or their descendants) was obtained and then for the purpose of this thesis only. I was unable to obtain the speaker permissions for some AIATSIS recordings as I was unable to locate the individuals recorded or their descendants. Ideally, accompanying this thesis would be an annotated archive of the data, as described by Himmelmann in e.g. Himmelmann (2006, p. 5). The conditions attached by AIATSIS, SAM and copyright provisions of other sources such as Kilham et al (1986) and Sayers (1982a)
prevent the publication of such an archive.

This grammar then is as complete a description of the Wik-Mungkan language as spoken in Aurukun in the period 1964 to 1977 as possible with the available data. Additional material in e.g AIATSIS could not be obtained due to not being able to obtain permissions, The description of the language spoken in Coen and Theethinji in a similar period (chapter 14) is less comprehensive due to less data. The description of language as spoken in the period 1927 to 1934 (chapter 15) is also not comprehensive for the same reason.

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## Appendix 1 Sentence typology per Longacre



Figure 1

Sentence typology proposed by Longacre (1970 p. 784), adopted by Sayers in Sayers (1976a, 1976c). This has not been adopted for this grammar. See section 1.2.2.2.

## Appendix 2 Summary of Flex Corpus

## Written Texts

| Reference | Description |
| :--- | :--- |
| Sayers and Godfrey <br> 1964 | Examples extracted from the document |
| Godfrey and Kerr 1964 | Examples extracted from the document |
| Godfrey 1970 | Examples extracted from the document |
| Sayers 1976a | Examples extracted from the document |
| Sayers 1976b | Examples extracted from the document |
| Sayers 1976c | Examples extracted from the document |
| Sayers 1977 | Examples extracted from the document |
| Kilham 1977 | Examples extracted from the document |
|  | The narrative 'The Snake' pp 257-260 |
| Sayers 1982 | Narrative 'PNG Film Review', pp150 - 170, originally told <br> by Topsy Wolmby. Also found in Kilham 1977 pp 249- <br> 256 |
|  | Narrative 'Geese Eggs' pp 171 - 192 |
|  | Narrative 'Kuutan' or 'umbilical cord ceremony' pp 193- <br> 206 |
| Narrative 'kekwoyang the Echidna pp 207-214 |  |
| Kilham et al 1986 | Narrative 'Why we make mats' pp 215-220 |
| Suchet 1990 | Narrative 'Mabel's New Year Message' pp 221-224. <br> Originally told by Mabel Pamulkan |
|  | Selected verses from the SIL Bible translation |
|  | Examples extracted from the document |
|  |  |

## Translations from AIATSIS Audio

| AIATSIS <br> Reference | Corpus <br> Reference | Description |
| :--- | :--- | :--- |
| SAYERS_B01 <br> 018772 | BS772BY | First 22 minutes, a recording of Benny Yunkaporta, <br> undated. Rest of tape too distorted for analysis. <br> Translated by Dawn Koondumbin June 2017 |
| SAYERS_B01 <br> 018774 | BS774MYTW | First 26 minutes a recording of Maud Yunkaporta <br> and Topsy Wolmby 1967. Translated by Dawn <br> Koondumbin June 2017. Did not obtain permissions <br> for rest of tape. |
| SAYERS_B01 <br> 018778 | BS7782XW | Only obtained permission for last 13 minutes <br> speakers are two women of unknown identity. <br> Translated by Dorothy Poothchemunka June 2017 |
| SAYERS_B01 <br> 018779 | BS779_min22 | First 22 minutes are of very poor quality, so used the <br> rest. Undated. Translated by Dorothy <br> Poothchemunka June 2017, who identified the <br> speakers as Topsy Wolmby, her mother and Winnie <br> Koongotema |

## Recordings analysed but not in the corpus

| AIATSIS <br> Reference | Corpus <br> Reference | Description |
| :--- | :--- | :--- |
| CHESNEY_01 | Chesney | Elicitations recorded on Palm Island in 1966 of <br> Melbourne Marpundin. See section 2.4.1.5. |
| RIGSBY_B03 | Rigsby 1974 | Elicitations of Oscar Gordon in Coen 1974. See <br> Chapter 14. |
| N/A | LkXN; x=1 to <br> 19, N=A, B | Various recordings made by Lucy Kuntz and Steve <br> Johnson c 1988. Used in Chapter 2. |

## Notes

1/ Other recordings of Wik-Mungkan exist at AIATSIS e.g SAYERS_B01773, 5, \& 7.
They were not used either because correct permissions could not be obtained or the recording quality was inadequate

2/ Summary statistics: 5,170 unique words, 21,791 word tokens and 3,978 segments (clauses)

## Appendix 3 Geese Eggs Narrative

Text of narrative 'Geese Eggs' from Sayers (1982 pp 171-190), included to assist understanding of section 5.1.2.1. WM and translations are as per original; glosses are as per this thesis.

1 ngay thon waa'-ang wik kath 1SG(NOM) other tell.1SG.PRS WORD old 'I tell another story'

2 minh=ak nguch=ang=an iiy-antan ko'an nhepan=ak=an-iy meat=ALL early=LOC=DEF go-3PL.PRS goose eggs=ALL=DEF-TO 'they go hunting for goose eggs.'

| nil-a kan-a | ngut=ang=an-iy | than | pam |
| :--- | :--- | :--- | :--- |
| 3SG(NOM)-a NOW-a | night=LOC=DEF-TOP | 3PL(NOM) man |  |
| wanch thamana than $\quad$ kan wik | yump-antan |  |  |
| woman | 3PL(NOM) NOW WORD | make-3PL.PRS |  |
| 'one night the men and women make plans' |  |  |  |

thanttakaman thaw-antan
themselves say-3PL.PRS
' they said among themselves'
6 nil
kan wee' iiy-ow
ngaanwiy=ak=an
3SG(NOM) NOW who go-3DG.FUT sacred=ALL=DEF 'who will go for these sacred things.'
minh ko'an nhepanan waa'antan ngaanwiyiy meat goose egg call.they sacred.things
'they call those goose eggs sacred things'
nint ey
2SG(NOM)
Q
'is it you?'

9

| pam thon alantan | thaw-antan |
| :--- | :--- |
| man other DIST | say.3PL.PRS |
| 'to one man they say' |  |

10
ya'a ngay-wey ing=am-a
NO 1SG(NOM)-EMO PRX=EMPH-a
'no l'll stay here'
ngaa' thon nath ngul iiy-ang-a
night other maybe then go-1SG.FUT-a
'another night I will go maybe'
kan niiy-ar-a puy
NOW 2SG-1SG.DAT-a further
'you, my relatives, should go'
nil-amp nan ya'a ey
3SG-3PL MED NO question
'maybe that relative of ours would go'
ya'a ngay ing=am-a
NO 1SG PRX=EMPH-a
'no I'm staying here'

| nil-amp | ke' iiy-iy | ey |
| :--- | :---: | :---: |
| 3SG-3PL | NEG go-3SG.SBJV | Q |
| 'what about that other relative of ours going' |  |  |


| ee' | ngay-wey | iiy-áng |
| :--- | :--- | :--- |$\quad$| ngamp-ar-a |
| :--- |
| yes |
| 1SG(NOM)-EMO | go-1SG.FUT 1PL.INCL-DAT-a

thaw-an pam thon=an-iy
says.3SG.PRS man other=DEF-TOP
'says the other man'
yaa an-a puth pam=ant namp ke' wich-iythan
YES DIST-a but man=DAT DAT NEG call.3PL.SBJ
'yes but it is the custom not to name this man'
ngeenwiy an-man waa'-antan
avoidance.name DIST-SAME call.-3PL.PRS
'they just call him sacred one'
puth ngench-thayan
because taboo
'because it's sacred'
namp wich-iythana
name call.out-3PL.SBJV
'were they to call his name'
ngaantam-ngeey-iythan-a think.about.they-3PL.SBJV-a 'were they to think about (his name)'
an-a puth minh ngeena
DIST-a but MEAT what 'what would happen about them (those eggs)'

| nhepan=an-a | ko'alam | maay-iy | puth-a |
| :--- | :--- | :--- | :--- |
| eggs=DEF-a | few | pick.up.1SG.SBJV | but |
| 'they would pick up only a few' |  |  |  |

nil namanam waa'-wuntan ngaanwiy=an-iy 3SG that.same.ontell-2PL.RCP.PRS sacred=DEF-TOP 'that's why we speak about him to ourselves as sacred;'
minh yot yipam maay-ow meat many so.that pick-3SG.FUT 'he will pick up lots of eggs'

| angmana tha' mat-ow | thoonangam | angmana |
| :--- | :--- | :--- |
| DIST.SAME foot climb3SG.FUT, | bark.canoe.into | DIST.SAME |
| 'there he gets into that bark canoe' |  |  |

yaa nguchanang changpey-an yes early jump-3SG.PRS 'he jumps into early'
 'I've seen this place'
weenam many ang=an-a kaaw yuk ongka thaamp-an fresh water small DIST=DEF-a east stick long paddles.he nungamangana
himself
'into the creek he paddles himself east'
yuk pemar-a ya'a
thing mangrove NO 'he doesn't have a mangrove paddle'

| in-a yuk ongkan than-iy | waa'-antan | thuul-a |  |
| :--- | :--- | :--- | :--- |
| PRX-a thing long |  |  |  |
| they-TOP | wall-3PL.PRS <br> call this stick 'thuul', |  |  |

An empty paragraph
waa'-antan
call-3PL.PRS
'they call it'
an=an yuk ongk an=an thoonam=ang alangaman DIST=DEF thing long DIST=DEF bark.canoe=LOC DIST.SAME.ERG tha'-tha'-ow nungamang itangam palam-puyam push-RDP-3SG.FUT himself slowly hither-thither 'with that long stick he pushes himself backwards and forwards.'

An empty paragraph
nil=an aak kech thath-an-a minh=ak=an-iy 3SG(NOM)=DEF place far see-3SG.PRS-a meat=ALL=DEF-TOP 'he looks far for those eggs'

| nil-a | minh $k$ ko'an-wey thath-an | kaath | pi'an |
| :--- | :--- | :--- | :--- | :--- |
| he(NOM)-a meat goose-EMO see-3SG.PRS | mother | big |  |
| 'he sees a goose (a big mother goose)' |  |  |  |

nyiin-wey
sit-3SG.PST-EMO
'sat there'
nhepan kuup-an-a
egg watch.over-3SG.PRS-a
'she waits for eggs.'
nil-a kek pith maay thul tham
3SG(NOM)-a spear four.pronged pick-3SG.PST woomera also 'he picked up his spear and woomera as well.'

47

| a' minh nhepan | ngul=an | ngunch-an | than-ang |
| :--- | :--- | :--- | :--- | :--- |
| and meat egg | then=DEF | gather3SG.PRS | 3PL-ACC | 'then he gathers the eggs'


| nil | yimanam | iiy-an |
| :--- | :--- | :--- |
| 3SG(NOM) | like.this | go-3SG.PRS | | kaaw kaaw |
| :--- |
| east east | 'like this he goes further east'

an-a puth-wey punth-a nil-a weenam DIST-a but-EMO creek-a 3SG(N)M)-a fresh water many=an-iy kaaw=an kulkul=ak many=am wun small=DEF-TOP east=DEF crooked=ALL small=EMPH to.be-3SG.PST 'that creek (different) lies towards the east.'
ke' thuuk yimanang mana-paant aakanakam kaaw=an ey similar.to snake like.this long.way DIST.ALL east=DEF $Q$ 'like a snake, going a long way east.'

| nil-a | yuunch=ang-wey | mat-iythan-a |
| :--- | :--- | :--- |
| 3SG(NOM)-a | tree=LOC-EMO | climb-3PL.SBJV-a |
| 'they would climb a tree' |  |  |

yuk puth an-a mu'am anman than-thanan tree but DSIT-a big DIST.SAME stand-RDP-3SG.PRS 'a big tree stands there'
kich keenk-keenkan nath mat-in-a ti-tree long.ago maybe climbe3PL.PST-a 'maybe long ago they climbed it'
ananman tha-than DIST.SAME stand-RDP-3SG.PST 'that same one still stands.'
yuk an=an ke'am yippak kath-am-a tree DIST=DEF not yet 'that tree hasn't got old yet'

| ke'am yippak | keek | kich | thuumpiyan |
| :--- | :--- | :--- | :--- |
| not yet | fall-3SG.PSTti- | tree | melaleuca.leucendron | 'it hasn't yet fallen, that paperbark'

yuk mat-an-wey thonam wanch pam-wey ang
tree climb one woman man-EMO DIST 'one woman climbs that tree, maybe a man'

59

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70
an-a thath-iythan nun ke' puk manya mupa DIST-a see3PL.SBJV 3SG.ACC like child small low 'they would see him low, like a child'
kuchek=am thonak-a head=EMPH only-a 'or perhaps only his head'

| than=an | thiich-antan | nun |
| :--- | :--- | :--- |
| 3PL(NOM)=DEF | know-3PL.PRS | 3SG.ACC |
| 'they know him' |  |  |

nil-a minh ngeen thath-iythan 3SG(NOM)-a meat what see3PL.SBJV 'what did they see?'

| pulok-wey | an-a | nil-nil |
| :--- | :--- | :--- |
| bullock-EMO | DIST-a | different | '(they would see) bullocks as different'


| than wiy anangan | thaw-antan |
| :--- | :--- | :--- |
| 3PL(NOM) some DIST | say3PL.PRS |
| 'those other say' |  |

ngoyngk=ang=an nyiin-tan
shade=LOC=DEF sit-3PL.PRS
'those sitting in the shade'
kan puy yaa'an
NOW further just
'just look further (they say)'
wukal than-tan
neck stand3PL.PRS
'neck (stretched) they stand'

| ngaanwiy | puy | thath-antan |
| :--- | :--- | :--- |
| sacred | thither | see-3PL.PRS |
| 'they see the sacred man | further away' |  |

man-man ngul than-tan
neck.stretched then stand-3PL.PRS
'they stand with necks stretched'
wenk-antan
look.for-3PL.PRS
'looking'
koow great! 'great'

83

84

85

86

87

88

90

94
thaw-an-a say-3SG.PRS-a 'he says'
mak wun-ayn
OPT will.stay-3PL.FUT
'let them lie here'
thonam wanch=ang manththayan=ang
one woman=ERG old.important.person=ERG
kuch-an wanchinth mangk=ang-wey
sends-3SG.PRS old.women important=ERG-EMO 'one old important woman sends someone. '
thath-an
see-3SG.PRS
'to see'

| kan thath-an | ngaanwiy | puy-pal | ya'a | ey |
| :--- | :--- | :--- | :--- | :--- |
| NOW see-3SG.PRS | sacred | thither-hither | NO | Q |
| 'does she not see the sacred one coming from far to here?' |  |  |  |  |


| in-pal-a | thinth-thinth ey |
| :--- | :--- |
| PRX=hither-a | close-RDP Q |

wal wachan an=amlittle.bit long.way DIST=EMPHeast Q 'or still far away in the east?'

```
```

ya'a in=am thinth kan-a kungench=ang=am=an NO PRX=EMPH close NOW-a corner=LOC=EMPH=DEF pal=am kan pip-an-a now=EMPH NOW turn-3SG.PRS-a 'no (he is) close now, turning the corner'
pi'an kan path-ath-iyin
ant.bed NOW light-TR-1PL.EXCL.SBJV
'let's light this ant bed.'

| wanch manththayan | an=ang=an <br> woman old.important <br> DIST=ERG=DEF | thaw-antan |
| :--- | :--- | :--- |
| 'those important women say' |  |  |
| say.3PL.PRS |  |  |

kan path-ath-iyin karkan ee'
NOW light-TR-1PL.EXCL.SBJV hot yes 'let us light it hot'
in=am=ow
PRX=EMPH=EMPH
'(he is) here!'
pech-ath-wuntan shout-TR-3PL.RCP.PRS
'they shout to each other'
ngeenwiy in-pal=ow
avoidance.name PRX-hither=EMPH
'the sacred one is here.'
thaw-antan
say-3PL.PRS
'they say'
ulp-antan minh=ak=an-iy
show3PL.PRS MEAT=ALL=DEF-TOP
'they are glad for the eggs'
wiy yalkangpek-antan minh aakanakan-iy puth some dance.shake.a.leg-3PL.PRS MEAT DIST.ALL-TOP because 'some dance shake-a-leg because of those eggs'
ngangk kuupam-antan naakanakan heart rejoice.3PL.PRS MED.ALL
'they are glad for those (eggs).'

```

\begin{tabular}{|c|c|}
\hline 118 & thoon=an thath-antan bark.canoe=DEF see-3PL.PRS 'they see the bark canoe' \\
\hline 119 & than thaw-antan 3PL say-3PL.PRS 'they say' \\
\hline 120 & \begin{tabular}{lcll} 
kee' in-a & ngamp-ar-a & yot \(n g u l\) & maay-an-a \\
great! PRX-a & 1PL.INCL-DAT-ar & many then & pick-2SG.PST-a \\
'great! you have picked many for us' & &
\end{tabular} \\
\hline 121 & ko'-ko'alam ke' maay-in-wey RDP-some NEG pick2SG.SBJV-EMO 'you could have picked just a few' \\
\hline 122 & \begin{tabular}{lr} 
pi'-pi'-ámp & than-ang \\
look.after-RDP-1PL.EXCL.FUT & 3PL-ACC \\
'we will keep them' &
\end{tabular} \\
\hline 123 & kana-kana mungk-ámp-a now-a-RDP eat.1PL.EXCL.FUT 'we will eat them' \\
\hline 124 & minh kaath pi'an ko'an maay-antan
MEAT mother big goose pick-3PL.PRS
'they pick up the big mother goose' \\
\hline 125 & pul thuth-antan
feather pull-3PL.PRS
'(feathers)they pull' \\
\hline 126 & kiingk-antan-wey cook-3PL.PRS-EMO 'they cook (them)' \\
\hline 127 & nil nhepanan thoon=am=an maay-antan
3SG egg canoe=ABL=DEF pick-3PL.PRS
'they pick up those eggs form the canoe.' \\
\hline 128 & \begin{tabular}{l}
maay-antan \\
pick-3PL.PRS \\
'they pick them up'
\end{tabular} \\
\hline 129 & \begin{tabular}{lll} 
minh nil puukam-wey & an-a & maay-antan \\
MEAT 3SG fresh-EMO & DIST-a & pick-3PL.PRS \\
'they pick up those fresh eggs' & &
\end{tabular} \\
\hline
\end{tabular}

yot=ow
yot=ow
lots=EMPH
lots=EMPH
'lots'
'lots'
143
144
145
146
147
um kaaw kaaw an-man thaa' puy nung-nung
chest east east DIST-SAME really further 3SG.DAT-RDP
thath-thath-ang-a
see-RDP-1SG.PST-a
'I saw lots of them there.'
thaw-an-wey
say-3SG.PRS-EMO
'he says'
an-a minh=ak=an-a ulp-antan
DIST-a MEAT=ALL=DEF-a swell.up
'they are glad for the eggs'

153
kaamp-antan minh anangan-iy-a
bury.they MEAT DIST-TOP-a
'they cook those eggs'
\(p i^{\prime}=a m=a n \quad\) emp-antan
ant.bed=ALL=DEF pull.out-3PL.PRS
'they pull out (the eggs) from the ant bed'
an-a yaark-ath-antan thanttakaman minh=an-iy-a DIST-a apart-TR-3PL.PRS themselves MEAT=DEF-top-a kampan=ant
relatives.DAT
'they divide the eggs among themselves, with the relatives'
\begin{tabular}{llll} 
thonam nil & ya'a & \(k e^{\prime}=a m\) & wun \\
one & 3SG & NO & NEG=EMPH
\end{tabular} to.be-3SG.PST
ma'mangkam=ant aath-wuntan
everyone=DAT give.3PL.RCP.PRS
'they gave them to everybody.'
than-a pam alantan-iy-a may-a wathiy-a keenk-a
3PL-a man DIST.DAT-TOP-a VEG-a yam-a first-a
ma'=ang pi'-in nung-ant
HAND=LOC keep-3PL.PST 3SG-DAT
'they had kept yams from the first for him'
nil wamp-an an
3SG comes.he DIST
'he comes'
an-a puth may=an chak=ang wunp-antan nung-ant that but VEG=DEF front=LOC put.they 3SG-DAT 'they put that food in front of him'
\begin{tabular}{lll} 
meechiy puth & nguch-an & nath=an-iy \\
hungry because early.go-3SG.PRS away=DEF-TOP
\end{tabular} 'he was hungry because he went early and far away'
nil may ngul-wey mungk-an
3SG fVEG then-EMO eat-3SG.PRS
'he eats the food'
nil minh nhepan thak=an-a an-a than ngul maay-antan 3SG MEAT egg thing=DEF-1 DIST-a 3PL then pick.3SG.PRS wiy=ang pam wanch wiy=ang kampan=ang some=ERG man woman some=ERG relation=ERG
'as for the eggs, they picked them up, those men and women, those relatives'
nil wiy-a ke' wun-iythan 3SG some-a NEG to.be-3PL.SBJV 'nobody would be without'
```

kan nan-man-a ya'a ngul

```
NOW MED-SAME-a really then
'that's all'

\section*{Appendix 4 Praat \(^{(T M)}\) Images (see Chapter 2)}


BS772BY0.10
```

| 3. TextGrid BS772BY0_27
File Edit Query View Select Interval Boundary Tier Spectrum Pitch Intensity Formant Pulses Helf
0

```


BS772BY0. 27


\section*{BS772BY1.35}
```

1. 7. TextGrid BS772BY1_38
File Edit Query View Select Interval Boundary Tier Spectrum Pitch Intensity Formant Pulses Help
``` ampumppul



BS772BY2.02


BS772BY7.14


BS774MYTW0.21.5


BS774MYTW0.52


BS774MYTW0.56


\section*{BS774MYTW1.44}


\section*{BS774MYTW1.57}


BS774MYTW1.59


BS774MYTW2.01


BS774MYTW2.55

File Edit Query View Select Interval Boundary Tier Spectrum Pitch Intensity Formant Pulses
\(p \backslash \wedge h \mid\)


BS774MYTW3.24



\section*{BS774MYTW4.45}

```

File Edit Query View Select Interval Boundary Tier Spectrum Pitch Intensity Formant Pulses
Help
j

```


BS774MYTW4.50
```

\ 28. TextGrid BS774mytw7_31 >
File Edit Query View Select Interval Boundary Tier Spectrum Pitch Intensity Formant Pulses
pukmany|

```


BS774MYTW7.31


\section*{BS774MYTW8.09}


BS774MYTW8.24


\section*{BS774MYTW9.36}


\section*{BS774MYTW10.25}


BS774MYTW12.01


\section*{BS774MYTW12.15}


BS774MYTW14.04


BS774MYTW15.08


\section*{BS774MYTW17.48}


\section*{BS774MYTW18.57}


BS774MYTW20.52


\section*{BS774MYTW22.56}


BS7782XW0.01


\section*{BS7782XW0.01}


BS7782XW0.41


BS7782XW1.34


\section*{BS7782XW2.56}


BS7782xw3.35


BS7782XW7. 02


BS7782XW9.46


BS7782xw10.10


BS7782XW11.33


BS779min22_0.23


BS779min22_0.56


BS779min22_1.02


BS779mmin22_1.13


BS779min22_1.28


BS779min22_1.58


BS779min22_2.03


BS779min22_2.04


BS779min22_2.07


BS779min22_2.36


BS779min22_2.48


BS779min22_4.12


BS779min22_5.19


BS779min22_5.31


BS779min22_6.01


BS779min22_6.21


BS779min22_7.21


BS779min22_8.41


BS779min22_9.18


BS779min22_10.51


BS779min22_15.15


BS779min22_18.06


\footnotetext{
BS779min22_18.41
}


BS779min22_19.01


BS779min22_19.32


BS779min22_19.55


BS779min22_22.40


BS779min22_24.18


LK13A12_46

\section*{Appendix 5 Dialect Comparison}

Words in bold are those with no counterpart in Aurukun Dialect.
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby \(1994^{97}\) \\
(Theethinji)
\end{tabular} \\
\hline 1DU incl & ngal & ngaali & & ngali \\
\hline 1DU excl & ngan & ngana & & \\
\hline \[
\begin{aligned}
& \text { 1DU incl DAT / } \\
& \text { POSS }
\end{aligned}
\] & ngalant & ngalanta & & \\
\hline 1DU excl DAT / POSS & ngant & nganta & & \\
\hline 1PL & ngamp & nampi & ngampa & ngampe \\
\hline \[
\begin{aligned}
& \text { 1PL DAT / } \\
& \text { POSS }
\end{aligned}
\] & ngampar & ngampara & & \\
\hline 1SG & ngay & ngaya & & ngaya \\
\hline \[
\begin{aligned}
& \text { 1SG DAT / } \\
& \text { POSS }
\end{aligned}
\] & ngath / ngatharam & ngatu / ngatara & ngatha / loto (see Note below) & ngathu / ngatha \\
\hline 2DU & nip & nipa & & nhipa \\
\hline \[
\begin{aligned}
& \text { 2DU DAT / } \\
& \text { POSS }
\end{aligned}
\] & nipar & nipara & & \\
\hline 2SG & nint & ninta / nanyi & ninta & ninta \\
\hline 2SG DAT & nungk(ar) & nungkura & & \\
\hline 2SG POSS & nungkaram / nungk(ar) (DAT alt) & ningku / nunkura & & \\
\hline 2PL & niiy & niya & noy & nhiya \\
\hline \[
\begin{aligned}
& \text { 2PL DAT / } \\
& \text { POSS }
\end{aligned}
\] & niiyant & niyant & & \\
\hline 3DU & pul & pula & & \\
\hline \[
\begin{aligned}
& \text { 3DU DAT / } \\
& \text { POSS }
\end{aligned}
\] & pulant & pulanta & & \\
\hline 3PL & than & tana & & thana \\
\hline
\end{tabular}

97 As noted in chapter 14 the exact dialect captured in Theethinji by Rigsby (1994) is not known
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline \[
\begin{aligned}
& \text { 3PL DAT / } \\
& \text { POSS }
\end{aligned}
\] & thant & tantra & & \\
\hline 3SG & nil & nila & nila & nhila \\
\hline 3SG DAT & nungant & nungundu & & \\
\hline 3SG POSS & nungantam & ningu & minku (see Note below) & \\
\hline a small bush & - & nguran & & \\
\hline afternoon & kinch-wayang & & & kincha wayang \\
\hline alligator / crocodile & pikkuw & pikoo & & pinychi \\
\hline another & thon & tonu & & \\
\hline ankle & (puunth / tha') kont / kongk & & & konto \\
\hline anus & mun uuyan & & & kunoka \({ }^{98}\) \\
\hline arm / creek & punth & & & punhtha / punta \\
\hline armpit & yuwan & & waato / yuwa & waatha \\
\hline armpit hair & yuwan pench & & & yanganwaath \(a^{99}\) \\
\hline apple - lady (R) / breadfruit (A) & cheengk & & & cheengku \\
\hline aristolochia pubera (vine) & waant & & & waantu \\
\hline ask (IMP) & engk(an) & & & waa'ana \({ }^{100}\) \\
\hline axe / hard / strong & thayan & & & thayan (kul'a) \\
\hline baby & puk many & arka / puk manya & & puku manya \\
\hline backside / faeces & kun ik/mun & & & kuna / muna \\
\hline backside (big) & munathiy & & & muntiya \\
\hline bad & way & & & waya \\
\hline
\end{tabular}

\footnotetext{
98 See also backside
99 In Aurukun yangan is marked 'head hair only'
1000 dd - waa'an is 'tell' in Kilham et al. Full R94 is ninta wa'ana 'ask him!'
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & Kilham et al 1986 (Aurukun) & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline bandicoot & \[
\begin{aligned}
& \text { up }{ }^{101} \text { / monk / } \\
& \text { kut }
\end{aligned}
\] & upa & & munki \\
\hline bark (of tree) & multiple depends on tree / use & & & engka \({ }^{102}\) \\
\hline barramundi & wuungkam & & & woongkam \\
\hline bat & mal & & & malli \\
\hline beach / sea & thomp & tompu & & \\
\hline bee & thaw & & & moola ('small native bee') \\
\hline behind & koyyuw & koyuwa & & \\
\hline beside / close & thinth & tinta & & \\
\hline big & pi'an pii'an (emphatic) & pii'an & pi'an / paapa & pi'an \\
\hline bird & panch & & & panycha \\
\hline bite (2SG.PRS) / IMP & nguchan / pathan & & pekana \({ }^{103 /}\) piikana \({ }^{104}\) & pathana \\
\hline black & ngotan & ngoton & & ngortan / ngoton \\
\hline black bream & kuypang / kutpak & & & kuypang / kuypay \\
\hline black currant & yoorp & & & yorpi \\
\hline black duck & themp & & & thampi \\
\hline blackfruit tree & kuump & & & kuumpa \\
\hline black headed python & yuum & & & yumafi <check symbol f = dy> \\
\hline blood / red & chaapar & & & chaapara chookoro \\
\hline blue tongue lizard & wel & & & walli \\
\hline
\end{tabular}

\footnotetext{
101 one of three types
102 Cf engk 'yellowfish' in Aurukun dialect
103 The verb pekan exists in Kilham et al in various phrases without being defined; on one interpretation it can mean 'bite'
104 Verb piikan in Kilham et al means 'to hit'
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline blunt & munth & & & munhthu \\
\hline boomerang & winch & & & winychi \\
\hline bone & kaanch & kaanchi & yentkan / nanta / kaanchi & kaanchi \\
\hline bony bream & yaak & & & yaaka \\
\hline boy & puk wuut / komp & & & puku pochan \\
\hline break (IMP) & pip(an) & & & pipana \\
\hline breast & thuut / paap & & thutu & thuutu \\
\hline bring (1SG.PRS) & kalang & kalanga & & \\
\hline bring (IMP) & \[
\begin{aligned}
& \text { wampath(an) / } \\
& \text { kal(an) }
\end{aligned}
\] & & & wampata / kalanha \\
\hline brother (older) & wuny & & & wunya \\
\hline brother (younger) & pont & & & ponto \\
\hline brolga & kor'/ yoompanam & & & kow'o \\
\hline burn & penchan & kengka & banche & \\
\hline bury / plant (IMP) & kaamp(an) & & & kaampana \\
\hline buttock & mun wal & & & kuntaa'a \\
\hline carpet snake & ooyngorpan & & & oyngarpunh \\
\hline catfish & ka'anth (engk) & & & ka'anhdang \\
\hline centipede & thal ma'uuy / thuunch & & & thonycho \\
\hline chest & ukup / um & & uwa & \(u m m u\) \\
\hline climb (3SG.PRS) & matan & matana & & \\
\hline climb (IMP) & mat(an) & & & mata \\
\hline close (adv) & thinth & tinta / tintu & pintho & \\
\hline cloud & yuw & & & yuwa \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline English & Kilham et al 1986 (Aurukun) & Sayers \& Godfrey 1964 (Coen) & \begin{tabular}{l}
Rigsby 1974 \\
(Coen)
\end{tabular} & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline cold & kuchar & & & kuchera \\
\hline \begin{tabular}{l}
come \\
(1DU.EXCL.PR \\
S)
\end{tabular} & wampanal & wampana & & \\
\hline \[
\begin{aligned}
& \text { come } \\
& \text { (1SG.FUT) }
\end{aligned}
\] & wampang & & & wampanga \\
\hline come here (IMP) & nint pal iiy(an) & & & ninta paliya \\
\hline come out (IMP) & pent(an) & & & pal penta \\
\hline \[
\begin{aligned}
& \text { cook } \\
& \text { (2SG.PRS) }
\end{aligned}
\] & kiingkan & kiingkana & & \\
\hline cook (IMP) & kiingk(an) & & & kiingkana \\
\hline crab & puuy \({ }^{105}\) & puuya & & рииуа \\
\hline crayfish (freshwater) & ma'wunth & & & ma'unhthu \\
\hline creek & punth & punta & & \\
\hline crooked & kulal & & & kulolo \\
\hline crow (Torresian) & waath & & & waathaa \\
\hline cry (3SG.PRS) & peeyan & & peeyan & \\
\hline cry (IMP) - don't & ke' peey)an) & & & ka'a peeya \\
\hline cut (1SG.PRS) & umpang & umpanga & & \\
\hline cut (IMP) & ump(an) & & & umpanha \\
\hline dance type & malp & malpa & & \\
\hline deep & thangk & tankun / tangkan & & \\
\hline die (3SG.PST) & utham & utuma & & uthama \\
\hline dig (IMP) & we'(an) & & & we'ana \\
\hline dilly bag & waangk & waanka & & waanka \\
\hline dingo & (ku')ngekanam & & & ku'angekanam \\
\hline dog & \(k u^{\prime}(a)\) & ku'a & ku'a & ku'a \\
\hline
\end{tabular}

\footnotetext{
105 Specifically mud crab, one of six types of crab
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & \begin{tabular}{l}
Rigsby 1974 \\
(Coen)
\end{tabular} & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline dove / grey pigeon & kolat & & & kolatang \\
\hline down & pek & & pak & pake \\
\hline dry (weather / country) & kayaman & & & kayaman \\
\hline dust & kurk & & & purka \\
\hline echidna & kek-uuyang / kek-wayang & & & kekayang \\
\hline ear & kon & konmangka \({ }^{106}\) & konamangka & konmangka / yerol \\
\hline east & kaaw & kaawa & kaawa & kaawa \\
\hline eat (1SG.PST) & mungkang & munkanga & & \\
\hline eat (IMP) & mungk(an) & & & mungka \\
\hline egg & nhepan / thiith & (min)tuka & & molla \\
\hline elbow & yuungk & & yuungka & yuungka \\
\hline emu & achamp & achampa & & achamba \\
\hline eugenia sp A) wild plum (R) & po'am & & & po'em \\
\hline eye & mee' & me'e & & me'e \\
\hline face & kaa' ngurp & kangutpi & & kaangorpi \\
\hline faeces & kun & & guna & \\
\hline fall (1SG.PST) & keekang & & keekang & \\
\hline fall (3SG.PST) & keek & & & keeka \\
\hline far & kech & & kach & \\
\hline fat (of animals) & thanth / wachaman & & thanthu & \\
\hline father & piip & piipa & & piipa / papa \\
\hline father's father & (puul)wuut & poola & & \\
\hline father's sister & piny & pinya & & \\
\hline ficus opposita & kom & & & kommi \\
\hline
\end{tabular}

106 kon mangk 'ear back' is 'back of ear' in the Aurukun dialect
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline fig & & & & eechi \\
\hline find (1SG.PST) & uwang & & & uwang \\
\hline fingernail & ma' ek / ma' piir & eka / ma'-piir & ma eka & ma'owuthi \\
\hline finger joint & ma' ath & & ma' ath & \\
\hline fire (charcoal) / (ashes) & thum (munth) / (kurk) & & thuma & thuma (munhtha) / purka \\
\hline flame / red or yellow & laymp / nganth & layimpu & & nganhtha \\
\hline flesh / body & kemp & kempa & & kempa \\
\hline flower (A) grass (R94) & pach & & & pacha \\
\hline fly (n) / blowfly & nyeeny / wol & eke & tanthu & wolo \\
\hline flying fox & kaany-kaany / mukampang / wuk & & & kumpang / wuki \\
\hline follow (IMP or NF) & wak(an) & & & muta \({ }^{107}\) waakana \\
\hline food (all) & maampiy (avoidance) & & & maampanyi ('big word') \\
\hline food (veg) & may & mayi & maya & mayi \\
\hline foot & tha' & & tha'o & tha'o \\
\hline forehead & ngul-ngangk / uungk & & wel eka & yangku \\
\hline freshwater crab & ngool & & & ngooli \\
\hline freshwater crocodile & kenh & & & kenhi \\
\hline freshwater lobster & ma'wunth / wuuch & & & konte \\
\hline freshwater shark & nyiingkuchan & & & yiingkufin \\
\hline freshwater snake & mullayng & & & moleyang \\
\hline
\end{tabular}

\footnotetext{
107 Cf Aurukun mut 'tail'
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline frill necked lizard & ponchathan & & & thawa \\
\hline frog / green frog & olonp / that & & & oolanbo / tata \\
\hline front & umputh & umput & & \\
\hline full (of food) & oth & & & othi \\
\hline get better (1SG.PRS) & miyalamang & miyalamanga & & \\
\hline girl & puk koman / wanch & & & puku wanycha \\
\hline girlfriend / boyfriend & maarich & & & marachi \\
\hline give (IMP) & aathan & atanye & aahanye & \\
\hline go (IMP) & iiy(an) & & & iya / iiya \\
\hline go inside (IMP) & pek ngoonch(an) & & & pak ngooncha \\
\hline go (1SG.FUT) & iilyang & & & iiyanga \\
\hline go (1SG.PRS) & iiyang & iyang & & \\
\hline go (2SG.PRS) & iiyan & & iiyan & \\
\hline go up / down \({ }^{108}\) (1SG.PRS) / 3SG.PRS & ukang / ukan & ukanga & & - / okana \\
\hline good & min, wanth & wanti & & wanythi \\
\hline grass for dilly bag & kempan & & & kampin \\
\hline grasshopper & pongkok & & & athathing \\
\hline green ant & wath & & & watha \\
\hline grub & moth & & & motho \\
\hline gum tree & minchak \({ }^{109}\) & kaakara & & \\
\hline hair (head) & yangan & yangan & yangan & \\
\hline hand & \(m a^{\prime}(a)\) & ma'a & ma'a & ma'a \\
\hline
\end{tabular}

\footnotetext{
108 It seems the same verb is interpreted differently 109 One of three types
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline hard see also axe & yantap & & & yentampa \\
\hline head & kuchek & kuchek & moompala & kufeka \\
\hline \begin{tabular}{l}
hear \\
(1SG.PRS)
\end{tabular} & ngeeyang & & ngeeyalang & \\
\hline hear (IMP) & ngeey(an) & & & ngeeya \\
\hline heart & ngangk & & mootho & angkathitha \\
\hline heavy & anhan & & & punta \\
\hline here & in & inu / inuma / inguma & aak inu & \\
\hline here (adv) & ing & inguma & & \\
\hline hide (IMP) & thench(an) & & & thanycha \\
\hline high (on top, up) & keny & kani & kane & kanni / palkani \\
\hline hill & yoyk & yoyiko & & yoyko \\
\hline hit (2SG.PRS/IMP) & piikan & piikan & & piikana \\
\hline hither & pal / palam & pala / palama & & pala \\
\hline hole & awar / wikar & & & anychi \\
\hline hot & karkan & kaarkan & & karkan \\
\hline hungry & meech & maachi & & maachi \\
\hline hut & thaakan & & & thaakanh \\
\hline ibis - black & pappantang & & & pepenyi ngotun \\
\hline ibis - white & kayyuw & & & pepenyi polpu \\
\hline ironwood & yongk & & & yongko \\
\hline jabiru & mont & & & munti / monti \\
\hline jardine (fish) & thochan & & & thochanh \\
\hline jaw & wal & & & kaakuthu \\
\hline jump high (IMP) & thaa' pey(an) & & & thaa' paya \\
\hline just as well (A) / no matter (R94) & makalam & & & makalama \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline kidney & kongam & & & thitha \\
\hline kite / hawk types & \[
\begin{aligned}
& \text { parp / paap / } \\
& \text { chii'ty }
\end{aligned}
\] & parpa & & koomo \\
\hline lawyer cane vine & koonth & & & koonhthe \\
\hline knee & pungk & pungku & pungko & pungku \\
\hline kookaburra (laughing) & konkan & & & konkon \\
\hline language & wik & & wik/ ayaninko & \\
\hline last & koykoyyuw & kulakulum & & \\
\hline \begin{tabular}{l}
laugh \\
(1PL.PRS)
\end{tabular} & thengkamp & tangkimpu & & \\
\hline laugh (IMP) & thengk(an) & & & thengka \\
\hline leaf & kangk & kangka & kalka & kangka \\
\hline Leichardt tree & keelp & & & kaalpi \\
\hline \begin{tabular}{l}
leave \\
(1SG.PST)
\end{tabular} & wantang & & & wantang \\
\hline leave (2SG.PRS) & wantan & & wantan & \\
\hline leave (IMP) & want(an) & & & wantanha \\
\hline leech & miich / ulark / uw & & & noonan \\
\hline \(\operatorname{leg}\left(A D^{110}\right)\) lower keg (R94) & thump \({ }^{111}\) & tump & & thumpa \\
\hline lie down (3SG.PST) / IMP & wun & & wuna & wuna \\
\hline lie down (let him) & mak wuniy/iw/in & & & maka wunawa \\
\hline like & kaangk & kaangka & & \\
\hline liver & waanh / wongkanch & & thanto & thantu \\
\hline
\end{tabular}

\footnotetext{
110 'AD' denotes the Aurukun dialect, R74 Rigsby (1974) , R94 Rigsby (1994) and S\&G64 Sayers and Godfrey (1964)
111 Only in phrase yangk thump-ongk 'long legs' where yangk is 'lower leg'. There is no word for 'leg'
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline locust & & & & yiinchan \\
\hline long & ongk & ongkuwa / ongko & kaache / ongko & oongo \\
\hline long ago & keenk & keengkuma & & \\
\hline long neck turtle & punchiy & & & punycheng \\
\hline look (IMP) & thath(an) & tata & ngawan & thathanyi \\
\hline magpie goose & ko'an & & & ko'on \\
\hline make / do (2SG.PRS) & yumpanan & yumpinga & & \\
\hline man & pam & pama & pama & pama \\
\hline mangrove cedar (A) bulquru?? (R) & kuthal & & & kuthala \\
\hline many & yot & yotu & Oyo \({ }^{112}\) / yota & yoto \\
\hline meat & minh & mina & mina & \\
\hline middle & menhang & moneng & & \\
\hline moon & kep & kapi & kape & kappi \\
\hline mosquito & \(m{ }^{\prime}\) & me'e & & me'e \\
\hline mother & kaath & & & kaatha \\
\hline mother's father & (ngech)wuut & ngayitutu & & \\
\hline mouth & thaa' & & thaa'a & thaa'a \\
\hline mullet & kechanil \(^{113}\) & naliya & & \\
\hline mussel & & & & kuthi \\
\hline name & namp & & nampa & \\
\hline navel & ngoompang but kuutan umbilicus & & & kutin \\
\hline NEG / similar to & ke' & ka' & & ka'a \\
\hline neck (back of) & man & & muche / & manu / \\
\hline
\end{tabular}

\footnotetext{
112 In specific phrase pam oyo 'man many' for stimulus 'big mob'
113 One of five types of mullet; this one chosen for similarity with S\&G
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline & & & kwaaka / mano & kuyka \({ }^{114}\) \\
\hline nit & but note lice thukkay & & & kaku \({ }^{115}\) \\
\hline no & ya'a & ya'a & & \\
\hline north & kungk & kungka & chipi / kungka & kungki \\
\hline nose & kaa' & kamangka & thaa' kuto / kaa' kuto & kaa'anychi \\
\hline now & kan / kanam & kani / kana / kanam & kana & \[
\begin{aligned}
& \operatorname{kan}(a) / \\
& \operatorname{kanna}^{116}
\end{aligned}
\] \\
\hline old man & wuut & & wuutu & wuutu \\
\hline old woman & wanchinth & wanchinta & wanchininta / thookwa & wanychinhtha \\
\hline one & thonam & tonam & thoman & thonam(a) \\
\hline oyster & war & kunmula & & \\
\hline palm cockatoo & kilam & & & kilang \\
\hline pandanus nut & kunchan & & & kunychin \\
\hline \begin{tabular}{l}
pelican \\
(Australian)
\end{tabular} & mooth / man olathiy & & & moothi \\
\hline penis & kunch & & & kunchi \\
\hline perch (fish) & ichan & & & yitha \\
\hline pick up (IMP) & maay(an) & & maayan & maayanha \\
\hline pig & nhinthan & & & piika \\
\hline place (camp) & aak & aaku tantra & aaku / aako & aaku \\
\hline plains turkey & mantamp & & & mantapa \\
\hline possum & kaanchal / kanmul / kulan & kulun & & kulan / wooympu \\
\hline pull (1SG.PRS) & wichang, thuthang & wiyanga & & \\
\hline pull (IMP) & \begin{tabular}{l}
wich(an) / \\
thuth(an)
\end{tabular} & & & thuthana \\
\hline
\end{tabular}

\footnotetext{
114 Cf kuyk 'head' in Aurukun
115 Cf kak 'faeces' in Aurukun dialect
116 Actual translation is 'yes'
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline put down (IMP) & wunpan / wunp & wunpa & & wunpana \\
\hline quickly & any, erkam, etar, wupam, wur & kalpi / kalmpi / kalmp & & \\
\hline quiet
(2SG.IMP) & mapanam(an) & & matha & \\
\hline rainbow & ngooy & & & weempa \\
\hline rat & kal & & & kallo \\
\hline raw & \begin{tabular}{l}
\[
\operatorname{erp}(a m) /
\] \\
ngoyal
\end{tabular} & & & yetha \\
\hline red kangaroo & kuympayng & & & kuyampayi \\
\hline rib & munth & & ma'ontho & \\
\hline ripe & menchan & & & manychin \\
\hline river & wo'uw & & & wo'owa \\
\hline river cherry & pengkiy & & & eInte \\
\hline rock salmon & maningan & & & mangkan \\
\hline road (main) & mont & & & \begin{tabular}{l}
mont \\
(pamanda)
\end{tabular} \\
\hline rotten / old & kath & & katha & katha \\
\hline rub (IMP) & namp(an) & & & nampana \\
\hline run (to) & mo'an & mo'ono & & \\
\hline run (IMP) & mo'(an) & & & mo'a \\
\hline sand & chil & chila & & chila \\
\hline sand (black) & ngaanh & & & \\
\hline sand goanna & thech / panth & & & taththi / panhtha \\
\hline sawfish & kiikalkaath / kiikalkeeth & & & kiikalakaatha \\
\hline scorpion & thal ma'-puuy & ma'pampa & & \\
\hline scrape (IMP) & uuk(an) & & & uukanha \\
\hline scrub & wuthan & & & yiitha \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline English & Kilham et al 1986 (Aurukun) & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline scrub fowl / hen & chokalang & & & chokolong \\
\hline scrub turkey & kuunth & & & koonhtha \\
\hline search for (IMP) & wenk(an) & & & wenkana \\
\hline shade & ngoyngk & ngooyingko / ngooyinko & & \\
\hline sharp & pepan & & & peppen \\
\hline short & kaankan / murkan / otang /koch \({ }^{117}\) & & murkan & kochen \\
\hline short necked turtle & & & & wumpa \\
\hline shoulder & \begin{tabular}{l}
michan / \\
picham
\end{tabular} & & & pichama \\
\hline shoulder blade & ngangk ek & & & maatapi \\
\hline similar & yimanam / yimanang / yinang & yiminama / yiminang & & \\
\hline sister (older) & yap / yapanchin & & & yapanya \\
\hline sister's (older) children & (puk) otham & & & puku 'otham \\
\hline sister (younger) & wiil & & & wilanya \\
\hline sit (2SG.PRS, IMP) & nyiinan nyiin(an) & nyiiana & nyiinan & nyiina \\
\hline sit (2DU.FUT) & nyiinal & & & nhiinala \\
\hline skin & \(p{ }^{\prime} \mathrm{an}^{118}\) & aku & ako / pi & aku \\
\hline sky & - & akyuwa \({ }^{119}\) / aakyuwa & yuwan & \\
\hline sleep / sleepy & weep & wepe & & weepa \\
\hline sleep (IMP) & weep wun(an) & & & weepa \\
\hline
\end{tabular}

\footnotetext{
117 Interpreted from various lexemes e.g. man koch 'neck short?'
118 ak also found in thaa' ak 'lips' (mouth skin?) and thip ak 'loose skin around stomach' (stomach skin?)
119 S\&G (p. 53) "literally 'camp of clouds'" which would be aak yuw 'place cloud' in the Aurukun dialect
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline & & & & wunanga \\
\hline slowly & itam / itangam & itang / itan / itangama & & \\
\hline small (adj) & many & & manya & manya \\
\hline small (adv) & manyam & manyama & & \\
\hline small goanna & puparang & & & popareng \\
\hline smell (1SG.PRS) & nuuthang etc & & & nuuthangu \\
\hline smell (2SG.PRS) & nhuuman / nhuutan / nuuthan / nguuthan & & noongkan & \\
\hline smell (IMP) & nhuut(an) etc & & & nuutha \\
\hline smoke & (thum) thok & & & thoka / ngoka \\
\hline snake & thuuk & & thuuko & thuuku \\
\hline soft & mich & nope & & noppi \\
\hline soon & yip & yiipa & & \\
\hline south & yiip & yiipa & & yiipe \\
\hline spear ( n ) & kek & keeka & keka & keka \\
\hline spear (NF) & chintan & chinta & & \\
\hline spear (IMP) & chint(an) & & & chintana \\
\hline spine & pik(puungk) kaanch & & & pikanychi \\
\hline spirit / devil & oony & & & oonya / wooypu \\
\hline spit & (thaa') theek & & thakathe \({ }^{120}\) & \\
\hline stand (IMP) & than(an) & & & thanna / thana \\
\hline stand (3SG.PRS) & thanan & & thanan & \\
\hline stand (3DU.PRS) & thananpul & tanapula & & \\
\hline
\end{tabular}

120 Possibly derived frpm thaa' kath 'mouth rotten/old'
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline stand (tr) (IMP) & thanath(an) & & & thanada \\
\hline star & nguch / thunp & & thunpe & thunpi \\
\hline stay quiet (IMP) & wik appap nyiin & & & wikapan nhiina \\
\hline storm & kaap & & & ukal \\
\hline stick / tree / thing & yuk & yuku, taka \({ }^{121}\) & & yuku \\
\hline \begin{tabular}{l}
stick (fighting - \\
A) (nulla nulla - \\
R)
\end{tabular} & yooman & & & yoomi \\
\hline sticks (fire) & thum pup & & & thum pupi \\
\hline stick (generic -A) yamstick (R94) & kechan & & & kachin \\
\hline stingray (various species) & aar' / kek-kalan / waangan / walk & & & yiingkufin \\
\hline stomach & iimpan / thip / iithun / ngangk & & nanka & thipi / ngangka \\
\hline stone & ith / kunttow . muk & & ku'a & kul'a \\
\hline storm (thunder) & kaap & & & ukala \({ }^{122}\) thaapin \\
\hline stormbird & kaa'ku' / tuwoo & & & wuypu \\
\hline string & kuuy & kuuyu & & \\
\hline sugarbag long funnelled & kuyan (general word for sugarbag) & & & kuyanawa \\
\hline sun & kinch / pung & & \begin{tabular}{l}
kincha / \\
kampala
\end{tabular} & kinycha / punga \\
\hline swim (IMP) & muunch(an) & munchi & & muunycha \\
\hline tail & koym / mut & & motho & mutu \\
\hline taipan & thaypan & & & thaypan \\
\hline
\end{tabular}

\footnotetext{
121 Possibly linked to thak 'thing'
122 Note ukala = 'water'
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline talk (IMP) & thaw(an) & & & thawa \\
\hline talk (stem) & thaw & tawa & & \\
\hline tell (you) & waa'an & waa'ana & & \\
\hline testicles & unt (thiith) & & & wuntu \\
\hline then / by and by & ngul & ngula & ngula & \\
\hline there / that & an / anam (DIST) / nan (MED) & ana / anama & nana nano \({ }^{123}\) & \\
\hline there to here & amanam & amanam & & \\
\hline thigh & pemar/ yeenganh / kuman & kantan & kuman & kuman \\
\hline thirsty & man e' & & & (manu)icha \\
\hline thither & puy & & puy & puyu \({ }^{124}\) \\
\hline three & ko'alam & ko'alam & yimpu \({ }^{125}\) & ko'alam \\
\hline \begin{tabular}{l}
throw \\
(1SG.PRS)
\end{tabular} & pungang & punganga & & \\
\hline throw (IMP) & thee'(an) & tee'ana & & thee'a \\
\hline tired & nal & & & nala \\
\hline titree / paperbark & kich & & & kicha \\
\hline tobacco (smoke) & may chiik & & may chiika & chiika / kiini \\
\hline today & in (dem) & neengka & aak neeka & pungnyiingka \\
\hline toe nail & tha' ek, tha' piir & tapir / ta'-piir & & tha'owuthi \({ }^{126}\) \\
\hline tomorrow & ngaa'tham & ngaatom & & ngaatham \\
\hline tongue & thaa'nganh / namp-ngaln / aang-ngaalan & & thaape & thaanganhtha \\
\hline
\end{tabular}

\footnotetext{
123 In phrase ninta nano? '2SG MED' (are you there?)
124 R94 notates as 'take' in phrase puyu thancha 'take hide' but 'thither hide' makes more sense 125 Odd but note ko'alam is 'four' in Rigsby (1974 0.57)
126 See also fingernail
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & \begin{tabular}{l}
Rigsby 1974 \\
(Coen)
\end{tabular} & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline touch & maman & maman & & \\
\hline tree & yuk & yuku & yuko & yuk/yuku / yukku \\
\hline tooth & koonh / paalan & & kancha \({ }^{127}\) & koona \\
\hline turkey - plains & mantamp & & & 'aanku \\
\hline twist
(1SG.PRS) & monyang & tutananga & & \\
\hline two & kucham & kuchim / kuuyicham & kucham & kuchem \\
\hline under & pek & pekawa, pak, paki & & \\
\hline upper arm / shoulder & picham & picham & & \\
\hline urine & yump & & yumpo & kumpu \\
\hline vagina & \(p u^{\prime}\) & & & pu'u \\
\hline vigna vixillata & lot & & & loto \\
\hline wait (IMP) & kuup(an) & & & pi'ani \({ }^{128}\) \\
\hline wallaby - small, red (A\&) - grey kangaroo (R) & kuuch & & & kuucha \\
\hline wallaby generic (A) - whiptail (R) & pangk & & & pangku \\
\hline \begin{tabular}{l}
wash \\
(1DU.INCL.PR \\
S)
\end{tabular} & kaawanal & kaawali & & \\
\hline water & ngak / chang (av) & ngaka / ukulu / ngaaka & ngaka / changa / okolo & ngaka / ukala \\
\hline waterlily & erk (root only) & & & arki \\
\hline waterlily - large leafed & & & & punpan \\
\hline well & minam & minima & & \\
\hline
\end{tabular}

\footnotetext{
127 Cf kaanch 'bone'
128 Odd. In Kilham et al (1986) pi'-an is 'look after-NF'
}
\begin{tabular}{|c|c|c|c|c|}
\hline English & \begin{tabular}{l}
Kilham et al 1986 \\
(Aurukun)
\end{tabular} & Sayers \& Godfrey 1964 (Coen) & Rigsby 1974 (Coen) & \begin{tabular}{l}
Rigsby 1994 \\
(Theethinji)
\end{tabular} \\
\hline west & kuuw & kuuwa & kuuwa & kuwa \\
\hline wet & yiinch & & & yiincha \\
\hline wet season & kaap & & & kaapa \\
\hline what & ngeen & ngaane & & \\
\hline where & wanttin & wantu & wanttin & \\
\hline white & pach & polpo & & polpo \\
\hline white fruit or apple & thunth & & & thunhtha \\
\hline white currant & & & & yaaku \\
\hline white fruit; small (A); big ( R ) & kaatham & & & \begin{tabular}{l}
kaathaman / \\
thalpin
\end{tabular} \\
\hline white gum & waak & & & waaki \\
\hline who & wee' & wa'a, wa'e & waa' & \\
\hline whose & wee'antama & wa'inta & & \\
\hline why & ngeenak/ wanttak & ngaaneko & & \\
\hline wind & wunt & & wunta & wunta \\
\hline woman & wanch & wanchi & wanchu & wanychu \\
\hline woomera & kunhan / thul & & & thuli \\
\hline worm & chekweew/waa w/chek'eew/aa w & & & chakawaawi \\
\hline yam & nam, ka'ar, ka'am, angk, wathiy & wanka & & wangka / ka'ara \\
\hline \begin{tabular}{l}
yellowfruit (A) / \\
nandi plum ( R )
\end{tabular} & po'al & & & po'ala \\
\hline yesterday & peetan & peetna & & pungpaathn \({ }^{129}\) \\
\hline younger sister & wiil & wiilanya & & \\
\hline
\end{tabular}

129 pung is 'sun' in Aurukun dialect so this seems related

\section*{Note.}

In Rigsby (1974), there are two stimuli at 5:20 to 5:29 which are included in the above table but there is uncertainty as to meaning. The first asks how to say 'name bilong him Bruce'. The response is nampa minku Bruce 'name ??? Bruce'. The word minku has been included above under 3SG.DAT / POSS but it is unclear if that is correct. The second asks how to say 'name bilong me Bruce' with the response nampa loto Bruce 'name ??? Bruce'. The translation of loto as possessive 'my' is included above in the row 1SG.DAT / POSS but again it is unclear if that is correct.

\section*{Appendix 6 List of McConnel Texts}

\section*{A. From the South Australian Museum (SAM)}
\begin{tabular}{|l|l|l|}
\hline \begin{tabular}{l} 
SAM \\
Reference
\end{tabular} & Title & Speaker \\
\hline AA191/11.10 & Draft Grammar & \begin{tabular}{l} 
(Charlie Bann) \\
Kumama
\end{tabular} \\
\hline AA191/12.24 & \begin{tabular}{l} 
Myth of Maityi \\
The Bush Nut
\end{tabular} & Kumita \\
\hline AA191/12.25 & \begin{tabular}{l} 
Myth of Min Monti \\
The Jabiru
\end{tabular} & \begin{tabular}{l} 
Kyth of Min Kanmula (The Man) Cuss-Cuss \\
O'possum And Min Pokauwan (The \\
Woman) Cuss-Cuss O'possum
\end{tabular} \\
\hline AA191/12.26 & \begin{tabular}{l} 
Myth of Pukmanya \\
The Making of A Baby - (A Boy)
\end{tabular} & Araman \\
\hline AA191/13.02 & \begin{tabular}{l} 
The Presentation of A Baby To Its \\
Namesake
\end{tabular} & Staphen \\
\hline AA191/13.04 & \begin{tabular}{l} 
Myth of The Swamp Fish Ita
\end{tabular} \\
\hline Aa191/13.06 & \begin{tabular}{l} 
Myth of Mai Kuyan And Mai Polpa \\
The Honey-Bee Husband And Wife And \\
Mai Mola, Their Bee Children
\end{tabular} & Araman \\
\hline AA191/16.02 & \begin{tabular}{l} 
Myth of The Oyster (Min Wara) And The \\
Shark (Min Tei'aledyan)
\end{tabular} & Lampas \\
\hline AA191/16.04 & \begin{tabular}{l} 
Myth of Mai Umpiya \\
The Blue Water-Lily
\end{tabular} & Ku'eka \\
\hline AA191/16.05 & \begin{tabular}{l} 
Myth of Mai Arika \\
The Small Swamp Water-Lily
\end{tabular} & Kurandambin \\
\hline AA191/16.06 \& Jimmy \\
\hline AA191/16.09 & \begin{tabular}{l} 
Myth of Min Kekuyang \\
The Porcupine
\end{tabular} & \begin{tabular}{l} 
Myth of Kongkong \\
The White Fish Hawk
\end{tabular} \\
\hline AA191/16.10 & \begin{tabular}{l} 
Myth of Tuma \\
The Fire
\end{tabular} & \begin{tabular}{l} 
Myth of Min Tempi The Swamp Duck And \\
Min Mantaba The Plain Turkey
\end{tabular} \\
\hline AA191/16.11 & Hrth of The Root (Mai Ka'era) And The \\
Arrowroot (Mai Wi'ingka)
\end{tabular}

\section*{B From Published Texts}
\begin{tabular}{|l|l|l|}
\hline Reference & Title & Speaker \\
\hline \begin{tabular}{l} 
McConnel 1935 \\
p. 72
\end{tabular} & Myth of Wolkolan, the Bonefish & \\
\hline \begin{tabular}{l} 
McConnel 1935 \\
p. 76
\end{tabular} & The Bullroarers (Moiya and Moipaka) & \\
\hline \begin{tabular}{l} 
McConnel 1935 \\
p. 84
\end{tabular} & \begin{tabular}{l} 
The Two Cockatoos and the Bullroarer \\
Moipaka
\end{tabular} & \\
\hline \begin{tabular}{l} 
McConnel 1935 \\
p. 89
\end{tabular} & The Two Bullroarers Moipaka & \begin{tabular}{l} 
Araman, in \\
Wiknatara, \\
translated by \\
Bambeigan
\end{tabular} \\
\hline \begin{tabular}{l} 
McConnel 1936 \\
p. 472
\end{tabular} & Myth of the Moon and the Morning Star \\
\hline \begin{tabular}{l} 
McConnel \\
1936b p. 91
\end{tabular} & \begin{tabular}{l} 
Myth of Min Kena and Pikuwa, the Fresh and \\
Salt-water Crocodiles
\end{tabular} & Paul Teidyola \\
\hline \begin{tabular}{l} 
McConnel \\
1936b p. 92
\end{tabular} & Myth of Min Pikuwa, the Salt-water Crocodile & Yalwintyamamana \\
\hline \begin{tabular}{l} 
McConnel \\
1936b p. 95
\end{tabular} & Myth of Pikuwa, the Salt-water Crocodile & Henry Thomson \\
\hline \begin{tabular}{l} 
McConnel \\
1936b p. 100
\end{tabular} & Myth of Min Taipan, the Rainbow-Snake & \\
\hline \begin{tabular}{l} 
McConnel \\
1936b p. 103
\end{tabular} & \begin{tabular}{l} 
Myth of Min Yuwam and Wantya Koman \\
Tuwa Nunganda, the Black Snake with Red \\
Belly and Her Daughters
\end{tabular} & Kongutam \\
\hline
\end{tabular}

\section*{Appendix 7 Lexical / Phonetic Differences MCC vs AD}
\begin{tabular}{|c|c|c|}
\hline MCC & AD & Meaning \\
\hline ak wumpa & aak umpan & look for \\
\hline ampamba & & in a bundle \\
\hline antyan & anchathan & four pronged spear \\
\hline anto & & proper \\
\hline arika & erk & small swamp lily \\
\hline atauwany & & fetch \\
\hline babata & & suck out \\
\hline boiya & & growl \\
\hline bungana & weenan & become \\
\hline tyipa & yiip & south \\
\hline dyila & & soil \\
\hline epana & epankan & turn back (vt / vi) \\
\hline epanga & epankan & return (iv) \\
\hline etya & enchan & rape / sex \\
\hline i'inta & thiman & squeeze \\
\hline ika & ikan & crack (n) / split )iv) \\
\hline imati & & look after \\
\hline inta & & swing (v) \\
\hline intan? & & 'made'? \\
\hline ipungka & & below the shoulder \\
\hline ita & eent & swampfish \\
\hline iyumpa & umpan & make / cut \\
\hline kaiya & kaay & type of spear \\
\hline kakapatei'an & & seed pods of white water lily \\
\hline kami & kemwayyow & MM \\
\hline kamp / kungk & kiingkan & cook \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MCC & AD & Meaning \\
\hline kantan & & chase out \\
\hline kayuka & & \(\log\) \\
\hline kintyana & kinch keny & midday \\
\hline koiyuya & koyam & behind / back \\
\hline kontan & konkan & jackass / kookaburra \\
\hline kora & kor' & brolga \\
\hline kulimantilei & & bonefish spear \\
\hline kwoika & man & neck \\
\hline mamoyntyi & mokanan & swim \\
\hline manam & man & throat / neck \\
\hline mantonam & ont-ontan & once and for all \\
\hline mepam & me'? & grass \\
\hline mi'a & & clear (tv) \\
\hline mimiyila & & quickly \\
\hline minanga & menhang & in the middle \\
\hline moipaka & muypak & bullroarer \\
\hline moiya & & bull roarer \\
\hline mukama & mukampang & black / big-breasted resp flying fox \\
\hline muta & & hammer (v) \\
\hline natyana & ngeechanan & feel \\
\hline nampa & & water snake \\
\hline ngaka & & cook \\
\hline nganga & & ashes \\
\hline nganga & kinch thonang & next day \\
\hline ngorpa & & quick \\
\hline ngu'untya & & grass \\
\hline nitya & & feather \\
\hline ompamba & ompam & middle \\
\hline ontana & ontan & straight? / paperbark \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline MCC & AD & Meaning \\
\hline papa & & kangaroo \\
\hline pikala & & stalk (n) \\
\hline pikota & pik-otang & island / small island \\
\hline pimpana & & leg \\
\hline puntamu & punth & creek \\
\hline putarin & & small cross-sticks \\
\hline puttha & umputh & in front \\
\hline puupiyanga & thum pup & place of firesticks / firestick \\
\hline ta & & hide(v) \\
\hline ta'anumpa & & assemble (tv) \\
\hline ta'atenung & & carry (water current) \\
\hline ta'ayanta & thaa'nganth & tongue \\
\hline ta'ingula & tha'iy & plenty / abundance \\
\hline taiyana & & swamp snake \\
\hline taiyanma & & tire \\
\hline takan & & above \\
\hline tampa & & back? \\
\hline timan puka & thip puk & guts small (intestines) \\
\hline tyipa & yiip & south \\
\hline umina & ompam & middle \\
\hline wala(nga) & & hanging down \\
\hline wama & wom & beeswax \\
\hline wampa & & big cross-sticks \\
\hline wantya & & balance \\
\hline wangka & & water \\
\hline warula & wark & swamp turtle \\
\hline wella & pew & baler shell \\
\hline wikata & wikathiy & anything at all talk / talkative \\
\hline wipa , tara & wipan & be stuck \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|}
\hline \multicolumn{1}{|c|}{ MCC } & \multicolumn{1}{c|}{ AD } & \multicolumn{1}{c|}{ Meaning } \\
\hline wiwa & & under (eyes) \\
\hline wiyana & & sometimes \\
\hline wopa & & left over food \\
\hline wu'umpa & won around \\
\hline wutya & & throw off \\
\hline wuma & & beeswax \\
\hline wumpiyanama & muukaman & chop \\
\hline yaka & umyompanam & pretend \\
\hline yakiyana & yantap & everywhere \\
\hline yamokama, mo'kamana & firm \\
\hline yampanuma & yeelal & small white cockatoo \\
\hline yantampa & & many times \\
\hline yeila & winch & boomerang \\
\hline yepana & yunchan (avoidance) & clear (a space) \\
\hline yintya & & heart \\
\hline yintya & yukai & \\
\hline
\end{tabular}

\section*{Note}

Excludes differences arising from different interpretations of vowel and consonant values. See section 15.2 for a discussion on phonology and section 15.3 for a discussion on the above lexical items.```


[^0]:    2 The 2019 version of this report (Smith \& Marmion 2020) does not contain this level of detail but

[^1]:    3 My thanks to Jean-Christophe Verstraete (pc) for this information

[^2]:    7 Any morphological boundaries are now historical

[^3]:    8 Adopting the Ladefoged (2006 p. 39) definition of 'movement from one vowel to another in a single syllable'
    9 Clynes (1997) has been criticised by Blust (1998) but those criticisms are not relevant here

[^4]:    11 Notwithstanding that glottal stops can occur word-initial as speaker variants (ref section 2.4.1.6)
    12 Probably a loan word; the only Wik-Mungkan word with initial $r$ (see section 2.7.4)

[^5]:    13 My thanks to Simon Musgrave for this observation

[^6]:    19 As discussed previously ty corresponds to modern orthography ch 20 The loss of $n$ between the two is not explained
    21 Analysis as per Hywel Stoakes

[^7]:    22 This is similar to the VC analysis described in Tabain et al (2004) whereby polysyllabic words are segmented from left to right, as opposed to the usual segmentation from right to left, labelled CV by Tabain et al (2004)
    23 An apparent hybrid of the VC and CV approaches

[^8]:    24 Using the term 'adjunct' to refer to non-core grammatical relations
    25 As discussed in section 2.7.2, Hale (1960b) shows the word initial nasal as [ n ] as the dental [ n ]

[^9]:    28 Brackets as per original. Translation should perhaps be she, the woman, was pregnant.

[^10]:    29 No Indigenous names are found in the corpus for presumed cultural reasons

[^11]:    30 An unusual use of the transitiviser, as tha'-an 'to hurt' is already transitive. This is the only example in the corpus of this usage.

[^12]:    31 Numbers are approximate. Reporting facilities in Flex were inadequate for providing greater precision

[^13]:    32 For a theoretical discussion of multiple expressions of arguments, see Haspelmath (2013)

[^14]:    34 The prefix al- for demonstratives is only for the distal in one series of demonstratives; see section 6.1.2 and hence not considered related to this form here.

    35 glossed as 'PTL' in original

[^15]:    36 the term 'ontological category' follows Gaby (2017 p. 161), citing Jackendoff (1983 p. 52) and Haspelmath (1997)

[^16]:    39 Evidence based on absence in corpus and lack of mention in Wik-Mungkan literature 40 The IN and ING nomenclature follows Huchet (1990)

[^17]:    44 Sayers notes but does not explain the discrepancy between 3PL marking on the verb and the singular translation of 'he'.

[^18]:    46 miniy weeman is listed in the lexicon as a compound with the meaning 'to hang back'

[^19]:    47 Simon Musgrave (pc) has suggested that the lack of medial examples in the corpus of different demonstrative series may reflect that its use was already in decline 40 years ago.

[^20]:    48 translation as per original, which omits translating the first instance of $a n=a n$ 'DIST(DAT)=DEF' and thoonamang 'in his canoe'

[^21]:    49 The disparity between the past tense noted on the verb and the present tense in the translation is not explained.

[^22]:    52 As per original; it is unclear why the suffix is -antan '3PL.PRS' and not -an '3SG.PRS'

[^23]:    53Shupbach (2013 p. 32) describes a strategy of some languages (Ancient Greek for example) of disambiguating between more or less recent participants in anaphoric tracking by means of different demonstratives. That is, a language may use the proximal to track one referent and the distal for an earlier referent. There is no evidence in the corpus that Wik-Mungkan has adopted this strategy.

[^24]:    55 Appears to be thap=angk '?=LOC' where thap is an adverb, as is thapangk 'one.end'. However thap as adverb does not exist, only the noun 'forked.branch'. Meaning of thapangk is obscure and this is the only example.

[^25]:    58 The use of thanpanam 'partly' is unexplained but appears to mean that the man is being partly kicked and partly hit with billy cans. This is the only instance of thanpanam 'partly' in the corpus.

[^26]:    62 the suffix -ang on two of these allomorphs is perhaps a case marker; data is insufficient so the lexicon is relied on here

[^27]:    65 As noted by Hale (1960b p. 1) but describing -iy as 'irrealis'
    66 These allomorphs have been found in examples in the corpus

[^28]:    67 There is no known explanation for this constraint

[^29]:    68 Note that ontan 'straight' is not found in the lexicon, it is found in the McConnel corpus
    (AA191/16/05 ex 104. See section 15.1 for explanation of the reference.

[^30]:    72 There are possible cognates for mak 'OPT' in Kuuk Thaayorre ak 'OPT' (Gaby 2006 p. 385) who also noted possible cognate (ma)-ku in Kugu Nganhcara reported by Smith and Johnson (2000 pp. 437-8).

[^31]:    73 The usual 2PL.SBJV suffix is =iyin but several examples in the corpus have this variant

[^32]:    74 Relationship pronoun - see section 5.1.5
    75 not adequately glossed in the lexicon but pik chintan is defined as 'feeling tired'

[^33]:    77 the =iy in this form is the topic marker (See section 3.6.2). Only two examples exist in the current corpus

[^34]:    78 bul is not in the lexicon except as the phrase bul empan 'draw water' and bul-bul 'sound of boiling water', which are the only lexemes starting with 'b'. An English borrowing of 'boil' seems indicated.

[^35]:    79 Possibly 'ABL' but 'EMPH' seems more apt

[^36]:    80 An example of the singular '3SG' with plural reference; see section 5.1

[^37]:    83 There is no entry in the lexicon for yatham, only for man-yetham, so the hyphenation is not explained. The word man means 'neck'.

[^38]:    89 Rare instance of double =an 'DEF' marking; possibly an error or an example of =an marking adverbial clause

[^39]:    90 To be exact, the children of an elder sister

