# Handbook <br> of Australian Languages <br> Volume 2 

edited by


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# Handbook of Australian Languages <br> <br> Volume 2 

 <br> <br> Volume 2}

Wargamay<br>The Mpakwithi dialect of Anguthimri<br>Watjarri<br>Margany and Gunya<br>Tasmanian

# edited by <br> R.M.W. Dixon and <br> Barry J. Blake 

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Map 1: Australia, Showing Approximate Locations of Languages Refered to in Preface and in List of Books Available on Australian Languages

## Preface

This Handbook is intended to make available short grammatical sketches of Australian languages. Each grammar is written in a standard format, following guidelines provided by the editors, and includes a sample text (where available) and vocabulary lists. Volume 1 was published in 1979 and has been generally well received; about $80 \%$ of the printing for the Australian market had been sold within the first eighteen months after publication. It contained an introduction by the editors, discussing some of the recurrent features of languages across the continent, together with grammars of Guugu Yimidhirr, by John Haviland; PittaPitta by Barry J. Blake; Gumbaynggir, by Diana Eades; and Yaygir by Terry Crowley.

The contributions to this volume are salvage studies, giving all the information that is available on four languages which are on the point of extinction, and an assessment of what linguistic impressions can be inferred from the unsatisfactory material that is available on the extinct languages of Tasmania.

The main interest of the Wargamay grammar centres on the occurrence of transitive verbs in intransitive constructions (marked by distinctive tense allomorphs and case affixes), which may be the beginnings of a change from an absolutive-ergative to a nominative-accusative grammatical system. Anguthimri shows a quite different phonological outline from most Australian languages and Crowley shows how it has in fact evolved from a language of the regular type through the operation of about twenty ordered diachronic changes; these have given rise to series of fricatives, prenasalised stops, and nasalised vowels, among other features. Watjarri was spoken about three hundred miles north of Perth and Wilf Douglas discusses its interesting similarities to, as well as important differences from, the Western Desert language. Margany and Gunya, from southern Queensland, are effectively dialects of a single language. Breen carefully enumerates the dialectal differences (for instance, only Gunya has bound-form pronouns) and also assesses older sources on this language.

It is planned that Volume 3 will contain a grammatical sketch of Djapu - a Yolgu dialect spoken at Yirrkala in Eastern Arnhem Land - by Frances Morphy. There should also be some of the following: Varumungu by Jeffrey Heath and Jane Simpson; the Yadhaykenu, Angkamuthi and Atampaya dialects of Uradhi, by Terry Crowley; Nyawaygi, by R.M.W. Dixon; Yukulta, by Sandra Keen; Jabugay, by Elizabeth Patz; Warungu, by Tasaku Tsunoda and Peter Sutton; Kaititj, by Harold J. Koch; Nganhcara by Ian Smith and Steve Johnson.

Each contributor to the Handbook is normally responsi-
ble for having his grammar typed according to a standard style-sheet, and providing camera-ready copy for the editors. Authors are responsible for their own sub-editing and proof-checking. For this volume Margany/Gunya was typed at Monash University by Joan Juliff; all of the remaining contributions were typed by Ellalene Seymour, at the ANU. It is a pleasure to extend thanks to the typists whose skill in using five different golf-balls and variable 10/12 pitch contributes so much to the quality of the Volume. Rose Butt gave invaluable help with checking manuscripts and proofs for style and consistency; and Val Lyon drew the maps with her customary care and skill.

R.M.W.Dixon

February 1981
Barry J. Blake

## Books available on Australian languages


#### Abstract

The following list of books on Australian languages that are currently in print includes all works which in the editors' opinion contain reliable information.

Publishers are: AIAS - Australian Institute of Aboriginal Studies, P.O. Box 553, Canberra City, A.C.T., 2601. Distributor for North and South America: Humanities Press Inc., 171 First Ave., Atlantic Highlands, N.J. 07716, U.S.A. Postage extra CUP - Cambridge University Press, P.O. Box 91, Albert Park, Victoria 3206 (and offices in U.K. and U.S.A.) IAD - Institute for Aboriginal Development, P.O. Box 2531, Alice Springs, N.T. 5750. Prices include postage; payment to accompany order. ML - Mount Lawley College, 2 Bradford Street, Mount Lawley, W.A. 6050. Postage extra.

OLM - Oceania Linguistic Monographs - The Secretary, Oceania Publications, Mackie Building, University of Sydney, Sydney, N.S.W., 2006. Prices include postage; payment to accompany order. PL - Pacific Linguistics, Department of Linguistics, Research School of Pacific Studies, Australian National University, P.O. Box 4, Canberra, A.C.T. 2600. Postage extra. SIL - Summer Institute of Linguistics, Australian Aborigines Branch, P.O., Berrimah, N.T. 5788. Postage extra.


GENERAL SURVEYS AND AREAL STUDIES, ETC
Blake, B.J. Case marking in Australian languages, 1977, AIAS. \$A8.95
Brumby, E. and Vaszolyi, E. (editors) Language problems and Aboriginal Education, 1977, ML. \$As.
Capell, A. A new approach to Australian linguistics, 1956, OLM. \$A2. 50
Dixon, R.M.W. The languages of Australia, 1980, CUP. \$A19.95 paper, $\$ 86.50$ hard (in Australia); £ 9.95 paper, $£ 30$ hard (in U.K.)
Dixon, R.M.W. (editor) Grammatical categories in Australian languages, 1976, AIAS. \$A23 paper, \$A39 hard.
Heath, J. Linguistic diffusion in Arnhem Land, 1978, AIAS. \$A8. 95
Sutton, P. (editor) Languages of Cape York, 1976, AIAS. \$A11. 50.
Sutton, P. and Walsh, M. Revised linguistic fieldwonk manual for Australia, 1979, AIAS. \$A4.95.
Wurm, S.A. The languages of Australia and Tasmania, 1972. Mouton: The Hague

Wurm, S.A. (editor). Australian linguistic studies, 1979, PL. \$A29

## GRAMMARS, DICTIONARIES, TEXT COLLECTIONS

Birk, D.B.W. The MalakMalak Zanguage, Daly River (Western Arnhem Land), 1976, PL. \$A7.50
Blake, B.J. A Kalkatungu grammar, 1979, PL. \$A8
-- 'Pitta-Pitta' in Handbook of Australian languages, Volume 1
Capell, A. Some Zinguistic types in Australia [Waljbiri, Garadjari, Dalabon, Jiwadja], 1961, OLM. \$A4.50
-- Cave painting myths: Northern Kimberley, 1972, OLM. \$A4
Capell, A. and Hinch, H.E. Maung grammar, texts and vocabulary, 1970. Mouton: The Hague
Chadwick, N. A descriptive study of the Djingili language, 1975, AIAS. \$A3.50
Coate, H.H.J. and Elkin, A.P. Ngarinyin-English dictionary, 1974, OLM. \$A10.
Coate, H.H.J. and Oates, L.F. A grammar of Ngarinjin, Western Australia, 1970, AIAS. \$A4.50. Companion tape and booklet \$A2, or cassette and booklet \$A3
Crowley, T. The middle Clarence dialects of Bandjalang 1978, AIAS. \$A13.95.
-- 'Yaygir' in Handbook of Australian languages, Volume 1
Dixon, R.M.W. The Dyirbal language of North Queensland, 1972, CUP. \$A22 paper, \$A70.50 hard (in Australia); £7.95 paper, £25 hard (in U.K.)
-- A grammar of Yidin, 1977, CUP. \$A35 (in Australia), £35 (in U.K.)
Dixon, R.M.W. and Blake, B.J. (editors) Handbook of AustraZian Zanguages, VoZume 1, 1979. ANU Press, Canberra \$A16 (in Australia); John Benjamins, Amsterdam - Hfl 90 (in rest of world).
Donaldson, T. Ngiyambaa, the Zanguage of the Wangaaybuwan, 1980, CUP. \$A55 (in Australia); £26 (in U.K.)
Douglas, W.H. An introduction to the Western Desert language, Australia. Revised edition, 1964, OLM.\$A4
-- The Aboriginal Zanguages of the south-west of Australia, Second edition, 1976, AIAS. \$A5.00
-- Illustrated topical dictionary of the Western Desert language, Revised edition, 1977, AIAS. \$A2.50
Eades, D.K. The Dharawal and Dhurga languages of the New South Wales south coast, 1976, AIAS. \$A6
-- 'Gumbaynggir' in Handbook of Australian languages, Votume 1
Furby, E.S. and C.E. A preliminary analysis of Garawa phrases and clauses, 1977, PL. \$A4.50
Geytenbeek, B. and H. Gidabal grammar and dictionary, 1971, AIAS. \$A7
Glass, A. and Hackett, D. Ngaanyatjarra texts, Revised edition, 1980, AIAS. \$A7
Hansen, K.C. and L.E. Pintupi/Luritja dictionary, Second edition, 1977, IAD. \$A8.50
-- The core of Pintupi gramimar, 1978, TAD. \$A8.50
Haviland, J. 'Guugu Yimidhirr' in Handbook of Australian languages, Volume 1

Heath, J. Ngandi grammar, texts and dictionary, 1979, AIAS. \$A18.95
-- Dhuwal (Arnhem Land) texts on kinship and other subjects with grammatical sketch and dictionary, 1980, OLM.\$A8.50
-- Basic materials in Ritharngu: grammar, texts and dietionary, 1980, PL. \$A9.50
-- Basic materials in Warndarang: grammar, texts and dictionary, 1980, PL. \$A7.50
Holmer, N.M. Notes on the Bandjalang dialect spoken at Coraki and Bungawalbin Creek, N.S.W., 1971, AIAS. \$A6
Hudson, J. The core of Watmatjari grammar, 1979, AIAS. \$A9. 45
Hudson, J., Richards, E., Siddon, P., Skipper, P. et al. The Walmatjari: an introduction to the language and culture, Second edition, 1978, SIL. \$A4.75
Kilham, C.A. Thematic organization of Wik-Munkan discourse, 1977, PL. \$A11
Klokeid, T.J. Thargari phonology and morphology, 1969, PL. \$A3
McDonald, M. and Wurm, S.A. Basic materials in Waykumara (Galali): grammar, sentences and vocabulary, 1979, PL. \$A5
Metcalfe, C.D. Bardi verb morphology (northwestern Australia), 1975, PL. \$A8
Oates, L.F. A tentative description of the Gunwinggu language (Western Arnhem Land), 1964, OLM. \$A3.50
O'Grady, G.N. Nyangumata grammar, 1964, OLM. \$A2
Osborne, C.R. The Tiwi language, 1975, AIAS. \$A12.50. Companion tape or cassette, \$A3
Platt, J.T. An outline grammar of the Gugada dialect, South Australia, 1972, AIAS. \$A7
Pym, N. Papers on Iwaidja phonology and grammar, 1979, SIL. \$A6. 25
Reece, L. Dictionary of the Wailbri language of Central Australia, Part I, Wailbri-English, 1975, OLM, \$A4.50; Part II, English-Wailbri, 1979, OLM, \$A7
Sandefur, J.R. An Australian Creole in the Northern Territory: a description of the Ngukurr-Bamyili dialects (Part 1), 1979, SIL. \$A5. 20
Sandefur, J.R. and J.L. Beginnings of a Ngukurr-Bamyili Creole Dictionary, 1979, SIL. \$A4.50
Sayers, B. The sentence in Wik-Munkan: a description of propositional relationships, 1976, PL. \$A7. 50
Schebeck, B. Texts on the social system of the $A t n^{y}$ amatana people, with grammatical notes, 1974, PL. \$A11
Sharpe, M.C. Alawa phonology and grammar, 1971, AIAS. \$A10
Sommer, B.A. Kunjen phonology: synchronic and diachronic, 1969, PL. \$A4
-- Kunjen syntax: a generative view, 1972, AIAS. \$A9.50
Tryon, D.T. An introduction to Maranungku (Northern Australia), 1970, PL. \$A5
-- Daly family languages, Australia, 1974. PL. \$A14
Waters, B. A distinctive features approach to Djinang phonology and verb morphology, 1979, SIL. \$A4.80
Williams, C.J. A grammar of Yuwaalaraay, 1980, PL. \$A7.50
Yallop, C. Alyawarra: an Aboriginal language of central Australia, 1977, AIAS. \$A9.95
-- Narinjari, 1975, OLM. \$A3. 50

## LANGUAGE LEARNING COURSES

Pitiantjatiara, 10 cassettes and written material, IAD. \$A45.15 (\$A35.95 to students)
Pintupi, 8 cassettes and written material, IAD. \$A39.30 (\$A32 to students)
Warlpiri, 11 cassettes and written material, IAD. \$A58.75 (\$A48.63 to students)
Eastern Aranda, 6 cassettes and written material, IAD. \$A29.80 (\$A24.25 to students)
Western Aranda, 7 cassettes and written material, IAD. \$A33.55 (\$A27.00 to students)
Teach yourself Wangkatja, 4 cassettes and book, ML. \$A13 Kriol language learning course, 6 cassettes and written material, SIL. \$A24

There are also several series of volumes each containing a number of papers on aspects of Australian languages: Pacific Linguistics has published 14 numbers of Papers in Australian Linguistics, and Pacific Linguistic Studies in Honour of Arthur Capell (edited by S.A.Wurm and D.C.Laycock) contains a dozen papers on Australian Linguistics; AIAS has put out four miscellaneous collections of papers; and SIL has two series of Work Papers.

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## Abbreviations

| A | transitive subject (function) | IMPERF <br> INCH(0) | imperfect <br> inchoative (deriving |
| :---: | :---: | :---: | :---: |
| ABL | ablative (case) |  | intransitive verb from |
| ABS | absolutive (case) |  | noun or adjective) |
| ACC | accusative (case) | INST | instrumental (case) |
| AVERS | aversive (case) | INT | interrogative (verbal |
| ALL | allative (case) |  | affix) |
|  |  | INTR | intransitive |
| C.A. | ```concurrent action (verb affix)``` | IRREAL | ```irrealis (verb inflection)``` |
| CAU | causal (case) | IV | intransitive verb |
| CAUS | ```causative (deriving transitive verb from noun or adjective)``` | IOC | locative |
| COMIT | comitative (nominal | NEG | negative |
|  | affix | NOM | nominative (case) |
| COMP | comparative (nominal | NOMLSR | nominaliser |
|  | affix) | NON-FUT | non-future (tense) |
| CON | ```concomitant (nominal affix)``` | NP | noun phrase |
| CONJ | ```conjunctive (verbal affix)``` | O,OBJ | transitive direct object |
| CONSEC | consecutive (verbal | PERF | perfect (verb inflection) |
|  | affix) | PL | plural object (verbal |
| CONT | continuing action |  | affix) |
|  | (verbal affix) | p1 | plural form of pronoun |
| CONTIN | continuative (verbal | POSS | possessive (case) |
|  | affix) | POT | potential (verbal affix) |
|  |  | PRES | present (tense) |
| DAT | dative (case) | PRIV | privative (nominal affix) |
| DESID | desiderative (verbal | PROHIB | prohibitive (particle) |
|  | affix) | PROP | proprietive (nominal |
| DIMIN | diminutive (nominal |  | affix) |
|  | affix) | PROX | proximate (verbal affix) |
| du | dual form of pronoun | PURP | purposive (verb inflection) |
| ERG | ergative (case) |  |  |
|  |  | REC PAS' | recent past (verbal |
| FUT | future (tense) |  | affix) |
|  |  | RECIP | reciprocal (verbal affix) |
| GEN | genitive | REFL | reflexive (verbal affix) |
|  |  | REDUP | reduplicated |
| HAB | habitual (verbal affix) |  |  |
|  |  | S | intransitive subject |
| IMMED | imminent action (verbal |  | (function) |
|  | affix) | sg | singular form of pronoun |
| IMP | imperative (verb | STAT | stative (verbal affix) |
|  | inflection) | SUBORD | subordinate clause |


|  | (verb marking) | VC | verb complex |
| :---: | :---: | :---: | :---: |
| TR | transitive |  |  |
| TV | transitive verb |  |  |
| UNMKD | unmarked (verb inflection) | 1 | first person |
| UNEXP | unexpected action (verb | 2 | second person |
|  | affix) | 3 | third person |



Map 2: Wargamay and Its Neighbours (tribal boundaries are only approximate)

## Wargamay

 by R.M.W.Dixon
## 1. THE LANGUAGE AND ITS SPEAKERS

### 1.1 LINGUISTIC TYPE

Wargamay is a fairly typical Australian language with a suffixing, agglutinative structure and free word order. Its most notable characteristic is the fact that transitive verbs can occur in intransitive, as well as in transitive, construction types, mainly to satisfy an 'ergative' syntactic constraint on subordination. In chapter 5 it is suggested that the grammatical changes which have recently taken place in Wargamay could eventually lead to a shift from the present split-ergative morphology to an entirely accusative system.

The consonant inventory consists of four stops (labial, apical, laminal and dorsal), a nasal corresponding to each, one lateral, two rhotics and two semi-vowels. There are three vowels, with a length distinction occurring only in the initial syllable of a word. The dozen or so monosyllabic words all involve a long vowel. Stress goes onto a syllable involving a long vowel if there is one; otherwise onto the first syllable of a disyllabic word but onto the middle syllable of a trisyllabic form.

There are clearly defined classes of nominal (noun and adjective), locational qualifier, time qualifier, pronoun, demonstrative, verb, particle and interjection. Pronouns show singular, dual and plural forms for all three persons (although the 'third person singular' has a wide usage, and may not properly belong in the pronoun class).

There is a system of nine cases for nominals and pronouns, with locational and time qualifiers taking a limited selection from these. There are three systems of case marking for the main syntactic functions of transitive subject (A), transitive object (O) and intransitive subject (S). Nominals and the third person singular pronoun distinguish absolutive (S,O) from ergative (A) case; first and second person non-singular pronouns have separate forms for nominative (S,A) and accusative (O); the remainder -
first and second person. singular, third person non-singular, and the interrogative pronoun - have distinct case forms for all three syntactic functions.

Verbs do not show any category of tense; there is instead a rich aspectual-type system. Verbal inflections comprise 'unmarked aspect', perfect, purposive, irrealis, positive imperative, negative imperative and subordinate. There is also a 'continuative' derivational affix, and a comitative suffix that derives transitive from intransitive stems. In addition, transitive and intransitive verbal stems can be derived from nominal and from some interrogative and local roots.

Almost every verbal suffix has two allomorphs - one used on verbs in intransitive constructions with the other being employed on verbs in transitive constructions. Verbal stems fall into two classes: 'intransitive' verbs occur only in intransitive constructions whereas 'transitive' roots can occur in transitive or in intransitive constructions (taking the appropriate inflectional allomorphs).

The scanty material available for Wargamay does not yield overmuch syntactic information. There are, however, well defined complement constructions and also relative clauses. A great deal of the work that is done by syntactic derivation in other Australian languages is achieved in Wargamay by careful employment of transitive verbs in either transitive or intransitive constructions; the kinds of correspondence between these two types of construction are important, both synchronically and diachronically.

Sentence modification is achieved through a set of non-inflecting particles ('not', 'perhaps', 'only' etc). It appears that polar questions can be shown only by a marked intonation pattern.

### 1.2 DIALECTS

What I refer to as the 'Wargamay language' appears to have had three distinct dialects (shown on the map):
(1) The people living in the rich forest country along the lower reaches of the Herbert River - from just west of the present town of Ingham, through Hawkins Creek, Long Pocket, Herbert Vale and Niagara Vale to Yamanic Creek and the Herbert Gorge - were called Wargamaygan, and referred to their language as Wargamay.

This group had territory on both sides of the river extending just a few miles from the banks; thus Wallaman Falls and the township of Stone River, on the south side, are said to have been included within Wargamaygan territory. gu:n was the name given to the Herbert River at the gorge and just downstream from it; and speakers of Wargamay can also describe themselves as gu:nbara (-bara 'belonging to' is a productive derivational affix - see 3.1.3). (It is not known for certain whether du:nbara was synonymous with Wargamaygan, or whether it described just one local group of the tribe speaking Wargamay.)

The origin of the name 'Wargamay' is not known. There
may be something in William Craig's suggestion, made in 1898 (see 1.6 below) that the last syllable of 'Wargamay', and of 'Giramay' (which is spoken immediately to the north), is related to maya, the word for 'no' in these two dialects. Certainly the other dialects of the Wargamay language are directly named by their word for 'no'.
(2) The people living around the mouth of the Herbert River (including the present towns of Halifax and Bemerside) called their language Biyay (which was their word for 'no') and could refer to themselves as Biyaygiri, involving the productive derivational affix -giri 'with' (see 3.1.3). The gu:nbara would refer to speakers of Biyay as guninbara using the common noun gurin 'the coast, people/things from the coast'.

Biyay, from the mouth of the Herbert River, and Wargamay, spoken up river from it, are mutually intelligible dialects. They have about $90 \%$ common vocabulary and very similar grammars - morphological differences include the form of the 'continuative' verbal suffix, and the paradigm of the single irregular verb gi:(gi)- 'to sit' (differences of verbal morphology are detailed in 3.5.3; lexical differences are fully catalogued in the Vocabulary by semantic fields).
(3) The people living on Hinchinbrook Island and the adjacent mainland (south from the present town of Cardweli), a country of mountainous jungle and flat mangrove swamps, also appear to have spoken a dialect referred to as Biyay (and to have been themselves called Biyaygiri). Tindale quotes a tribal name 'Bandjin'; this is the common noun bangin 'sea water', and thus on a par with names du:nbara and guninbara.

Hinchinbrook Biyay did show some lexical differences from Halifax Biyay, but more than $90 \%$ of their vocabularies are identical. Since no speakers survive for this dialect, and the only information is from a few short word lists of fifty and more years ago, no details of the grammar are known. However, from informants ${ }^{\text {' }}$ comments it is likely that the grammar would have been very close to that of the other two dialects.

These three dialects are recognised, by their speakers and by those of neighbouring languages, to form a tight-knit group - to be, effectively, dialects of a single language. Indeed, the name 'Wargamay' is commonly used to refer to this language. Thus Nora Boyd, the informant for the Halifax dialect, would sometimes say that she spoke Wargamay but at other times (especially if emphasising some difference from the dialect spoken upstream) might specify it more exactly as Biyay. Similarly, speakers of Giramay would talk of Wargamay being spoken over the whole Cardwell/ Herbert Vale/Halifax area, but would mention that the variety spoken at Cardwell itself was called Biyay.

We are thus taking over the usage of speakers in referring to (1-3) as the Wargamay dialect, the Halifax Biyay dialect, and the Hinchinbrook Biyay dialect of the Wargamay language. To avoid confusion Wargamay is used below for
the language name, with initial letters normally being employed to refer to dialects:

W - (1) Wargamay dialect
B - (2) Halifax Biyay dialect
H - (3) Hinchinbrook Biyay dialect

### 1.3 SURROUNDING LANGUAGES

To the north of Wargamay is Giramay - the most southerly dialect of the large 'Dyirbal language' (see Dixon 1972) - spoken by the Giramaygan tribe. Giramay and Wargamay have around $48 \%$ common vocabulary, squarely within the 'equilibrium figures' predicted for languages that have been in contiguity for a substantial period (Dixon 1972:331-7,1980a:254-60); a comparison of verb forms shows only $32 \%$ being completely or almost completely identical (differing only as regards vowel length, etc) suggesting that the languages may not be closely genetically related.

To the south-east is Nyawaygi which shows about $45 \%$ common vocabulary with Wargamay (the figure is about the same for verbs and for non-verbs). Again, there is no evidence for strong genetic connection.

Inland from Wargamay, to the west and south-west, is Warupu, the northmost member of the closely related 'Maric' group of languages that extends as far south as the New South Wales border. There is less lexical overlap here the common vocabulary stands at $35 \%$ and a verb count shows $29 \%$. (The Warunu data comes from Alf Palmer who also knows Dyirbal and Wargamay and tends to mix these languages together. As a result, the figures quoted for WargamayWarugu common vocabulary may be somewhat higher than they should be.)

When one turns to grammar there are again no overwhelming similarities in any one direction. Warunu is fairly different, but both Giramay and Nyawaygi show interesting points of congruence. Giramay, Wargamay and Nyawaygi do, in fact, have virtually identical paradigms for first and second person pronouns. Wargamay resembles Giramay in having only two verbal conjugations, in having separate inflections for dative and genitive, and in having no monosyllabic verb roots. It resembles Nyawaygi in having contrastive vowel length, in the form of some verbal affixes, and in the form of the interrogative pronoun.

In sum, although Wargamay shows strong similarities to the north (Giramay) and to the south (Nyawaygi) the evidence does not permit us to put forward a close genetic connection in either direction. (Dyirbal and Nyawaygi differ so markedly that there is no chance of connecting all three languages in terms of some 'low node' on the Australian language tree.)

### 1.4 SECTIONS

Some information about the life and beliefs of the Wargamaygan is included in Lumholtz (1887, 1888, 1889, 1921), and in Craig's letters to A.W.Howitt (see 1.5. 1. 6). Each member of the tribe belonged to one of the four sections. These interrelated as follows:
a man who is: must marry a woman their children being:
wungu
gucgucu
gurgila
wuguru
who is
gurgucayngan gurgila/gurgilayngan wungurayngan wugurayggan gurgilayngan
wuguru/wugurayngan wungu/wungurayngan gucgucu/gucgucayngan

Note that the feminine forms involve the addition of -rayngan to a disyllabic masculine form and -ayngan to a trisyllabic form (with the -a- replacing the final -u of a masculine form); this is probably related to the feminine suffix -gan which occurs in a number of eastern languages (see Dixon 1972:12-13, 31, 319).

Lumholtz (1889:199) mentioned these terms in an interesting paragraph: 'The black man whom I had persuaded to go with me was related to one of my men, Yanki. He was Yanki's otero. In the tribes the words otéro, gorgerro, gorilla, gorgorilla are found, which designate various kinds of relations. Sometimes a man would be called otero or gorgero without the addition of any other name, and still everyone knew who was meant. There are similar words to designate female relations, in which case the termination ingan is substituted for the final o or $a$, thus oteringan, gorgeringan, etc.' Lumholtz has clearly transcribed two of the section names reasonably well, but has used gorizla and gorgorizla where/gurgila/ and /wungu/ would be expected (the Dyirbal equivalent of wungu is gigungara, which is no more recognisable here). See also Birtles (1976:15).

In his correspondence with Howitt, William Craig transcribed the section names quite accurately: his letter of 2nd June 1898 give the masculine and feminine forms as woon-goo/woon-goo-ringan, goorgoo-roo/goor-goo-ringan, goor-gil-ah/goor-gil-ingan, wooth-oo-roolwooth-oo-ringan. John Murray (1886) gives identical section names for Hinchinbrook Biyay: woongo, kookooroo, koorkeela, wooitcheroo. Note that a corresponding four-section system is employed by the Dyirbalnan (Dixon 1972:27-31) and in fact over much of south-eastern Queensland (Murray 1886 states equivalences between Hinchinbrook and Wide Bay section names).

A little information has been obtained in the totems associated with each section. Speakers emphasised that there were many more totems, which they could not recall:

[^0]wuguru - walguwucu 'brown snake'; gurigala 'eag1e hawk'.

### 1.5 CONTACT HISTORY

The first Europeans to visit Wargamay territory were Captain King and the crew of the survey cutter Mermaid who anchored off Goold Island - five miles north of Hinchinbrook - from 19th to 21st June 1819. King (1827:199-203) records how he traded fishing hooks and lines for Biyaygiri baskets and turtle pegs, and describes the canoes, forms of bodily decoration, etc.

Goold Island became a favoured place of call for water. The first vocabulary - of some fifteen words - was procured by Mr Evans, master of Captain Blackwood's survey ship $E l y$, in late May 1843 (see Jukes 1847, I:93-4).

A settlement was established at Cardwell in January 1864. The inevitable clashes followed - Aborigines felt they had a right to spear European cattle feeding on their tribal lands and the settlers were so incensed by this that they took human life in return, whereupon the Aborigines retaliated by taking white lives. Dorothy Jones' Cardwell Shire Story (1961) provides an excellent history of settlement in the area, paying some attention to the affect it had on Aboriginal society.

On 9th March 1872 a party of police and troopers led by Sub-Inspector Robert Johnstone beat a cordon across Hinchinbrook Island and cornered almost all the tribe on a point. According to Jones' (1961:170-1) interview with an early settler 'those who were not shot on land were shot as they attempted to swim away'; she remarks that what was reported in the paper as the killing of 'a few unfortunates' amounted to 'almost total massacre of the tribe'. The slaughter was purportedly in retaliation for an attack by Aborigines on Europeans shipwrecked from the brig Maria (Jones 1961:164-70).

This massacre did attract national publicity. The Pastoral Register, a Sydney paper, mentioned that 'a writer in the Central Australasian, who proposes to give a narrative of the expedition to the wreck of the ill-fated "Maria" says:- "We brought off with us Mr Johnston, Sub-inspector of Native Police; and from hearing his conversation with some of our fellows, I got my first insight into the atrocious state of public opinion in North Queensland with reference to the blacks. He spoke of killing whole camps - not merely men, but girls and piccanninies - with the greatest coolness" '. The matter was brought up in the Queensland Parliament with the Colonial Secretary stoutly denying that the government 'pursued a policy of extermination in dealing with the blacks'; rather 'the policy of the Government towards the blacks had been for the repression of crime' (Queensland Parliamentary Debates, 5th Series, 1871, pp 3234). Nowhere in the Colonial Secretary's statement, or in the cables he quoted from Johnstone, was there any denial concerning the Hinchinbrook slaughter.

Even after this the white attitude appears not to have softened and in the note by M.Armstrong, Esq., Inspector of

Police, on the Aborigines of Hinchinbrook Island and the Mainland Adjacent' in Curr's Austratian Race (1886, II:41821) it is said that 'the tribe wore no clothes in their original state, but those who are now (in 1880) allowed to come to Cardwell do so' (my italics). Indeed, Cardwell continues to this day to be a town with an intransigent attitude towards Aborigines. On commencing fieldwork in October 1963 I enquired of the Cardwell policeman (who was, under the laws in force then, local Protector of Aborigines) whether there might be anyone left with language competence and received the answer 'there are no niggers in this town'. Murder was only one of the dangers to which the Biyaygiri were exposed. In 1882 a Mr Cunningham was sent by the American showman Barnum to bring back some Australian Aborigines for exhibition. He gathered five men, two women and one baby from Hinchinbrook Island and from Palm Island (twenty miles to the south-east). There was an incident in Melbourne when one Aborigine, Tambo, is said to have killed a policeman who complained about his lack of clothing. But, despite protestations in Parliament and in the press, the party left for America (one Aborigine dying en route); they were then 'exhibited' in London, Brussels, Cologne, Berlin and Paris (see Houze and Jacques 1884:97-9). There is no record of whether they were ever returned to their tribal lands.

The Wargamaygan, up on the Herbert River, were less affected by European and Chinese contact. They had sufficient numbers and freedom to continue with a recognisable tribal life until the end of the century. The Norwegian zoologist Carl Lumholtz lived among them, by an abandoned cattle station at Herbert Vale, from August 1882 until July 1883. Lumholtz's classic Among Cannibals (1889, see also 1887, 1888, 1921), has a great many observations on the life and customs of the tribe. He said that their culture - if indeed they can be said to have any culture whatever - must be characterised as the lowest to be found among the whole genus homo sapiens' (viii). But Lumholtz himself must be assessed as an unobservant and uninsightful anthropological observer. For instance, he refers (201) to Yamina, a monster which lived in a certain water hole and 'of which the natives stood in mortal dread... A gun would be of no use, they said, for the monster was invulnerable'. This was almost certainly the rainbow-serpent, yaman - in this and other instances Lumholtz made no effort to delve below the surface of his informants' comments, and plainly did not realise they had such things as myths. However, despite the shallowness of Lumholtz's cultural understanding and insight (and his failure to learn to speak the language) the information he gives on the break-up of tribal life, in the face of European contact, is outstanding.

William Craig had been running a cattle station at Niagara Vale - a little higher up the Herbert River than Lumholtz's base at Herbert Vale - for some years before, in 1898, he opened up a correspondence with the anthropologist A.W.Howitt in Victoria (Craig mentions that he had written several articles on Aborigines for the Queenstander). The letters to Howitt give the section system, marriage laws,
totems and some other cultural information; they appear mostly to deal with the Wargamaygan although there may be some intrusions from Giramaygan (when quoting numbers, for instance, in the letter of 14 th April 1898, he gives Giramay bulari 'two' rather than Wargamay yaga). (These letters are in the A.W.Howitt papers, National Museum of Victoria.) Craig was concerned with the welfare of the Wargamaygan and on 26th January 1898 had written to Parry-Okeden, the Commissioner of Police in Brisbane:
'In the interests of the aboriginals here I take the liberty of writing to you. There are about 80 here who have not yet got down the river and mixed with the Chinese and colored races or learnt the opium habit to any great extent. While I have been here I have found horses and packed the Govt blankets allowed them and always permitted them to camp on my run and hunt through my cattle and gave them medicines as far as I was able. I also killed any waster cattle I had for them.
'As the ticks killed nearly all my cattle, and I am about to leave here, seeing that the Govt intend to do something for the amelioration of the aborigines I think it would not be amiss in the interests of those here to supply you with some information about them, so that if you think fit you may be able to do something for them, as other station owners do not care to have them hunt and camp about their runs or homesteads and they will surely drift down among the Chinese and Malays where the opium charcoal and disease will soon finish them.
'I think there is a splendid place here for the Govt to make a reserve in which they could gather most of the blacks from around the lower Herbert where they are mixed with the alien colored races and dying from opium charcoal and disease. This country has become useless for grazing on account of the heavy undergrowth but the blacks get a good deal of food from the Yu-boo-100 tree nuts (ground to flour) and the Wong-ah or Chestnut. [Craig is probably referring to gubula, Podocarpus amarus, and wana, Castanospermum australe]. From here over to Cardwell in a straight line about 20 miles there is a range covered with dense coast scrubs in which this food with scrub turkeys eggs etc. is plentiful, and Sea View Range on the other side shuts the Herbert into a gorge and is good hunting and food ground also, while if any agriculture is desired there are enough isolated rich flats that will grow anything tropical...'

Craig's letter was forwarded to the Inspector of Police at Townsville, who asked Constable Holmes of Cardwell to comment. Holmes confirmed that 'the particular tribe of blacks spoken of by Mr Craig are rather a superior class of the general run of blacks in the district the greater proportion of them being free from disease and opium charcoal is a thing almost unknown to them. The Constable has seen these blacks in numbers of from 50 to 60 on the Bora ground about 14 miles to the North West of Cardwell on Saltwater Creek. Not only does the wild fruit that Mr Craig mentions grow here but a great many others.' Holmes was not, however, in favour of making a reserve at the location suggested by Craig because it was hard to reach from Cardwell (the very reason Craig thought it would be suitable, this inaccessibility serving as a protection against the temptations available on the coast). Craig's letter was acknowledged from Brisbane with the assurance that 'the subject is receiving attention'. (Craig's and Holmes's letters are
held in the Archives Section of the Public Library of Queensland.) But nothing positive was ever done. In fact those Aborigines who did not succumb to the Chinaman's opium stood a good chance of being hunted and shot by the 'native police' (cf Kennedy 1902); the only text obtained from Lambert Cocky (see 1.7) in 1972 told of attacks and massacres by this force around the turn of the century. Still, those Aborigines who did survive were able to live a fairly free life. In 1896 E.J. Banfield went to live on Dunk Island - twenty miles north of Hinchinbrook - and his four volumes of diary and reminiscence (Banfield 1908, 1911, 1918, 1925) contain a good deal of information about Aborigines and their habits, with Aboriginal names for a fair number of plants, animals, etc. In Confessions of a Beachcomber (1908:8) Banfield stated that only four of the original 'Dunk tribe' were alive when he settled there, and maintained that their language was nearer to that of Hinchinbrook than to the mainland. Banfield's narrative freely mixes words from Biyay and from dialects of Dyirbal, but in one passage (1908:292-3) he does focus on language and gives parallel 18 -word vocabularies from two Aborigines, Tom and Nelly. 'Tom's totemic title, "Kitalbarra", is derived from a splinter of a rock off an islet to the south-east of Dunk Island. "Oongle-bi", Nelly's affinity, is a rock on the summit of a hill on the mainland, not far from her birthplace.' Whereas the words from Nelly are recognisable as a dialect of Dyirbal, those given by Tom appear to be Hinchinbrook Biyay. This may be taken as evidence that Dunk Island was in fact part of Biyaygiri territory.

The period of freedom ended in 1914 when most of the surviving Aborigines were rounded up and taken, some in chains, to the Hull River Mission - Banfield expressed regret at what he considered an unnecessary step in Last Leaves from Dunk Island (1925). When the settlement at Hull River was destroyed by a cyclone, in 1918, its inmates were transferred to Palm Island.

It is worth noting that all my informants for Wargamay and Biyay would have been children at the time William Craig left Niagara Vale. No one born in the following generations learnt anything of the language.

### 1.6 PREVIOUS WORK ON THE LANGUAGE

There are several early vocabularies of the Biyay dialects:
(1) 15 words collected by Mr Evans of HMS Fly, May 1843 (Jukes 1847, I:93-4). All but two of these are clearly recognisable as H.
(2) Houzé and Jacques (1884) give about 200 words from ' ile D'Hinchinbrook', taken from 'Bob' and 'Billy'. In most cases only one item is quoted but where there are two variants that given by Billy appears to be Hinchinbrook Biyay whereas that from Bob is Halifax Biyay. There are some general comments on the language and its pronunciation; the quality of transcription is fair.
(3) Edward Curr in his compendium The Australian Race (1886, II:418-21) included under 'Hinchinbrook Island and the Mainland Adjacent' a few cultural notes by M.Armstrong, Esq. Inspector of Police, and a vocabulary of about 130 words (together with details of sections) by John Murray. Robert Johnstone wrote of Murray that he was a 'keen observer, a first class bushman with a thorough understanding of the blacks, [and that he] spoke fluently the languages of the tribes of Rockingham Bay, Wide Bay, Rockhampton, the Murray River and the Edward River of N.S.W.' (Jones 1961: 106, quoting from 'Spinifex and Wattle', a series of articles by Johnstone in The Queenslander, 1903-4). Murray's vocabulary is predominantly of $H$ (although there may be a few Giramay words mixed in - both biyay 'no' and maya 'no' appear, for instance) and the standard of transscription is again fair.
(4) Banfield's (1908:292-3) 18-word vocabulary gathered from 'Tom' is of $H$, and is rather well transcribed. The majority of the commonest nouns and verbs Banfield quotes throughout his narratives belong to Dyiru or other dialects of Dyirbal, showing that he had more contact with speakers of this language than with the Biyaygiri (indeed there were at the time many more Dyirbal speakers around than there were Biyaygiri).
(5) On $28 t h$ October 1938 N.B.Tindale recorded on Palm Island a vocabulary of about 80 words that was headed 'Bandjin (Biyay)'. This was taken down from Jimmy Banfield, whom I met on Palm Island in 1964, being told that he was the last of the Hinchinbrook tribe; Banfield told me that he knew no Biyay and this was confirmed by other informants. It is thus not surprising that the vocabulary Banfield gave Tindale is almost straight Dyirbal with just a handful of Biyay words interspersed (kai 'ground', kakakau 'walk' and one or two more). It is worth noting that for ' no' Tindale first wrote down imba (the Dyirbal word is yimba) but then crossed it out and inserted bijai with the parenthetic comment 'this is the word which defines their language'.
(6) William Craig recorded a few Biyay words in a letter to Howitt - see (10) below.
(7) Archibald Meston's papers include seven words from Cardwell on page 6 of his notebook Folio 1 (in the Oxley Library, Brisbane); most of them are forms that occur in both Giramay and Wargamay.

The material gathered on the $W$ dialect comprises:
(8) Lumholtz included a page of grammatical comments on the language in Among Cannibals (1889:308-9). About 120 words (with just a few Biyay and Giramay intrusions) are scattered throughout the text and also gathered together in a vocabulary at the end (312-3). Lumholtz's ear was not outstanding - thus he spent a great deal of his time trying to obtain a specimen of the tree-climbing kangaroo (Dendrolagus lumholtzii) called in Wargamay bulogari, but Lumholtz consistently called it 'Boongary', failing for a year to hear the -1-. But on the whole Lumholtz's language material is fair and useful. In view of the importance of Lumholtz's book a full commentary on his language material
is included in an Appendix at the end of this grammar.
(9) Kendal Broadbent noted about a dozen Aboriginal names for plants and animals in his diary of a trip collecting for the Queensland Museum in the Cardwell district, 1886 (the diary is now in the Queensland Museum Library). Some words are close to some of those obtained by Lumholtz; others appear to be Wargamay or Giramay.
(10) In a letter to A.W.Howitt dated 24 th July 1898 William Craig correctly identified the 'tribes' of the region as Warga-mi, Kirra-mi, War-oong-oo, Bei and Nowa-gee. He did not like the term 'tribe', saying that they were more like Scottish clans. Craig took 'language' to be a defining characteristic of this grouping (cf Dixon 1976a), thus:
'I give below the groups or clans with their name; it appears to me it is connected with language more than anything else as it does not bind them for agression or tribal organisation nor prevent intermarrying... I give you the five groups close here and a few of their commonest words, so you can see what you can make out of it.

| Group | Sun | Moon | Fire | Water | No | Yes | Where go |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Currie ${ }_{\text {, }}$ |  | Wiibara |  |  |  |  |  |  |
| War-ga-mia | Woo-ee | Ballanee |  | U11-oo | Mia | I-ee | minya | yan |  |
| (no) |  |  |  |  |  |  |  |  |  |
| Kirra-mi ${ }^{\text {a }}$ | Currie | Ballanoo | You-goo | Com-oo |  | In-y | wan-ja | yan |  |
| War-oong-oo | Yuln-gun | Ballanoo | Boor-ee | Com-oo |  | Yae- | wan-ja | ya |  |

(no)
Bei Woo-ee Ballan Mingoo Com-oo Be-i Iba wan-ja moom-a-goo (no) I cannot give you this just now but Nowa means No
'I give you here some words that I have got from a boy who has been on the Johnstone to the N.of Cardwell and says he knows their talk Uth-an -

| (yes) | Sun | Moon | Fire | Water | No (yes) (where) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Uth-an | Currie | Cug-a-Ium | Boan-ee Bun-a | Imba Uth-a min-ya-goo, |  |

Most of the words in the Wargamay and Biyay lines are quite recognisable. 'Woo-ee' indicates wi:'sun' (gari occurs only in Dyirbal), 'moon' is in fact balanu in $W$ and balan in $B$, 'fire' is wagun, 'water' is galu in $W$ and gamu in $H$, 'no' is maya in $W$ and biyay in $B$, 'yes' is in fact nayi in both dialects, 'where' is based on the root wanga- (mina is 'what') and 'go' should be gaga- (yani is a Warupu form). 'Wiibara' may relate to wi: 'sun' and the derivational affix -bara 'belonging to' (3.1.3) but mingoo and moom-a-goo from the Biyay lines are not recognisable. The inclusion of gamu for 'water' indicates that Craig may have taken the Biyay line from a member of the Hinchinbrook group (Halifax Biyay has nalu, like W). The Giramay and Warupu lines have a similar sprinkling of errors and the last line (from the Johnstone River) appears to be a northerly dialect of Dyirbal, probably Ngajan (Craig's 'Uth-an').
(11) On 3rd November 1938 N.B.Tindale collected a Wargamay vocabulary on Palm Island. This is, like all Tindale's material, well transcribed and is clearly identifiable as W, with a few $B$ intrusions.

However, Tindale's placement of Wargamay and Nyawaygi on his tribal maps (1940 and 1974) is not correct. He attributes the Bandjin/Biyay tribe solely to Hinchinbrook Island (presumably on Jimmy Banfield's testimony); in fact it occupied the adjacent mainland (attributed by Tindale to Giramay) and the land around the mouth of the Herbert River. In the case of Wargamay, Tindale describes the territory as coast at Halifax Bay, inland to slope of Coast Range; north to Ingham and Lucinda Point; south to Black River, twenty miles north of Townsville (seven hordes are mentioned in the literature)'. The literature cited by Tindale is the entry by Cassady and Johnstone in Curr (1886, II:42431); but this in fact refers to the Nyawaygi tribe (the name is not given but comparison of vocabularies - for instance, those gathered by Tindale himself in 1938 establishes this quite conclusively). In fact, the territory Tindale ascribes to Wargamay was occupied partly by Biyay but largely by Nyawaygi, a coastal people who Tindale mistakenly attributes to an inland tract. As already noted, the Wargamaygan occupied territory on both sides of the Herbert River - Tindale allocates that on the north bank to Giramay and the southerly portion to Nyawaygi.
(12) About 1961 La Mont West Jnr worked at Palm Island with Jimmy Johnson (Johnson died a few months afterwards). West lent me his notes in 1964. They involve 1300 numbered items (mostly single words), which appear to have been dictated almost randomly by Johnson, with West making no attempt to cross-check or systematise the data he was writing down, or to gain any understanding of the language. Glosses are often misleading and the transcription is phonetically poor - for instance, item 1032 is given as 'wuripa bulumbi wa•kunke - take stick away and chuck in bush'; this is almost certainly (following West's use of voiceless stop symbols) wurpi purmbi waku•nta 'big-ABS throw-IMP tree-LOC'. In most cases West missed the important, phonologically-distinctive vowel length in initial syllables.

West made a tape-recording of songs, pronouns and a few somewhat halting texts; the tape is deposited with the Australian Institute of Aboriginal Studies. The quality of recording is very poor, and when $I$ played it to Alf Palmer, in 1967, he professed himself unable to make it out. However, it was possible to check with Palmer and with other informants some of the words and grammatical forms, from West's transcriptions of the tape and from my listening to it.

Johnson undoubtedly had a fair command of Wargamay and was said to be an excellent racconteur. But it is clear from the material (corroborated by other informants) that he tended to mix Giramay in with Wargamay. This, together with the poor quality of the Johnson material, severely limits its value. I did use it during my own field work to suggest forms, but always required careful corroboration from a Wargamay informant (see 1.7).
(13) In 1970 Peter Sutton contacted John Tooth, at Minnamoolka Station, and recorded a few minutes Wargamay on tape; no written notes were taken. able to me and suggested Tooth as a potentially useful
and reliable informant.
(14) About 1974 Tony Beale recorded a few score words from Nora Boyd, at Ayr, and passed these on to me. (I had previously contacted Mrs Boyd, but Beale discovered her whereabouts quite independently).
(15) Tasaku Tsunoda worked intensively at Palm Island with Alf Palmer (born about 1890) on what was described in 1971 as Kutjal and in 1972 as Warugu - see Tsunoda's MA thesis (1974). The material Palmer gave on Warupu is splattered with Dyirbal words and morphemes and ideally requires checking with another speaker of Warugu. Although Palmer's parents were Warupu, he has lived most of his life in Warga-may- and Dyirbal-speaking districts (and, for the last thirty or so years, Dyirbal has been the only one of these languages to be actively spoken in everyday affairs).

In September 1974 Tsunoda elicited some Wargamay material from Palmer (as I had done ten years before - see 1.7), making this available to me. A few months later Palmer told Peter Sutton that he had given Tsunoda some Wargamay, but was afraid that a bit of Warunu had got muddled in! This material does in fact contain intrusions from Warugu and from Dyirbal; it also mixes together the distinct $W$ and $B$ dialects of Wargamay (for instance, Palmer uses both the -bali and -ni varieties of the continuative verbal suffix - 3.5.3).

Most tribes in this area have an extensive 'avoidance vocabulary' used in the presence of (amongst others) a parent-in-law of the opposite sex. The Dyirbal and Yidin term for this speech-style is Dyalnuy; it is often referred to in English as 'mother-in-law language'. I asked Palmer in 1964 concerning a Wargamay avoidance style and he affirmed there was one, but he could only remember three words (quoted in 1.7 below). However, during 1971-4 Palmer would, apparently randomly, tell Tsunoda that a certain Warunu or Wargamay item was 'Dyalnuy' (especially when, say, two words had been given for the same thing). None of these later Dyal nuy labellings has any veracity; almost all are straightforward Warugu, Wargamay or Dyirbal items.

### 1.7 SOURCES FOR THIS STUDY

I did some peripheral work on Wargamay in 1964 and 1967 (whilst primarily concerned with Dyirbal) gathering material from Alf Palmer (gimbilnay) at Palm Island. A comparative vocabulary of some 500 items was elicited in Wargamay, Warugu, Dyirbal and Giramay and some basic grammatical paradigms in Wargamay were also obtained. In addition, Palmer spoke Warunu and Wargamay material of his own choosing (words and simple sentences) onto tapes after I left the field, under the auspices of Jack Doolan of Palm Island. He consistently declined to give any textual material. At this time Palmer volunteered just three words in the Dyalpuy 'avoidance style' of Wargamay - bingubara 'foot', guygara 'water' and mandila 'hand'; the correspondent forms in the unmarked 'everyday style' of Wargamay are bingar, nalu and mala respectively. Note though that mand:
is the form for 'hand' in the $H$ dialect (attested in sources (1) - (4) of 1.6). Palmer did not appear very certain of these items, and it was not possible to obtain confirmation from any other informants.

Intensive study of the language ran from 1972 to 1980 and involved work with John Tooth and Lambert Cocky (W dialect) and Nora Boyd (B dialect). Each of these informants was less liable to muddle in material from other languages than were Jimmy Johnson (1.6) and Alf Palmer but it was still necessary to exercise extreme care in separating out Wargamay from the Giramay dialect of Dyirbal. Every putative Wargamay lexical item - given by Alf Palmer and/or Jimmy Johnson - was checked with at least one, and preferably two or all three, of Tooth, Cocky and Boyd. Particular care was taken in checking items which appeared to coincide in Wargamay and Giramay. The grammar was also carefully sifted to exclude extraneous elements.

At first Giramay was used as a means of elicitation. But since Giramay forms and constructions are often close to - but not identical with - Wargamay this sometimes tended to confuse speakers; they would continue in Giramay, or say that Wargamay was 'the same' when in fact there were slight differences. Because of this, most of the later elicitation was done using just Wargamay and English (in which all of the informants were quite fluent).

John Tooth's name is guraminbal, literally 'shoot the cloud' (this relates to the thunderstorm, a totem of his section, gucgucu). Born at Abergowrie of a Giramay mother and Malay father, he was brought up by his Wargamay stepfather at Lannercost and Stone River; Tooth speaks the W dialect but is also quite at home in Giramay. He remembers as a boy walking with his tribe to a corroboree near Innisfail; to another at the Argentine Gold Mine, about 40 miles inland from Townsville; and to a third at the tin mine on the Charters Towers/Lynd road. Tooth has worked most of his life at cattle stations on the tablelands north of the Herbert and was contacted in 1972, 1973, 1974 and 1977 at Glen Ruth (formerly Cashmere). His knowledge of Wargamay was rather rusty but this was compensated by his intelligence and application. It was possible to record from him two very short texts, to obtain or check the best part of a thousand lexical items and to elicit on a wide range of grammatical points. John Tooth has a fine linguistic sense; if I made mistakes in trying to construct Wargamay sentences he would reject them because 'it doesn't seem to rhyme', his way of saying they were ungrammatical.

The fact that John Tooth also speaks Giramay (and of course there have been more people to speak to in Giramay than in Wargamay, over the last few decades) affects his Wargamay a little. Tooth tends to use the irrealis inflection -ma mostly in the 'lest' sense, probably because the Giramay verbal inflection -bila is restricted to a 'lest' sense; he would use -mawith a simple future sense sometimes but less often than would Cocky (or Boyd). Tooth would also use transitive verbs in intransitive constructions a little less often than Cocky or Boyd; in Giramay transitive verbs can only occur in transitive constructions.

Lambert Cocky (or Atkinson) is named burayngubaru and belongs to the wuguru section. One parent was Wargamaygan and and one Biyaygiri; thus although Cocky's dialect is predominantly $W$ there is some $B$ mixed in (but scarcely any Giramay). Like John Tooth, he was probably born a few years before 1900. Cocky was interviewed in 1972 and 1973 at Dan Sheahan's cane farm, on the bank of the Herbert River, just east of Abergowrie (in original Wargamaygan territory) and in 1974, 1975, 1977 and 1980 at the Eventide Home, Charters Towers. Cocky may have been more fluent in Wargamay than John Tooth but was at first a difficult informant, not inviting direct questions. Despite this, it was possible to check several hundred lexical items with him and to clarify a number of grammatical points; he also recorded one short text (see 1.5).

Nora Boyd, named at birth girgul, later called gupuru, was the only source for the Halifax Biyay dialect. She was interviewed at Ayr in 1973 and 1974 and at Halifax in 1975. Nora Boyd was reported to be in her nineties (she had a son in an old folks' home, and went to visit him periodically) but was as mentally agile as John Tooth or Lambert Cocky, each of whom was a dozen years her junior. Mrs Boyd spoke pure Biyay and although she could sometimes recognise proferred items to be in the $W$ dialect or in Giramay she would never mix these into her own speech. Nora Boyd did not give texts but was unfailingly courteous in volunteering and checking all manner of lexical and grammatical points. Only a limited amount of work was possible with Nora Boyd, before her death in late 1976; it was not possible to check a number of grammatical points, or whether many $W$ lexemes also occurred in $B$.

Arthur Wild, named gububagi, (born at Abergowrie) was interviewed near Halifax in 1972 and 1973 (he died in 1974). Although most helpful, he was too old and semi-senile to yield any information that had not already been obtained from Tooth and Cocky.

## 2. PHONOLOGY

This description is in part conceived of as a section of an areal study of the languages in the Cairns/Townsville region. These are, from north to south, Yidin (Dixon 1977a); Dyirbal with major dialects Ngagan, Mamu, Dyirbal and Giramay (Dixon 1972); Wargamay with dialects Biyay and Wargamay; and Nyawaygi.

Yidin, Dyirbal and Wargamay have an identical set of sixteen segmental phonemes. In Nyawaygi original *d has changed to $r$ or 5 except within a consonant cluster; in modern Nyawaygi [d] and [r] can be grouped together as allophones of a single phoneme, giving an inventory of just fifteen phonemes.

The four languages differ in the occurrence of vowel length. Length occurs only in initial syllables in Nyawaygi and Wargamay, only in non-initial syllables in Yidin, and in any syllable in the northerly dialects of Dyirbal.

The southern Dyirbal dialects do not show contrastive vowel length.

It is likely that Wargamay and Nyawaygi preserve a length distinction that was in a proto-language, ancestral to the four modern tongues (Dixon 1980a); this initial length contrast has simply been lost in Dyirbal and Yidif. Yidin has evolved a length distinction in non-initial syllables by a series of recent changes (documented in Dixon 1977a:42-88, 1977b), while the Ngagan and Wari dialects of Dyirbal have developed long vowels in all types of syllables through a recent change of a quite different type (Dixon 1972:342-5, 1980b). A comparative survey of the occurrence of vowel length in languages of the Cooktown/Cairns/Townsville area is in Dixon, 1976a.

### 2.1 CONSONANTS

Wargamay has

|  | labial | apical | laminal | dorsal |
| :--- | :---: | :---: | :---: | :---: |
| stop | b | d | g | 9 |
| nasal | m | n | n | 0 |
| 1ateral |  | l |  | 0 |

There are also
two semi vowels: dorso-labial $w$ and laminal y
and two rhotics, distinguished mainly in terms of place of articulation (although the frontmost rhotic is more often a trill, and tends to involve more taps):
$r$ normally an alveolar trill (sometimes a single flap)
[ either a semi-retroflex (post-alveolar) continuant or else a flap or short trill articulated towards the back of the alveclar ridge.
Rhotic minimal pairs include gambara 'cyclone', gambaca'body'; gurugu 'grog' (a loan), gurugu 'dove'. Minimal pairs distinguishing /r/ from /d/include /bari/ 'stone', /badi/ 'hook fish'.

Apical stop, nasal and lateral involve the tip of the tongue touching the alveolar ridge; sometimes an apicopostalveolar (retroflex) allophone occurs following u. Intervocalically, /d/ can be realised as an alveolar flap [s]. It appears that [r] can be an allophone of both /d/ and $/ r /$ - we have [basi] in free variation with [bari] - featuring a trill - for /bari/ 'stone', and [bu:riya] alternating with [bu:diya] for /bu:diya/ 'take!'.

Phonemes in the laminal column normally have laminopalatal realisation. However, lamino-interdental allophones have been encountered before a and before $u$ (following a normal Australian pattern - Dixon 1970): [oada] alternates with [gaga] '1sg pronoun, A function' and [dana] with [gana] '3pl pronoun, $S$ function'. Wargamay is mid-way between Dyirbal, which has no interdental sounds, and Nyawaygi, where interdental is the major allophone for laminal stop and nasal.

The labials and velars do not show as much allophonic variation. But /g/can be labialised when u follows (and, probably, only when there is a dorsal consonant in the
following cluster) e.g. [ $\left.g^{\text {Wuygal }}\right]$ 'long-nosed bandicoot'.
And /b/ has been heard lenited to a bilabial fricative when non-utterance-initial e.g. [gi:caßada], /oi:ca bada/'tie up the dog:'.

Most words beginning in/yi.../ can be realised either as [yi...] or as [i...]; thus/yimirigi/, [imirigi] 'be gladPERFECT'; /yigara/, [igara] 'crayfish'. However, the initial $/ \mathrm{y} / \mathrm{must}$ be pronounced in, for example, /yira/, [yira] 'tooth'; it may be that initial [y] can be omitted before [i] only when followed by a nasal or stop. Note that initial/w/ is always pronounced, even before /u/, thus [wudu] 'nose', [wurbi] 'big' (never [udu] or [urbi]). Compare with Yidin where initial $/ \mathrm{y} /$ and $/ \mathrm{w} /$ are always pronounced (Dixon 1977a:34-5) and Dyirbal where either semi-vowel can usually be elided before a homorganic vowel (Dixon 1972:278).

### 2.2 VOWELS

In the second or later syllable of a word, Wargamay has three vowel phonemes:

$$
\begin{array}{ll}
\text { u } & \text { close back } \\
\text { i } & \text { close front } \\
\text { a } & \text { open }
\end{array}
$$

In the initial syllable of a word there is a contrast between short and long vowels - effectively a six-term system, $u, u:, i, i:, a, a:$. The vowels occurring in non-initial syllables are most similar in length and quality to the short vowels in initial syllables.

Since Wargamay is an entirely suffixing language it will be seen that all long vowels occur in roots; affixes exclusively involve short vowels.

There are in fact just two examples of long vowels in a non-initial syllable - gi:gi: 'bird (generic)' and bi:lbi:l 'peewee (Grallina cyanoleuca)' (the latter, at least, is onomatopoeic). Note that these appear to be reduplicated, although the non-reduplicated forms ( $d i$ : and bi:l) are not attested. However, in other Australian languages roots that involve 'inherent reduplication' pattern phonologically like compounds - that is, the intramorphemic boundary halfway through the root allows the phonotactic possibilities normal for intermorphemic boundaries (cf Dixon 1977a:36-7 for Yidin) - and these two forms do not therefore pose any serious counterexample to our generalisation that long vowels are restricted to initial syllables.

Minimal pairs involving a length contrast are:

| gana | 'lpl pronoun, SA form' | ga:na 'interrogative pronoun, o form' |
| :--- | :--- | :--- | :--- |
| badi- 'to hook a fish' | ba:di- 'to cry, weep' |  |
| giba 'liver' | gi:ba- 'to scratch' |  |
| gura 'cloud, sky' | gu:ra- 'to rub' |  |
| gulu $\quad$ 'buttocks' | gu:lu 'black' |  |
| nuba | 'bark bag' | nu:ba- 'to sharpen' |
| ganda- 'to burn, cook' | ga:nda- 'to craw1' |  |

Of the 920-word Wargamay lexicon, 90 items (almost $10 \%$ ) involve a long vowel. And note that although verbs make up
only $16 \%$ of the total lexicon, $38 \%$ of long vowel items are verbs. (Comparative evidence suggests that Wargamay vowel length goes back to a proto-language. The fact that such a high proportion of verbs involves long vowels may be partly explained by the fact that, in the course of linguistic evolution, verbs are less likely to be tabooed - and replaced by a form borrowed from a neighbouring language - than are words from other parts of speech.)

Nineteen of the long vowel roots are trisyllabic and 56 are disyllabic e.g.

| bu: nguray | 'a snore' | gu:gal 'mud cod' |
| :--- | :--- | :--- |
| gu:gaca | 'urine' | ga:la 'empty' |
| gu:Ingucun | 'nave1' | ma:ngay 'silly (person)' |

There are thirteen monosyllabic words in Wargamay, each containing a long vowel (that is, there are no monosyllables with just short vowels). Seven comprise a closed syllable:

$$
\begin{array}{lll}
\text { di:l 'a black bird' } & \text { gu:n 'spirit of a man' } \\
\text { di:n 'eyebrow' } & \text { ma:l 'man' } \\
\text { gu:l 'salt' (a loanword) } & \text { yi:l 'name' } \\
\text { gu:n 'Herbert River/Gorge' } & &
\end{array}
$$

and six an open syllable:

| di: 'tea' (a loanword) | wi: 'sun' |
| :--- | :--- |
| ga: 'jaw' (B) | wu: 'hoe' and 'war' (two homo- |
| na: 'not' |  |
|  |  |

The actual phonetic length of a vowel appears to depend on the following consonant (cf Lehiste 1970:27):
(a) the shortest variety appears before a stop [gi•gin],/gi:gin/ 'swamp wallaby';
(b) a slightly longer variety occurs before a nasal -[ma:ni-], /ma:ni-/ 'hold in hand, catch hold of'.
(c) the longest variety of all is encountered before the semi-retroflex rhotic continuant (whether this is itself prevocalic or preconsonantal) - [du::ca-], /du: [à-/ 'to pull up', [gu::[gucu], /gu:cgucu/ 'beetle'. In the case of the longest vowels, type (c), I sometimes heard (and transcribed) a long vowel, and sometimes a sequence of vowel-semivowel-vowel i.e. [duwuca] etc. Type (b) were consistently transcribed with a long vowel. Many type (a) words were noted sometimes to have a long vowel, and other times to have a short one, in my early transcription. Further questioning was undertaken to resolve the inconsistency, and I was corrected when I said, for instance, [gıgin], the informant especially stressing and lengthening the vowel, [gi:gin], to indicate the correct pronunciation.

The realisations of Wargamay short vowels /u/ and /i/ range from close to half-close, and that of /a/ from open to half-open. It seems, however, that long close vowels can have more distant allophones - thus /yu:[igi/, [yo:rigi] 'grow-up-PERFECT' for instance.

In a monosyllable/u:/ can be realised as [u:] or [uwu], /i:/as [i:] or [iyi], and /a:/ as [a:] or as [a?a]. Thus we have [yiyil] alternating with [yi:l], [ma:l] with [ma?al],
and [ga:], with [na?a], etc. ([a?a] also occurs in inflected forms of /ma:l/ e.g. [ma:Idu] [ma?aldu] 'man-ERGATIVE'; but [a?a] has not been encountered as the realisation of /a:/ in any form that involves a polysyllabic root.)

Note that there are arguments against interpreting long vowels as, phonologically, vowel-semivowel-vowel sequences; that is, against writing /bu:di-/'to take' as /buwudi-/, and so on. There is a critical morphophonological rule that is sensitive to the number of syllables in a word: for transitive verbs in the $W$ dialect imperative is -ya after a disyllabic stem ending in $-i$, but is $-\emptyset$ in all other circumstances (after any stem ending in -a, or after a trisyllabic in -i). Thus we get:

| stemwugi- <br> baba- <br> gungari- | imperative | wugiya |
| :---: | :---: | :---: |
| bu:di- | baba | 'spear:' |
|  |  | gungari |
| 'cut!' |  |  |
|  | bu:diya | 'take!' |

The fact that bu:di- (and also ma:ni- 'take hold of', da:lbi'scoop water up' and so on) takes $-\varnothing$ imperative suggests that the root here involves just two syllables.

There is, however, no morphological criterion applying to monosyllables, and we could consider treating long vowels in monosyllables differently from those that occur in polysyllabic roots. There are no examples of contrast (in monosyllabic or polysyllabic forms) between -iyi- and -i:- or between -uwu- and-u:- so we could assign the sequences -iyiand -uwu-to underlie surface [i:] and [u:]. There is difficulty, however, with [a:]. The most likely solution here is /awa/ but this is ruled out since it does contrast with /a:/. Thus /mawa/ 'shrimp' is never realised as [ma:] or [ma?a] and demands to be treated in a different way from [ma:I]~[ma?al]. The only way completely to avoid postulating forms which are phonologically monosyllables would be to have an additional phoneme / $/$ / that would appear in just four roots: The long vowel interpretation, outlined above, is surely preferable to this.

In Dyirbal, sequences /awa/, /uwu/ and/iyi/ can be realised as [a:], [u:] and [i:] respectively, but these are less frequent realisations than [awa], [uwu] and [iyi]; the latter pronunciations are always given in lexical elicitation (Dixon 1972:278). There are in Dyirbal morphological reasons for preferring a vowel-semivowel-vowel interpretation; for instance, locative case is -nga onto a disyllabic but -ga after a trisyllabic root ending in a vowel, and the locative of duwumba 'a wild fruit' is -ga (not -nga). Note that only about $1 \%$ of the Dyirbal lexicon involves /awa/, /uwu/ or /iyi/ sequences, whereas $10 \%$ of the Thargamay corpus shows a long vowel.

Plainly Dyirbal imposes its 'vowel-semivowel-vowel' interpretation on any phonetic long vowel (and this is related to a requirement that every word in Dyirbal have at least two syllables) whereas Wargamay would interpret a phonetically identical sound as a phonological long vowel. Thus we have correspondences:

| Dyjrbal | /diyil/ 'star1ing' | Wargamay | /gi:l/ |
| :---: | :---: | :---: | :---: |
|  | /biyilbiyil/ 'peewee' |  | /bi:lbi:1/ |
|  | /yawa/ 'top of tree' |  | /ya:/ |
|  | /gawa/ 'doorway' |  | /fa:/ 'jaw' |

and close cognates:
Dyirbal /guwuy/ 'spirit of a man' Wargamay /gu:n/
Both Dyirbal/giyil/ and Wargamay/gi:l/ could be pronounced [giyil] (and similarly for the second line). This does not, however, hold for the third and fourth pairs. Dyirbal allows /awa/ to be realised as [a:] whereas Wargamay maintains a distinction between /awa/ and /a:/ (the Wargamay phonetic sequence [a?a] is missing from Dyirbal).

### 2.3 STRESS

Stress is assigned as follows:
(1) if the first syllable involves a long vowel, then it must receive primary stress;
(2) if there is no long vowel in a word, and (a) the word is disyllabic or quadrisyllabic, primary stress goes on the first syllable;
(b) the word is trisyllabic or quinquesyllabic, primary stress goes on the second syllable.

Secondary stress goes on the syllable next but one after primary stress, except that a final syllable can never bear stress.

Thus:

| (1) mú:ba 'stone fish' | gí:bara | 'fig tree' |  |
| :--- | :--- | :--- | :--- |
| (2) (a) báda | 'dog' | gígawúlu | 'freshwater jewfish' |
| (b) gagára 'dilly bag' | gưágay-miri | 'Niagara Vale-FROM' |  |

It will be seen that stress shifts between the absolutive form of a noun (which involves zero inflection) and an oblique form, e.g.
múgan 'mountain-ABS' munán-da 'mountain-LOC'

The Wargamay stress assignment rules make it impossible to get two successive stressed syllables; and two successive unstressed syllables are only possible in a word with an odd number of syllables and the initial vowel long, as gí:bara above.

A non-initial vowel that bears primary stress may be phonetically lengthened e.g. [muná•nda] 'mountain-LOC'; this must be carefully distinguished from the phonologically contrastive length in initial syllables (which has stronger and more consistent quantitative realisation). Phonological and phonetic length specifications do in fact function at different 'levels'. Thus we have, in the following order:

1. Underlying forms with phonological length specification.
2. Stress rule - onto the first syllable of a disyllabic
word, or a word of any length involving a long vowel;
but onto the middle syllable of a trisyllabic word with all vowels short.
3. Optional phonetic lengthening of non-initial stressed syllable.
That is, phonetic lengthening is dependent on stress placement, which in turn depends on the occurrence of phonological length.
(Pre-Yidin probably had stress assignment and phonetic lengthening rules rather like modern Wargamay. It then introduced a rule deleting the final syllable of words with an odd number of syllables, under certain phonologicallyand grammatically-defined conditions; this made the placement of stress in a word phonologically contrastive, as malá•nu > malá•n'righthand-ABS' contrasting with málan 'riverABS'. Finally, contrastive stress (with concomitant lengthening) was replaced by contrastive length (which determines stress placement) - /malá:n/ versus/málan/. See Dixon 1977a,b.)

### 2.4 PHONOTACTICS

A Wargamay root has phonological structure:
either $C_{1} V:\left(C_{3}\right)$
or $C_{1} V(:) C_{2} V\left(C_{2} V\right)^{n}\left(C_{3}\right)$ where $n \geqslant 0$
In these structures:
V is any vowel (a, i or $u$ );
$C_{1}$ can be any consonant except 1 or $r$; that is, it can be a stop, a nasal, a semi-vowel, or $[$;
$C_{3}$ can be $y, 1, r$ or any nasal other than $\eta$; that is, it cannot be a stop, $w$, $[$ or $D$;
$\mathrm{C}_{2}$ can be
(i) any single consonant; or
(ii) a homorganic nasal-stop sequence; or
(iii) l, r, [ or y followed by a non-apical stop,
or nasal, or nasal-stop sequence, or by $w$; or
(iv) $n$ followed by a non-apical stop or nasal.

The following clusters, which would be predicted by these generalisations, have not been encountered: in, $n n$, [m, $\mathrm{cn}, \mathrm{yn}$, yw; they are assumed to be 'accidental gaps' in the data. Only one example is known of each of $1 w, n n$, rmb, rn, rw, [ng, [n, [w, yo.

In addition, -iy- must be immediately followed by a vowel (that is, this sequence can never occur at the end of a syllable).

There are just three words not covered by the general statement. 'Male kangaroo' has been heard as yáwuymbàci and as yáwuynbaci, but when I enquired about the pronunciation it was said slowly as yáwuy báci. It seems that a nasal is inserted between second and third syllables and can be assimilated in place of articulation either to the preceding or to the following segment. gú:Ingucun 'navel' was treated similarly - it was said slowly simply as gú:l gúcun, without the nasal segment. The third item is yurúynbi
'bank of river', which occurs only in a song.
There are considerably wider cluster possibilities across a morpheme boundary, effectively $C_{3}$ followed by $C_{1}$ (affixes can begin with almost all segments that can commence words). Across a nominal stem+inflection boundary we can also get possibilities not included under $C_{2}$ e.g. -Id- or even -lnd- (for ergative case - see 3.1.1).

Loans generally follow the possibilities outlined above. The only exceptions noted (and these may be ad hoc 'loans', rather than items that were properly assimilated into the language at a time when it was actively spoken) are drayga 'tracker' and layn '(fishing) line'. The mapping of English into Wargamay phonotactics in loans generally follows the principles described for Dyirbal (Dixon 1972: 325-6). Noteworthy examples include bagir 'basket' - where English -s- is lost before the velar stop, and final -t is rendered as -r (Wargamay words cannot end in a stop) - and gabicbil 'Herbert Vale', where the initial consonant is supplied as 0 , for an English loan that begins in an open vowel (or $h$ plus open vowel).

### 2.5 PROBABILITIES OF OCCURRENCE

Relative probabilities of occurrence were calculated, from the 920-item lexicon, for initial, $C_{1}$, and final, $C_{3}$, consonants. The $C_{1}$ count covers all parts of speech whereas the figures for final consonants exclude verbs (which all have roots ending in -a or -i , see 3.5.2).
root initial root final


The relative probabilities for vowels are (with initial syllable figures covering all parts of speech but the non-initial count excluding verbs):

|  | initial syllable | non-initial <br> syllable |
| :---: | :--- | :--- |
| a | 0.43 | 0.47 |
| $i$ | 0.18 | 0.21 |
| u 0.39 | 0.32 |  |

There was no significant difference between figures for open or closed syllables, or for short versus long vowels.

About $63 \%$ of non-verbal roots end in a vowel; this compares with figures of $50 \%$ for Dyirbal, $44 \%$ for Yidin
and 60\% for Nyawaygi.
At $C_{2}$, homorganic nasal-stop clusters (mb, nd, ng, ng) outnumber non-homorganic clusters (nb, ng, ng) by about four-to-one. Nasal-nasal clusters are much rarer than in Dyirbal - only three examples of -nm- and one of -nn-were encountered.

### 2.6 PHONOLOGICAL PROCESSES

[A] Yotic deletion. This is the one important morphophonemic rule in Wargamay. We have already noted that a sequence -iy- must be followed by a vowel, never by a consonant or word-boundary. If an illicit sequence is generated by morpheme combination, then the - $y$ - is simply dropped:

YOTIC DELETION RULE $-i y-\rightarrow-i\left\{\begin{array}{c}-C \\ -\#\end{array}\right\}$
There is an identical rule in Dyirbal (Dixon 1972:287) and in Warupu, and a similar one - in which -iy is sometimes replaced by -i: - in Yidin (Dixon 1977a:77-83).
[B] Nasal insertion. There are sporadic examples of a nasal being inserted between a syllable-final y or 1 and a syllable initial stop. Three examples of apparent nasal insertion within roots were given in 2.4. Locative and ergative case inflections, with canonical shapes -da and -du, become -nda and -ndu after a stem ending in -1 (3.1.1). There is also a nasal in gubimbulu 'very wise man', presumably based on gubi 'wise man' and -bulu 'very' (3.1.3). An inserted nasal can be assimilated in place of articulation to the following, or sometimes to the preceding, segment.

Ergative and locative case allomorphs provide further examples of assimilation, this time of a stop to a preceding nasal or y (3.1.1).
[C] Haplology. There are in the grammar a number of examples of a syllable being omitted from a longish form when it is phonologically identical to or similar to the preceding or to the following syllable.
(i) the inchoative verbaliser has allomorphs -mbi (following a vowel)~-bi (following a nasal)~-i (following lor r. The -bi-is omitted from the postvocalic allomorph -mbi when continuative suffix -bali follows. Thus:

| nominal | bi:ca 'fear' but gubil 'whistle' |  |
| :--- | :--- | :--- |
| +inchoative | bi:cambi- | gubili- |
| +inchoative+continuative | bi:cambali | gubilibali |

Note that -bi- is phonologically similar to the following -ba-, and that it must be omitted in this environment; a fuller discussion is in 4.9.1. The continuative suffix cannot be added directly to a nominal root, so there is no possibility of ambiguity here.
(ii) purposive inflection is -lagu onto an intransitive stem. However, the -la- is sporadically omitted after a trisyllabic stem - all the examples noted have third syllable -ra- or -li- (quite close in form to -la-). Thus guwaralagu and guwaragu were both recorded for 'stand-PURPOSIVE'; when elicitation was directed to this point the informant preferred the canonical form duwaralagu. In one of the texts
recorded by Jimmy Johnson the disyllabic root wula- 'to die' plus purposive -lagu was said as wulagu (not wulalagu). See 3.5.4.
(iii) we surmise in 3.5 .3 that an original monosyllabic verb gi:- 'to sit' has effectively been reanalysed as having a disyllabic root gi:gi- in the $W$ dialect. But the -gican optionally be omitted before continuative -bali; thus gi:gibalingi:bali. This could be explained in either of two quite different ways - through the general syllable elision tendency of Wargamay, or in terms of the reanalysis of di:in terms of gi:gi- being not quite complete. Or it could be due to the intersection of these two rather disparate factors. (But note that -gi- is rather different in form from the following syllable -ba-; the preceding gi:- is unlikely to be relevant since -gi- does not drop from gi:gi- with any other suffix.) See 3.5.3.
(iv) there are other isolated instances of syllable elision in my corpus. For instance, gumba- 'put in, go in' plus -bali was heard as dumbali-, and gi:ba- 'scrape, scratch' plus -bali was said as gi:bali, as in (140) below (I was in fact corrected when I said gi:babali). But note that the reciprocal suffix -ba- is never dropped from bucba-ba-y 'hit-RECIP-UNMKD'; if it were the verb would be indistinguishable from the non-reciprocal form bucba-y (see 4.5).

Syllable elision could almost be described as a 'personality trait' of Wargamay grammar (nothing of this nature has been noticed in surrounding languages). It is except in the case of (i) - almost always a sporadic phenomenon.

### 2.7. COGNATION WITH NEIGHBOURING LANGUAGES

The majority of words cognate between Wargamay and a neighbour are identical in form in the two languages. There are, however, some systematic differences:
[A] Long vowels. Generally, a long vowel in Wargamay simply corresponds to a short vowel in Dyirbal and Warupu, languages that have no contrastive length. Thus:

```
Wargamay ba:lba- 'to roll' Dyirbal, Waru\etau balba-
bu:di- 'to take, bring' Dyirbal budi- 'to carry'
```

In the case of most of the long/short vowel minimal pairs, listed in 2.2, only one member occurs in Dyirbal. For instance:

| Wargamay | Dyirbal |
| :--- | :--- |
| gana '1p1 pronoun, SA form, | gana |
| ja:na 'interrogative pronoun, o form' | wanuna |
| badi- 'to hook a fish' | badi- |
| ba:di- 'to cry, weep' | dungara- |
| giba 'liver' | giba (northern dialects) |
| gi:ba- 'to scrape, scratch' | giba (Giramay dialects) |

But there is one example of a minimal pair in Wargamay
corresponding to homophones in Dyirbal:

$$
\begin{array}{lllll}
\text { Wargamay } & \text { gura } & \text { 'cloud, sky' Dyirbal } & \text { gura } \\
& \text { gu:ra } & \text { 'to rub' } & & \text { gura- }
\end{array}
$$

Correspondences between long vowels in Wargamay monosyllables, and vowel-semivowel-vowel sequences in Dyirbal, were mentioned in 2.2.

Long vowels in Wargamay normally correspond to long vowels in Nyawaygi and in other, widely separated, languages (in cases where there is a corresponding form). For instance, Wargamay ma:ni 'hold in the hand' corresponds to ma:- 'hold in the hand' in Nyawaygi and also to ma:- 'take' in GuuguYimidhir (next language but two to the north of Yidin, spoken around Cooktown). Similarly, 'cry' is ba:ri- in Nyawaygi, ba:di- in Wargamay and ba:di- in Guugu-Yimidhir. It is this sort of correspondence which leads us to suggest that length in the initial syllables of Wargamay, Nyawaygi and Guugu-Yimidhir words is rather ancient, and has simply been lost in the intervening Dyirbal/Yidin block (Yidin has simply badi-'to cry', and mani- 'to catch in a trap', for instance). (Further discussion of long vowel correspondences will be found in section 2.7 of my Nyawaygi grammar.)
[B] Final [. The main phonotactic difference between Wargamay and its northerly neighbour is that in Dyirbal, but not in Wargamay, roots and words can end in the retroflex grooved continuant, 5 . There are in fact a number of cognate pairs in which the Wargamay member simply has a vowel following what is final -c in Dyirbal:


In each of the nine examples of this type of correspondence, the vowel following $c$ in Wargamay is identical with the preceding vowel. It is thus, on this data, equally plausible that Dyirbal dropped a final vowel, or that Wargamay introduced one (say, at a time when it adopted a constraint that words could not end in $[$ ). Eight other trisyllabic Wargamay roots ending in $[-p l u s-v o w e l ~ h a v e ~ i d e n t i c a l ~ f o r m ~$ in Dyirbal, e.g.:

> Wargamay yinaci Dyirbal yinaci 'cave'

Five of these have the same vowel on each side of r , and three have different vowels. (There are five quadrisyllabic Wargamay words ending in [-plus-vowel that have cognates in Dyirbal - the Dyirbal and Wargamay forms are all identical.)

There is, however, phonotactic evidence that can help us decide between the two alternatives mentioned in the last paragraph. There is in Wargamay, as in most Australian languages, great similarity between the set of consonants that can commence a consonant cluster, and those that can end a word (that is, between the closing segments of non-final and of final syllables). Note that although $c$ cannot end a word, there are more than two dozen examples of medial clusters beginning with $\subset$ (and $\lceil$ does here con-
trast with $r$ - as in the minimal pair wirga 'nulla nulla (club)', wicga- 'to bathe'). This surely favours the hypothesis that originally Wargamay allowed $[$ at the ends of all syllables - as Dyirbal still does - and at a late stage eliminated word-final $[$ by simply repeating the vowel of the preceding syllable.
[C] Initial $c . ~ L e a v i n g ~ a s i d e ~ l o a n s, ~ o n l y ~ 7 ~ r o o t s ~ i n ~ m y ~$ Wargamay lexicon begin with [-, less than $1 \%$ of the total; in contrast, Dyirbal has $3 \%$ of its lexical roots commencing with [-. (Four of the seven Wargamay roots do occur in identical form in Dyirbal.)

There are two isolated correspondences involving $[$-initial items in Dyirbal:
Wargamay wulgugu Dyirbal cugugu 'Torres Straits pigeon'
guwa
¿uwa
[D] Final -r. Eleven per cent of the consonant-final roots in Wargamay end in the laminal nasal, $n$ (2.5), a figure almost twice that for Dyirbal (Dixon 1972:279). There are in fact four cognate pairs in which Wargamay - $n$ corresponds to -y in Dyirbal:

| Wargamay dagan 'sand guana' | Dyirbalgagay <br> gawun 'hot' <br> gu:n 'spirit of a man' | gawuy | 'steam' |
| :--- | :--- | :--- | :--- |
| wagun 'sea' | guwuy |  |  |
|  | waguy 'sand' |  |  |

And there are four correspondences in which Dyirbal also has a final - $n$ :

| Wargamaybundin 'grasshopper' <br> gulin 'east' | Dyirbal bundin |  |
| :--- | :--- | :--- |
| wargin 'boomerang' |  | gulin |
| dubun 'slow' | wargin |  |
| gubun 'gentle, |  |  |

Note that all-if final items in Wargamay also have the nasal in Dyirbal; the sequence -iy is not permitted at the end of a syllable in either language. But four out of the five roots ending in -an or -un in Wargamay have a final -y in Dyirbal. This suggests that final - $\Omega$ was lenited to -y in Dyirbal in cases where it did not follow the homorganic vowel -i. (gubun could have been a loan from Wargamay after the lenition rule operated, or there may be some other explanation for this form.)
[E] gi- and gi-. In many languages of eastern Australia can be found cognate pairs involving a correspondence between gi and gior di. For instance:
(i) the comitative suffix on nominals is -giri in Wargamay (3.1.3), -gi in Nyawaygi, *-gir in Warunu and Yidin, -dir in Guugu-Yimidhir, etc. (see Dixon 1976b:203-310);
(ii) both Nyawaygi and Guugu-Yimidhir have a small closed verbal conjugation which includes wu- 'to give' and na:- or na:- 'to see'; the past/perfect inflection on this conjugation is -gi in Nyawaygi and -di in Guugu-Yimidhir;
(iii) giba is 'liver' in Wargamay and in the Giramay dialect of Dyirbal, and 'stomach' in Nyawaygi; giba is 'liver' in
the northern dialects of Dyirbal and in Warupu, and diba is 'liver' in Guugu-Yimidhir;
(iv) 'mother's father' is nagi in Dyirbal, jayginan in Wargamay, naygi in Nyawaygi, nagi in Warunu and nadi in Guugu-Yimidhir.

It appears that this set of correspondences covers a large geographical area (and should not be regarded as something particular to Wargamay).

## 3. MORPHOLOGY

For Wargamay the following word classes, with mutually exclusive membership, can be set up:

```
noun {djective } nominal
locational qualifier
time qualifier
pronoun
demonstrative
verb
particle
interjection
```

Noun and adjective have almost the same morphological properties; there is, of course, a clear semantic difference. Locational and time qualifiers take a subset of nominal inflections, but show enough minor differences to be considered separate word classes. Pronouns show inflections that are quite similar to those on nominals, but also demonstrate important differences (and some irregularities). Verbs have a separate set of inflections from nominals, pronouns, etc.

The closed classes are fully listed below: pronouns and demonstratives in 3.4, particles - which provide modaltype qualification of a complete sentence - in 4.10 and interjections in 4.12.

Members of the remaining, open, classes are listed in the vocabulary; the semantic content of these parts of speech is best seen from examination of this list. Generally, the semantic contents are quite close to those for Dyirbal (Dixon 1972:39-41). Significant differences are (i) Dyirbal has a set of adverbs, inflecting like verbs e.g. 'do well', 'do slowly'; Wargamay appears to specify value and speed entirely through adjectives; (ii) where Dyirbal has adjectives 'angry', 'sleepy', 'frightened', Wargamay appears to have abstract nouns 'anger', 'sleepiness', 'fear', a modifying stem being formed by the derivational affix-giri 'with' (3.1.3).

Each root in Wargamay belongs to just one word class. There are a number of processes that derive a stem of a different class - forming verbs from nominals, adjectives from nouns, etc. In Dyirbal, Yidin and Nyawaygi every verbal root is strictly specified for transitivity (half-a-dozen exceptions are known in Dyirbal, none in the other
two languages); Wargamay is unusual among languages of this area in having a large number of verbal roots (probably, two-thirds of the total) able to take either the transitive or the intransitive conjugational inflections.

### 3.1 NOMINALS

A noun or adjective in Wargamay must involve a root and a case inflection (one choice being absolutive, which has zero realisation). Between root and inflection can come one or more derivational affixes, listed in 3.1.3. All nominals in a noun phrase must agree in case inflection.
3.1.1 CASE INFLECTIONS. The full set of case inflections is:


We now take these in turn, giving the formal and functional possibilities:
[1] Absolutive. This always has zero realisation, absolutive form coinciding with the stem. It marks intransitive subject and transitive object functions.
[2] Ergative-instrumental.
$F O R M$ - -刀gu after a vowel e.g. bari 'stone', ERG baringu
-du after a consonant, with assimilation of the -d- in
place of articulation to a stem-final nasal e.g. gi:gin 'wallaby', ERG gi:gindu; muninin 'black ant', ERG muninisigu; walam 'tick', ERG walambu.

After the yotic, $y$, there is again assimilation; the stem-final -y can optionally be dropped before ergative -gu e.g. ma:ngay 'silly', ERG ma:ngaygu~ma:ngagu.

After the lateral, 1 , an $-n$-can be inserted before ergative -du; the stem-final -I can be dropped only when the -n- is present. Thus ma:I 'man', ERG ma:Indu~ma:Idu~ma:ndu (but not $*_{\text {ma:dus }}$.

After the trilled rhotic, $r$, ergative is simply -du e.g. gurur 'brolga', ERG gururdu.

FUNCTION - A nominal in transitive subject function must bear ergative inflection. The same inflection is used to mark the instrument or tool used in an action e.g. 'hit with a stick', 'tie with a rope'; note that the instrument can be a body part e.g. 'hit with the hand', 'blow with the mouth'. With a verb of giving, instrumental inflection marks the noun phrase referring to 'that which is given' 4.6.3.

If a basically transitive verb is used in an intransitive construction then its 'object' NP will bear ergative-
instrumental inflection - 4.2. Note that the interrogative mina 'what' does have distinct ergative and instrumental case forms (3.1.5), supporting the recognition of two distinct cases, with identical realisation.
[3] Locative-aversive.
FORM -nga after a vowel e.g. nalu 'water', LOC nalunga -da after a consonant, with assimilation of the -d-
in place of articulation to a stem-final nasal e.g. munan
'mountain', LOC munanda; gulgin 'scrub', LOC gulginga; yinam
'Ingham', LOC yinamba, After y, locative is -ga e.g. bu:gguray 'snore', LOC bu:ngurayga; elision of the stem-final -y has not been encountered.

After 1, locative is normally -nda e.g. nagul 'deep', LOC nagulnda. Elision of $n$ orl (as for ergative) may be possible, but has not been encountered. After r, locative is simply -a e.g.mibir 'pine tree', LOC milbira.

It will be seen that locative exactly parallels ergative (the two cases differing only in the final vowel) except after $-r$, where ergative is $-d u$ and locative -a. (There may also be different possibilities of elision after -y and -|.) Locative and ergative allomorphs after -r may be effectively reversed in Biyay. Nora Boyd, the only informant for this dialect, gave yimbur 'pelican', ERG yimburu and milbir 'pine tree', LOC milbirda. (Or it may be that both types of allomorph are possible for both cases in all dialects:)
GUNCTION - The main use of locative case is to indicate a position of rest ('at', 'in' or 'on'):
(1) nayba yugaray nalunga $I$ swam in the water
(2) nayba munanda walagi I climbed the mountain

Locative can also be used to indicate accompaniment; e.g. added to yungura 'another one':
(3) nayba gagabali yungucanga I'm going with another fellow

And it can have a temporal sense; from balanu 'moon' is obtained balanunga 'in the moonlight':
nali ninba jagalagu balanunga gagaragu nunilagu
1du-SA 2sg-S go-PURP moon-LOC possum-DAT hunt-PURP
You and I'1l go hunting possums by moonlight.
There is similarity between the use of locative in (4) and that in
(5) nayba na: bungi / ninunda bu: ogurayga
lsg-S NOT sleep-UNMKD you-LOC snore-LOC
I couldn't sleep for your snoring.
In (5) oinunda bu:ngurayda could be glossed 'during your snoring', but the causal sense 'because of your snoring' is also implied. This usage merges into the aversive sense, where the inflection -nga~-da indicates some person or thing that is to be avoided, with the action referred to by the main verb normally being directed towards this avoidance:
(6) nayba bimbirigi waybalanga
lsg-S run-PERF white man-AVERS
I ran away from the white man
This case is also used on the complement of a verb of fearing, 'that which is feared' - see (64) in 3.4.1. The nominal aversive inflection has close semantic conrection with the apprehensional sense of the irrealis verbal inflection 3.5.4.

The interrogative mina 'what' has distinct locative and aversive case forms (3.1.5), supporting the recognition of two distinct cases, with identical realisation.

A final use of this inflection - probably best included under the 'locative' label - is to mark a language or speech-style being used e.g.
(7) nupa banmalagu wargamayga He can talk Wargamay
[4] Dative-alrative
FORM - -gu after all stems e.g. miga 'camp', DAT-ALL migagu; gulgin 'scrub', DAT-ALL gulgingu.
FUNCTION - This inflection can have a purely local usage ('allative'), indicating motion towards some place or thing, e.g.
(8) nayba banalagu migagu I must return to the camp

Notice, though, that in some cases where English would use 'to', the locative is preferred in Wargamay; e.g. with gumba- 'to enter':
(9) miganga gumbaga Come into the camp:
-gu also has a non-local use ('dative'), marking indirect object, etc - examples are in 4.3.1, 4.6.3. This use shows up in minagu 'what for, why?' from mina 'what?', as in
(10) minagu ninba ba:digi Why did you cry? (=What did you cry for?)

There is reason in Wargamay to distinguish allative and dative cases, that have identical realisation on nominals. Allative will cooccur with an allative deictic such as nagunga '(to) there' (3.4.3) whereas dative would choose the dative form of the third person pronoun, nunangu 'to/for him/her/it' (3.4.1). Compare:
(11) ninba gagaga nagunga migagu You go there to the camp:

[^1]The inclusion of a dative NP in (12) implies that the actor is going to the campsite to do something to it (e.g. clear it, mend it, or look it over to see what condition it is in). There is the expectation of a verb in purposive inflection being included in a sentence with a dative NP but not in one with an allative NP - to form a 'favourite construction' (4.3.3). Thus, when the first three words of (12) were put to Nora Boyd she added nundalagu.

Note that a sentence in Wargamay can involve both an allative and a dative NP:
(13) nuna ma:nga bucmbi / nalugu /ga:bugu

3sg-SO line-ABS throw-UNMKD water-ALL fish-DAT
[I've] thrown the line, into the water, for fish
[5] Abtative
FORM - in W: - $\boldsymbol{i}$ in after all types of stems e.g. nalu 'water', ABL nalunin; yinam 'Ingham (loanword)', ABL yinamnin. The initial - $\Omega$ - can be dropped following a consonant e.g. balgan 'house', ABL balgannin~balganin.
in $B$ : - $\boldsymbol{n}$ after a vowel e.g. galu 'water', ABL galun
-is after a consonant e.g. yugan 'rain', ABL yuganin

FUNCTION - This suffix has a predominantly local sense, indicating 'motion away from':
(14) nulanga ma:Idu du:cay yana nalunin

3sg-A man-ERG pull-UNMKD 1sg-0 water-ABL
The man pulled me from the water.
It can also be used with time qualifiers (3.3) and with nominals, indicating temporal sequence:
(15) wugarnin nayba walay sleep-ABL lsg-S get up-UNMKD
I got up from sleep
In just one or two instances, -nin indicates the cause of some state:
(16) nayba wi:gimbigi magul( $\Omega$ ) in

1sg-S no good-INCHO-PERF work-ABL
I'm tired from work.
[6] Genitive.
FORM - - 万u after a stem ending in a vowel, l, r or y e.g.
waybala 'white man', GEN waybalanu; ma: ' 'man', GEN ma: onu; gucur 'brolga', GEN gururnu; gilbay 'knowing', GEN gilbaynu - after a stem ending in a nasal e.g. gilan 'old man', GEN gilanu; gacamgacam 'seagu11', GEN gacamgacamu; girawan 'scrub hen', GEN girawanu.
FUNCTION - the syntactic behaviour of genitives is given in 4.6.1-2.

Note that pronominal genitives do decline, taking case inflections [1-5] above (3.4.1). Although, despite several attempts, no examples have been obtained of nominal genitives declining, it seems very likely that they will do so (as they do in every - or almost every - other Australian language). In view of this, genitive could well be regarded as a stem-forming (derivational) affix, rather than an inflection (for discussion of this point in Yidin see Dixon 1977a:134ff).

It will be seen that there is, in the Wargamay case system, no strict morphological distinction between 'local' and 'non-local' functions. The inflections which indicate local relations all show, in addition, non-local senses. Thus allative coincides with dative, locative is the same as aversive, and -nin can have causal as well as ablative meaning.
3.1.2 ACCUSATIVE SUFFIX -na. The suffix -na is quite frequently encountered in Australian languages, marking transitive object function. It is normally found on pronouns but sometimes also on proper nouns, extended in a few cases to common nouns that have human reference (or even to all common nouns).

Non-singular pronouns in Wargamay involve the accusative affix - na (3.4.1-2). There are also, in the corpus, half-a-dozen examples of -na being suffixed to a common noun; in each case the noun is in transitive object function. Thus, from text 6 line 6:
(17) [gurigalangu bubaymay binbicalna
eaglehawk-ERG stolen-CAUS-UNMKD parrot-ACC
[The eaglehawks] stole the parrots (in this myth the eaglehawks took away the black wallabies' wives, the parrots, while the wallabies were out getting water).
Another example is:
(18) ma:Indu gulngu banay / muymana man-ERG neck-ABS choke-UNMKD boy-ACC The man choked the boy
The other nouns with which -na has been found are gaja 'father', wigiyan 'white woman', ma:l 'man' and wagun 'tree, wood'. The last example shows that -na is not confined to occurrence with human nouns. (In (17) binbical is referring to two human females - the myth explains how they were turned into birds.)

The first segment of -na can optionally be deleted following a stem-final consonant - thus waguna alternates with waguna.

It appears that -na can be added to a nominal in 0 function almost at whim. Thus, when 'you go and kiss that girl' was asked, Lambert Cocky gave
(19) wigiyana nu:nga / wigiyan nu:nga ninda white woman-ACC kiss-IMP white woman-ABS kiss-IMP 2sg-A Kiss the white woman! You kiss the white woman!
including the accusative suffix in the first clause but leaving it out on repetition.
3.1.3 STEM-FORMING SUFFIXES. There are nine derivational suffixes that derive nominal stems from nominal roots:
[1] Comitative -giri 'with'. This can be added to any nominal and derives a stem that has both semantic and syntactic characteristics of a derived adjective.
-giri forms frequently refer to characteristics of a person, thing or place. Either physical characteristics, as
(20) nungagi wagun mangagiri

THAT tree-ABS flower-COMIT-ABS
That tree has a flower
ninu mala nigingiri
2sg-GEN-ABS hand-ABS fingernail-COMIT-ABS
Your hand is full of nails (i.e. your fingernails are long)
or some mental or physiological state:
(22)
nayba bimbirigi/ bi: [agiri / gagay migagu
lsg-S run-PERF fear-COMIT-ABS go-UNMKD camp-ALL
I had run away in fear, and went to the camp (Text 5.19)
(23)
nayba gabingiri I've got belly-ache (diarrhoea)
(24)
jana ma:Idu wugargiringu junday
1sg-O man-ERG sleepiness-COMIT-ERG see-UNMKD
The sleepy man saw me
-gir: can also be used to refer to something alienably possessed by a person:
(25) nuna ma: wurbigiri wagungiri

3sg-SO man-ABS big-COMIT-ABS stick-COMIT-ABS
The man has a big stick
An NP that involves a modifier in comitative form can be used in a verbal sentence to indicate someone at rest or in motion, accompanied by some thing or person:
(26) nuna ma:l guwarabali bangaygiri

3sg-SO man-ABS stand-CONTIN-UNMKD spear-COMIT-ABS
The man is standing with a spear (in his hand)
(27)
nuna julmburu gi:gibali gagagiri
3 sg -SO woman-ABS sit-CONTIN-UNMKD child-COMIT-ABS
The woman is sitting with a child
(28) nayba gagay nalugiri I'm going with (i.e. carrying) water
(29) nuna gilan gabaygiri wunabali The old man is walking around with (the aid of) a walking stick
(30) nuna julmbucu wunabali gingugiri The woman is walking around with (her) baby
Note that -giri cannot be used to refer to a time or season (as the cognate affix - di can in Yidin - Dixon 1977a:297; cf Dixon 1976b:203-310); instead, locative inflection must be used, as in (4) above.
'Biyay-giri' is used for the name of the tribe which speaks the Biyay language, characterised by the particle biyay 'no' (1.2).

Like the other affixes described in this section, -giri derives a stem that takes the full range of nominal inflections - ergative was exemplified in (24). -giri can be added to a noun and to its modifying adjective, as in (25), deriving a modifying NP within an NP.
[2] Privative. -bicay W, -biyay B 'without'. This is the complement of -giri and has an almost identical syntacticsemantic range. For instance:
(31) nayba nalubitay I've no water
(32) gagaga nulmburugu gambibicaygu mungugu / gambingu
go-IMP woman-DAT clothes-PRIV-DAT naked-DAT clothes-INST ginda wugiya
2sg-A give-IMP
Go to the woman who is naked, without any clothes. You give some clothes (to her)!

Just as we have gawangiri 'anger-COMIT' for 'angry', so gawanbicay appears to be possible, for emphasising that a person is not angry. However, informants did not accept bi:cabicay 'fear-PRIV'.
[3] -bara 'belonging to, pertaining to'. This affix occurs with identical form and function in a large number of Queensland languages including Dyirbal (Dixon 1972:224-5), Yidif (Dixon 1977a:144-5) and Nyawaygi. It is typically used for the naming of local groups, in terms of the type of territory they inhabit (see 1.2). -bara can be suffixed to a nominal or to a deictic (3.4.3):
(33) nayba yalanbara I'm from here (i.e. I'm a person belonging to this place)
[4] -bulu'very, lots of' occurs with a number of adjectives and a few nouns. nagarambulu 'very small' is in fact more frequent than nagaram 'small'. (Although it could be that this is at least partly due to the fact that -m-final forms are not common in Wargamay - my corpus of 900 forms showed only 4 roots ending in $-m$. There may be a progressive tendency towards eliminating $-m$ in word-final position.) Other examples include gundilbulu 'very heavy', giyalbulu 'very sweet', gawanbulu 'very savage (used of a dog)', wunanbulu 'very lustful, promiscuous' and galnganbulu 'lots of froth'. However, I was not able to elicit -bulu with other adjectives, suggesting that it is not fully productive.

The noun gubi refers to a clever man or 'doctor'; gubimbulu is used for 'very clever man' - this presumably involves -bulu, with a nasal inserted and assimilated in place of articulation to the following b (2.6).
[5] -bagun 'really' can be suffixed to adjectives e.g. wurbibadun 'very big', or to nouns e.g. ma:lbagun 'really a man'. With mina 'what' it can emphasise the speaker's bewilderment, as in:
(34) mina nuna/ minabagun/ guyngan

```
'What's that?' 'I don't know
    what it is. [Maybe it is] a
    female ghost?' (Text 5.8-9)
```

See also 3.1.5.
[6] -bara is a comparative. In all but one of the instances obtained it was suffixed to an adjective e.g.
(35) gawungu nalungu wugiya / maya nunga gidul / hot-INST water-INST give-IMP NO THIS cold-ABS
gawurbarangu wugiya
hot-COMP-INST give-IMP
Give [me] some hot water: No, this is cold. Give [me] hotter [water]:

An example of -baca suffixed to a noun is in (245).
[7] -miri 'as a result of, from'. This appears to have a largely 'causal' sense:
(36) מayba mangay gungulmiri lsg-S full-ABS food-miri-ABS I'm full from [eating] food
nayba magulmiri /gi:baligu
lsg-S work-miri-ABS sit-CONTIN-PURP
I'm (tired) from work, and need to sit down
But it has also been found in a local sense, 'from':
(38) ma:gangu bu:dinu gulinmiri

God-ERG bring-PERF spirit home-miri
'God brought [spirits] from heaven' (here Lambert Cocky was explaining how spirits are placed in unborn babies)
It seems that -miri is properly a derivational affix and not a further case inflection (Lambert Cocky gave -miri followed by ablative); but the data available are slim and not totally clear.
[8] - ŋaru 'like a', is used to mark a physical or behavioural resemblance. Only two or three examples have been noted, including:
(39) naga gunday julubucu / mina nuna gu:ngaru
lsg-A see-UNMKD stump-ABS what-ABS 3sg-SO ghost-paru-ABS
I saw a stump. What was it - it was like a ghost.
[9] - daman can be suffixed to kin terms when the speaker is referring to the addressee's relationship to a person. Thus (80) and
(40) wangarga ginu yabugaman

WHERE-LOC 2 sg-GEN mother-KIN
Where's your mother?
Note that in replying the child could only say naygu yabu 'my mother' (and not *naygu yabudaman).
-gaman can only be employed with kinship terms (e.g. gana 'father', murgin 'son') and its use is always optional. It cannot be suffixed to terms that classify age-groups (i.e. - gaman is not a permissable suffix with gada 'child').

The suffix -yara 'another' appears in a text given by Jimmy Johnson (migayaragu 'to another camp') and was given by John Tooth as the equivalent of Giramay -gabun, 'another' but was not recognised by Tooth on a later field-trip; nor could clear confirmation be obtained from other informants.

Four of these derivational affixes occur - with the same form and meaning - in Dyirbal; they are -bara, -bagun, -bara and -naru. (-yaru was only heard in Wargamay after it has been used in Giramay elicitation, and there must remain a slight element of doubt as to whether this is a bona fide Wargamay affix.)
3.1.4 REDUPLICATION. Nominal reduplication appears to indicate plurality, and to involve repetition of the complete form (as in Dyirbal - Dixon 1972:242-3). Thus wurbiwurbi 'lots of big (things)', gilangilan 'lots of old men', namicinamici 'lots of hungry (people)'. The nouns yibi 'child' and gambi 'old woman' are more frequently than not encountered reduplicated - yibiyibi'children', gambigambi 'group of old women'. (But, outside these two instances, nominal reduplication has been obtained only through elicitation.)
3.1.5 INTERROGATIVE MEMBERS. There are two interrogatives relating to the class of nominals: mina 'what' and minan 'how many'.
[1] mina'what' effectively ranges over the class of nouns that have non-human reference (and over third person pronouns, when these refer to something non-human).
mina inflects exactly like a noun in all cases but two. There are distinct forms for ergative, instrumental, locative and aversive:

| ergative | minatngu |
| :--- | :--- |
| instrumental | mina+lu |
| locative | mina+nga |
| aversive | mina+la |

Thus:
(41) minangu пала ganbay what-ERG 1 sg-0 hit-UNMKD
What hit me? (Said by someone sitting under a tree, when something fell from the tree on his head)
(42) minalu jinda bucbay gana
what-INST 2sg-A hit-UNMKD $1 \mathrm{sg}-0$ What did you hit me with?
(43) minanga ninba gi:gibali
what-LOC $2 \mathrm{sg}-\mathrm{S}$ sit-CONTIN-UNMKD
What are you sitting on?
(44) minala ginba bi:rambali
what-AVERS 2sg-S fear-INCHO-CONTIN-UNMKD
What are you frightened of?
Note that bacgu-nga 'axe-LOC/AVERS' could be given as a reply to (43) or (44). In the first case it would indicate that the speaker was sitting on an axe (involving the locative' sense of the -nga nominal inflection), and in the second case that he was scared of the axe (the 'aversive' sense of the nominal suffix-nga). Typical examples of the use of minala in discourse are in text 8 , line 5 and text 9 line 2.

Over the continent, $-1 u$ alternates with -ngu as ergative inflection and -la with-nga as locative (Dixon 1980a: 301-21). In a number of North Queensland languages the regular inflections are -ngu and -nga, with -lu and -la occurring on just three or four nominals, almost always including mina (we are here assuming that mina 'edible animal' is cognate with the indefinite/interrogative form mina - see Dixon 1980a:376, 495 for discussion of this point, and examples).

It is likely that in an earlier stage of Wargamay -lu
and -la occurred only with mina, for the ergative-instrumental and locative-aversive inflections respectively. And that the language then generalised nominal -ngu and -nga for ergative and locative marking, keeping -lu and -la just for the instrumental and aversive functions of mina. Thus, -lu and -la, originally just allomorphic irregularities adding complication to the grammar without making any contribution to its functional task - have been exploited in
order to distinguish between ergative and instrumental, and between locative and aversive, in the case of the important item mina. (A further change might then be for -lu and -la to be generalised as instrumental and aversive markers with all nominals, thus consistently distinguishing these functions throughout the grammar.) See also 5.4.
mina can be verbalised to form intransitive minambiand transitive minama- 'do what?' - see 4.9.
[2] minan 'how many' ranges over the subclass of number adjectives; it declines like a nominal. Thus:
(45) A: nina junday minangu

2sg-0 see-UNMKD how many-ERG
How many [people] saw you?
B: gumacbaringu
a lot-ERG
A lot [did].
In most Australian languages, a single form can bear both interrogative and indefinite sense. In elicitation mina-badun, 'very' (see 3.1.3) was given for 'something'; it has not been possible to obtain corroboration of this. See also (34) above.

### 3.2 LOCATIONAL QUALIFIERS

This set of roots includes galaga 'up', yu:nu 'down', gungari 'north', guyabay 'the other side (of a river)', bamba 'a long way', ga:lungal 'in front' and so on.

These forms can occur with local (locative, allative, ablative) but not with syntactic case-inflections, e.g.
(46) A: wingingu nana gunganu / B: wanganga / A: yu:nunga snake-ERG 1sg-0 bite-PERF where-LOC down-LOC
A: A snake bit me. B: Where? A: Down [there on my leg]
However, a locational qualifier can occur without any inflection, the context usually making it clear whether 'at', 'to' or 'from' is intended. An uninflected locational qualifier may occur with a nominal, which must have a local case inflection. In (47) the 'locational phrase' includes munan 'mountain', in locative case, and galaga 'up' without any inflection:
(47) A: nayba namici / gagaragu nunilagu / 1sg-S hungry-ABS possum-DAT hunt-PURP
B: wanganga / A: munanda galaga
where-LOC mountain-LOC up
A: I'm hungry, and I'll hunt for possums.
B: Whereabouts. A: Up in the mountain.

### 3.3 TIME QUALIFIERS

A time qualifier will most frequently (although not invariably) begin a sentence. The semantics of time qualifiers is oriented to 'now'; probably the most frequent forms are ganumbul 'earlier on today' and ganu'later
today' (for a discussion of other types of temporal semantics in Australian languages see Dixon 1977a:498-9).

Time qualifiers occur most often without any inflection:
(48) gayba nirwara banama
lsg-S tomorrow return-IRREAL
I'11 return [home] tomorrow
However, words referring to a time in the future can take -gu with the meaning 'until' (note that this is identical with the dative-allative inflection on nominals); and words referring to past time appear able to take -nin 'since' (this is identical with nominal ablative). See (103) and (49) nayba di:gibali nirwaragu I'm staying here until tomorrow

The locative inflection -nga~-da cannot, it seems, occur with 'temporal shifters' like 'yesterday' or 'later today' (words whose reference is constantly changing as time progresses), but it can be added to non-shifters, as in text 9, lines 12 and 19, and
(50) birgibaranga nayba giduligi
winter-LOC 1sg-S cold-INCHO-PERF
I got cold in the wintertime
And see balanunga 'moon-LOC' used for 'in the moonlight' in (4) above. In (51) the shifter nirwara occurs sentenceinitially without inflection but biliginga 'at daybreak' follows the verb (note that this is the preferred position for words in locative inflection that have spatial reference):
(51) nirwara nayba gagalagu biliginga tomorrow lsg-S go-PURP daybreak-LOC
I'11 go at daybreak tomorrow
Words referring to temporal duration - for instance, garay 'for a long time', namu 'for a short time', yurmay 'all the time' - cannot, for semantic reasons, take any inflection.

There is a suffix-mira 'for -- nights' which derives temporal qualifiers from number adjectives e.g.

$$
\begin{array}{ll}
\text { yungul 'one' } & \text { yungulmira 'for one night' } \\
\text { yaga 'two' } & \text { yagamira 'for two nights' } \\
\text { gumarbari 'a lot' } & \text { gumacbarimira 'for a lot of nights' }
\end{array}
$$

as in
(52) yagamira nayba bungilagu yala I'm going to camp here for two nights

Wargamay has a single temporal interrogative, wangamira 'when'. This appears to involve the suffix -mira, but it is attached to the locational interrogative root wanda 'where' (3.4.3) (and not to minar 'how many' as we might have expected). Unlike 'number' +mira forms, wangamira does not specifically refer to duration, but is used to enquire about the point in time at which something happened, or will take place e.g.
(53) wangamira ginba banalagu/ganu 'When are you going to return home?' 'Later on today'
(54) wangamira ginda nuna gundanu/ rugulu 'When did you see him? 'Yesterday'

There is a formal-semantic similarity between -mira and the Yidin affix -m 'during -- days/nights' (which also forms a time interrogative, but in this case from 'how many?') Dixon 1977a:201-3.

### 3.4 PRONOUNS AND DEICTICS

3.4.1 PERSONAL PRONOUNS - FORM AND FUNCTION. We can recognise ten personal pronouns for Wargamay - singular, dual and plural numbers for first, second and third person, and an interrogative pronoun 'who' (that is not specified for number). The main forms are set out in Table 3.1.

Wargamay does not have separate forms for inclusive and exclusive varieties of non-singular pronouns. Inclusion can be shown by placing the 2 sg pronoun in apposition to a 1 du or 1 pl form (or, presumably, 2 du to 1 pl ) - nali ninba 'you and $I^{\prime}$ appears in (4) above. Exclusion can be shown by juxtaposing a noun, or else the 3 sg pronoun, to 1 du or 1pl:
(55) nali bada gumbagi miganga

1du-SA dog-ABS enter-PERF camp-LOC
The dog and I went into the camp
An alternative way of indicating 'me and someone else' is shown in (3).

The ten personal pronouns in Table 3.1 are not in fact semantically homogeneous. Eight of them - the first and second person forms, as well as 3du and 3pl - are strictly specified for number and can only be used with human reference (occasionally extended to include tame dogs). But what we have termed 'third person singular', funa, can refer to anything - human or non-human. Further, although its unmarked reference is to singular number it can be used for two or more things, or even for something uncountable. nupa typically occurs in an NP with nominals, or with other pronouns.

An example of numa in an $N P$ with a nominal that has human reference is:
(56) nana wunalgani nulanga bulimandu

1sg-O chase-CONTIN-UNMKD 3 sg-A policeman-ERG
The policeman was chasing me
and with a nominal that has non-human reference:
(57) maya nuna nalu wurbimbigi

NO 3 sg -SO water-ABS big-INCHO-PERF
No, the water [hole] has become [too] deep [to swim in]
and with the third person plural pronoun (which always has human reference):

TABLE 3.1 －Main pronominal forms

|  | ```intrans- itive subject [S]``` | ```trans- itive subject [A]``` | ```trans- itive object [0]``` | genitive | oblique stem |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 sg | nayba | gaga | 刀ana | gaygu | naygun－＇I＇ |
| 1 du | па |  | nalina | nalinu | galin－＇We two＇ |
| 1 p 1 |  |  | janara | gananu | ganan－＇We all＇ |
| 2 sg | ninba | ginda | gina | ginu | ginun－＇You＇ |
| 2 du | nu |  | nubulana | nubulanu | nubulan－＇You two＇ |
| 2 pl |  |  | 刀urana | nuranu | Muran－＇You all＇ |
| 3 sg | nuna | nulanga | nuna | nuganu | nujan－＇He／she／it＇ |
| 3 du | bula | bulangu | bulara | bulanu | bulan－＇They two＇ |
| 3 pl | gana | ganangu | ganana | ganamu | ganan－＇They all＇ |
| Interr－ ogative | ga：nga | pa：ndu | na：na | ŋа：nu | na：nun－＇Who＇ |

Dative－allative－gu，locative－aversive－da and ablative－if are all added to the oblique stem．
（58）nuna gana nugigi
3sg－SO 3pl－S dance－PERF
A lot of people danced
Indeed，nuna can occur with a first or second person pronoun．A common form of greeting，corresponding to Eng－ lish＇Hello＇is ninba nuna gaganu＇Oh，you＇ve come＇．（Greet－ ings in Wargamay，as in most Australian languages，normally refer to speaker and／or addressee＇s motion to and from the place of encounter．There are no absolutely set forms，it being more in the nature of＇variations on a theme＇．One way of saying＇goodbye＇is クayba gagabali＇I must be going now＇．）

The＇A form＇of nuna can also be used to refer to an instrument，as in（217）and
（59）naga ma：l babay／nulanga bangaygu lsg－A man－ABS spear－UNMKD 3sg－INST spear－INST I speared the man with a spear．
Note that all of the other forms in the A column of Table 3.1 are restricted to transitive subject function．

From a semantic point of view we could think of the personal pronouns（with human reference）as constituting a $3 \times 3$ matrix with a gap in the 3 sg box．nuna is then a form outside this system，ranging over all numbers and all per－ sons（but with an unmarked sense＇3sg＇that does correspond to the empty box）．

Deictic verbs derived from nuga－transitive nugama－and intransitive numambi－－are described in 4.9.

What we have called the＇interrogative pronoun＇na：n－

the interrogative nominal mina that is restricted to nonhuman use (3.1.5). ja:n- effectively ranges over the set of eight personal pronouns with human reference, and over the human nominals. It can cooccur with nuna:
(60) na:nga лuna gagay

WHO-S 3sg-SO go-UNMKD
Who's that going?
Parallel to minabagun 'something' (3.1.5), John Tooth added -bagun (3.1.3) to a na:n-form to translate 'someone' e.g. na:nabadun 'someone-0'; but it was not possible to obtain corroboration of this.

We saw in 3.1.1 that nominals follow an 'absolutiveergative' paradigm. One case form ('ergative') indicates transitive subject (A) function, whereas the unmarked 'absolutive' form shows intransitive subject (S) and transitive object (O). The extra-systemic pronoun, nuga, inflects in the same way.

The remaining nine pronouns, however, inflect on a quite different pattern from nominals and funa. There are two subtypes - non-sg 1 st and 2nd person pronouns use one form for $A$ and $S$ subject functions and a different form for object function. The remaining five forms $-1 \mathrm{sg}, 2 \mathrm{sg}$, 3 du , $3 p 1$ and interrogative - have distinct forms for the three major syntactic functions $S, A$ and $O$.

Genitive pronouns can decline, the case inflection being added directly onto the forms given in Table 3.1. A genitive pronoun (and presumably also a genitive noun) functions like an adjective, and takes the normal set of nominal inflections e.g.
(61) ninungu badangu nana gungay / waga
you-GEN-ERG dog-ERG 1 sg-O bite-UNMKD shin-ABS
Your dog bit my shin
-gu forms of pronouns can have both dative and allative sense - 'he came for me', and 'he came to me'. An ablative pronoun will indicate 'motion away from', just like an ablative nominal:
(62) ŋinba gagaga naygunin You get away from me:

The locative-aversive forms of pronouns appear to have the range of usage available to locative-aversive nominals:
(63) nuna ninunda gagay He passed you by
(64) na:nunda ginba bi: cambali Who is it you're scared of?
3.4.2 PERSONAL PRONOUNS - ANALYSIS. The non-singular first and second person pronouns show the most transparent structure, with

$$
\begin{array}{lll}
\text { Roots } & \text { 1du - nali } & 2 \mathrm{du}-\text { nubula } \\
& \text { lp1 - nana } & 2 \mathrm{p} 1-\text { nura }
\end{array}
$$

The root alone is used for $S$ and $A$ functions, while $O$ and genitive forms involve inflections identical to those on nominals:
Accusative (0) -na
Genitive - - nu

We can now consider 1du dative-allative nalingu, loca-tive-aversive jalinda and ablative nalinin (and similar forms for $1 \mathrm{pl}, 2 \mathrm{du}$ and 2 pl ). If we regarded these as involving suffixes added to the root nali, the forms of the inflections would be significantly different from those on nominals -dative-allative -ngu rather than the expected -gu, locativeaversive -nda where a nominal would have -nga, and ablative -nin instead of -rin. The simplest solution is to say that the root is augmented by a stem-forming suffix -n, yielding nalin, and that nalin does take the expected allomorphs for the three oblique cases (save that the first segment of ablative -лin, which is optionally dropped after a nominal stem ending in a consonant, is obligatorily lost after a pronominal stem ending in $n$ ).
$3 d u$ and 3 pl show roots bula and dana which - like the 1du, $1 \mathrm{pl}, 2 \mathrm{du}$ and 2 pl roots - occur in many other Australian languages (see Dixon 1980a:327-62). They decline on the pattern just described with one exception - the root alone is restricted to $S$ function, and an ergative inflection -ngu (identical to that on nominals) is brought in to mark $A$ function.

1sg, 2 sg and interrogative pronouns cannot, in the same way, be given a synchronic analysis. However, reference to comparative work on a wide range of Australian languages and reconstruction of the original singular pronominal forms for an ancestor language (Dixon 1980a:339-46) does provide a diachronic explanation. Basically, the proto-language allowed all types of monosyllables (not just monosyllables with a long vowel, like modern Wargamay). The 1 sg and 2 sg roots were gay and gin respectively, and these were probably used in $S$ function; oblique cases were formed on the nominal pattern, by ergative -du (with assimilation), accusative -na and probably genitive *-gu. Thus:

| proto-forms | $S$ | $A$ | 0 | GENITIVE |
| :---: | :---: | :---: | :---: | :---: |
| lsg | nay | nay+gu | nay+na | nay+gu |
| 2 sg | gin | jin+du | nin+na | nin+gu |

Development to modern forms included (see also Dixon 1980a: 339-46): (i) dropping of -y- before -g- and -r-, probably to satisfy a phonotactic constraint; (ii) replacement of final -u by -a in the forms; this is a change that has occurred in many Australian languages, its isogloss almost coinciding with the change $*_{u}>a$ in the past tense inflection *-ru; (iii) augmentation of $S$ forms by -ba, when phonotactic constraints shifted so that monosyllabic roots which involved only short vowels were proscribed; (iv) simplification of 2 sg accusative gin+na>nina; one example of -nn- is known for modern Wargamay but this cluster is not a popular one; (v) dropping of $-g$ - from the 2 sg genitive gin+gu; this cannot be explained, although it does appear to relate to na:ntgu>na:nu in the interrogative pronoun.

Comparative work also suggests an original interrogative root $*_{n a}: n-$, which inflected on the same pattern as 1 sg and 2 sg pronouns (Dixon 1980a:372-4). There are two important differences: the change of final $u$ to a in $A$
forms has not applied to na:ndu; and the final syllable of the $S$ form na:nga is -ga, against -ba for 1 sg and 2 sg . (No explanation is known for this -ga.)

Finally, we can consider the ubiquitous 'third person singular' pronoun. Most of the forms of this pronoun are most similar to those of non-sg pronouns, with genitive involving the addition of gu to the root nuna and other oblique inflections being based on a stem nunan-. Note, however, that the root covers $S$ and 0 functions, whereas the roots of non-sg 1st and 2 nd person pronouns cover $S$ and $A$ functions.

Comparative reconstruction suggests an original 3sg form *nu in a distant proto-language, with A form *nulu. This form is found in a number of eastern languages, and in others the final vowel has shifted to a, giving 3sg A nula (see Dixon 1980a:356-62). It is possible that Wargamay 3sg A form nulanga relates to nula (which is the 3 sg form for both A and $S$ functions in Warunu) plus ergative -ngu, with the shift from final $u$ to a having applied a second time. This is, however, a fairly speculative hypothesis. (Further work may conceivably show that the Wargamay 3 sg root nuna is also related to an original *nu.)

In sum, leaving aside the A form, it will be seen that 3sg nuna inflects on a nominal pattern, save that dativeallative, locative-aversive and ablative are based on a stem derived from the root by the addition of $-n$, and not directly on the root.

Wargamay first and second person pronouns are almost identical to those of Giramay and of Nyawaygi. The only differences are (a) 2 du has root nubula in Wargamay and Nyawaygi but nubila in Giramay; (b) genitive is just -nu in Wargamay and Nyawaygi whereas Giramay has -gu after disyllabic and -nu after trisyllabic stems; (c) dative of nonsingulars is based on the accusative form in Giramay (just as dative of non-singulars is based on genitive) but on the root in Wargamay and Nyawaygi (and also in the northerly dialects of Dyirbal); (d) Nyawaygi has distinct inclusive forms of 1 du and 1 pl (involving an increment to nali and gana, which are here the exclusive forms), unlike Wargamay and Nyawaygi.

In Giramay bula functions both as the 3 du pronoun and as the number adjective 'two'. Wargamay and Nyawaygi restrict bula to pronominal function and have yaga for 'two'. bula and yaga can cooccur in an NP in Wargamay, to stress that exactly two people are involved:
(65) yaga bula ma:l bimbirigi The two men had run away (Text 5.18).
3.4.3 LOCAL FORMS. There are two deictics - 'here' (near speaker) and 'there' (distant from speaker) - that have allative, locative and ablative forms, parallel to the local cases of nominals. These are shown in table 3.2, together with the interrogative deictic 'where'.

Morphologically this is a highly unusual pattern. Most languages - in Australia and elsewhere - would have roots for 'here' and 'there' with affixes for allative, locative and ablative (locative often having zero realisation). This is what is found with the interrogative in Wargamay - alla-

TABLE 3.2-Deictic paradigm

|  | allative | locative | ablative |
| :---: | :---: | :---: | :---: |
| 'here' <br> 'there' | nagu | nagunga | yala |
| where' | wangagu | yalanga | yalan |

tive -gu, locative -nga and ablative - $n$ are added to the root wanga. But with the non-interrogatives we have suppletive forms nagu 'to here' and yala 'at here' from which 'there' deictics are obtained by adding -nga. Ablative involves the addition of $-n$ to the locative (with the -nga- in yalanga being simplified to -na- in yalanan). That is, we would expect one root for each row in Table 3.2, with inflections distinguishing the columns; but we find that suffixes derive some of the forms in the second row from corresponding forms in the first row.

These forms are very common in Wargamay and there is no doubt as to the correctness of Table 3.2. Equivalences with Giramay (which has a more usual system - Dixon 1972:57) were given by informants as a further check. Thus ( $G=$ Giramay):

$$
\begin{array}{lll}
\text { nagu }=G \text { yalu } & \text { yala }=G \text { yalay } & \text { yalan }=G \text { yanum } \\
\text { nagunga }=G \text { balu } & \text { yalanga }=G \text { balay } & \text { yalanan }=G \text { banum }
\end{array}
$$

A deictic will typically cooccur with a nominal, with which it must agree in case - an example was given at (11) above.

There is a further set of deictics that appear to have aversive function; they involve-ga, the regular locativeaversive allomorph after - , added to the ablative form yalanga, yalananga, wanganga. Thus, in a text about early massacres, Lambert Cocky said:
nayba bimbirigi/ yalanga bulimanda / gulgingu
lsg-S run-PERF HERE-ABL-AVERS policeman-AVERS scrub-ALL
I ran away, from the policeman here, into the scrub (Text 7.1)

Note also
(67) wanganga ninba bi:cambigi Where did you get frightened of? (i.e. What place were you frightened of?)

The time interrogative wangamira 'when' appears to be based on the root wanga - see 3.3 .
3.4.4 DEMONSTRATIVES. There are two demonstratives in Wargamay:

```
nunga 'this one (near speaker)'
nungagi 'that one (distant from speaker)'
```

Each has a single form and can be used only in $S$ or $O$ function. (When I tried to obtain these in A form, the informants insisted that one could only use nulanga, the A form of the 3 sg pronoun - 3.4.1).

A demonstrative can be used - alone or in an NP with a nominal - for deictic reference to any kind of person, ob-
ject or place．Thus，John Tooth was eating a mango during one elicitation session and then said，holding out the stone：
（68）nunga mayngu naģa gulbambagu／mamu yu：cilagu THIS mango－ABS lsg－A bury－PURP by－and－by grow up－PURP I＇m going to bury this mango［stone］，so that by－and－by it＇ll grow［into a mango tree］
Other examples include
runga bada walmbari This dog＇s barking
A demonstrative can occur in an NP with a 3du or 3 pl pronoun e．g．
（70）nungagi gana／nalunga yugarabali
THAT 3pl－S water－LOC swim－CONTIN－UNMKD
All those people are swimming in the water
or even with a first person pronoun－line 13 of text 7 ． Note also that nungagi miga was given as the translation of Giramay balabawal miga＇camp over there＇（cf Dixon 1972：44－5， 48）．

## 3．5 VERBS

3．5．1 PARADIGM IN W．DIALECT．A verb in Wargamay invol－ ves an obligatory root and inflection．Between these may occur one（or more）of a set of derivational affixes，i．e．

Root（＋Derivational affix（es））＋Inflection
There are two conjugational patterns，depending on whether the construction in which the verb occurs is transitive or intransitive．These are shown in Table 3．3．

Table 3．3，in fact，deals with just the $W$ dialect．Diff－ erences found in $B$ are given in 3．5．3．

The continuative allomorph－bali，added to an intransi－ tive root，derives an intransitive stem that again takes inflections from the first column．Continuative form －Igani is added to transitive roots and derives transitive stems，taking inflectional allomorphs from the second column．Comitative－ma is added to intransitive roots and derives a transitive stem，taking，an inflection from the right－hand column．Instrumental－ma effectively derives a ditransitive from a transitive form；this still takes transitive inflections．

The only morphological alternation that is not fully determined by transitivity concerns positive imperative． With intransitives this is simply－ga，but with transitive stems it is－ya after a disyllabic root ending in－i but －$\phi$ in all other cases（that is，after a trisyllabic stem ending in $-i$ ，or after any stem ending in－a）．

The Yotic Deletion Rule－iy $\rightarrow$ i／－$⿰ ⿰ 三 丨 ⿰ 丨 三 一$（ 2.6 ）plays an import－ ant role in verbal morphology．One effect of this rule is that the most frequent inflection，that we are calling ＇unmarked aspect＇，is realised as－y after a but as $\phi$ after $i$ ；thus：

TABLE 3.3-Verbal suffixes in $W$ dialect

| Conjugation: | Intransitive | Transitive |
| :---: | :---: | :---: |
| Inflections: |  |  |
| Positive imperative | -ga | $-y \approx \sim-\phi$ |
| Negative imperative | - ga | - ! ¢ a |
| Irrealis | -ma | - ima |
| Purposive | - lagu | -gu |
| Perfect | -gi | -n4 |
| Unmarked aspect | -y | -y |
| Subordinate | -nu | -nu |
| Derivations - transitivity-preserving |  |  |
| Continuative | -bali- | -Igani- |
| Derivations - transitivity-changing |  |  |
| Comitative | -ma- | - |
| Instrumental | - | -ma- |


|  | Root |  | tunmarked inflection | +perfect <br> inflection | +continuative <br> turmarked | +continuati <br> +perfect |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| wicga 'bathe' |  |  |  | gagi | gaba | wicabaligi wa:gibaligi |
|  |  |  | , | wa:gigi | wa:gibal |  |
|  | sunda | see ${ }^{\text {' }}$ | nunday | nundanu | nundalgan | nundalganinu |
|  | balmb i | \| 'smel | - balmbi | balmbinu | balmbilgan | balmbilgani |

In the case of transitive trisyllabic stems ending in -i, positive imperative thus falls together with the unmarked inflection, both being just the stem.

Sporadic syllable dropping from purposive -lagu (to give -gu), with some intransitive stems, all of them trisyllabic, is detailed in 3.5.4.

It will be noted that -nu occurs twice in the transitive column of Table 3.3. That is, perfect and subordinate inflections, which are distinct in the case of intransitive verbs, fall together on transitives i.e.


In most Australian languages -nu (or some reflex of *-nu) marks past tense; this would be closest in meaning to perfective -nu in Wargamay. (Note that in Dyirbal the relative clause inflection on verbs, -gu, appears to be taking on a perfective meaning - Dixon 1972:104).

Detailed discussion and exemplification of the inflectional and derivational suffixes is in 3.5.4-6.

There is in Wargamay just one irregular verb gi:gi- 'to sit'. In the $W$ dialect it behaves as a regular intransitive root with the following exceptions:
(i) positive imperative was consistently given as gi:giya by John Tooth, but as the expected gi:giga by Lambert Cocky;
(ii) the -gi- of the stem may optionally drop before continuative -bali. That is, gi:gibali-alternates with gi:bali(see 2.6); gi:bali is the most frequent form before non-zero inflections e.g. gi:baliga, and gi:gibali is preferred with the
unmarked inflection, which is $\phi$ after a stem ending in $i$. The paradigm of $\mathrm{gl}: \mathrm{gi}$ in W , and in Biyay, is in 3.5.3.
3.5.2 CONJUGATIONAL SETS. Verbal roots in Wargamay fall into two, mutually exclusive, sets:
[a] Intransitive e.g. gaga 'go, come', banma 'talk', wa:gi 'laugh'. These can only take the 'intransitive allomorphs', from the first column of Table 3.3. They occur only in intransitive constructions, that is, with an S NP (they cannot occur with a nominal in ergative, or with a pronoun or nominal in accusative case).
[b] the other set can be termed 'transitive' - it includes bu:di 'take, bring', muga 'eat', מunda 'see' and so on. Roots in this class can occur either in transitive constructions (with $A$ and $O$ NPs) and then take allomorphs from the transitive column of Table 3.3 , or in intransitive constructions (with just an $S \mathrm{NP}$ ) and then take suffixes from the intransitive column. Thus we can have both (with English translations exactly as given by informants):
(71) naga ma:l nundalgani I'm looking at the man
(72) nayba nundabali (ma:Indu) I'm having a look (at the man)

The syntactic consequences of this double transitivity' behaviour of what we have termed 'transitive roots' is dealt with in 4.2 , while chapter 5 puts forward a hypothesis about the diachronic development of this feature of present-day Wargamay. In the surrounding languages each root is (with very few exceptions) strictly specified for conjugation and also for transitivity; the parameters of conjugation and transitivity do not coincide in any of Wargamay's neighbours (or, indeed, in languages from other parts of Australia Dixon 1980a:378-430).

Note that although all 'transitive roots' can occur in intransitive constructions they are always more frequently encountered in transitive function - the circumstances in which a 'transitive root' is likely to occur in an intransitive construction are discussed in 4.2, 5.3.

Roots in the 'intransitive set' in Wargamay are definitely restricted to intransitive inflections, and occurrence in intransitive constructions. That is, we can have
(73) nayba wa:gibali I'm laughing
but not $*_{\text {naga }}$ ma:l wa:gilgani. Transitive stems can be derived from intransitive roots, but this process is always morphologically marked by the comitative suffix -ma. Thus:
(74) jaga ma:l wa:gimalgani I'm laughing at the man

Examination of Table 3.3 shows that transitive negative imperative and irrealis allomorphs are identical to the intransitive forms save for an initial -l-. This affix-initial - 1 also occurs in the derivational form -Igani (and in the transitive allomorph -lani of the continuative in the B dialect - 3.5.3). We can regard the - 1 - as constituting a distinct 'conjugation marker' morpheme that intrudes between a transitive stem and these four suffixes. It is certainly appropriate to do this in other Australian langu-
ages, where the conjugation marker appears before almost all verbal suffixes (Yidin is a very clear example - Dixon 1980a:382-99, 1977a:207). In Wargamay -l- is more restricted in occurrence, so that although we do prefer to recognise it as a separate morpheme the decision is a fairly marginal one. In contrast, the intransitive column can be said to have zero conjugation marker. (The -l- in -lagu, the intransitive allomorph of purposive, is probably derived from the transitive conjugation marker -l-, through a process of diachronic reanalysis - see 5.3.)

Of the 140 verbal roots in my corpus just one-third belong to the intransitive set, and are restricted to intransitive function. The remaining two-thirds belong to the 'transitive set', and can function either transitively or intransitively.

Verb roots all end in -a or -i, never in -u. It is probably significant (within the context of a comparative study of the development of conjugational systems in the Australian language family) that $56 \%$ of the intransitive roots end in $-i$, whereas only $24 \%$ of the transitive set do.

There are no monosyllabic verb roots in the $W$ dialect (di:- in $B$ is discussed in 3.5.3). Two roots in the corpus are quadrisyllabic, 30 are trisyllabic and the remainder disyllabic. 14 of the trisyllabics are intransitive, and 16 out of the 30 end in -i.

Dyirbal has just a few verbal roots ending in -u, all of them in the predominantly transitive -1 conjugation. There are two cognates in Wargamay:

Dyirbal baygu-1 'shake, wave, bash' Wargamay bayguri
buybu-l 'spit at' "raspberry" at"

In each case Wargamay has a trisyllabic root. There are altogether ten trisyllabic verbal roots in Wargamay whose third syllable is -ri-, like bayguri (but there are no further examples of a third syllable -ci-, as in buyburi, a verb form which is probably onomatopoeically based). It is possible (but of course by no means certain) that what was originally a productive affix $-r i$ has been incorporated into some modern root-forms, and that it is this which has helped to eliminate verbal roots ending in -u. (There is no affix -ri in present-day Wargamay. The Dyirbal reflexive -ríryirí~-mári is not a likely candidate since it always derives intransitive stems; of the -ri-final roots in Wargamay only half are intransitive. Similar remarks apply in the case of the verbal comitative/instrumental suffix - [i in Waruou; this always derives transitive stems Tsunoda 1974). An alternative hypothesis would be that no earlier stage of Wargamay allowed verbs to end in $-u$, and that Dyirbal originally had roots bayguri and buybuti with the modern forms being obtained by elision of the final syllable.
3.5.3 DIFFERENCES IN BIYAY DIALECT. Verbs in B are almost identical to those in W. Although the following differences are minor, they are crucial to an investigation of the historical developments that have led to the verb systems

TABLE 3.4 - The irregular verb 'to sit' in $W$ and $B$

|  | W dialect | B dialect |
| :--- | :--- | :--- |
| positive imperative | gi:giga~gi:giya | gi:ga |
| negative imperative | gi:giga | $?$ |
| irrealis | gi:gima | gi:gima |
| purposive | gi:gilagu | gi:gigu |
| perfect | di:gigi | gi:gi |
| unmarked aspect | gi:gi | gi:ginu |
| continuative stem <br> comitative stem | gi:(gi)bali- | gi:gima- |

of modern dialects (5.3). Differences from $W$ are:
[i] $B$ has, like Nyawaygi but unlike W, a reciprocal derivationat suffix -ba. This is discussed in 4.5 below.
[ii] The continuative derivational suffix is -ni in the intransitive and -lani in the transitive column. Thus:
continuativetunmarked

|  | root |  | W dialect |
| :--- | :--- | :--- | :--- |
| intransitive | wicga- 'bathe' | wicga+bali | B dialect |
| transitive | nunda | 'see' | Dunda+lgani |

It may be that the $B$ continuative goes back to *-gani, with developments *-gani>-ni in the intransitive and *-l+gani>-lani in the transitive column. (Note that-gani- 'do repeatedly' is a verbal derivational affix in Dyirbal, occurring there with verbs from both conjugations - Dixon $1972: 248$.$) The$ full form -lgani is maintained for transitive verbs in $W$; no origin is known for the intransitive $W$ allomorph -ball.
[iii] The irregular verb 'to sit' has a rather different paradigm in $B$. Whereas in $W$ the root can be taken as gi:gi-, in B the root appears to be basically just di:-. This is the only monosyllabic verb root in the language; but note that it must take an inflection that is at least one syllable long, so that each verb word has at least two syllables. (The twelve nominals and a particle that actually form monosyllabic words were listed in 2.2.)

The paradigm of 'to sit' in the two dialects is shown in Table 3.4.

In the right-hand column positive imperative and perfect/unmarked appear to involve the regular inflections -ga and -gi added to root gi:-. Other inflections are added to these forms. Thus, irrealis -ma and purposive -gu (not-lagu, the regular intransitive allomorph) are added to gi:gi-, while continuative $-n i$ is based on gi:ga. (Negative imperative and comitative forms were not obtained from Nora Boyd, the only $B$ informant, before her death in 1976).

We remarked that $-n$, the continuative suffix in $B$, may be related to -gani, the transitive allomorph in W. The form gi:gani, which could be analysed as gi:tgani, might be thought to provide support for this position. But it is not the strongest type of support, since the paradigm of $\mathrm{gi}:-\mathrm{is}$ highly irregular, and gi:ga is an independently motivated
form within it.
[iv] In $B$ the positive imperative inflection on intransitive verbs is -ga, exactly as in W. In the case of verbs functioning transitively $B$ has $-\phi$ for the positive imperative on stems ending in -a, again exactly like W. With transitive stems ending in -i, however, the inflections are quite different. Whereas $W$ has -ya with a disyllabic and - $\phi$ with a trisyllabic root, $B$ has $-\phi$ with a disyllabic root and in the case of trisyllabics it substitutes -a for the stem-final -i. Thus

|  | root |  | positive imperative in | W impe | positive erative in $B$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| intransitive | gaga | 'go' |  | gagaga |  |
|  | wa:gi | 'laugh' |  | wa:giga |  |
|  | migiri | 'wait' |  | migiriga |  |
| transitive | gunda | 'see' |  | gunda |  |
|  | bu:di | 'take' | bu:diya |  | bu:di |
|  | wagir: | 'overturn' | wadir: |  | wadira |

There are in addition just two disyllabic transitive verbs - in B only - that replace final -i by -a in the positive imperative:

| root | positive imperative |  |
| :--- | :--- | :--- |
| ma:ni 'hold in hand' | $W$ ma:niya | B ma:na |
| wugi 'give' | W wugiya | B wuga |

We can suggest that originally all -i-final transitive stems took positive imperative -ya. The affix was dropped from trisyllabic stems in $W$, while in $B$ the change:

took place. With disyllabics -ya was retained in $W$ but dropped in B.

The two odd disyllabics that undergo a vowel change can be explained historically. Some Australian languages (including Nyawaygi) have a few monosyllabic verbs, normally including (gu-~) wu- 'give' and ma:- 'hold in the hand'; these typically have imperatives wuga and ma:na and tense forms wugi, ma:ni (a full discussion is in Dixon 1980a:382430). It is likely that a recent ancestor of Wargamay had these monosyllabic verbs, and that they have - in the modern language - been reanalysed as having disyllabic roots; but the original imperative form is maintained in $B$ and now correlates well with the $-i \rightarrow-a$ rule for trisyllabic imperatives.

We could suggest that in $B$ the root of 'to sit' is simply gl:gi (as in $W$ ) and that positive imperative gl:ga is formed by the type of process just dealt with. But there are other oddities in the paradigm of 'to sit' in B (purposive gi:gigu rather than gi:gilagu, and continuative di:gani-) so that there is still need for an ad hoc analysis of this verb in terms of a root gi:-. (It is very probable that gi:is the last of a number of original monosyllabic verb roots in Wargamay which have been reanalysed as having disyllabic roots. This diachronic change, with gi:gi- taking over from
gi:-, is all but complete in $W$ - although the alternation gi:gibali~gi:bali in the continuative stem may show a relic of the original root gi:- - but has only proceeded part-way in B.)
[v] Finally, B differs from W in the association of conjugation with transitivity.

Dyirbal is typical of surrounding languages in that it has two conjugation classes, there being a statistical correlation - but far from an exact coincidence - with transitivity classes; the -y conjugation in Dyirbal has about $80 \%$ intransitive members and the - 1 conjugation around $80 \%$ transitive members. A major point of interest concerning the $W$ dialect of Wargamay is that conjugation exactly coincides with transitivity. Comparing the verbs cognate between the two languages we find that all the intransitive members of the -y conjugation in Dyirbal do, of course, fall into the 'intransitive set' in $W$; and the transitive members of the Dyirbal - -1 conjugation are in the 'transitive set' in W. But there are also two or three verbs common to the two languages that, although intransitive, are members of the -1 conjugation in Dyirbal; in $W$ these receive intransitive inflectional allomorphs. This can be illustrated with a sample inflection (purposive) of representative verbs in each language (conjugational membership in Dyirbal is shown by $-y$ or -1 suffixed to the stem; the purposive inflection in Dyirbal is -ygu onto a stem of the $-y$ conjugation and $-1 i$ onto a form from the -1 class):

## W dialect

intransitive $\begin{cases}\text { root } & \text { purposive } \\ \text { wula 'die' } & \text { wulatlagu } \\ \text { bungi 'lie down' } & \text { bungi+lagu } \\ \text { gi:ga 'tell to do' } & \text { gi:gatgu }\end{cases}$

Dyirbal
-y conjugation (intransitive)
wula-y
-1 conjugation $\left\{\begin{array}{lll}\text { (intransitive) } & \text { bungi-i } & \text { 'lie down' } \\ \text { (transitive) } & \text { giga-l } & \text { 'tell to do' }\end{array} \begin{array}{l}\text { wurposive } \\ \text { bungi+li } \\ \text { gigatli }\end{array}\right.$

It looks from this as if $W$ has reanalysed conjugational membership to coincide exactly with transitivity subclasses. That is, the 'exceptions' like bungi-1 have been transferred to the class with which their transitivity value has the strongest connection.

However, this has not happened in the B dialect. Here the intransitive root bungi takes only allomorphs from the transitive column of Table 3.3. Sample forms in the two dialects are:

|  | W aialect | B dialect |
| :--- | :--- | :--- |
| positive imperative | bungi+ga | bungi |
| purposive | bungi+lagu | bungi+gu |
| irrealis | bungitma | bungitlma |

Note, however, that John Tooth consistently gave bungi+ya as the positive imperative, parallel to his di:giya 'sit-IMP' mentioned earlier; Lambert Cocky gave bungiga and gi:giga. The slender evidence available suggests that two other
intransitive verbs take allomorphs from the 'transitive' column in $B$ (but regular intransitive allomorphs in W); these are ga:nda- 'crawl' and wala- 'ascend'; there are no cognates in Dyirbal. The only other verbs which are intransitive members of the - 1 conjugation in Dyirbal and also occur in Wargamay are Dyirbal waloga-l, W walnga- 'float' and Dyirbal galba-1, W ga:lba- 'be stuck'. These occur only with the unmarked inflection in the limited $B$ corpus; they take normal intransitive inflections in $W$ (except that the irrealis form ga:lbalma, rather than expected da:lbama, was once given by John Tooth; the other forms he gave were regular intransitive ga:lbabali and ga:lbagi, besides ga:lbay).

The inchoative verbaliser, deriving intransitive verbal stems from nominals etc (4.9.1) is -mbi~-bi~-i in Wargamay, surely cognate with the corresponding suffix -bi-l in Dyirbal. This belongs to the -1 conjugation in Dyirbal, although it does form intransitive stems. However, the inchoative suffix takes only intransitive allomorphs in Wargamay, in both W and B dialects (Nora Boyd gave ganu-mbi-g' 'broken' and magul-i-gi 'worked', for instance). It seems that that reassignment of original -l-conjugation intransitive forms to the intransitive class probably commenced with this derivational affix, which now belongs in the intransitive set in both $W$ and $B$; but for lexical verbs such as bungi- lie down' the reassignment has thus far taken place only in the W dialect.

It has already been stressed that what we are calling 'transitive roots' in $W$ and $B$ can occur with either transitive inflection (corresponding to -l conjugation endings in Dyirbal) or with intransitive inflection (corresponding to Dyirbal -y conjugation allomorphs), depending on the type of construction in which the verb is functioning. Most transitive verbs cognate between the two languages belong to the -l conjugation in Dyirbal, but there are a few verbs such as galgi- 'cook' - that are in the Dyirbal -y class. There has plainly been a shift here too. A verb like galgi- would originally have occurred only in transitive constructions, and would then have taken inflections from the first column of Table 3.3. It now takes endings from the right-hand column of Table 3.3 in transitive sentences, and when it takes endings from the left-hand column it is functioning in intransitive constructions. (A full account of the diachronic changes that can be surmised to have taken place in the development of the modern Wargamay verb system - which are presupposed by the comments above - is in chapter 5.)
3.5.4 INFLECTIONS. We will now take the seven inflections in turn, describing their form and function.
[1] Positive imperative. intransitive -ga transitive on stems ending in $-a$, $\phi$ on disyllabics ending in -i, -ya $\mathrm{W}, \phi \mathrm{B}$
on trisyllabics ending in $-\mathrm{i}, \phi \mathrm{W}$, -a B (where this -a replaces the stem-final vowel i.e. $\mathrm{V}_{1} \mathrm{~V}_{2} \rightarrow \mathrm{~V}_{2}$ )

The irregular forms of the imperative for gi:(gi)-, ma:ni-wagi-, and bungi- were described in 3.5.1, 3.5.3.

The function of imperatives follows the pattern of most other Australian languages. The (A or $S$ ) subject is normally a singular, dual or plural second person pronoun, which can freely be omitted - see (9), (11), (35), (62), (82), (85). One example has been recorded in which the subject of an imperative is a ldu pronoun (implied: inclusive):
(75) nali bari burmbiya nalugu 1du-SA stone-ABS throw-IMP water-ALL We must throw the stone into the water
[2] Negative imperative. This construction is the same as positive imperative but for the obligatory inclusion of particle naru 'don't' before the verb, and the use of inflections

$$
\begin{array}{ll}
\text { intransitive } & \text {-ga } \\
\text { transitive } & \text {-Iga }
\end{array}
$$

Examples are at (83-4) and (166) below.
[3] Purposive.
$\begin{array}{ll}\text { intransitive } & \text {-lagu } \\ \text { transitive } & \text {-gu }\end{array}$
The intransitive allomorph is occasionally shortened to -gu after trisyllabic stems. The only examples that have been remarked are duwaratgu 'stand-PURP', bandali+gu 'burst-PURP', magul+i+gu 'work-INCHO-PURP' and gi:+bali+gu 'sit-CONTIN-PURP' (see (37)). However, when elicitation was directed to these words the informants gave duwara+lagu, magul+i+lagu etc as the 'correct' forms. It seems that this sporadic elision of -la (after -ra- or -li-) is an instance of the haplologic-type syllable omission that occurs at a number of places in the grammar of Wargamay (2.6). The truncation of -lagu to -gu has only been encountered on a basically intransitive root, never with a 'transitive stem' used intransitively (if it did happen in the latter case it would obscure the difference between intransitive and transitive variants of purposive with roots from the 'transitive set').

Purposive has an important syntactic function, marking an 'in order to' complement clause - see 4.3.2-3. But purposive inflection can also occur in a main clause (that is, in the first clause of a discourse) and then indicates necessity - that the subject wants to or has to undertake some action. See (4), (51-3), (68) and:
(76) 万inba wagunda bicba!agu gulgaranga
$2 \mathrm{sg}-\mathrm{S}$ wood-LOC jump-PURP log-LOC
You' 11 have to jump over the log
(77) ŋayba gagalagu magulgu

1sg-S go-PURP work-DAT
I want to go for work
(78) mamu nayba duwaragu
by-and-by lisg-S stand-PURP
I'll stand up by-and-by
naģa nina bu:digu mamu / ointa migirilagu naygungu /
1sg-A 2 sg-0 take-PURP by-and-by 2 sg-S wait-PURP 1 sg-DAT
magulgu
work-DAT

I'll take you by-and-by. You should wait for me (and I'll take you) for work.

Purposive can also be used to indicate ability, as in (7).
[4] Irrealis.

$$
\begin{array}{ll}
\text { intransitive } & -\mathrm{ma} \\
\text { transitive } & - \text { Ima }
\end{array}
$$

This inflection can be used on the verb in a main clause for unmarked reference to the 'future' e.g. (48), (230) and:
(80) Q - nubula bulgugaman wangamira gagama 2du-SA wife-gaman WHEN go-IRREAL When are you and your wife going?

A - nirwara nali gagama We'11 go tomorrow
(81) nayba na: walama

1sg-S NOT ascend-IRREAL
I'm not climbing (any more, because I'm tired)
It is also, with an 'apprehensional' sense, used to refer to something unpleasant that might happen; a -ma clause is then often subordinated to a main clause (which will typically be in positive or negative imperative - or in the unmarked - inflection), indicating action that should be taken to avoid this unpleasant possibility e.g. (125) and
(82) 万inba mu:cambiga /bulimandu jundalma

2 sg -S hidden-INCHO-IMP policeman-ERG see-IRREAL
You hide, lest the policeman see (you)!
jaru gilwalga / ba:dima
DON'T kick-NEG IMP cry-IRREAL
Don't kick (him) lest (he) cry!
(84) naygu bundurun naru ma:nilga / nibungu nina

1sg-GEN-ABS bag-ABS DON'T touch-NEG IMP ribu-ERG 2sg-0 gungalma bite-IRREAL
Don't touch my bag, or the Nyibu (a 'mythical spider', who is supposed to punish some types of wrongdoing) might bite you:

Note that if there is an NP common to main and subordinate clauses, and if it is in $O$ or $S$ function in each clause, it can be deleted from the second clause, as in (82), (83) and (125).

A verb in irrealis inflection can be used to explain why an instruction is not followed:
$\begin{aligned} \text { (85) A: Dinda nanba } / B: & \text { maya nana nundalma } \\ \text { 2sg-A follow-IMP } & \text { No 1sg-0 see-IRREAL } \\ \text { A: You follow (him): } & \text { B: No, (he) might see me. }\end{aligned}$
See also text 8, line 6 and text 9 line 3 . There is a close semantic connection between this sense of irrealis and the aversive nominal inflection - 3.1.1, 3.1.5.

Dyirbal and Yidin each has a verbal suffix that has an exclusively 'unpleasant' meaning - corresponding to (82-5) here. (The forms are -bila~-ba in Dyirbal and -di in Yidin Dixon 1972:112-3, 1977a:350-7.) Wargamay -ma~-lma refers to 'something that might happen and should be avoided' in more than half its occurrences, but it can also have a straightforward predictive function, as in (48) and (80-1) and it is in view of this that we name it 'irrealis'. (For the corresponding suffix, -ma, in Nyawaygi the straightforward future meaning is rather more frequent than the 'undesirable' sense. It appears that there is a gradual shift in the semantic effect of this category as one proceeds south from Yidin and Dyirbal through Wargamay to Nyawaygi.)

Any action in the future must be referred to by one of the four verbal inflections we have described thus far. Commands and instructions involve the positive or negative imperative. An action that the subject is likely to have volitional control over will be shown by purposive inflection - something he wants to do, or has to do to fulfil some social obligation or physiological need. An action that is outside the sphere of control of the subject - something that just 'might happen', a simple prediction - is shown by irrealis.

There appears to be some overlap of meaning between purposive and irrealis. Thus, the English sentence 'I'll go by-and-by' could be rendered by either of
(86) mamu nayba gagalagu
(87) mamu nayba gagama

But there can be a difference in meaning between these two sentences: (86) could indicate that the speaker has a reason for going soon, whereas (87) would suggest that he might take it into his head to depart, although there is no real need to.
[5] Perfect.

| intransitive | $-g i$ |
| :--- | :--- |
| transitive | $-g u$ |

This inflection indicates that some action is irretrievably finished. Thus gagay - unmarked inflection on gaga 'go' - can be used to indicate that someone has gone away; in contrast, the perfect gagagi suggests that he has gone away for good (with the implication that he may never return). There is a tendency for verbs in perfect inflection to be referring to an event in the distant past (a few days or longer ago) but this is not necessarily the case.

Note the contrast between a shout of discovery (involving unmarked inflection on the verb):
(88) naga nunga baygi gaymbay I've found this bag
and a narrative recounting a past discovery (with perfect inflection):
(89) gu:naгa daymbanu nunga baygi
[I] found this bag a long time ago

The meaning of a perfect form can often be brought out
by comparison with a continuative (in unmarked inflection) e.g.
(90) wagun gandabali
wood-ABS burn-CONTIN-UNMKD
The wood is burning
(91) nupa miga gandagi

3sg-SO camp-ABS burn-PERF
The camp has all burnt up
and see (101-2) below.
Perfect inflection is frequently used with non-durative verbs e.g. bitbagi 'jumped (with fright)', dagigi'fell down', wulagi 'died'. However, it can also be used with durative verbs, as in (91).

Sequence of actions can be shown by the use of perfect, in conjunction with unmarked inflection. Thus, in
(92) bulimandu nana wunay / nayba bimbirigi
policeman-ERG 1 sg-O search-UNMKD 1sg-S run-PERF
The policeman searched for me; but I had run away.
the speaker indicates that he had left a given locality before the policeman commenced to search for him there.

As a final illustration, an informant gave for ma:ni, in unmarked inflection, the gloss ' I grab something, catch hold of it' but for the perfect ma:nisu he gave 'I bought it up', plainly showing that the action is finished.
[6] Unmarked aspect, has realisation -y with all verbs (the -y being eliminated after $i$ by the yotic deletion rule, 2.6).

This is the most frequent verbal inflection in Wargamay and can most simply be described as complementary to the four 'future' possiblities (imperatives, purposive and irrealis) and to perfect. It can, in addition, be used where any of the three non-imperative and non-subordinate inflections are possible e.g. 'he died' could be either nuna wulagi or nuna wulay, and 'I'll go' might be nayba gagama, nayba gagalagu or just nayba gagay.

It will be noticed that Wargamay does not have anything that could be referred to as a tense system. It is, instead, possible to make a positive aspectual or modal specification by use of perfect, irrealis, purposive, etc inflections. But if this is not considered necessary, or if none of these choices would be appropriate (e.g. for an action begun in the past and continuing into the present) then the verb is suffixed by the 'unmarked aspect' -y . (Wargamay does, of course, have lexical time qualifiers, for explicit reference to points in the past and future, or to the present - 3.3.)

Verbs in -y inflection can refer to past, present or future time:

```
ganumbul nayba gagay
earlier on today lsg-S go-UNMKD
I went earlier on today.
nirwara nayba nagumbi
tomorrow lsg-S HERE-INCHO-UNMKD
```

I'11 come tomorrow
An example of present time reference is (60) above.
-y is the normal inflection for narratives - see texts 5-9.
[7] Subordinate -nu. This suffix marks the verb in a relative clause. A full discussion of its syntactic possibilities is in 4.4.
3.5.5 TRANSITIVITY-PRESERVING DERIVATIONAL SUFFIXES. There is one frequent and well-attested transitivity-preserving suffix - the continuative. Two other affixes, -lga- and -yandi, that have only been encountered in a handful of examples, are mentioned under [2], [3] below.
[1] Continuative.

```
intransitive -bali W -ni B
transitive -Igani W, -lani B
```

This is a very common suffix, being followed in the overwhelming majority of cases by the unmarked inflection (realised as zero after stem-final -i). -bali~-Igani etc then indicates either that an action is now taking place and has a fair duration ('present continuous') or that the subject typically performs this action ('habitual') e.g. (49), (70) and
(95) nayba nalunga guwaraball/ I'm standing in the water. nalu gldul The water's cold.
(96) minagu nuna nagaram guyibali
what-DAT $3 \mathrm{sg}-\mathrm{So}$ sma11-ABS cry-CONTIN-UNMKD What is the child crying for?
(97) gagan gi:dindu mugalgani grass-ABS wallaby-ERG eat-CONTIN-UNMKD Wallabies eat grass
(98) nulanga naygu mugalgani He [always] eats my [food]

See also (182) below. And note that yaraman bimbirini 'horseABS run-CONTIN-UNMKD' was translated as 'that's a fast horse'.

The contrast between a verb with the continuative su-- ffix and one without is brought out by an informant's translations for:
(99) nulanga nana nundalgani 'He stand there one place watching me'
(100) nulanga nana nunday 'He only just seen me there, he went away'

An important contrast is between continuative (plus unmarked inflection) and perfect inflection, as in (90-1) and:
(101) maya nayba na: buyabali No, I don't smoke
(102) maya nayba na: buyagi No, I never smoked
-bali~-Igani etc can refer to an action performed a number of times in quick succession e.g. minbalgani 'hit and hit and hit and hit...' It can also be used to indicate an habitual association of actions. Thus, in Text 7, Lambert

Cocky tells how about the turn of the century his tribesmen were hunted and shot at by the 'native police'. He uses a series of verbs, all in the continuative form - a black tracker would show (milbalgani) the policeman the tracks of the Wargamaygan, the policeman would follow (nanbalgani) them, and then shoot (bungalgani) at the Aborigines.

A verb with continuative plus unmarked inflection can refer to the present, the past or the future. Thus nuna wunabali was normally glossed 'He's walking about now' but an informant pointed out that it could refer to a person who was going to set out soon (and could be specified more exactly by insertion of an appropriate time qualifier 3.3).

Although continuative is normally followed by the unmarked inflection it can take the full range of verbal inflections. It is followed by purposive in (37), by imperative in (103) and by perfect in (104):
(103) di:baliga yalanga mamugu
sit-CONTIN-TMP THERE by-and-by-UNTIL
Sit down there for a while:
(104) minagu ninda gundalganinu nulmburu

WHAT-DAT 2sg-A see-CONTIN-PERF woman-ABS
Why did you keep on watching that woman? [A wife berating her husband]

Examples of -bali~-Igani etc with the subordinate inflection are in (186) and (189) of 4.4. No non-zero inflections were recorded following $B$-ni~-lani in the limited corpus obtained from Nora Boyd.
[2] -Iga. In Text 7 (lines 8 and 15) Lambert Cocky twice said wuna-lga-y, suffixing -lga- to the transitive root wuna 'chase'. He explained that it meant 'chase a lot of people' (thus corresponding in meaning to the verbal affix -ga-in Dyirbal - Dixon 1972:249-50). However when the text was replayed he seemed to prefer wunalgani over wunalgay.

Other informants were not happy with -Iga- as a Wargamay suffix, and gave instead -bali~-Igani etc forms. When elicitation was directed to this point Lambert Cocky did give wunalgalgani nulanga bulimandu 'The policemen are chasing [Aborigines] all the time', involving -lga- and -lgani-; but he did not use -Iga spontaneously on any other occasion.
-lda-may be an intrusion from Giramay or, speculatively, a derivational affix that was used in the now-extinct Hinchinbrook Biyay dialect.
[3] -yandi. In the texts recorded by La Mont West Jr from Jimmy Johnson (1.6) there are half-a-dozen occurrences of a verbal affix -yandi-; in every case but one it is followed by -may (that is, presumably comitative -ma- plus unmarked inflection $-y$ ). Of my informants Lambert Cocky recognised this form but did not use it himself (preferring -bali). -yandi (which is not similar to any Dyirbal affix) may have occurred only in Hinchinbrook Biyay. Examination of the glosses given by Jimmy Johnson suggests that its meaning may possibly have been 'away', 'going' e.g. bimbiriyand: 'run away', gagayandimay 'take away'. Alternatively it
could conceivably have been the Hinchinbrook Biyay equivalent of -bali~-lgani etc.
3.5.6 SYNTACTIC DERIVATIONAL SUFFIXES. There are three affixes that change the syntactic function of a stem to which they are attached:
[1] comitative -ma-, added to an intransitive stem derives a transitive stem. Discussion and exemplification is in 4.7.
[2] instrumental -ma-, added to a transitive stem derives a stem that still takes transitive inflections, but functions ditransitively - see 4.8 .
[3] in $B$ only there is a reciprocal suffix -ba. Details are in 4.5 .

Just three verbs have been recorded with both a transi-tivity-preserving and a syntactic derivational affix comitative -ma- followed by continuative -Igani. One example was quoted at (74), another is at (207), and the third is bayibayimalgani 'REDUP-be tangled up-COMIT-CONTIN-UNMKD' i.e. 'keep tangling [something] up'.
3.5.7 REDUPLICATION. Verbal reduplication is used very sparingly. It appears to involve repetition of the first two syllables of the root and to indicate that an action is repeated over and over again. For example, with verbal roots gaga 'go' and bayguri 'shake':
(105) Jayba gagagagagi I kept on going and going
(106) bada nuna baygubaygurigi gungiri
dog-ABS 3sg-SO REDUP-shake-PERF tail-ABS
The dog swished its tail (Literally, the dog's tail swished)

### 3.6 POST-INFLECTIONAL AFFIXES

There are a number of affixes that follow inflections.
Only two or three examples of each have occurred. They appear not to have any clear semantic or syntactic effect but rather to involve a type of stylistic emphasis. These affixes are:
-gan - see Text 6 lines 10 and 16;
-ban e.g. minaguban 'I don't know' from minagu 'what-DAT';
-bi e.g. nungabi 'Will this one do?' from demonstrative nunga'this';
-bal - occurred in the texts given by Jimmy Johnson to La Mont West
Jr. Its meaning and function are not understood.

## 4. SYNTAX

### 4.1 SIMPLE SENTENCES

4.1.1 CORE. Each sentence must involve a 'core' of obligatory elements in order to constitute a complete semantic unit. There are two types of core configuration:

TABLE 4.1-Types of case marking.


Intransitive construction - NP in 'intransitive subject function' (S) and VC showing intransitive inflection;
Transitive construction - NP in 'transitive subject function' (A), NP in 'transitive object function' (O) and VC showing transitive inflection.
Here NP (noun phrase) indicates a number of nominal and/or pronominal elements, and VC (verb complex) is one or more verbs (agreeing in inflection); details of NP and VC composition are in 4.1.3-4.

Different parts of speech have different ways of marking the three core syntactic functions, $S$, A and O. Representative forms are shown in Table 4.1.

In column i non-singular first and second person pronouns have a single ('nominative') form for $S$ and $A$ functions, and a different marked form - involving the 'accusative' suffix -na-for 0 function. This is usually referred to as a 'nominative-accusative' pattern of inflection. Thus:
(107) jali gagay We two are going
(108) rubula gagay You two are going
(109) nali rubulana nunday We two are looking at you two
(110) nubula nalina nunday You two are looking at us two

At the opposite extreme, iii, nominals (nouns and adjectives) and what we are calling the 3 sg pronoun have one form ('absolutive case') for $S$ and $O$ functions, and a marked form ('ergative case') for A function. Examples of sentences involving forms that inflect in an 'absolutive-ergative' pattern are:
(111) nuja gagay

It is going
(112) ma:l gagay

The man is going
(113) rulanga ma:l gunday It is looking at the man
(114) ma: Indu runa nunday The man is looking at it

In the middle of the diagram, at ii, we find that there exist distinct forms for all three functions; this applies to $1 \mathrm{sg}, 2 \mathrm{sg}, 3 \mathrm{du}, 3 \mathrm{pl}$ and the interrogative pronoun. (A
general semantic account of 'split' case systems, which perfectly covers the Wargamay situation, is in Silverstein 1976).

Sentences can, of course, mix NPs of all these types. Consider for instance:
(115) nali ma:l nu

Now gunda- 'see, look' can occur with transitive or intransitive inflections. -lma identifies it as transitive in this instance (see Table 3.3 in 3.5.1) and we would then look for an A NP and an O NP. We know that the form nall can be used for $S$ or $A$ function and ma:l for $S$ or $O$ function. Hence nali must here be $A$ and ma:l 0 , so that (115) can only mean 'we two will look at the man'.

There is a possibility of ambiguity here, due to the free occurrence of 'transitive roots' with transitive or intransitive inflections, and to the fact that two of the seven inflections have identical form in intransitive and transitive conjugations (3.5.1). Suppose that the verb were in unmarked inflection, which is -y irrespective of transitivity. Then:
(116) nali ma:l junday
could be taken as transitive, like (115) - 'We two are looking at the man'. Or (116) could be taken as intransitive with a single $S$ NP involving both nali and ma:l -'we two men are looking'.

Note that this ambiguity could only happen with a 'nominative' non-singular first or second person pronoun, and with the verb in unmarked (or possibly in subordinate) inflection. 1sg and 2 sg pronouns have distinct forms for S and A functions, so that corresponding to the two senses of (116) we have two distinct sentences:
(117) nada ma:l punday $I$ am looking at the man
(118) nayba ma:l junday $I$, a man, am looking.

Further discussion, explaining the two interpretations of (116), is in 4.2 .
4.1.2 SYNTACTIC AND LOCAL EXTENSIONS. To the obligatory core members of a sentence (whether transitive or intransitive) can be added one or more NPs indicating, for instance, the purpose (dative case) or cause (ablative case) of the action:
(119) nuna naygungu gagabali He's coming for me

See also (16), (77), (79). Purposive NPs are discussed further in 4.2, 4.3.

Other syntactic extensions of the core are an aversive NP indicating something that is feared, as in (6), or an NP referring to some instrument that is used (see 4.8.1).

There are also local extensions, indicating motion 'to' or 'from' or rest 'at' some place. Thus (75), (76) and:
(120) nayba gagay nalugu I'm going to the water (river)
(121) gilganin gu:ngigi gagara
hole-ABS emerge-PERF possum-ABS

A possum came out of the hole
(122) jaģa gagaranga gaga buyngari
lsg-A dillybag-LOC child-ABS hang up-UNMKD
I hung the baby up in a dilly-bag.
Further examples were given in the discussion of nominal cases - 3.1.1.
4.1.3 NP STRUCTURE. It appears that an NP, whatever its syntactic function, can involve any collection of nominals, deictics, pronouns, so long as semantic plausibility is preserved; every constituent in the NP must bear the appropriate case marking. Thus, we encounter noun plus adjective:
(123) naga bigal gagargagar nu:may

1sg-A bark-ABS rough-ABS feel-UNMKD
I felt the rough bark
and pronoun plus adjective, as in:
(124) naga nuna bu:di / namiringu naga mugagu
lsg-A 3sg-SO take-UNMKD hungry-ERG $1 \mathrm{sg}-\mathrm{A}$ eat-PURP
I took it, I'm hungry so I'll eat it
In (124) the 'transitive subject' NP involves the ergative form of namici 'hungry' and the A pronoun naga 'I' (the translation provided is a fairly free one).

An NP can involve two nouns, as wagun 'tree, wood' plus dulgara 'log' in (76); an example of an NP with two pronouns is an 'inclusive' combination such as nali ginba - see (4) and 3.4.1. A noun and a pronoun can cooccur, as in (116) and (118). In (65) the NP involves a noun ma:! 'man', an adjective yaga 'two' and the 3du pronoun bula; there is a similar structure in line 17 of text 9 .

The so-called 'third person pronoun' nuna appears to be able to feature in an NP with any other constituents (3.4.1). The demonstratives are restricted to $S$ or 0 function (3.4.4).

In 4.6 we discuss the occurrence within an NP of an embedded genitive NP (normally indicating alienable possession), or of an apposed 'part' noun (inalienable possession).

Note that although the subject of a transitive sentence is normally animate, it can be inanimate, as:
(125) miganga dumbaga / yugandu bargilma
house-LOC enter-IMP rain-ERG wet-IRREAL Come into the house, lest the rain wet you:
(126)
nalungu nana gu:gay
water-ERG lsg-O wash away-UNMKD
The water (i.e. flood) washed me away
4.1.4 VC STRUCTURE. Although most simple sentences involve a single transitive or intransitive verb, the VC can involve more than one verb; these must have been the same inflection (which implies that they must, of course, agree in transitivity). Typically, the second element in a VC may be a verbalised adjective, providing adverbial-type modification of the lexical verb. See (194), (232-3),
(238)
and
(127) galgutu nulanga wi:gimay ganday meat-ABS 3sg-A no good-CAUS-UNMKD cook-UNMKD
She cooked the meat badly (glossed by the informant as 'She burnt the meat')
4.1.5 MINIMAL SENTENCES. Like other Australian languages, Wargamay does have a minor sentence type which involves no verb. This typically involves an adjectival or locational 'comment. (in absolutive case) on a nominal or pronominal 'topic' (which is in $S$ function). See the second clause of (95) and:
(128) गalu bamba The water's (too) far away
(129) nayba gidu: I'm cold
4.1.6 ORDER OF ELEMENTS. Wargamay shares with Dyirbal the property of allowing great freedom of ordering - not only of words within a phrase and phrases within a sentence, but also of words within a sentence. (In contrast, the order of morphemes within a word is quite fixed.) Little textual material is available so that it is not possible even to suggest ordering preferences. The wide range of possibilities encountered can be seen from examination of the examples quoted throughout this grammar (leaving aside sentences (130-41), (143-155), (274-8), (284-7) in some of which the word order has been normalised in order to draw attention more easily to particular grammatical correspondences).
See also 3.3.

### 4.2 CORRESPONDENCES BETWEEN TRANSITIVE AND INTRANSITIVE CONSTRUCTIONS INVOLVING TRANSITIVE VERBS

We mentioned in 3.5 that each verb root falls into one of two classes. Intransitive verbs can only occur in intransitive constructions - with a single $S$ NP - and must take intransitive inflections, from the first column of Table 3.3. Thus we can have yugarabali 'is swimming' but not *yugaralgani. (Transitive stems can be derived from intransitive roots by suffixing the comitative -ma; this takes transitive inflections. See 4.7.)

A root from the 'transitive set' can occur in a transitive construction - with A NP and O NP - taking an inflection from the transitive column, or in an intransitive inflection - with just an $S$ core NP - taking an intransitive inflection. In neither case is any syntactic derivational affix required.

The NP accompanying a verb from the intransitive set must involve forms from the 'S row' of Table 4.1:
(130) rubula yugarabali You two are swimming
(131) nayba yugarabali I am swimming
(132) nuna ma:l yugarabali The man is swimming

In a transitive construction one NP must involve forms from the 'A row' of Table 4.1 and one NP forms from the ' 0
row':
(133) nubula nana nundalgani You two are watching me
(134) naga nuna ma:l nundalgani I'm watching the man
(135) nulanga ma:Indu nubulana The man is watching you two oundalgani
An NP like nuna ma:l occurs in $S$ and in $O$ functions. Its precise function in any particular sentence can be inferred from the pronominal forms that may fill the same slot. Thus nuna ma:l in (132) is interchangeable with nubula and nayba, indicating $S$ function; and in (134) it is interchangeable with nana and nubulana, indicating $O$ function. Similarly, whether a non-singular first or second person pronoun like nubula is in $S$ or $A$ function in a particular sentence can be inferred from comparison with singular pronouns and nominals that can occur in the same slot.

We can now turn to intransitive constructions involving transitive verbs. There are basically two varieties.
[1] Subject effectively identified with object, reflexivetype meaning. Here, if the agent does something to himself, an intransitive construction will be used. Often a bodypart noun - referring to the effective 'object' - will be included in the S NP, apposed to the head noun or pronoun (in an 'inalienable possession' construction - 4.6.2). Thus, corresponding to transitive
(136) nada wagun gandanu

1sg-A wood-ABS burn-PERF
I've burnt the wood
(137) ma:Indu gagan gi:balgani
man-ERG grass-ABS scratch-CONTIN-UNMKD
Man is scratching up grass
(138) naģa galgucu gunbay

1sg-A meat-ABS cut-UNMKD
I've cut the meat
we have the intransitive constructions, with reflexive-type meaning:
(139) jayba mala gandagi

1sg-S hand-ABS burn-PERF
I've burnt my hand
(140) ma:l gambara gi:bali
man-ABS body-ABS scratch-CONTIN-UNMKD
Man is scratching his body
(141) nayba bingan gunbay
lsg-S foot-ABS cut-UNMKD
I've cut my foot
and see (106). In each of these sentences the body-part noun could be omitted - thus nayba gandagi 'I've burnt myself;, ma:l gi:bali 'Man is scratching himself' and nayba gunbay 'I've cut myself' are all perfectly acceptable Wargamay sentences.

Note, though, that an intransitive construction is not obligatory for describing someone doing something to himself
(although it does seem to be preferred). Instead of (141) one could use a transitive construction

> naga gunbay bingan naygu
> lsg-A cut-UNMKD foot-ABS lsg-GEN
> I've cut my foot

Here the O NP has bingan 'foot' as head, modified by the possessive pronoun naygu 'my' (see 4.6.2).

In the $W$ dialect, reciprocal sense is also shown by using a transitive verb in an intransitive construction, with a plural $S$ NP. Examples are given in 4.5.
[2] Distinct subject and object. For most intransitive constructions involving a transitive verb the subject and object are quite distinct, just as in a normal transitive construction. The A NP in the corresponding transitive sentence becomes the intransitive $S \mathrm{NP}$ and the transitive $O \mathrm{NP}$ now normally takes on ergative-instrumental inflection. Thus:

| (143) Transitive naga gungul mugalgani |  |
| ---: | :--- |
|  | Isg-A vegetables-ABS eat-CONTIN-UNMKD |
|  | I'm eating vegetables |

(144) Intransitive nayba gungulndu mugabali
lsg-S vegetables-ERG/INST eat-CONTIN-UNMKD I'm having a feed of vegetables
There is at most a very slight difference in meaning between (143) and (144), shown by informants' glosses 'I'm eating'/ 'I'm having a feed' (and 'I'm looking/'I'm having a look' for (71-2) in 3.5.2). The reasons for having 'deep transitive subject' in surface $S$ function are most frequently syntactic; this can help satisfy the complementation and subordination rules of Wargamay, which work in terms of identity of $S$ and $O$ NPs (never A NPs) between clauses. Discussion of these complementation and subordination processes is in 4.3, 4.4.

Note that most transitive verbs can occur in both type [1] and also type [2] of intransitive constructions. Thus, in addition to (143-4) we can have the reflexive construction:
(145) nayba (mala) gungabali I'm biting my (hand)

In (143-5) the transitivity was immediately apparent from the form of the singular pronouns (quite apart from the form of the verb) - naga is only used for $A$ and nayba only for $S$ function. But where both NPs involve just nominals, their function can be harder to determine. Take, for instance, the $B$ sentence
(146) da:bungu yimbur mugani
fish-ERG pelican-ABS eat-CONTIN-UNMKD
Leaving aside any extra-linguistic knowledge we may already have concerning which of pelicans and fish eat the other, let us determine this from syntactic analysis. If this were a transitive sentence we would expect the A NP to be in ergative case and $O N P$ to be in absolutive. If it were
intransitive then $S$ NP (corresponding to transitive A) should be in absolutive and the NP which corresponds to transitive 0 should be in ergative-instrumental inflection. That is, the form of the NPs is perfectly compatible with a transitive interpretation 'fish eat pelicans' or with an intransitive interpretation bearing the opposite meaning 'pelicans eat fish'.

It is in fact the form of the verbal suffix that resolves this difficulty. The continuative suffix (in B) is -lani in the transitive conjugation and $-n i$ with intransitives (3.5.3). Thus yimbur is to be identified as $S \mathrm{NP}$ in (146) and the sentence translated as 'pelicans eat fish'.

Note, though, that (146) would involve a syntacticallyirresolvable ambiguity if the verb had just unmarked inflection, since this is -y for both transitive and intransitive conjugations. This relates to our comments in 4.1.1 on the ambiguity of (116).

Now in an intransitive construction involving a transitive verb, if the verbal inflection is anything other than purposive, the 'deep object' will normally take ergativeinstrumental inflection, as in (144) and (72).

But if the verb is in purposive inflection (in a main clause or in a subordinate clause) then the 'deep $O^{\prime}$ NP can take either ergative-instrumental or dative case inflection. Thus corresponding to transitive
(147) ŋali biya gannagu We want to drink beer
either of the intransitive alternatives
(148) gali biyangu gannalagu $<=(147)>$
(149) nali biyagu gannalagu <=(147)>
is acceptable. Whereas with an inflection other than purposive, the transitive
(150) 万ali biya gannalgani We're drinking beer
has a single corresponding intransitive:
(151) nali biyangu gannabali $<=(150)>$
(Most of these constructions are exemplified in text 5.)
This is one example of the strong syntactic connection that exists in Wargamay between nominal dative inflection -guand verbal purposive -lagu~-gu. The formal similarity between these suffixes recurs in many Australian languages so that it seems likely that they do have a common genetic origin (cf Capell 1956:77-8, Dixon 1972:11, 141-7, 1976b:42182).

In fact, more than half the occurrences of transitive verbs in an intransitive construction are with purposive inflection, often as the second clause of a conjunction ' $X$ in order to $Y$ ' where purposive marks the 'in order to' relation between events (see 4.3).

All the examples we have given thus far of transitive verbs in an intransitive construction have involved a nominal 'deep 0'. We can now ask what happens in the case of a pronominal transitive object, as in
(152) ninda nana na:ra

2sg-A 1sg-O listen-IMP
You 1isten to me!
There is no ergative-instrumental inflection of pronouns so that we cannot form an intransitive correspondent of (152) along the lines of (143-4). It seems, in fact, that dative can be used in this instance, even though the verbal inflection is not purposive:
(153) ninba naygungu ja:raga <=(152)>

In another instance locative was used to mark a pronominal 'deep $O^{\prime}$ NP in an intransitive construction:
(154) transitive

```
yugandu nana bargilgani
rain-ERG 1sg-O wet-CONTIN-UNMKD
Rain is falling on me.
```

(155) intransitive yugan gaygunda bargibali rain-ABS 1sg-LOC wet-CONTIN-JNMKD <=(154)>
Note that the A form of a pronoun can not be used for the 'deep $0^{\prime}$ NP in a transitive sentence. That is, *oinba naga na:raga and *yugan naga bargibali (with the sense 'the rain wet me') are totally unacceptable. naga can only be used in an NP that is in surface as well as deep 'transitive subject function.

Confronted by (146) the reader may have wondered why it could not be called a special type of transitive construction - after all it does have a subject and an object, and formal marking of absolutive and ergative-instrumental inflections. The reasons for calling it 'intransitive' are
(a) the 'subject' NP in a construction like (146) is always chosen from the middle row in Table 4.1, involving 1sg nayba and 2 sg ginba (forms that only occur in S function for intransitive sentences);
(b) whereas a nominal in $A$ function in a transitive sentence must be in ergative case and one in $S$ or 0 function must be in absolutive case, the 'deep $O^{\prime}$ ND (ga:bu) in a sentence like (146) can be in ergative-instrumental or dative or even in locative case;
(c) the suffixes available to the verb in sentences like (146) are all from the intransitive column of Table 3.3; these are the inflectional allomorphs that must be used with intransitive roots like yugara 'swim' and wa:gi 'laugh'.

A sentence will normally be expected to have the full set of core elements (4.1.1). Although some of these may be deleted in running texts, in elicitation informants wou1d tend always to supply an A NP and an O NP for a transitive sentence, and so on. In contrast, the 'deep O' NP in an intransitive construction need not be stated at all. In fact a transitive verb is sometimes used in an intransitive construction simply because the speaker does not want to, or cannot, specify the 'object'. Contrast:
(156) nulanga bada nundalgani He is looking at the dog
(157) nuna jundabali He is looking around

In this way, the 'deep $O$ ' $N P$ in an intransitive construction behaves like an 'extensional' (4.1.2) and not like a core NP. (Compare nayba gunday in line 17 of Text 5 with naga gunday guyngan in line 7.)

In the discussion so far we have implied that the $S \mathrm{NP}$ in an intransitive construction is always coreferential to the A NP in the corresponding transitive construction (involving the same transitive root). There is just one known exception to this generalisation - gumba can mean 'go in' or 'put in' e.g.
(158) nuna bada gumbagi balganda

3sg-SO dog-ABS go in-PERF house-LOC
The dog went into the house
bada gaga gumbay balganda
dog-ABS 1sg-A put in-UNMKD house-LOC
I put the dog into the house

Note that the $S$ NP in (158) is coreferential to the $O$ (and not the A) NP in (159). Since this is a unique example we can perhaps suggest that there are two homophonous verbal roots - intransitive gumba 'go in' and transitive gumba 'put in'. We would then, of course, expect the transitive root to be able to occur in an intransitive construction in the normal way. But in fact
*(160) nayba nulanga badangu gumbagi
appears not to be acceptable. We can put this down to 'interference from the homonymous intransitive root, as in (158); to avoid the possibility of ambiguity it seems that the transitive root dumba- can only be used in transitive constructions.

We have said that all or almost all 'transitive verbs' can occur in transitive or in intransitive constructions. In fact, each of them functions transitively the majority of the time, this being the unmarked construction type for 'transitive verbs'. They occur in intransitive constructions for specific reasons - to indicate reflexive meaning, to put the 'deep $A^{\prime}$ NP into surface $S$ function in order to satisfy coordination and subordination constraints, to avoid having to specify the 'object', or for reasons of semantic or stylistic emphasis. About half the transitive roots collected did appear in both transitive and intransitive construction types; checking a sample of the remainder suggests that almost all of these also have the potentiality of occurring in intransitive constructions (with, potentially, any intransitive inflection).

In fact, some transitive verbs commonly occur in intransitive constructions, others do so occasionally, and others almost never do. This is simply a function of their semantic nature, and consequent syntactic behaviour. A verb like gi:ba- 'to scratch' will often be used reflexively (and note that the pair of roots giba-y/giba-l 'scratch' is one of only five known intransitive/transitive pairs in Dyirbal see 5.1 .2 and Dixon 1972:315-6); and with verbs like junda'to see,look' na:ra- 'to hear, listen', baya-'to sing', buya-
'to blow' and muga- 'to eat', the speaker occasionally may not wish to specify an object. Other verbs typically occur in complement clauses - juni- 'to hunt for' often occurs in sentences like 'go to hunt for animals' - and will then take the intransitive purposive inflection lagu. But gi:ga- 'tell to do, let do' has none of these properties - it has never been encountered used reflexively, the object is always specified, and it tends to occur in the main clause (not the subordinate clause) of a complement construction (e.g. 'tell him to catch animals'). It is thus quite natural that gi:gashould not have been encountered in an intransitive construction, and could not be elicited in one. Another verb that has never been heard in an intransitive sentence - and could not be elicited in one - is wugi-'give'.

### 4.3 COMPLEMENTS

4.3.1 DATIVE AND PURPOSIVE. In his brief comments on the grammar of Wargamay, Lumholtz (Among Cannibals, 1889:308) singled out for special mention the suffix -gu:
'The suffix go literally means "with regard to", and is usually added to nouns to give them a verbal meaning, but it is also sometimes added to verbs. The question Wainta Morboro? - that is, "Where is Morbora?" can be answered by saying only tityengo (he has gone hunting tityen) (wallaby), (literally, with respect to wallaby); or, for example, mittago he is at home (literally, with regard to the hut). Mottaigo means "he is eating" (literally, with regard to eating). "Throw him into the water," is expressed simply by ngallogo. As is evident, this is a very convenient suffix, as it saves a number of moods and tenses.'

There does seem to be, as Lumholtz suggested, a connection between the dative case -gu and verbal purposive -lagu ~-gu. Thus, in
(161) ninba migirilagu naygungu

2sg-S wait-PURP 1sg-DAT
You must wait for me
(162) ginda baya gama naygungu/naga na:ragu

2 sg-A sing-PURP songstyle-ABS 1sg-DAT 1 sg-A hear-PURP You sing a gama-style song for me. I want to hear (it).
the dative NP and purposive verb have in each case similar semantic overtones, indicating 'need' and 'desire'.

We can however go beyond semantic feelings and demonstrate a fairly formal syntactic relationship between the nominal and verbal inflections. First, note that a core sentence may be extended by either a dative NP, or a purposive verb, to indicate something to which the action referred to by the main verb is directed, as in:
(163) nayba gagay wubirigu I'm going for sugar-bag (i.e. bee's honeycomb)
(164) Jayba gagay wicgalagu I'm going to bathe

In 3.5 .4 we gave examples of purposive inflection on the verb in a main clause, marking necessity or desire (a kind of 'volitional future'). (164) shows a rather different
use of purposive, to mark the verb in a complement clause; -lagu in (164) seems to link the action referred to by the verb in the main clause with that in the complement clause 'go in order to bathe'.
4.3.2 COMPLEMENT CLAUSES. The condition for two clauses to be joined in a complement construction is that they have a common NP that is in surface $S$ or 0 function in each clause. The verb of the main clause can bear any inflection (except subordinate) and the verb of the complement clause shows purposive inflection. Semantically, the action of the main clause was performed so that the action of the complement clause should be possible.

We can thus recognise four types of complement construction, according to the functions of the common NP.
[a] S function in main clause and in subordinate clause e.g. (164).
[b] $S$ in main clause and $O$ in subordinate clause e.g.
(165) nuna ma:l gu:ngigi / nulmburungu nundagu 3sg-SO man-ABS emerge-PERF woman-ERG see-PURP The man came out so that the woman would see him
[c] $O$ in main clause and $S$ in subordinate clause e.g. (68) and
(166) naru gungarilga wagun / wana / duwaralagu DON'T cut-NEG IMP tree-ABS leave-IMP stand-PURP Don't cut the tree down! Leave it to stand (there)!
(167) jaga burmbi nupa / bandaligu
lsg-A throw-UNMKD 3sg-0 burst-PURP
I threw it (a bottle) down, so that (it) burst.
[d] $O$ in main and in subordinate clause e.g. the last two clauses in line 1 of Text 7, and
(168) ninda baba gi:gin / naga gunbagu $2 \mathrm{sg}-\mathrm{A}$ spear-IMP wallaby-ABS $1 \mathrm{sg}-\mathrm{A}$ cut-PURP You spear a wallaby, so that I can cut it up.
4.3.3 'FAVOURITE CONSTRUCTIONS'. Suppose that we wish to join in a complement construction two clauses, and that they have a common NP which is in $S$ or $O$ function in the first but in $A$ function in the second e.g.
(169) nayba gagay I'm going
(170) naga wubiri gungarigu I want to cut sugar-bag

In order to form a complement construction the common NP must be in $S$ or $O$ function in each clause; to meet this syntactic constraint we have to use not (170) but the corresponding intransitive construction (4.2) i.e.
(171) nayba wubirigu gungarllagu <=(170)>

We then obtain, with the normal deletion of the second occurrence of the common NP:
(172) nayba gagay wubirigu gungarilagu I'm going to cut sugar bag

Note the similarity between (172) and (163) nayba gagay wubirigu $I^{\prime} m$ going for sugar-bag

In fact, any sentence with a dative $N P$, such as (163), can be extended by a transitive verb in -lagu inflection, indicating what the referent of the $S / O$ NP of the first clause wants to do to the referent of the dative NP. A dative NP thus carries the expectation of a following transitive verb, in intransitive purposive inflection (cf (12) in 3.1.1).

We can refer to (172) as a favourite construction'. (There are parallels to the 'favourite construction' described for Dyirbal - Dixon 1972:73-4. Further discussion is in Chapter 5.) The first clause can be transitive or intransitive; its $S$ or $O$ NP will be coreferential with the 'deep $A^{\prime}$ NP of the second clause - this actually appears in surface $S$ function through choice of the intransitive construction (which was necessary to meet the $S / O$ condition on coreferential NPs for complement constructions).

Further examples of favourite constructions with intransitive main clause are line 15 in text 5 and line 4 in text 6. A favourite construction with transitive main clause is
(173) waybalangu 刀ana gi:gay galgurugu ģalgilagu whiteman-ERG lsg-0 tell-UNMKD meat-DAT cook-PURP The white man told me to cook the meat
Note that the main clause can involve any inflection including purposive (as in (4)). Or the main clause can be a 'minimal sentence' involving, say, an adjective (but no verb), as in (47).

The crucial role of intransitive constructions involving transitive verbs can thus be seen - they are needed to form complement clauses where the underlying A NP is coreferential to $S$ or 0 NP in the main clause. We noted in 4.2 that if a transitive verb appears in an intransitive construction with purposive inflection, then the 'deep $O^{\prime}$ NP can be in dative or in ergative-instrumental inflection, that is, we can have either nayba gagay gannalagu biyagu or nayba gagay dannalagu biyangu ' I went to have a drink of beer' (cf. (148-9)). But in purposive complement clauses, dative is much the commoner marking on the 'deep 0 ' NP, as in (172-3), (12), (4) and (47).

Little text material is available in Wargamay and little can be said about conditions for coordination of two sentences that fall outside complement constructions (i.e. where the second sentence does not show purposive verbal inflection). The indications are, though, that it is again necessary for there to be a common NP that is in $S$ or $O$ function in each clause. In 3.5.4 we mentioned a type of subordinate clause whose verb is marked by irrealis inflection -ma~-lma, referring to something unpleasant that is to be avoided. For this construction-type there is generally an NP common to the two clauses and it is usually in $S$ or $O$ function in each clause; certainly the common NP can only be deleted from the second clause if this syntactic condition is satisfied - see (82), (83) and (125).

We have not said anything about complex sentences where
there is a common NP that is in A function in the main clause but in $S$ or $O$ function in the subordinate clause. In fact there are no examples of this type in the corpus collected, and when elicitation was directed to this point a straightforward sequence of transitive and intransitive clauses was obtained, with no syntactic interrelation between their noun phrases, and no NP deletion:
(174) nana nulanga gaygay / nuna bungilagu

1sg-0 3sg-A hunt away-UNMKD 3sg-SO 1ie down-PURP wugargiri sleepy-COMIT-ABS
He sent me away then he could sleep.

### 4.4 RELATIVE CLAUSES.

The syntax of relative clauses is almost identical to that of complement clauses. There must be a common NP that is in $S$ or $O$ function in each clause. The verb of the main clause can bear any inflection except subordinate, while the verb of the relative clause must be in subordinate inflection. A relative clause refers to an action that is simultaneous with, or previous to, the action of the main clause.

Exemplifying in terms of the function of the common NP:
[a] $S$ function in main clause and also in relative clause
(175) nayba wi:gimbigi wunanu
lsg-S no good-INCHO-PERF walkabout-SUBORD
I, who had been walking about, felt no good (i.e. tired)
(176) nayba magulinu gi:gilagu

1 sg-S work-INCHO-SUBORD sit-PURP
I, who have been working, want to sit down
[b] $S$ in main clause and $O$ in subordinate clause
(177) nuna bicbabali naga jundanu

3sg-SO jump-CONTIN-UNMKD 1sg-A see-SUBORD
It (the kangaroo) which I saw was jumping
(178) gu:gara naga baygurinu wulay
goanna-ABS lsg-A bash-SUBORD die-UNMKD
The goanna which I had bashed (on a tree) died
(179) A: dumubucungu naga wuginu / nulmburu dagigi / beef-INST 1sg-A give-SUBORD woman-ABS fall-PERF
B: minambinu / A: jumubucu gundil / what-INCHO-PERF beef-ABS heavy-ABS
A: 'The woman, whom I had given meat to, fell down'. B:'How was it (she fell)?' A: 'The meat was (too) heavy.'
(180) naga ganbanu / nuna dagigi
lsg-A hit-SUBORD 3sg-SO fall-PERF
He, who I had hit, fell down.
[c] $O$ in main clause and $S$ in subordinate clause
(181) jaga nulmburu ganbay ba:dinu
lsg-A woman-ABS hit-UNMKD cry-SUBORD
I punched the woman who was crying.
(182) naga nuna gumuburu burmbilgani /

1sg-A 3sg-SO beef-ABS throw-CONTIN-UNMKD bugambinu
rotten-INCHO-SUBORD
I throw away beef which has gone rotten.
(183) naga na:ray jina bu: 刀guraymbinu
lsg-A hear-UNMKD $2 \mathrm{sg}-0$ snore-INCHO-SUBORD
I heard you snoring (last night)
[d] O function in both clauses
(184) jaģa junday nuna gilwanu

1sg-A see-UNMKD 3sg-SO kick-SUBORD
I saw him being kicked
(185) nana gannay nalu waybalangu bu:dinu lpl-SA drink-UNMKD grog-ABS whiteman-ERG bring-SUBORD
We are drinking the grog which the white man brought
A continuative suffix can, of course, come between root and subordinate inflection, as in:
(186) nuna nulmbucu nunda wa: ̧̧ibalinu

3sg-SO women-ABS look-IMP 1augh-CONTIN-SUBORD
Look at that woman laughing:
We described two uses of the purposive inflection -lagu ~-gu, marking a main verb, or the verb in a complement clause. If we were restricted to the transitive conjugation we could suggest that - nu patterned in a similar way - as a perfect inflection in the main clause, and as the marked of a relative clause. The similarity between main and subordinate uses of -lagu~-gu (both implying futurity and purpose) is paralleled by a semantic overlap between main and subordinate uses of - fu (the former must and the latter can refer to completed actions). But in the intransitive conjugation perfect is -gi, quite distinct from subordinate -ru, and it is partly in view of this that we recognise two separate inflections in this case (as against one inflection, with two functions, for -lagu~-gu).

It is in fact sometimes difficult to decide whether a verb in - תu form should be regarded as 'perfect' or 'subordinate'. (176) is a typical example: we could take gi:gilagu as the main verb and magulinu as a subordinate clause; or alternatively magulinu could be the main verb in perfect inflection with gi:gilagu a complement clause. On semantic grounds the first interpretation seems most plausible in this instance - that is, we prefer 'I, who have been working, want to sit down' over 'I worked in order to sit down' In many cases there is a considerable semantic difference between perfect and relative interpretations. In (181), for instance, if ba:dinu were in perfect inflection the sentence could only mean ' I punched the woman (after she) had completely finished crying' (and if this interpretation had been intended ba:dinu should normally have preceded naģa danbay).

If the common NP involves just nominals they will have the same form for $S$ and $O$ functions; then the second occurrence of the common NP is likely to be deleted. In the case
of pronouns, different forms are used for the two functions and both occurrences may be retained, as in:
(187) nayba bimbirigi/ma:Idu nana wunanu
lsg-S run-PERF man-ERG 1 sg-0 chase-SUBORD
I, who was being chased by the man, ran away (i.e. 'I ran away with the man chasing me')
(188) nulanga ma:Indu nana du:[anu / nayba dagigi

3sg-A man-ERG 1sg-O pull-SUBORD 1sg-S fall-PERF
I, having been pulled by the man, fell down (out of the tree-fork)
Just as in the case of complement clauses, a transitive
verb may be used in an intransitive construction in order to meet the syntactic condition on relative constructions e.g.
(189) nulmburungu nunday gingu mugabalinu
woman-ERG see-UNMKD child-ABS eat-CONTIN-SUBORD gunguladu vegetables-ERG/INST
The woman watched the child eating vegetables
Another way of dealing with this situation (of the common NP occurring in A function in one clause) is simply to employ two separate sentences:
(190) naga gilway nuna wigiyan / dalginu nulanga

1sg-A kick-UNMKD 3sg-SO white woman-ABS burn-PERF 3sg-A galguru meat-ABS
I kicked the white woman. She had burnt the meat.
No example is known of a relative clause construction in which a common NP can be in surface $A$ function in either clause.

It will be noticed that a relative clause normally follows the main clause. It may, however, precede it (normally forming a separate intonation group in this case) as in (179-80), (188). And there are examples of relative clauses being inserted into the main clause, normally after the occurrence of the common NP - as (176), (178).

### 4.5 RECIPROCALS

There is, in the B dialect only, a suffix -ba that can be added to transitive verb roots, deriving an intransitive stem with reciprocal meaning:
(191) nali mayngabay yala We'll talk together here (literally 'teli each other')
(192) gawanbigi nuna burbabagu
anger-INCHO-PERF '3sg'-SO hit-RECIP-PURP
They have become angry and want to fight each other.
In text 9 line 15 John Tooth used a B reciprocal form bucbabay.

Note that in (192) the purposive inflection is -gu, from the transitive column in Table 3.3, rather than intransitive -lagu. This was given on two separate occasions,
and bucbabalagu explicitly rejected, so that it is unlikely to be an error.

In (193) nunda+ba-, literally 'look at oneself', has the semi-idiomatic sense 'wait (for)':
(193) Jayba yala nundabay ninungu $I^{\prime}$ ve been waiting here for you.

A reciprocal verb can, of course, function in a subordinate clause e.g.
(194) nada nubulana yagamay ningay bucbabanu

1sg-A 2du-0 two-CAUS-UNMKD stop-UNMKD hit-RECIP-SUBORD
I stopped you two from fighting
The $W$ dialect will simply use a transitive verb in an intransitive construction in order to show reflexive and also reciprocal sense e.g. gana bucbabali 'they are fighting' gana bungabali 'they are shooting each other'; the inclusion of adjective nalma 'on one's own' can emphasis the reflexive interpretation.

Nyawaygi also shows a reciprocal verbal suffix -ba, identical to that in B.

### 4.6 POSSESSION

In common with most Australian languages, Wargamay distinguishes between inalienable possession - covering wholepart relationship - and alienable possession - covering possession of artefacts, pets, language, and also kinship relations.
4.6.1 ALIENABLE POSSESSION. The genitive case -nu must be used to mark alienable possession. Genitive is added to each word of the 'possessor' NP, and this NP then modifies the 'possessed' head noun. The inflection appropriate for the head noun is added after the genitive inflection, on words of the 'possessor' NP. (The only examples of a declined genitive that have been gathered involve pronouns e.g. (61).)

See (84) and
(195) nuga bada nagunga gambigambinu 3sg-SO dog-ABS THERE old woman-REDUP-GEN-ABS The dog over there belongs to the old women
(196) bada jaga junday gananu
dog-ABS 1sg-A see-UNMKD 3pl-GEN-ABS I saw the dog belonging to all (those people)
4.6.2 INALIENABLE POSSESSION. For indicating a part of some object either a genitive construction can be used, as for alienable possession, or else the 'part noun' can just be apposed to the 'whole noun' in an NP (modifying it as an adjective would). In this 'appositional' construction there is no overt marking of possession; both nouns simply take the case inflection appropriate to the function of their NP.

Either a genitive or an appositional construction can be used quite freely for inalienable possession, although
apposition is probably a little commoner. (In this Wargamay is quite different from Dyirbal, which cannot use the genitive for inalienable possession - Dixon 1972:61-2. The data available for Wargamay is not rich enough to allow us to investigate whether there is a semantic hierarchy motivating the alternation, as there is for Yidin- Dixon 1977a: 360-4.)

Thus, one could say either of
(197) naygu bingan wi刀in My foot is sore
(198) nayba bingan wioin <=(197)>

Other examples of the appositional construction are at (61), (106), (139-41), (243) and line 11 of text 9 . A minimal sentence with adjectival comment and a topic NP that involves inalienable possession is:
(199) nayilngara nayba marnga
neck-ABS 1 sg-S sore-ABS
My neck is sore
Note also:
(200) nayba yira namugay My tooth aches (1iterally 'My tooth has toothache')

It appears that a person's name is regarded as inalienably possessed, just like a body part - either the genitive mina ninu yi:l or appositional ninba mina yi:l can be used for 'what's your name?'.
4.6.3 'GIVING' CONSTRUCTIONS. The most frequent construction involving the verb wugi 'give' has the 'giver' in $A$ function, the 'recipient' in O function, and 'what is given' in instrumental inflection. Thus (32), (35), (179) and
(201) bugangu gumubucungu nana nulanga waybalangu wuginu rotten-ERG/INST beef-INST 1 sg-O 3sg-A whiteman-ERG give-PERF The white man gave me rotten beef
(202) yungurangu nana bangaygu wuga
another-INST $1 \mathrm{sg}-0$ spear-TNST give-IMP
Give me another spear:
The alternative 'giving' construction is to have 'giver' in A function, 'what is given' in $O$ function, and 'recipient, as alienable possessor (marked by genitive) within the 0 NP e.g.
(203) A: na:nu ginda wugi gaygamali/

WHO-GEN-ABS 2sg-A give-UNMKD flour-ABS
Who did you give the flour to?
B: nagunga nu!mburunu wugi
THERE woman-GEN-ABS give-UNMKD
(I) gave it to the woman over there

Note that the recipient would not normally be in dative case. The possibility of using dative (but not to mark ultimate recipient) with wugi is seen in (204). John Tooth had asked me to take a trunk full of crockery to his son in Cairns, and told me to say:
(204) bagigi nunga ganangu wuginu naygungu/ wugigu
trunk-ABS THIS father-ERG give-PERF isg-DAT give-PURP ninu
2sg-GEN-ABS
(Your) father gave this trunk to me (for me) to give (it) to you

Here the dative naygungu 'to me' indicates that I
(who was intended to be the speaker of this sentence) was not the eventual recipient of the crockery; I had to deliver it to the intended addressee, John Tooth's son, and ginu 'your' is in genitive form.

### 4.7 COMITATIVE CONSTRUCTIONS

The addition of derivational suffix -ma to an intransitive root derives a transitive stem. John Tooth contrasted:
(205) balbay bandaligi The bottle burst
(206) balbay bandalimay (Someone) burst the bottle

The first sentence involves the intransitive verb ban-dali-, and implies that the explosion was spontaneous. In contrast, the inclusion of transitive bandalitma- in (206) indicates that there was an agent (and an A NP could of course be included in this sentence).

The $S$ NP in (205) corresponds to the O NP in (206), with an agent brought in as $A$ - literally Someone made [the bottle burst]'; note that here there is a change of state, for the bottle. However, in most of the -ma constructions I have collected it is transitive A NP which corresponds to intransitive $S$ (and there is no change of state involved). For instance:
(207) nulanga nulmburungu gingu wunamalgani
$3 \mathrm{sg}-\mathrm{A}$ woman-ERG child-ABS walkabout-COMIT-CONTIN-UNMKD malanga hand-LOC
The woman is walking about with the child [holding it] by the hand
(208) nuna nulmburu wunabali gingugiri
$3 \mathrm{sg}-\mathrm{SO}$ woman-ABS walkabout-CONTIN-UNMKD child-COMIT-ABS <=(207)>

Here the A NP in (207) is identical to the head noun (and $3 s g$ pronoun) of the $S N P$ in (208); and gingu, which is in $O$ function in (207), takes the nominal comitative suffix -giri (3.1.3) to function as a modifier within the $S$ NP in (208).

In most of the -ma examples collected there is a correspondence between the $O N P$ in the transitive comitative construction and a noun in nominal comitative form in the underlying intransitive sentence, as in (207-8); it is in view of this that we refer to -ma as the verbal comitative suffix (and (206-7) as 'comitative constructions'). Other examples are
(209) muyma ginda banama
boy-ABS 2sg-A return-COMIT-IMP
(210) naga nulmburu gi:gimay
$1 \mathrm{sg}-\mathrm{A}$ woman-ABS sit-COMIT-UNMKD
I'll sit with the woman (this has the idiomatic meaning 'I'll marry the woman')
But there are some comitative constructions where the O NP corresponds to a dative or locative NP in the corresponding intransitive sentence; see (74) and
(211) naga naygu yibi ba:dimay
lsg-A 1sg-GEN-ABS child-ABS cry-COMIT-JNMKD
I'm crying for my child (if, say, she is lost)
(212) gi:balgan: nulanga gadangadan /
scratch-CONTIN-UNMKD 3sg-A grass-REDUP-ABS
bungimagu nulanga
1ie down-COMIT-PURP 3sg-A
He (the bandicoot) scratches grass together, to lie down on it
Intransitive verbs - like bandali-'burst', bana 'return', wa:gi 'laugh', gi:(gi) 'sit' and ba:di 'cry' - can only take intransitive inflections. But comitative -ma derives transitive stems which can then take either transitive or intransitive inflections (according to the circumstances outlined in 4.2). Thus we can have both
(213) transitive naga gaga banamagu I must take the child home
(214) intransitive Jayba gagagu banamalagu <=(213)>

Note the contrast between intransitive use of the transitive stem banatma- 'go home with, take home' and the intransitive root bana in:
(215) intransitive nayba banalagu gagagu I must go home to the child
(Word order is not significant in any of these examples.)
The comitative derivational affix -ma coincides in form with the intransitive irrealis inflection -ma. Thus gagama could be intransitive 'go-IRREAL' or transitive 'go-COMIT-POS IMP'. In most cases the other constituents in the sentence would help resolve this ambiguity. We can also, of course, get comitative -ma followed by irrealis -Ima:
(216) nuna dagangu bu:dilma / wumamalma

3sg-ABS child-ERG take-IRREAL walkabout-COMIT-IRREAL The child might pick it up and walk around with it

### 4.8 INSTRUMENTALS

4.8.1 INSTRUMENTAL NPs. If an action crucially involves a weapon or tool then this can be shown by an NP in instrumental inflection, as in (59) and
(217) nuna wagun gungari nulanga bargungu 3sg-SO tree-ABS cut-IMP 3sg-INST axe-INST Cut the tree with the axe?
(218) nuna gurga rubungu jinda 3sg-SO tie-IMP rope-INST 2sg-A

You tie it up with rope:
The instrument may be a body part, as in
(219) nuna bingangu gilwa Kick him with (your) foot:
(220) mulindu naga wagun buyay
lip-INST 1 sg-A fire-ABS blow-UNMKD
I blew the fire with (my) mouth
(221) gagan rulanga mulindu du:ralgani
grass-ABS 3sg-A lip-INST pull-CONTIN-UNMKD
It (the bird) kept pulling up grass with (its) mouth
Instrumental NPs can also refer to liquids:
(222) gurmalndu banga jinda
blood-INST paint-IMP 2sg-A
You paint (it) with blood!
Note that the instrumental inflection will only be used if the tool or body part is crucial to the action and if it is used to affect the state of the referent of the 0 NP. Thus in (221) the bird used its beak to pull the grass out of the ground, and instrumental inflection is appropriate. But in
(223) gagan nulanga mulinda bu:dilgani
grass-ABS 3sg-A lip-LOC take-CONTIN-UNMKD
It (the bird) carries grass in (its) mouth
the bird simply carries the uprooted grass back to its nest in its beak; here locative inflection is used.

A further use of instrumental is to mark 'what is given' in the most common type of giving construction - 4.6.3.
4.8.2 INSTRUMENTAL CONSTRUCTIONS. There are in my corpus just four or five examples of a derivational suffix -ma added to a transitive root. For instance:
(224)

> warnay
> fishspear-ABS lsga bu:digu dinbamagu
> I'11 take the fishspear to spear fish with

This appears to have the same meaning as
(225) warnay naga bu:digu I'11 take the fishspear
(226) ga:bu naga dinbagu warnaygu I'll spear fish with the fishspear

We can thus suggest that -ma effectively derives from (226):
(227) warnay gaga ginbamagu ga:bugu <=(226)>

That is, it places the instrumental NP in surface 0 function (absolutive case) so that it can enter into complement constructions etc (which demand a common NP in $S$ or $O$ function in each clause) ; and the deep $O$ NP is now marked with dative case; (224) involves (225) as main and (227) as complement clause, with the common O NP warnay - and also the repeated A pronoun naga - being deleted from the second clause. (This is, in fact, syntactically identical to the instrumentive construction in Dyirbal - Dixon 1972:95-6.)

Another example is:
(228) nuna gagara bu:diya / wanagu gumbamagu 3sg-SO dillybag-ABS bring-TMP beans-DAT put in-TNST-PURP Bring the dillybag to put beans in!

In view of its connection with nominal instrumentals, we call the suffix -ma, when added to a transitive verb, an 'instrumental' derivational affix

No example has been gathered of -ma added to wugi- 'give' with the 'what is given' NP (normally in instrumental case with wugi-) going into absolutive case with wugima-. 'What is given' Np's do behave like other types of instrumental NP in Dyirbal, and it is quite likely that they would also do so in Wargamay.

Note that only an instrumental NP can go into absolutive case within a -ma construction. Although ergative and instrumental have identical formal realisation, ergative is not affected by the -maderivation.

### 4.9 VERBALISATION

4.9.1 INCHOATIVES. From any noun or adjective can be derived an intransitive verbal stem, through the addition of an inchoative derivational affix that has the following allomorphs:

```
-mbi following a vowel,
-bi following a nasal ( }n,n\mathrm{ or m),
-bi~-mbi following y
-i following | or r.
```

Inchoatives take the full set of intransitive suffixes, from Table 3.3. There is just one irregularity in that before the continuative suffix -bali, -bi drops from the postvocalic inchoative allomorph -mbi. Thus (cf. (44)):

| nominal | bi:ca | gawan | gubil |
| :--- | :--- | :--- | :--- |
| inchoative stem | bi:cambi- | gawanbi- | gubili- |
| +perfect inflection | bi:cambigi | gawanbigi | gubiligi |
| tcontinuativetunmarked | bi:cambali | gawanbibali | gubilibali |
|  | 'fear' | 'anger' | 'whistle' |

This -bidropping - which appears to be obligatory - is a further instance of the haplologic-like syllable deletion tendency mentioned in 2.6.

The intransitive verbaliser is most frequently added to adjectives or abstract nouns and indicates a state of 'becoming'. Examples have been given at (50), (57), (64), (67) (82), (182), (192); there are in addition examples throughout the texts. Also:
(229) nayba nalambuçumbigi
lsg-S good-INCHO-PERF
I feel good
(230) gilan gawanbima
old man-ABS anger-INCHO-IRREAL
The old man might get mad
It is also frequently used to derive intransitive verbs from nouns such as bu:nguray 'snore' - as in (183) - and magul
'work' - as in (176) and (240). The verbaliser is often found with nouns referring to noise - thus gubil 'a whistle', gubili- 'to whistle'; gawal 'a call', gawali- 'to call out'. The $W$ verb banma- 'to speak' is missing from $B$ and instead mayay $(\mathrm{m})$ bi-, a verbalisation of mayay 'language', is employed. (In $W$ mayay (m)bi- can be used in alternation with banma-.)

In fact, any sort of noun can be verbalised. In line 18 of Text 6 wacugalatmbitgi refers to two 'dreamtime men' changing into black wallabies, warugala. And in:
(231) nani nuna me:i gi:ginbigi
face-ABS 3sg-SO man-ABS wallaby-INCHO-PERF
The man's face has become like a wallaby's
inchoative -bi is used as an alternative to the nominal suffix - מaru 'like a' (3.1.3).

When added to mina'what' the intransitive verbaliser derives an interrogative verb minambi- 'do what, do how' see (179), line 14 of Text 6 and line 4 of Text 9. With the locational root wanga 'where' we obtain wangambi- 'do where', as in
(232) nuga wangambilagu yugaralagu Which way will he swim?

With what we called the third person pronoun, nuna, -mbi derives a deictic verb 'do like this':
(233) 刀inba nugiga nufambiga You dance like this:

There is also a verb nagumbi-'to come' that is based on the form nagu'to here' (3.4.3); it is used in (94). It appears, however, that -mbi~-bi~-i cannot be productively added to all forms from Table 3.2.
4.9.2 CAUSATIVES. A transitive verbal stem can be formed by adding -mato any noun or adjective root. These causatives have much the same properties as inchoatives; examples are at (17), (127), (194) and
(234) nalu gidul / gawuma The water is cold, heat it up: (literally 'make it hot')
(235) wingingu nana bi:camay
snake-ERG 1 sg -S fear-CAUS-UNMKD
The snake frightened me
(236) rulanga nana gilbaymay

3sg-A $1 \mathrm{sg}-0$ know how to do-CAUS-UNMKD
He taught me (how to do it)
(237) ma:Idu nana gungamay
man-ERG lsg-0 alive-CAUS-UNMKD
The man cured me
(238) naga dalguru gargi-imay gunbay

1sg-A meat-ABS finished-CAUS-UNMKD cut-UNMKD
I finished cutting the meat up
There are also transitive verbs minama- 'do what', nunama- 'do like this' and naguma- 'bring':
(239) minamagu runa ma:l
what-CAUS-PURP 3sg-SO man-ABS
What will (you) do to the man?

### 4.10 PARTICLES

There is a set of non-inflecting particles that provide modal/logical-type qualification of a complete sentence. With the exception of guri, they have only been encountered occurring before the verb.
[1] na: 'not'. This is used to negate any clause (excepting imperatives). Examples are (5), (101-2), Texts 5.24, 6.17, 7.10 and
(240) nuna wi:gina / na: maguligi ma:l He's no good, the man won't work
(241) wi:gi nulan / ga: wagun gungari The axe is no good, it won't cut wood
(242) nuna gunigi naygungu / maya nana na: junday 3sg-SO look for-PERF 1sg-DAT NO $1 \mathrm{sg}-\mathrm{O}$ NOT see-UNMKD He was looking for me - but no, (he) didn't see me.
(243) mala nana gungay / maya naça na: gi:gay hand-ABS 1sg-O bite-UNMKD NO 1 sg-A NOT let go-UNMKD (She) bit my hand - but no, I didn't let go (of her)
[2] naru 'don't. This is used in negative imperative sentences, in conjunction with verbal inflection -da~-lga. See 3.5.4.
[3] waraindicates that an event concerned the wrong person or thing as referent of the $S$ or $O N P$ e.g.
(244) nulanga wagun wara gunbay He cut the wrong tree down
(245) ...wara namunbinu / maya bandarabaranga

PARTICLE breastmilk-INCHO-PERF NO bottle-COMP-LOC
(When I was a small child I was fed milk) that was not the right type; it was like mother's milk but no, it was in a bottle
[4] mari 'might be' e.g.
(246) mamu mari naga nupa gandagu I might burn it by-and-by

Only five examples of mari are in the corpus but in each it is second element in the sentence, suggesting that it may properly be regardable as a clitic to the first word of the sentence.
[5] gamu 'just, on Iy', as in
(247) Q: minagu jinba gagay Why did you go (to that man)? A: gamu / naga barbay I just went to ask (him something)
(248) gamu ginba migirilagu You must just wait (here for me)
[6] 万uri 'in turn':
(249) naga nuna bucbay nuri I'11 hit him back
[7] na:ca 'can't do (despite trying)
(250) gumubucu muguru / na:ca naga gungay beef-ABS hard-ABS PARTICLE $1 \mathrm{sg}-\mathrm{A}$ bite-UNMKD The meat is hard, I can't bite it

There is also a transitive verb na: camba- 'try to do, but fail' e.g.
(251) na:cambay naga wagun gungar:
fail-UNMKD 1sg-A tree-ABS cut-UNMKD
I tried to cut the tree but couldn't
Six of these particles - naru, wara, mari, gamu, nuri and na:ca - appear with similar or identical meaning in Dyirbal (Dixon 1972:118-21).

### 4.11 QUESTIONS

We have mentioned the various interrogatives used in non-polar questions:
mina 'what' - 3.1.5, 4.9 (and minan 'how many' - 3.1.5); minagu
'what-DAT' means 'what for' or 'why' - see Text 5 line 22,
Text 8 line 2 and Text 9 ines 8 and 10.
na:n- 'who' - 3.4.1, 3.4.2.
wanga- 'where, when' - $3.4 .3,3.3,4.9$
There is no segmental indicator of polar questions in Wargamay; these are simply shown by final rising intonation (and also, of course, by various extralinguistic expressions and gestures).

### 4.12 INTERJECTIONS

Interjections either make up a complete utterance, or else normally begin a sentence. Those encountered are:

```
W maya, B biyay 'no' - see (242-3)
nayi 'yes'
gawu 'come on!'
gala 'try again'
guli exclamation when startled.
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## 5. HISTORICAL DEVELOPMENT

There are a number of remarkable features of Wargamay grammar, when measured against the normal patterns encountered in languages of the Australian family. Firstly, every Australian language clearly distinguishes transitive from intransitive verbal stems, and almost every language has two or more distinct verbal conjugations, but Wargamay is the only example known to me where transitivity classes and conjugation classes exactly coincide. The second noteworthy feature is the free occurrence of 'transitive stems' with either transitive or intransitive inflectional allomorphs, while intransitive stems are confined to intransitive inflections.

In this chapter we compare Wargamay with the prevailing patterns found in Dyirbal and in other Australian languages, and attempt to explain the evolution of these two features. We also try to explain the occurrence of lagu as intransi-
tive allomorph of the purposive inflection, and suggest that the -1- in this form is a reflex of the transitive conjugation marker. Finally, we speculate on the likely direction Wargamay might move in if the changes that have begun were carried to a logical conclusion.

### 5.1 NOTEWORTHY FEATURES OF WARGAMAY

5.1.1 TRANSITIVITY CLASSES AND CONJUGATION CLASSES. The typical situation in an Australian language is for each verbal root, and each derived verbal stem, to have fixed transitivity. That is, it is either intransitive, and must occur with an $S \mathrm{NP}$, or it is transitive, and occurs with an A NP or an O NP. (These types of NP are easily recognisable from the case inflection appropriate to nouns and to pronouns in $S$, $A$ and $O$ functions respectively.) A transitive stem can usually be derived from an intransitive root, and an intransitive stem from a transitive root, but this will always be marked by a derivational affix.

We can illustrate from the Giramay dialect of Dyirbal (which has a paradigm for first and second person pronouns that is almost identical to that for Wargamay, and similar nominal case inflections). The intransitive verb yugara-y 'swim' can only occur in an intransitive construction, as (252-3), and not in the transitive (253-4).
(252) bayi yara yugaranu The man is swimming
(253) nayba yugaranu: I am swimming

* (254) bafgul yarangu balan gaga yugaranu
* (255) 万agia 万ina yugarapis

Whereas the transitive verb gunba-l 'cut' can only occur in a transitive construction, (258-9), never in intransitives, (256-7).

* (256) bayl yata gunban
*(257) गayba gunban
(258) bangul yarangu' bala yugu gunban The man cut the tree
(259) gaga nina gunban I cut you
(Note that (256) could be an elliptical version of a transitive sentence with the A NP deleted, 'The man was cut (by someone)'. This interpretation is possible since absolutive case marks either $S$ or 0 function. It is the unacceptability of (257) which indicates that gunba-l cannot occur in an intransitive construction.)

We can form a derived transitive stem yugaraymba-1 'swim with' by adding the comitative suffix -mba-l:
(260) bangul yacangu balan gaga yugaraymban The man is swimming with the child
(261) jaga jina yugaraymban $I$ am swimming with you

And similarly the reflexive stem gunbari-y will function intransitively:
(262) bayi yara gunbarinu
(263) ŋayba gunbarinu

I have chosen to use two verbs that also occur in Wargamay. yugara-is intransitive in Wargamay, and can only occur in intransitive constructions - compare (130-2) with (252-3). gunba- is in the complementary Wargamay class that we have called 'transitive' - and can occur in either transitive or intransitive constructions. Compare (256-9) with (138) and (141) above.

The point we are making is that in most Australian languages a verb is strictly categorised as transitive or intransitive. We do not come up against the difficulty involved with the English verb eat, for instance. Eat is clearly transitive in $I$ have eaten zunch but it also occurs in grammatical sentences like I have eaten. It is not clear whether it is functioning intransitively in the latter case (as in I have slept) or whether I have eaten is a reduced form of a transitive sentence, with the O NP being nonspecified in this instance.

Wargamay does have two mutually exclusive transitivity classes; as for other Australian languages it is a straightforward matter to decide which class any given stem belongs to. It differs from other languages in that the transitive class can function in either type of construction whereas the intransitive class cannot. We return to this point in 5.1.2.

The second type of classification of verbal stem that is encountered in almost all Australian languages is into conjugation classes. There are usually two open classes, one whose members are predominantly transitive and the other with predominantly intransitive membership. Some languages also have a number of smaller, closed conjugations, often involving mostly monosyllabic roots (Nyawaygi is a language of this type).

Generally, the most revealing analysis of verbal forms in Australian languages is to take the root to end in a vowel, and to recognise a 'conjugation marker' morpheme that intrudes between stem and most suffixes. For instance, the forms for four out of the seven verbal inflections in Yidin are (cf. Dixon 1977a:207)

| -n conjugation | - 1 conjugation | $-¢$ conjugation |
| :---: | :---: | :---: |
| (56\% intransitive) | (81\% transitive) | ( $87 \%$ transitive) |
| -0 | -1 | - ᄃ |
| -nu | -1+nu | $-\mathrm{c}+\mathrm{nu}$ |
| -na | -Itna | - + +na |
| $-n+d i$ | $-1+g i$ | $-\mathrm{c}+\mathrm{g} \mathrm{i}$ |

$$
\begin{aligned}
& -1 \\
& -1+n u
\end{aligned}
$$

$$
-c+n u
$$

$$
-c+n a
$$

$$
-c+g i
$$

We can recognise past tense as -nu, purposive inflection as -na and 'lest' as -di. The conjugation markers -l- and - intervene between stem and each of these three suffixes whereas the -n-marker only occurs before 'lest'.

But, typically, not every suffix can be explained in this way. The most frequent and important inflections may not show a conjugation marker (in synchronic analysis at least) or may have other irregularities. Thus 'present-past' in Yidin has $-n$ in the $-n$ conjugation but -1 and $-[$ (appar-
ently, just the conjugation markers) in the other two cases.
The combination of regular 'conjugation marker plus invariable suffix' for some categories, with irregularities in the case of the more frequent inflections, is well exemplified in the Giramay dialect of Dyirbal:

| $-y$ conjugation | -1 conjugation |
| :---: | :---: |
| $(80 \%$ intransitive) | ( $80 \%$ transitive) |
| $-n u$ | $-n$ |
| $-n+$ gay | $-1+$ gay |
| $-y+$ gu | $-1 i$ |
| $-y+m u n a$ | -1 muna |
| -n-gani-y | $-1-g a n i-y$ |

In this paradigm the invariable morphemes -day future, -muna participial and -gani-y repetitive aspect are preceded by marker -I-for the second conjugation and by either $-n-$ or $-y$ - in the first column. One purposive allomorph can be segmented into -y+gu (the -gu recurring in Wargamay, and in many other Australian languages) but the $-1 i$ is not susceptible to analysis (there is no record of a purposive -i). And present-past forms -nu~-n do not relate, in a synchronic analysis, to the conjugation markers (although there is evidence that -nu<*-y+nu and $-n<*-1+n u$ - see Dixon 1972:354-8).

Now the open conjugation which has predominantly transitive membership has, in a wide range of languages from every part of the continent, a conjugation marker -l-, as in the Yidin and Dyirbal paradigms just given. The other recurrent open conjugation, with mostly intransitive membership, has as conjugation marker sometimes -y-, occasionally $-n$ - (or even $-y-\sim-n-a s$ in Dyirbal), and often $\phi$.

Wargamay does have two conjugational patterns, corresponding to the Australian norm. And examination of Table 3.3 shows that there are grounds for recognising -l- as conjugation marker for the transitive column, contrasting with $\phi$ in the corresponding intransitive forms (3.5.2).

What is unusual about the $W$ dialect of Wargamay is the exact coincidence of transitivity with conjugation classes. Every intransitive verb occurs only with allomorphs from the left-hand column of Table 3.3 (with conjugation marker $\phi$ ); every transitive verb occurs predominantly with allomorphs from the right-hand column (conjugation marker -l) although it can also function intransitively and then takes allomorphs from the left-hand column. It appears that the W dialect has reassigned conjugational membership for those items that are exceptions in related languages. We mentioned in 3.5 .3 that intransitive bungi 'lie down' belongs to the -1 conjugation in Dyirbal, but it takes only intransitive inflections in W. (The Biyay dialect, in contrast, appears not to have undertaken this reassignment and in $B$ bungistill takes inflections from the transitive column of Table 3.3, although it only functions intransitively.)

In summary, whereas most Australian languages show statistical correlation between transitivity and conjugational classes, the $W$ dialect is a unique example of conjugational and transitivity classes exactly coinciding.
5.1.2 DOUBLE TRANSITIVITY. A survey of 'ergative languages' (both inside and outside of Australia) suggests that they tend to show stricter transitivity than 'accusative languages'. That is, a verb in an ergative language will normally be classified as one and only one of intransitive, transitive, ditransitive, and so on; whereas a verb in an accusative language may have more fluid transitivity membership and be able to occur equally easily with one or two (or three) core NPs. It will pay us to look into possible reasons for this phenomenon before considering in more detail the ability of 'transitive verbs' in Wargamay to function in transitive or in intransitive constructions.

First note that a language may typically have a number of pairs of verbs that have the same (or almost the same) semantic content, but differ in transitivity. We can exemplify from Dyirbal (Dixon 1972:296-9):
transitive
buwa-y 'tell'
ganga-y 'eat'
banga- 'follow'
bundi-l 'take out'
intransitive
wurba-y 'talk, speak'
manga-y 'eat (to appease hunger)'
mari-l 'follow'
mayi-1 'come out'

What could be more natural than for the transitive and intransitive members of such a pair to have the same form and to differ only in conjugational membership. There are, in fact, just five such pairs known for Dyirbal; with - conjugation inflectional allomorphs they function transitively and with -y conjugation allomorphs they function intransitively. These pairs include (Dixon 1972:315):
transitive
yalama-l 'do like this to'
giba-l 'scratch, scrape'
gaba-1 'immerse in water
intransitive
yalama-y 'do like this'
giba-y 'scratch (oneself)'
naba-y 'bathe'

A simple event could be described using either the transitive or the intransitive member of a pair:
(264) bangul yarangu balan gaga buwaru The man told the child
(265) bayi yafa wurbanu The man spoke

Most transitive-intransitive pairs involve semantic identification of $A$ and $S$ NPs as here: the A NP, bangul yarangu, in (264) and the $S \mathrm{NP}$, bayi yaca, in (265) are coreferential. (Note that not all pairs involve $S \equiv A$ identification. In fact two of the pairs just quoted are of the $S \equiv 0$ type thus he took it out (of the hole)/it came out (of the hole) and he immersed her in water/she bathed. But $S \equiv 0$ pairs are outnumbered by $S \equiv A$ pairs in Dyirbal and it is likely that $S \equiv O$ items are greatly outnumbered by $S \equiv A$ pairs in most other languages.)

Suppose that a single verb root can function either transitively or intransitively (and that it is of the majority syntactic type $\mathrm{S} \equiv \mathrm{A}$ ). That is, in an 'accusative language' it can occur either with just a nominative (S) NP, or with both a nominative (A) and an accusative (O) NP. It is likely that an NP could be deleted from a transitive sentence, so that if we encounter
(266) 'alligator'-NOM 'eat'-PAST
we could not be sure whether it was a complete intransitive sentence, or an elliptical form of a transitive construction with the object (which would be in accusative case) omitted. But in the case of a nominative-accusative language this syntactic indeterminacy is semantically quite inconsequential. In either case (266) would be translated by 'the alligator ate'. That is, there is no possibility of semantic confusion.

Consider the corresponding example in an 'ergative language'. Suppose that a verb could occur either with just an absolutive (S) NP, or with both an ergative (A) and an absolutive (O) NP; and that an NP can be omitted from the surface representation of a transitive sentence. Then
(267) 'alligator'-ABS 'eat'-PAST
is ambiguous between a reading where 'alligator'-ABS is the $S N P$, or where it is the $O N P$ in a transitive construction (with deleted A NP). In this case the syntactic ambiguity leads to a real semantic impasse - in the one case (267) means 'the alligator ate', and in the other it indicates that '(something) ate the alligator'.

We thus see that the consequences of allowing verbs to have fluid transitivity can lead to unacceptable semantic ambiguity for a language with ergative case marking (but not to the same extent if the case marking follows a nomin-ative-accusative paradigm). This is likely to be at least one reason why ergative languages tend to have a fairly rigid assignment of verbal roots into transitivity classes.

Of course a verb could be permitted to function either transitively or intransitively if it took a different set of conjugational affixes in the two functions (ideally, there would have to be a distinct allomorph of each inflection for the two conjugations). In this case transitivity would be inferrable from conjugation; the meaning of a sentence like (267) would be unequivocably known on the basis of whether 'transitive' or 'intransitive' allomorph of past tense were used.

In most Australian languages transitivity correlates statistically with conjugation class but does not coincide with it; that is, transitivity can not definitely be inferred from conjugational membership. This may in part account for the small number of transitive/intransitive pairs with the same form (as Dyirbal yalama-l/yalama-y) in comparison with the larger number of pairs with different forms for intransitive and transitive function (e.g. Dyirbal buwa-y/wurba-y).

But in the $W$ dialect of Wargamay transitivity does coincide with conjugation. The type of construction involved can be inferred from the conjugational class of the verb ending. It is, in view of this, perfectly reasonable that roots from the 'transitive set' should all be 'double transitivity verbs' (like the five pairs known for Dyirbal).
(There may be a connection between the degree of correlation between transitivity and conjugation classes in a given language, and the number of verb roots which can fun-
ction transitively or intransitively. Thus Yidin has a relatively low degree of correlation - $81 \%$ of -l conjugation and $87 \%$ of $-[$ conjugation roots are transitive, but only $56 \%$ of $-n$ conjugation roots are intransitive. Yidin has no verbal roots that can function transitively or intransitively according as they take different conjugational endings. Dyirbal has a better correlation - about $80 \%$ of - 1 conjugation roots are transitive and around $80 \%$ of $-y$ conjugation roots are intransitive; here there are five transitive/intransitive pairs. Then Wargamay has coincidence of conjugation and transitivity classes, and twothirds of its verbs (i.e. all or almost all those in the 'transitive set') have double transitivity.)

It will be seen from Table 3.3 that each Wargamay inflection has different allomorphs in the intransitive and transitive columns excepting 'subordinate' -nu and the most frequent ending of all, 'unmarked aspect' -y. If a 'transitive root is in one of these inflections a Wargamay sentence like (267) is indeed ambiguous, with the two possible readings being completely opposite in meaning. (This has already been pointed out in 4.2 , and in the discussion of (116) in 4.1.1.)

There is, however, one further factor that mitigates possibilities of this sort. Nominals in Wargamay follow an absolutive-ergative pattern but pronouns do not. The singular first and second person pronouns have in fact distinct forms for all three of the major syntactic functions, $S$, A and 0 . We are thus only likely to find ambiguity of the type exemplified in (267) if the verb is in unmarked or subordinate inflection (and in the latter case there may well be other clues in the construction to help resolve things) and if the single NP is a nominal or the third person singular pronoun. (There is still a real possibility of confusion; and it seems to be the price that must be paid for the extensions and generalisations that have recently taken place in Wargamay grammar - 5.3.)

One important question to ask about Wargamay is why, although the set of 'transitive roots' can occur in either transitive or intransitive constructions (with the appropriate inflectional allomorphs), the set of intransitive verbs is restricted to intransitive constructions. If transitivity is inferrable from conjugational ending why should the property of 'double transitivity' be restricted to only two-thirds of the verbs, and not extended to apply to every verb in the lexicon?

This question is in essence a diachronic enquiry. From comparison with other Australian languages we infer that the 'transitive roots' in Wargamay - which correspond to verbs that can only function transitively in other languages - must at one time have been confined to occurrence in transitive constructions. Their function has been extended so that they now also function in intransitive constructions, taking intransitive inflections. What has motivated this generalisation? And why have intransitive roots not had their function extended analogously, to allow them to occur with transitive inflection in transitive constructions? We return to these two questions in 5.3 below.

### 5.2 SYNTACTIC CONSTRAINTS IN DYIRBAL AND WARGAMAY

In Dyirbal two clauses can be coordinated if they have a common NP which is in $S$ or $O$ function in each clause (that is, there are four possibilities: $S-S, S-O, O-S$ and $O-O$ ). If the NP involves only nominals they must be in absolutive case in each clause - which is the reason this type of constraint has been referred to as an example of 'absolutiveergative' syntax (but note that the $S=0$ constraint also applies if the common NP involves pronouns, which do not have the same form for $S$ and $O$ functions - Dixon 1972:130-4).

The same constraint applies to the formation of complement clauses in Dyirbal (these are subordinate clauses whose verb bears the purposive inflection). Thus (quoting examples in the Giramay dialect), from
(268) bayi yara banaganu the man returned
(269) bayi yara bangun gumbucu nungali for the woman to kiss the man we can derive the complement construction:
(270) bayi yaca banaganu bangun gumbucu nungali The man returned to be kissed by the woman

Here bayi yara is the $S \mathrm{NP}$ in (268) and $O$ NP in (269), thus satisfying the syntactic condition on coordination/complementation.

However, (268) and
(271) balan gumbul bangul yarangu nungali For the man to kiss the woman
cannot be simply combined, since the common NP bayi yara is in $S$ function in (268) but in $A$ function (showing ergative case) for (271).

In cases such as this Dyirbal derives an antipassive version of a transitive sentence - the deep A NP goes into surface $S$ function, the deep $O$ NP into dative (or, occasionally, into instrumental-ergative case) case, and the verb takes the derivational affix -l+(n)a-y (onto an -1 conjugation stem) ~-na-y (onto a $-y$ conjugation stem). Thus from (271) is derived:
(272) bayi yaca bagun gumbulgu nungalaygu <=(271)>
where bagun gumbulgu is in dative case. Thus (268) and (272) can be combined to form
(273) bayi yara banaganu bagun gumbulgu nungalaygu The man returned to kiss the woman

Note that the antipassive suffix $-1+(n) a-y \sim-n a-y ~ d e r i v-$ es an intransitive stem that takes the full set of derivational and inflectional possibilities. For instance:

| derived |  |  |  |
| :---: | :---: | :---: | :---: |
|  | intransitive root | intransitive stem | transitive root |
|  | banaga-y 'return' | nungal ( 0 )a-y 'kiss' | nunga-1 'kiss' |
| present-past | banaganu | nungal ( $\dagger$ ) anu | nungan |
| future | banagangay | nungal ( n ) anday | nungalgay |
| purposive | banagaygu | nungal ( $n$ ) aygu | nungali |

The occurrence of -n- in the antipassive suffix is a dialect-determined phenomenon. The northerly Mamu dialect always includes -n-, the central Dyirbal dialect can include or omit -n-, whereas Giramay, the most southerly dialect, obligatorily omits it. We thus get:

```
Mamu dialect nunga!na-y
Dyirbal dialect nungal(n)a-y
Giramay dialect nungala-y
```

If we were writing a grammar of the Giramay dialect alone we should doubtless set up the antipassive suffix (onto an -l conjugation stem) as simple -a-y, preceded by the conjugation marker -i-. But dealing with the language as a whole we prefer to posit a canonical form -na-y, and then state a rule of '-n- dropping' that is optional for the Dyirbal dialect but obligatory in Giramay.

The syntactic constraint on complementation in Wargamay is identical to that in Dyirbal. There must be a common NP that is in $S$ or 0 function in both main and subordinate clauses (4.3). That is, from
(274) ma: l banay The man returned
and
(275) ma:l nulmbucungu nu:ngagu For the woman to kiss the man is derived:
(276) ma:l banay gulmburungu nu:ngagu The man returned to be kissed by the woman
gu:nga 'to kiss' belongs to the transitive set of verbs in Wargamay and appears most frequently in transitive constructions, like (275). However, if a sentence like 'for the man to kiss the woman' is required to be joined to (274) then nu:nga must be put into an intransitive construction:
(277) ma:l nulmbucugu nu:ngalagu For the man to kiss the woman yielding
(278) ma:1 banay nulmburugu nu:rdalagu The man returned to kiss the woman

Thus the fact that the NP which is subject of the intransitive main clause is deep transitive subject (A) for the complement clause is marked in different ways in the Dyirbal sentence (273) and in the Wargamay sentence (278). In (273) the verb shows antipassive derivational affix -( 0 ) a-y whereas in (278) it simply takes the intransitive allomorph of purposive, -lagu. When $-(\cap) a-y$ is absent - as in Dyirbal (271) - or when nu:nga takes the purposive allomorph from the transitive column of Table 3.3-as in Wargamay (276) - then the main clause $S$ is understood to be identified with the deep transitive object (O).

### 5.3 DIACHRONIC CHANGES IN WARGAMAY

It is worthwhile carefully comparing the forms of the verb in a complement clause whose deep A NP is coreferential
with the main clause $S$ or $O N P$ - that is, in a sentence like (273) or (278). We can compare these forms over the three dialects of Dyirbal, in north-to-south order, and in Dyirbal's southerly neighbour Wargamay:
Dyirbal
language
Wargamay $\left\{\begin{array}{cl}\text { Mamu dialect } & \text { nungalnaygu } \\ \text { Dyirbal dialect } & \text { nungal( }) \text { aygu } \\ \text { Giramay dialect } & \text { nungalaygu }\end{array}\right.$

We have purposely chosen the cognate roots funga-l and nu:nga-. The only other difference between the Giramay and Wargamay forms is the absence of -y- in the latter. But -y- is a conjugation marker in the Giramay form and we know that the intransitive conjugation in Wargamay has $\phi$ marker. In view of this, are the forms in Giramay and Wargamay not grammatically identical?

In fact they are not. Morphemic segmentation yields
Giramay nunga-1-a-y-gu
kiss-CONJ MARKER-ANTIPASSIVE-CONJ MARKER-PURPOSIVE
whereas we cannot go beyond

$$
\begin{aligned}
\text { Wargamay } & \text { nu:nga-lagu } \\
& \text { kiss-PURPOSIVE }
\end{aligned}
$$

In Wargamay -lagu is simply the allomorph of the purposive inflection onto the verb in an intransitive construction (whether the verb belongs to the intransitive or the transitive set). An example of lagu onto an intransitive root is in
(279) ma:l banay yugaralagu The man returned to swim

It is impossible to obtain -la- followed by any other inflection (thus *-lay, for instance, is quite unacceptable as a verbal ending); so -lagu cannot be segmented in terms of a synchronic analysis of Wargamay. And while Giramay nungalaygu and Wargamay nu:ngalagu are almost identical in form, the first can be analysed into five morphemes and the second only into root plus -lagu.

However, the similarity between these Giramay and Wargamay forms is significant, and surely suggests that there may be a diachronic connection between them.

Let us look again at those verbal affixes in $W$ and $B$ that involve -1-:

```
negative imperative
irrealis
purposive
continuative derivational suffix
```

| intransitive | transitive |
| :---: | :---: |
| -ga | -lga |
| -ma | -lma |
| -lagu | -gu |
| W -bali- | -Igani- |
| B -ni- | -lani- |

There are four occurrences of -1- as 'conjugation marker' in the transitive column (we suggested in $3.5 .3 *$-gani>-ni and *-Igani>-lani for the continuative forms in B). The odd man out here is -lagu, where an -l-appears in the intransitive column, but not on the transitive side.

Now the -1- in -lagu might be quite unconnected with the transitive conjugation marker. On the other hand, the simi-
larity between Giramay nungalaygu and Wargamay nu:ngalagu forms which fill the same syntactic slot in exactly parallel construction types - suggests that it may be worthwhile pursuing the hypothesis that there is a relation here.

We will posit a hypothetical earlier stage of Wargamay (in which it is syntactically more like its neighbours than is the modern language) and then investigate whether any natural series of changes could yield the modern system. Firstly consider, at some time in the past:
STAGE A
Suppose that at this time pre-Wargamay showed the following features:
(i) Like other Australian languages, each verbal stem was strictly specified for transitivity. A transitive form could only occur in a transitive construction, just as an intransitive form could only appear in an intransitive construction (any other possibility had to involve explicit syntactic derivation, morphologically marked by an appropriate affix).
(ii) As in other Australian languages, conjugation classes correlated statistically with, but did not totally coincide with, transitivity classes.
(iii) Like modern Wargamay and Dyirbal, Stage A had an 'absolutive-ergative'-type syntactic constraint on coreferential NPs in complement constructions. That is, the surface $S$ or $O N P$ of the main clause had to be coreferential with the surface $S$ or $O N P$ of the subordinate clause (and the latter token could then be deleted).

In order to satisfy (iii), within the restrictions imposed by (i), pre-Wargamay would have had to have a transformation that put a deep A NP into surface $S$ or 0 function. The most likely possibility is an antipassive construction, parallel to that in modern Dyirbal.

The Dyirbal antipassive was alluded to in 5.2. The deep A NP goes into surface $S$ function, deep 0 NP takes dative or instrumental(-ergative) inflection, and the verb is marked by the antipassive derivational affix -I+(n)a-y~ -na-y. Thus a Dyirbal transitive construction such as (quoting Giramay forms, with verbs in present-past inflection):
(280) balan gumbul bangul yacangu nungan The man kissed the woman
or
(281) naga balan gumbul nungan I kissed the woman
can be transformed into
(282) bayi yara\{bagun gumbulgu\}nungalanu $<=(280)>$
(bangun gumburu)
or
(283) nayba $\left\{\begin{array}{l}\text { bagun gumbulgut } \\ \text { bangungalanu gumbucu }\end{array}\right\}<=(281)>$
respectively.
Now in Dyirbal an antipassive construction will only normally appear in a non-initial clause, and it is used in order to meet the coreferentiality demands of coordinate constructions (thus (282) could be the second clause in
'the man returned and kissed the woman'). Most frequently the verb in such a non-initial clause will be in purposive inflection, marking a complement construction, as (273). (And whereas the deep $O$ NP can be in dative or in instrumen-tal(-ergative) inflection in an antipassive construction if the verb is not in purposive inflection, if the verb takes purposive inflection -gu then this NP can only be in dative case, also realised by -gu. See Dixon 1972:69, 170-6.) An important point here is that while the overall most frequent inflection on a verb root is present-past -nu~-n, the most commonly encountered inflection on an antipassive stem (involving derivational affix -|(n)a-y~-na-y) is undoubtedly purposive $-\mathrm{y}+\mathrm{gu}$.

Suppose, for the sake of exemplification, that Wargamay had an antipassive derivational affix similar to that in Dyirbal, with form -a- preceded by the conjugation marker -l-. We would then have had, for 'the man returned to kiss the woman ${ }^{\prime}$ :
(284) ma:l banay nulmburugu nu:ngalagu

This is identical to the attested modern construction, (278). However, we are supposing that at Stage A the verb was segmentable into nu:nga+l+atgu. That is, we posit an original system of verbal inflections that would have been, in part:
predominantly intransitive predominantly transitive conjugation conjugation
irrealis
purposive
pos.imperative

| -ma | -Ima |
| :--- | :--- |
| -gu | -gu |
| -ga | $-y a$ |

Our suggestion is that antipassive stems, ending in -la- would take the full range of intransitive inflections. Thus, increments to the root would comprise:
(A)

|  | intransitive |
| :--- | :---: |
| irrealis | root |
| purposive | - ma |
| pos.imperative | -gu |
| -ga |  |


| derived |  |
| :---: | :---: |
| antipassive | transitive |
| stem | root |
| $-1+a+m a$ | $-1+m a$ |
| $-1+a+g u$ | $-g u$ |
| $-1+a+g a$ | $-y a$ |

So that typical complement sentences would be (284), with a (deep) transitive complement clause, and
(285) ma:l banay nugigu the man returned to dance
with a (deep) intransitive complement clause.
STAGE B
Sentences (284) and (285) are parallel constructions, and in each case the complement clause is intransitive at the surface level. It would thus be quite possible for the ending on the verb in (284) to be generalised, so that it also functioned as the ending on the verb in (285). We are suggesting that -lagu replaced -gu as the purposive inflection for intransitive verbs. Paradigm $A$ would then be superceded by:
(B)

| derived |  |
| :--- | :--- |
| antipassive | transitive |
| stem | root |
| $-1+a+m a$ | $-1+m a$ |
| $-1+a+g u$ | $-g u$ |
| $-1+a+g a$ | $-y a$ |

The most frequent type of complement construction is one in which the underlying A NP of the subordinate clause is coreferential with the $S$ or $O N P$ of the main clause (indeed, this is referred to as the 'favourite construction' in 4.3.3 above, and also in my grammar of Dyirbal - Dixon 1972: 73-4); thus, -lagu would probably have been the commonest ending on a complement clause verb. This may have been part of the explanation for why -lagu was generalised to replace -gu in the left-hand column. We can also note that -gu could scarcely have been generalised from the left-hand column to replace -lagu in the middle column without a form like nu:nga-gu becoming irretrievably ambiguous between the interpretation as a simple verb in a transitive sentence, e.g. (275-6), and that as the verb in a derived antipassive intransitive construction, like (277-8).

At this stage-lagu would have become the purposive inflection on intransitive roots in complement clauses, like (279), and also in main clauses, like (76-8) in 3.5.4. A crucial point here is that in an antipassive clause -lagu is segmentable into transitive conjugation marker -1-, plus antipassive derivational suffix -a-, plus purposive -gu, whereas with intransitive roots -lagu is functioning as a simple morph, the (unanalysable) intransitive allomorph of purposive.

The next obvious generalisation (or, really, simplification) is to have just one set of forms for the first and second columns in the paradigm. We have suggested that antipassive -lagu was extended to the intransitive column, partly because of its greater frequency. But for the other verbal inflections (irrealis, imperative, and so on) the intransitive allomorphs would be much more frequent than the antipassive variety; and, unlike purposive, all of the other inflections (leaving aside the unmarked ending -y) do have different forms in the left-hand and right-hand columns. We might thus expect that for inflections other than purposive (and also for the 'continuative' derivational suffix), the intransitive allomorph might be generalised to the second column, giving:
(C)

| intransitive root in intransitive construction | transiti | root in |
| :---: | :---: | :---: |
|  | intransitive construction | transitive construction |
| -ma |  | - Ima |
| -lagu |  | -gu |
| -ga |  | -уa~ф |

and so on.
This would only work if there were, at approximately the same time, a tidying-up of conjugation-transitivity membership. Exceptional items - transitive verbs in the
$\phi$ conjugation or intransitive stems in the -l class - would have to be reassigned to the majority class, if severe confusion were not to result. We can see that such a tidyingup must have taken place very recently in the $W$ dialect, simply because it has not been completed in the $B$ variety (in 3.5 .3 we mentioned that $B$ has a few verbs like bungi'lie down' which take transitive inflections although they do only occur in intransitive constructions).

With the replacement of -lama by -ma, -laga by -ga and so on in the middle column, the justification for analysing -lagu into three morphemes would have disappeared; since -la only occurs in -lagu it cannot be segmented out as a distinct morpheme. Now -lagu would be felt to be indivisible, simply an allomorph of purposive, whether affixed to intransitive or to transitive roots.
(It is likely that Stage $C$ very quickly followed Stage $B$; indeed the changes may have been more-or-less simultaneous, so that Stage A effectively gave way to Stage C. The original -lagu in the middle column of Paradigm A was analysed into -l+atgu, the last element being the intransitive allomorph of purposive; once this allomorph, -gu, had been replaced by -lagu a pivotal point for the analysis of -lagu would have been lost. If, in the middle column, -lagu - and also -lama and -laga - were no longer felt to have recognisable components, what more natural than that the latter two forms should have been replaced by -ma and -ga from the left-hand column.)

This diachronic hypothesis explains the modern intransitive allomorph -lagu as being derived from the transitive conjugation marker -l-, plus -a- as a residue of an original antipassive derivational affix, plus the early intransitive allomorph of purposive, -gu. We can posit a form *-Ca- for the antipassive suffix at Stage A (where C indicates some consonant'that can occur word/affix initially). Suffixes in Wargamay, as in surrounding languages, almost invariably have canonical forms commencing with a consonant, and the change *-1+Ca->-1+a- exactly parallels *-1+gani> -ltani suggested for the continuative suffix in the $B$ dialect.

The antipassive form could have been -na-, identical to the suffix in modern Dyirbal, and then the reduction *-I+na->-I+a- in Wargamay would exactly parallel that in Giramay. But there is no way of verifying this. Dyirbal and Wargamay do show striking similarities but there are also many differences, and there is simply not enough evidence to support their close genetic relationship (that is, to justify suggesting proto-Dyirbal-Wargamay as the ancestor of these two languages and of no others).

It does seem a little surprising that the transitive allomorph of purposive is -gu rather than -Igu, which would parallel -Ima, -lga and -Igani- in the transitive column of Table 3.3. We can note, however, that Nyawaygi has a verbal system that shows important similarities to that of Wargamay; a number of the inflectional allomorphs for the -1 conjugation in Nywaygi do begin with -l (e.g. irrealis -Ima, negative imperative -Igam) but in Nyawaygi - as in
modern Wargamay - the purposive inflection is just -gu in the - 1 conjugation. This makes it seem quite likely that at Stage A purposive was -gufor both Wargamay conjugations; indeed, this identity is one of the reasons why the intransitive inflection could scarcely have been generalised onto the middle column in the change from $A$ to $B$.

In summary, we have suggested that Wargamay had a derivational process that formed an intransitive stem from a transitive root, and that this was largely motivated by the 'absolutive-ergative' syntactic constraint on complementation (and perhaps on coordination generally). Through morphological generalisation - allied to an 'elimination of exceptions' that led to an exact coincidence of conjugation and transitivity subclasses - this has developed into the possibility of using transitive verbs in either transitive or intransitive constructions, with the appropriate conjugational allomorphs in each case.

Transitive verbs occur the great majority of the time in transitive constructions; it appears that all or almost all of them can function intransitively although - for the syntactic and semantic reasons outlined at the end of 4.2 some do so more frequently than others. A transitive verb will generally only appear in an intransitive construction in marked syntactic circumstances - to signify a reflexive relation, or to satisfy the constraint on complement constructions, and so on. There is no such syntactic reason for intransitive verbs to function transitively, and there has thus been no change to the original restriction that intransitive verbs can occur only in intransitive constructions.
(As a final note, it is worthwhile comparing the case assignment in intransitive constructions involving transitive verbs, for Wargamay, with case assignment in an antipassive construction, in Dyirbal. The deep 0 NP from a transitive construction in Wargamay must be in ergativeinstrumental inflection in the corresponding intransitive sentence unless the verb has purposive inflection (-lagu) in which case it can take either ergative-instrumental or dative (-gu) case. The deep 0 NP in a Dyirbal antipassive can be in ergative-instrumental or dative inflection unless the verb has purposive inflection (-qu) when it can only take dative inflection (-gu). This underlies the recurrent connection - first pointed out by Capell (1956:77-8) between nominal dative $-g u$ and verbal purposive -gu. And it also emphasises that - whatever the syntax of the postulated antipassive construction in Stage A - intransitive constructions with transitive roots in modern Wargamay do not by any means bear an exact syntactic correspondence to antipassive constructions in Dyirbal.)

### 5.4 EXAMPLES OF SEMANTICISATION

Languages typically have a number of alternations that are morphologically determined - one set of roots may take one allomorph while another set may take an allomorph of a quite different shape (with the membership of the sets
often having simply to be learnt, as a list). These alternations add nothing to the communicative function of the language but simply provide complication, and take some of the users' efforts away from the main semantic task in hand - that of communicating meaning between speaker and hearer.

There is always a tendency to eliminate irregularities and contentless alternations in order to simplify and streamline the language, and to enable its speakers to concentrate their energies on the major semantic tasks. This process of rationalisation can often proceed very slowly; typically, new irregularities crop up as old ones are being ironed out.

Wargamay, and especially the $W$ dialect, shows a pronounced tendency (more than any of its neighbours) to do something about irregularities or morphologically-conditioned alternations. It will sometimes eliminate them; at other times it will provide reinterpretation so that they come to fulfil a useful communicative role. We can quote four examples of this tendency:
[a] Inflections on mina 'what' (see 3.1.5).
In other languages of the area -ogu serves for both ergative and instrumental functions, and -nga for locative and aversive functions. There are sometimes two or three irregular items that take -lu in place of -ggu and -la instead of -nga; mina is a frequent member of this 'irregular subset' (see Dixon 1980a:376,495).

This is likely to have been the situation at an earlier stage of Wargamay. But the language has now taken the previously contentless alternation between -lu, -la (on mina) and -oga, -nga (on all other nominals) and invested it with semantic power. In the case of mina, lu indicates instrumental and -la aversive functions, while -ngu and -nga have been generalised from the remainder of the class for ergative and locative functions. This is a paradigmatic example of morphological change, with a given morpheme being replaced - by analogic generalisation - in its primary function (ergative, locative), but retained in what was originally the secondary function (instrumental, aversive) - see Kuryłowicz 1964:11.

A possible next step would be for the semantic constrast between -lu and -ngu, and between -la and -nga, to be generalised to alt nominals.
[b] The irregular verb gi:-~gi:gi- 'to sit' (see 3.5.3). Data from the B dialect suggests that in an earlier stage of Wargamay there was an irregular verb, with monosyllabic root, di:-. We showed in 3.5.3 that this appears to be in the process of being reinterpreted as a regular disyllabic form gi:gi-, and that it has proceeded much further in this direction in the $W$ than in the $B$ dialect. Thus is an irregularity apparently in the process of being eliminated through creation of a disyllabic in place of an original monosyllabic root. (See also the comment in 3.5.3 on irregular imperatives ma:na and wuga suggesting that two more originally monosyllabic verbs, ma:- 'hold in hand' and wu- 'give', have been restructured as disyllabic roots ma:ni- and wugi- respectively.)
[c] Conjugation-transitivity iconicity Distinct verbal conjugations are plainly a complexity that can serve no communicative function if they do not, say, coincide with transitivity classes. In Yidin, for instance, $56 \%$ of verbs in the $-n$ conjugation are intransitive and $44 \%$ transitive; plainly no speaker could make a sure syntactic inference from conjugational class membership. Wargamay has taken this morphologically-determined alternation and, by making transitivity exactly coincide with conjugation, given it an important syntactico-semantic role. The fact that this tidying-up has not fully taken place in the $B$ dialect confirms that pre-Wargamay must have been like modern Yidin and Dyirbal and had only a degree of correlation between conjugation and transitivity classes. The $W$ dialect has assigned a communicative role to this previously asemantic distinction. This has, in turn, paved the way for the fourth example of simplification in modern Wargamay.
[d] Loss of antipassive derivational affix. It will plainly be to the advantage of a language to use the smallest number of morphemes in some grammatical task. Originally, in order to use a transitive verb in an intransitive construction - to satisfy a syntactic constraint - the antipassive derivational suffix must have been required between root and inflection. Presumably one had to say, in pre-Wargamay, something like:
(286) ninba gagaga baya-i-a-ga You go and sing:

Nowadays the transitive verb baya- can simply be used with the intransitive inflection:
(287) ninba gagaga baya-ga You go and sing:

This is a clear gain in simplicity and cannot fail to assist the communicative power of the language. It is only possible, of course, because of the coincidence of conjugation and transitivity, mentioned under [c].

We thus have four examples of the semanticisation or elimination of irregularities/alternations that had no semantic force in pre-Wargamay. (It will be seen that this tendency is most pronounced in the $W$ dialect, although points [a] and [d] do appear also to hold for Biyay.)

### 5.5 FUTURE SYNTACTIC DEVELOPMENT

Wargamay has not been actively spoken for some years, and is only 'remembered' by the last two or three users. It will thus not be possible to observe the further changes that would surely have occurred, following on from the sequence outlined in 5.3. Would 'intransitive verbs' have been generalised also to appear in transitive constructions, taking transitive inflections? If this happened, every verb in the language could appear in a construction of either transitivity type, marked by an appropriate inflection.

It is possible to do no more than speculate about the
changes that might have occurred. But one line of development - that seems to me more likely than that mentioned in the last paragraph - deserves to be briefly followed through, because of its important theoretical implications.

Recall that the developments in 5.3 were motivated by a syntactic constraint that identifies intransitive subject (S) and transitive object (O) functions. Because of this a co-referential deep A NP in a complement clause has to be placed in surface $S$ function. This may originally have been achieved through a derivational process but is now handled by simply letting transitive verbs appear, with intransitive inflection, in intransitive constructions.

Transitive verbs still occur much more often in transitive than in intransitive constructions. But, unlike antipassive clauses in Dyirbal, an intransitive Wargamay clause involving a transitive verb can occur as an utteranceinitial main clause. Suppose that this state of affairs gradually shifted so that:

First - transitive verbs appeared more frequently in intransitive than in transitive constructions;

Then - original transitive constructions eventually ceased to be used; A forms of 1 sg and 2 sg pronouns (naga and ginda) dropped out of use and the transitive allomorphs in Table 3.3 were simply discarded.

Transitive verbs would now only occur with their subject (A) NP in what we have called absolutive case - this is also used for the subject (S) of an intransitive verb - and their object (O) NP in ergative-instrumental (or perhaps, in specially marked circumstances, in dative) inflection. But this is simply a 'nominative-accusative' case system, and it would surely be appropriate to rename absolutive as 'nominative' and ergative-instrumental as 'accusative'.

Now the syntactic constraint on complement constructions, that the common NP must be in surface $S$ or 0 function in each clause, would become 'the common NP must be in surface $S$ or $A$ function in each clause'.

More details would of course have to be worked out, but the end result is clear enough. By extending the natural set of changes described in 5.3 , that were orientated towards meeting 'absolutive-ergative'-type syntactic constraints, Wargamay would change so that it was, morphologically and syntactically, a 'nominative-accusative' language:
(Some other Australian languages have followed changes of the type just described and in two instances this has led to the development of a fully nominative-accusative morphology. Discussion and further references are in Dixon 1980a:449-57, 498).

## APPENDIX - CARL LUMHOLTZ ON WARGAMAY

Lumholtz did not give any tribal or language names, but his grammatical and lexical comments clearly concern the $W$ dialect of Wargamay with just a few intrusions from the $B$ dialect of Wargamay and from the Giramay dialect of Dyirbal. In the left-hand column below we quote Lumholtz, providing phonemicisation and commentary on the right.

Among Cannibals, p.308-9
The language of the natives on Herbbert river is imperative and brief. A single word frequently expresses a whole sentence. 'Will you go with me?' is expressed simply by the interrogation nginta? (thou?), and the answer, 'I will stay where I am,' by karri ngipa (I remain). 'I will go home,' ngipa mittago (literally, I in respect to the hut).

The suffix go literally means 'with regard to', and is usually added to nouns to give them a verbal meaning, but is also sometimes added to verbs. The question Weinta Morbora? - that is, 'Where is Morbora?' - can be answered by saying, only tityengo (he has gone hunting tityen) (wallaby), (literally, with respect to wallaby); or, for example, mittago he is at home (literally, with regard to the hut). Mottaigo means 'he is eating' (literally, with regard to eating). 'Throw him into the water,' is expressed simply by ngallogo. As is evident, this is a very convenient suffix, as it saves a number of moods and tenses. It may also be used to express the genitive for example, toolgil tomoberogo, the bones of the ox.

There frequently is no difference between nouns, verbs, and adjectives. Kola guli 'wild, angry'; buga means wrath, angry and to get angry. Poka means smell, to smell and rotten; oito means a jest, and to jest.
'It is noon' is $v i$ ormpi (sun big). 'It is early in the morning,' is vi naklom (sun little). 'It is near sunset', is vi molle mongan. Kolle is a very common word. It is, in fact, used to call attention to a strange or remarkable sound, and means 'hush!', Kolle mal!' 'Hush,

## Commentary

Dinda 'you (singular)'
nayba 'I'; 'karri' is not recognised by modern speakers. gayba migagu 'I camp-to'
-gu is dative-allative case with nouns, and purposive inflection with verbs in transitive sentences.
wanganga 'where'
gi:gin 'wallaby' (Lumholtz's accent is clearly motivated by the long vowel) + dativeallative -gu
migatgu as above
muga+gu 'eat-purposive'
nalu+gu 'water-dative/allative'
gulgil is 'bone' and gumubucu 'bullock' but genitive is -nu not -gu 'rotten, stinking'; 'oito' is not recognisable (informants suggested wudu 'nose' or wa:di- 'laugh' when this was read to them). Verbs are in fact derived from nominals by the inchoative suffix -mbi~-bi~-i (4.9).
wi: wurbi 'sun big'
wi: nagaram 'sun tiny'
$v i$ molle mongan means 'the sun is near the mountains' (Among Cannibals p 177); it involves mulu 'near' and
there is a strange man!' Kólle is also used to express indignation or a protest, 'far from it'. A superlative of an adjective is expressed by repetition - for example, krally-krally, 'very old'.
The vocabulary is small. The language is rich in words describing phenomena that attract the attention of the savage, but it lacks words for abstract notions. The natives, being utterly unable to generalise, have no words for kinds or classes of things, as tree, bird, fish, etc. But each variety of these things has its own name. Strange to say, there are words not only for the animals and plants which the natives themselves use, but also for such as they have no use for or interest in whatever...

On Herbert River I found, to my surprise, various names for flame and coals. Vákkun meant camp fire, coals, or the burning stick of wood, while the flame was called koyilla.
...Several tribes have three numerals, as, for instance, Herbert Vale tribe - 1 yóngul, 2 yákkan, 3 kárbo, 4 , etc. is usually expressed by taggin (many).
munan 'mountain'.
Surprisingly, in view of Lumholtz's comments, 'kolle' is not used by present-day speakers. ma:l is 'man'
'krally' was not recognised.
I collected 900 words from informants who have not spoken the language actively for two score years (whereas Lumholtz only collected 140 in a year!). These comments are a reflection on Lumho1tz's lack of interest in learning the language. Wargamay would certainly have had a vocabulary of at least $5-10,000$ words, like every other natural language.
Generic terms include ganal 'frog', wingi 'snake', gi:gi: 'bird', ga:bu 'fish', gurgal 'bee', bangay 'spear', bari 'stone', wagun 'tree', gungul 'vegetables'. Each of these has a number of specific terns included under it.
Wargamay is particularly rich
in abstract nouns e.g. 'anger', 'fear', 'odour' (-giri can be suffixed to derive an adjective, or -mbi~-bi~-i to form an intransitive verb).
wagun is used for tree, wood and fire. guyila was said to mean 'charcoal' by Lambert Cocky (although he did not seem very certain about this word). Note that accents here correctly identify the stressed syllable (but there is no long vowel in wagun, as in gi:gin above).
yungul 'one', yaga 'two', gacbu 'three', gagin 'a lot'

Among Cannibals, pp.312-3

## Commentary

COLLECTION OF WORDS FROM HERBERT RIVER
( $g$ before $i$ and $a$ pronounced hard)

Alıínkpa, we two

Ámmery, hungry
Ammon, breast
Atta [Moreton Bay and Rockhampton: atta], $I$.
Bággoro, sword, serpent-liver
Bállan, moon
Bámbo, egg
Bámpa, distant
Bátta, take
Bému, brother's son
Bínghan, foot, footprint
Bínna, ear
Boongary, Dendrolagus lumholtzit
Bórboby, battle, duels
Bórrogo, a variety of Pseudochirus
Deerbera, tomorrow
Dómbi-dómbi, woman
Era, teeth
Etaka, tuft
Evin, Calamus australis
Farínga, stone, rock

Gangítta, handkerchief
Gilgla [the $Z$ to be pronounced with thick palatal sound], cassowary
G'rauan, Megapodius tumulus (bird, egg, nest)
-Go [suffix, Moreton Bay: -co], in regard to.

Gómbian, Echidna
Góri, blood
Hánka, whence?
Káddera, opposum (Irichosumus vulpecuza)
Kádjera, Cycas media
Kainno, to-day
Kainno-kainno, well, sound
Kakavagó, go
Kalló, come on:

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gali \etainba - 'we two', first per-
    son dual pronoun, plus 'you',
    second person singular pronoun
    added to mark it as 'inclusive'
nami ci
namun
naga, transitive subject form of
    first person singular pronoun
```

bagucu
balanu $w$, balan $B$
bambu
bamba
possibly bu:di- 'take, bring'
bimu 'father's elder brother'
bingan
bina
bulngari 'tree-climbing kangaroo'
burbabay 'hit each other'
bucugu
possibly gidalgu
gambigambi, 'old women'
yira
not recognised
gamin
baritnga 'stone' plus locative
inflection
plainly a loan from English
gilngira
girawan 'scrub hen and nest'
-gu dative-allative case inflect-
ion on nouns; purposive inflect-
ion on verbs in transitive
constructions.
gumbiyan
gu[i
possibly wanga- 'where?'
gagara
gadira 'zamia fem'
ganu 'later on today'
not recognised
gaga- 'go' probably with purposive
inflection -lagu
probably one of the two interjec-
tions gawu 'come on:', gala
'try again'

Kämin, climbing implement
Kāmo, water

Kárbo, 3
Kárri, remain
Kawan, nausea
Káwri, axe
Kedool, cold
Kelan, old man, sir [word of address]
Kóbi, arts of witchcraft
Kola [subst and adj], anger, angry
Kólle, hush:
Kómorbory, many, large multitude
Kóna, excrements
Kónka, unharmed, raw, not roasted
Kóntagan, nice weather
Kontáhberan, dark, dark night
Koonduno, thunder
Koráddan, a kind of fruit
Koyílla, flame
Králly, old
Kuroonguy, thirsty

Kootjary, Talegalla lathomi
Kvíkkal, Perameles nasuta
Kvíngan, evil spirit, devil
Mah, ${ }^{\text {Maja, }}$, not, no
Mal [Moreton Bay: malar. Yelta: malle], man, especially of a strange and hostile tribe
Mállan, hand
Mally, good, excellent
Mami, master
Mánta, membrum virile
Manta korán, an oath of uncertain meaning, also a word of abuse
Márbo, louse
Márgin, gun
Máwa, crawfish
Mílka [verb], produce rain
gamin, a loya vine and climbing implement made from it
gamu is 'water' in Giramay and HB ; the term in $W$ and $B$ is galu

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gacbu
not recognised
gawan 'anger'
not recognised
gidul
gilan
gubi, 'doctor' who practises these
    arts
guli 'wild, angry'
not recognised
gumarbari
guna
gunga 'unripe (vegetable), raw
    (meat), alive (person)'
possibly gundabara 'fine weather'
gundambula
gungunu
not recognised
guyila 'charcoal' (?)
not recognised
Nora Boyd suggested that dulogu
    'throat' might have been intended
    gulngu narala 'dry throat' can
    mean 'thirsty'.
guygari 'scrub turkey'
guygal 'long-nosed bandicoot'
guyggan 'spirit of a woman'
maya 'no'
ma: | 'man' (not necessarily of a
    strange or hostile tribe)
mala
mali
not recognised
manda 'penis'
this could conceivably involve
    guran 'long'
macbu
margin
mawa
milga is actually a noun, referr-
    ing to a piece of painted bark
    (in later days, iron) placed in
    the root of a tree just in the
    water, as a 'rain-maker'. It is
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| Míll, eye | not a Wargamay item |
| :---: | :---: |
| Minná [cf. Moreton Bay: menäh], how? | mina 'what?' |
| Minná-minnana-gó, how in the world? | mina-mina-gu 'what-REDUP-DAT' i.e. 'why?' |
| Mítta, hut | miga |
| Mogil [Moreton Bay: magul] head | mugal |
| Mólle, near | mulu |
| Móngan, mountain | munan |
| Móngan, Pseudochims herbertensis | mungan |
| Móttai [verb and subst.], eat, food | muga- 'to eat' (only a verb) |
| Móyo, anus | muyu |
| Nahyee, no | not recognised |
| Naiko [verb], own | naygu 'my', first person singular possessive pronoun |
| Naklam [the $\mathcal{Z}$ to be pronounced with thick palatal sound」, little | nagaram 'tiny' |
| Ngallo, water | nalu |
| Ngalloa, Dactylopsila trivirgata | naluwa 'flying squirrel' |
| Nginta, you | ginda, transitive subject form of second person singular pronoun |
| Ngipa, I | nayba, intransitive subject form of first person singular pronoun |
| Nongáshly, only | not recognised |
| Nili, girl | nayili, girls |
| Oito, jest | not recognised |
| Oonda, see | gunda- 'to see, look' |
| Ōrupi, large | wurbi |
| Peera [subst and adj], fear, afraid | bi:ca |
| Pipu [from the English], pipe | baybu |
| Poka, hair; smell [Echuca: boka] | buga 'rotten, stinking' |
| Pókkan, grass-land, grass | bugan 'grassland' |
| Pul [verb], smell | Nora Boyd suggested that this could only relate to buga 'smelly' (see above) |
| Púlli, flea | buli |
| Sinchen, rash, syphilis | not recognised not recognised |
| Suttungo, tobacco | not recognised |
| Tággin, many, much, also the numeral 4 | gagin 'a lot' |
| Takólgoro [a word of exclamation], poor fellow | gagul 'sorry, pitiful' perhaps with an affix such as -bulu 'very' |
| Tálgoro, human flesh | galguru ' (any) meat' |
| Tállan, tongue | galan |
| Tamin, fat | gami is 'fat' in Giramay |
| Tchígga, sit | gi:ga 'sit-IMPERATIVE' |
| Títyen, wallaby | gi:gin 'swamp wallaby' |
| Tobola, a kind of fruit | dubula 'black pine' |
| Tomóbero, cattle, meat | gumuburu |
| Toollah, Pseudochirus archeri | gula 'striped possum' |
| Toolgil, bone, bones | gulgil |

mentioned by Banfield in My
Tropic Iste p. 278 and Last
leaves from Dunk Istand p. 127
not a Wargamay item
mina 'what?'
mina-mina-gu 'what-REDUP-DAT' i.e. 'why?'
miga
mugal
mulu
munan
mungas
to eat' (only a verb)
not recognised
naygu 'my', first person singular possessive pronoun
nagaram 'tiny'
nalu
naluwa 'flying squirrel'
ninda, transitive subject form of
second person singular pronoun
nayba, intransitive subject form
of first person singular pronoun
not recognised
not recognised
gunda- 'to see, look'
wurbi
bi:ca
baybu
buga 'rotten, stinking'
bugan 'grassland'
only relate to buga 'smelly'
(see above)
buli
not recognised
not recognised
gagin 'a lot'

```
gagul 'sorry, pitiful' perhaps
    with an affix such as -bulu
    'very'
galguru '(any) meat'
galar
gami is fat in Giramay
gi:ga "sit-IMPERAIVE
gisgin'swall
gubula black pine
gula 'striped possum'
gulgil
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Toolgin, scrub
Toongna, drink
Toongu, sweet
Towdala, Orthonyx spaldingii
Vákkun, coals
Vaneera, hot
Vee, sun
Veera, a kind of fig which grows on grass-land
Vikku, bad
Víndcheh, snake
Vómba, belly
Vónda, an edible root of a climbing plant
Vooly [adj], dead
Vooroo, nose
Vótel, sleep
Vukka, thigh
Wainta, where?
Yábby, Pseudochirus lemuroides
Yákkan, 2
Yálla, remain
Yamina, a monster (p 201)
Yanky, a kind of fig
Yárri, Dasyumus
Yárí, honey
Yeergilíngera, star
Yókkan, fog, rain
Yóngul, 1
Yopolo, Hypsiprymnodon moschatus

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gulgin
gan\etaa- 'to drink'
gunu 'odour'
possibly Giramay gawudala
wagun, 'tree, wood, fire'
banica 'sweat'
wi:
wira 'black fig'
wi:gi 'no good'
wingi 'snake (generic)'
wumba
bundu
wula-, verb 'to die' plus unmarked
    aspect -y
wudu or wuru
wudil, adjective 'asleep'
waga 'shin'
wanga+nga 'where?'
Giramay yabi 'light grey possum'
yaga
yala 'here'
yamani 'rainbow'
not recognised
not recognised (but yari is Das-
    yumus maculatus in Giramay)
Nora Boyd suggested wubiri might
    have been meant
yirgingara
yugan 'rain'
yungul
not recognised
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## TEXTS

Texts 5-7, which were tape-recorded from John Tooth and Lambert Cocky, and Texts 8 and 9, dictated by John Tooth, are given here. These have been slightly edited, by the omission of repetitions and false starts.

Texts 1-4 were recorded by La Mont West Jr from Jimmy Johnson at Palm Island in 1964. The transcription and analysis that can be provided is not sure enough to merit inclusion here.

Tapes of Texts 1-7 (and West's transcription of Texts 1-4) have been deposited with the Australian Institute of Aboriginal Studies, P.O. Box 553, Canberra City, A.C.T., 2601, Australia.

## TEXT 5

A story told by John Tooth about seeing a ghost after having been drinking. (Recorded 4th November 1972 at Glen

Ruth Station; lasts $2 \frac{1}{2}$ minutes.)

1. ma:l naga barbay / gannalagu nalungu I asked a man, for a drink.
2. nulanga ga:may / jali ninba gannalagu jalungu / He said 'We'11 have a drink'.
3. nayi / yungurangu ga:may / nayi / dannalagu 'Yes', the other man said, 'yes, (we'11) drink.'
4. garbu gagay / garbu nayba gagay / The three of us went.
5. nalu waybalangu bu:dinu / The white man had brought grog.
6. garbu gannabali / nalungu gannabali / gurugungu gannanu / We three were drinking, drinking liquid - drinking grog.
7. by-and-by naga nunday guyggan / gagabali / By-and-by I saw a female ghost. (It) was walking about.
8. yungurangu ma:Idu ga:may / mina nuna / The other man said (to me) 'What's that?'
9. minabagun / guyggan I think / guyngan / nayi / 'I don't know what. A female ghost, I think - yes.' (I replied.)
10. maya maya maya waybala nuna / toreh-giri wunabali / 'No, no, no. that's a white man. Walking about with a torch.' (Another said.)
11. nayi / 'Yes' (I replied)
12. ganŋabali gannabali/ (We) continued drinking.
13. naga nunday again / I saw (it) again.
14. nuga duwarabali / guyggan / 'That ghost, she's standing (there).'
15. naga bicbagi / ganbalagu I had jumped, to hit (it).
16. maya bugulbigi / But no, it had disappeared.
17. nayba junday / maya / I looked. There was nothing.
18. yaga bula ma:l bimbirigi / The two men (who were with me) had run away.
19. nayba bimbirigi / bi:[agiri / gagay migagu / I had run away (too) with fright; I went to the camp.
20. naga barbay / puna ma:l / gannalagu / I asked the (two) men to have a drink.
21. maya maya bi:cambigi nayba / 'No, no, I'm frightened' (they each said).
22. minagu / 'What of?' (I asked them).
23. nayba gagay / nayba bi: cambigi too / nayi / I went. I was frightened too, yes.
24. गa: गunday naga / yalanga buguligi / I didn't see (the ghost); (it) had disappeared there.
25. Jaga jalu gaga / banamay / I brought the drink back (to my friends).
26. yalanga nalu gannay / (We) drink the grog there.

Note that alcoholic drink is at first referred to by galu ('water, any drinkable liquid') and then in line 6 is specified more explicitly as
guçugu 'grog'.
The perfect inchoative form of bugul 'vanished' was said as bugulbigi in line 16, but corrected to bugulig! on playback; it was said as buguligi in line 24 (see 4.9.1).

When the three men saw the ghost for the second time they dropped the bottle and ran off (lines 18-19). At the end John Tooth returns alone to retrieve the bottle.

## TEXT 6

A traditional myth told by John Tooth. (Recorded 5th November 1972 at Glen Ruth station; lasts $2 \frac{1}{4}$ minutes.)

The story concerns six mythical people. The two Gurigala, who were good hunters, had no wives, whereas the two Warugala each had a wife called Binbical. One day the two Gurigala asked the Warugala to go and get water; while they were away the Gurigala stole their wives. When the two Warugala came back they looked everywhere for Gurigala and Binbical. They heard a cooing noise that they thought might be them, but it was only two trees rubbing against each other. Then they saw all four of them way down in the Herbert Gorge. The Wacugala descended the gorge but the Gurigala and their captives were on the opposite side of the river and the Warugala could not swim. They threw stones into the water to make a bridge across, but then everything started to change. The Warugala saw the others high up on a ridge. Then the Wacugala men turned into black wallabies (warugala), Gurigala into eaglehawks (gurigala) and Binbical into parrots (binbical). The eaglehawks and parrots flew away, into the scrub.

Text 1, by Jimmy Johnson, is another version of the same myth. Johnson said that the sparrow-hawk taught Wacugala how to hear a hunter, and that in revenge Gurigala stole the sparrow-hawk's wife and opened her vagina with a sliver of quartz.

1. gurigalangu / miga binday / The eaglehawk (gurigala) built a camp.
2. nuna gana warugala / wunabali (on playback John Tooth corrected gana to bula) The two black wallabies (warugala) were walking about.
3. by-and-by nuna gi:gay nalugu / gurigalangu / warugala / By-andby the eaglehawks told the black wallabies (to go) for water.
4. gagay galugu / bu:dilagu / (The black wallabies) went to fetch water.
5. nuna gagay / (The wallabies) went out.
6. yubaymay / binbicalna / (The eaglehawks) stole the parrots (binbical) (who were the wives of the black wallabies).
7. wafugala gawaligi / gawaligi gawaligi / nuna nuna nuna galaga / nuna gurunga / The black wallabies cried out, they called out (in every direction). 'There they are, up on the ridge!'
8. nali gagabali / 'We're going' (the black wallabies said to each other, as they traced a cooing noise).
9. maya gunbin nunga / wayumbigi / 'No, (there's just) these twisted trees rubbing together. (It) has changed into something.' (they said)
10. gu:ngugan / gana biray / warugalangu funday / They (the eaglehawks and their captives) all went down to the gorge, and were seen by the black wallabies.
11. rungadi gana / nalunga yugarabali / 'There they are, swimming in the water' (the wallabies exclaimed).
12. wacugala bimbirigi / bimbirigi / The black wallabies ran (down to the bottom of the gorge).
13. yaluga nuna gana / guyabay guwarabali / 'They're all there, standing on the other side' (one wallaby said to the other).
14. minambilagu / 'What are we going to do now?' (one wallaby said).
15. maya gamu nali / bari bucmbiya nalugu / 'We must just chuck stones into the water (to make a bridge', the other wallaby replied).
16. nali jinba gagalagugan / 'You and I must go now' (one eaglehawk said to the other).
17. maya nuna all together / nuna gagabali du funga / bamba now / bamba bamba / na: nunday / (The wallabies watch the eaglehawks progress and say to each other:) 'They're all going along the ridge now. Now they're a long way off, and no longer visible.'
18. mina nuga wayuwayumbigi / wacugalambigi / They (the eaglehawks) changed into something. (And the Wacugala changed from men) into black wallabies.
19. nuna gurigala yinbi / binbiral yinbi too / yalanga buguligi / The eaglehawks flew away, and the parrots flew away too. They vanished from sight there.

## TEXT 7

A reminiscence of massacres by the native police, as told to Lambert Cocky by his father and grandfather. (Recorded by Lambert Cocky, 6th November 1972 at Sheahan's farm near Ingham; lasts 2 minutes.)

1. nayba bimbirigi / yalanga bulimanda / gulgingu / bulimandu nana wunay / bungagu nana caybulndu / I had run away, from the policeman here, into the scrub. The policeman was chasing me, to shoot me with a rifle.
2. maya nulanga draygangu milbalgani naygungu / bungagu nana / The trackers would show (the white police where) I (was) so that (they) could shoot me.
3. gana yubagi / gulgingulgingu / gawaligi / We all ran away, from scrub to scrub, calling out.
4. nupa drayga nanbalgani / bulimandu / The policeman would follow the trackers.
5. nagu dulgingu / munanmunangu nana gagay / We went into this scrub, and then (from hillop to scrub) to hilltop.
6. maya nuna bulimandu nanbalgani / bungay yungura / But no, the policeman would follow them (my tribesmen), and shoot one.
7. nayba nunga cagigi / I fell down.
8. galaga gagay munangu / gaymbiri gaymbiri nanana wunal gay bulimandu / (We) went up the hill, but the policeman chased us everywhere.
9. drayga / gawaligi nanangu / wanga ninba / The tracker called out to us 'Where are you?'
10. maya nana na: na:ray/... nana bi:cambigi / No, we didn't listen, we were frightened.
11. bulimandu bungalgani / nana / The policeman would always shoot at me.
12. galaga nana gagay / We went up.
13. nunga nayba / ninda na:ra gu: nara / gu: nacanin / where na:ralma пала / I'm that one. You listen to (this story) from a long time ago. (Now) you'11 listen to me (telling another story).
14. gi:cigin / na:ra nana / gi: rigin nayba Howkins-Creek-miri / yalanga nanana bulimandu narngay / Romulus (gi: figin) listen to me - I'm Romulus from Hawkins' Creek. The policemen rushed us there.
15. nanbay ganama ma:l / malanmalan / galaga / munangu / gala gagay / gulgingu / gaymbiri ganana wunalgay / bungay / bungay / bulimandu / (Policemen) followed all the (Aboriginal) men, up the rivers, up the hills. They went into the scrub, and were chased everywhere (by the policemen) ; and shot by the policemen.

Note that Romulus was an Aboriginal leader during Lambert Cocky's youth.

TEXT 8
An ad hoc conversation dictated by John Tooth (at Glen Ruth, 13th December 1974).

1. A: nayba balganda dumbagi / I went into the house
2. B: minagu / What for?
3. A: gulmburugu jundalagu / To see the woman.
4. B: Jinba mulgara / You're game:
5. A: minala nayba bi:cambilagu / What should I be frightened of?
6. B: ma:|ndu nina bucbalma / The man (belonging to that woman) might hit you.
7. A: maya / nu!mburu naga yungul daymbay / No, I only found one woman there (no men)
8. B: 万ina nu:ngay / Did (she) kiss you?
9. A: nayi / naga mala ma:ni / naga yubaymay / Yes. I grabbed (her) hand, I stole (her) away.
10. B: wangagu ninda bu:di/ Where did you take (her) to?
11. A: gungari nayba gagay / nalwagirigu / waybalangu nana / gulbunmay nana / I went north to Abergowrie (nalwagiri). And the white man married me (to the woman).
12. B: birigingu ninda / You're a bugger (marrying another man's woman).
13. B: Dinba mulgara / You're game.
14. A: пауi Yes.

## TEXT 9

An ad hoc conversation dictated by John Tooth (at Glen Ruth, 8th November 1977).

1. A: Jinba mu: cambiga / You hide:
2. B: minala / For fear of what?
3. A: waybalangu nina nundalma / Lest the white man see you.
4. A: ninba yubaybinu / minambinu ninba bimbirigi/ You ran away (from him). Why did you run away?
5. A: waybalangu naлa burbanu / The white man hit me.
6. B: minala nina bucbay / What did (he) hit you over?
7. A: yaramanda nana bu[bay / (He) hit me over a horse.
8. B: minagu ninda bucbay / What did you hit (the horse) for?
9. A: yaramandu nana bucmbi / The horse threw me.
10. B: nuna wayabala gawanbigi / minagu / Why did the white man get wild?
11. A: Jaga yaraman mugal bucbay / I hit the horse in the head.
12. A: 刀ulmucunga nayba yubaybigi / (That) night I ran away.
13. A: yala nana waybalangu daymbay / The white man found me here.
14. A: nana waybalangu bu:di / nana balgangu banamay / The white man took me back to the house.
15. A: yalanga nali bucbabay / The two of us had a fight there.
16. A: naga ganbay / gagal / nuna dagigi I hit (him) in the jaw; and he fell down.
17. A: yungurangu waybalangu yagangu nana ma:ni / cubungu nana ni:cay / yalanga nana wagunda ni:tay / Two other white men grabbed me, and tied me up with rope, tied me to a tree there.
18. A: nayba yalanga nulmurugu gi:gi / I stopped there until the night (and all through the night).
19. A: biliginga / buliman du:ngigi / In the morning the policeman arrived.
20. A: bulimandu nana bu:di / burgumangu / yalanga gana wanay / The policeman took me to Palm Island, and left me there.

## VOCABULARY

## ALPHABETICAL VOCABULARY

The vocabulary by semantic fields gives the fullest available information on meanings (with example sentences and cross-references to grammar and texts), dialect distribution, etc. This alphabetical listing is intended for cross-reference purposes; many glosses are given only in abbreviated form. The alphabetical order followed is:

$$
a, a:, b, d, g, g, i, i:, l, m, n, \Gamma, \eta, r,[, u, u:, w, y
$$

Word class membership is indicated by:

```
N - noun Time - time qualifier
Adj - adjective Part - particle
Loc - locational qualifier Int - interjection
Proper - proper name, of person or place
Vint - intransitive verb (occurs only in intransitive constructions)
Vtri - transitive verb (attested in both transitive and intransitive
    constructions)
Vtr - transitive verb (attested only in transitive constructions in
        the data collected)
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As discussed in 3.5 .2 and 4.2 it appears likely that all or very nearly all transitive verbs can also occur in intransitive constructions, with the appropriate inflectional allomorphs and case marking on noun phrases. Almost all the more frequently occurring verbs were encountered in both construction types, but some of those for which only two or three instances were recorded were only in transitive constructions - shown by Vtr. No systematic effort was made to obtain all transitive verbs in intransitive constructions; it is likely that most or all Vtr could be extended to Vtri.

The few proper names recorded are included in the alphabetical list, but not in the vocabulary by semantic fields. Grammatical words such as pronouns and demonstratives are in neither list - they are fully discussed in the grammar, section 3.4 .
baba, Vtri: pierce, spear babi(lan), N: father's mother bada, N: dog
badi, Vtri: hook fish
baga, Adj: shut, blocked
bagala, N: flat rock
bagigal, N: saltwater turtle
bagingila, N: spangled drongo
baguru, N : money
bagigi, N: box, trunk (Loan)
bagir, N: basket (Loan)
Bagir, Proper: Ingham
baguru, N: sword
balan ~ balanu, $N$ : moon
balangal, N: dugong
balbala, N; Adj: fat
balban, N: lumps
balbay, N: bottle balbi, N: sloping bank balbirigan, $N:$ large shark balgin, $N$ : male cross-cousin balgan, $N$ : house, hut balgubalgu, N : hat balgun, Adj: clear, open balmbi, Vtr: smell balmbura, N: drum, its noise balggira, $N$ : throwing implement bama, N; Adj: male bamba, Loc: long way bambara, Adj: white bambu, N: egg bana, Vint: return, go/come home bana, Vtri: bend, choke banba, $N$ : red fig tree
bandagala, Adj: full
bandali, Vint: burst, smash, break bandaca, $\mathrm{N}: ~ b o t t l e$
banira, N ; Adj: sweat, heat from
sun, summertime; hot from sun banma, Vint: talk
bangin, $\mathrm{N}: ~ s e a, ~ s a l t w a t e r$
banal, $\mathrm{N}:$ water goanna
banga, Vtri: paint, write
bangal, N : upper arm, shoulder
bangara, $N: ~ b l u e-t o n g u e ~ l i z a r d$
bangay, $N:$ spear (generic)
bangila, $\mathrm{N}: ~ w o o m e r a$
banginu, N: a tree fern
banguru, N: freshwater turtle
bargi, Vtr: (rain) falls on, wets
bargil, N : brown rat
bari, N: stone
barul, $\mathrm{N}:$ vine-like plant
barba, Vtri: ask
bargu, N: English axe
barnan, $N$ : kangaroo rat
bawu[u, $N$ : rock wallaby
baya, Vtri: sing
bayal, $N$ : yellow native bee
baybu, N: pipe (Loan)
bayga[i, N: river fig
baygi, $N:$ bag (Loan)
bayguri, Vtr: shake, wave, bash
bayi, Vint: go around, get
tangled up
bayil, $\mathrm{N}: ~ f i l e ~(L o a n) ~$
bayima, Vtr: buy (Loan)
bayngaca, Adj: tired
bayogira, Adj: hot
bayuga, $N:$ a coastal ginger
bayumbi, Vtri: shake, wave,
swing, turn
ba:di, Vint: cry, sob, weep
ba:lba, Vtr: roll
ba: lbali, Vint: roll
bidaman, N: conjiboy plant
bidi, Vint: shake with cold
bigal, $N:$ bark of tree
bigilbara, $N$ : whistling duck
bigin, N: shield
bilga, N: pitch/gum from grass tree
bili, Vint: run
biligi, Time: daybreak, early
in morning
bilil, $N:$ rough-necked turtle
bilmba, Vtr: push
bilmbu, $N:$ hip, side, flank
bilngiri, Adj: wide
bilu, N: hip(bone)
bilun, N: hook spear
bima, $N:$ death adder
bimbiri, Vint: run, run away
bimu, N: father's elder brother
bimulan, $N:$ father's sister
bina, $N$ : ear
binbical, N: king parrot
binda, $N:$ shoulder
binda, Vtri: put standing up, build; defecate, urinate, spit
bindi, $N:$ female genitalia
binga, Vtr: make fire blaze up
bingan, N : foot
bingira, Adj:(do) quickly, hurry up
bini, N: black beetle
bira, Vint: descend
biranbiran, $N:$ bee bird
birbubirbu, N : throwing implement of crossed sticks
birgibaca, $N$ : wintertime
birigi, Adj: nuisance
birnga ~ birnganbirngan, N: grey
hair, grey-haired person
birugay, $N:$ umbilical cord
bicba, Vint: jump
biya, N: beer (Loan)
biyay, Int: no
Biyay, Proper: name of dialect
biyu, N: small creek, gully
bi:bal, N: small budgerigar
bi:lbi:l, N: pee-wee
bi:ca, Adj; N: frightened; fear
bubun ~ bubunba, $N$ : pheasant
budam, N: matter inside a blister
bugi, Vint: fall down
bugi, N: fart
bugu, N : paperbark tea-tree
bugul, Adj: vanished, disappeared
buga, Adj: rotten, stinking, dead
bugan, $\mathrm{N}:$ forest, grasslands
bugan, $N:$ big bush or grass fire
bugawu, $N:$ long-neck turtle
bugulbay, $\mathrm{N}: ~ s c r u b$ wallaby
bula, 3 du pronoun
bulal, N: firefly
bulbu, N : old person
bulburu, N : spotted gum
bulgan, N : shrimp, prawn, lobster
bulgu, N: wife
buli, $N: f l e a$
bulibuli, $N:$ nightowl
buliman, $N:$ policeman (Loan)
bulici, $N:$ staghorn fern
bulngari, $N:$ tree-climbing kangaroo
bumaga, $\mathrm{N}: ~ w a s p$
bumba, $N:$ dust
bunabuna, $\mathrm{N}:$ weeds, rubbish, couch grass
bundiл, N: grasshopper
bundu, N : edible root
bundurun, N: English-style bag
bunga, Vtri: shoot
bungi, Vint: lie down
bunu, $N:$ smoke
bunul, N: march fly
bußan, Adj: stinking
bunga, Vint: swe11 up
bungal, Adj: glad, proud, happy
bungil, N : rock wallaby
bungu, N: knee
bungul, Adj: full with food
bunun, $N:$ drum and its noise
Burayngubaru, Proper: Lambert
Cocky
burganu, N: snake species
Burguman, Proper: Palm Island
burubay, $\mathrm{N}: ~ b o i l, ~ p u s$
buran, $\mathrm{N}:$ song style
burba, Vtri: hit with stick, etc
burmbi, Vtri: throw
bu[ngan, $N:$ white ant and nest
bu[gul, Adj: rotten (e.g. wood)
burugu, $N:$ possum species
butun, $N:$ fighting ground
buya, $N$ : shooting star
buya, Vtri: blow, smoke
buyana, $N:$ white cockatoo feather
decoration
buybuci, Vtr: make a raspberry at buyin, $\mathrm{N}: ~ e y e b r o w$
buymaran, $\mathrm{N}: ~ s a n d$
buyngul, $\mathrm{N}: ~ s m a l l ~ t r e e ~ l i z a r d ~$
buyogari, Vtr: hang up
buyu, N: head
bu:di, Vtri: take/bring, carry
bu:giya, N: mullet
bu: nguray, $\mathrm{N}: ~ s n o r e$
dabugay, N: a wild cherry
dagi, Vint: fall down
dagu, N: carpenter bird,
hammer bird
Dali, Proper: Tully (Loan)
dalna, Adj: hard
dalogal, $\mathrm{N}: ~ s p i d e r$ and web
dalu, N: palm tree
daman, $N:$ new-born baby
dara, $N$ : wing of bird
Dawunbil, Proper: Townsville (Loan)
da: lbi, Vtri: scoop up water
di:, N: tea (Loan)
drayga, N: tracker (Loan)
dubi, $\mathrm{N}:$ worm
Dumban, Proper: Ripple Creek
dumbil, $\mathrm{N}:$ flange of tree
dumbul, N : bump on shield opposite handle
dumbulan, $N:$ ant species
du:ca, Vtri: pull
gabali, N: whip-tail kangaroo
gabini, Adj: sharp(ened) (Loan)
gada, N: baby
gagabara, N: grass tree
gagal, N: jaw
gagan, $N$ : sand goanna
gagargagar, Adj: rough, prickly
gagari, $N:$ fat
gagin, Adj: a lot, much
gagul, Adj: worried, sorry, pitiful
galaba, N: a long yam
galan, $\mathrm{N}:$ tongue
galbara, N: beard
galgawuru, N: big parasitic fig
galgi, Vtri: cook
galgucu, $N:$ meat
galmbu, N : younger brother
galmbuyan, N : younger sister
galngica, $N:$ moaning funeral chant
galngan, $N:$ froth
galngulan, $\mathrm{N}:$ tongue
galnuy, $N$ : avoidance speech style
galun, $N:$ short spear with hook
gambal, N: snake (generic)
gambara, $N:$ large nulla nulla
gambi, $N:$ old woman
gambun, $\mathrm{N}: ~ g r u b$
gamiya, N: stone tomahawk
gamu, Part: only, just
gamugan, $\mathrm{N}: ~ d a u g h t e r$
gana, 3 pl pronoun
ganba, Vtri: hit with rounded implement
gandi, $\mathrm{N}:$ older sister
gangu, $\mathrm{N}: ~ s m a l l$ grass dilly-bag;
kangaroo pouch
gangura, $N:$ turpentine tree
ganna, Vtri: drink
ganu, Adj: broken
gana, $N$ : father; father's younger brother
ganal, N: honey
ganala, $N$ : obscene song style
ganali, $N$ : stinging tree
gangumbi, Vtr: fan
gara, $N:$ thigh
garin, N: woomera
garuga, N: trousers (Loan)
gargala, $N$ : mangrove tree
gawun, Adj: hot from fire
gayga, Vtr: hunt away
gaymba, Vtr: find
gayngiri, $N:$ scrub carpet snake
ga:, N: jaw
ga:bu, N: fish (generic)
ga:gi, $N:$ cousin (Loan?)
ga:la, Adj: empty
ga:lba, Vint: be stuck
ga:lungal, Loc: in front
Dya:ni, Proper: Johnny (Tooth)
(Loan)
ga: 刀gi, Vint: sleep
ga:yari, N: horse
gidalgu, Time: tomorrow
gidu, N: chider hardwood tree
gigari, Vtri: put down
giguluruy, $N$ : forest kingfisher
giga, $N:$ cigarette (Loan)
gigubina, $N:$ falling star
gilba, Vtr: dig
gilbay, Adj: know how to do
something
gilgan, $\mathrm{N}: ~ h o l e$
gilin, N: hot coals, charcoal
giliwuru, $\mathrm{N}:$ lungs
gilinga, Vtr: pour water on
gilwa, Vtr: kick, shove with knee
giman, $N:$ firestick; species of
tree from which it is obtained
gimbara, $\mathrm{N}: ~ s m a l l$ throwing stick
ginaman, $N:$ boots, shoes
ginambaran, $\mathrm{N}: ~ c r a m p$
ginara, $N:$ root
ginba, Vtri: spear in water
Dyimbiloay, Proper:
Alf Palmer
ginda, N: waterfall
ginda, Vtr: blaze tree
gindarigan, $N$ : grass tree
gindi, $\mathrm{N}: ~ c h e s t$
gingibiri, Adj: big (of fish only)
gingila, $N:$ moreton bay ash/ messmate tree
gingara, Adj: shallow
gingu, Loc: down (hill??)
gingara, Vint: dream
gingili, $\mathrm{N}: ~ s i n g l e t ~(L o a n) ~$
gingin, $N:$ female genitalia
gingirigingiri, N: willy wagtail
Dyirbal, Proper: name of language
girbinga, Adj: very good-looking (woman, girl)
gicibi, N: quail
giwural, N: pubic hair
giya, N: chair (Loan)
gi:~ gi:gi, Vint: sit down, live
gi:gi:, N: birds (generic)
gif:gin, $N: ~ s w a m p ~ w a l l a b y ~$
gi:l, $N:$ shining starling
gi:n, N: eyebrow
Dyubaru, Proper: Peter Wallace
(a Dyirbal man)
gubi, $N:$ married couple
gubula, $N:$ black pine
gubun, Adj: slow, slowly
gudu ~ gudulu, Adj: short
gula, $\mathrm{N}: ~ s t r i p e d ~ r i n g t a i l ~ p o s s u m ~$
gulbamba, Vtr: bury (deeply)
gulbun, Adj: married
gulbungin, $N$ : woman who claims her promised husband
gulgara, $N: \log$
gulgil, $\mathrm{N}: ~ b o n e$
gulgin, $N:$ scrub
gulogu, $N$ : throat
gulu, $N:$ buttocks
gulumbara, Adj: straight
gumba, Vtri, go in, enter, put in
gumubucu, $\mathrm{N}: ~ b u l l o c k$
gungiri, $\mathrm{N}: ~ t a i l$
gunguru, Adj: (do) hard
gunguy, $N:$ tendon, sinew, gristle
gunma, Vtr: squeeze, knead
gungara, $N:$ erection of penis
gunu, N: odour
gura, $\mathrm{N}: ~ c l o u d, ~ s k y$
gurala, N: flood
gurga, Vtr: tie up, join on
Dyutagay, Proper: Niagara Vale
Dyuraminbal, Proper: John Tooth
gurbay, $N$ : fishing rod and line
guru, $N$ : shoulder, upper arm, ridge
guwara, Vint: stand
gu:birin, $N: ~ s m a l l ~ b a r k ~ l i z a r d ~$
gu:gara, $N:$ urine
gu:guru, $N:$ navel
gu:ga, Vtri: swive, copulate with
gu: l, N: salt
gu:Ingurun, $N:$ navel
gu:lu, Adj: black
Dyu:n, Proper: Herbert River at the Herbert Gorge
gu:nga, Adj: black
gu:ngi, Vint: come out, arrive gu:ra, Vtr: rub, wipe
gu:yi, Vint: feel around
gabagala, N: small bream
gaban, $N:$ acacia tree; grub in it
gabangica, $\mathrm{N}: ~ d o l l a r ~ b i r d ~$
gabay, $N:$ walking stick
gabin, $N:$ belly ache, diarrhoea
gabugala, $\mathrm{N}:$ plains turkey gabul, N: forest carpet snake gadala, Adj: dry, shallow gagan, $\mathrm{N}: ~ b l a d y ~ g r a s s$ gagara, N: grey possum gadaru, N: small striped fish gagin, N; Adj: female; yamstick gagira, $N:$ zamia fern gadiya, N: young girl gagu, N : white tree ant and nest gaga, Vint: go/come gagal, Adj: hard gagara, $N:$ cane dilly-bag gagul, $\mathrm{N}:$ white-breasted heron gala, Int: try it!, try again!
galaga, Loc: up hill, up in sky
galambu, $N$ : grub in gum tree galbay, $N$ : wattle galgabara, N: she oak galgay, N : spear (generic)
galmara, Time: long time ago
galmbula, $N$ : ironbark tree
galmuru, N: yellow clay
galugu, $\mathrm{N}: ~ s c r u b$ mouse
galun, $N:$ testicles
gama, $\mathrm{N}: ~ s o n g-s t y 1 e$
gamanday, N: spear (generic)
gambara, N: cyclone
gambara, N: body
gambay, N: big lawyer vine
gambi, $\mathrm{N}:$ clothes
gambila, N: bark blanket
gambunu, N: black duck
gamin, $\mathrm{N}: ~ a ~ l a w y e r ~ v i n e ~$
gamu, N: water
ganal, N: frog (generic)
ganbaymu, Adj: very old
ganda, Vtri: burn, make fire
gandil, N: jabiru, stork
gandu, N: dog
gani, Loc: up river
ganibara, $N:$ dingo
ganga, Adj; Vtr: stealing; steal
gangaba, Vtri: spear
gafu, Time: later on today
ganumbul, Time: earlier on today
ganaligan, $N:$ mythical devil woman
garay, Time: for a long time
garba, Adj: stupid
gargagarga, N: prickle
gargal, $N$ : arm, limb of tree gargay, $\mathrm{N}: ~ l i t t l e ~ c h i c k e n ~ h a w k ~$ gargici, Adj: finished garnga, $N:$ spittle
garamgaram, N: seagull
garamu, Adj: huge
garangala, Adj: strong (man)
ga[bu, Adj: three
gacingi, Adj: cranky (Loan)
Garul, Proper: Cardwell (Loan)
gacwun, N: green ant
gawal, N: a call
gawamba, Vint: vomit
gawan, N ; Adj: anger; angry, savage gawanan, N: mother's younger brother gawangawan, N: rice
gawar, N: large intestine
gawarala, $\mathrm{N}:$ crane, ibis
gawu, Int: come on:
gawulgawul, $N:$ wind
gawuy, Adj: quickly
gayambula, N : white cockatoo
gayba, Time: now
gayga, N: eye
gaygamali, N: (non-flesh) food
gayi, N: ground
gaymbiri, Adj: (do) everywhere
ga:guru ~ ga:gurug, N: cockroach
(Loan)
ga:ma, Vtr: do (say) like this
ga:nda, Vint: craw1
ga: [a, N: centipede
giba, N: liver
gida, Vtr: poke with stick
gidul, Adj: cold
giga, Adj: small
gigawulu, $\mathrm{N}: ~ f r e s h w a t e r ~ j e w f i s h ~$
Gigubal, Proper: Rosevale
gilan, $N$ : old man
gilangan, $\mathrm{N}: ~ o l d$ woman
gilgan, N: a bad cold
gilingica, N: cassowary
gimbi, Vtr: (wind) blow
ginba, N: bark water container
gingu, N: offspring, chick
Giramay, Proper: language name
girawan, N: scrub-hen
Girgul, Proper: Nora Boyd (name given at birth)
girgingan, $\mathrm{N}: ~ l a d y$ finger tree gicugicu, N: small intestine giyabay, $N$ : brown rock lizard giyal, Adj: sweet, savage, poisonous gi:ba, Vtri: scratch, scrape, shave gi:bara, N: large fig tree; mark on message stick 'one hundred'
gi:ga, Vtr: tell to do, let do
Gi:cigin, Proper: Romulus (an olden-
days Wargamay man)
gubana(n), N: father's father
gubara, $N$ : tree with red bark
gubi, gubimbulu, $N$ : wise man
gubil, N : whistle
gubu, $N:$ small leaf

Gububadi, Proper: Arthur Wild gubur, N: sticky black native bee gubuta, $\mathrm{N}:$ magpie guda, Vtri: block, shut, close gudi, $N$ : water rat gugagay, N: alligator gugila, $N$ : short-nose bandicoot gudiyan, N: boil, pus gugulbara, $\mathrm{N}: ~ w h i r l w i n d$
 gugigugi, $\mathrm{N}: ~ b u t t e r f 1 y, ~ m o t h$ gugu, Time: meanwhile gugulu, $N$ : stick for accompany-
ing ganala-style songs gugun, $\mathrm{N}:$ older brother gugungal, Loc: behind guguwun, $\mathrm{N}: ~ b l u e ~ p i g e o n$ gulalbi, N: black cockatoo gulacu, $\mathrm{N}:$ blue gum tree gulawun, $N$ : Leichardt tree gulbila, Loc: south gulbica, N: spear grass gulbu, Adj: foreign, strange gulgal, N: black pigeon gulgici, Adj: prettily painted gulguma, Vtr: bring in, muster guli, Int: excalamation when startled
gulin, $N$ : land of spirits in east gulmbal, $N$ : good friend gulmbura, N : woomera gulingu, $N$ : nulla nulla gulubu, $N$ : wind gumarbari, Adj: a lot, many gumbay, $N$ : mother
gumbi, $N$ : forest carpet snake gumbi, $N$ : thumb
gumbiyan, $N:$ echidna, porcupine gumbuna( $n$ ), $N$ : mother's mother gumbur, N: dew
gumburu, $\mathrm{N}:$ fog, mist
gumu, $N$ : mosquito
gumul, N: bark blanket
guna, N: faeces, shit
gunaygil, N: white cockatoo gunba, Vtri: cut into, cut open, cut a piece out
gunbin, N: two trees rubbing
together; noise they make
gundabara, N : fine weather
gundambula, $N:$ very dark (night)
gundamu, N: freshwater garfish gundanga, Time: last night
gundil, Adj: heavy
gundulu, $N$ : emu
gunga, Adj: unripe, green (vegetables), raw (meat), alive (person)
gungari, Vtri: cut down, cut through gungul, $N$ : non-flesh food
gunugunu, N : sandfly
gunga, Vtri: bite
gungi, $\mathrm{N}:$ top grinding stone
gungunu, N : thunderstorm
gunin, Loc: people, goods and places
from south; 'coast'
gungaga, N: grey kookaburra
gungari, Loc: north
guran, Adj: long
gurga, N : back of neck
gurgiga, $N:$ ring-tail rat
gurgila/gurgilayngan, $\mathrm{N}: ~ s e c t i o n$
gurigala, $N$ : eaglehawk
gurmal, N: blood, vein
gurugan, N: bloodwood
gurugu, N: grog (Loan)
guralal, N: grey kookaburra
gucambal, $\mathrm{N}:$ blue mountain parrot
gurbal, $\mathrm{N}: ~ h a l f-c a s t e$
gucbala, N: wild banana tree
gurgal, $N$ : bee, sugarbag (generic)
gucgara, N: billy-can
gucgay, N: big grey kangaroo
gucguru/gurgurayngan, $N$ : section
gu[i, N: blood, vein
gucil, $N:$ storm bird
guça, N: mud
gurugu, $\mathrm{N}:$ dove
gucur, N: native companion, brolga guwa, Loc: west
guyabay, Loc: other side of river guyan, $N$ : quartz, sharp quartz knife
guygari, N: scrub turkey
guygal, N: long-nose bandicoot
guyguy, N: mosquito
guyi, Vint: cry, sob, weep
guyibara, $\mathrm{N}: ~ c u r l e w ~$
guyila, N: charcoal, flame
guyma, Vtri: give birth to
guymbi, N: eel (generic)
guymbica, N: cicatrices (tribal
marks) and men who bear them
guyngan, N : spirit of a dead woman;
white woman
guypin, $N$ : honey
guyumulu, N : quandong
gu:ba, Vtr: cover with water
gu:ga, Vtr: (water) washes away
gu:gal, N: mud cod
gu:gaca, N: black goanna
gu:n, $N$ : spirit of a dead man; white
man; 'devil'; 'ghost'
gu: naca, $N:$ rubbish (e.g. in river)
gu: ja ca , Time: very long time ago
gu:cgucu, N: beetle (generic)
layn, $N$ : fishing line (Loan)
mada, Adj: salty
mada, Vtri: paint
magal, $N$ : cocky apple tree
magila, $N:$ white clay
maduwargi, $\mathrm{N}:$ mate
magira, N: red clay
magu, N: arm, wing of bird
magul, N: work
mala, $N:$ hand
malan, N: creek
malanbara, $N$ : right hand
mali, Adj: good
malugan, $N$ : chicken snake
mamu, Time: by-and-by
manda, $N$ : penis
mandi, $N$ : hand
mangi, $N$ : a lawyer vine
mani, $N$ : money (Loan)
manabagay, Adj: ugly
manalmanal, Adj: stinking,
bitter, dirty
mangay, Adj: full up with food
manaca, N: big kangaroo
manga, N: flower
mangu, $N$ : mango (Loan)
manguru, $\mathrm{N}: ~ b i g$ flying squirrel
manguru, $N:$ mother's elder sister
mara, N: leaf
margara, $N$ : youth ready for
initiation
margin, $N$ : gun (Loan, from musket)
mari, Part: might be
marna, Adj: wet
marnga, Adj: sore; bitter, salty
maraga, N : cherry tree
marbal, N: fly
marbu, N: louse
margun, Adj: grey
mawa, N: shrimp, prawn, lobster maya, Int: no
mayay, N: (everyday style)
language
mayba, N: fire
maybaga, $N$ : alligator
maydala, $N:$ lightning
maynga, Vtri: tell
mayogu, N: mango (Loan)
ma:ga, $N:$ boss, ' $\operatorname{Goc}^{\prime}$
ma:gaya, $N:$ bee's wax
ma:l, N: man
ma:ni, Vtri: hold in hand, hold
onto, catch hold of, catch, grab ma:nga, $\mathrm{N}:$ fishing line, string ma: ŋgay, Adj: silly
midi, $N$ : leech
midin, N: grey possum
miga, N: camp, house
migiri, Vint: wait
migu, $N:$ brain
migulu, $N$ : white man (Loan)
milara, $\mathrm{N}: ~ r i b s$
milba, vtr: show
milbir, N: slippery blue fig
milburu, Adj: straight
milgun, N : type of cousin
milga, $N:$ painted bark rainmaker
milgal, Adj: greedy
milmuru, Adj: spinning, fast
minba, V: hit with thrown stick etc
mindi, $N:$ grass dilly-bag
mindi, $N$ : corroboree ground
mudan, $N$ : Iump on body
mudiga, N : motor car (Loan)
muğa, Vtri: eat
mugi, $N$ : semen
mugugara, $N$ : mud crab
muguru, N: big locust
mugal, $N$ : head
mugacu, N: fish net
mugay, $\mathbb{N}$ : elbow
mugul, N: knee
mugulan, N : mother's elder brother
mugunduru, $N$ : hailstone
muguru, Adj: hard, strong
mulga, Adj: half-blind
mulgalgay, N: green ginger
mulgara, Adj: game, brave
mulgun, $N:$ backbone
mulin, N: lip, mouth, bird's beak
mulmbin, Adj: blunt
mulu, Loc: near, close up
munma, $\mathrm{N}:$ paperbark hornet
Munungul, Proper: Younger Creek
(place in Giramay territory)
munara, Adj: by oneself, alone
mungal, Adj: soft, weak
mungu, Adj: naked
muni, Vint: blink
muninin, $N:$ small black ant
mununmunun, $N$ : chocolate bats
mupan, N: mountain
mungan, $\mathrm{N}:$ Herbert River ringtail
possum
muray, $N$ : head hair
murgal ogan, N : seven sisters
murgin, N : son
mucmbal, $N$ : quandong
muwar:, N: any big shady tree
muyma, $\mathrm{N}: ~ b o y$
muymba, Vtr: extinguish fire/light
muyggul, $\mathrm{N}:$ oldest boy
muyggulgan, N : oldest girl
muyu, N: bottom, arse
muyun, $N:$ large blue kingfisher mu:ba, $N:$ stone fish
mu:gu[u, $N:$ perch
mu:gil, N: freshwater black bream
mu:ngi, Vtr: make cold, make
shiver
mu:ca, Adj: hidden, out of sight mu: [i, N: tree with small blue fruit
naybu, N : knife (Loan)
nayi (plural: nayili), $N$ : young girl
nibal, $N:$ coals, opium
nuba, $N:$ bark water container
nugumba, Vint: vomit
nu:ba, Vtr: sharpen, grind
naba, Adj: ripe
nagaram, Adj: tiny
nagumbi, Vint: come
nalambucu, Adj: good
nalbay, N(Adj?): totemic
identification
nalmu, $N:$ large nulla nulla
nalggirgan, Adj: pretty
(woman, girl)
namu, Time: for a short while
nandu, Int (or Adj?): I don't
know
nangal, Adj: heavy
narnga, Vtri: rush in on, raid, arrest
na: ra, $N:$ light (in distance)
nibu, N: mythical spider
nigin, $N:$ finger-/toe-nail
nimbara, $N:$ body hair, fur
ninga, Vtr: stop, block
nirwaca, Time: tomorrow
nicinara, $N:$ maggot
nubi, N: (classifactory)
father-in-law
nugi, Vint: dance
nurbira, Vint: be ill, sick, feverish
nurgu, $N$ : hitting/bumping noise
nu:nga, Vtri: kiss
ŋaba, Vtr: soak
Ngabila, Proper: a mountain near Sheahan's farm (which is where the Abergowrie road crosses the Herbert River)
Ngabicbil, Proper: Herbert Vale (Loan)
gadaymbi, Vint: come
gaguba, $N:$ Burdekin plum tree
nagul, Adj: N: deep; deep waterhole
galma, Adj: one's own
nalmangara, N: light
jalu, $\mathrm{N}: ~ f r e s h$ water
jaluwa, $\mathrm{N}: ~ b l a c k$ and white flying squirrel
Ngalwagiri, Proper: Abergowrie
gama, $N$ : shield handle
nami ${ }^{i}$, Adj: hungry
namugay, $N:$ toothache
namun, N: (female) breast
gamuru, N: armpit
nanba, Vtri: follow
nangul, N: chin
gani, N: face
ुarala, Adj: dry, shallow
garingi, $N:$ orange (Loan)
naru, Part: don't
nacgi, $N:$ country (generic)
nacgup, $\mathrm{N}: ~ c h i n$
naci, Vtr: answer
nayaba, N: vine used as fish poison
jaygina( $n$ ), $N$ : mother's father
nayi, Int: yes
gayi, N; Adj: voice; thirsty
nayilngara, $N:$ neck
na:, Part: not
na:ba, $N:$ bottom of ribs
na:ra, Vtri: hear, listen
na: ra , Part: can't do (despite
trying)
クa: Camba, Vtri: try to do (but fail)
bicgima, Vtri: tickle (in sex play)
nicginicyi, $\mathrm{N}:$ 'nymphomaniac'
giyanma, Vtr: ask
giyara, N: ribs
刀iyawuda, Vtr: grab with hand
ni:ra, Vtri: tie up
Øudan, N: large black snake
gugu, Adj: pretending, lying,
malingering
gugi, Adj: stinking, bad smell
gugu, $\mathrm{N}:$ mopoke owl
gulan, $N$ : stone tomahawk
pulganga, Time: yesterday
gulmbutu, $\mathrm{N}:$ woman
nulmu[u, N/Time: darkness, night
gulngicin, Adj: wet
nulniri, $N:$ lots of noise
nulubucu, N: stump
numbulu, $\mathrm{N}: ~ b l a c k ~ s n a k e ~ w i t h ~ r e d ~$ tail
gunda, Vtri: see, look
guni, Vint: search for, hunt for
gunin, $\mathrm{N}:$ reflection, shadow, spirit

Ngunucu, Proper: Nora Boyd (name given later in life)
guri, Part: in turn/retribution
gucgl, N: a ginger species
numbun, $N$ : tapping noise
nucu, N: nose
गu:ga, Vtri: test, taste, try out
ŋu:ma, Vtri: feel
gu: [u, N: heel
[aba, N: forked stick, fork of tree
[abi, Adj: (do) quickly
caybul, N: rifle (Loan)
taygi, N: old clothes (Loan, prob. from rag)
[imbi, N: forehead
cubu, N: rope (Loan)
cugulu, Time: the other day OR
yesterday
[ulgu, N: heart
[ulmbura, N : ashes
rucnga, Vtr: suck
ruyu, Adj: playing around
wada, $N:$ crow
waga, N: mud
waģan, $N$ : small native bee
wagangara, $\mathrm{N}: ~ c r o w$
wagiri, Vtr: overturn, spill, pour
waga, $N:$ shin(bone) $W$, thigh $B$
wagagala, $N$ : yellow flying fox
Wagaraba, Proper: Long Pocket
wagun, N: fire, wood, tree
wagur, N: sea, saltwater
wala, Vint: arise, go up
walam, N: tick
walguwucu, $\mathrm{N}:$ poisonous brown snake
walmbari, Vint: (dog) barks walmbi, Vtri: 1ift up, pick up, waken
walngan, $\mathrm{N}: ~ a ~ r i v e r ~ t e a-t r e e ~$ Walnganbara, Proper: Peacock

Siding (up Stone River)
walnga, $N:$ air in lungs walnga, Vint: float on water walngarnin, $N:$ eldest child in family
wambuy, $\mathrm{N}:$ fire, wood, tree wana, Vtr: leave (it) be wangawa, N: bird like pigeon wasuy, N : round yam
wana, $\mathrm{N}: ~ b l a c k$ bean
wanal, N: boomerang
wangu, N: small goanna
wanguri, Vint: kneel down, squat
wara, Part: inappropriate $S$ or 0 NP
wargal, Adj: sharp
wargan, $N:$ raft
Wargamay, Proper: language name
wargayga, N : spear with stingaree sting
wargin, $\mathrm{N}:$ boomerang
wargubala, $\mathbb{N}:$ left hand
warguy, $N:$ left hand
warnay, $N:$ fish spear
warumbil, $\mathrm{N}:$ whistle
warun, N: sand
warabi, N: dog
wargumba, Vtr: wash
waŗugala, N: black wallaby
wacugay, $N$ : short fishing rod and line
waruwaru, Adj: crooked
waybala, N: white man (Loan)
wayili, N: red bream
waymin, N: (classificatory)
mother-in-law
wayu, Adj: turning into
wa:ba, Vint: look up (for sugarbag only)
wa:gi, Vint: laugh
wa:gan, N: crow
wa:nda, Vtr: rouse on, tell on
wigiyan, $\mathrm{N}:$ white woman
wingi, $N$ : snake (generic)
winin, Adj: sore
wira, $\mathrm{N}: ~ b l a c k ~ f i g ~$
wiran, N: blood
wirga, N: small nulla nulla
wiri, N: bird's nest
wiru, $N:$ husband
wicba, N: little stick
wicgu, $N:$ frilly lizard
wicga, Vint: bathe, bogey
wi:, $N$ : sun
wi:gi, wi:gina, Adj: no good
wubiri, N: Eng1ish bee
wuda, Vtr: take off
wudil, Adj: asleep
wudu, $N$ : nose
wudugalgucu, $N:$ bird like ibis
wuguru/wugurayngan: section
wugar, Adj; N: sleepy; sleepiness
wugi, Vtr: give
wugu, N : breastbone
wula, Vint: die
wulbu, $\mathrm{N}:$ pheasant
wulgamu, N: green scrub pigeon
wulgu, N : bark canoe
wulgugu, N: Torres Strait pigeon
wulman, $N$ : old man (Loan)
wuma, N: shade
wumba, $N:$ belly, stomach, bowels, guts
wumbugiri, $N:$ star
wunduy, $\mathrm{N}:$ freshwater shark
wungu/wunguraypgan, $N$ : section
wufan, Adj: lustful, larrikin
wuga, Vint: go walkabout
wuna, Vtr: chase
wurbi, Adj: big
wuramba, $N$ : scrub turkey
wutidala, $\mathrm{N}: ~ b a r r a m u n d i$
wuyga, N: snake skin (after
having been shed)
wuygul, N : whip snake
wuymbi, Vtr: lick
wu:, N: war (Loan)
wu:, $N$ : hoe (Loan)
yabu, N: mother and mother's younger sister
yabugu, $N$ : son
yabulga, $N$ : morning star
yabun, N: big camp
yaga, $N$ : two
yagabayan, $N:$ large gum tree
yagal, N: pandanus
yalbar, N: flat ground
yalgay, $N:$ road
yalngabara, Adj: a very large number
yalngay, $N:$ a single person
yaluga - although included in text 6.13 this is a Giramay form (Dixon 1972:259)
yamani, $N:$ rainbow
Yamani, Proper: Yamanie Creek
yamaca, N: man
yanbara, $N$ : kangaroo spear
yanal, yanabaca, yanandari, $\mathrm{N}:$ long, tall
yanabula, $N$ : long eel species
yangal, N: freshwater black bream
yaraman, N: horse (Loan)
yawuynbaci ~ yawuymba[i, N: big grey kangaroo
yayimbali, Vint: play about
ya:, N: top of tree
yibi, N: child
yigara, $N:$ crayfish
yigir, $N$ : disease like smallpox
yilgan, N: moon
yimba, Vtr: put on (clothes)
yimbur, N: pelican
yimiri, Vint: feel glad, be glad
yinbi, Vint: fly
yingin, $N:$ (cane train) engine (Loan)
Yifam, Proper: Ingham (Loan)
yinaci, N; Adj: cave; hollow
yira, N: tooth
yirawu $u, \mathrm{~N}:$ forest carpet snake
yirgal, Adj: itchy
yirgangi, Loc: people, goods and places from north
yirgingara, $N:$ star (generic)
yiribara, N: blue gum tree
yiringila, $\mathrm{N}: ~ h o r s e ~ f l y$
yi:l, N: name
yubay, Adj: be away
yubaybi, Vint: run away
yubayma, Vtr: steal, take
yudi, N: long-nosed frog
yugan, N: rain
yugara, Vint: swim (from A to B)
yulba, $N$ : end of branch
yulgu, N: belly, stomach, bowels,
yulguruy, Loc: inside
yumburu, $N$ : late stage of tadpole
yumuru, $N$ : son (said by mother)
yungun, $N$ : swamp
yunga, N: skin
yungubala, N : copper-headed python
yujgul, Adj: one
yurguta, Adj: another one
yurmay, Time: do all the time
yucalbara, $\mathbb{N}$ : big river
yucuynbi, $N$ : river-bank (in song)
yu:mba, Vtri: bury (to shallow
depth)
yu:nu, Loc: down (river?)
yu:ca, Vtr: swallow
yu: $\subset$ i, Vint: grow, sprout

## VOCABULARY BY SEMANTIC FIELDS

Dialect attestation of lexemes is shown to the left of each entry. There are three columns (see 1.2 above):

| column 1 | W - occurs in Wargamay proper |
| :--- | :--- |
| column 2 | B - occurs in Halifax Biyay |
| column 3 | H - occurs in Hinchinbrook Biyay |

A dash, -, in a column indicates that informants stated this item did not occur in that dialect.

All lexemes included here (for the $W$ column) have been fully checked out with at least two speakers; this has always included at least one, and usually both, of John Tooth and Lambert Cocky. Words in $B$ which differ from those in $W$ were generally checked on two occasions with Nora Boyd. Information on $H$ comes only from old sources - see 1.6.

In a small number of cases different informants gave rather different meanings for a form. These are noted below, using abbreviations.

| JT - John Tooth | AP - Alf Palmer |
| :--- | :--- |
| LC - Lambert Cocky | JJ - Jimmy Johnson |
| NB - Nora Boyd |  |

Several hundred words that were at one time suggested as Wargamay were eliminated from the final vocabulary since corroboration could not be obtained of this. Most of them are in fact from Giramay, Warugu or Nyawaygi although a number are not attested for any surrounding language (some of these are probably from the $H$ dialect, for which no speakers remain).

A few words for which full corroboration could not be obtained are included here, preceded by a star to indicate that they could not be checked as fully as the remainder of the vocabulary. These are:
(i) Obtained from LC, and checked with him, but not checked with any other speaker (some were given by LC in 1980 and I did not have the opportunity to revisit JT after that, to obtain his corroboration): bayngaca, bumba, galogulan, ga:ngi, dinambaran, gingili, gargagarga, guli, muwari, giyanma, gulgiri, wa:nda, wacgumba, wiran, yayimbali.
(ii) Given by JT and checked with him as definitely $W$ items, but could not be obtained from LC: gagabara, galmbula, magal, yabun, yimba.
(iii) Given by NB but could not be checked with her before her death (the identification of the rhotic is uncertain in each case, at the least): bingira, daca, oulngirin (NB alternated between this form and gulngirin), warumbil.
(iv) gulmbuca 'woomera' was given by Arthur Wild and recognized by LC but not JT; but when asked on a later occasion LC did not acknowledge this item. yalbay was in the material recorded by La Mont West Jr from Jimmy Johnson. LC recognised it but JT did not. However, on a later date LC would not admit it as a $W$ form.

There must without doubt be further mistakes, of transcription and glossing, in a project of this nature, despite the care that has been taken in checking.

Abbreviations int, tri and tr for verbs correspond to Vint, Vtri and Vtr above; they are explained in the introductory note to the alphabetical vocabulary.

NOUNS
A - Body parts
W- mugal, head
-BH buyu, head
W migu, brain

WB muray, head hair
W birgga ~ birnganbirøgan, grey hair, grey-haired person
W cimbi, forehead
W H gani, face

WBH gayga, eye
WB -gaygabaga, blind
W -gaygabala, b1ind
W- buyin, eyebrow
-B gi:n, eyebrow
W- wudu, nose, point, headland, end of penis, pencil
-BH gucu, nose, etc.
WBH bina, ear
WB -binabaga, deaf
W-H gagal, jaw
-B ga:, jaw
W- nangul, chin
-B nacgun, chin
WBH mulin, lip, mouth, bird's beak
WB galbaca, beard
WBH yira, teeth, seed, point of spear
W jamugay, toothache
WBH galan, tongue
W *galngulan, tongue
WBH garnga, spittle
w jayilıgara, neck
wBH gulogu, throat
W gurga, back of neck
W gayi, voice (also Adj, thirsty)
W binda, shoulder
W guru, shoulder, upper arm, ridge
WB namucu, armpit
WB mugay, elbow
W bangal, upper arm (JT, JJ);
shoulder along to neck (LC)
W H magu, arm, wing of bird
W gargal, arm, limb of tree
WB mala, hand
--H mandi, hand
W malanbaca, right hand
W- wargubala, left hand
-B warguy, left hand
WB gumbi, thumb
W H nigin, fingernail, toenail, claw of bird - see (21)
WBH namun, breast
w gindi, chest
W guymbita, cicatrices
WBH wugu, breastbone
W- Diyara, ribs
-B milara, ribs
W ja:ba, bottom of ribs
WH bilu, hip(bone)
-B bilmbu, hip, side, flank
W- yulgu, belly, stomach, bowels guts (and front of boomerang, woomera)
W
W -yulgugiri, full of food
-BH wumba, belly, etc (as yulgu)
W- gu:Ingucun, navel
-B gu:guru, navel
WB birugay, umbilical cord
W gawar, large intestine, 'tripe' (and 'big paunch')
W girugicu, small intestine
W culgu, heart
W giba, liver
B giliwuru, lungs
W walnga, air in lungs
W mulgun, backbone (and back of
boomerang, woomera)
WB gulu, buttocks
WB muyu, bottom, arse
W H gara, thigh
w- bungu, knee
-BH mugul, knee
WB waga, shin(bone) $W$; thigh $B$
WBH bingan, foot
WB nu: [u, heel
W manda, penis
W gungaca, erection of penis
e.g. manda gungarambigi

W H galun, testicles
W mugi, semen
W giwural, pubic hair
W bindi, female genitalia (preferred term in W)
W giggin, female genitalia (Giramay term, also used in W)
WBH guna, faeces, shit
$W$ bugi, fart, e.g. nayba
bugimbigi 'I farted'
W gabin, belly-ache, diarrhoea
W gu:gara, urine
W gambara, body
W nimbaca, body-hair, fur
WBH yunga, skin
WBH gulgil, bone
W- gurmal, blood, vein
-BH guri, blood, vein
W *wiran, blood
WB gunguy, tendon, sinew, gristle
W balbala, fat (also used to describe fat person)
Wं gagari, fat (e.g. kidney fat)
WB banica, sweat, hot sun (making one sweat), summertime
W gilnan, a bad cold
W- burubay, boil, pus
-B gugiyan, boil, pus
-B budam, matter inside a blister
W yigir, a disease like smallpox that makes one scratch (perhaps Jiggers)
W- balban, a lump on body (and warts on bark of tree)

```
W -balbanbalban, Iumpy all over
        body
-B mudan, lumps on body
W *ginambaran, cramp (+ body
        part)
WB gungiri, tail (on animal or fish)
W xgargagarga, any prickle (e.g. echidna spike, or lawyer cane prickle)
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B-Human classification
W bama, male (human or animal)
W gagin, female (human or animal)
WBH ma:l, (Aboriginal) man
W yamara, (Aboriginal) man [may be preferred for referring to a group of men]
WBH nulmburu, (Aboriginal) woman
W gingu, offspring (human child or animal chick)
WB daman, new-born (human) baby
W gaga, baby
WBH yibi, child (especially reduplicated, yibiyibi, children)
WB walngarnin, eldest child in family
WB muyma, boy
W margara, teenage boy (of age for initiation but not yet initiated)
W guymbica, cicatrices (tribal marks) and man with them
W-H gilan, old man
W -gilangan, old woman
-B bulbu, old person
W wulman, old man (Loan)
W gagiya, young girl
-B nayi (pl nayifi), young girl
WBH gambi, old woman (especially reduplicated to refer to group of old women, gambigambi)
W yalogay, single person (spinster/bachelor, or widow/ widower)
W gubi, wise man
W gubimbulu, very wise man
WB maguwargi, mate, friend
WB gulmbal, mate, friend
WB Jusin, reflection, shadow, spirit (semi-corporeal)
W gu: $n$, spirit of a dead man (non-corporeal); also white man, 'ghost', 'devil'
W waybala, white man (Loan)

W migulu, white man (Loan)
W guyngan, spirit of a dead woman (these are believed to exist as birds) ; white woman
WBH wigiyan, white woman
W gurbal(gurbal), half-caste
W ganaligan, mythical 'devil woman', invoked to frighten. people not to stray too far
W nibu, mythical spider e.g. nibungu nina mani:lma
'Nyibu might catch you (and make you sick)', and (84)
W buliman, policeman (Loan)
W ma:ga, boss (also used by LC for God, described as 'big boss in heaven')
W drayga, (black) tracker (Loan)
C-Kinship
W mugulan, mother's elder brother
W gawanan, mother's younger brother
W mangucu, mother's elder sister
WB yabu, mother, mother's younger sister
H gumbay (?), mother and younger sister
W bimu, father's elder brother
WB gana, father, father's younger brother
WB bimulan, father's sister (elder or younger)
W- gumbunan, mother's mother
-B gumbuna, mother's mother
W- nayginan, mother's father
-B raygina, mother's father
W- babilan, father's mother
-B babi, father's mother
W- gubanan, father's father
-B gubana, father's father
WBH dandi, elder sister
w galmbuyan, younger sister
W H gugun, elder brother
WBH galmbu, younger brother
Above four terms also cover
father's brother's and mother's sister's children
WB gamugan, daughter
W murgin, son
-B yabugu, son
W yumuru, 'son' (said by mother to avoid using his name)
W muyggul, eldest boy
W -muyngulgan, eldest girl
w balgin, mother's brother's son;
father's sister's son
W milgun, mother's brother's daughter, etc.
W ga:di, cousin (Loan?)
WBH bulgu, wife
WB wiru, husband
W gubi, man and wife
W waymin, (classificatory)
mother-in-law
W nubi, (classificatory)
father-in-law
Ca - Sections and
Identification
w H gurgila/gurgilayngan, wuguru/ wugurayngan, wungu/ wungurayogan/, gurguru/ gurgurayngan, male/female section labels - see 1.4
W nalbay, identification with totem or country e.g. gungunu nalbay naygu 'the thunderstorm is my totem'

## D - Mammals

WB gumbiyan, echnidna, porcupine
W gurgida, ring-tail rat
WB bargil, brown rat and/or
house mouse
W galugu, scrub mouse
WB gudi, water rat
WB gugila, short-nose bandicoot
W guygal, long-nose bandicoot
W- gadara, grey possum
-BH midin, grey possum
W gula, striped ringtail possum (Pseudochirops archeri)
W mungan, Herbert River ringtail possum (Pseudocheirus herbertensis)
W burugu, a possum species
WB naluwa, black and white flying squirrel (Dactylopsila trivirgata)
W
manguru, large flying squirrel
W bulggari, tree-climbing kangaroo (Dendrolagus lumholtzi)
manara, large kangaroo
W yawuynbari ~ yawuymbaci, big grey kangaroo (male)
W gurgay, big grey kangaroo (female)

W gabali, whip-tail kangaroo
W warugala, black wallaby
W gi:gin, swamp wallaby
W bulgulbay, scrub wallaby
W- bawufu, rock wallaby
-B bungil, rock wallaby
WB bacnan, kangaroo rat
WB gugi, black flying fox
W wagagala, yellow flying fox
WB mununmunun, chocolate bat
WB bada, dog
W warabi, dog
W ganibara, dingo
H gandu, dog
W yaraman, horse (Loan)
W ga:yari, horse
WB gumuburu, bullock, beef
E - Reptiles and Amphibians
W H gugagay, alligator ('main Wargamay word')
W maybaga, alligator (alternative term, less preferred)
WBH bagigal, saltwater turtle
WB banguru, freshwater turtle with round belly
W bilil, freshwater turtle with flat belly and long rough neck
W bugawu, long-neck turtle (not good to eat)
WB bangara, blue-tongue lizard
W giyabay, brown rock lizard
WB wirgu, frilled lizard
W buyngul, small tree lizard
WB gu:biris, small bark lizard
WB gu:ga[a, black goanna
WB gagan, sand goanna
W banal, water goanna
W wangu, small goanna
WBH wingi, snake (generic) (preferred Wargamay term)
W gambal, snake (generic) (said to be a Giramay term, also used in Wargamay)
W wuyga, snake skin (after being shed)
WB gabul, forest carpet snake (female)
W- yirawu[u, forest carpet snake (male)
-B gumbi, forest carpet snake (male)
W gayggiri, large tree-climbing scrub carpet snake (also used as generic term for any carpet snake)
WB malugan, chicken snake (edible)
W bima, death adder

| WB | Judan, large black snake | WB | agtail |
| :---: | :---: | :---: | :---: |
| W | numbulu, small poisonous black snake with red tail | W-H -B | gayambula, white cockatoo gunayngil, white cockatoo |
| W | wuygul, whip snake | W | gulalbi, black cockatoo |
| W | walguwu ${ }^{4}$, poisonous brown snake | W W | binbical, king parrot gurambal, blue mountain parrot |
| W | burganu, big, lazy brown snake (also said to be tiger snake; taipan) | W | bi:bal, small needle-tail budgerigar, eats bees <br> birànbiran, a needle-tail bee |
| W | yungubala, copper-headed python |  | bird |
| WB | ganal, frog (generic) | W | gifibi, quail |
| W | yudi, long-nosed frog (used as bait for barramundi) | W | gabangifa, dollar bird bagingila, spangled drongo |
| WB | yumburu, late stage of tadpole | W W | di:l, shining starling -gi:Igi:l, flock of these |
| F | Bixds | W | dagu, carpenter bird, hammer |
| W | gi:gi:, bird (generic) |  | bird |
| WBH | bambu, egg | W | guril, storm bird |
| W | wiri, bird's nest | WB | gurigala, eagle hawk |
| -B | *daca, bird's wing | W | gargay, small chicken hawk |
| WB | gilngica, cassowary | W | gambunu, black duck |
| W H | gundulu, emu | W | bigilbara, whistling duck |
| W | gurur, native companion, brolga | $\begin{aligned} & W- \\ & -B \end{aligned}$ | bubunba, pheasant bubun, pheasant |
| W | gawarala, crane, ibis | -B | wulbu, pheasant |
| W | wudugalguru, bird like ibis | W | gacamgaram, sea gull |
| W | gandil, jabiru, stork |  |  |
| W | gagul, brown heron with white chest | $\begin{aligned} & G- \\ & \text { WBH } \end{aligned}$ | Fishes, etc <br> ga:bu, fish (generic) |
| B | y imbur, pelican | W | gingibiri, big (used only of |
| W | guyibara, curlew |  | fish) |
| W | gabugala, plains turkey | WB | gigawulu, freshwater jewfish |
| W- | wucamba, scrub turkey |  | (catfish) |
| WB | guygari, scrub turkey | WB | gu:gal, mud cod |
| WB | girawan, scrub hen | W | bu:giya, freshwater mullet |
| W | gucugu, dove | W | gagaru, small white fish with |
| WB | guguwur, blue pigeon |  | black stripes, used as bait |
| W | gulgal, black flock pigeon |  | for catching barramundi |
| W | wulgamu, green scrub pigeon | W- | mu:gil, freshwater black bream |
| WB | wulgugu, Torres Strait pigeon | - | yangal, freshwater black bream |
| W | wangawa, a bird like a pigeon, which scratches around on the ground |  | wayili, freshwater red bream gabadala, smaller bream mu:duru, perch |
| WB | nugu, mopoke owl | W | wurigala, barramundi |
| W | bulibuli, night ow1 | WB | mu:ba, stone fish |
| W | bi:lbi:l, pee wee | W | gundamu, freshwater garfish |
| W | gubuta, magpie | W | balbirigan, large saltwater |
| W- | waga, crow |  | shark |
| -B- | wagangara, crow | W | wunduy, freshwater shark |
| WB | -wadara, big mob of crows | W | balajgal, dugong |
| --H | wa:gan, crow | WB | guymbi, eel (generic) |
| W-H | gungaga, grey jackass, kookaburra |  | yajabula, a species of long eel mugugara, mud crab |
| B | guralal, grey jackass, kookaburra |  | yigara, crayfish, yabby <br> bulgan, shrimp, prawn, lobster |
| W | muyun, large blue kingfisher |  | (preferred Wargamay term) |
| W | giguluruy, small forest | WB | mawa, shrimp, prawn, lobster |


H - Insects, etc
urogan, white ant (and its
agu, white ant on tree (and
antbed)
red ant (LC), bull ant (AP)
uninin little biting black
ant
nest on a tree like a
hornet)
B bumaga, wasp
W- munma, paperbark hornet
(makes nest in gum tree)
WB ga: [a, centipede
W nicinara, maggot
WBH marbal, (common) fly
bunul, march fly
yiringila, horse-fly
bulal, firefly
gumu, mosquito
-B gunugunu, sandfly
W gugigugi, butterfly, moth
WB gambun, grub
WB gaban, grub in acacia tree
W galambu, grub in gum tree
B gu:cguru, beetle (generic),
including cane beetle
lamp) NOTE that NB gave
these as two distinct
designations in $B$, but
c said that gini was the
gu: cqucu
LC included a final g but
NB did not
midi, leech
bundin, grasshopper
muguru, large locust
macbu, louse
buli, flea
gurgal, bee, sugarbag
(generic)
ibur, large black savage
agan, small yellow native
bee with white behind
WB bayal, a yellow native bee
WB wubiri, English bee
W guygin, honey

W ma:gaya, bee's wax
W dalngal, spider, web
I - Language, ceremony, noise
WB mayay, language (everyday style)
W -mayay(m)bi, Vint, talk
W galnuy, avoidance style
W gawal, a call
W -gawali, Vint, call out
W yi:l name
W gama, song-style
W bucan, song-style borrowed
by Wargamaygan
w ganala, song style
(predominantly obscene)
W- galngita, moaning funeral chant recounting deeds of dead person
WB bunun, drum used by women
(and noise)
W balmbura, as bunun
W wu:, war (Loan)
W bu: oguray, a snore; see (5)
W -bu:nguray(m)bi, Vint, snore; see (183)
W gubil, a whistle
W -gubili, Vint, whistle
-B *warumbil, whistle
$W$ 施ulgiri, lots of noise (e.g. cattle lowing, or from people)
WB nurnu, a noise e.g. hitting a drum, breaking a stick, bumping into something
W nurmbun, a tapping noise e.g. tapping feet
W gunbin, two trees rubbing together, and the noise they make

J-Artefacts
WBH wargin, boomerang (the 'best' Wargamay word)
W wanal, boomerang
W birbubirbu, throwing implement made of two crossed sticks
W balngira, as birbubirbu [balngira may possibly be an adjective 'crossed']
WB gimbara, small throwing stick, $2-3^{\prime}$ long, big head and tapering body, mostly a toy
WB gambara, larger nulla nulla (throwing stick), for fighting
W wirga, small nulla nulla, a little bigger than gimbara,

|  | mostly used to throw up into tree to knock fruit down | W | ma:gaya, bee's wax, used for sealing nuba/girba |
| :---: | :---: | :---: | :---: |
| WB | guligu, a nulla nul | W | bilga, pitch/gum from grass. |
| WB | nalmu, large nulla nulla, 5-6' in length with big head, used by women in fighting | W | tree, used for sealing gucgara, billy can bandara, bottle |
| -B | gagin, yamstick | W | balbay, bottle |
| W | gabay, walking stick | W | bundurun, English bag |
| W | gugulu, stick for accompaniment in ganala song-style | W | baygi, bag (Loan) <br> bagir, basket (Loan) |
| W- | bangay, spear (generic) | W | bagigi, box, trunk (Loan, prob. |
| -B | gamanday, spear (generic) |  | from baggage) |
| H | galgay, spear (generic) | WB | gambi, clothes |
| W | galun, short spear with hook, used for fighting | $\underset{B}{W}$ | gambila, bark blanket gumul, blanket from stinging |
| W | yanbaca, long spear, used for hunting kangaroos | W | tree bark balgubalgu, hat |
| W | wargayda, prickly spear, with stingaree sting | B | [aygi, old clothes (Loan, prob. from rag) |
| W | bilun, hook spear | W | Ginaman, boot, shoe |
| W | warnay, fish spear | W | garuga, trousers (Loan) |
| W | garin, (straight) woomera | W | *gingili, singlet (Loan) |
| -B | bangila, (straight) woomera | WB | milga, water-maker: piece of |
| W | *gulmbura, (straight) woomera |  | painted bark (later, iron) |
| WB | baguru, sword |  | placed in the submerged root |
| BH | bigin, shield |  | of a tree just below water |
| W | nama, shield handle |  | level. See Lumholtz and |
| W | dumbul, bump at reverse of handle on shield |  | Banfield references given on p.104-5 above. |
| WB | julan, stone tomahawk | W | buyana, white feather from |
| -B | gamiya, stone tomahawk |  | chest of white cockatoo |
| WB | bacgu, English axe |  | (corroboree decoration) |
| W | guyan, quartz, sharp knife made from quartz | W | mani, money (Loan) <br> bari 'stone' also used; and |
| W | naybu, knife (Loan) |  | biba 'paper' for paper money |
| W | bayil, file (Lban) | B | baguru, money (probably a |
| W | wu: , hoe (Loan) |  | yaraman-type loan) |
| W | gungi, (top) grinding stone | W | baybu, pipe (Loan) |
| W | giman, firestick | W | caybul, rifle (Loan) |
| W | mugacu, fish net | W | margin, gun (Loan, from musket) |
| W | ma:nga, fishing line, string | W | mudiga, motor car (Loan) |
| W | gucbay, fishing rod (about 4' | W | diya, chair (Loan) |
|  | long) and line | W | yingin, (cane train) engine |
| W | wacugay, fishing rod (about $1^{\prime}$ long) and line |  | (Loan) |
| W | layn, fishing line (Loan) |  | Food, fire, water |
| B | cubu, rope (Loan) | W H | galguru, meat |
| B | wulgu, bark canoe | WB | gungul, non-flesh food i.e. |
| W | wargan, raft |  | fruit, vegetables, honey |
| WB | gagara, cane dilly-bag | W | gaygamali, (non-flesh) food |
| W | mindi, grass dilly-bag | W | gu:l, salt (Loan) |
| W | gangu, smaller grass dilly- | W | gawangawan, rice |
|  | bag (used for carrying | WB- | wagun, fire, tree, wood |
|  | valuables around); kangaroo | W | mayba, fire (less-used |
|  | pouch |  | ernative to wagun) |
| W | nuba, bark water container |  | wambuy, fire, tree, wood |
| WB | ginba, bark water container | WB | guyila, charcoal (Lumholtz: flame) |


| W | bugan, big bush fire or big grass fire |  | gawulgawul, wind gugulbara, whirlwind |
| :---: | :---: | :---: | :---: |
| W | gilin, hot coals, charcoal | WB | gambara, cyclone |
| WB | nibal, coals, opium | WBH | gungunu, thunderstorm, |
| WB | culmbura, ashes |  | thunderclap |
| WBH | bunu, smoke | WB | maygala, lightning |
| W | ŋalmangara, light, e.g. | WBH | yugan, rain |
|  | lighted torch | WB | mugunduru, hailstone |
| W | -nalmangarama, Vtr, make a light | M - | Geography, etc |
| W | na: ¢a, light (in distance) | W H | miga, camp, house |
| W | diga, cigarette (Loan) | W H | balgan, house, hut |
| WB | nalu, (fresh) water | W | *yabun, large camp, lots of |
| - H | gamu, (fresh) water |  | people camping together |
| W | wagun, sea, salt water | W | mindi, corroboree ground |
| H | bangin, sea, salt water | WB | bucun, fighting ground |
| W | yucalbara, big river | WB | yalgay, road, track, path |
| WB | malan, creek | WBH | gayi, ground, earth, dirt |
| W | biyu, small creek, gully | W | *bumba, dust |
| W | gurala, big flood | WB | warun, sand |
| W | ginda, waterfall | WB | buymaran, sand |
| W | yungun, swamp | WB | gurna, mud |
| W | galggan, froth (on waterfall or gully) |  | waga, mud, clay magila, white clay |
| W | gurugu, grog (Loan) | W | galmu[u, yellow clay (and any |
| W | biya, beer (Loan) |  | yellow object) |
| W | di:, tea (Loan) | W H | magira, red clay |
|  |  | WB | gilgan, hole |
| $L$ - | Celestial, weather | WB | yinari, cave, hollow (also Adj, |
| WB | wi:, sun (sometimes |  | hollow) |
|  | pronounced [wui]) | W | *yalbac, flat ground |
| W- | balanu, moon, month | WBH | bari, stone (generic) |
| -B | balan, moon, month | W | guyan, quartz, quartz knife |
| -H | yilgan, moon, month | W | bagala, flat rock |
| W | yirgingara, star (generic) | W | -mugal bagala, bald head |
| WB | wumbugiri, star | W | munan, mountain |
| W | yabulga, morning star | W | balbi, sloping bank |
| WB | murgalngan, seven sisters | W | ducu, ridge, shoulder, upper |
| WB | buya, shooting star |  | arm |
| W | gigubina, falling star (mythical person | W | yuruyubi, river bank (only in song) |
|  | 'ugly old bugger') | W | bugan, forest, grasslands |
| W | ŋulmu[u, dark, darkness, | WB | gulgin, (thick) scrub |
|  | night | WB | nargi, country (generic) e.g. |
| W | gundambula, very dark (night) |  | naygu nunga nargi 'this is |
| W | biligi, daybreak, early in morning | W | my country' <br> gunin, coast (also 'south') |
| W | gundabaca, fine weather |  |  |
| W | banica, sumertime, hot sun, sweat |  | $\begin{aligned} & \text { Flora } \\ & \text { wagun, tree, wood, large stick, } \end{aligned}$ |
| W | birgibara, wintertime |  | fire |
| WB | wuma, shade | --H | wambuy, tree etc |
| W H | yamani, rainbow |  | wicba, small stick |
| WB | gura, cloud, sky | W | *muwari, any big tree |
| WB | gumburu, fog, mist |  | (providing shade) |
| B | gumbur, dew | WB | mara, leaf [LC and NB gave mara |
| W- | gulubu, wind |  | but JT gave ma[a] |


|  | gubu, small leaf (including tea |  | en by bir |
| :---: | :---: | :---: | :---: |
|  | leaves), typically in piles | W | bugu, larger paperbark tea-tree, |
| W | manga, flower |  | bark used for humpy and torch |
| W | bigal, bark | W | galaba, long wild yam (can be |
| WB | ginara, root |  | eaten after minimal cooking) |
| W | dumbil, flange of tree | WB | wanuy, round yam (requires |
| W | ya:, top of tree e.g. gagara wagunda ya: oga 'the possum is at the top of the tree' | W | cooking) <br> bundu, edible root of a climbing plant (see vondo in |
| W | gargal, branch, arm |  | Lumholtz 1889:207,313) |
| W | yulba, end of branch | W | gamin, lawyer vine |
| WB | guluburu, stump | W | gambay, big lawyer vine |
| W | gulgara, log |  | Calamus australis |
| W | caba, forked stick, fork of tree | W | mangi, lawyer vine used for dilly-bags |
| W | gagan, blady grass (used for grass huts) | W | nayaba, seaside vine, grows in the sand just above high |
| W | gulbica, cane grass, spear grass |  | water level, used as fish poison |
| W | bunabuna, couch grass, weeds/rubbish | $\begin{aligned} & \text { W } \\ & \text { WB } \end{aligned}$ | bidaman, conjiboy plant barul, a vine-like plant in the |
| W | gu: 刀afa, rubbish, weeds |  | ntains |
| W | *gargagarga, (any) prickle | W | gi:bara, very large fig tree |
| WB | bulbucu, spotted gum, bubbly gum (possum eats leaves) | W | banba, red fig - prob. Ficus destruens |
| W | yagabayan, large hollow gum tree in scrub - Eucalyptus grandis | W | wira, black fig, with rough sandpaper leaf baygari, a river fig |
| W- | yiribara, blue gum tree | W | galgawuru, big fig, grows as |
| - | gulacu, blue gum tree |  | parasite on another tree |
| WB | gurugan, bloodwood | W | naguba, Burdekin plum |
| W | galgabara, she-oak (on river) | W | dindacigan, grass tree on river bank (used for dilly |
| W | gidu, chider hardwood tree, and light made from it Halfordia scleroxyla | $\begin{aligned} & \mathrm{W} \\ & \mathrm{~W} \end{aligned}$ | bags) - Lomandra longifolia <br> *gagabaca, a grass tree <br> gadira, zamia fern and fruit |
| W | dingila, moreton bay ash (JT); messmate tree (LC) | W | bulici, staghorn fern banginu, a tree fern |
| W | diman, firestick tree | W | yagal, pandanus |
| W | *galmbula, iron bark tree | W | dalu, palm tree - Archonto- |
| W | milbir, slippery blue fig, used for shields | W | phoenix alexandrae murmbal, quandong (edible blue |
| W | gubara, coastal tree with red bark, used for yamsticks | W | ```fruit) guyumulu, quandong (edible blue``` |
| W | gulawun, Leichardt tree |  | fruit) |
| W | gubula, black pine Podocarpus amarus | W | mu:ci, tree with small blue <br> fruit, size of a peanut |
| WB | wana, black bean |  | (bark used for canoes) |
|  | Castanospermum australe | W | gutbala, wild banana tree |
| W | maraga, river cherry tree | WB | girgingan, lady finger tree, |
| WB | dabugay, wild cherry (clusters of sour fruit on a small | W | edible berry-like fruit <br> mulgalgay, green ginger |
|  | plant, used for jam) | W | bayuga, a coastal ginger |
| W | gacgala, mangrove (used for boomerangs and spears) | W | gucgi, ginger, bears no fruit but leaves used to wrap fish |
| W | galbay, wattle tree |  | for baking |
| W | walngan, river tea-tree (fruit | W | an, acacia tree, and the |

white grub in it
W *magal, cocky apple tree
W gangura, turpentine tree, bark used for canoes

WB gajali, stinging tree -
Dendrocnides moroides
$W$ mangu ~ mayngu, mango (Loan)
W jaringi, orange (Loan)

O - ADJECTIVES
Number and identity
WBH yungul, one
W yungura, another one
WBH yaga, two
WBH garbu, three
WB gumacbari, a lot, many (e.g. people, animals, leaves)
WBH gagin, a lot, much (e.g. dirt, fish, water, food)
The difference in meaning between these two words is not clear.
W yalngabaca, a very large number e.g. big mob of cockatoos, huge pile of leaves
W gi:bara, mark on message stick to indicate approximate number of people from a group planning to attend a corroboree, glossed as 'a hundred'
WB munara, by oneself, alone - gayba munara gagabaii nirwara 'I'll be going on my own tomorrow'; nayba gi:gibali munara 'I was sitting by myself'; ginda gi:ba munara 'you scratch yourself:'
W Jalma, one's own (object or section, etc) - wanal nalma 'one's own boomerang'; nuna nalmambigi gunbagi 'he cut his own [foot]; nuna nalmambigi bangagi 'he paints himself'; naygu ninba nalma 'you're my friend'
W gulbu, anything strange (strange thing or foreign person)
Colour
W- gu:lu, black - muray gu:lu 'black hair'
WB gu:nga, black
W bambara, white
W margun, grey

## Dimension

WBH wurbi, big - wagun wurbi 'big tree'; wurbi yugan 'big rain'; gungul wurbi 'plenty of tucker'
W garamu, huge - bingan garamu 'huge feet'
W gingibiri, big (used only of fish)
WB giga, small (also used as N, child)
W -gigaru, mob of small children
W nagaram, tiny (especially nagarambulu, very tiny); shallow (water)
W- yanal, long, tall; and also yanabaca, yanandari with same gloss
-B guran, long, tall
W- gudulu, short
-B gudu, short
WB bilngiri, wide - wurbi nuna bingan bilngiri 'he has large wide feet'
W balbala, fat (person)
W jagul, deep (also used as $N$, deep water hole)
W gingara, shallow (water) [see also gadala/narala, dry, shallow]
W- gulumbara, straight
W milburu, straight - yalgay milburu 'straight road'
W waruwaru, crooked

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Physicat property
WB bandagala, full - yaygu gagara bandagala 'my dilly-bag is full'
W ga:la, empty
WB gawun, hot (from fire) - gilin gawun 'hot coals'
    B bayngica, hot
WB banica, hot (sun), summertime, sweat, hot (from sun)
WBH gidul, cold - nana giduldu mu:ngi 'the cold makes me shiver';
        gulubungu nana gidulmay 'the wind makes me cold'; see also (50)
W- marna, wet
-B *nulngirin, wet
W- gadala, dry, shallow
-B jarala, dry
W gabini, sharp(ened) (Loan) - תuna gabinima bayindu 'sharpen it
        with a file!'
WB wargal, sharp - gamiya wargal 'sharp tomahawk'
W mulmbin, blunt
W gundil, heavy - naygu mugal gundiligi 'my head feels heavy'
W fangal, heavy (a Giramay word, also used in Wargamay)
W gagardagar, rough, prickly (skin, leaf, etc)
W gagal, hard, solid - wagun gagalgagal 'solid tree'; namun
    gagalgagal 'firm breasts (on woman)'
w- dalna(dalna), hard - galguru dalnadalnambigi 'the meat got hard'
\(-B\) muguru, hard (e.g. meat, wood), strong (e.g. person, spear)
WB yinaci, hollow (also N , cave, hollow)
WB mungal, soft (e.g. cooked meat), weak (e.g. person)
WB naba, ripe
WB gunga, green, unripe (vegetables), raw (meat), alive (person)
W- gunu, (good or bad) odour [this is probably best regarded as an
        abstract noun]
W nugi, bad smell, stinking
W giyal, sweet (food, honey), savage (e.g. dog), poisonous (e.g.
        fangs of snake)
    B mada, salty
WB marnga, salty, bitter, sore
W manalmanal, stinking, bitter, dirty - jaru mugal ga gawambama
        manalmanal 'don't eat the stinking thing, it will make you
        spew up'
    W- bunan, stinking
    WB buga, rotten, stinking, dead - see (182)
    W bucgul, rotten (e.g. wood - dry and light)
    WB ganu, broken - wargin ganumbigi 'the boomerang broke'; wanal ganu
        'the boomerang is broken'; garanga dulgil danumbigi 'a bone
        broke in [his] thigh'; yulba ganuma 'break the branch:'
    W baga, shut, blocked - nayba bina wi:gimbigi/ bagambigi 'I forget
        it' (literally 'my ear has become no good, has become blocked');
        also bina baga 'deaf', gayga baģa 'blind'
WB mungu, naked - see (32)
W balgun, clear, open - nayba balgunda guwaray 'I stand out in the
        open (when a cyclone comes)'
Age and vatue
W ganbaymu, very old (person, object, or action - done many years
        ago)
WB nalambucu, good (general term) - ninu nayi nalambucu 'you have a
        good voice (for singing)'; and see (229)
WB mali, good, pleasing (especially food and drink, but can be
        applied to anything)
        These two terms seem fairly synonymous, and can be alternated
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for felicity of discourse e.g. Question yalgay nalamburu 'is the road good?', Answer gayi, mali 'yes, it's good'
WB palngirgan, good-looking, pretty (woman, girl) - nuna yibi nalggirgan/ gara wurbi 'that girl's pretty, she has big thighs' W- girbinga, very good-looking (woman, girl)
W gulgici, prettily painted (e.g. man) - nuna gulgicimay bangay 'he is painted prettily'
WB wi:gi, no good - gambara nayba wi:gimbigi 'my body feels no good (e.g. I'm tired)'
wi:gina, no good - wi:gina nuna buga 'that fellow no good, he stink'; naga wi:ginamay 'I made a mess of it'
The difference in meaning between these two words is not clear manabagay, ugly - minagu wa: dibali/ nana nunday manabagay 'why is he laughing?' 'he saw me looking ugly'

## Human propensity

W gilbay, know how to do something - see (236)
$W$ mulgara, game to do something, brave, see text $8.4,13$
W bungal, glad, proud, happy - nulanga babay bangaygu / muna bungaligi 'he speared [a kangaroo] and now he's proud'
W ma:ngay, stupid, silly - nulanga ma:ngagu gunbagi bingan 'the silly person cut his own foot (on purpose)'
B garba, stupid
W birigi, general term of disapproval, to describe someome who is a nuisance or 'no bloody good'; translated as 'bugger' or 'bastard'; see text 8.12.
W jugu, pretending, lying, malingering
WB ganga, stealing (see Vtr, ganga, steal) - wi:gi nuna gangabulu 'he's no good, a real thief'
WB milgal, greedy
W bi:ca, frightened (also N, fear) - nayba bi: cambigi 'I was frightened'; see also (44), (64), (67), (235)
gagul, worried, sorry, pitiful, 'poor fellow'
cuyu, playing around - yibiyibi cuyumbigi 'lots of kids are playing around'; see also yayimbali, Vint under V - Corporeal verbs wunan, lustful, promiscuous; and wunanbulu, larrikin, harlot
gawan, angry, cheeky (person), savage (dog) (also N, anger) nayba gawan 'my temper is up'; and see (230)
gafingi, cranky (Loan) - ga[ingibara 'cranky person'
Corporeal
W garangala, strong (man)
-B muguru, strong (person, spear), hard (meat, wood)
WB mungal, weak (person), soft (e.g. meat)
W balbala, fat (person)
WB namici, hungry - nayba namicimbigi/minagu/ gungul naga mugagu 'I'm hungry' 'What for?' 'I want to eat vegetables'
$W$ mangay, satiated, full up with food - naygu yulgu mangay 'my belly is full'; see also (36)
B bungul, satiated, full up with food
WB nayi, thirsty (also $N$, voice) - ŋayba nayu jalugu/ ganŋalagu 'I'm thirsty for a drink of water'
wugar, sleepy (and N, sleepiness) - nuna wugargiri 'he's sleepy'; wugar nunga ma:l bungilagu 'this sleepy man wants to lie down (and sleep)'; and see (15), (24), (174)
wudil, asleep, - gaga gina wanay/ ginba wudilgiri bungilagu 'I left you to lie sleeping (i.e. I didn't wake you, although your snores
disturbed me)
W *bayngara, tired (from work or other effort), rendered by LC as 'buggered up'
-B yirgal, itchy - yirgal/ nayba gi:bay 'I'm itchy and I scratched myself'
WB marnga, sore (+ body part), bitter, salty - nayba nayilogara marnga 'my neck is sore'
WB winin, sore - bingan naygu winin 'my foot is scre'
W mulga, half-blind (and see gayga baga 'blind')
WB gunga, alive (person), raw (meat), green, unripe (vegetable) see (237)

Speed and adverbial
W milmucu, spinning (e.g. top or boomerang), moving fast (of wheeled vehicle - literally, wheels are spinning) - wargin milmucumbigi
'the boomerang is spinning'
WB gawuy, (do) quickly - bu:diya gawuy 'pick it up quickly!'
W [abi, (do) quickly - cabi bimbiriga 'run quickly!'
These two words were said to be synonyms
-B *bingira, (do) quickly, hurry up
WB gubun, slow, slowly - bilmba ginda gubun 'push it slowly'
WB gunguru, (do) hard - gulubungu gimbi gunguru 'the wind blew hard'; gunguru nayba bimbirigi 'I ran hard (to escape the bullock that was chasing me)'; nana nunday gunguru '[he] stared at me'; gunguru ni:ca 'tie it tight'
WB gargici, finished - naga mugay gargiti gungul 'I've eaten all the food up'; naḑa gargicimay gunbay, translated by informant as 'cut finish'

Positional
W- gaymbiri, everywhere, all over the place - see text 7.8,15
W mu:ca, hidden, out of sight, (fire) extinguished - jinba mu: cambiga 'you hide:'; 刀ulmburungu mu: ramay naga nundalma 'the woman hid [the food] lest I see it'
W bugul, vanished, disappeared - see texts 5.16,24, 6.19
Misceltaneous
W wayu, turning into - see text 6.9,18
WB gulbun, married - ga:ndu gulbunmay 'who married her?'; and see text 8.11
WB - gulbunma, Vtr, marry (alternative is gi:gima, from gi:(gi) 'sit down')
W -gulbungin, $N$ woman who claims her promised husband - ruga gulbungin nulmburu ma:Igu nunigu 'the woman is going to search for her promised man'
W magul, working (also N , work) ; most often verbalised - wanganga ninba magulinu 'where do you work?'; see also (16), (37), (77), (176), (240)

W yubay, be away
W -yubayma, Vtr, take, steal - ma:Indu yubaymay pulmburu 'he stole the woman'; see also text 6.6
W -yubaybi~yuba, Vint, run away - nulmucunga nayba yubaybigi 'that night I ran away'; see also texts 7.3, 9.4,12

## VERBS

P - Motion and induced motion
WB gaga, int, go/come. The unmarked sense is motion away from speak-
er - jaru gagaga yulbanga 'don't go to the end of the branch (lest it break):' However it is sometimes used to indicate motion towards the speaker - nuga naygungu gagabali 'he's coming for me'
nadaymbi, int, come. This has the form of a verbalisation, although no root gaday has been encountered
nagumbi, int, come. This involves productive verbalisation of the deictic nagu 'to here' (3.4.3) - see (94). One informant contrasted nadaymbiga 'come here!' and nagumbiga 'come closer!'; this meaning difference has not been confirmed
wuna, int, go walkabout - wanganga nura wunabali 'where are you going walkabout'; and see (29), (30), (175), (207-8), (216)
wuna, tr, chase - gumubucungu nana wunalgani 'the bullock is chasing me'; see also text $7.1,8,15$ and (56), (92), (187)
gu:ngi, int, come out, emerge, arrive - nuna waloga gu:ngigi the sighed'; see also text 9.19 and (121), (165)
gumba, tri, go in, enter, put in - gulginga nayba gumbagi 'I went into the scrub'; nulanga maca gumbalgani 'he [a bird] keeps putting leaves into [a nest he is building]'; jaru nalu di:nga gumbalga 'don't put water in the tea!'; falunga gumbay milga/ yugangu '[I] put the rainmaker [in position] in the water, for [to make] rain'; gumba nuna 'put it [a handle on the axe]'; and see (125), (158-9), (228)
wuda, tr, take off - ginda gambi wuda 'you take [your] clothes off:'; bigal wuda 'take the bark [off a tree, to make a canoe]!'
*yimba, tr, put on (clothes) - balgubalgu nada yimbay 'I've put [my] hat on'
bayi, int, go around, get tangled up - wagunda funa bayigi/ mu: cambigi naygunda 'he went around the tree, hiding from me'
bana, int, return (person or boomerang), go home, come home nayba banalagu migagu 'I must return to the camp'; see also (209), (213-5)
nanba, tri, follow (person, tracks, path, river) - jinda nanba yalgay 'you follow the path:'; see also (85)
gayga, tr, hunt away (person, dog, etc) - see (174)
nargga, tri, rush in on, raid, arrest - see text 7.14
ba:lba, tr, roll - bari finda ba:lba 'you roll the stone over'
ba:lbali, int, roll, tumble over and over - bari nuna ba:lbaligi 'the stone rolled [down the hillside]'; nayba ba:lbaligi 'I rolled over ${ }^{\prime}$
ga:nda, int, craw1. Data in $B$ from NB has transitive inflections on this intransitive verb - ga:ndalma, garu ga:ndalga, ga: ndalani; data from LC on the $W$ dialect shows regular intransitive inflections e.g. ga:ndabali (see 3.5.3)
bicba, int, jump - gi:gin bicbay 'the wallaby is jumping'; nayba bicbagi/ wingingu nana bi:camanu 'I jumped when frighted by the snake'; see also (76), (177)
nugi, int, dance - mindinga nayba nugilagu 'I want to dance in the corroboree ground'; see also (58), (233)
yinbi, int, fly - gi:gi: yinbigi 'the bird flew away'; nupa macbal yinbiyinbibali 'the fly is flying around'
bimbiri, int, run, run away - see (6), (187)
bili, int, run
dagi, int, fall down - binganga nuna dagigi 'it [the boomerang returned and] fell at my feet'; nayba gagima 'I might fall down (if I go that way)'; see also (179), (180), (188)
B bugi, int, fall down - buya bugigi 'the shooting star fell
(through the sky)'

WB yugara, int, swim (i.e. travel through water to get from one point to another - most instances of English 'swim' i.e. 'swim about in one area' would be rendered by wicga)
W gaba, tr, soak (food or tea, etc) - nalunga naba gubula soak the black pine nuts in water:'
W *wargumba, tr, wash (e.g. children, clothes) - nulanga gambi wargumbagu naygu 'he [went] to wash my clothes'
$W$ walmbi, tri, lift up, pick up, wake (someone) up - galaba pinda walmbiya 'pull up that yam'; naga nuna walmbinu/ wugargiri 'I woke him from sleep'
W da:lbi, tri, scoop up water in container - pinba gagaga/ jalugu da:lbilagu/ gurgara ginda bu:diya 'you go and scoop up some water and bring the billy-can [full of water, back here]:'; jalu da:lbiya 'scoop up some water:'
WB ma:ni, tri, hold in hand, hold onto, catch hold of, catch something thrown, grab - naga nuna mala ma:ni 'I grabbed her hand'; nana nayilngara ma:ni 'he choked my neck'; garindu bangay ma: na 'hold the spear in the woomera!; see also (84)
W- giyawuda, tr, grab with hand (e.g. grab woman)
WB bu:di, tri, take/bring, carry - naga nunga ma:l bu:di/ naygungu gulmbal 'I take this man [to go] with me as a mate'; raguma门inda budi:ya 'you bring it:'; see also (38), (79), (185), (216), (224-5)
WB
TB
WB gu:ga, tr, (water) washes (something) away - guralangu nana gu:galma 'flood might wash me away'; and see (126)
WB gu:yi, int, feel around e.g. put hand into log to see if possum or sugarbag is there - ginba gu:yiga/ wagunda gida 'you feel in the log, poke with a stick!'; nayba gu:yigi/ maya 'I felt around, there is nothing there'
WB gida, tr, poke (something) with a stick e.g. poke stick into hole to see if an animal or sugarbag is there - wi bbangu ginda gida gagara 'you poke for possum with a stick:'
 mulindu du: [algani bayibayimalgani 'the willy wagtail pulls up grass with his mouth and tangles it up [for his nest]'; mala ginba gumba/ gagara ginda du: [a 'you put your hand in [hollow in tree] and you pull out a possum!'; and see (14), (188)
WB bilmba, tr, push - nuna bilmbay guralangu gu: nara 'the flood washed all the rubbish down'
WB bu[mbi, tri, throw, chuck, throw away, cast line into water ganumbul gana burmbi yaramandu 'a horse threw me earlier on today'; gurbay nuna bu:diya/ burmbilagu ga:bugu 'take the fishing line, to throw it out for fish'; garnga burmbilgani nulanga badagu 'he spat at (literally, chucked spittle at) the dog'; and see (13), (75), (167), (182)

W gilnga, tr, pour water on - wagun giloga/minagu/ gagan gandama 'pour water on the fire [to extinguish it]!', 'why?', 'lest the grass catch on fire'; naru nalungu gilngalga/ di: gidulmalma 'don't pour water into the tea, lest it make it too cold'
WB wagiri, tr, overturn, capsize, spill/pour (water) - naga wagiri nalu 'I spilt the water'
W bayumbi, tri, shake (e.g. tree), wave (e.g. hand), swing anything round, turn oneself around - naga wagun bayumbi 'I waved a stick OR I shook a tree'; nuna wagun bayumbigi 'the tree is waving (in the breeze)'
WB gangumbi, tr, fan - balgubalgungu gangumbi nuna wagun 'fan the fire with [your] hat:'

Q - Giving
WBH wugi, tr, give - see 4.6.3; also namundu wugiya 'breastfeed [baby]'; gilnangu nana wugi '[he] gave me [his] cold'
$W$ bayima, tr, buy (Loan from buy, verbalised) - naga bayimay ginaman 'I bought the boots'
WB ganga, tr, steal (see also Adj, stealing) - nulanga gangalgani mani 'he's stealing money'
$R$ - Position and induced position
WBH gi: (gi), int, sit, sit down, live (see 3.5.3) - wumanga nayba gi:gibali 'I'm sitting in the shade'; nulubu uunga nayba gi:gilagu 'I'll sit on the stump'; yinamba nayba gi:gibali 'I live in Ingham'; see also (49), (103), (176), (210)

W wanguri, int, kneel down, squat on haunches
W guwara, int, stand, stand up - see (78), (95), (166)
$W$ binda, tri, put standing up, build (house); defecate, urinate, spit (with faeces/urine/spittle in instrumental or absolutive case): nayba gu:gara/gu:garangu bindalagu 'I need to pee'; miga naga bindagu 'I'll build a camp'; nulanga ma: Indu milga binday 'the man put the rainmaker in position'
WBH bungi, int, lie down, sleep, live (takes transitive inflections in $B-3.5 .3$ ) - nayba yaga balan bungilma 'I'11 camp here for two months'; and see (52), (174)
*ga:ngi, int, sleep [Obtained only from LC who then said that bung was properly 'lie down' and ga:ngi 'sleep'. However bungi does have the sense '1ie down to sleep' in other elicitation.]
walnga, int, float (on water)
WB ga:lba, int, be stuck e.g. person stuck in mud or fence etc, meat stuck in throat, branch stuck and can't be budged - nayba ga: lbay gilganda 'I got stuck in the hole (in the ground)'
gigari, tri, put down - wumanga naga nuna gigari/ gidulilagu 'I put it down in the shade, to cool'
W buyngari, tr, hang up - see (122)
wana, tr, leave (it) be - ginba gagaga/ nulmbu[u jinda wana 'you go away, you leave the woman alone'; gurugu naga wanay 'I've left off grog (i.e. stopped drinking it)'
W guda, tri, block, shut (door), close - guda gilgan 'shut the door (1iterally: shut the hole)'; manga gudagi 'flower closed up' bana, tri, bend (e.g. to describe manufacture of boomerang by warming and bending) - gulggu bana 'choke' See gagal/ga: bana 'yawn' under Corporeal.

S - Affect
WB bucba, tri, hit with long rigid implement, held in the hand nulanga nana bucbay wagundu 'he hit me with a stick'; gana bucbalagu wu:nga 'people have to fight each other in a war'; bunun nulmbucungu nulanga bucbalgani malangu 'the women are continually banging drums with their hands'; see also (192), (194), (249)

W
minba, tr, hit with long rigid implement (e.g. stick or boomerang) which is thrown - naga nuna wagundu minbay 'I hit him with a stick'
bunga, tri, shoot - bunga nuna bada 'shoot that dog'
ganba, tri, hit with rounded implement, held or thrown (e.g. stone, fist) - malangu nana ganbay '[he] punched me'; see also text 5.15 and (180-1)

WB gilwa, tr, kick - bingangu naga gilway; or shove with knee gilway bungungu; see also (184), (190)
WB bayguri, tr, shake (e.g. dog swings its tail), wave, bash i.e. put in motion in trajectory, holding on to it (may or may not impact on some other object) - naga gu:gaca bayguri gungiringa 'I [picked up] the goanna by its tail [and] bashed it [on a tree, to kill it ${ }^{\prime}$; and see (106), (178)
WB dinda, tr, blaze, make steps up tree to assist climbing
WB bargi, tri, (rain) falls on, wets (someone) - see (125), (154-5)
WB gunma, tr, squeeze e.g. knead flour for damper - galu gunma 'squeeze water [out of something]'; 乃ada dunmay gungul 'I squeezed the fruit'; jaga gunmagu budam 'I must squeeze matter (from the blister)'
W badi, tri, hook (fish); also hook woman (to take as wife) - naģa julmburu badi/ naygu bulgumagu 'I'm hooking the woman, to make her my wife'
W- baba, tri, pierce, spear (specifically: spear on land), rub firestick to make fire - na:ndu gi:gin babay 'who speared the wallaby?'; naga giman babagu 'I must spin the firestick'; see also (59), (168)
-B gangaba, tri, spear (probably = baba)
W ginba, tri, spear something in the water - naga ga:bu ginbay 'I speared a fish'; see also (224), (226-7)
WB gilba, tr, dig - naga yaga dilbay gilgan 'I dug two holes'; gaga gagan gilbay 'I dug the grass'
W gulbamba, tr, bury (deeply) e.g. bury a body in a graveyard - see (68)

WB yu:mba, tri, bury (to shallow depth) ; in intransitive constructions it was glossed as 'hide [oneself]'
W nu:ba, tr, sharpen, grind - nu:ba nuna bargu baringu 'sharpen the axe on a stone!'
WB gi:ba, tri, scratch, scrape, shave - gayi naga gi:bay 'I scratched up the ground'; nayba gambaca gi:bagi 'I scratched my body'; galbata naygu gi:balagu 'I want to shave'; gudilangu gi:balgani gagan/ bungimagu rulanga 'the bandicoot is scratching up grass (heaping it up) to camp on it (i.e. for a nest to lie on)'; see also (137), (140), (212)
WB gungari, tri, cut down, cut through - see (166), (170-2), (217), (241)

WB gunba, tri, cut a piece out of, cut into, cut open - guluburungu nana gunbay 'the stump cut me (when I backed into it)'; nayba gunbay gurmaligu 'I cut myself so that blood flowed'; see also (138), (141), (142), (168)

W bandali, int, burst, smash, break (e.g. chicken comes out of agg) see (167), (205-6)
WB ganda, tri, burn, make fire, be burning - galguru naga ganday 'I burnt the meat'; giman ninda babal wagun gandagu/ nayba gidul 'you rub the firestick to make fire, I'm cold'; see also ( $90-1$ ), (127), (136), (139), (246)
galgi, tri, cook - ŋinda gumubucu naygu galgi 'you cook beef for me:'; gungulndu jayba galgibali 'I'm cooking tucker'; and see (173), (190)
binga, tr, make fire blaze up (by fanning, blowing on it, stoking it up, etc) - 刀inda wagun binga dalgigu midin 'you make the fire blaze, to cook the possum [on it]'
muymba, tr, extinguish fire, put light out - wagun muymba nalungu 'extinguish the fire with water'; ma:ni nuna muymba 'press the button and the light goes out!'
WB gurga, tr, tie up with rope, join on - see (218)
W Di:ca, tri, tie up - naḑa gumafbari yaraman ni:cay 'I've tied up lots of horses'; rubunga nana ni:cay '[someone] tied me with rope'
WB gu:ra, tr, rub, wipe
W banga, tri, paint (e.g. shield, person) (with lawyer cane brush), write - see (222)
WB mada, tri, paint (e.g. shield, person for corroboree) - Dinda bigin mada 'you paint the shield!'
WB gu:ba, tr, cover with water e.g. the moon covers grass with dew See Corporeal for gimbi, (wind) blow

T-Attention
WB migiri, int, wait - yala nayba migiribali/ gagara gu:ngilagu/ jaga ma:nigu 'I'm waiting here [by the possum hole], for the possum to come out, then I can catch him'; ninba gagaga/ malanda ninba migiriga naygungu 'you go ahead, you wait for me at the river:'; see also (79), (248)
WBH gunda, tri, see, look - nulanga nana jundalgani 'he's watching me'; nuna nundabali 'he's looking'; naga nunday nalunga nunin 'I saw my shadow (or reflection) in the water'; see also (12), (54), (71-2), (82), (99-100), (156-7), (177), (193)
WB wa:ba, int, look up, for sugar-bag (bee's nest) only - nayba wa: balagu wubirigu 'I'11 look up (in the tree) for English bee's nests'
W Juni, int, search for, hunt for - bambugu nayba gunilagu 'I'11 search for [scrub-hen] eggs'; see also (4), (47), (242)
W gaymba, tr, find - yala nana waybalangu gaymbay 'the white man found me here'; see also text 8.7, (88-9)
W milba, tr, show - wargin naga milbay ma:lgu 'I showed the boomerang to the man'; see also text 7.2
WB na:ra, tri, hear, listen - naģa gawal na:ray 'I heard a shout'; nugunudu/ naru na:ralga 'he's a liar, don't listen to him:'; see also (152-3), (162), (183)
WB 刀u:ma, tri, feel - ŋulmucunga nayba nu:manu:mabali 'I'm feeling around in the night'; gara gaga ju:may 'I felt the [woman's] leg'; see also (123)
WB giggara, int, dream
U-Talking, etc
W- banma, int, talk - nuna banmabali naygungu 'he's talking to me'; see also (7). NOTE that NB gave mayay-bi, a verb derived from
mayay 'language' as the $B$ equivalent of banma
maynga, tri, tell (addressee as Object) - na:ndu gina mayggay
'who told you?'; bulimangu mayngalagu '[you] should tell the police'; see also (191)
W $\quad{ }_{\text {wa }}$ :nda, tr, rouse on, tell on i.e. tell someone that the referent of the Object NP has done something e.g. tell the police that people are fighting - nulanga nana wa:nday nuri 'he roused on me in return'
W gi:ga, tr, tell to do, let do - when JT recommended I contact LC he told me to say to him: ga:ningu nana gi:gay bacbalagu/ ninda mayngagu nana wargamaygu 'Johnny told me to ask you to tell me about Wargamay'; na:na ninda gi:gay wagungu 'who did you send for wood?'; waloga gi:ga 'sigh (1iterally: 1et wind go)'; see also (243)
W ninga, tr, stop someone, block something - see (194)
WB bąba, tri, ask - nuna waybala gungulgu barba 'ask the white man for vegetable food:'
W *niyanma, tr, ask (LC said this was the 'high word' corresponding to barba)
W- naci, tr, answer - naģa nuna nacilma mamu 'I'11 answer him by-andby'
WBH baya, tri, sing (Object is song or song-style) - jana bayalagu mindinga 'we'll sing at the corroboree ground; see also (162)
W walmbari, int, (dog) barks - nuna bada walmbaribali minagu 'what's the dog barking for?'; see also (69)
See also ga:ma 'do like this, say' in $W$; and derived verbs gubil-i
'whistle', bu:0guray-mbi 'snore', gawal-i 'call-out', mayay-(m)bi
'talk' under I.
V - Corporeal
WBH muga, tri, eat (meat or vegetables) - nayba namici mugabali gungulndu 'I'm eating vegetables [because I'm] hungry'; see also (97-8), (124), (143-4), (146), (189)
WBH gunga, tri, bite - gumungu gungalma 'the mosquitos might bit [us]'; see also (46), (61), (84), (145), (243), (250)
W yu: ra, tr, swallow
W [ucnga, tr, suck
WBH ganna, tri, drink - nalu bu:diya naygungu gannagu jaga 'bring me some water so that I can drink it:' - see also text 5, (147-51), (185)

W gawamba, int, vomit - nayba gawambay/ bugangu dumuburungu лала nulanga waybalangu wuginu 'I vomited because of the rotten beef the white man gave me'
WB nugumba, int, vomit
W gagal bana, int, yawn
B ga: bana, int, yawn - gayba ga: banay 'I'm yawning'
These forms involve the roun 'jaw' and transitive verb 'bend' literally 'bend jaw'. Although bana 'bend' is basically transitive 'yawn' appears to be intransitive. They are probably compound verbs (and should then be written each as one word).
W muni, int, blink (eyes) - gayga munibali 'blinking eyes'
W H balmbi, tr, smell - ninda balmbiya bada buga 'you smell the dead dog'
WB buya, tri, (person) blow, smoke (tobacco) - Dinda wagun buya 'you blow the fire!'; naga baybu buyalgani 'I smoke a pipe'; see also (101-2), (220)
W- gimbi, tr, (wind) blow - gambarangu nana gimbi 'the cyclone is
ba:di, int, cry, sob, weep - nuna nulmburu ba:digi gaygungu 'the
woman cried for me'; gana galngica ba:digi 'a mob of people
all cry and mourn'; see also (10), (83), (181), (211)
guyi, int, cry, sob, weep - see (96)
wa:gi, int, laugh - nana waybalangu wa:gimay 'the white man is
laughing at me', nuna wa:dibali naygungu/ naga bucbay 'he was
laughing at me and I hit him'; see also (186)
yimiri, int, be glad, feel glad - nayba yimirigi 'I felt glad'
*yayimbali, int, play about (having joke, or making nuisance of
onese1f). See also [uyu, Adj under 0, Human propensity
W - Adverbial
W ga:ma, tr, do like this (without any accompanying verb the unmark- ed sense is 'say [like this]', with reported speech following) ga:ma ninda gungari 'you cut [the tree] 1ike this:'; garu ga:malga 'don't do (or say) that:'
W na: camba, tri, try to do (but fail) - wagun naga gunbay na: rambay 'I tried to cut the tree down'. This is plainly related to the particle ga:ca 'can't do' - see 4.10.
W gu:ga, tri, test, taste, try out - gaga nalu gu:gay/ maya/ nuna nalu wi:gina 'I tried the water but no, the water was no good'

|  | LOCATION |  | week ago ('the other day'); |
| :---: | :---: | :---: | :---: |
|  | gungari, north(wards) |  | LC: yesterday |
| W | gulbila, south(wards) | W | 万ulganga, LC/JT: yesterday; NB: |
| W | guwa, west, tablelands |  | tomorrow (NB gave as W |
| W | yirgangi, people, goods and places from north | WB | equivalent of $B$ gidalgu) gundanga, last night |
| W | gunin, people, goods and | W | ganumbul, earlier on today |
|  | places from south; | W | gayba, now |
|  | 'coast' | WBH | ganu, later on today, directly, |
| W | gulin, place way out east where spirits come from and go to (variously |  | immediately; NB gave as 'yesterday' in B, possibly an error |
|  | glossed by LC as 'heaven' | WB | mamu, by-and-by |
|  | 'hell') | W- | nirwaca, tomorrow |
| W | bamba, long way off - bamba | -BH | gidalgu, tomorrow |
|  | naygungu 'too far for me [to jump]' | W | biligi, daybreak, early in morning |
| W | mulu, near, close up | W | nulmucu, night-time |
| WB | galaga, up hill, up in the sky | WB | gugu, meanwhile, wait-a-while namu, for a short while |
| WB | gani, up river | W | garay, for a long time |
| W | yu:nu, down (river?) | WB | yurmay, do all the time - nuna |
| W | gingu, down (hill??) |  | wa:gini naygungu yurmay |
| W | guyabay, other side of river |  | 'he's laughing at me all |
| W | ga:lungal, in front, ahead |  | the time' |
| W | gugungal, behind - ga:lungal |  |  |
|  | ninba/ nayba gugungal 'you | Z - | INTERJECTIONS |
|  | go ahead and I'11 come | W- | maya, no |
|  | behind'; gugungal balganda | -BE | blyay, no |
|  | 'behind the house' | H | nayi, yes |
| WB | yulguruy, inside - nayba | WB | gawu, come on: |
|  | yulguruy balganda 'I' [went] | B | gala, try it!, try again! |
|  | inside the house'; guranga | W | nandu, I don't know (this |
|  | yulgucuy 'inside a cloud' |  | might possibly be an Adj, knowing nothing, the |
| Y | - TIME |  | opposite of gilbay - see |
| WB | gu: a a, ${ }^{\text {a }}$ very long time ago |  | 0 , Human propensity) |
| WB | galmara, long time ago (a year to a few days) | W | *guli, exclamation when startled - jump with |
| W | cugulu, JT: from a few days to |  | fright and say [gulé:] |

## LIST OF AFFIXES

As an aid to the reader, the following list shows all affixes from the grammar, with reference to the sections containing major discussion of their form and functions. Allomorphs formed by assimilation or shortening etc are referred to the appropriate canonical form.

```
-a, see -da locative-aversive
-a, see -na accusative
-a, see -ya positive imperative
-ani, see -lani continuative
-ba, see -da locative-aversive
-bagun, 'really' - 3.1.3
-bal, post-inflectional affix -
    3.6
    -bali (W), continuative - 3.5.1,
-ba, reciprocal - 3.5.3, 3.5.6, 4.5 3.5.3, 3.5.5
```

-ban, post-inflectional affix 3.6
-bara, belonging to, pertaining to' - 3.1 .3
-bara, comparative - 3.1.3
-bi, inchoative - 4.9.1
-bi, post-inflectional affix 3.6
-blcay, (w), 'without' - 3.1 .3
-biyay (B), 'without' - 3.1 .3
-bu, see -du ergative-instrumental
-bulu, 'very, lots of' - 3.1.3
-da, locative-aversive - 3.1.1, 3.1.5, 3.2, 3.4.1
-du, ergative-instrumental 3.1.1, 3.1.5, 3.4.2, 4.2, $4.6 .3,4.8$
-da, negative imperative 3.5.1, 3.5.4
-ga, see -da locative-aversive

- gaman, addressee's kin relation-3.1.3
-gan, post-inflectional affix 3.6
-gu, see -du ergative-instrumental
-ga, positive imperative 3.5.1, 3.5 .4
-gani (W), continuative 3.5.1, 3.5.3, 3.5.5
-gi, perfect - 3.5.1, 3.5.4
-giri, 'with' - 3.1.3
-gu, dative-allative - 3.1.1, $3.2,3.3,3.4 .1-3,4.3 \quad-u$, see -DU genitive
-gu, purposive - 3.5.1, 3.5.4, 4.3
$-i$, see -bi inchoative
-in, see $-\Omega i n \sim-n$ ablative
-I-, conjugation marker 3.5.2, 5.1.1, 5.3
-la, aversive - 3.1.5, 5.4
-lagu, purposive - 3.5.1, 3.5.4, 4.3, 5.3
-Iani (B), continuative -
3.5.3, 3.5.5
- 14 , instrumental - 3.1.5, 5.4
-ma, irrealis - 3.5.1, 3.5.4
-ma, comitative - 3.5.1, 3.5.6, 4.7
-ma, instrumental - 3.5.2, 3.5.6, 4.8
-ma, causative - 4.9.2
$-m b i$, see -bi inchoative
-mira, 'for - nights' - 3.3
-miri, 'as a result of, from' 3.1 .3
-nda, see -da locative-aversive
-ndu, see -du ergative-instrumental -ni (B), continuative - 3.5.3
3.5 .5
-n ~ nin, ablative - 3.1.1, 3.2, 3.3, 3.4.1-3
-na, accusative - 3.1.2, 3.4.2
-nu, perfect - 3.5.1, 3.5.4
$-n u$, subordinate $-3.5 .1,3.5 .4$, 4.4
-garu, 'like a' - 3.1.3
-ggu, locative-aversive - 3.1.1, 3.1.5, 3.2, 3.4.1
-nga, 'there' - 3.4.3
-ngu, ergative-instrumental $3.1 .1,3.1 .5,3.4 .2,4.2,4.6 .3$, 4.8
-gu, genitive - 3.1.1, 3.4.2, 4.6.1
$-y$, unmarked aspect - 3.5.1, 3.5.4
-ya, positive imperative - 3.5.1, 3.5.3, 3.5.4

The following affixes have occurred in data gathered, but it has not proved possible to check them out: -Iga - 3.5.5
-yandi - 3.5 .5
-yara - 3.1 .3

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Map 3: Anguthimri Groups (1.2) and Neighbours (1.3), with Original Place Names (1.4)

# The Mpakwithi dialect of Anguthimri by Terry Crowley 

## 1. THE LANGUAGE AND ITS SPEAKERS

### 1.1 LINGUISTIC TYPE

The Mpakwithi people (phonetically [mbakwiti], phonemically, /bakwiti/), who speak a dialect of Anguthimri, have a language with one of the most unusual phonological systems to be found in Australia. This language allows words to be of one syllable, and words can begin with a wide range of double consonants, or clusters of even three or four consonants (though the number and complexity of these clusters is reduced by treating certain phonetic sequences as phonological units). It is also unusual in that there is a phonologically distinctive fricative series, and a glottal stop. The vowel system is very rich - in fact the richest in Australia as far as the present writer knows - and rather unsymmetrical. There are several nasal vowels and also several front rounded vowels.

Despite its aberrant appearance, however, the language of the Mpakwithi is clearly derived from a proto-language which was very similar to the more 'Australian-looking' languages of other parts of Cape York Peninsula, particularly those to the east and the south. This language is in fact quite closely related to the languages clustered around the mouths of the Hey, Mission and Embley Rivers in Albatross Bay, and also to the languages between Port Musgrave and Albatross Bay. It is also related, though slightly less closely, to the hinterland languages. See 2.5 for a discussion of the phonological changes we can deduce to have taken place in the language spoken by the Mpakwithi.

In its grammatical structure, this language is, however, far from aberrant. Like all of the languages of Cape York Peninsula (and indeed, the rest of Queensland), it is a wholly suffixing language. Verbs are divided into four basic conjugational classes, which correspond in some degree to transitivity classes (conjugations 1 and 2 being predominantly transitive and conjugations 3 and 4 being predomin-
antly intransitive). There is also a fair number of irregular verbs. There is no pronominal incorporation in the verb.

Nouns mark the following cases: absolutive, ergative/ instrumental, dative/purposive, genitive/benefactive, ablative/causal, locative/allative and desiderative. Nouns with human reference also optionally take a suffix when they are used as the object of a transitive verb. Nouns are divided into declension groups which determine the form of the ergative/instrumental and genitive/benefactive suffixes. There is no obvious semantic or phonological basis for these declension classes.

The pronoun system marks the same case functions as the noun system except that while nouns mark an ergative-absolutive contrast, pronouns mark nominative-accusative contrast and there is only a single pronominal 'oblique' form for locative/allative/dative/purposive. The pronominal number and person distinctions made are the same as for a great many other languages of Australia, i.e. three numbers with an inclusive-exclusive distinction in the first person nonsingular.

The basic word order pattern is $\mathrm{S}-\mathrm{O}-\mathrm{V}$.

### 1.2 TRIBAL AND LANGUAGE NAMES

The people whose language is being studied are called the bakwiti and they called their language anutimci (spelt here as Anguthimri), which is derived from the first person singular pronoun anu by adding the proprietive suffix -timci. Thus, the language name means '(the people) who use aju', in contrast to other people who have different forms for the first person singular pronoun.

There are several other known Anguthimri speaking groups apart from the Mpakwithi (their geographical distribution is shown in map 3):

$$
\begin{aligned}
& \text { bwinitanikwiti - around Batavia landing } \\
& \text { bakwiti - around Tent Pole Creek } \\
& \text { ba:ţana - Wenlock River as far as Gibson Waterhole } \\
& \text { bawfati - Mission River to Pine River } \\
& \text { adumakwiti - Pine River to Pennefather River } \\
& \text { Iwipanadini - Ward Point } \\
& \text { wimarana - Duyfken Point to Pennefather River }
\end{aligned}
$$

Thomson (1934) also mentions the kalikwifi and the denakwiti; the location of these groups was not known by my consultant. Consultants from groups other than the Mpakwithi are apparently no longer available, so it is not possible to check to what degree dialectal differences did exist among the various Anguthimri-speaking groups.

### 1.3 TERRITORY AND NEIGHBOURS

Map 3 shows that the Anguthimri-speaking groups occupied an area from the mouth of the Mission River, west to Duyfken Point, north to the Pennefather River, and as far
as the southern and western banks of the Wenlock River between about Batavia Landing and Gibson Waterhole.

The area surrounding the Anguthimri speaking groups was one of some linguistic complexity, and there seems to be some contradiction among the sources. However, from my consultant, I have been able to verify the locations of the following groups:
(i) To the north of Port Musgrave, along a narrow coastal strip, we find the gamuti (calling themselves ankamuti), who speak a language very different to Anguthimri. (A separate study of Angkamuthi is being prepared for publication - in a later volume of the Handbook.)
(ii) To the east and north of the Wenlock River were the tapaciyi and along the southern bank of the lower Ducie River were the closely related tænanakwata. Their language was probably also closely related to Anguthimri. (About a dozen or so words were remembered by a Thaenganakwatha consultant, suggesting that her speech could not really be considered to be a dialect of Anguthimri.)
(iii) Between Cullen Point and Janie Creek was the f̧unugi group, who spoke the yanatimri language (yana 'I', -timri'proprietive'). This is also closely related to Anguthimri, though still a distinct language. (The Mpakwithi consultant was able to remember over one hundred Yangathimri lexical items.) The Tjunguntji are fairly well known in the ethnographic literature, mainly from Thomson.
(iv) Between Janie Creek and the Pennefather River were the yupunati (called 'Nggerikudi' - presumably gerikwiti - by Hey; the Linngithigh called these people the yupnayt), whose language was called yuputimri (from yupu 'I').
(v) East of the Anguthimri, on the northern side of the Mission River, were the various awntim-speaking groups (from awn 'I' and -tim 'proprietive'). The known Awngthim groups are:
tankwiti (called tyangayt by the Linngithigh) - the mangrove area north of the Mission River
$d^{r}$ wapanati (called $d^{r}$ wa? in the Mission River area
mamanati (called mamnayt by the Linngithigh) - Urquhart Point
(vi) Another language which my consultant could not accurately place was in the area between the Mission and Hey Rivers: lininati (i.e.linotiy as they called themselves).

Data for most of the surrounding languages is scarce, but lexical comparisons with some of these languages can be made. The following lexicostatistical figures are presented as a rough means of comparison to Anguthimri:

Yangathimri - $67.5 \%$
Yuputhimri - $60.0 \%$
Angamuthi - $21.4 \%$

### 1.4 PLACE NAMES

My consultant was able to remember the following place names:

| purala | upper Ducie River | tidini | Pennefather River |
| :--- | :--- | :--- | :--- |
| tilini | Ducie River mouth | paynarama | Pine River |
| mamaliti | Port Musgrave | drweni | Duifken Point |
| rũmu | Janie Creek | yunakumanama | Ward Point |
| tu?upu | lower Wenlock River | ywana | Mission River Point |
| tibiranama | upper Wenlock River | nubunu | Norman River |

### 1.5 SOCIAL BACKGROUND

There has been no anthropological study of the Anguthimri speaking groups, though Sharp includes all of these local groups within what he calls the 'Tjunguntji type', which extends from just north of Port Musgrave to just south of Albatross Bay, the constituent groups of this general type having the same descent and marriage systems. The Anguthimri and the Tjunguntji also share the jißiri cult, which was described by Thomson (1934) for Tjunguntji.

Since the marriage system of the Anguthimri has not been investigated, the apparently identical system of the Tjunguntji will be presented here from data contained in Thomson (1934) and Sharp (1939). The moiety/section/subsection system of most of Australia is absent in what Sharp calls the Tjunguntji type. The group is divided up geographically into nine exogamous clans. The clans are grouped geographically into four as follows (using the terms used by the Mpakwithi rather than the Tjunguntji):

| ma-ayara | eastern group |
| :--- | :--- |
| ma-gwata | northern group |
| ma-ßata | southern group |
| ma-turu | western group |

and these groups are exogamous. Thus, one can marry from a clan that is not within the same clan-group as one's own.

Roth and Mathews, from data provided by Hey, a former missionary at Mapoon, present a very different picture, with moieties and sections. The names used for the sections (though not for the moieties) are all found to be misinterpretations of other terms. Thus, the section terms used are given below, with their correct form and reference:

| Roth | Mathews | mistaken for |  |
| :--- | :--- | :--- | :--- |
| nama-kurgi | namegoree | namakwiyi | Tjunguntji clan name |
| bakurgi | packwickee | bakwiyi | Anguthimri clan name |
| larnganama | lankenamee | lananama | Tjunguntji clan name |
| ba-marango | pamalang | pamalun | Taepadhighi 'son' |

The origin of Mathews' moiety names jamakunda and kamanutta are not known, however.

Thus, extending the Tjunguntji system to Anguthimri, we can assume that the local groups listed in 1.2 were exogamous and were grouped further into exogamous clan-groups.

### 1.6 PRESENT SITUATION

The present study of the Mpakwithi dialect of Anguthimri is a salvage study only. The German missionaries who began their mission at Mapoon in 1891 were very much responsible for the virtual extinction of most of the languages of the area. Although Rev. Hey (his colleague Rev. Ward died in 1895) did attempt to learn one of the languages, that of the Pennefather River (i.e. yuputimri), its use among the various Aboriginal groups who settled at Mapoon as a refuge was actively discouraged. Children were separated from their parents at an early age and placed in dormitories where only the use of English was permitted. The only known speaker of the Mpakwithi dialect today, Mr. Don Fletcher of New Mapoon (near Bamaga), was also isolated from his language as a youth, and it was only by rebelling and going back to the old people after his schooling had finished that he is now able to speak the language at all. The writer owes his gratitude to Mr. Fletcher for allowing his speech to be used as a basis for this description.

Most of the descendants of the Mpakwithi speak a Creolized variety of English (see Crowley and Rigsby, 1979). Presumably, as numerous groups with mutually unintelligible languages came into contact at the various mission stations, and the use of these languages was also actively discouraged by the missionaries, an English-based pidgin developed as a secondary means of communication. Since then, this pidgin has become the first language of many people of the entire Cape York and Torres Strait area, and is the first language of almost all the descendants of the Cape York, Port Musgrave and Albatross Bay Aborigines.

### 1.7 PAST INVESTIGATIONS

The terms 'Anguthimri' and 'Mpakwithi', as has already been mentioned, have been used in the literature on the area, though there was no linguistic material recorded in earlier sources. The earliest reference to the Anguthimri language and the Mpakwithi clan (apart from Roth's and Mathews' misinterpreted usage of the terms) is in Thomson (1934). Sharp (1939) refers to the 'Mbakudi' and McConnel to the 'Angutimi'. The other Anguthimri local groups mentioned above have been mentioned by Roth (tanikwiti), Meston (kalikwiti, Iwipanagini, adumakwiti), McConnel (ba:ţana) and Thompson (bwinitanikwiti).

For the surrounding tribes, there is a fair amount of data, and the 1920's and the 1930's saw a flurry of anthropological activity among the Tjunguntji and other groups by Thomson, McConnel and Sharp. See Craig (1967).

## 2. PHONOLOGY

### 2.1 PHONEMES AND THEIR REALISATIONS

2.1.1 CONSONANTS. The consonant inventory for Anguthimri is shown in Table 2.1. There is a considerable range of phonetic variation in the realisations of some of these consonants.

All stops have aspirated and non-aspirated alternants in free variation, e.g.

| /titi/ | 'fishhawk' |  |
| :---: | :---: | :---: |
| /kili/ | 'king parrot' | [khili, kili] |
| /trokanwi/ | 'lagoon' | [t ${ }^{\text {rhok }}$ 㐌anwi, trokan |

The labial stop is generally realised as a fricative when it is followed by a continuant consonant such as $w$ or $r$. This is clearly an assimilation rule, with the stop taking on continuant (i.e. fricative) articulation when followed by a continuant, e.g.

| /pwe:ke/ | 'groper' | [fwe:ke ¢we:ke] |
| :---: | :---: | :---: |
| /pwi/ | 'seed' | [fwi:, Фwi:] |
| /prupu/ | 'worm' | [frupu, Фcupu] |
| /prulu/ | 'monsoon season' | [fculu, कculu] |
| /dupciyi/ | 'old lady' | [ndufeiyi, nduøciyi] |

This assimilation rule also occasionally applies with the palatal stop, e.g.

$$
\text { /†wama/ 'hill' [ђwama, } \left.\int \text { wama }\right]
$$

The post-alveolar stop is pronounced with the tip of the tongue placed slightly behind the alveolar ridge. This is not the same sound as the retroflex stop symbolised as $t$ in other Australian languages. In Anguthimri, the postalveolar stop is always followed by a sharp trill and auditorily in no way resembles a retroflex. The justification for treating the post-alveolar consonants as single units rather than as sequences of stop followed by $r$ is given in 2.2 .

The prenasalised stops are pronounced as voiced stops preceded by non-syllabic homorganic nasals, i.e. as [mb, nd, ndr, nd, ng, $n g]$; this applies even in word initial position. See 2.2 for justification of the treatment of such sequences as single phonemes.

The fricatives $\beta, \varnothing, 3, \gamma$ and $r$, when in word initial position, are optionally preceded by a prothetic schwa. Thus, we find alternants such as:

| /Baði/ | 'intestines' | [ $\beta$ aði, өßaði] |
| :---: | :---: | :---: |
| / ${ }^{\text {®ay/ }}$ | 'mother' | [ðay, əðаy] |
| /30ya/ | 'fly' | [zоуа, әзоуа] |
| / yama/ | 'child' | [yama, әyama] |
| /ra/ | 'stomach' | [ra:, әra:] |

The phoneme $r$ is generally articulated as a single postalveolar flap, though occasionally it is a genuine trill. It is treated as a fricative in Anguthimri because it patterns with $\beta, \gamma, \gamma$ and 3 in that it optionally participates

TABLE 2.1 －Consonant phonemes

in the schwa prothesis discussed above．
The retroflex continuant $[$ generally causes the vowel of the preceding syllable to be c－coloured．This colouring is clearly noticeable even when the vowel and $C$ are separa－ ted by a consonant，e．g．

$$
\begin{array}{lll}
\text { /gwapca/ } & \text { 'is eating' } & \text { [ngwalffa] } \\
\text { /rucitimci/ } & \text { 'pregnant' } & {[\text { arucitiCmci] }}
\end{array}
$$

The Anguthimri consonant inventory also contains the possible phonemes $s$ and $\int$ ．These sounds have been found only in a very small number of words，so no minimal pairs are available．In fact，the corpus contains only the following words with $s$ and $\int$ ：


It would appear that in neighbouring Yangathimri， $\int$ is a genuine phoneme，so these words could have entered Anguthi－ mri through borrowing．（It is also possible that $s$ and $f$ are conditioned variants but the corpus is insufficiently broad to allow final judgement．）

Minimal and subminimal pairs are presented below to show that various suspicious pairs contrast phonologically：

| $\beta-p$ | ／Baraka／ | ＇long time ago＇ | ／pacupacaji／ | ＇cottonwood tree＇ |
| :---: | :---: | :---: | :---: | :---: |
| $\partial-t$ | ／ðutu－／ | ＇follow＇ | ／tuci／ | ＇trochus shell＇ |
| ¢－t | ない－1 | ＇sew＇ | ／tu／ | ＇west＇ |
| $\underline{t}-{ }_{\text {¢ }}$ | ／tama／ | ＇thumb＇ | ／fama－／ | ＇jump＇ |
| $\bar{t}-{ }^{r}$ | ／fuci／ | ＇trochus shell＇ | ／t $\mathrm{r}_{\mathrm{u}}$ | ＇urine＇ |
| 3－5 | 13i－1 | ＇blow＇ | ／fi－／ | ＇see＇ |
| y－k | ／yama／ | ＇child＇ | ／kama／ | ＇gum species＇ |
| k－？ | ／troka／ | ＇head＇ | ／drupa／ | ＇this＇ |
| $r-1$ | ／rama／ | ＇empty＇ | ／rama） | ＇recently＇ |
| $\pm-t$ | ／土i：ni／ | ＇thigh＇ | ／ti：ni／ | ＇swamp＇ |
| n－n | ／nana／ | ＇you－ACC＇ | ／nana／ | ＇we－ACC＇ |
| ？－ф | ／Twa／ | ＇dog＇ | ／wal | ＇grey hair＇ |

2．1．2 VOWELS．The vowel inventory is shown in Table 2．2． This system with sixteen（possibly even seventeen）members is probably the most complex vowel system in Australia．

TABLE 2.2 - Vowel phonemes

|  | front |  |  | back |
| :---: | :---: | :---: | :---: | :---: |
|  | unrounded |  | rounded |  |
|  | oral | nasal |  |  |
| high | i (:) | İ | $\ddot{\text { ü }}$ | u(:) |
| high-mid | e(:) | $\tilde{e}$ | (ö?) | $\bigcirc$ |
| low-mid | (:) | $\widetilde{\text { r }}$ |  |  |
| low | a(:) | ã |  |  |

The only really doubtful vowel is $\ddot{0}$, which is found only in köyy ${ }^{\prime}$ 'left-hand side'. The fact that there are words such as goy 'wallaby', suggests that the following $y$ is not conditioning non-distinctive fronting of o to ö. It seems likely that this $\ddot{0}$ may well be a seventeenth vowel which is of very low functional load.

In various structural positions of the word in Anguthimri, the number of vowel oppositions is reduced by neutralisation. In word-initial position, there is only a contrast between $i$, a and $u$ and, in word-final position, there is only a four-way contrast between $i$, $e$, a and $u$ (with distinctive nasalisation, however). (However, see 3.6.2 where there is discussion of rules in the verbal paradigm which derive surface $\ddot{u}$ and $¥$ word-finally from underlying $u$ and $a$. This $\ddot{i}$ always varies freely with $i$ and the $\nsim$ with e.) If the vowel of the penultimate syllable is $\not \approx$, the opposition between i, e, $\notin$ and a (i.e. the front unrounded vowels) is lost in the following syllable. The phonetic realisation of this archiphoneme (which will be written in this description, arbitrarily, as a), varies anywhere through the front unrounded vowel range, e.g.
/pæ?a/ 'elbow' [pæใæ, pæ?a, pæ?e, pæ?i]
In monosyllables, the length contrast is lost, and all vowels in monosyllabic words are phonetically long. However, if a monosyllabic word is made polysyllabic by the addition of a suffix, the vowel is short, e.g.

```
/ra/ 'stomach' [әra:]
/rana/ 'stomach-LOC' [әraja]
```

In polysyllabic words after a non-prenasalised stop (i.e. p, t, $\mathrm{t}^{\mathrm{r}, ~} \ddagger, \ddagger, k, ?$ ), a final vowel is generally devoiced. In all other positions, vowels are fully voiced, e.g.

| /bakwiti/ | 'clan name' | [mbakwiti] |
| :--- | :--- | :--- |
| /yibatil/ | 'plains turkey' | [yimbatij] |
| /ba:Jana/ | 'clan name' | [mba:tana] |
| /kwini:yi/ | 'cassowary' | [kwini:yi] |

As justification for the complex set of vowel distinctions presented above, the following minimal and subminimal pairs are presented:
V-v: /pana/ 'friend' /pa:na/ 'level'

| i-e | /cici/ | 'oak' | /ceci/ | 'crow' |
| :---: | :---: | :---: | :---: | :---: |
| e-æ | /ge?ekeka-/ | 'tickle' | /gæ?ama-/ | 'laugh' |
| æ-a | /Iadi/ | 'grass tree' | /ladi/ | 'girl' |
| $u-\underset{\sim}{\sim}$ | /bumru/ | 'we-GEN' | / puma | 'You two-GEN' |
| $\mathrm{V}-\tilde{\mathrm{V}}$ | /rumu/ | 'fish-net' | /rũmu/ | 'Janie Creek' |
|  | /pwi/ | 'bone' | /muwi/ | 'fig tree' |
|  | /ce:ye/ | 'you-NOM' | /rẽye/ | 'whitefish' |
|  | /laya/ | 'lizard' | /rãya/ | 'shade' |
| u-o | /3u?u/ | '1ily species' | /zoya/ | 'fly' |

### 2.2 PHONOTACTICS

Word initially in Anguthimri, we can have:
(a) Any consonant;
(b) One of i, a, or $u$ (in short form only);
(c) Any of the clusters below:
(i) $\left[\right.$ following any labial (i.e. $\mathrm{P}^{-}, \mathrm{m}\left[^{-}, \beta \mathrm{C}^{-}, \mathrm{b} \mathrm{C}^{-}\right.$);
(ii) w following any consonant;
(iii) y following any dorsal, glottal, labial or post-alveolar consonant, (i.e. my-, $t^{「} y^{-}, y^{-}-$, $g y-$, ky-, ?y-, dry-, but no recorded occurrences of By-, py-, by-, ry- and ny-).
This is quite a simple statement of the word-initial phonotactic possibilities for Anguthimri. The simplicity derives from the treatment of phonetic clusters such as the following:

> [tr, ndr, mb, nd, nd, ng, ng]
as unitary phonemes. Thus, it will be observed that Anguthimri treats $t, t^{r}$ and $d^{r}$ similarly as far as the phonotactic patterns are concerned. If we were to analyse these phonetically complex units as being phonemically complex, our statement of the phonotactics would have to account for initial clusters such as, for example, [ndrwampa] 'woman'. With the phonology as it is, this has a simple two member Cw- cluster: /drwamra/.

Intervocalically, we can have any single consonant (except sibilants) and also the following consonant clusters:

|  | $p$ | $\beta$ | $k$ | $m$ | $b$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $p w$ | $\beta w$ | $k w$ | $m w$ | $b w$ |
| $c$ | $p[$ | - | - | $m C$ | $b c$ |

i.e. a labial followed by $w$ or $[$ and also $k w$ (but note that the corpus lacks $\beta$ ) . There are also intervocalic semivowel + consonant clusters, e.g. -yy-, -wt-, -ym- and -wn-.

Word finally, Anguthimri allows only the vowels $-i,-e$, -a, and -u (which may be nasalised) and the two semi-vowels $-y$ and $-w$ (though there is rare final $\neq$ and $\ddot{u}$; see 3.6.2).

### 2.3 STRESS

The Anguthimri stress pattern is as follows:
(c) $V$ (C) CV (C) CV́(C) CV. .
i.e. the first syllable and every alternate syllable receives stress. The long-short distinction with vowels is only ever made in stressable syllables, and then only rarely in any syllable but the first. Thus, we find:

| /oú?u/ | 'yamstick' |
| :--- | :--- |
| /pá:na/ | 'level' |
| /kálipwa/ | 'gully' |
| /árana/ | 'toenail, fingernail' |
| /dré:gwati/ | 'trevally' |
| /bwá?a/ | 'meat' |
| /?únuwána/ | 'blister' |
| /máyu? í:ni/ | 'mullet' |

Note however that if an otherwise stressable syllable is the last of a word, it is not stressed.

### 2.4 MORPHOPHONEMICS

In this section, we discuss the phonological rules that are frequently found to apply in the morphology, but which are best treated as general phonological rules. There are several phenomena that are worthy of mention in this section.
2.4.1 SANDHI. Anguthimri has a series of optional sandhi rules which are used only in quick speech. Normal elicitation does not provide many examples of sandhi, though the consultant clearly recognised the distinction between 'fast' and 'slow' speech, the difference being (except for speed of utterance) the application of sandhi rules in the former style and their non-application in the latter. The rules that apply are:
(i) With monosyllables ending in a high vowel, the corresponding glide is inserted before another vowel over a word boundary, e.g.
'Come here!' slow form $\quad / \mathrm{d} r_{u}$ wi ani?i/ fast form $\quad / \mathrm{d}_{\mathrm{u}}$ wiy ani?i/
(ii) With words of more than one syllable ending in a high vowel, the vowel itself becomes a glide before another vowel over a word boundary, e.g.

```
slow form fast form
'Go away!' /dru garu ani?i/ /dru garw ani?i/
```

(iii)With words of more than one syllable with a nasal preceding the final vowel, the final vowel is deleted before a vowel over a word boundary, e.g.

```
'Go to the /dru bcenini ani?i/ /dru brenin ani?i/
    beach'
```

slow form fast form
$/ d^{r} u$ bcenini anisi/ /dru bcenin ani?i/
2.4.2 VOWEL HARMONY. Many of the noun and verb suffixes of Anguthimri vary according to the nature of the final vowel of the root. Basically the vowel of a suffix becomes a repetition of the final vowel of the stem (but see 2.4.3). Harmonising suffixes known from the corpus include:
ergative/instrumental: -gV, -rV, - $\ddagger V$
locative/allative: -gV
ablative: -mV
dative/purposive: -kV
accusative: -nv
desiderative: -kVga:

```
privative: -(kV)\daggeŗana
present tense: -nV
past tense: -\gammaV, -nV
future tense: - VV, -\pmV
imperative: -?V
purposive: -nVkumu
```

This synchronic alternation is the result of a historical change whereby the final vowel of the proto-language was lost (as evidenced by the present Linngithigh situation) and a later change, whereby the vowel-final character of Anguthimri was restored by this echo-vowel rule (see 2.5).
2.4.3 SEMI-VOWEL DELETION. Where a word-final semi-vowel is followed by a suffix beginning with a prenasalised stop, the semi-vowel is deleted, e.g.

```
gaw 'that', ergative gagu
baw 'tooth', instrumental bagu
```

Note that this deletion rule must apply after the vowel harmony rule, as the vowel of the suffix will take its quality from the semi-vowel if there is one in this position, rather than the preceding vowel. Where the suffix begins with a consonant other than a prenasalised stop, the semivowel is retained:

```
pay 'forehead', locative payni
goy 'wallaby', ergative goyri
```


### 2.5 HISTORICAL PHONOLOGY

It is not possible to set out in full detail the phonological changes that have taken place in the history of Anguthimri as adequate data on closely related languages and dialects has not yet been assembled, nor has sufficient work been done in the reconstruction of the proto-language. Hale (1976) has gone some of the way towards reconstructing this proto-language, however. His reconstructions are used as a basis for the study of Anguthimri historical phonology. In this section, the major changes are outlined, with examples.

There are cognate sets which indicate that the initial consonant of a word in some cases had an effect on the consonant or consonant cluster of the following syllable. What happened was that if a word originally had an initial labial consonant (either m-, p- or $w-$ ), then an alveolar segment in the following syllable became post-alveolar. This change was involved in the derivation of the following forms from proto-Northern Paman (PNP). (The proto-forms are taken from Hale (1976) or reconstructed according to his statements.)

| *pinta | drya | 'arm' |
| :--- | :--- | :--- |
| *wanta | dra- | 'leave' |
| *wantunu | dranu | 'where-Loc' |

Intuitively, it seems somehow that this change was assimilatory, though one would be hard pushed to express the change in terms of phonological features. What probably happened was that the alveolars were retracting towards the periphery, to match the peripheral feature for labials. An argument against this, however, is the fact that initial velars do not seem to trigger this kind of alveolar retraction.

After alveolar retraction took place, the language then simply lost all initial consonants. This is a change which Anguthimri has in common with a very great number of Northern Paman languages (except for some of the languages of the extreme tip of Cape York peninsula, which have mysteriously retained some of these consonants).

At some early stage in its history, Anguthimri unconditionally merged the proto-phonemes $c$ and $t$, into the new phoneme ?. This merger is the origin for all glottal stops in modern Anguthimri. It would seem probable that there was first of all a shift of the form:

$$
C>t
$$

and subsequently a shift of the form

$$
t>?
$$

A one-stage shift of $\lceil$ to ? is implausible enough, and for this change to have been paralleled exactly by a shift of $t$ to ? is even more implausible. This suggestion that the shift took place in two stages is backed up by the fact that there are related languages which have undergone the first shift, but have maintained the $t$ and have not shifted this to ?. Thus *maca 'hand' in Atampaya (from the MacDonald River) became mata. This sequence of changes in Anguthimri is involved in the derivation of the following forms (C indicates an original consonant, whose value has not been reconstructed with certainty):

| *mara | ?a | 'hand' |
| :--- | :--- | :--- |
| *kuta | ?wa | 'dog' |
| *kalmpar | bwa?a | 'meat' |
| *Cita | ?ya | 'hair' |
| *Cuta | ?wa | 'cut' |

Note that the shift of $[$ to $t$ must be ordered after the retraction of alveolars following an initial labial. If the $\left[>{ }^{t}\right.$ rule applied first, the $t$ would then become either $t$ or $t^{r}$, which does not happen; ? is the regular reflex.

Following the shift of $[$ to ?, there was a shift:

$$
y>\lceil
$$

This change is involved in the derivation of:

| *pakay | kara | 'down' |
| :--- | :--- | :--- |
| *kampiy | baci | 'up' |
| *Ci:puy | Büru | 'smoke' |

This change must follow the change $\subset>$ ? If the ordering were reversed the r. derived from *y and the original
${ }^{[ }$[ would have the same fate and $*_{C}$ and $*_{y}$ would end up as ?; this does not happen.

After the shift of $y$ to C took place in Anguthimri, the language then underwent the change:
> w before a consonant
$>y$ elsewhere (i.e. between vowels or at the end of a word).
This change was involved in the derivation of:

| *Cipal | pe:pe | 'close' |
| :--- | :--- | :--- |
| *kalmpac | bwa?a | 'meat' |
| *kalka | kwe?e | 'spear' (final syllable unpredictable) |
| *nukal | kwe | 'foot' (ay then became e) |
| *panku! | goy | 'wallaby' |

Note that in some cases the original glide derived from the lateral has subsequently undergone coalition with the vowel or undergone other changes. The shifts that have occurred will be discussed below. This change must have followed the shift of $y$ to $[$ since the $y$ which have evolved from $* \mid$ have not changed to $[$.

The next phonological change to take place depended on whether the vowel of the first syllable was long or short. If this vowel was long, then a following stop or nasal-stop cluster was lenited and became a fricative of the same or a nearby place of articulation. By this change, $k$ and nk became $\gamma ; \underline{t}$, $t$, $t$ and $n t$ became $~ d ;$ and $p$ and mp became $\beta$. This change explains the origin of the fricatives in the words below:

| *ka: ${ }^{\text {a }}$ | ðау | 'mother' |
| :---: | :---: | :---: |
| *Cu: nkun | yunu | 'distant |
| *Ca:rtim | oxam¢! | 'hungry' |
| *Ni:mpi | Büyi | 'ashes' |
| *ya:さi | ¢adi | 'burn' |
| *Cu:mpi | $\beta w i$ | 'die' |

Following the lenition of the intervocalic stops and nasal-stop clusters, the long vowel generally reduced to a schwa (central vowel [ə]). This stage is attested in some of the languages closely related to Anguthimri, and although there is now no underlying schwa in Anguthimri, it still does exist as an optional phonetic variant before word initial fricatives (2.1).

If the initial vowel was short, and sometimes also (unpredictably) when long, then metathesis of the vowel and the following consonant applied. This change can be stated as:

$$
\mathrm{VC}>\mathrm{CV}
$$

This is an extremely frequent and regular change, and it is attested in quite a number of other Northern Paman languages. The usual claim that metathesis is a sporadic and unpredictable change cannot be upheld for these languages.

Actually, the statement of change above should contain the symbol (C)C rather than just $C$, because the vowel exchanged places not only with the following consonant, but also the following consonant cluster. This brought nasalstop clusters to the beginning of the word. It was stated in 2.2 that these phonetic clusters should be analysed as
unitary phonemes. It was at this stage of the history of Anguthimri that this reanalysis would have taken place.

Following the original consonant of the second syllable there was of course invariably a vowel, and the metathesis rule brought the initial vowel and the original post-consonantal vowel together. The language could not tolerate adjacent vowels and so applied a number of changes to avoid the situation:
(i) If the two vowels were identical, one was deleted, e.g.

| *pama | ma | 'man' |
| :--- | :--- | :--- |
| *punku | gu | 'knee' |
| *nipima | pimi | 'one' |

(ii) If the two vowels were not identical and if one was a high vowel and one was a low vowel, then the high vowel shifted to the corresponding semi-vowel. This change applied whether the original high vowel preceded or followed the original low vowel, e.g.

| *munka | gwa | 'eat' |
| :--- | :--- | :--- |
| *tuma | mwa | 'fire' |
| *nanku | gaw | 'that' |
| *pinta | drya $^{r}$ 'arm' |  |
| *yapi | pay | 'forehead' |
| *nampu | baw | 'tooth' |

(iii) There were some cases however, where high vowels did not simply become semi-vowels. Rather, they coalesced with the low vowel and formed a new vowel. This process was apparently the origin of many of the 'unusual' vowels of Anguthimri. It is not possible at this stage to state the conditions under which these changes took place, nor is it possible to specify precisely what the forms of the changes were. The following kinds of reduction have been observed:

| au, ua > 0 | e.g. | $\begin{aligned} & \text { *CutakV > troka } \\ & \text { *pankul }>\text { goy } \end{aligned}$ | 'head' <br> 'wallabv' |
| :---: | :---: | :---: | :---: |
| ai>x | e.g. | $\begin{aligned} & * k a \mid i>l æ \\ & *_{\text {mal }} \gg \text { lægi } \end{aligned}$ | 'go walkabout' 'we' |
| $u i, i u>\ddot{u}$ | e.g. | *Ci:puy > $\beta$ üru | 'smoke' |
| $i a^{>}$e | e.g. | *nica > ce:ye | 'you' |

Anguthimri at some stage in its history also underwent a change by which all word final vowels were deleted. However, this only occurred in polysyllables; all monosyllables have retained their vowels. Because monosyllables were treated differently, it seems that this rule must have applied after monosyllables were created, i.e. after the metathesis of VC and the accompanying vowel changes. Linngithigh shares with Anguthimri this loss of final vowels. Thus, in modern Linngithigh, there is a great range of wordfinal consonants and consonant clusters. However, Anguthimri has innovated further and added a vowel at the end of each word, which repeats the vowel preceding the final consonant or final consonant cluster. The fact that the echo-vowels are only ever -i, -e, -a and -u, even when the preceding syllable contains vowels such as $\not \approx$ or $\ddot{u}$, suggests

TABLE 2.3-Historical changes in Anguthimri phonology
that the application of this rule took place before these vowels had developed in the language. If words such as büyu 'scorpion', pæ?a 'elbow' and pünu 'you-ACC' already had ü and $\ngtr$ when the vowel was added, we would expect to find bürü, $p æ ? æ$ and pünü.

Two other changes must have applied after the echo vowel rule. The first involved the deletion of any glide which immediately preceded a consonant. This change is involved in the derivation of Anguthimri forms such as mayu 'armpit' and kayu 'skin'. A historically prior stage of these two forms is attested in Linngithigh, where they are mawy and kawy respectively. The echo-vowel rule operating on these forms would presumably have yielded a final -u, and then the glide must have been deleted. The second change involved $[$ insertion. In Anguthimri, the last $m$ of a word was sporadically affected by a change which inserted a r after it. This change was frequent, but not universal in application. Its conditioning is not understood. It was involved in the derivation of the following forms:

| *Ca:nfim | ðаym「i | 'hungry' |
| :--- | :--- | :--- |
| *-tima | -timci | 'proprietive' |
| *-namu | -namca | 'genitive' |

Finally, there was a change whereby $r$ shifted sporadically to either $\gamma$ or $t$. The conditioning factors are not known. There is no way of knowing how this change was ordered with respect to the remaining changes. This change is involved in the derivation of:

| *na:mur | mayu | 'armpit' |
| :--- | :--- | :--- |
| *Cakur | kayu | 'skin' |
| *kupkar | gwata | 'north' |
| *yi:par | ßata | 'south' |

The main phonological changes that have taken place in the history of Anguthimri are summarised in Table 2.3, with the necessary chronological ordering shown at the left.

## 3. MORPHOLOGY

### 3.1 PARTS OF SPEECH

The parts of speech we can set up for Anguthimri are listed below, with justification for each lexical class recognised. Words generally belong to only one underlying part of speech though, by various derivational processes, membership can be changed. Membership of the parts of speech is assigned on the basis of shared syntactic and morphological behaviour and also on the basis of shared semantic content. The parts of speech in Anguthimri are:
(i) Nouns. These inflect for case according to an ergativeabsolutive system, though nouns with human reference optionally take the suffix -nv when acting as the object of a transitive verb. Nouns on the whole refer to concrete objects - people and animals, parts of the body of humans and animals, trees and plants, environmental phenomena (e.g. 'ground', 'river', 'sea', 'fire', 'forest', 'lightning' etc), particular places and people and various cultural artifacts. Non-observable objects such as spirits are also expressed as nouns. Abstract concepts such as kinship relationships are nouns. Other abstract nouns are rare, though there is a noun for 'sickness'.
(ii) Adjectives. These potentially take the same case suffixes as nouns, though they do not inflect for case unless the head noun is absent. Adjectives generally also occur in sentences with the inchoative verbaliser -geni, though they can also appear without it. There is a very great semantic difference between adjectives and nouns. Adjectives refer only to qualities that characterise the referents of nouns. Syntactically, we can make the generalisation that adjectives follow nouns within noun phrases. Adjectives can express speed ('fast'), dimension ('tall', 'short', 'deep', 'small'), physical property ('heavy','cold', 'blunt'), colour ('black', 'red', 'blue'), human propensity ('greedy', 'worried', 'knowledgeable'), value ('good', 'bad'), and number ('one', 'many').
(iii) Verbs. These inflect for tense. It is also on the verb that sentence subordination is marked. Semantically, verbs express motion, state and change of state, vocalisation, thought, noise-making, body functions ('laugh', 'cry', 'defecate', 'ache'), impact and violence, and holding, possessing and transfer.
(iv) Pronouns. These constitute a closed set of items. The members of this part of speech can be described semantically using the features of person, number and inclusivenessexclusiveness. Pronouns inflect for case, as do nouns and adjectives, but make a smaller number of formal case distinctions.
(v) Particles. These are all uninflectable items. There are three semantic groups of particles: (a) Time particles, expressing 'for a long time', 'now', 'yesterday' etc; (b) Place particles, expressing 'up', 'down', 'near', 'far', 'this direction' etc; (c) MiscelZaneous particles, expressing for example 'too much', 'again', 'asleep', 'by mistake' and so on. There are no apparent morphological or syntactic properties that could distinguish between the three types of particle on formal grounds.
(vi) Interjections. These are forms that can exist alone without being considered in any way ungrammatical or elliptical.

### 3.2 NOUN MORPHOLOGY

3.2.1 CASE INFLECTIONS. The case functions of all nouns in Anguthimri are expressed through suffixes to the noun. In this section, the various inflectional suffixes of the language are presented, with a discussion of the roles each suffix expresses. Examples of each of the cases are given.
(i) Intransitive subject (S): $\varnothing$ (zero suffix), e.g.
(1) $t^{r}$ ya- $\phi$ lanu-nu geca shark-S sea-LOC 1ive-PRES Sharks live in the sea.
Patient nouns in non-verbal sentences are also marked by - $\phi$, as in:
(2) ma- $\phi$ gu-ఫ̧ana
man-S clothes-PRIV
The man is naked.
Note that in elicitation, nouns are always cited with no suffix.
(ii) Transitive object ( 0 ). This is also ordinarily marked by $\phi, \mathrm{e} . \mathrm{g}$.
(3) $d^{r}$ wamca-ța papaţi-ri rioi-ni d we-ф bwa-ya
woman-A stone-INST hit-PAST shell-o break-PAST The woman hit the shell with a stone (and) broke it.

However, any noun which has human reference, when it is in object position, can optionally carry the suffix -nV, e.g.

```
Iu ma-ra yama(-na) rini-ni f_anałi-nikumu
```

he-A man-A child-0 hit-PAST run-CONSEC
The man hit the child and it ran away.

There is one noun which is known to have a slightly irregular -nV form. This is day 'mother', which becomes ðana (rather than the expected *dayni).
(iii) Transitive subject (A). Marked by ergative case suffix: -rV~-gV~-tV. There is no apparent phonological or semantic conditioning factor involved in the choice of allomorph for any particular noun and the only solution seems to be to divide nouns into three distinct declensions. A few examples of members of each group are listed:
DECLENSION I

| kyabara-ga | 'crocodile' | ku-gu | 'stick' |
| :--- | :--- | :--- | :--- |
| t'ya-ga | 'shark', | ðurupu-gu | 'sma11' |

Büyi-gi
DECLENSION II

| ma-ra | 'man' | d'ati-ri | 'current' |
| :--- | :--- | :--- | :--- |
| kwe?e-re | 'spear' | ?wa-ra | 'tame dog' |
| Iwaga-ra | 'fever' |  |  |
| DECLENSION III |  |  |  |
| bu?u-tu | 'ghost' | yegi-ti | 'wind' |
| wa?a-ta | 'ear' | gaba-ta | 'paddle' |
| PCu?u-tu | 'ghost' |  |  |

It might be thought that the apparently random distribution of ergative allomorphy may have as its origin an early situation in the language with some kind of final segments that have since been deleted. This is known not to be the case however (see 2.5). In fact, at an earlier stage of Anguthimri, the final vowel was absent and there can be no question of this vowel having an earlier following consonant. Actually, data from many Cape York languages suggests that the proto-language itself had a slightly unpredictable ergative allomorphy after vowels. Many languages show reflexes of $*-l u, *_{-m p u}{ }^{*}-n t u, *_{-n t ̧ u}$ and $*_{-g k u}$ postvocalically. The system in Anguthimri may therefore have developed out of an earlier system that was itself only partially regular.

In addition to the allomorphy discussed above, there are some nouns that do not fit into any of the three declensions presented. The irregularities fall into two groups:
(a) Nouns ending with -yi change the yito ${ }^{i}$; e.g.
ni:yi 'boy', ergative ni:[i
dupciyi 'old lady', ergative dupcici 'old lady'
(b) Some nouns with stem final -i/-e change this to -a before adding -rv. E.g.
kwe 'foot', ergative kwara adiki 'moon', ergative adikara mcitiki 'many', ergative mcitikara puł̧iki 'many', ergative puţikara 'many'

A couple of sentences are given below illustrating the use of nouns in ergative case:
(5) ga?aga-ra kunu yeci gwa-na
kookaburra-A now snake-0 eat-PAST
The kookaburra ate a snake then.
(6) prupu-tu nana kunu ta-na
leech-A you-0 now bite-NON-FUT
The leech is biting you now.
Coinciding in form with the ergative suffix is the instrumental suffix. This expresses the inanimate instrument by which an action is carried out, e.g.
(7) na dru?a kunu rwagatji-ri dwa-na
fish-O this now fishing-line-INST catch-NON-FUT
[I] am catching fish with a line now.
(8) ?a-ga lu d「upa nani layu rini-ni hand-INST he-A this I-O cheek-0 hit-PAST He slapped me with his hand.
Although the ergative and the instrumental suffixes coincide in form, there is evidence that we should recognise two cases. The evidence is:
(a) The fact that instrumentals can appear in non-transitive sentences such as (9), whereas ergative nouns can only appear in transitive sentences.
(9) Iu ku-gu a力i-ni
he-S stick-INST walk-PAST
He walked with a stick.
(b) The fact that transitive subjects can be affected by reflexivisation whereas instrumental noun phrases are not involved in this transformation. Thus:
(10) yama-ta drupa ßüyi-gi $\quad$ ?a-y baby- $\bar{A}$ this ashes-INST cover-PRES The baby is covering [it] with ashes.
can be related structurally to:
(11) yama dru?a ßüyi-gi $3 a-t i-n i$ baby-S this ashes-INST cover-REFL-NON-FUT The baby is covering himself with ashes.
where yamata becomes yama but $\beta$ üyigi does not change.
(iv) Genitive. The possessor noun in an alienable possession situation (and also, optionally, that in an inalienable possession situation) is marked by one of the following suffixes: -mra, -namca or -yamca. The -mra allomorph is used with monosyllabic nouns, e.g.
ma 'man', genitive mamca
?wa 'dog', genitive ?wamra
Polysyllabic nouns form the genitive by adding either -namra or -yamra to the stem. The choice of allomorph is lexically determined; there is no apparent phonological or semantic factor involved in the choice. Thus, we must once again set up declension classes, as illustrated by:

DECLENSION A
ga?aga-yamra
dwaladi-yamca
goy-yamª
DECLENSION B
drwana-namra
bu?u-namea
yama-namca
'kookaburra'
'dingo'
'wallaby'
'wife'
'ghost'
'child'

PCu?u-yamca 'leech'
ladi-yamca 'gir1'
nati-namta 'father'
ðwiti-nampa 'two'

The membership of the ergative and the genitive declensions is quite unrelated; the form of the ergative cannot be predicted from the form of the genitive and vice versa.

Sentences illustrating genitive constructions in Anguthimri are:
(12) puia pana-yamra
water-S friend-GEN
The water belongs to [my] friend.
yyana nați-namca
axe-S father-GEN
The axe belongs to [my] father.
The genitive suffixes in Anguthimri also express the benefactive relation, e.g.

$$
\begin{align*}
& \text { bwaPa gaw dra-na dwaladi-yamca }  \tag{14}\\
& \text { meat-o that-0 leave-NON-FUT dingo-GEN } \\
& \text { [I] left some meat out for the dingos. }
\end{align*}
$$

(v) Dative. Anguthimri has a case-marking suffix of the form -kV (which is cognate with the Common Australian suffix -ku). This suffix expresses a wide range of case relations. The basic function of this suffix is to express the purpose of an action, as in:
(15) lu ruci gaw ani-ni watayi-ni gæ-y ræginana-ka
he-S child-S that-S go-NON-FUT old man-O ask-FUT honey-DAT
The child is going [and] will ask the old man for some honey.
(16)
anu bwa?a-ka f $\ddagger$
I-A meat-DAT look-PRES
I'm looking for some meat.
The -kV suffix also expresses the causal relationship, as in:
(17) Twa gægi yama-ka
dog-S bark-PRES child-DAT
The dog is barking because of the child.
and with various predicates of emotion, including fear: e.g.
$d^{r} u$ ge?e ðitama-?a mræragi-ki
you-S don't fear-TMP goanna-DAT
Don't be frightened of the goanna.
Iu ma ge-deni-ni ?wa-ka he-S man-S good-INCH-PAST dog-DAT The man is happy with [his] dog.
(20)
lu ma drwana-ka pay ðuwi-ðuwi he-S man-S wife-DAT ashamed The man is ashamed of his wife.

TABLE 3.1-Nominal case suffixes
S
0
A/INSTrumental
GENitive/Benefactive
DATive (/Causal)
ABLative (/Causal)
LOCal
DESIDerative

$$
\begin{aligned}
& -\phi \\
& -\phi,-n V \\
& -g V,-r v, - \pm V \\
& -m C a,-n a m \subset a,-\gamma a m c a \\
& -k V \\
& -m V \\
& -n V \\
& -k V g a:
\end{aligned}
$$

(vi) Ablative. Anguthimri has a suffix of the form -mv which expresses 'motion away from', as in:
(21) țigiri baya-ma pæ-ni
joey-S pouch-ABL come out-NON-FUT
The joey came out of the pouch.
The -mV suffix also expresses the causal function (which can also be expressed by $-k V$; see (17) above), e.g.
lu drupa lanu-mu Iwaga-timfi-geni-ni
he-S this salt-water-ABL fever-PROP-INCH-NON-FUT
He got sick because of the salt-water.
(vii) Unmarked local case. There is a suffix of the form $-\cap V$ in Anguthimri which expresses the locative, allative and indirect object functions. This is therefore a general local case. Examples of this suffix in use are:
(23) Iu ?wa yyüdi-ni tyapaţeca
he-S dog-S scrub-LOC run-PRES
The dog is running to the scrub.
(24) rana ba-na dradata
we-S island-LOC live-PRES
We live on the island.
(25) agu gyunu watayi-gi kayi mwa yæ-yi

I-A he-LOC old man-LOC later on matches-0 give-FUT
Later on I will give the man some matches.
(viii) Desiderative. Anguthimri also has a well-attested suffix of the form -kVga: (i.e. the dative followed by -ga:). This suffix is the only source for words in the language containing long vowels in a syllable other than the first. The suffix expresses a 'liking' or 'wanting' relationship, e.g.
(26) lu yama gu?u-kuga:
he-S child-S milk-DESID
The baby wants some milk.
Table 3.1 summarises the case-marking possibilities for Anguthimri nouns.
3.2.2 DERIVATIONAL AFFIXES. In this section, the processes by which a nominal stem is derived from a noun root are discussed.
(i) Proprietive. Anguthimri has a suffix -timpi, corresponding in form to the suffix -tim in Awngthim and -ti(ma) in the Northern Peninsula group (i.e. Atampaya, Angkamuthi and Yadhaykenu). It has a fairly wide range of functions, including:
(a) To have something, not necessarily to be in possession of it, e.g.
(27) Iu ma drupa narama kwe?e-timi
he-S man-S this stand-NON-FUT spear-PROP The man is standing with a spear.
(b) To be in the company of someone, e.g.
(28) Twa ruci-timci geca dog-S child-PROP sit-PRES The dog is sitting with the child.
(c) To indicate a means of transport, e.g.
(29) lu ma maruku-timci ani-ni he-S man-S horse-PROP go-PAST The man went by horse.
(30) lu watayi pat ${ }^{r}$ a-timpi wi Bama ani-ni he-S old man-S canoe-PROP this way back go-PAST The old man came back by canoe.
(d) To express an abstract state, e.g.

| Iwaga 'fever' | lwagatimci 'sick' |
| :--- | :--- |
| wa?a 'ear' | wa?atimci 'knowledgeable' |
| troka 'head' | trokatimCi 'worried' |
| ruci 'child' | rucitimci 'pregnant' |
| gu 'clothes' | 刀ułimci 'clothed' |

A noun with the proprietive suffix can qualify a noun with non-zero case inflection but does not itself inflect. Thus:
(31) anu drupa ma-na gera na-timfi

I-S this man-LOC sit-PRES beard-PROP
I am sitting down with the man with a beard.
(ii) Privative. There is a suffix -(kV)ţana meaning 'without' or 'not having' e.g.
(32) aŋu baw-kuł̧ana

I-S tooth-PRIV
I have got no teeth.
This suffix also does not seem to inflect for case, though it does function as a qualifier to non-zero marked nouns, e.g.
(33) $d^{r} u$ ku-mu wi ani-ni tudu-kuţana
you-S tree-ABL this way go-PAST leaf-PRIV
You came away from the tree without leaves.
(iii) Diminutive. Added to a noun, the suffix -pwa creates a new noun with a diminutive meaning. Thus, we find pairs such as:

```
ma 'man'
ba 'island'
rana 'river'
```

mapwa 'small man'
bapwa 'small island'
ranapwa 'creek'

| ku 'tree' | kupwa 'shrub' |
| :--- | :--- | :--- |
| ?wa |  |

This suffix can also be added to adjectives which have some kind of diminutive reference, but does not change the meaning, e.g.

$$
\begin{array}{ll}
\text { puxti(pwa) } & \text { 'small' } \\
\text { bi:ni(pwa) } & \text { 'short' }
\end{array}
$$

Nouns with the diminutive suffix with further case-inflection were accepted by my consultant, e.g.

```
ma-pwa-ra kwa-ra nu-yu
man-DIMIN-A foot-INST kick-PAST
The small man kicked [it]with [his] foot
```

(iv) Plural. Count nouns in Anguthimri probably have a plural form, which is marked with either -rV or - $\ddagger \mathrm{V}$. This is an aspect of the grammar about which my consultant was very unsure, and elicitation produced little consistency. There is one known irregular plural:

$$
d^{r} \text { wamra 'woman' } \quad d^{r} \text { wabici 'women' }
$$

(v) Reduptication. This is a very peripheral process in the nominal morphology of Anguthimri, and no real generalisations can be made about its effect on the meaning of noun roots. Note the following examples:

$$
\begin{array}{lll}
t^{r} \text { oka 'head' } & t^{r} \text { oka-t oka } & \text { 'end' } \\
\text { bruyi 'night' } & \text { bruyi-bcuyi } & \text { 'afternoon' }
\end{array}
$$

(vi) Compounding. This is a fairly common process in Anguthimri. Nominal compounds are of type N+ADJ or of the type $\mathrm{N}+\mathrm{N}$. The $\mathrm{N}+$ ADJ type is exemplified by:
kayu-ge 'palm of the hand'
kayu-we:ye 'muscle'
bu?u-ge 'clever man'
〔i-үu?ukwi:yi 'jabiru, brolga'

```
kayu 'skin', ge 'good'
kayu 'skin', we:ye 'fat'
bu?u 'ghost', ge 'good'
[i 'nose' \gammau{ukwi:yi 'long'
```

The $N+N$ type is exemplifed by:

```
dwa-pay 'eyebrow'
ywa-pay 'sandhill'
pay-ga 'hillside'
patra-dre:m[' 'outrigger canoe'
```

```
dwa 'eye', pay 'forehead'
ywa 'sand', pay 'forehead'
pay 'forehead' ga 'ground'
patra 'canoe', dre:mri 'outrigger'
```


### 3.3 PRONOUN MORPHOLOGY

Anguthimri pronouns have forms for the first, second and third persons; singular, dual and plural; and, for the first person non-singular, there is an inclusive-exclusive distinction. Note that the third person forms are not demonstratives (as in many Australian languages), but are genuine pronouns. All pronouns exist only as free forms, i.e. there are no pronominal forms bound to the verb.

Pronouns inflect according to the nominative-accusative pattern throughout, in contrast to the nouns, which generally inflect according to an ergative-absolutive system. The distinction made in the noun paradigm between the dative and

TABLE 3.2 －Pronoun paradigm

|  | Nom． | Acc． | Gen． | Dat．＊ | Ablative | Desiderative |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 sg | anu | nani | tamcu | tanu | tamcumu | taguga： |
| ldu inc | læg | Impi | 1 æ矿 | ｜æni | I セmくimi | lægiga： |
| lpl inc | bwi | bunu | bumeu | buna | bumcumu | buguga： |
| 1 du exc | nini $\}$ | nana | namra | nana | namrama |  |
| lpl exc | nana |  | namea | nana | namCama | nagaga： |
| 2 sg | $d^{r} u$ | nana | gyumiu | gyunu | gyumcumu | gyuguga： |
| 2du | pi | pünu | puimcu | pünu | pümcumu | püguga： |
| 2pl | Ee：ye | Cwana | cwamra | Ewana | Cwamcama | ［wagaga： |
| 3 sg |  | nyunu | nyumru | gyunu | nyumcumu | nyuguga： |
| $\begin{aligned} & 3 \mathrm{du} \\ & 3 \mathrm{p} 1 \end{aligned}$ | $\left.\begin{array}{l}\text { Iwepi } \\ \text { amra }\end{array}\right\}$ | I wana | I wamra | I wana | I wamrama | I wagaga： |

＊This form covers dative，allative and locative functions．
allative／locative is not made for pronouns．The full para－ digm is in Table 3．2．

These forms are only partly analysable synchronically． For the most part，the paradigms seem to be very irregular， and also very different from the pronouns of many other Australian languages．However，these forms can all be de－ rived from an already reconstructed proto－system（see Hale 1976），in which there is a good deal of morphological trans－ parency．

The reconstructed nominative forms are：

|  | singular |  | dual | plural |
| :--- | :--- | :--- | :--- | :--- |
| Ist person | nayu | inclusive | nali | nampul |
| 2nd person | nuntu | exclusive | nana | nana |
| 3rad person | nulu |  | nipul | nira |
|  |  | pula | ？ |  |

The rules discussed in 2.5 can be applied to this proto－ system to derive the Anguthimri nominative paradigm，e．g．

```
*nulu > lu 'he/she/it'
*nali > Iæ(+gi) 'we two'
*gampul > bwi 'we all'
```

*ripul > pi 'you two'

```
*nira > ce:(+ye) 'you all'
```

Some of the forms are slightly irregular in that there are accretive syllables（e．g．the－gi of lægi）．Others go back to an earlier form that is slightly different to that re－ constructed for proto－Northern Paman．For example，aju appears to be derived from＊ayun（i．e．＊ayun＞yaun＞aun＞awn ＞anu）．This is a rather peculiar proto－form；a possible explanation is that it is derived from＊nayu by a kind of sporadic metathesis．$d^{r}{ }_{u}$＇you＇may be derived from＊nuntu by some（as yet not understood）type of change．

The oblique forms are for the most part derived from pronominal stems which Hale（1976）has reconstructed as：

| 1st person | singular | nafu- | inclusive | dual |
| :--- | :--- | :--- | :--- | :--- |
| nali- | plural |  |  |  |
| 2nd person | ninku- |  | nampul- |  |
| 3rd person | ninu- |  | nana- | nana- |
| nipul- | nura- |  |  |  |

These have developed into the Anguthimri stems:

|  | singular |  | dual | plural |
| :--- | :--- | :--- | :--- | :--- |
| 1st person | ta- | inclusive | la- | bu- |
|  |  | exclusive | na- | na- |
| 2nd person | gyu- |  | pü- | Ewa- |
| 3rd person | nyu- |  | Iwa- | Iwa- |

which can in almost all cases be derived directly by the rules discussed in 2.5 . The suffixes by which the various oblique cases are derived from the oblique roots are:

| $-n V$ | accusative |
| :--- | :--- |
| $-m \Gamma V$ | genitive |
| -nV | dative/allative/locative |
| GEN+-mV | ablative |
| -gVga: | desiderative |

The $V$ segment takes its quality not from the final vowel of the oblique root as it does in the modern language; rather, this $V$ was added at a time in the language when the oblique roots were:

|  | singular |  | dual | plural |
| :--- | :--- | :--- | :--- | :--- |
| 1st person | taw- | inclusive | lay- | bu- |
|  |  | exclusive | na- | na- |
| 2nd person | gyu- |  | Pyu- | cwa- |
| 3rd person | nyu- |  | Iwa- | lwa- |

Synchronically, we cannot really recognise roots as abstract as these, though they can be justified on diachronic grounds.

The only irregular forms, which do not fit into the historical pattern presented above, are the modern first and second person singular accusative forms nani and nana respectively.

### 3.4 DEMONSTRATIVES

There are evidently only two demonstratives in Anguthimri. These are:
$d^{r} u ? a \quad$ 'proximate' i.e. 'this', 'here'
gaw 'distant' i.e. 'that', 'there'.
Their inflectional paradigm is in Table 3.3. This is for the most part regular, with the following exceptions:
(i) The allative/locative of $d^{r} u$ ?a is $d^{r} u$ ?ana rather than *dru?ana.
(ii) The genitive of gaw is gawrama rather than *gawncu.

TABLE 3.3 - Inflection of demonstratives

|  | Proximate | Distant |
| :--- | :--- | :--- |
| Absolutive | $d^{r}$ u?a | gaw |
| Ergative/Instrumental | $d^{r}$ u?ata | gagu |
| Genitive | $d^{r}$ u?ayamra | gawrama |
| Dative | $d r u ? a k a$ | gawku |
| Allative/Locative | $d^{r}$ u?ana | gawnu |
| Ablative | $d^{r}$ u?ama | gawmu |
| Desiderative | $d^{r}$ u?akaga: |  |

### 3.5 INTERROGATIVES

The interrogative pronouns are:

| Pani | 'who' |
| :--- | :--- |
| rãyi | 'what' |
| dramanama | 'when' |
| dra | 'where' |

All of these, except $d^{r}$ amanama 'when', inflect for case, as shown in Table 3.4. These paradigms are only partly regular. The root $\mathrm{Qx}_{\mathrm{m}}$ is used in association with the pronominal markers of oblique cases as set out in 3.3 , but with irregular $S$ and ergative-instrumental forms. The root of 'what' seems to be rã̃-, with somewhat idiosyncratic inflectional behaviour. The interrogative of place has the root dra-, but the locative suffix is -gu (presumably to distinguish it from the allative -na).

Note that the interrogative forms can also be used indefinitely, e.g.

> anu gyunu rãyi $\quad$ twa-ta
> I-A you-DAT something-o teli-FUT
> I will tell you something.

### 3.6 VERB MORPHOLOGY

3.6.1 TRANSITIVITY. Verbs in Anguthimri are always clearly either transitive or intransitive, though there are derivational means of changing transitivity. An intransitive verb has a nominal subject in the absolutive case or a pronominal subject in the nominative case, while a transitive verb has a nominal subject in the ergative case or a pronominal subject in the nominative case and an object which, if nominal, is usually marked as being absolutive, but which, if pronominal, is marked for accusativity.

A breakdown of the lexicon for verbal transitivity (out of a total verb corpus of 97 items) is:

Transitive $\quad 56=58 \%$
Intransitive $\quad 41=42 \%$

TABLE 3．4－Inflections of interrogatives

|  | ＇who＇ | ＇what＇ | ＇where＇ |
| :---: | :---: | :---: | :---: |
| S | ？ani |  | － |
| 0 | ？æni | rayi |  |
| Ergative／Instrumental | ？ayi | r $\check{\sim} \mathrm{r} \times$ | － |
| Genitive | ？ mmCi | － | $r^{-}$ |
| Allative | ？æワ1 | ＿ | $d^{r}{ }^{\text {rana }}$ |
| Locative | ？æŋ1 | － | $d^{r}$ agu |
| Ablative | ？ xmi | － | drama |
| Desiderative | ？ægiga： | rãyiga： | － |

3．6．2 CONJUGATION．Anguthimri verbs are all assigned mem－ bership in one of four conjugational classes，each of which has two sub－classes．There is a significant number of irre－ gular and partly irregular verbs which lie outside the four regular conjugations．A brief summary of the regular con－ jugation system is given in Table 3.5 ．

There are some obvious similarities to Hale＇s Linngi－ thigh verbal paradigms（Hale 1966）．Anguthimri paradigm I obviously corresponds to 4 in Linngithigh and Anguthimri IV to Linngithigh 1．The Anguthimri suffixes have obviously undergone final vowel deletion as have the Linngithigh suffixes，but the Anguthimri forms have subsequently added an echo－vowel（see 2．5）．

A more detailed discussion of each of the conjugations follows．
（a）Conjugation I．It can be seen from Table 3.5 that there are two sub－conjugations，differentiated only by the form of the vowel of the suffix．In the（a）subclass，the suff－ ixal vowel is $V$（i．e．takes its quality from the preceding stem vowel；see 2．4．2），while in the（b）subelass，the vowel is u／ü．

There are some morphophonemic changes that are brought about by the $y$ segment in the future tense of this conjuga－ tion（and in fact by any $y$ of any suffix in Anguthimri）． These changes are：
（i）a stem final a or $u$ ，when followed by y，is optionally assimilated towards the $y$ in place of articulation．Thus， a optionally becomes $æ$ and $u$ optionally becomes $\ddot{u}$ ，giving rise to the following kinds of variation in the future forms：ya～yæ＇will give＇，ђa～ちæ＇will split＇，yyu～yyü＇will spear＇，クu～лü＇will kick＇．
（ii）a suffixal a or $u$ obligatorily shifts to $\approx$ or $\ddot{u}$ ，and optionally then shifts further to e or i respectively， following the $y$ ．This rule is the only source in Anguth－ imri for word final $x$ and $\ddot{u}$ ．
（iii）in the future tense forms，phonetic sequences of æyæ （from underlying a＋ya）optionally reduce to become $\approx y \sim \nsim \sim$（in free variation）．Thus，from a future form dra－ya＇leave－FUT＇， we can derive the possible surface forms：drayæ～draye～dræyæ～
 forms is that future tense is distinguished from the stem

TABLE 3.5 - Verbal inflections by conjugation

|  | Ia | Ib | IIa | IIb | IIIa | IIIb | IVa | IVb |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| pres. | -nv | -nu |  |  | (-y) | (-y) | -ф | - $\phi$ |
| past | -\%V | -yu | -nV | -nv | -ni | -ni | -nV | -nv |
| fut. | -yv | -yü | (-yV) | (-yV) | -yi | -yi | -tv | - -V |
| imper. | -?V | -Pu | -?V | -?V | -? i | -? i | -?V | -? V |
| consec. | -nvkumu | -nukumu | -nVkumu | -nama | -nikumu | -nama | -nVkumu | -nama |

TABLE 3.6 - Sample Paradigms of conjugation I verbs.

|  |  | present | past | future | imperative | consecutive |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 a | 'blow'(tr) | 3ini | 3iyi | $3 i y!$ | $31 ? 1$ | $3 i n i k u m u$ |
|  | 'kick' | nunu | nuyu | nuyü~nuyi~ nüyü~nüy: | nupu | nunukumu |
|  | 'poke' | ganu | gayu | gayü~gayi~ <br> gæyï~gæyi | ga?u | ganukumu |
|  | 'rub' | ranu | rayu | rayü~rayi~ <br> ræyï~ræyi | ra?u | ranukumu |

by vowel ablaut.
A couple of sample paradigms are given in Table 3.6 to illustrate the behaviour of these morphophonemic alternations.

The known membership of conjugation I from the corpus is listed.

There are 15 verb roots in the corpus belonging to conjugation Ia: $3 i$ 'blow', bwa 'break', ya 'give, bring', ?i: 'wake', yyu 'spear', ţi: 'see, look at', pu 'do', pu 'throw', kwi: 'have, keep, look after', nu 'kick', a 'pull',
 'make'. Note that all these are transitive. Just two are known for conjugation Ib (both are transitive): ga 'poke', ra 'wash, rub'.
(b) Conjugation II. The forms of the suffixes are identical for the two sub-classes, except in the form of the consecutive suffix - see Table 3.5. Note that in conjugation II there is no distinction between the past and present tenses. Note also that the future tense can be marked by either -yV or - $\phi$. Sample paradigms of conjugation II verbs are given in Table 3.7.

The transitivity breakdown for conjugation II is:

|  | IIa | IIb | II | Total |
| :--- | :--- | :---: | :--- | :---: |
| transitive | 23 | 3 | 0 | 26 |
| intransitive | 12 | 5 | 1 | 18 |

Thus, the membership is predominantly transitive. The third column covers łitama 'be afraid', whose sub-class is not known.

TABLE 3.7 －Sample paradigms of conjugation II verbs

|  |  | non－future | future | imperative | consecutive |
| :---: | :---: | :---: | :---: | :---: | :---: |
| IIa | ＇come out＇ | pæni | рæуа | рæ？a | pæni kumu |
|  | ＇dig＇ | nana | クауæ～！æуæ～ | na？a | janakumu |
| IIb | ＇follow＇ <br> ＇bend＇ | ðutunu rumuns | クæу～クæ～クе ðutuyï rumuyü | ðutu？u rumu？u | ðutunama rumunama |

TABLE 3.8 －Sample paradigms of conjugation III verbs

|  |  | past | present | future | imperative | consecutive |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IIIa | ＇ki11＇ | bwi：ni | bwi | bwi：yi | bwi：？i | bwi：nikumu |
|  | ＇cover＇ | ？ani | ？ay | Sayi | ？a？i | ？anikumu |
| IIIb | ＇hit＇ | rigini | rigi | riniyi | rinisi | rininama |
|  | ＇reciprocal＇ | －pcini | －pri | －pciyi | －pcipi | －prinama |

The known membership of class IIa is：na＇dig＇，kanana ＇find＇，－gena＇causative＇，pæ＇come out＇，karagwa＇crawl＇， țama＇jump＇，gæ？ama＇laugh＇，dra＇leave，put down＇，$\ddagger w a ð a g a ~$ ＇wash＇，tæ＇push，send，move＇，pra＇rub，wash＇，winiga ＇scratch＇，riyiga＇smash＇，gæ＇ask＇，twinina＇bash＇，bwæni ＇break（intr）＇，fa＇stand＇；＇bite＇；＇burn／cook＇；tie＇，ð̊æ：na＇bury＇， dwa＇catch＇，brini＇dirty＇，nwita＇pour out，empty＇，pata＇fix， make＇，† $\quad$ warama＇float＇，ðwata＇flow down＇，$\ddagger$ waka＇heap up＇， tiyiga＇smash＇，agima＇suffer＇，luluma＇swell up＇，lay＇carry＇， acu＇bark＇，tabæ＇chase＇，gawri＇look for＇．Known members of IIb are：ma？ał̧ana＇lift up＇，－ti＇reflexive＇，đwimi＇tell lies＇，drati＇lie down＇，rumu＇bend down＇，ठutu＇follow＇， $\beta \mathrm{i}: \mathrm{ni}$＇go down＇，yumu＇cook in ashes＇．
（c）Conjugation III．The only difference between the two sub－classes is once again the form of the consecutive suff－ ix．Note that as word－final sequences of iy are prohibited in Anguthimri，i final stems do not change in the present tense．Sample paradigms are given in Table 3．8．

The transitivity breakdown for conjugation III is：

|  | IIIa | IIIb | III | Total |
| :--- | :---: | :---: | :---: | :---: |
| transitive | 6 | 1 | 0 | 7 |
| intransitive | 2 | 4 | 2 | 8 |

The third column covers 犭adi＇burn＇and dradata＇live，lie down＇，whose sub－class is not known．

The attested membership of IIIa is：gi：＇fall＇，bwi： ＇kill＇，di＇suck＇，di：＇light fire＇， $\mathfrak{i}$＇cover＇，mæ＇get up，wake up＇，ma＇hear，listen to＇，$\ddagger i:$＇see，look at＇， Members of IIIb are rini＇hit，punch＇，wati＇dive＇，pwe：＇go in＇，－p［i＇reciprocal＇，b［ini－b［ini＇be noisy＇．
（d）Conjugation IV．The only difference between the two sub－classes is again in the form of the consecutive suffix． This conjugation is illustrated by paradigms in Table 3．9．

TABLE 3.9 －Sample paradigms of conjugation IV verbs

|  |  | past | pres． | future | imper． | consecutive |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| IVa＇stand＇ | naramana | narama | naramata | narama？a | naramanakumu |  |
|  | ＇go walkabout＇ | læni <br> rumunu | læ <br> rumu | læfi <br> rumutu | læ？$i$ <br> rumu？u | lænikumu <br> rumunama |

TABLE 3．10－Fully irregutar verbs

|  | past | present | future | imperative | consecutive |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ＇say＇ | fici～fıwi：ni | ちæ「а～ちwi | toye | jwi | twanakumu |
| ＇sit＇ | rãna | geca | gya | rẽ | rãnakumu |
| ＇cry＇ | wimcirãna | wimcigeca | wimcigya | wimcirẽ | wimcirãnakumu |

The transitivity breakdown for conjugation IV is：

|  | IVa | IVb | Total |
| :--- | :---: | :---: | :---: |
| transitive | 2 | 0 | 2 |
| intransitive | 4 | 1 | 5 |

Although attested membership is small，this is a predomin－ antly intransitive conjugation．The known membership of IVa is narama＇stand＇，ywagata＇swim＇， $\mathfrak{\text { ® }}$＇go walkabout＇，ga ＇peel＇，bre？ena＇play＇，fwa＇tell＇．The only root attested for $I V b$ is rumu＇bend over＇．

3．6．3 VERBAL IRREGULARITIES．The Anguthimri corpus con－ tains just over a dozen verbs with partly or completely irregular conjugations．There are three completely irregu－ lar verbs，set out in Table 3．10．The remaining eleven irregular verbs can be related to the already established conjugations．There is one set of four verbs，set out in Table 3．11，which are identical to conjugation 1 verbs except for the form of the present，which is not formed by suffixing $-n v$ ．There is a further irregular set of verbs containing seven members，which take conjugation IV suffix－ es，but show irregularity in the forms of the roots．They are given in Table 3．12．

3．6．4．INFLECTIONAL SUFFIXES．Anguthimri has three basic tense distinctions．The present refers to events occurring now（though not continuously）and also expresses the exist－ ential：
（36）trya lanu－gu geta shark－S sea－LOC sit－PRES Sharks live in the sea．

```
yay drupa dwata-na
rain-S this flow down-NON-FUT
    It is raining (now)
```

The past tense suffix refers to events that have already

TABLE 3.11 - Irregutar verbs relating to Conjugation I

|  | past | present | future | imperative | consecutive |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 'pick up' | pcana | pcece | praya | Pra?a | pranakumu |
| 'eat, drink' | gwana | gwapra | gwaya | gwa?a | gwanakumu |
| 'cut, chop' | ?wana | Pwe?e | ?waya | ?wa?a | ?wanakumu |
| 'shout' | gæni | gægi | gæya | gæ?a | gænikumu |

TABLE 3.12-Irregular verbs relating to Conjugation IV

|  | past | present | future | imperative | consecutive |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 'run' | tapationi | ja?a̧eca | tja?aţata | ja?aţi?i | tapaţinikumu |
| 'inchoative' | -genini | -geni | -ganata | -gena?a | -ganakumu |
| 'vomit' | zenini | 3eni | zænata | zeni?i | зæni kumu |
| 'dance' | mwimi | mwi | mwamata | mwama?a | mwamanama |
| 'climb' | banini | bana | banata | banipi | bananama |
| 'go come' | anini | ana | anata | ani? i | ananama |
| 'die' | $\beta$ i $i=n i$ | $\beta$ wi | $\beta w a t a$ | $\beta w i ? \mathrm{i}$ | $\beta$ wanakumu |

happened and which are now completed, or events which began in the past and are finishing in the present. Thus, the inchoative verbaliser with a past suffix often refers to a present state since the change of state began in the past but is now completed, e.g.
(38) Iu $d^{r} u$ ?a yegi $d^{r} e: n i-g e n i-n i$
he-S this wind-S different-INCH-PAST The wind has changed (= is now different).
(39) Iu $d^{r}$ upa $t^{r}$ alawati-geni-ni
he-S this red-INCH-PAST
He has turned red ( $=$ is now red).
Note that with conjugation II verbs, the distinction between present and past is merged into a general non-future.

The future suffix refers to an unbegun or uncompleted event, i.e. a state can have begun changing, but not yet be changed, e.g.
(40) $d^{r} u \quad t^{r}$ alawati-gana-ta
you-S red-INCH-FUT
You will be red (but are not yet red, though you have begun to change).
Imperative inflection is discussed in 4.6 and consecutive in 4.5 .
3.6.5 VERBAL DERIVATION. Anguthimri has the following suffixes that derive verbs from other verbs or other parts of speech:
-gena causative (Adjective $\rightarrow$ Transitive verb)

- deni inchoative (Adjective $\rightarrow$ Intransitive verb)
- $\ddagger$ reflexive (Transitive $\rightarrow$ Intransitive verb)


## -pri reciprocal/anti-passive (Transitive $\rightarrow$ Intransitive verb)

Further discussion of these derivational suffixes and their syntactic function is in 4.2 and 4.3 .

Verbal reduplication also plays a role in the derivational morphology of Anguthimri. The semantic effect of reduplication can be:
(i) Lack of intensity (and possibly also, repeated action), rini 'hit', rini-rini 'pat (e.g. dog)'
(ii) Continuity, e.g.
gwa 'eat', gwa-gwa 'keep eating'
Note that when verbs are reduplicated in Anguthimri, either just the root or else the entire root + suffix can be repeated.

## 4. SYNTAX

### 4.1 CONSTITUENTS AND CONSTITUENT ORDER

The main constituents in any Anguthimri sentence are:
NP (noun phrase)
VP (verb phrase)
COMP (complement)

There are also minor constituents such as TIME, PLACE, etc, which occur only occasionally.

A noun phrase will always have either a noun or a pronoun as its head; this is marked for case according to its function in the sentence. Either of these can be optionally followed by a demonstrative, either $d^{r} u$ a a 'proximate' ('this') or gaw 'distant' ('that'), and in the case of nouns, but not of pronouns, also an adjective. The following adjective or demonstrative never inflects for case unless the noun or pronoun is deleted by ellipsis; if this has happened the full responsibility for marking case must then fall on this secondary NP constituent. Thus, we might get:
(41) lu nani ku-gu dru?a rini-ni
he-A I-O stick-INST this hit-PAST
He hit me with this stick.
but
Iu nani $d^{r} u$ ua-ta rigi-ni
he-A I-0 this-INST hit-PAST He hit me with this [stick].
A noun in subject position (i.e. in $A$ or $S$ function) can be preceded by a pronoun, apparently functioning as some kind of deictic, e.g.
(43) $d^{r} u$ ruci wi ani
you-S child-S this way go-IMP
Come here child!
(44) Iu ma-ra ?wa kwa-ra nu-үu
he-A man-ERG dog-0 foot-INST kick-PAST
The man kicked the dog with his foot.
A verb phrase has only ever been found to consist of a single lexical verb and nothing more. The complement constituent can consist of an NP (as already described) or of an $S$ (i.e. an embedded sentence, see 4.5).

As far as ordering of constituents is concerned, Anguthimri is basically an S-O-V language, i.e. the first constituent of a sentence will normally be the subject (the $S$ or A noun phrase) and if there is an object, it comes second, with the verb last. This kind of ordering is exemplified by:
(45) ?wa-ra yama-na ta-na
dog-A child-0 bite-PAST The dog bit the child.
(46) lu ani-ni

3sg-NOM go-PAST
He went.
Also, a complement constituent, if it is an NP, generally immediately precedes the verb (though an $S$ complement will follow it; see 4.5). Thus, we might find:
?wa-ra bwa?a ba-gu ta-na
dog-A meat-0 teeth-INST bite-PAST The dog bit the meat with his teeth.
$d^{r} u$ ku-mu wi ani-? $i$
$2 s g-N O M$ tree-ABL this way come-IMP
Come away from the tree.

In any transitive sentence where discourse provides details of the participants, either the ergative NP or the absolutive NP can be deleted (though not both). Thus, the corpus contains sentences such as:
(49) aŋu kayi yyu-yü
$2 \mathrm{sg}-\mathrm{NOM}$ later on spear-FUT
I will spear [e.g. a wallaby] later on.
(50)
bwa?a gaw $d^{\text {ra }}$ ana
meat-0 that leave-PAST
[He] left the meat there.
It should be noted however, that the S-O-Complement-V order is not rigidly fixed in Anguthimri and deviations do occur, albeit rather infrequently. Generally, however, it is the verb and the object that change position. The subject tends to stay at the beginning of the sentence. Also, a complement NP might go after the verb or between the subject and object of the sentence.

### 4.2 WORD LEVEL DERIVATIONS

In 3.6 .5 mention was made of the existence of mechanisms in Anguthimri for creating verbs out of other parts of speech. The two verbalisers are:

## - gena transitive verbaliser <br> - geni intransitive verbaliser

These can be added to adjectives, nouns, place constituents and even inflected nouns. The transitive verbaliser -gena has a causative meaning 'to cause $X$ to become $Y$ ' if the kernel sentence is of the form ' X is Y '. Thus, we can have an underlying adjective in:

```
anu \(t^{r}\) alawat \(i\)
I-S red
I am red.
```

which becomes a transitive verb in:
(52) Jwa-ga nani tralawati-gena-na
sun-ERG I-0 red-CAUS-PAST
The sun has made me turn red.
An example of a causative sentence in which the -gena suffix is found on a constituent other than an adjective is:
(53) Iu ma-ra $t^{\text {roka }}$ kara-na-gena-na
he-A man-ERG head-0 down-LOC-CAUS-PAST
The man lowered his head.
which comes from an underlying:
troka kara-na
head-S down-LOC
[His] head is lowered (=down).
The intransitive verbaliser -geni can be added to the same kinds of constituents as the transitive verbaliser and the meaning is simply inchoative 'to be/become $X^{\prime}, ~ e . g$.
(55) anu kayu $t^{r}$ alawati-geni-ni

I-S skin-S red-INCH-PAST
My skin has become red (=is red).
which comes from:

```
anu kayu tralawati
    I-S skin-S red
    My skin is red.
```

and also:
(57) lu ma yunu-geni-ni
he-S man-S there-INCH-PAST
The man went a long way away.
Iu ma kaca-na-geni-ni
he-S man-S down-LOC-INCH-PAST
The man went down.

### 4.3 SENTENCE TRANSITIVITY

Mention was also made in 3.6 .5 of two derivational affixes that can change the transitivity of a verb. Normally, every lexical verb must be described as being either transitive or intransitive, and to change transitivity one must use a derivational affix, except for the single verb:

```
bwa 'break transitive'
bwæni 'break intransitive'
```

which has two clearly related root forms differing in transitivity.

There are two derivational means of changing the transitivity of a sentence in Anguthimri.
(a) The reflexive suffix to a verb in Anguthimri is -ti (and all reflexive verbs belong to conjugation IIa). From an underlying sentence of the form:

$$
\mathrm{NP}_{\mathrm{A}} \quad \mathrm{NP}_{\mathrm{O}} \quad \mathrm{~V}
$$

where $\mathrm{NP}_{\mathrm{A}}$ and $\mathrm{NP}_{\mathrm{O}}$ are marked in some way as being coreferential, the reflexive transformation applies to derive a sentence of the form:

$$
\mathrm{NP}_{S} \quad \mathrm{~V}-\mathrm{ti}
$$

Thus, we might find the verb $3 a^{\prime}$ cover' in a transitive sentence of the form:
(59) anu pwi ?a-ni

I-A bone-O cover-PAST
I covered over the bones.
Undergoing the reflexive transformation, ?a can also occur intransitively in a sentence such as:

```
anu Pa-ti-ni
I-S cover-REFL-PAST
I covered myself over.
```

(b) Reciprocal. Transitive sentences with a plural subject and a coreferential object, and a verb indicating that the participants acted on each other, undergo the reciprocal transformation, in which the verb takes the suffix -pil (which puts the verb into conjugation IIIb). Thus, to a transitive sentence of similar structure to (15) we can relate a setence such as:
(61) amca ?wa bwi:-pci-ni
they-S dog-S kill-RECIP-PAST
The dogs killed one another.
(c) False reciprocal. The corpus contains sentences such as:
(62) kwe?e bwa-pri-ni
spear-S break-RECIP-PAST
The spear broke.
ku t.a-pci-ni
log-S split-RECIP-PAST
The log split.
Here the reciprocal suffix -ppi causes the sentence to change its transitivity, with the ergative NP becoming absolutive, yet the verb does not carry the reciprocal meaning. It is clearly impossible to interpret these sentences as 'the spears broke each other' and 'the logs split each other'.

This is a type of antipassive construction, but it does not parallel the antipassive in a number of other Australian
languages (e.g. Dyirbal, Bandjalang) where a verb with a false reciprocal (or false reflexive) suffix can have a patient, usually in some oblique case (say, dative or locative). The corpus contains no occurrences of sentences similar to (62) or (63) with an underlying accusative that has become some oblique case.

### 4.4 POSSESSION.

The morphology of alienable possession was outlined in 3.2.1. It was pointed out that the possessor noun is marked.by a suffix, either -mª, -namra or -yamca. This process is generally reserved for situations of alienable possession. Where the possessor NP is in a non-zero case inflection, the genitive NP can agree with it. The morphology of non-zero case-marking on genitive NPs is quite regular. Thus:
(64) Iu watayi-yamra-ma pat ${ }^{r}$ a-ma pa-ni
he-S old man-GEN-ABL canoe-ABL come out-PAST
He got out of the old man's canoe.
Inalienable possession can be indicated in the same way, but it seems to be generally indicated by apposition without suffixation. Things that are regarded as inalienably possessed in Anguthimri are:
(i) Parts of the body:
anu kayu
I skin $\quad$ 'my skin'
(ii) Kin: agu rudi 'my grandson'

I grandson
lu nati 'his father' he father
(iii) Parts of some kind or whole: tu?u ?ya 'leg hair'
leg hair

| $d^{r}$ ya mwini | 'sore on an arm' |
| :--- | :--- |
| arm sore |  |
| ga?u na |  |
| chin beard |  |

When inalienably possessed NP's occur in non-zero caseframes, the case suffixes follow the last item.

### 4.5 COMPLEX SENTENCES

In 3.6, the paradigms listed include a 'consecutive' suffix of the form -nama, -nvkumu, -nukumu or -nikumu, according to conjugation and sub-conjugation membership. In form, most of these variants (i.e. the -nvkumu, -nikumu or -nukumu) are probably originally purposives. The -nu is the nominaliser found in other Northern Paman languages such as Linngithigh and the Northern Peninsula group, and the -ku is clearly the common Australian dative. Only the -mu syllable cannot be explained at this stage. However, although his-
torically only a purposive, this suffix now carries a much wider range of functions; it generally indicates simply sentence subordination and sentence coordination of various types. It also occurs in simple sentences such as the following, but with a desiderative reading:
(65) anu gwa-nakumu

I-A eat-CONSEC
I want to eat (something).
In complex sentences, this suffix expresses the following ideas:
(i) Purposive. The presumed historically original meaning of the suffix is maintained in Anguthimri. The verb of the sentence acting as a purpose complement is marked by the consecutive suffix. If there is a common NP, it may be deletable under some identity conditions; however, there is no need for there to be a common NP, e.g.
(66) lu ku ?wa-na ta-nakumu
he-A wood-0 cut-PAST burn-CONSEC He cut the wood for burning.

$$
\begin{align*}
& \text { lu ma gægi amca ruci garu ani-nama }  \tag{67}\\
& \text { he-s man-S shout-PRES they-S child-s there go-CONSEC } \\
& \text { The old man is shouting for the children to go away. }
\end{align*}
$$

(ii) Symmetric conjunction. The suffixes above have also developed another function in Anguthimri, that of expressing 'and then' constructions. Symmetric conjunction is a possible structure for (67) where two readings would be possible, i.e. the one given, and also 'The old man is shouting, and the children ran away [after that]'. The sentence below is an example where a purposive reading is unlikely, and a conjunctive reading is to be preferred:
lu twe le-ni $\quad$ agima-nakumu
he-S too much walkabout-PAST suffer-CONSEC
He walked about too much and is now suffering.

### 4.6 IMPERATIVES

To express a positive imperative, the second person pronouns (i.e. dru 'sg'; pi 'dl'; ce:ye 'pl') are used with the verb following with the imperative inflection (as presented in 3.6.2), e.g.
(69) dru na yumu-?u
you-A fish-0 cook in ashes-IMP
Cook that fish in the ashes!
(70) pi narama-?a
you-S stand-IMP
You two stand up!
To express the negative imperative, i.e. the prohibitive, the particle yuyu is placed before the verb:
(71) dru yuyu $\beta i=n i-? i$
you-S PROHIB go down-IMP
Don't go down (there)!

### 4.7 PARTICLES AND INTERJECTIONS

Those known are:

| ge?e | 'no' | garu 'that way' |  |
| :--- | :--- | :--- | :--- |
| yuyu | 'don't' | ßaw | 'cheerio' |
| kati?i | 'perhaps' | ßama | 'again' |
| wi | 'this way' |  |  |

## VOCABULARY

## ALPHABETICAL VOCABULARY

Below is presented an alphabetical listing of words recorded from Mr. Don Fletcher of New Mapoon, the consultant for this study. The list is exhaustive for the corpus that was assembled. (It should be pointed out at this stage that no textual material can be presented for this language. The sketch grammar that has been written is based entirely on elicited data, as the speaker no longer uses the language, and his degree of fluency was such that he did not feel competent to speak spontaneously into a tape recorder in the form of a monologue.) The alphabetical order that is chosen for this wordlist is as follows:
$a, \neq b, d, d, d, d^{r}, d, e, g, \gamma, i, k, ?, l, m, n, n, n, \eta, o$,
$\ddot{o}, p, r, r, s, \int, t, t, f, t r, u, u, \beta, w, y, 弓$
with long vowels being ordered after short vowels, and nasal vowels after oral vowels.

The abbreviations employed are as follows:

| N noun | T | time |
| :--- | :--- | :--- |
| ADJ adjective | tr | transitive |
| PART particle | intr | intransitive |
| INT interjection | irr | irregular |
| LOC locational |  |  |

Details of conjugation membership and transitivity are given for each verb. Where the ergative declension (I, II and III) and/or the genitive declension (A or B) of a noun is known, this information is also given. Note that there are a few examples of a root being recorded with allomorphs from two different conjugations, or two different declensions.
a, Vtr (Ia): pull
adi, N: ritual scar
adiki, N(II): moon
adiki, ADJ: yellow
aditi, N: wrinkle
aģima, Vintr(IIa): suffer anu, $N:$ hip
ana, Vintr(irr): go, come ajukwini, $N:$ mother's brother anurudi, $N:$ my grandchild aputa, N: daughter
arana, $N$ : toenail, fingernail
acu, Vintr(IIa): bark
awniladi, N: eldest sister
awnipwa, $N:$ middle sister
ay, $N:$ vegetable food
ba, N: island
baya, N: bag, marsupial's pouch bana, Vintr(irr): climb banu, $N:$ wattle species barana, N: carpet snake
ba[i, LOC: up
baw, N(I): tooth
bay, N: barracouta
ba: nu, $N:$ wild cucumber, grape
bi:ni(pwa), AdJ: short
bcadra, $T$ : long time ago
brana, N(II,III;B): husband bre?eja, Vintr(IVa): play
breni, $N:$ beach
$b c i, N(I): ~ m u d, ~ r e d ~ p a i n t$
bcini, Vintr(IIa): be dirty
bcini-bcini, Vintr (IIIb): be noisy
bruyi, $\mathrm{T}:$ night
bcuyi-bcuyi, T: afternoon
bu?u, N(III;B): ghost
bu?u-ge, $N:$ clever man
büyu, N : scorpion
büwutu, $N$ : large crab species
bwa, Vtr(Ia): break
bwa?a, N(III): meat, flesh
bwana, $\mathrm{N}: ~ b r e a m$
bwaraka, N: Torres Strait pigeon
bwæni, Vintr(IIa): break
bwi:, Vtr(IIIa): kill
bwi:ni, N: back
dadi, ADJ: fast
dimigiti, $N:$ water goanna
dữu, $\mathrm{N}:$ word
dupcixi, N(A): old lady
duru, $N$ : four-prong spear
duwioi, $N:$ name
du: lu, N: garfish
du:nu, $N:$ small whiting
dwaya, $\mathrm{N}:$ beach
dwakwabati, N: salmon
dwiri, N: sugarbag bee
da, $N:$ chips of wood, splinter
dayu, $N:$ testicles
da?a, N: grass
da:ţamana, N: sap
dæ:wati, ADJ: greedy
de:ni, N(III;B): wasp
di, $N$ : smooth-bark tea tree
di, Vtr(IIIa): suck
diti, $N:$ New Guinea sago
duci, $N:$ kingfisher
dwa, N: eye
dwa-pawa, N: eyeball
dwa-pay, N: eyebrow
dwa, Vtr(IIa): catch
dwaladi, N(II;A): wild dog
dwi?i, N: buttocks
dwimi, $N:$ string
dwini, $N:$ vine
ga, $N$ : ground
ga, Vtr(Ia): make
ga:tini, $N:$ reef
ge, ADJ: good
deci, $N:$ whitebark tree in mangrove
gil:, Vintr(IIIa): fall
gi:, Vtr(IIIa): light fire
gu?u, $\mathrm{N}:$ breast, milk, lump on tree
$d^{r}$ a, Vtr(IIa): leave, put down
dradata, Vintr(III): live, Iie down
drati, N(II): current, tide
$d^{\prime}$ ati, Vintr(IIb): lie down
$d^{r} e: b[i, N: ~ u m b r e l l a ~ p a l m ~$
$d^{r}$ e:gwat $\mathrm{i}, \mathrm{N}:$ trevally
$d^{r} e: m \mathrm{i}, \mathrm{N}:$ outrigger, shirt
$\mathrm{d}^{「 r e}: n \mathrm{i}, \mathrm{ADJ}:$ different
$d^{r} e: \neq i m[i, N: s h i r t$
$\mathrm{dr}^{\mathrm{i}}, \mathrm{N}$ : throat
$d^{r} i=g i t i, A D J: ~ s w e e t$
$d^{r}$ wa?ara, $T:$ today, daytime
drwala, $N$ : long-tom
$d^{r}$ wamea, $N(I I I ; B)$ : woman
drwana, N(II,III;B): wife
$d^{r}$ we, $N:$ shell
drwili, N: brolga
drya, $N$ : wing, arm
owfjiki, N: white kangaroo
ðay, $N(I, I I)$ : mother
ðaymㄷ, ADJ: hungry
ðadi, Vintr(III): burn
ðæ:na, Vtr(IIa): bury
ðitama, Vintr(II): be afraid
ðu, Vtr(Ia): sew
ðu?u, N: yamstick
ðurupu, ADJ: sma11
ðutu, Vtr(IIb): follow
owata, Vintr(IIa): flow down
owimi, Vintr(IIb): tell lies
dwiti, ADJ(II;B): two
ga, $N(I)$ : mouth
ga, Vtr(Ib): poke
ga, Vtr(IVa): peel
ga?aga, $N(I I ; A)$ : kookaburra
ga?u, $N$ : chin
ga?u-刀a, N: beard
gamaranu, $N:$ pannikin
gapra, ADJ: bad
garu, PART: that way
garu?ana, $N:$ spear type
gacaka, N: star
gat $r_{\text {al }} \mathrm{i}$, ADJ: sour
gawỡayi, $N:$ crocodile
gawri, Vtr(IIa): look for
gæ, Vtr(IIa): ask
gægi, Vintr(irr): shout
gæPama, Vintr(IIa): laugh
geginana, $N$ : emu
ge?e, INT: no
ge?ekeka, Vtr(Ia): tickle
geca, Vintr(irr): sit
goy, N(II;A): buck wallaby gu, N: knee
guwana, N: curlew
gu:nu, ADJ: heavy
gwapta, Vtr(irr): eat, drink
gwata, LOC: north
gwe:ni, N: 1ily
gwunu, N: ankle, knuckle
gya, $N$ : native cat
yayu, N: messmate tree
yama, N(III;B): taro, wild
cucumber, child
yara, N: large cabbage tree
yaru, N: bloodwood
yay, N: rain
yefi, $N:$ snake (generic)
yunu, LOC: distant
yurupigi, ADJ: tall
ywa, N(I): sand
ywa-pay, N: sandhill
ywagata, Vintr(IVa): swim
ywa?ati, N: small crab species
ywini, N: coughing, breathing
yyana, N(III): axe
yYu, Vtr(Ia): spear
yyüdi, N: scrub, dry forest
idi, $N:$ loya cane
iyi, N: termite mound, snapper
iyiti, ADJ: brown
kadaka, N: oyster
kagi, N: black ibis
kayu, N: skin
kayu rimi-rimi, ADJ: jealous
kayu-ge, $N$ : palm of hand
kayuparaţi, N: coconut palm
kayu- $\beta$ wati, $N:$ mixed race person
kayu-we:ye, N: muscle
kali, N: hole
kalipwa, N: gully
kama, N: gum species
kanana, $\operatorname{Vtr}(I I a):$ find
karagwa, Vintr(IIa): craw1
karuku, N: beer
karupu, N: buck red kangaroo
kaca, LOC: down
kati?i, PART: perhaps
kati?i, $\mathrm{T}:$ soon
kati(ni), ADJ: deep
kaw, N: lice
kayi-kayi, $\mathrm{T}:$ later on
kerimi, ADJ: clean, shiny
kili, N: king parrot
kiri-kiri, N: wood duck
kici, N(III): knife
köyyi, $N:$ lefthand side
ku, N(I): tree, wood, stick
kubu, N: blackfruit
kuku, N: mother's father, father's
sister
kukulæ: ye , N: Islander
kukunati, $N: ~ s c r u b ~ h e n ~$
kumala, N: sweet potato
kumugini, $\mathrm{N}:$ woodpecker
kunu, $T$ : now
kutraka, $N$ : fighting stick
kuwati, N: grub
kwabi, N: quandong
kwada?a, N: crane
kwana, $N$ : nape of neck
kwe, N(II): foot
kwe-rãya, N: footprint
kwe?e, N(II): straight spear
kwi?iti, N: long yam
kwiniyi, N: possum
kwini:yi, N: cassowary
kwi:, Vtr(Ia): have, keep, look after
kwi:yi, N: eldest sister
kwumru, N: wrist
kyabara, N(I;A): alligator
?a, $N(I)$ : hand
?a, Vtr(IIIa): cover
?i:, Vtr(Ia): wake
?unuwana, $\mathrm{N}: ~ b l i s t e r$
?wa, N(II;B): tame dog
?wapwa, N: pup
?we?e, Vtr(irr): cut, chop
?wi:ni, N: chest, rib
?ya, N: hair
?ya-dwa-pay, N: eyelashes
?ya:na, N: twigs
?yuru, N: white gum
la, N: wattle species, black snake
ladi, N: marrow
ladi, N(III;A): girl
laðu, N: hawk
laga-laga, N: leg corroboree
laya, $\mathrm{N}: ~ l i z a r d ~(g e n e r i c) ~$
layu, N: jaw, cheek, temple
layubreci, $\mathrm{N}:$ white cockatoo
lali, N: harpoon
lamalati, N: stranger
lana, N: tongue
lanu, N: sea
latimi, ADJ: alive
lay, Vtr(IIa): carry
la:ga?a, N: death adder
Iæ, Vintr(IVa): go walkabout
lædi，N：grass－tree læ： $\begin{aligned} & \text { a，} N: ~ f o r k ~ i n ~ t r e e ~\end{aligned}$ lu？u， N ：mangrove
luluma，Vintr（IIa）：swell up
lwaga，N（II）：sickness
Iwagati，N：kingfish
Iwagatimci，ADJ：sick
lwe，N：lake
Iwi：yi，ADJ：angry
ma，$N(I I ; B): m a n$
ma，Vtr（IIIa）：hear，listen to
maya， N ：small brown snake
mayu，$N$ ：armpit
mayu？$i: n i, N:$ saltwater mullet
mayunu，$N:$ lips
ma？atana，Vtr（IIb）：lift up
ma？æni，N（A）：father＇s brother， elder brother
malyari，$N$ ：corroboree（generic）
mamaliti，$N:$ message stick
marapi，$N:$ bamboo
maru， $\mathrm{N}: ~ q u e e n f i s h$
maruku，N：horse
mawkwiyi，N：countryman
mayi，N：father＇s father
mæ，Vintr（IIIa）：get up，wake up
midi，$N:$ club，spear thrower
m「æcagi， $\mathrm{N}: ~ l a n d ~ g o a n n a ~$
mrã̧̧ iri，N：black duck
mCitiki，ADJ（II）：many
mu， N ：buttocks
mu？utu，$N$ ：firestick
muruti，$N:$ fish（generic）
mutu－mutu， N ：anthole
mutiti，N：white ibis
muwã̃，$N:$ fin
muwi，$N:$ fig－tree
mwa，N：fire
mwa－rwi？i，N：hot coals
mwi，Vintr（irr）：dance
mwini， $\mathrm{N}:$ sore
myügu，$N$ ：short yam
nabu，$N$ ：tree $s p$ ．in mangrove
nama，$N$ ：rough－bark tea tree
namaraju， $\mathrm{N}: ~ f r y i n g-p a n$
napu，Vtr（Ia）：swallow
natabani， $\mathrm{N}: ~ s w e a t$
nat imi，ADJ：tired
nati，N（III；B）：father
ni，N：place，camp
ni： $\mathrm{fi}, \mathrm{N}(\mathrm{A}):$ boy
nubuti，$N$ ：navel
nu：nu，$N$ ：wild potato
na，$N:$ fish（generic）
nagu，$N$ ：fern
namweye，$N$ ：ironwood
narama．Vintr（IVa）：stand
nedi，$N: ~ s m a l l$ cabbage tree
nu，ADJ：different
nu，Vtr（Ia）：kick
クa，N：beard，moustache
クa，Vtr（IIa）：dig
naba，N（III）：paddle
gu，N：clothes
gu：bwa，ADJ：hot
gu：｜u，N（III；A）：mosquito
万wa，N（I）：sun
nwa？ata，$N:$ catfish
刀wa［i，N：bandicoot
owita，Vtr（IIa）：pour out，empty
pagiki，$P:$ recently
paguru，N：yawn
pa？u，$N:$ blue－tongue lizard
palawara， $\mathrm{N}: ~ f l o w e x$
pana，N（A）：friend
papatji，N（I，II，III）：stone
paruparaţi，N：cottonwood
pata，Vtr（IIa）：fix，make
patra，$N:$ canoe
patra－dre：m［i，N：outrigger canoe
pawa，N：egg
pawt i，ADJ：blunt
pay，$N$ ：forehead，face
pay ðuwi－ðuwi，ADJ：ashamed
pay－ga，$N$ ：hillside
pa：na，$N:$ riverbank，level
pæ，Vintr（IIa）：come out
рæ？a，N：elbow
pemini，$N$ ：thunder
pimi，ADJ：one
P［a，Vtr（IIa）：rub，wash
prana， $\mathrm{T}:$ morning
prece，Vtr（irr）：pick up
pro？a，N（III；A）：Erog，tadpole
PCuPu，$N(I I I ; A):$ maggot，worm，leech， ghost．
prulu， N ：rainy season
pu，Vtr（Ia）：do，throw
puơi（pwa），ADJ：small
pu？a，N（III）：water
pulugini，N：blanket
puluku，$N$ ：bullock
putuku，ADJ：hard
puţiki，ADJ（II）：many
putru， N ：sailboat
puyimi， $\mathrm{N}: ~ b i l l y c a n$
pwa？akwiti，$N$ ：kangaroo rat
pwapu，N：lily species
pwe：，Vintr（IIIb）：go in
pwe：ke，N：groper
pwi， N ：bone，seed
ra，N：stomach
ra， $\operatorname{Vtr}(\mathrm{Ib}):$ wash，rub
ragu，N：sandpaper tree，prawn
rayu，ADJ：clear
rama，ADJ：empty
rana，N：sky
rana，N：river
ranapwa，N：creek
rani，$N:$ bailer shell
raw，ADJ：black
rãya，N：shade
rẽye，N：whitefish
ri，N：excrement
rigi，Vtr（IIIb）：hit，punch
riyiga，Vtr（IIa）：smash
roga，ADJ：grey
rudi，N：grandson
rugu，N：bulrushes
rugunu，$N$ ：file stingray
ruluku，N：taipan
rumu，N：fish net，side
rumu，Vintr（IIb，IVb）：bend down
rumuprana，N：kidney
ruci，N（III；A）：mother＇s sister，
child
rwa，N（I）：white paint
rwagati，N（II）：fishing－line
rwamati，$N:$ bamboo pipe
rwi？i，N：charcoal
rwili，$N:$ native almond
Cama，T：recently
ca：deye，N：jabiru
¡æすiŋana，$N:$ honey，grease
ceri，N：crow
［i，$N:$ nose
〔iði，N：nasal mucus
［i putuku，ADJ：jealous
［idi，N：freshwater turtle species ［i－үupukwi：yi，N：jabiru，brolga cici，N：oak
sæla，N：milkwood species
fi？i，N：green snake
$\int i \beta i r i, N:$ culture hero
tabwa，N：small bee tapifi，N：wife＇s brother tarama，N：drum taßa， N ：road
taßayama，N：wife＇s brother
tiyati，ADJ：soft
tini，N：tin
tiri，N：tick
ti：ni，N：swamp
tugumu，N：c1iff
tuci， $\mathrm{N}:$ trochus shell
twala，N：plain
twiniga，Vtr（IIa）：bash
ta，Vintr（IIa）：stand
ta，Vtr（IIa）：bite，tie，burn／cook
tabæ，Vtr（IIa）：chase
tabwa，N：younger brother／sister
talu，N：shoulder
tama，N：thumb
tapi，N：wing
tarana，N：spotted snake
ta ${ }^{[a n a, ~ A D J: ~ c o l d ~}$
taciti，ADJ：cold
tata，N：fighting spear
tæ，Vtr（IIa）：push，send，move
$\ddagger æ \beta i, A D J: b l u e, ~ g r e e n$
tidini， $\mathrm{N}:$ wax in ears
tilini，N：saltwater turtle species
timciti，N：large grasshopper
timciちi，N：large grasshopper
tiniprece，N：lady apple
tinipri，N：large grasshopper
tiribwiti，N：porcupine
titiri，N：willy－wagtail
tiyiga，Vtr（IIa）：smash
ti：ni，N：spear type，thigh
tu， $\mathrm{N}:$ west
tudu，N：leaf
tupu，N：leg
tumu，ADJ：dead
twara，N：eagle
†a，N：language，speech，song
tha， $\operatorname{Vtr}(\mathrm{Ia}):$ split
taya，N：tail
takara，N：large whiting
ta？aga，N：long－tail stingray
ţa？ateca，Vintr（irr）：run
tama，Vintr（IIa）：jump
fra， $\operatorname{Vtr}($ irr $):$ say to
teciyeci，N：burr
figiri， $\mathrm{N}: ~ j o e y, ~ d o e ~ w a l l a b y$
fiti，N：fishhawk
fi：，Vtr（Ia，IIIa）：see，look at
孔uरußu，N：tobacco，cigarette
fumu，$A D J:$ three
，wa，Vtr（IVa）：tell
waðaga，Vtr（IIa）：wash
twaka，Vtr（IIa）：heap up
fwama，N：hill
twana，N：wave
warama，Vintr（IIa）：float
fwe：ye，N：flood
ţwi，Vtr（irr）：say to
twitionana，$N:$ beeswax
+raða, N: barramundi
tralawati, ADJ: red
tray, N: penis
træ:ni, N: green turtle
trelimi, $\mathrm{N}: ~ b l o o d$
troka, N: head
trokaßati, N: scrub turkey
trokanwi, N: lagoon
troka-troka, N: end
$t^{r} u, N$ : urine
trya, $N(I ; A)$ : ant, shark
ubu, $N$ : red gum
$\beta a$, PART: back, again ßaði, N: intestines ßama, PART: back, again Bacaka, T: long time ago ßati, N: righthand side Bata, LOC: south
Baw, INT: goodbye
$\beta i: n i, \operatorname{Vintr}(I I b): ~ g o ~ d o w n$
$\beta$ Ce?e- $\beta$ ce?e, ADJ: slippery
$\beta[i ? i, N:$ vagina
$\beta \ddot{i} c u, N:$ smoke
$\beta \ddot{y}$ i, N(I): dust,ashes,fog, cloud
ßwagi, N: milkwood species
$\beta w e, N:$ brains
ßwe:ni, N: dream
ßwi, Vintr(irr): die
wa, $N:$ grey hair
wa?a, N(III) : ear
walapanu, $\mathrm{N}:$ hat, dinghy, whaleboat
wara, $N$ : flat-tail stingray
watayi, N(III;A): old man
wati, Vintr(IIIb): dive
we, N : owl
we:ye, $A D J:$ big, fat
wi, PART: this way
wim「igera, Vintr(irr): cry
winiga, Vtr(IIa): scratch
winimi, $N:$ spotted stingray
wuyulabi, N: frill-neck lizard
wunatimci, T : tomorrow
wutj $i$, $N$ : house
ya, $\operatorname{Vtr}(\mathrm{Ia}):$ give, bring yayara, $N$ : centipede, dragonfly yara, N: seagull
yarata, $N$ : small parrot species
yegi, N(III) : wind
yeri, N: feather
yeti, N: bird (generic)
yibati, N: plains turkey
yugi, N: loggerhead turtle
yumu, Vtr(IIb): cook in ashes
zeni, Vintr(irr): vomit
3i, Vtr(Ia): blow
zoya, N: fly
弓upu, N: lily species

## VOCABULARY IN SEMANTIC FIELDS

## NOUNS

A - Body parts
troka, head
ßwe, brains
?ya, hair
wa, grey hair
pay, forehead, face
dwa, eye
dwa-pay, eyebrow
dwa-pawa, eyeball
?ya-dwa-pay, eyelashes
[i, nose
[ioi, nasal mucus
wa?a (III), ear
tidini, wax in ears
layu, jaw, cheek, temple
ga?u, chin
ga (I), mouth
mayunu, lips
ga?u-ŋa, beard
ja, beard, moustache
anu, hip
nubuti, navel
ra, stomach
rumuprana, kidney
$\beta$ aði, intestines
bwi:ni, back
mu, dwi?i, buttocks
tu?u, leg
ti:ni, thigh
gu, knee
gwunu, ankle, knuckle
kwe (II), foot
kwe-rãya, footprint
$t^{\text {「ay }}$, penis
dayu, testicles
$\beta$ ifil, vagina
$r i$, excrement
$t^{r} u$, urine
kayu-we: $\gamma$ e, muscle
kayu, skin
pwi, bone
ladi, marrow
trelimi, blood
natabani, sweat
mwini, sore
?unuwana, blister
adit!, wrinkle
adi, ritual scar
|waga (II), fever, sickness
$\beta w e: n i$, dream
paguru, yawn
B - Human classification
ma (II;B), man
drwamca (III;B) woman
yama (III;B), ruci (III;A), child
ni:yi (A), boy
watayi (III;A), old man
ladi (III;A), girl
dupciyi (A), old lady
mawkwiyi, countryman
kayu- $\beta$ wati, mixed race person
kukulæ:ye, Islander
fißiri, culture hero
buPu-ge, clever man
lamalati, stranger
pana (A), friend
bu?u (III;B), pru?u (III;A), ghost

C-Kinship
anukwini, mother's brother
ðay (I,II), mother
ruci, mother's sister
nati (III;B), father
ma?æni (A), father's brother kuku, father's sister,
mother's father
mayi, father's father mâæni (A), elder brother
tabwa, younger brother/sister
awniladi, kwi:yi, eldest sister
awnipwa, middle sister
anuta, daughter
(aßu) rudi, (my) grandchild
brana (II,III;B), husband
drwana (II,III;B), wife
tapifi, taßayama, wife's brother
D - Marmals
tiribwiti, porcupine
gya, native cat
Jwari, bandicoot
kwiniyi, possum
goy (II;A), buck wallaby
karupu, buck red kangaroo
ðawtiki, white kangaroo
figiri, joey, doe wallaby
baya, pouch of marsupial
țaya, tail
pwa?akwiti, kangaroo rat
dwaladi (II;A), wild dog
?wa (II;B), tame dog
?wapwa, pup
maruku, horse
puluku, bullock
E-Reptiles
gawôayi, crocodile
kyabara (I;A), alligator
$t^{「}$ æ:ni, green turtle
yugi, loggerhead turtle
tilini, saltwater turtle species
[id: fresh-water turtle species
laya, lizard (generic)
pa?u, blue-tongue lizard
wuyulabi, frill-neck lizard
mræragi, land goanna
dimigifi, water goanna
yeci, snake (generic)
barana, carpet snake
Ji?i, green snake
la:ga?a, death adder
ruluku, taipan
la, black snake
maya, small brown snake
tarana, spotted snake
F - Birds
yeti, bird (generic)
pawa, egg
tapi, drya, wing
yeri, feather
gedinana, emu
kwini:yi, cassowary
d wili, ci-yu?ukwi:yi, brolga
ca:deye, ci-yu?ukwi:yi, jabiru
kwada?a, crane
guwana, curlew
yibati, plains turkey
trokaßati, scrub turkey
kukunati, scrub hen
bwaraka, Torres Strait pigeon
we, owl
kumugini, woodpecker
reci, crow
ga?aga (A), kookaburra
duci, kingfisher
titiri, willy-wagtail
layubceci, white cockatoo
yarata, small parrot species
kili, king parrot
laðu, hawk
†iti, fishhawk
twara, eagle
kagi, black ibis
mutiti, white ibis
mrひ̈́t iri, black duck
kiri-kiri, wood duck
yara, seagull
G-Fish, etc.
muruti, na, fish (generic)
muwã, fin
rẽye, whitefish
dwakwabati, salmon
takara, large whiting
du:nu, small whiting
du:lu, garfish
Dwa?ata, catfish
bwana, bream
maru, queenfish
mayu?i:ni, salt-water mullet
t aða, barramundi
$d^{r}$ wala, long-tom
$d^{r} e: g w a t i, ~ t r e v a l l y$
bay, barracouta
Iwagati, kingfish
iyi, snapper
pwe:ke, groper
trya (I;A), shark
winimi, spotted stingray wara, flat-tail stingray
ja?aga, long-tail stingray
rugunu, file stingray
kadaka, oyster
ywa?aţi, small crab species
büwutu, large crab species
$d^{\prime}$ we, shell
rani, bailer shell
tu[i, trochus shell

H - Insects
iyi, termite mound
mutu-mutu, anthole
trya, ant
de:ni (III;B), wasp
tabwa, small bee
dwiri, sugarbag bee
jwitinana, beeswax
rædimana, honey, grease
büyu, scorpion
yayara, centipede, dragonfly
pru?u (III;A), maggot, worm
zoya, fly
ju:lu (III;A), mosquito
kuwati, grub
ragu, prawn
proia, (III;A), frog, tadpole
timciti, timciti, tinipci, large
grasshopper
tiri, tick
kaw, lice
I - Language, ceremony, etc
ja, language, speech, song
duwidi, name
duôu, word
malyari, corroboree (generic)
laga-laga, leg corroboree
$J$ - Material artefacts
kut「aka, fighting stick
mamaliti, message stick
ðu?u, yamstick
midi, club, spear-thrower
tata, fighting spear
kwe?e (II), straight spear
duru, four-prong spear
garu?ana, spear type
ti:ni, spear type
lali, harpoon
kici (III), knife
yyana (III), axe
mu?utu, firestick
rumu, fish net
rwagati (II), fishing-line
dwimi, string
patra, canoe
walapanu, dinghy, whaleboat, hat
jaba (III), paddle
put ${ }^{r} u$, sailboat
patra-dre:mci, dre:mí, outrigger canoe
$d^{r} e: t i m[i, ~ d r e: m c i, ~ s h i r t$
nu, clothes
pulugini, blanket
baya, bag
tini, tin
tarama, drum
puyimi, billy can
gamaranu, pannikin
namaranu, frying-pan
rwamati, bamboo pipe
rwa (I), white paint
K - Food, fire, water
bwa?a (III), meat, flesh
ay, vegetable food
fuyußu, tobacco, cigarette
karuku, beer
mwa, fire
ku (I), wood
rwi?i, charcoal
mwa-rwi?i, hot coals
Büyi (I), ashes
Büru, smoke
pu?a (III), water
Iwe, lake
trokanwi, lagoon
lanu, sea
twana, wave
drati (II), current, tide
ranapwa, creek
rana, river
pa:na, riverbank, level
ईwe:ye, flood
ti:ni, swamp
yay, rain
$L$ - Celestial, weather etc
jwa (I), sun
rãya, shade
adiki, moon
garaka, star
rana, sky
$\beta \ddot{i y} i$, dust, fog, cloud
yegi (III), wind
pemini, thunder
prulu, rainy season
M - Geography
ni, place, camp
wuţ i , house
tapa, road
ga, ground
bгeni, dwaya, beach
ywa (I), sand
ywa-pay, sandhill
ga:tini, reef
ba, island
bri (I), mud, red paint
kali, hole
kalipwa, gully
twala, plain
$\dagger$ wama, hill
pay-ga, hillside
tugumu, cliff
papaţi (I,II,III), stone
troka-troka, end
N - Arboreat
ku (I), tree, wood, stick
la:ya, fork in tree
tudu, leaf
yyüdi, scrub, dry forest
?ya:na, twigs
da, splinter, chips of wood
da: ţamana, sap
palawara, flower
pwi, seed
da?a, grass
nagu, fern
teciyeci, burr
gwe:ni, lily
pwapu, 3u?u, lily species
ubu, red gum
yacu, bloodwood
?yucu, white gum
kama, gum species
pacupacaţi, cottonwood
namweye, ironwood
sæla, $\beta w a g i, m i l k w o o d ~ s p e c i e s$
yayu, messmate tree
ragu, sandpaper tree
$d^{r} \mathrm{e}$ :bri, umbrella palm
cici, oak
lupu, mangrove
geci, whitebark tree in mangrove
nabu, species of tree in mangrove
banu, la, wattle species
di, smooth-bark tea tree
nama, rough-bark tea tree
nedi, small cabbage-tree
yara, large cabbage tree
|æd: grass-tree
muwT, fig-tree
diti, New Guinea sago
kwabi, quandong
kayuparaţi, coconut palm
tiniprece, lady apple
rwili, native almond
myüyu, short yam
kwi?iti, long yam
kumala, sweet potato
nu:nu, wild potato
ba:nu, wild cucumber, grape
yama, taro, wild cucumber
kubu, blackfruit
idi, loya cane
marapi, bamboo
rugu, bulrushes
dwini, vine

0 - Adiectives
pimi, one
Jwiti (II:B), two
ђumu, three
mıitiki (II), puţiki (II), many
raw, black
tralawati, red
tæßi, blue, green
iyiti, brown
roga, grey
adiki, yellow
we:ye, big, fat
pữ (pwa), đurupu, small
yurupigi, tall
bi:ni(pwa), short
kati(ni), deep
gu:bwa, hot
tarana, taciti, cold
putuku, hard
tiyati, soft
gu:nu, heavy
rama, empty
$\beta$ re?e- $\beta$ re?e, slippery
dadi, fast
pawfi, blunt
dri:giti, sweet
gatrali, sour
kerimi, shiny, clean
rayu, clear
ge, good
gapca, bad
pay ðuwi-ðuwi, ashamed
|wi:yi, angry
dæ:wati, greedy
ci putuku, kayu rimi-rimi, jealous
tumu, dead
Tatimi, alive
I wagat im¢i, sick
natimi, tired
бaymi, hungry
nu, dre:ni, different

## VERBS

P - Motion
ana (intr)irr, go, come l's (intr)IVa, go walkabout
pwe: (intr)IIIb, go in
pæ (intr)ITa, come out
$\beta i: n i$ (intr)IIb, go down
能U (tr)IIb, follow
tabæ (tr)IIa, chase
karagwa (intr)IIa, crawl
tama (intr)IIa, jump
mwi (intr)irr, dance ja?ajeca (intr)irr, run
bce?ena (intr)IVa, play
gi: (intr)IIIa, fall
bana (intr)irr, climb
ywagata (intr)IVa, swim
wati, (intr)IIIb, dive
owata (intr)IIa, flow down
Q - Rest
geta (intr)irr, sit
rumu (intr)IIb, IVB, bend down
ma (intr)IIIa, get up
ta (intr)IIa, narama (intr)IVa, stand
drati (intr)IIb, Iie down
†warama (intr)IIa, float
R - Induced position
kwl: (tr) Ia, have, keep, look after
dra (tr)IIa, leave, put down
owita (tr)IIa, pour out, empty
ma?ataŋa (tr)IIb, lift up
jwako (tr)IIa, heap up
prece (tr)irr, pick up
dwa (tr)IIa, catch
lay (tr)IIa, carry
ya (tr)Ia, bring, give
a (tr)Ia, pull
tæ (tr)IIa, push, send, move
pu (tr)Ia, throw
kanaŋa (tr)IIa, find
$S$ - Affeet
bwi: (tr)IIIa, kill
yyu (tr)Ia, spear
twinina (tr)IIa, bash
rini (tr)IIIb, hit, punch
fu (tr) la, kick
ga (tr) Ib, poke
กa (tr)IIa, dig
?we?e (tr)irr, cut, chop
ga (tr)IVa, peel
winiga (tr)IIa, scratch
bwani (intr)IIa, break
bwa (tr)Ia, break
ta (tr)Ia, split
riyiga tr(IIa), tiyiga(tr)lia, smash
gi: (tr)IIIa, light fire
yumu (tr)IIb, cook in ashes
dadi (intr)III, ta (tr)IIa, burn
ta (tr)IIa, tie
bcini (intr)IIa, be dirty
ra (tr)Ib, PCa (tr)IIa, rub, wash
twadaga (tr)IIa, wash
? ${ }^{2}$ (tr)IIIa, cover
đæ:na (tr)IIa, bury
ga (tr)Ia, make
pata (tr)IIa, fix, make
ðu (tr)Ia, sew
pu (tr) Ia, do
T-Attention
fi: (tr)Ia, IIIa, see
gawri (tr)IIa, look for ma (tr)IIIa, hear, listen to
$U$ - Talking, etc
$\dagger_{\text {æra ( }}$ (tr)irr, $\ddagger w i$ (tr)irr, say to
fwa (tr)IVa, tell
敌imi (intr)IIb, tell lies
gæ (tr)IIa, ask
gægi (intr)irr, shout
açu (intr)IIa, bark
bcioi-brigi (intr)IIIb, be noisy
V - Corporeal
gwap ca (tr)irr, eat, drink
ta (tr)IIa, bite
napu (tr) Ia, swallow
di (tr) IIIa, suck
Zeni (intr)irr, vomit
Pi: (tr)Ia, wake
$3 i(t r) I a, ~ b l o w ~$
adima (intr)IIa, suffer
luluma (intr)IIa, swell up
ge?ekeka (tr)Ia, tickle
dradata (intr)II, live, lie down
$\beta w i$ (intr)irr, die
wimcigeca (intr)irr, cry
gæ?ama (intr)IIa, laugh
ðitama (intr)II, be afraid

W - LOCATION
gwata, north
ßata, south
$t u$, west
yunu, distant
bari, up
kara, down
X - TIME
bcadra, ßaraka, long time ago
pagiki, [ama, recently
kunu, now
kati?i, soon
drwa?ara, today, daytime
bcuyi, night
kayi-kayi, later on
wunatim「i, tomorrow
prana, morning
bcuyi-bcuyi, afternoon

Y - INTERJECTIONS
ßaw, goodbye
ge?e, no

Z - PARTICLES
kati?i, perhaps
wi, this way
garu, that way
$\beta a(m a)$, again, back


Map 4: Original Watjarri Area (Shaded) and Surrounding Languages, As Identified by Watjarri Speakers

# Watjarri by Wilfrid H. Douglas 

## 1. THE LANGUAGE AND ITS SPEAKERS

### 1.1 LINGUISTIC TYPE

The Watjarri language, spoken by the few remaining descendants of an Aboriginal tribe previously camped along a section of the Murchison River in Western Australia, is a suffixing type language similar to the Western Desert language (see Douglas 1958, 1964).

The phonemes of Watjarri are the typical Western Desert pattern with three significant vowels and 17 consonants. In Watjarri, however, there is no contrast between long and short vowels. Monosyllabic words predictably carry vowel length. There is contrast between dental, alveolar and apico-post-alveolar stops, nasals and laterals, and between two rhotics. A contrast between lamino-dentals and laminoalveolars (sometimes mistaken for lamino-palatals) cannot be sustained on the ground of semantic distinction. Watjarri speakers, though, recognize the sound difference and refer to the lamino-dental articulation as 'Iight Watjarri' and the lamino-alveolar as 'heavy Watjarri'. Individual speakers fluctuate in their usage of these sounds.

The Watjarri syllable pattern is strongly CV or CVC; but words may begin with a vowel (as in Eastern dialects of the Western Desert) and there is a strong tendency to have a vowel as word-final phoneme. In utterance-medial positions, words may end with one of the continuants except $/ \mathrm{m} /$, $/ \mathrm{o} / \mathrm{l} / \mathrm{r} / \mathrm{l} / \mathrm{w} /$ or $/ \mathrm{y} /$.

Morphologically, Watjarri is not very complex. Monosyllabic words are comparatively rare. (Note the frequent occurrence of single-syllable words in Nyungar of the SouthWest, Douglas 1968). Noun and verb stems are predominantly bisyllabic. There is a distinction between common and proper nouns and pronouns. Bound pronouns may occur instead of free pronouns and may be found suffixed to noun, noun phrase or verb fillers on clause level to indicate Subject or Object. A bound pronoun suffixed to a free form of the pro-
noun produces an emphatic form of that pronoun.
The free pronoun system has singular, dual and plural distinctions as well as inclusive-exclusive distinction in the dual and plural forms. The bound pronoun system is restricted to 1 st, 2 nd and 3 rd singular, 1 st dual and $3 r d$ plural with a restricted use of a 2nd dual. The accusative forms of the bound pronouns, from the data available, are restricted to 1 st and 2 nd singular only.

In addition to the personal pronouns, there is a set of positional pronouns or locationals which could be regarded as 3 rd person pronouns except that they take the same case markers as nouns and carry a component of position in relation to the speaker as 'near', 'mid-distant', 'distant' or 'previously referred to'. In the noun phrase these forms function as demonstratives.

Admittedly it is difficult to maintain a distinction between nouns and adjectives in this description. Each of these categories is inflected in the same way and each may be derived from verbs in the same manner. A noun which is the head of a noun phrase may be said to be modified by an adjective, which is peripheral to the noun nucleus; but a generic noun may also be modified by a more specific noun. On the other hand, although an adjective may occupy a headless noun phrase, in a requested repetition the noun head will be supplied. For ease of description on this surface level, therefore, the adjective category has been retained. Semantically this category includes those forms which refer to state, quality, number or quantity, and size.

Transitive-intransitive contrast occurs within the verb system and there are two major conjugational classes, manifested by their differing inflectional suffixes, marking off the verbs as belonging to either the -YA class or the -LA class. The labelling is borrowed from the future tense allomorphic suffixes. A small number of irregular forms of the verb have been noted.

A notable feature of Watjarri is the presence of a nominative-accusative case system for pronouns, an ergativeabsolutive system for common nouns, and an ergative-absolutive system associated with proper names but with a different marker for the absolutive form.

In the syntax, word order within the noun phrase is more fixed than in clauses generally. As the major functional units within the clause are clearly marked by the case endings, change of word order may change only the semantic focus. As in the Western Desert language, clauses may have verbal or verbless predicates. With clauses having verbal predicates, there is distinction between transitive and intransitive statement and command types. The verbless clauses may be equational, stative or locational. Dependent clauses indicate whether the action of the second predicate is simultaneous with or subsequent to the action of the main predicate. There is no 'switch reference system' in Watjarri.

Although a statistical analysis has not been attempted, the differences in Watjarri and Western Desert language vocabularies is obvious. There are, as can be expected, a number of shared cognates and also a number of obvious borrowings; but the vocabulary overlap between the two languages
is small. Syntactic overlap is greater; but even in this area there are notable differences.

### 1.2 THE SPEAKERS

In 1973, I estimated the number of Watjarri speakers as fewer than two hundred scattered between Meekatharra and Geraldton. Of these, probably fewer than fifty spoke the language fluently. On later visits, I found that many of these people had become unreliable as language informants because of alcoholism. In fact, it was difficult to find a person whose first language was Watjarri. Very few could tell a traditional story without using English. Recently, there have been signs of a cultural revival among the Watjarri people. A number of the people have attempted to retrieve the lost knowledge of their own language and culture. Parents, concerned now because their children had not learned the language in the home, have even requested that the children be taught the Watjarri language in primary schools.

Fink (1965) writing about the situation in the Murchison District in the years 1955-57 stated: 'Most of the coloured people in the district are descended from the original local tribal groups; but other Aborigines, brought in from South Australia by an early settler, have now intermarried and merged with the local people (who are Wadjari). The word "Jamadji" (yamatji) means "man" in the Wadjari language, and is commonly used by natives in the Murchison for anyone of Aboriginal descent who was born in the district. Other terms are applied to natives from other districts; for instance, Aborigines from farther east are called Wanmala, and those from the south-west, Nunga (Nyungar).'

The people from 'South Australia', referred to by Fink, were probably the group of Aborigines brought from Eucla by Reece and Scott about 1905. To-day, in the Murchison, they are referred to as the 'Yukala' people. Their language is also known as 'Yukala'; but only a few vocabulary items could be recalled by the informants approached. Elsewhere their language has been referred to as Mirniny or Mirning (Wurm 1972, Tindale 1974).

Since Dr. Ruth Fink did her research in the Murchison, there has been considerable movement of Watjarri people. Some families may still be found at Mullewa, Yalgoo and Mt. Magnet, at Meekatharra and Geraldton. Others have moved to places as far away as Kalgoorlie and Perth and there are a few individuals from the area who have travelled even more widely.

### 1.3 DIALECTS AND NEIGHBOURING LANGUAGES

Curr in his The Austratian Race (1886-7) Vol. 1 p. 310, includes reference to a language, 'Watchandie', spoken by a tribe camped at the mouth of the Murchison River. From the vocabulary lists supplied in Volumes $I$ and IV, it seems obvious that this language was closely related to the Watjarri spoken higher up the river. No doubt there would have been
mutual intelligibility between dialects right along the river, although people at one end of the string may have regarded those at the other end as speaking something unintelligible. Watjarri speakers in the Murchison to-day do not know the name Watjanti (Watchandie) but refer to the people at the sea end of the Murchison River as either 'Wirlunyu' (Wirlunju) 'sea coast people', or 'Tja Urra', which refers to their use of the verb 'urra' (meaning 'He is coming') in their 'speech' or 'mouth', tja.

The Watjarri are surrounded by a multiplicity of languages. During the period of research (infrequent intervals between 1964 and 1977), Watjarri speakers referred to more than thirty languages or dialects of which they had some knowledge. This excludes their knowledge of English, of Aboriginal English, and of other European languages. I may mention that one excellent Watjarri informant, Joe Marlow, spoke English with a broad Scottish accent acquired from association with his long-time Scottish employer. A list of languages referred to by Watjarri speakers is supplied in 1.5 below.

In 1964, people of Watjarri background were located in Geraldton, Mullewa, Yalgoo, Mt. Magnet and Meekatharra towns. They were also to be found on pastoral stations along the Murchison, both on the south side and on the north. The farthest east Watjarri family was located at Mt. Fraser station, just north of where the river crosses the Great Northern Highway. Small numbers of people were also to be found at Trilbar, Moorarie, Koonmarra, Berringarra, MillyMilly, Byro (a significant Watjarri centre), Nookawarra, Mileura, Curbar, Narryer, Meeberrie, Boolardy (another significant centre), Twin Peaks, Murgoo, Pinegrove, Bullardoo and Yuin.

As can be expected, dialects developed or were centred in some of these stations and towns. For example, Mrs.Lily Dann compared the 'heavy' and 'light' dialects in this way. Using the Watjarri word katja as the example, she said, 'On the Byro side it is light, kata; but the heavy Watjarri (referring to the Boolardy side) is katya'. The 'Byro dialect', being closer to Ingkarta, was possibly influenced by this language in which the lamino-dental stops are more common. Boolardy is regarded by people on the south side of the river as the centre of 'true Watjarri'. Compare Brandenstein's reference to Iirra-Wadjarri (Brandenstein 1967:3).

As the Watjarri people moved into towns along the railway line between Geraldton and Mt. Magnet, they came under the influence of the Wirtimaya (also called the Watjanmay by the Nyungars) around Yalgoo, and the Patimaya, who had moved from Paynes Find to Mt. Magnet township. They were also influenced by the Nyungars of the South-west, now moving into the towns of Geraldton, Mullewa and Mt. Magnet also (Douglas 1976). Other groups of Watjarri speakers were influenced by the Western Desert language in towns along the Great Northern Highway, especially at Cue and Meekatharra. Borrowings from these languages are evident in more recently collected vocabulary items. For example, the Watjarri negative is watji. To-day, Watjarri speakers at Mt. Magnet, Mul1ewa, at Meekatharra and even as far as Boolardy, may be
heard using the Wirtimaya negative, wirti. A number of Patimaya, Western Desert and other language borrowings may be found in the dictionary.

Northwards, at Woodlands Station, the negative is nanu, and this gives the name Nanu to the language which has a vocabulary overlap with Watjarri of approximately $70 \%$, according to the local estimate. At Pingandie Station, further north, the language is referred to by the southern speakers as 'Watjarti'.

### 1.4 PAST WORK ON THE WATJARRI LANGUAGE

The greatest amount of information on Watjarri seems to be contained in the writings of Mrs. Daisy Bates (c.1904). Her manuscripts are held in the Australian National Library. No. 365 manuscript has a section (XII) which has an Outline of the Grammar and also Vocabularies from the Murchison area. These vocabularies, which incidentally confirm much of the material in the present work, come from various dialect areas within the Murchison district (Bates c.1904).

Reference has been made already to Curr's vocabulary list from 'the mouth of the Murchison', contained in Volume IV of The Australian Race, pages 4-45. Augustus Oldfield (1886), writing in Volume I of the same book, has a brief introduction to the Watchandi Tribe and then a short vocabulary list. He suggests that there may be some connection between watchu, meaning 'west', and the name of the tribe (see Oldfield 1865, 1886:310-313).

Other observations on the people of the Murchison were made by Helms (1896), Perks (1886), Richardson (1900), Vivienne (1901) and the Elder Scientific Exploring Expedition of 1891-2. More recently, Hambly (1931) described types of weapons in the area. Fink (1960) supplied an Appendix for her dissertation on social change in the Murchison District. The appendix is entitled 'Traditional songs' and contains some valuable material of a linguistic nature. A copy of this is held by the Australian Institute of Aboriginal Studies for 'Restricted use' only. Another paper of a restricted nature is one by Gratte (1966). This contains first hand observations of certain ceremonies; but also contains about 250 words from Watjarri speakers at Boolardy Station.

### 1.5 NEIGHBOURING LANGUAGES REFERRED TO BY WATJARRI SPEAKERS

The initial spelling of language names in this section is in the practical alphabet described in chapter 2 and represents the pronunciation of the Aboriginal informant. To enable the reader to gain further information about the languages listed, references to the appropriate pages or sections in O'Grady, Voegelin and Voegelin (1966) and Oates (1975), Vol.I, are given. These two sources are abbreviated to 'O'Grady' and 'Oates' respectively. Other references are given in full. Comments by Aboriginal informants are given in quotes.

ARNMANU - a coastal language. Some vocabulary supplied. Probably Nanta. $O^{\prime}$ Grady pp.119-28. Oates 53.4a.
INGKARTA - 'Gascoyne Junction way'. O'Grady pp.114-118. Oates 53.2.
INTJIWARNI - 'The language of Jack Smith'. Probably Jindjibandi. $0^{\prime}$ Grady p.90-6. Oates 50.4b.
KANJARRA - Joe Marlow related the word to Yukala. O'Grady pp.103ff. Oates 51.
KARIYARRI - 'The language spoken in the Port Hedland - Roebourne area.' Example of the language given. O'Grady pp.96ff. Oates 50.5a.
MALIYARA - '... means East'. Informants indicated that it is synonymous with Wanmala (q.v.). O'Grady, in list p.37. Oates 53.5a.

MALKANA - '..spoken at Hamelin Pool'. 'We can understand a bit of that.' O'Grady p.119. Oates 53.3a.
NJANTA - '...more over Geraldton way. We can hear some of this talk.' O'Grady pp.119ff. Oates 53.4a.
NANU - '...a dialect of Watjarri. Nanu means 'no'. 'The dialect of Alan Hill of Woodlands Station. He said, 'Watjarri means, "What's your word?"' See Tindale (1974) map, Ninanu north of Watjari. Not listed in O'Grady or Oates; but a Nanu listed under Ngurlu in Oates and Oates (1970:74).
NGARLA - 'Around the Fortescue - Ashburton area'. About 60 expressions supplied showing considerable overlap with Watjarri and with Paljku-Pantjima. O'Grady pp. 80ff. Oates 50.1.
NJIYAPALI - 'Language of Tablelands to Jigalong'. Wurm (1972:23, 125). Oates 56.11a. See also Oates and Oates (1970:55, 80).
NJUKARN - '...near Malkana...spoken near Northampton'. Oates 53.3b.
PALTJIRI - 'Spoken at Williambury Station.' (N.E. of Carnarvon). In area indicated for Bayungu in O'Grady, p.108. Oates 51.2.

PANTUMA - 'Language of Hammersley, Rocklea and Mulga Downs stations.' Prob. Pantjima, O'Grady pp. $84 f f .0 a t e s$ 50A.2a.
PATIMAYA - '...spoken in the Mt. Magnet - Paynes Find area.' O'Grady p.128. Oates 52.3.
PINIKURRA - '...spoken at Nanutarra station'. O'Grady p. 103. Oates 50.7.

PULINJA - '...old Geraldton talk..'. A small vocabulary collected showing about $60 \%$ overlap with Watjarri. Wurm (1972:126), Oates 53.4c.
TALANTJI - '..spoken in the Pindar River country and at Towera station.' O'Grady p.103-7. Oates 51.1a.
TARRKARI - '...in the Carnarvon area'. O'Grady p.111-2 Oates 51.3.
TJA URRA - '...spoken around Murchison House and near Northampton.' 'I understand that; but they talk a little bit different...' 'Tja Urra and Watjarri are all mixed up.' (Inf. Joe Marlow). Not listed in O'Grady or Oates.
WANMALA - 'Easterner', 'The desert people.' 'The Wanmala people at Meekatharra come from Wiluna...They are the warriors (avengers).' A common term for the people of the Western Desert. Not listed.

WARTALJ - 'The Jigalong talk.' O'Grady p. 37. Oates 56.3c.
WATJARRI - 'The Murchison River language.' O'Grady p. 128. Oates 52.1.
WATJARTI - '...spoken at Pingandie station' (i.e. by the Scott family and by two or three other people mentioned by name). A variant of Watjarri. Not listed by O'Grady or Oates.
WIRTIMAYA - '...spoken north of Paynes Find.' 'It was originally spoken at Yalgoo.' Also called Wirtiya. Speakers use watjan 'fire', a Watjanmay distinction. Douglas (1973), O'Grady p.128. Oates 52.4.

WIRLUNJU - '...sea coast people.' Wirlu 'sea'. See under Tja Urra. Not listed in O'Grady or Oates.
YUKALA - '...the original Eucla dialect.' Also known as Mirninj. See reference to Yukala under section 1.2 in this description. Oates and Oates (1970) 9Wr, p. 64. Also 55.1a on p. 62.
YANARTI - '...spoken at Onslow.' '...original language of Onslow was Purtuna.' ? Oates and Oates (1970) 3Wr,p.64.
YUNGKATJI - a dialect spoken north of Watjarri. Not listed in O'Grady or Oates.

## 2. PHONOLOGY

### 2.1 THE PHONEMES AND THEIR DISTRIBUTION

There are 17 consonants and three vowels in Watjarri.
In this section, the phonemes will be symbolised with one symbol for each sound. In a following section a practical alphabet will be introduced in which digraphs will be used, partly to simplify printing and also to encourage literacy in the language. The consonants are set out in Table 2.1 and the vowels in Table 2.2.

### 2.1.1 GENERAL DESCRIPTION OF PHONEMES

The stops are voiceless and unaspirated in the word initial position and in polysyllabic words; but become lightly voiced following nasals in the word-medial position, ngarnka 'cave' is phonetically [nanga]. There is also a tendency for bilingual (English-Watjarri) speakers to lightly voice medial stops in bisyllabic words such as ika 'bone'.

Lamino-dentals occur allophonically as definite interdentals preceding the vowels/a/ and/u/, especially in dialects north of the river; but as lamino-alveolars (or lamino-post-dentals) in the southern dialects. It has been noted that some speakers of the Byro dialect even retain the inter-dental articulation before the yowel/i/. (For example: in the word for the 'Ta-ta lizard', itjitji, which is in this dialect phonetically [ititi]). However, the general usage throughout the area is postdental with a slight high-vowel off-glide preceding the vowel /i/. With increased Anglicisation there is a greater tendency to palatalise the dentals before /ij. When the

TABLE 2.1-Watjarri consonants

Place of articutation

| Manner of articulation | bilabial | 1amino- <br> dental | apico <br> alveolar | apico- <br> post- <br> alveolar | velar |
| :---: | :---: | :---: | :---: | :---: | :---: |
| stops | 101 | / 1 | /t/ | /t/ | /k/ |
| nasals | /m/ | /n/ | /n/ | /n/ | /0/ |
| laterals |  | II | /1/ | $1!1$ |  |
| rhotics <br> semi-vowels | /w/ | \|y/ | $\|r\|$ | $1 \cdot /$ |  |

lamino-interdental stop is preceded by an apico-alveolar continuant ( $/ \mathrm{n} /, / \mathrm{l} / \mathrm{l} / \mathrm{r} / \mathrm{)}$, regardless as to whether it is followed by /a/ or /u/, it assumes the lamino-post-dental (or lamino-alveolar) position as is usual before /i/. Examples include:

| /taka/ | phonetically | [taka] | 'carrying dish' |
| :--- | :---: | :--- | :--- |
| /kutara/ | $"$ | [kutara] 'two' |  |
| /yamati/ | $"$ | [yamatyi] 'a person' |  |
| /winta/ | $"$ | [windy] 'an elder' |  |
| /tina / | $"$ | [tyina] 'foot' |  |

A light palatal fricative, ( $\chi$ ), may be manifested for the lamino-dental stop preceding /i/in some dialects (or, more correctly, idiolects), e.g., /wati/ 'no', phonetically [wat $\mathrm{y}_{i}$ ] becomes [wayi]; /yamati/ 'person', phonetically [yamatyi] becomes [yamayi] in the speech of Joe Marlow, Meekatharra.

The rhotics, $/ r /$ and $/ r /$, are found in minimally contrastive words such as /waru/ 'the back' (body part) and /waru/ 'light', 'lamp'. /r/ occurs as an apico-alveolar flap in normal speech; but as a trill in emphasised speech. Because of the tendency of some speakers to lightly voice medial/t/ in two-syllable words, /t/ and /r/ are easily confused in this position and may even be said to fluctuate in this position. /r/ is a voiced, apico-post-alveolar or alveolar retroflex continuant.

As mentioned by O'Grady (1966:85) for Bailko (palyku), there may be fluctuation between $/ r /$ and $/ y /$ in Watjarri. For example: /karimana/fluctuating with /kayimana/ 'standing'; also /patarimana/ fluctuating with /patayimana/ 'becoming angry'.

There is also frequent fluctuation between /tj/ and /y/ (see 3.7.1[v](e)). Less frequently there is fluctuation between /r/ and /w/, see njararni-~njawarni-, and between /k/ and $/ \mathrm{w} /$, as in warluwura and warlukura.
2.1.2 VOWEL LENGTH. Words of a single syllable regularly manifest length of vowel phonetically and several borrowed words also manifest vowel length. Vowel length is not phonemic in Watjarri; but in borrowed words of more than one syllable it will be symbolised since sometimes it is an indication of stress in the second syllable. Examples include:

TABLE 2.2-Watjarri vowels

|  | front | central |
| :---: | :---: | :---: |
| high | $/ i /$ |  |
| low |  | $/ \mathrm{a} /$ |

single syllable words, always long

| /tal | phonetically | ta:] | 'mouth' |
| :---: | :---: | :---: | :---: |
| /na/ |  | [na:] | 'what?' |
| /wi/ | " | [wi:] | 'where?' (or general interrogative) |
| /kan/ | " | [ka:n] | 'gun' (from English) |
| /ku!/ | " | [ku:!] | 'school' (from English) |
| /wan/ | " | [wa:n] | 'creek' (from Patimaya) |
| /yal/ | " | [ya:1] | 'how?' |

polysyllabie borrowings
/kaapu/ 'calf'
/maaka/ 'mug'
/mata/ 'boss', 'master', 'government official'
/puraaku/ 'dress', 'frock' (a word used in the days of the
Afghan traders in Western Australia; probably from English 'frock')
/turaapa/ 'trough' /wiitpala/ 'whitefellow'
/tiipu/ 'sheep' /muuniya/ 'pneumonia'
(In ordinary speech, these borrowed words tend to adapt to the short vowel pattern of the language.)
2.1.3 PHONOTACTICS. Unlike Ngaanyatjarra of the Western

Desert, Watjarri permits the occurrence of vowels initially.
The canonical syllable pattern for Watjarri is:


Any one of the three vowels may occur word-initially. There are no phonemic diphthongs in Watjarri. Any vowel also may occur word-finally.

Any consonant may occur initially except the following: $/ 1 /, / r /, /!/, / n /, / r /$. Although the word initial use of /r/ is found in neighbouring languages, there is a striking absence of its occurrence in this position in Watjarri. Neither in the author's field data nor in the historical material, including the extensive vocabularies of Daisy Bates, is this sound found in the word-initial position. It is also difficult to find cognates for words beginning with /r/ in neighbouring languages. Maybe such a cognate is /yira/
'mouth' compared with Mangala rira 'mouth', 'lip', 'tooth', 'teeth'.

Stops do not occur word-finally, except the two rare examples: yat-yat 'torn' and pilat 'fat' (probably from English). Continuants may occur word-finally except the continuant consonants $/ \mathrm{w} /, / \mathrm{y} / \mathrm{l} / \mathrm{m} /$ and $/ \mathrm{o} /$.

Consonant clusters never occur initially or word-finally. In the morpheme medial position and across morpheme boundaries, a stop never occurs before a continuant except in the rare case of yat-yat'torn'. The permitted sequence is

TABLE 2.3 - Morpheme medial-consonant clusters

continuant plus stop or continuant plus continuant. Tables 2.3 and 2.4 give the full range of permitted sequences as evidenced by the data on hand; $x$ indicates that there is evidence for the occurrence of the cluster; (x) indicates that the combination occurs in reduplicated forms and there is a strong probability it occurs also morpheme medially.

Note that within a morpheme consonsant clusters are further limited as follows:
$/ \mathrm{m} /$ is followed only by $/ \mathrm{p} /$
/n/ is followed only by /k/
$/ \mathrm{n} /$ is never followed by / $\mathrm{t} /$
$/ \mathrm{n} /$ is never followed by $/ \mathrm{t} /$
$\mid \bar{r} /$ plus $/ t /$ medially is manifested phonetically as $\left[-r^{y}{ }^{Y}\right.$ ]
$/ \mathrm{n} / \mathrm{plus} / \mathrm{t} /$ medially is manifested phonetically as [-ndy-]
/1/ plus / $t$ / medially is manifested phonetically as [-|ty-]
$/ 1 / \mathrm{plus} / \mathrm{p} /$ or $/ \mathrm{k} /$ is manifested phonetically as $\left[-\mid Y_{p-}\right]$ and [ $-\mid Y_{k}$ ].

Note the phonetic differences in the following combinations:
/-nt-/ is phonetically [ $\left.-n d^{y}-\right]$ i.e., the stop is voiced and alveolarised.
/-nt-/ is phonetically [-nd-] i.e., both consonants are interdental.
and so for other examples of alveolar continuant plus dental stop or dental continuant plus dental stop, e.g., /-rt-/ is [-rt ${ }^{\mathrm{Y}}$-].

For rules governing consonant clusters across morpheme boundaries see 2.1 .6 below.
2.1.4 STRESS PLACEMENT. Primary syllable stress falls on the first syllable of each word except in a few borrowings from English, such as /puraaku/ 'frock' and/turaapa/ 'trough', in which stress on the second syllable is indicated by vowel length (which actually occurs phonetically). In three-syll-

TABLE 2.4-Consonant clusters across morpheme boundaries within the word

|  |  |  |  |  | cond | me | er |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | p | k | m | $\square$ | $\pm$ | t | $t$ | w | y |
|  | n | $x$ | x | x | (x) | $x$ |  |  |  |  |
|  | 1 | $x$ | x | x | (x) | x | (x) |  |  | (x) |
|  | n | x | x | x | (x) | x | x |  |  |  |
|  | 1 | x | x | x | (x) | x | x |  | (x) |  |
|  | r | x | x | x | (x) | x |  |  | (x) |  |
|  | $\square$ | x | x | $x$ | (x) | x |  | x |  |  |
|  | ! |  |  |  |  | x |  | x |  |  |

able words, secondary stress falls on the second syllable. In four-syllable words, secondary stress falls on the third syllable. In words of more than four syllables, secondary stress falls on the penultimate.
2.1.5 MINIMAL AND ANALOGOUS CONTRASTS. The following are examples only. Final decisions on what are the phonemes of Watjarri were based on more comprehensive data.
/t/ v/t/ kati 'arm', kati 'spear', tuwa 'house', tuwari 'red ochre'
/t/ v /t/ kati 'arm', katila 'lift (meat from fire)'
/t/ v /t// muti 'cold', muti 'husband'
/t/ v /r/ mitu 'mate', miru 'spearthrower', kurun 'spirit', kankutu 'gun-1ess'
/n/ v /n/ napa 'what?', napa 'fat'
/n/ v /n/ muni 'money', muṇi 'wife', łuna 'put it', 丸uṇa 'hitting stick'
$/ \mathrm{n} / \mathrm{v} / \mathrm{n} / \mathrm{pana}$ 'that', pana 'ground'
/n/ v /n/ nuri! 'navel cord', guri 'bag', nu!ina 'afraid'
/ / v / / / mula' ${ }^{-1}$ nose', mula 'dead', kulu 'sweet potato', kulu 'fiea'
/I/ v /!/ puli 'cockatoo', pu!l 'carpet snake', ma!a 'behind', mala 'will get'
 / $/$ v /// kala 'armpit', ka!a 'fire'
///v /r// warala 'will sing', wala 'egg', waran 'song'
/ṭ/ v /r/ mara 'hand', maṭa 'hili', taṭa 'calf of leg', tara 'shield'
/o/ v /n/ 刀ana 'who?', nana 'this one'
/a/ v /i/ v /u/ pika 'sore', puka 'covering', puku 'buttocks'
2.1.6 MORPHOPHONOLOGY The non-phonemic changes of components in consonant combinations within the morpheme have been described above. There are several changes which occur across morpheme boundaries for which a set of rules can be suggested.

Both the ergative suffix and the locative suffix (each being a single open CV syllable) have as their initial consonant an apico-stop. The ergative may be symbolized as -/\{-tu\}/ and the locative as - /\{-ta\}/. These forms occur following stems ending with a consonant, and each has an allo-
morph which occurs following stems ending with a vowel. In morphemics these may be displayed in this way:

```
subject stem ending with a vowel takes /-\etaku/ 'ergative'
subject stem ending with a consonant takes /{-tu}/ 'ergative'
location stem ending with a vowel takes /-la/ 'locative'
location stem ending consonant takes /{-ta}/ 'locative'
```

The stem-final consonant, however, may be dental, alveolar or post-alveolar (retroflex). The following rule then applies:

The apico-stop initial consonant of the suffix assimilates to the same point of articulation as the final consonant of the stem. Thus:
/oakalalan-tu/ 'The cockatoo did it.'
/kutulilin-tu/ 'The tadpole did it.'
/mapan-ṭa/ 'on the magic stone.'
An exception to the rule occurs in the case of stemfinal /r/, which is lost in the suffixation, producing an apico-post-alveolar (or retroflex) initial consonant of the suffix, e.g., /mayu mankur/ 'the three children', plus /\{-ta\}/ 'locative' becomes phonetically (mayu mankuta), 'on the three children'.

With suffixes beginning with /t/ (such as /-tara/, /-tanu/) following stems ending with a consonant, the same rules apply as for clusters within the morpheme (described above), that is
$/-n+t-/$ becomes phonetically $[-n d Y-]$
$/-n+t-/$ becomes phonetically $[-n d-]$
$/-n+t-/$ becomes phonetically $\left[-n^{n} Y_{-}\right]$etc.
Or, to state this as a rule, suffix-initial dental stop is interdental following a stem final interdental continuant or vowel; but following any other stem final continuant consonant it is alveolarised, i.e., it becomes a post-dental with a slight/i/ offglide.

### 2.2 A PRACTICAL ALPHABET

In choosing a practical orthography, I have been guided by recommendations from the Australian Institute of Aboriginal Studies, by the experience of linguists and teachers who have been engaged in bilingual education programmes, by the demands of typewriters and printing presses, and by appeals that the material supplied on this language may be easily compared with materials on other Western Australian languages, such as the Western Desert language, which have been in print for some considerable time.

A major problem in choosing a practical alphabet for an Australian language is that connected with the choice of $b$, $\mathrm{d}, \mathrm{g}$, or $\mathrm{p}, \mathrm{t}, \mathrm{k}$, for the symbolising of the voiceless, unaspirated stops, /p/, /t/, and/k/. There are difficulties whichever choice is made. I would prefer to use $b$, $d$ and $g$ for Watjarri; but have chosen rather to adopt the voiceless symbols for several reasons, one of these reasons being that

## TABLE 2.5 - Phonetic symbols and practical alphabet correspondents

| Stops | /p/ | p | /t/ | /t/ | $t$ | 1+1 | $r t$ | /k/ | k |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nasals | /m/ | m | 䂞 | /n/ | n | /0/ | $r$ | 101 | ng |
| Laterals |  |  | II | /1/ | 1 | $11 /$ | r |  |  |
| Rhotics |  |  |  | /r/ | rr | /r/ | r |  |  |
| Semi-vowels | /w/ | w |  | /y/ |  |  |  |  |  |
| Vowels |  |  |  | /i/ | i | /a/ | a | /u1 | $u$ |

it makes for ease of comparison with the Western Desert language.

For the lamino-(/inter-)dentals, the symbol $-j$ has been chosen to represent 'dentalness' consistently, viz. tj, nj, lj. Digraphs have been chosen also for the apico-post-alveolar (retroflexed) consonants, viz. rt, rn, rl. The symbol now recommended for the trilled or flapped rhotic is $r r$, and for the retroflexed rhotic the single $r$ has been adopted. Where $/ n /$ or $/!/$ occur before $/ \ddagger /$, the practical alphabet spelling will be rnt, rlt respectively. The phoneme/t/ occurring singly will be represented by rt.

Table 2.5 shows the symbols used for both linguistic and practical purposes; each phonemic symbol is enclosed in slant lines and is followed by the practical representation.

PUNCTUATION: The comma (,) represents a tentative pause, rising pitch.
The stop (.) represents a final pause, falling pitch. Questions are indicated by (?) and exclamations by (:) Quotation marks (') will be used for direct quotations. Punctuation as above is not based on a thorough study of the intonational features of the language. Such a study has not been attempted here.

Comparison of phonetic and practical orthographies:

Phonemic
/ jana/
/nana/
/muni/
/muni/
/muți/
/muti/
/miru/
Ituṭu/
/kati/
mula/
/mula/
/ma!u/
/waru/
/ya!ku/
/wankamana/
/yanatina/
/maṭunu kulayimana/

Practical
ngana
njanja
muni
murni
murt
mutji
mirru
tjurtu
kat i
mulja
mula
marlu
waru
yarlku
wangkamanja
yanatjinja
martungu kulayimanja
'who?'
'this one'
'money'
'wife'
'cold'
'husband'
'spear thrower'
'elder sister'
'arm'
'nose'
'dead'
'kangaroo'
'light/lamp'
'blood'
'talking'
'came'
'my spouse is
coming closer

## 3. MORPHOLOGY

### 3.1 PARTS OF SPEECH

[i] Nouns. The term 'noun' may be used to cover two subclasses as follows: (a) Common nouns, the major and open sub-class. Common noun stems may be derived or non-derived. (b) Proper names: distinguished from common nouns by the occurrence of allomorphic variants of certain inflectional suffixes which occur with this subclass of nouns.

These two classes may be further sub-divided by a phonological feature which affects the form of inflectional suffixes, namely, the occurrence of word-final consonant or word-final vowel.

Common nouns and proper names, marked with appropriate inflectional suffixes, are distinguished by fulfilling certain syntactic functions such as transitive or intransitive subject, direct or indirect object, possession, location, direction, instrument or benefactor. Common nouns and proper names may also occur in the verbless predicate of an equational clause.
[ii] Adjectives, like common and proper nouns, are divided into two phonological classes according to whether words end with a vowel or a consonant. Adjectives function as peripheral to the head noun of noun phrases; but, in rare cases may constitute a headless phrase, functioning as subject or object, taking the same inflectional suffixes as common nouns. They may be derived or non-derived.

Adjectives may also occur as predicates in verbless clauses, such as the stative clauses, or as modifiers of nouns in noun phrases occurring in the predicate of equational clauses. Adjectives may also serve adverbial functions, qualifying verbal predicates.
[iii] Pronouns. (a) Personal pronouns. This is a closed class with forms for singular, dual and plural pronouns with inclusive and exclusive forms for the dual and plural. (b) Positional pronouns or demonstratives. These function like the personal pronouns in that they can fill the function of 3rd person pronoun; but they may also function as do adjectives (or nouns) in that they can modify nouns in noun phrases. They are also distinct from personal pronouns in that they take some of the inflectional suffixes of common nouns. Semantically, they refer to 3rd person items according to position near, mid-distant or distant from the speaker
[iv] Adverbs may be non-derived or derived from other classes. Adverbs function as manner, location, direction or time fillers in syntactic constructions.
[v] Verbs. Verb stems may be non-derived or derived from other classes. Derivational suffixes occur as first order suffixes on the stems, followed by tense/mood suffixes then by other optional affixes, e.g. subject or object indicators The major division of verbs is the syntactic distinction between transitive and intransitive verbs. There are also a few verbs which are ditransitive. Transitive verbs may take a direct object, whereas an intransitive verb never
takes a direct object. Other transitive markers may also occur in clauses having a transitive verb in the predicate.

A further division, on phonological grounds, places verbs in two major conjugational classes according to which allomorph of the tense and mood suffixes they take. There is also a residue of irregular forms numbering probably not more than five or six.

As indicated above, verb inflection is by suffixation. In addition to tense-aspect and mood affixes, pronominal suffixes, negation and emphatic suffixes and other types of suffix occur following the stem.
[vi] Interrogative substitutes. This is a series of words which may supply a substitute for each of the other parts of speech in interrogative constructions. These cover such questions as 'Who?', 'What?', 'Whom?', 'Whose?', 'How?', 'Why?', 'When?', 'Where?', 'Doing what?', 'Becoming what?', and so on.
[vii] Interjections and Exclamations. Common and proper nouns and pronouns (usually second person) may fill a vocative role in utterances. Also, command forms of the verb may occur as attention attracters outside the regular grammatical constructions. There are, however, a few items which are used specifically as exclamations, or to indicate agreement, certitude, negation, and so on (see 4.4).

### 3.2 NOUN MORPHOLOGY

3.2.1 STEM FORMATION OF COMMON AND PROPER NOUNS. Stems in these two sub-classes may be simple, compounded, reduplicated, or complex. A sample list of simple stems is given below, divided according to the significant phonological dichotomy - (a) stems ending with a vowel and (b) stems ending with a consonant.
(a)

| ika | 'bone' |
| :--- | :--- |
| iku | 'younger sister' |
| kaku | 'crow' |
| kalja | 'armpit' |
| kami | 'grandfather' |
| kamparnu | 'uncle' |
| kurri | 'spouse' |
| maka | 'head' |

(b) maparn 'sorcerer' marnun 'upper arm'
murtinj 'a pre-initiate'
nurilj 'umbilical cord'
ngurlurn 'a windbreak'
pakarn 'throat'
panin 'seed'
pimpilj 'a rib/ribs'

Examples of proper names include:
Malka 'proper name of the nephew of Putjulkura in a sacred story'
Malura 'place name - the hill at Mileura'
Muluwi 'place name - Mullewa'
Para 'place name - Perth'
Tjampinu 'place name - Geraldton'
And the substitute name for a deceased person:
njatja 'sand', 'dirt', used metaphorically as Njatja
'name of deceased'

Compound stems (noun plus noun):
makayarla 'doctor' (maka 'head' + yarla 'hole', referring to a 'third eye')
marlukantja 'kangaroo-fur blanket' (marlu 'kangaroo' + kantja 'fur skin')
marlupirri 'the Kangaroo Paw (Anigosanthos Manglesii)' (marlu + pirri 'claw')
pilapirti 'a mallee tree (Eucalyptus pyriformis, etc.)'(pila 'spinifex' + pirti 'den')
tjilinpiti 'magpie lark' (tjilin 'sweet potato' + piti 'carrying dish') tjinapuka 'boots' (tjina 'foot' + puka 'a covering')
katjayara 'son-father relationship' (katja 'son' + yara 'relationship') mangkawarla 'hat' (mangka 'hair' + warla 'egg')
wanatjilingka 'scorpion' (wana 'digging stick' + tjila/i 'tail' + -ngka locative, 'on'.)

Reduplicated stems. Reduplication may be partial or complete. Partial reduplication may be the result of loss of vowel when two similar vowels become juxtaposed on complete reduplication, or the combination may be simply onomatopaeic. Onomatopaeic words may prove to be a large sub-class of nouns owing to the popularity for this form of signification for birds. Complete reduplication of noun or adjective roots may indicate diminuation (e.g. of size, quality or state) or, on the other hand, an extension of the meaning of the root meaning. Reduplication of verb root may indicate continuity of the action or process.

Examples of partial reduplication:
ilili 'noise of wooden spears rattling together' (probably ili + ili with loss of repeated vowel)
itjitji 'Ta-ta lizard' (probably itji + itji, from child speech)
kakararra 'East'
kurrkurtu 'owl' (Onom. kurr + kurr + -tu)
ngakalalanj 'Major Mitchell cockatoo' (Onom. compare Western Desert language kakalyalya)
parnparnkarlarla 'bell bird' (Onom. compare Western Desert language parnparnpalala)
warurru 'cold season' (probably from waru-waru, referring to 'fires') wirlutjarutjaru 'plover'. (Onom. 'weeloo', plus tjaru-tjaru, referring to its hovering descent, from -tjaru 'downwards')

Examples of complete reduplication:
karakara 'afternoon' (karangu 'sun')
marinj-marinj 'black ant' (as an adjective, means 'proud')
marta-marta 'a small lizard' (marta 'stone', 'pebble')
mintin-mintin 'beetle'
munga-munga 'evening' (munga 'night')
ngarn-ngarn 'jaw' 'chin' (ngarna 'ate')
njirri-njirri 'sme11 of meat cooking' (but parntilku more frequent)
para-para 'gecko lizard'
pirti-pirti 'butterfly' (pirti 'den') (compare Western Desert language pinta-pinta)
titi/pipi/mimi 'breasts', 'nipples'
yipilj-yipilj 'a night-flying bat'
wirta-wirta 'honey ants' (wirta 'tall')
yarlu-yarlura 'black gecko lizard' (yarlu 'gum leaf', -ra 'plural')

Compound stems (noun plus adjective):
kaljawirri 'rock wallaby' (kalja 'armpit' + wirri 'black')
kurntuwara 'echidna' (kurntu/i 'hitting stick' + wara 'long')
kurupurlkartu 'the Sturt Pea' (kuru 'eye' + purlka 'big' + -rtu 'emphatic')
tjilawara 'long-tailed lizard' (tjila 'tail' + wara 'long')
Kurtayapula~Kurtayarapula 'The Two Brothers' (Mythic figures said to be standing as white stones at Yuin Reef. kurta 'elder brother' + -yara 'reciprocal relationship' + -pula 'dual'.)
Complex stems. Nouns derived from other parts of speech, but not on the regular pattern of derivation. Examples include:
ngartingka 'a post initiate' (ngarti 'with force' + -ngka 'locative') tjutila 'policeman' (tjutila, a verb meaning: 'he will tie/hand-cuff') wirlunju 'sea-coast people' (wirlu 'sea' + -nju, from njuwa, 'having', used as a general adjective-deriving suffix.)
These occur in the following sentences:
(1) ngartingka yanatjimanja The initiate is coming.
(2) yamatjilu tjutila pinja The man hit the policeman.
(3) wirlunju marlaku yanmanja The sea-coast people are going back.

Regular derivation of nouns. From the limited amount of material salvaged, the following types of regular derivation occur:
(a) Nouns derived from adjectives. Evidence for the use of derivational affixes is absent. The practice is to use adjectives as subjects or objects in headless phrases, e.g.
(4) kutiya karimanja
one stand-PRES There is only one standing.
(5) kurninjpa mulayinja
pitiable die-PAST
The poor fellow died.
(6)

```
    yungatja kutiya ngarnaku
    give-to me one eat-PURP
    Give me one to eat.
```

(b) Nouns derived from adverbs. Nouns may be derived from adverbs by the affixation of the nominalizer -tja. Compare:
(7) ngatja marla njinamanja

I behind sit-PRES
I am sitting behind.
(8) ngatja marlatja pika

I behind-NomLSR sore
The calf of my leg is sore.
(c) Nouns derived from verbs. A verb stem plus the suffix -njtja produces a noun.
(9) mayu yaljpa piyamanja
children all play-PRES
All the children are playing.
(10) mayu yaljpa piyanjtja-ki yanmanja
children all play-NOMLSR-ALL go-PRES
All the children are going to the game.
Note that both adjectives and nouns are derived from verbs by the use of this same -njtja suffix. This shows again the difficulty in dividing these two categories. Only by expansions or transformations can a decision be made in many cases. For example, (10) may be interpreted to mean '(Someone) is going to all the playing children.' But if an elucidation were requested, the sentence above may be restated as, mayu yaljpa yanmanja piyanjtjaki, which is 'All the children are going to that which is being played.'

### 3.2.2 CASE INFLECTIONS OF COMMON AND PROPER NOUNS

(i) Transitive subject is marked by ergative inflection. This has different forms depending on whether it is added to a common or a proper noun, and depending on whether this ends in a vowel or in a consonant.
(a) common noun ending with a vowel. There is dialectal fluctuation between the use of -ngu and -ngku as ergative marker following stems ending with a vowel. The same speaker may use both when repeating a sentence. For this reason, examples will enclose the (k) in brackets.

```
mayu-ng(k)u tjutju pinja
child-ERG dog hit-PAST
The child hit the dog.
```

There is an alternative usage, however, which has semantic significance. The -lu suffix, normally used on proper nouns, may be affixed as the ergative marker to common nouns when the speaker wishes to show deference or to contrast 'personal' with 'impersonal', e.g.

```
njarlu-ng(k)u tjutju pinja winta-ngku
woman-ERG dog hit-PAST stick-INST
The woman hit the dog with a stick. (Impersonal)
```

njarlu-lu tjutju njanganja
woman-ERG dog see-PRES
My wife is watching the dog. (Personal)
(b) common noun ending with a consonant. The phonetic shape of the final consonant of the stem determines the allomorph of the suffix which occurs. Or, in process terms, the initial consonant of the ergative suffix assimilates to the same point of articulation of the final consonant of the stem. The allomorphs are: -tu~-tju~-rtu, as in:
(14) murtinj-tju papa nganmanja
preinitiate-ERG water consume-PRES
The young man (pre-initiate) is drinking water.
(15) maparn-tu pika njanganja
doctor-ERG sick see-PRES
The doctor is examining the sick(one).
In Watjarri, the ergative marker may be omitted when no ambiguity may occur, as, for example, when a direct object is marked or when a person occurs in the subject and an inani-
mate or non-personal item fills the direct object position, e.g.
(16) kutjarra mayu njanganja ngalinja
two children see-PRES us(dual)-OBJ
The two children are watching us two.
(c) proper noun (name) ending with a vowel. These invariably take the suffix -lu, e.g.
(17) Mungku-lu tjutju pinja

Mungku-ERG dog-OBJ hit-PAST
Mungku hit the dog.
(d) proper noun ending with a consonant. The same rule applies as for common nouns ending with a consonant. The allomorphs of the ergative suffix are -tu~-tju~-rtu, e.g.
(18) Stan-tu tjutju pinja

Stan-ERG dog hit-PAST
Stan hit the dog.
(ii) Intransitive subject (including the subject of verbless clauses) and (iii) Transitive object are both marked by the absolutive case suffix which again has different forms depending on whether it is added to a common or a proper noun, ending in a vowel or in a consonant:
(a) common noun ending with a vowel: $\varnothing$ (zero), e.g.
(19) papa intimanja
water-ABS flow-PRES
The water is flowing.
(b) common noun ending with a consonant: -pa, e.g.
(20) kurninj-pa mulayinja
pitiable one-ABS died-PAST
The poor fellow died.
(21) kuwiyarl-pa waku-ki yanmanja
goanna-ABS hole-ALL go-PRES
The goanna is going to the hole.
(c) proper noun ending with a vowel: -nja, e.g.
(22) Mungku-nja njinamanja

Mungku-ABS sit-PRES
Mungku is sitting.
(d) proper noun ending with a consonant: -nga, e.g.
(23) Mingkurl-nga njinamanja

Mingkurl-ABS sit-PRES
Mingkurl is sitting.
(24)

Mingkurl-nga pika
Mingkurl-ABS sick
Mingkurl is sick.
In traditional stories, the personalising of natural objects is indicated in the language by the use of the proper noun suffixes occurring with common nouns. (And, of course, there are many proper names which are simply common nouns personalised in this way.)
(iv) Location. The locative suffix indicates location 'at', 'on', 'in', and may occur with a noun in an adverbial phrase in which an adverb meaning 'near', 'above', etc occurs. There are again allomorphs sensitive to whether the noun is common or proper, and whether it ends in a vowel or a consonant.
(a) Common nouns ending with a vowel take either -ngka or -la (which seem to be in complete dialectal fluctuation at the time of writing except that speakers from Murgoo preferred -ngka rather than -la), e.g.
(25) kuwiyarlpa marta-ngka kayinja
goanna rock-LOC stand-PAST
The goanna stood on the rock.
kuwiyarlpa marta-la kayinja
goanna rock-LOC stand-PAST
The goanna stood on the rock.
(27) kuwiyarlpa marta-ngka kula kayinja
goanna rock-LOC near stand-PAST
The goanna stood near the rock.
(28) yamatji njinamanja marta-ngka
person sit-PRES rock-LOC
The man is sitting on the rock.
(29)

```
mayu ngayimanja tjaka-ngka
child lie-PRES dish-LOC
The child is lying in the carrying dish.
```

(b) Common nouns ending with a consonant take one of the allomorphs -ta~-tja~-rta according to the point of articulation of the final consonant of the stem, e.g.
(30) puluku turayin-ta yanmanja Tjampinu-ki bullocks train-LOC go-PRES Geraldton-ALL The bullocks are going on the train to Geraldton.
(c) Proper nouns ending with a vowel take -la.
(31) panja Tjampinu-la njinamanja
he Geraldton-LOC sit/stay-PRES
He is in Geraldton.
(d) Proper nouns ending with a consonant behave like common nouns ending with a consonant, e.g.
(32) Kurtayarapula kayimanja Yuwin-ta

The Two Brothers stand-PRES Yuin-LOC
The Two Brothers are standing at Yuin Reef.
mayu panja kayimanja Mingkurl-ta kula
child that stand-PRES Mingkurl-LOC near
That child is standing near Mingkurl.
(v) Direction towards. The allative suffix indicates motion to or towards. This is -kuwi, often shortened to -ki, suffixed directly to the noun stem regardless as to whether it ends with a consonant or vowel, e.g.
(34) ngatja marlaku yanmanja tuwa-ki

I back go-PRES house-ALL
I'm returning to the house.
(35)
yanmanja mungal marlaku-pa Carnarvon-ki
go-PRES tomorrow back-TMMED Carnarvon-ALL
I am going right back to Carnarvon tomorrow.
yamatji yanmanja tawun-ki warinj-ku
man go-PRES town-ALL food-PURP
The man is going to town for food.
martungu-kuwi-pa yanmanja
spouse-ALL-IMMED go-PRES
He's going straightaway to his wife.
Note that place names take -ki immediately following the stem, but personal name stems take the locative suffix (-la/ta) before $-k i$ is added.
(vi) Direction from. The ablative suffix indicates 'motion away from'. It has one form, -tjanu. Following common nouns, whether ending with a consonant or a vowel, -tjanu immediately follows the stem. Following proper nouns ending with a vowel, the locative suffix has first position following the stem, followed by -tjanu. Proper noun stems ending with a consonant take one of the allomorphs of the locative suffix, according to the point of articulation of the final consonant (-ta~-tja~-rta), and -tjanu, e.g.
turapa-tjanu yanatjinja
trough-ABL come-PAST
He came from the (water-)trough.
mayu yanatjimanja kurl-tjanu
child come-PRES school-ABL
The child is coming from school.
(40) Kuwiyarl-ta-tjanu pakarli kutjarra yanatjinja

Kuwiyar1-LOC-ABL man two come-PAST
From Kuwiyarl came the two initiated men.
(vii) Instrument. The instrumental suffix has the same form as the ergative suffix and obeys the same rules of affixation. Instrument occurs only in a transitive sentence and refers to the instrument used to carry out the action against the object. To translate certain 'instrumental' constructions in English, such as, 'to walk with a walking stick', 'to wash a child with water', the instrumental would not be used in Watjarri but rather a form such as -njuwa ('having', or 'equipped with') would be used following the noun or noun phrase in manner position.
(a) Common nouns ending with a vowel take -ngku or -lu. The choice of one or the other is a dialectal one and does not seem to bear any semantic overtones.
(b) Common nouns ending with a consonant take -tu~-tju~-rtu according to the point of articulation of the firal consonant of the stem.
(c) Proper nouns ending with a vowel take - lu.
(d) Proper nouns ending with a consonant take -tu~-tju~-rtu according to the rules above, e.g.
(41) warlarnu-lu tjutju yuwalku
boomerang-INST dog strike-PURP
.. To strike the dog with a boomerang.

> yamatji-lu tjutju warlarnu-ngku pinja
man-ERG dog boomerang-INST hit-PAST
The man hit the dog with a boomerang.
njarlu-ngku tjutju pinja winta-ngku
woman-ERG dog hit-PAST stick-INST
The woman hit the dog with a stick.
makayarla-lu parnti-ya maparn-(r)tu
doctor-ERG make good-FUT magic stone-INST
The doctor will heal him with a magic stone.
(viii) Possession. The possessive suffix is -ku for both common and proper nouns, e.g.
(45) yamatji-ku ngura It is the man's camp.
(46) murtinj-ku mama It is the pre-initiate's father.
(47) Mungku-ku kutjarta It is Mungku's spear.
(48) Mingkurl-ku tjutju It is Mingkurl's dog.
(49) njarlu-ku tjutjungku ngatjanja patjarna The woman's dog bit me.

Inalienable possession: for body parts, names of persons, one's language and other inalienable possessions, the -ku suffix is not used, but the noun precedes the thing possessed and is inflected according to case, e.g.
(50) Akurtu wangka

Akurtu speech
It is the speech of Akurtu.
(51) njinta Mingkurl-nga maka pinja
you Mingkurl-OBJ head hit-PAST
You hit Mingkurl's head.
(52) yalipirri warla
emu egg
It is an emu egg.
(53) murtinj yini wayi tjapin
preinitiate name NEG ask-IMP
Don't ask the pre-initiate's name.
(ix) Purpose. The purposive suffix is -ku also, and remains constant for common and proper nouns. This suffix may indicate purpose or reason, e.g.
(54) yamatji yanmanja tawun-ki warinj-ku
man go-PRES town-ALL food-PURP
A man is going to town for food.
ngatja patjayimanja warinj-ku
I become desperate-PRES food-PURP
I'm becoming desperate for food.
njarlu papa-ku yanatjimanja
woman water-PURP come-PRES
A woman is coming for water.
(x) Cause. The causal suffix is -kutja, with no allomorphs. It is found as a suffix to a noun or noun phrase only. (Ver-

TABLE 3.1-Summary of noun cases

|  | Common noun ending in vowel consonant |  | Proper ending vowel | noun <br> in consonant |
| :---: | :---: | :---: | :---: | :---: |
| Transitive Subject (Ergative) | $\begin{aligned} & -n g(k) u \\ & (-\mid u) \text { rare } \end{aligned}$ | -(tu)* | -14 | -(tu) |
| Intransitive Subject Direct Object <br> (Absolutive) | - $\phi$ (zero) | -pa | -nja | -nga |
| Location (Locative) | -ngka~-la <br> $\sim-k u(r) l a$ | -(ta)* | -1a | -(ta) |
| Direction towards (Allative) | -kuwi~-ki | -kuwi~-ki | -laki | -(ta) ki |
| Direction from (Ablative) | -tjanu | -t janu | -latjanu | -(ta) $\dagger$ janu |
| Instrument <br> (Instrumental) | -ngku~-1u | -(tu) | -1u | -(tu) |
| Possession (Possessive) | -ku | -ku | -ku | -ku |
| Purpose (Purposive) | -ku | -ku | -ku | -ku |
| Cause (Casual) | -kutja | -kutja | -kutja | -kutja |
| Indirect Object (Dative) | -kila | -kila | -1a | -(ta) |

*-(tu) $=-t u$ and its allomorphs, $-t j u$ and $-r t u ;-(t a)=-t a$ and its allomorphs - $\dagger$ ja and -rta; according to the point of articulation of the final consonant of the stem (a homorganic cluster is produced).
bal 'causes' are formed with purposive or reason verb markers), e.g.
(57) ngatja mayu-kutja mamanjimanja I child-CAU become angry-PRES I'm becoming angry because of the children.
(58) minga-kutja ngatja pakarna ants-CAU I rise-PAST On account of the ants I got up.
(xi) Indirect object. The indirect object or dative suffix is -kila for common nouns and -la for proper names (or on a common noun to stress personality or deference). For proper names ending with a consonant, an appropriate allomorph of -ta is used according to the point of articulation of the final consonant of the stem, e.g.
(59) tjutju-kila palu wangkanja yanayiku
dog-DAT he te11-PAST come-PURP
He told the dog to come.
wangkama, wuljpala-la ya-naku-pa tell-IMP whiteman-DAT go-PURP-IMMED Tell the whiteman to go now.
njinta Mungku-la wangkaya waralku you Mungku-DAT tell-FUT sing-PURP You will tell Mungku to sing.
Table 3.1 summarises the case inflections on common and proper nouns, and their allomorphs.

There is also a benefactive suffix -tja 'to me' that occurs only in sentences with the verb 'to give'. See 3.8.2.

### 3.3 ADJECTIVES

3.3.1 STEM FORMATION OF ADJECTIVES. Examples of simple stems, ending with a vowel:

| (62) | kampu 'cooked' | kuka kampu | 'cooked meat' |
| :--- | :--- | :--- | :--- |
| (63) | kumuru 'blind' | palu kumuru | 'he is blind' |
| (64) | malarti 'tired' | yamatji malarti | 'a tired man' |
| (65) | murla 'dead' | mayu panja murla | 'that child is dead' |
| (66) | ngurlu 'afraid' | ngatja ngurlu | 'I'mafraid' |
| (67) | pika 'sick' | mayu pika | 'the child is sick' |
| (68) | wanka 'raw', 'fresh' | kuka wanka | 'raw (uncooked) meat | Examples of simple stems, ending with a consonant:

(69) kartanj 'broken' waru kartanj 'the lamp's broken'
(70) kurninj 'pitiable'
kurninj mama 'poor old father'
mayu kurninjpa 'the pitiable child'
ngatja wangunjpa 'I am ashamed'
(71) wangunj 'ashamed'

Examples of reduplicated stems:
(72) murrkar-murrkar 'wise', 'clever' paluka murrkar-murrkarpa 'he (emph) is wise'
(73) marinj-marinj 'proud' wuljpala marinj-marinjpa 'a proud white-man'
(74) patja-patja 'drunk (intoxicated)' patja-patjan 'you're drunk'
(75) tjirr-tjirr 'embarrassed' njarlu tjirr-tjirrpa 'the woman is embarrassed'
(76) watjarr-watjarr 'leg-weary' ngatja watjarr-watjarrpa 'I'm leg-weary'
3.3.2 DERIVATION OF ADJECTIVES. The following affixes derive an adjectival stem:
[i] -njuwa, the comitative suffix, e.g.
(77) papa-njuwa 'having water' in yirapiya papanjuwa 'a storm cloud heavy with rain'
(78) puta-njuwa 'having lice' in tjutju putanjuwa 'a lice-ridden dog'
(79) martungu-njuwa 'having a spouse' in yamatji martungunjuwa 'a married man'
(80) njarlu pakatinjuwa 'a bucket-equipped woman'
(81) kurartu-njuwa 'equipped with a spear' in pakarli kurartunjuwa 'an initiated man equipped with a spear'
[ii] -kutu, the privative suffix, follows stems ending with a vowel or a consonant. One borrowed word, kan 'gun', takes a vowel following the stem:
(82) kan-a-kutu 'gunless' in pakarli kanakutu njinamanja 'the man without a gun is remaining here'
(83) panin-kutu 'seedless' in wirnta paninkutu 'the tree is seedless'
kurartu-kutu 'spearless' in yamatjl yaljpa kurartukutu 'all the fellows are spearless'
[iii] -yara, reciprocal relationship suffix. This is usually suffixed to relationship terms, and produces an adjective indicating that two or more people have a reciprocal relationship to each other.
(85) martungu-yara 'husband-wife relationship' (martungu 'spouse') as in pula martunguyara 'they-two are married'
(86) katja-yara, mama-yara 'son-father', 'father-son' relationships respectively; yaku-yara 'a mother-child relationship'. Note that kamparnu 'uncle' + -yara becomes kamparnira.
[iv] -njtja, used to derive an adjective from a verb (gerundive suffix).
(87) warni- 'to fall' gives warni-njtja as in papa warninjtja 'it is falling water (rain)' (see section 3.7.2 for the concurrent action suffix, -njtja with -YA class and -nta with -LA class verbs).
3.3.3 DERIVATION OF VERBS FROM COMMON NOUNS AND ADJECTIVES. This rightly belongs under the heading of verbs; but it should be noted at this point that both common nouns and adjectives, by the addition of the appropriate suffixes, may be verbalised to become transitive or intransitive verbs. The following examples involving the verbalising suffixes -tji~-yi 'to become' and -ma- 'to make' will give a general view of the manner of suffixation:
adjective murti 'cold': verb murti-tji-manja 'becoming cold' noun karla 'fire', verb karla-tji-manja 'becoming hot' adjective ngurlu 'afraid', verb ngurlu-ma-nmanja 'to make afraid/hunt

In rarer cases the normal verb suffix may be used, e.g., noun wangka 'speech', 'language', verb wangka-manja 'talking', 'telling'.
3.3.4 CLASSES OF ADJECTIVES. Adjectives may be divided into classes according to the order in which they may occur in descriptive phrases. The following classes may be noted:
Adjectives of state:

| kumuru | 'blind' | palparu | 'stupid' |
| :--- | :--- | :--- | :--- |
| murla | 'dead' | parnti | 'good', |
| murti | 'cold' | patja | 'angry', |
| malarti | 'tired' | yimpilj-yimpilj | 'untidy' |
| ngurlu | 'afraid' |  |  |

Adjectives of colour
wirri/mawurtu 'black' pirinj/pilingki 'white', 'shiny' piljinji/yarlku 'red' (yarlku 'blood')

Adjectives of number or quantity:

| kurriya (kutiya/kurri) | 'one' | yaljpa | 'many' |
| :--- | :--- | :--- | :--- |
| kutjarra (kutja) | 'two' | wirti | 'none' |
| marnkurr | 'three' | kutju | 'another' |

Adjectives of size:

| yarnta |  |
| :--- | :--- |
| tjintjamarta $\quad$ 'sig', 'large' | wirtara ', 'little', 'young' wiljpirri 'thin' |

See 4.2 for discussion of order of adjectives in the noun phrase. Demonstrative adjectives, or positional pronouns are dealt with in 3.5 .
3.3.5 INFLECTION OF ADJECTIVES. Adjectives are inflected in the same manner as nouns, depending on whether the stem ends with a vowel or a consonant and giving attention to the grammatical function the adjective is performing. This is dealt with more specifically under syntax; but, briefly, functioning as nouns or as the final word in a noun phrase, adjectives take the same inflections (case endings, etc.) as would nouns in these positions, e.g.
(88) kutiya-lu karla kutjarna
one-ERG fire ignite-PAST
One (fellow) lit the fire.
(89) mayu kutjarra yanatjimanja
child two-ABS come-PRES
The two children are coming.
njarlu yanmanja tjutju kutjarra-ku
woman-ABS go-PRES dog two-PURP
The woman is going for the two dogs.
pakarli-lu njarlu yarnta pinja
man-ERG woman big hit-PAST
The man hit the big woman.
pakarli-lu njarlu njanja-nja pinja
man-ERG woman this-person-ACC hit-PAST
The man hit this woman.

### 3.4 PRONOUN MORPHOLOGY

Table 3.2 shows the pronoun paradigm. It will be noted that the case system associated with pronouns is a nominat-ive-accusative system differing from the ergative system associated with common nouns and adjectives. This means that 'Subject' in the table covers both transitive and intransitive subject as the pronoun retains the same form for each of these grammatical functions. 'Object' then refers to transitive object, which takes the accusative case.

### 3.5 POSITIONAL PRONOUNS OR DEMONSTRATIVES

Positional pronouns or demonstratives may fill a number of grammatical functions, such as transitive or intransitive

TABLE 3.2 - Pronouns and their inflections


[^2]subject, direct or indirect object, location-direction, and so on, taking the appropriate case markers on clause level. They may also function in the same manner as pronouns, both personal and non-personal, i.e., they may stand in the place of common and proper nouns (but with the added component of 'position in relation to the speaker'). As demonstratives they may also occur on phrase level, functioning as modifiers or specifiers.

Positional pronouns indicate the position of a third person or thing as 'near', 'mid-distant', 'distant' or as someone or something which was referred to previously, but is not now visible. They are inflected like nouns and not like pronouns. The stems are as follows:

```
njanja 'that which is near', 'this person/thing'
pala 'that mid-distant person or thing'
mawu 'that distant person or thing'
panja 'that person or thing previously referred to' (panjatja
                                    'someone of the outside group referred to previously')
```

Examples, showing use of the case endings on positional pronouns:
Transitive sulject
(93) mawu-lu kuka pawunmanja That (distant) person is cooking meat.

Intransitive subject
(94) njanja ngalilaki yanatjinja This person came to us-two

Direct object, substitute for a common noun
(95) karla-ki-n tjurra panja
fire-ALL-2sg put-IMP that (previously mentioned)thing Put that thing in the fire.
Direct object, a person
njarlu-lu pala-nja manmanja
woman-ERG that-person-ABS get-PRES
The woman is picking up that (child).
Location-Direction
(97) yamatji njanja njinamanja
fellow here sit-PRES
The fellow is sitting here.
To avoid ambiguity, this sentence may be repeated as:
yamatji njinamanja ${ }^{\circ}$ njanja
fellow sit-PRES here
The fellow is sitting here.
(With ${ }^{\circ}$ indicating the onset of primary sentence stress.
which, in the actual field situation, was not lacking in the first example of this sentence but was unmarked in the written example in the above description.)

As well as the directive, -ki 'to', 'towards', listed as a suffix to nouns, another suffix is frequently found following the positional pronouns in location-direction on clause level. It is the suffix -karti 'around', 'on the other side of', e.g.
(99) njarlu kutjarra panjakarti njinamanja
woman two-ABS that-around sit-PRES
The two women are around the other side there (referring to something previously referred to).
(100) yamatji panja palakarti njinamanja
fellow that that-around sit-PRES
That fellow (we were talking about) is sitting around there.
An additional suffix, occurring before -karti, the form -rni, probably referring to the speaker as object of the direction (compare -rni the pronominal suffix indicating 1st person object), is also used in some combinations such as:
(101) mayu yaljpa njanja-rni-karti yanatjimanja
child many this-side of come-PRES
All the children are coming on this side.
(102) mayu yaljpa panja-rni-karti marta-ngka njinamanja
child many that-side of hill-LOC sit-PRES
All the children are sitting on the other side of the hill.

### 3.6 ADVERBS

Under this heading there are three classes distinguish-
ed. There is a set of locational-directionals which occur in the location-direction clause-level 'slot' and which do
not require the locative suffixes required by nouns or noun phrases occurring in this position. Then there is a set of temporals which occur in the time 'slot' on clause-level. These also occur without the suffix which occurs with nouns or noun phrases in this position. A third set may be labelled 'adverbs of manner' in that they occur in the manner 'slot' immediately preceding the verb. These also are undeclinable except that they take the ergative suffix when the clause is transitive.
[a] The locational-dipections. These may be diagrammed as follows:

[b] The temporals. These may be diagrammed according to whether they refer to time in relation to the present or to the time of day.

| ukarla | Kuwarti | (w) urta |
| :--- | :--- | :--- |
| 'before' | 'now' | 'later' |
| 'previously' | 'today' | 'in the future' |
| mungal | midday tjuljara | munga-munga |
| 'during pre-noon' | 'during afternoon' 'late afternoon' |  |

maruwara * marungapa
'early in the morning' 'at sunset'
*'midday' and 'midnight' are derived from nouns, tjurringka and mungangka respectively.
waparangu (from wapa-karangu)
'another day'
Whether the time of day is past or future depends on the tense of the verb. For example:
(103) ngalitju mungal yarra
we-two-inc-RECIP in the morning go-IMP
Let us go away (with each other) in the morning.
[c] Adverbs of manner. A list of these forms will be found in the Vocabulary.
(104) mayu ngartara ngayimanja
child crookedly lie-PRES
The child is lying uncomfortably.

### 3.7 VERB MORPHOLOGY

### 3.7.1 STEM FORMATION

[i] Simple Stems. Simple verb stems may have one to four syllables, but most frequently consist of just two syllables.

| One syllable roots <br> (complete list) | Two syllable roots <br> (examples) | Three or more syllable roots <br> (examples) |  |
| :--- | :--- | :--- | :--- |
| pu- 'to hit' | patja- 'to bite' | malarti- 'to tire' |  |
| nja- 'to see' | njina- 'to sit' | mungalji- 'to night-fall' |  |
| tju- 'to put' | inti- 'to flow' | patawi- 'to stiffen' |  |
| ma- 'to get' | ngula- 'to cry' |  |  |
| nga- 'to eat', | ngurli- 'to fear' | Four syllable stem |  |
| yu- 'to give' | paka- | 'to rise' | (rare example) |
| ya- 'to go' | pawu- | 'to cook' | kartapaya- 'to break meat' |

[ii] Reduplicated stems usually indicate repeated action, e.g.
kiti-kiti- as in kiti-kiti-manja 'tickling'
kula-kula- as in kula-kula-ri-manja 'becoming closer together'
mara-mara- as in mara-mara-nga-nja '(the child) crawled about'
mawu-mawu- as in mawu-mawu-yi 'keep moving over a bit further'
puti-puti- as in puti-puti-manja 'continually circ1ing around'
ngangku-ngangku- as in ngangku-ngangku-\# 'think about it' (ngangku
'listen')
ngantju-ngantju- as in ngantju-ngantju-manja 'being very bashful' tilj-tilj- as in tilj-tilj-manmanja '(frogs) croaking'
[iii] Complex Stems. The etymology of polysyllabic stems is difficult to determine by the descriptive method without recourse to comparative and other branches of linguistics. Stems, such as kartapaya, are obviously compounds (kartaoccurs in verbs to do with 'breaking' or 'cutting'); but -paya does not appear to occur as a meaningful unit in Watiarri. A number of other simple verb stems take suffixes to extend their meanings; but again it is difficult to assign specific meanings or functions to the various suffixes themselves.

A number of these forms will be dealt with under Derived Stems; but before listing these forms it will make for simpler presentation if the major classes of the verbs are introduced first.
[iv] A preliminary note on verb classes. Verbs may be divided into two inflectional classes, with a residue of irregular forms; and simultaneously into two syntactic classes. Using the future tense marker as the identifying feature, the two major inflectional classes may be labelled the -YA class and the -LA class. The seven irregular verbs recorded each has a monosyllabic stem.

The two syntactic classes are the transitive (TV) and intransitive (IV) divisions. These classes are determined by occurrence of the verbs belonging to them in two differently marked types of syntactic constructions. The verbs themselves are not marked specifically for transitivity, although there are examples of known intransitive verbs changed to transitive verbs by the addition of a transiti-
vising suffix.
The two inflectional classes are clearly marked by the differing allomorphs of the tense suffixes as follows:
the -ya class Present tense -manja, e.g. ngulamanja 'crying'
Past tense -nja, e.g. yanatjinja 'came' Future tense -ya e.g. intiya 'will flow'
the -la class Present tense -nmanja, e.g. †japinmanja 'requesting' (TV)
-rnmanja following stems with final a or u
Past tense - rna~-na e.g. wararna 'sang (a song)' (TV) Future tense -rla~-la e.g. pakarla 'will arise' (IV)
[v] Derived verb stems.
-YA class verbs:
(a) noun, adjective or verb root + nga. Transitive and intransitive verbs are formed with the suffix -nga. Apart from its verb-forming function, the meaning of -nga is obscure. Most examples of its occurrence are listed below.
karla-nga-ya (TV) 'will cause to be hot' (karla 'fire')
mara-nga-ya (IV) 'will crawl' (mara 'hand')
parnti-nga-ya (TV) 'will smell it' (parnti 'smell')
pitja-nga-ya (IV) 'will prowl' (pitja 'locomote' Western Desert language)
pukurna-nga-ya (IV) 'will run' (puku 'buttock', pukurnta- 'to run along')
tjakula-nga-ya (IV) '(the sun) will set/enter' (fjakula, meaning uncertain)
tjakultju-nga-ya (IV) '(the water) will flow' (tjakul+-tju but meaning uncertain)
karta-nga-ya (IV) 'will break/become broken' (kartanj 'broken')
kartiya-nga-ya (TV) 'will lift meat' (karti- 'to lift')
piya-nga-ya (IV) 'will play' (piya 'play') (piyamanja 'flying')
ngari-nga-ya (IV) 'will lie down' (ngari-/ngayi- 'to lie/be Iying down')
wilala-nga-ya (IV) 'will spill/leak' (wila 'creek', but wilala uncertain)
yara-nga-ya (IV) 'will tear/rip/split' (yara 'torn', 'ripped')
(b) verb root/noun root + -ranga. The combinations, -la-nga and -ya-nga (as in wilalangaya and kartiyangaya above) may be interpreted as allomorphs of -ranga; but the evidence seems to be inconclusive at this stage. Transitive and intransitive verbs are formed with this suffix. Its lexical meaning is uncertain. It functions as both a verbalising suffix and to extend the meaning of simple verb roots. These examples are virtually the total number of examples of this form recorded.
njina-ranga-ya (IV), 'will sit down (from a non-sitting position)'. Compare njina- as the root of the verb 'to sit', referring to the act of being in a sitting position.
paka-ranga-ya (TV) 'to rouse, raise'. Compare the IV paka- 'to rise', -LA class.
yurla-ranga-ya (IV) 'to smoke/to be smoky (as a fire)', (yurla 'smoke' (noun)).
(c) root + -rni. The root may be a verb or other root, sometimes its origin is uncertain. The suffix seems to indicate 'direction towards the speaker'. These are the recorded examples:
kangka-rni-ya (TV) 'will fetch/bring' (compare kangka- 'to take (away)')
pungku-rni-ya (IV) 'will sleep' (meaning of pungku, unless related to
'hit' or violent action, is uncertain)
njara-rni-ya (IV) 'will become hungry' (meaning of njara- in this context not known)
tjampa-rni-ya (IV) 'to run', 'will hurry' (tjamparn 'hurry'', 'hurriedly')
tjupa-rni-ya (IV) 'will straighten out' (tjuparn 'straight')
(It could be stipulated that tjuparn $+-r n i$, by loss of final consonant of the stem, becomes tjuparni-, and so with tjamparn; but it seems unnecessary to engage in a circular argument as to which is the basic form in such a brief description of Watjarri.)
(d) noun, adjective, adverb or verb root + -rin-yi. Intransitive verbs only are formed by this combination. The suffixes are found in free fluctuation and will be symbolised in the lists below by -yi alone. The morpheme, manifested by the variants $-r i$ and $-y i$, functions as a verbalising suffix and carries the meaning of 'to be' or 'to become'. It may be added to any noun or adjective.
karla-yi-ya 'will become hot' (karla 'fire')
kula-yi-ya 'will become near/close (kula 'near/close')
murla-yi-ya 'will become dead' (murla 'dead')
paljpa-yi-ya 'will become tired' (paljpa 'tired')
patja-yi-ya 'will become angry' (patja 'angry')
pika-yi-ya 'will become sick/ill' (pika 'sick')
tjuka-yi-ya 'will become happy' ( $t$ juka, not recorded in isolation)
tjintja-yi-ya 'will become small' (tjintja 'small')
tjuna-yi-ya 'will become clothed' (tjuna probably from the verb 'to put')
wilja-yi-ya 'will become splashed, sprinkled, bathed' (wilja- 'to splash')
(e) root $+t_{j}{ }^{\sim}-y i$. Both transitive and intransitive verbs are formed. The root may be a verb root or derivative or a root of unknown etymology. The function and meaning of the suffix is uncertain, sometimes changing a transitive verb into an intransitive verb, changing the direction of an action, or, in one case, carrying a meaning similar to -ri~ -yi above. The list below probably includes all the examples recorded.
kalpa-tji-ya (IV) 'will climb' (kalpa not recorded elsewhere)
tjarta-tji-ya (TV) 'will insert' (tjarta 'calf of leg')
wangka-tji-ya (IV) 'will talk/converse' (wangka 'speech', wangka(TV) 'to tell')
watji-tji-ya (IV) 'will become finished/complete' (watji 'no', 'nothing')
yana-tji-ya (IV) 'will come (towards the speaker)' (ya- 'to go')
mana-tji-ya (TV) 'will lift up' (ma- 'to get')
karla-tji-ya (IV) 'will become hot' (karla 'fire')
murti-tji-ya (IV) 'will become cold' (murti 'cold')
-LA class verbs.
[a] noun or adjective root + -ma. The suffix - ma may produce transitive or intransitive verbs. The suffix may be related to the verb ma- 'to get'; but it is difficult to assign a lexical meaning to it. The following are the only recorded examples:
puntu-ma-la (TV) 'will close/shut it' (puntu not found in isolation) warntu-ma-la (TV) 'will skin it' (warntu '(animal) skin')
parlku-ma-la (IV) '(dog) will bark' (parlku not found in isolation)
ngurlu-ma-la (TV) 'will hunt/sool' (ngurlu 'fear' in Western Desert language)
tjunku-ma-la (IV) 'will swim/splash about (in water)' (tjunku, etymology uncertain)
waljtji-ma-la (TV) 'will corrupt/belittle' (waljtji 'bad')
yal-ma-la (TV) 'will do what?' (yal 'interrogative')
mika-ma-la (TV) 'will make it' (mika 'make', probably English borrowing)
mili-ma-la (TV) 'will light (a fire)' (mili 'light', 'daylight') karla-ma-la (TV) 'will heat it' (karla 'fire')
[b] root + -tja. Only two examples are recorded, one intransitive the other transitive. One root is adjectival, the other a verb root. The meaning of the suffix is uncertain; but, in the case of its occurrence with the adjective root, it could be related to the western Desert form -tjarra meaning 'having', 'equipped with'.

```
murti-tja-la (TV) 'will become cold' (murti 'cold')
warni-tja-la (TV) 'will throw it (warni- 'to fall')
```

[c] root + -tju. All verbs produced by the suffixation of -tju are transitive. The suffix itself is probably related to the verb tju- 'to put'.
ngari-tju-la (TV) 'will cause to lie down' (ngari-/ngayi- 'to lie/
recline')
wakal-tju-la (TV) 'will scratch/write it' (waka- 'to spear') pina-tju-la (TV) 'will burn it' (pinma 'light' in Patimaya)
yurla-tju-la (TV) 'will cause to smoke' (yurla 'smoke', 'smoke signal')
3.7.2 VERB INFLECTION. Table 3.3 shows the inflections of the two conjugational classes of regular verbs and Table 3.4 has all forms recorded for the seven irregular verbs (all of them have monosyllabic roots).

The -YA class is the largest verb class with approximately $63 \%$ of the total number of verbs ( $48 \%$ intransitive, $15 \%$ transitive). The -LA class comprises about $36 \%$ ( $10 \%$ intransitive. $26 \%$ transitive). The irregular verbs make up the remaining $1 \%$ (or less); all irregular verbs are transitive excepting ya- 'to go'.

The following inflectional suffixes occur with the regular verbs. In the list of suffixial allomorphs below, the allomorph associated with the -YA class is Iisted first, followed by the -LA class allomorph or allomorphs.
(i) -manja~-rnmanja/-nmanja (stems ending with -i take only -nmanja in -LA class, but stems ending -a or -u may take -rnmanja or -nmanja by dialectal choice or in fluctuation) 'present tense' or 'continuous aspect', e.g.

TABLE 3.3-Inflections of regular verbs

|  | present | past | future | perfect <br> impera- <br> tive | imperfect <br> impera- <br> tive | purposive | concurrent action |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text {-YA } \\ & \text { class } \end{aligned}$ | -manja | -nja | -ya | -ф (zero) | -ma | $\begin{aligned} & -\mathrm{ku} \\ & \cdots-\text { wu } \end{aligned}$ | -njtja |
| $\begin{aligned} & \text {-IA } \\ & \text { class } \end{aligned}$ | -rnmanja ~-nmanja | $\begin{aligned} & \text {-rna } \\ & \text { ~-na } \end{aligned}$ | $\begin{aligned} & -r l a \\ & \sim-l a \end{aligned}$ | -n | - nma | - I ku | -rnta <br> ~-nta |

(105) njarlu yanatjimanja
woman come-PRES
The woman is coming.
(106) nganalu pawunmanja, kuka
[pawunmanja and pawurnmanja
who-ERG cook-PRES meat fluctuate dialectically]
Who is cooking it....the meat?
(ii) -nja~-rna (or -na following stems ending in -i), 'past
tense' or 'completive aspect', e.g.
(107) kutiya karinja
one-ABS stand-PAST
One only stood.
(108) mayu nijinanja parnangka
child-ABS sit-PAST ground-LOC
The child sat on the ground.
(109) palu wayi ngangkurna
he-NOM not hear-PAST
He did not hear it.
(iii) -ya~-rla (or -la following -i): 'future tense' or 'potential aspect', e.g.
(110) papa urta intiya
water-ABS later flow-FUT
The water will flow by and by.
(111) palu ngakarla kuwarti
he-NOM catch-FUT now/directly
He will catch you directly.
(iv) $-\phi$ (zero) $\sim-n$, 'perfect imperative mood' or 'completive command'. Used in commands and as a hortative or desiderative with first person subjects, e.g.
(112) njinaranga Sit down!
(113) kulayi Come closer!
(114) kuka pawun Cook the meat:
(115) tjapin Ask him!
(116) ngatja njina I want to sit down, or let me sit down.
(v) -ma~-nma, 'imperfect imperative' or 'continuous command'. be used as a polite form of command (or request) or may indicate 'permission', e.g.

TABLE 3.4 - Inflections of irregular verbs

|  | present | past | future | perfect |
| :--- | :--- | :--- | :--- | :--- |
| imperative |  |  |  |  |

(117) njinama, pintu Remain sitting and be quiet:
(118) Kuwa, wangkama Yes, keep telling it!
(119) ngatjanja ngangkunma Continue to hear me:
(vi) -ku~-lku, 'purposive', marking a verb in a dependent clause of purpose or reason. (Note that in some of the examples the irregular form -kulu or kurlu may be
shown with an irregular verb.)
ngapuri, njinta njinaya wangkaku palanja
brother-in-1aw you sit-FUT tell-PURP him
Brother-in-law, you will stay to tell him (the story).
(121)
palu warlarnu mana tjutju yuwalku
he-NOM boomerang get-PAST dog strike by throwing at-PURP He got the boomerang to hit the dog.
Note that -ku has an allomorph, -wu, which follows the low vowel -a; but this seems to be dialectal choice rather than by rule as in Walmatjari (see Hudson 1978:12-13). For example, Mrs. Dann corrected Joe Marlow's manawu to manaku, but allowed Fred Simpson's use of the same suffix. The -wu suffix manifests phonetically as $[-u]$ following $-a$ and $-u$, e.g., kutiyalu kartiyangawu '....so that one could take the meat out of the fire', shown phonetically as [kutiyalu katiyanau].
(vii) -njtja~rnta/-nta 'concurrent action (C.A.)' is marker for a verb in a dependent clause functioning as object, time, or other clause level 'filler' in which the action or event is occurring simultaneously with the action or event of the main clause, e.g.
tjatjan mayu tjamparninjtja pinjakurlu
chase-IMP child(ren) run-C.A. hit-PURP
Chase the children who are running away in order to punish them!
ngatja ngangkuna winjtju yuwakanta
I-NOM hear-PAST wind blow-C.A.
I heard the wind blowing.
ngatja njinja yamatji yaljpangku mama karinjtja
I-NOM see-PAST fellow many-ERG ceremony performing-C.A.
I saw a number of fellows performing a ceremony.
The forms of the inflectional suffixes occurring with the irregular verb roots are not completely predictable and, to complicate the picture, the stems themselves change shape for some tenses or moods. Not all tenses, aspects and moods have been recorded. The forms obtained are given in Table 3.4. Forms which have not been recorded but which are hypothesised are enclosed within parentheses in the table. Note that although ngangkula ('will hear it') is not listed as an irregular verb, it will be noted that in an example the purposive form is written ngangkunku instead of, as would be expected, ngangkulku. Further research may clarify this point.

### 3.8 BOUND PRONOUNS AND OTHER MOVEABLE SUFFIXES

3.8.1 PRONOMINAL SUFFIXES. The low number of examples of the occurrence of bound pronouns seems to indicate that, in Watjarri (unlike in some Western Desert dialects), the preference is to use free pronouns much more frequently than bound pronouns.

In a large mass of conversational material recorded there are only a few examples of the use of bound pronouns
functioning as subject of a clause. 1st and 2nd singular, 1st dual and 3rd person plural forms have been noted. 1st and 2nd person object forms have been recorded also, but only on rare occasions. Bound forms have been more closely associated with commands, and there are examples of the bound forms occurring with the free forms of the pronoun to form emphatic pronouns.

The following tables summarise the basic information extracted from the recorded data:

Pronominal suffixes, subject form (also used in emphatic pronouns):

|  | Singular | Dual | Plural |
| :--- | :--- | :--- | :--- |
| 1st | - rna | $-1 i$ | --- |
| 2nd | $-n$ | $(-p u l a)$ | --- |
| 3rd | $-\\|$ | -- | $-y a$ |

The bound subject pronoun occurs as the final suffix to the first grammar functioning item or 'tagmeme' in a clause, e.g.
(125) ngatja-rna ngarinja $I$ (emphatic) lay down.
(126) yanmanja-rna urta $I$ am going away shortly.
(127) urta-n kariya You will dance by and by.
(128) yarra-pa-1i ngali Let us (dual inclusive i.e. you and me) go now.
Note that there is no inclusive-exclusive distinction with the bound pronouns; but (128) shows how the distinction can be made by combining free and bound pronouns.
Pronominal suffixes, object form:

$$
\begin{array}{cc} 
& \text { Singular } \\
\text { 1st } & - \text { rni } \\
\text { 2nd } & \text {-nta }
\end{array}
$$

The bound object pronoun also occurs following the first clause level unit as a final suffix, e.g.
(129) ngatja-nta watji pinja I did not hit you.
(130) pinja-rni-n ngatjanja
hit-PAST-1sg0-2sgA 1sg-0
It was definitely me whom you hit.
Vocative forms of the pronominal suffixes (as associated with commands):

2nd | Singular | Dual | Plural |
| :---: | :---: | :--- |
| (zero) |  |  |

The vocative suffix, while most frequently occurring on the verb, as a final suffix, may also occur as a suffix to an item or phrase preceding the verb if another clause level construction occurs in the initial position in the clause, e.g.
(131) yanatji-ф You come here; you (singular) come.
(132) yanma-pula You (dual) go on!, you two, proceed!
(133) yanma-ya You (plural) proceed:
(134) tampatja-pula yunga You (dual), give me damper:
3.8.2 SUNDRY ADDITIONAL FORMS OF THE PRONOMINAL SUFFIXES. The following have been noted:
[i] -tja '1st person benefactive', as in (6), (134) and
(135) tampatja yunga Give me damper:
(136) yungatja tampa Give me damper:
(137) yungatja kutiya ngarnaku Give me one to eat:
[ii] -ra'3rd person dative' (only one example noted) :
(138) njintara wangka You say it to him:
[iii] -tju '1st person possessive', e.g.
(139) kurtatju yanmanja kuwarti My brother is going directly.
(This suffix occurs with nouns or noun phrases; but most frequently with kin terms, e.g., kangkutju 'my uncle', mamatju 'my father', etc.)
[iv] -tju 'reflexive-reciprocal suffix', occurs in association with transitive verbs and often as a suffix to a pronoun, e.g.
(140) njupali wangkatju "You two are talking to each other" or (Lit.) You two, talk to each other!
(141) mutukakula wangkatjinjtja ngalitju In the motor car, we two were conversing with each other.
3.8.3 THE EMPHATIC SUFFIX. -rtu ${ }^{\text {' emphatic or intensifier }}$ suffix' may follow any part of speech which needs to be emphasised, e.g. tjamparn 'Hurry up!' and
(142) tjamparntu, njanjura Make it quick, I'm hungry! (in which
'Make it quick' is a colloquial expression for 'Hurry more').
3.8.4 IMMINENT ACTION OR PUNCTILIAR SUFFIX. -pa is not a tense or aspect marker in the strict sense. It may occur with any part of speech in any part of a clause, drawing attention to the imminence of the action itself (as a suffix to the verb) or in relation to any specific clause level item. The meaning of -pa remains rather elusive, so a number of examples are supplied. The suffix, when occurring with verbs, is a second order suffix, following tense or mood affixes and preceding pronominal suffixes.
(143) njintapa wangka You say it now!
(144) njupalipa wangka You two say it now:
(145) nganalupa warala Who will sing now?
(146) martungunjuwapa It was a married person (? 'probably' or 'just observed')
(147) ngakanpa Grasp him immediately!
(148) wangkama wuljpalala yanakupa Tell (politely) the whiteman to go away now (i.e. 'not to hesitate to leave').
(149) yarrapartu Let's definitely go away right now.
(150) kurninj, yanmanja puluku traintapa tjampinuki What a pity, the poor bullocks are on the train already to go to Geraldton.
(151) nawupan wangkamanja yaljpa wangka nganatjungu Why are you at this point talking all my language?
3.8.5 NEGATION. The negative, watji, has a variant, wayi (which in some dialects is wayi, where [ $ұ$ ] is a voiced lami-no-alveolar fricative) which is frequently used to negate verbs. However, some speakers prefer to retain the form, watji, for this purpose.
(152) watji, wayi njanganja No, I cannot see it.
(153) ngatja wayi ngurlimanja I'm not becoming afraid.
(154) watji, wayi pawurna No, its not cooked.
(155) ngatjanta watji pinja I did not hit you.
(156) watji nganayangu ngura Not my camp.

### 3.9 INTERROGATIVES

There are interrogative substitutes for most grammatical functions on all levels - word, phrase and clause. The substitute for a common noun is nja? ('what?'). This form is declined like a common noun following an ergative-absolutive system. Proper names follow this system also; but instead of the zero marker for the absolutive, proper names take -nja~-nga both for the subject of an intransitive clause and for direct object in a transitive clause.
[i] Common noun interrogative substitute, nja?
transitive subject nja-lu? What did it?
intransitive subject
object
location
instrument
direction (towards)
direction (from)
purpose
vocative
possession (alienable)
possession (inalienable)
time (time at which)
becoming (intransitive)
nja? What did?
nja? He did it to what?
nja-ngka? On what?
nja-ngku? With what?
nja-ki? To what?
nja-tjanu? From what?
nja-ku? For what?
nja! Whatever it is:
nja-ku? Belonging to what?
nja (warla) (The egg) of what?
nja-ngka? When?
nja-tji-(plus tense) What is he becoming?
[ii] Proper name (person or place) substitute ngana?
transitive subject
intransitive subject object
location
direction (towards)
direction (from)
vocative
possession (alienable)
possession (inalienable)
ngana-lu? Who did it?
ngana-nja? Who did? (freq. reduced to ngana)
ngana-nja? Whom?
ngana-la? At what named place?
ngana-laki? To whom/place name?
ngana-la-tjanu From whom?
ngana Whoever it is:
ngana-ngu? Belonging to whom?
ngana-nja? Whose? (as whose head?)

Examples include:
(157) palu ngana-nja pinja? He hit whom?
(158) mayu nja-ngka njinamanja? What's the child sitting on?
(159) yamatjilu nja-ngku pinja? With what did the fellow hit him?
(160) warla pala nja-tji-nja? What did that egg become?
(161) njangka palu yanatjinja? When did he come?
(162) palu ngana-nja maka pinja? Whose (whom) head did he hit?
[iii] Interrogative substitutes for clause level fillers:
for transitive verb yal-ma- (-1a class)
for intransitive verb yali- (-ya class)
for stative
for number (subject)
yal?
for reason
for manner tjarnu? (intransitive)
yalj-tju? (transitive)
exclamation
$y i$ ?
general interrogative
wiyi?
Examples include:
(163) palu yal-ma-nmanja? What is he doing to it? (trans.)
(164) palu yali-manja What is he doing? (intrans.)
(165) yai njinta?
what state you
How are you?
(166)
nakalju yamatji yanatjinja mama kariku?
how many men come-PAST song dance-PURP How many men came to dance (perform) the ceremony?
nawu-lu-pula njanganja ngalinja?
why-they two see-PRES us two-ACC
Why are those two looking at us two?
(168) ngatja tjarnu wangkaya?

I how speak-FUT
How will I talk (tell it)?
yaljtju mikamanja kurartu?
how make-PAST spear How did you make the spear?
(170) kurninjpara, yi
pitiable ones, who on earth
We poor old fellows, what do you think we are?
(171) warntu wiyi? Where's my blanket?
(172) wangkanja wiyi?
speak-PAST eh?
Did he speak?

## 4. SYNTAX

### 4.1 THE BASIC (NON-EXPANDED) CLAUSE TYPES

Below are the basic clause types of Watjarri laid out in $t$ lar form. Optional expansions are dealt with in a later sectic but it will be noted that where a noun or a noun phrase may fil particular clause level spot, examples of both types of fillers be shown in the examples.

### 4.1.1 THE INTRANSITIVE STATEMENT

A. With common noun subject:
common noun subject predicate
(173) papa - $\varnothing$ inti-manja
(174) mayu kutjarra - $\phi$ yanatji-manja
The water is flowing,
The two children are coming.
B. With proper name subject:
proper name subject
Mungku-nja
(175)
(176) Mingkurl-nga
predicate
njina-manja Mungku is staying (1it: sitting).
paka-rnmanja Mingkurl is arising.
C. With free pronoun subject:
free pronoun subject predicate
(177) ngatja kula-yi-manja I am coming closer.
(178) njinta yanatji-manja? Are you coming?
D. Bound pronoun subject:
predicate
(179) yanatji-manja-rna I am coming. (I'm coming.)
(180) yanaya-n
4.1.2 THE INTRANSITIVE COMMAND
optional vocative
(182)
(183) mayu,
(184) njupali,
(185) Mungku,
predicate
kulayi- $\varnothing$ Come closer:
paka-n Get up:
tjuparni- $\phi \quad$ Child, straighten out!
wangkatji- $\phi \quad$ You two, talk!
yanatji- $\varnothing$ Mungku, come here:

### 4.1.3 THE TRANSITIVE STATEMENT

A. With common noun subject; common noun object; transitive verb:

|  | common noun <br> subject | common noun <br> object | predicate |
| :---: | :--- | :--- | :--- |

B. With proper name subject; proper name object; transitive verb:
proper nome proper name subject
(190) $\quad$ Nungki-lu
(191) Panin-tu
object predicate

Panin-nga njinja Nungki saw Panin. Nungki-nja ngangku- Panin heard Nungki. rna
C. With free pronoun subject and object, plus transitive verb:

| (192) | pronoun subject <br> ngatja | pronoun object <br> njinta-nja | predicate <br> ngangku- <br> rnmanja | I am listening to |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  | you. |  |
| (193) | njinta | palu-nja | pinja | You hit him. |
| (194) | njupali | pula-nja | ngangkurna | You two heard those |
|  |  |  |  | two. |

D. With bound pronoun forms plus transitive verb:
free pronoun subject-
bound object
(195) ngatja-nta
(196) njinta-rni
free pronoun objectbound subject
(197) njinta-nja-rna
(198) palu-nja-n
predicate
tjutila I'11 tie you up. pinja You hit me:
predicate ngangkurna I heard you. kangkaya You will take him away.
bound pronouns with the predicate
(199) ngurlumanmanja-rna- $\phi$

I am frightening him.
4.1.4 THE TRANSITIVE COMMAND.
optional
vocative
(203) mayu,
kuka
(206)
object
predicate tjatjan You chase it:
puma You hit it:
pawun You cook the meat:
nganma Child, drink the milk!
waran You two, sing a song!
tjatjan- You two, chase it! pula
puma-ya All of you, hit it:

### 4.1.5 VERBLESS CLAUSE TYPES

A. Equational:
(207) ngatja
(208) ngana yini

| predicate <br> pakarli | I am an initiated <br> man |
| :--- | :---: |
| pala | What is that person's |
| njarlu | name? child is a female <br> katja <br> maparnpa <br> offspring. <br> The man is a sorcer- <br> rer. |
| pakarli-rna I'man initiated |  |
| man. |  |

(210) pakarli
subject
ngat jangu mayu
B. Stative:

|  | subject | predicate |
| :--- | :--- | :--- |
| (212) | warla | parnti |
| (213) | yamatji pala | pika |
| (214) | kurta | mampu pika |
| $(215)$ |  | pika-n? |

C. Locational:
subject predicate
(216) kuwiyarl marta-ngka
(217) njarlu kutju panjakarti
(218) yamatji njanja ngura-ngka
(219) yamatji yaljpa Yuwin-ta
(220)
ngura-ngka-rna
The egg is good.
That fellow is sick.
Elder brother is sore-legged. Are you sick?

### 4.1.6 DEPENDENT CLAUSE TYPES

A. Simultaneous action clauses. Dependent clauses are marked to indicate their relationship to the main clause. There is no true 'switch reference system', but rather a focus on simultaneity of action as contrasted with subsequent action. (By 'action' in this context is meant event as contrasted with entity and abstraction.)

Simultaneity of action is indicated in the dependent clause by the concurrent action suffix, -njtja~-rnta~-nta as described in 3.7.2 (vii).
temporal clause (dependent) subject predicate
(221) mayu yaljpa kurl-ki yana-nta pakarli panja marlaku yanatjiya. child many school-ALL go-C.A. man that return come-FUT. When the children go to school, that man will come back.

| temporat clause (dependent) | subject | predicate |
| :--- | :--- | :--- |
| karangu tjakulanga-njtja- | -rna | yanatjiya |
| sun enter-C.A.- | -I | come-FUT. |

I will come at sunset.
subject predicate direct object clause
(223)
njarlu-ngku pinja tjutju warntu-ngka ngayi-njtja
woman-ERG hit-PAST dog blanket-LOC lie-C.A.
The woman hit the dog which was lying on the blanket.
(224)
subject predicate direct object clause
tjatja-n mayu tjamparni-njtja
chase-IMP child run-C.A.
Chase the child who is running.
subject object predicate locational/direction clause
(225) $\begin{array}{lll}\text { tjutju-ngku } & \text { marlu } & \text { tjatjanmanja yamatji kurartu-njuwa } \\ \text { dog-ERG } & \text { kangaroo } & \text { chase-PRES man }\end{array}$
kayi-njtja-ki
stand-C.A.-ALL
The dog is chasing the kangaroo towards the man standing with a spear.
subject object predicate locational/direction clause
tjana
they
mayu murilja child preinitiate

take-PAST
yamatji yaljpa-ngku mama
men many-ERG song

$$
\begin{aligned}
& \text { kari-njtja-ki } \\
& \text { perform-C.A.-ALL }
\end{aligned}
$$

They took the pre-initiate child to the men who were performing a ceremony.

| subject clause | object predicate |  |
| :--- | :--- | :--- |
| yamatji yaljpa-ngku mama kari-njtja-lu | murilja ngaka-rna |  |
| man | many-ERG | song perform-C.A.-ERG |
|  |  | pre-ini- grasp-PAST <br> tiate |

The men who were dancing the corroboree grasped the pre-initiate.
Further examples of dependent clauses indicating simultaneity of action:
(228) wilara paka-rnta yanatji ngatjangu ngura-ki
moon rise-C.A. come-IMP my camp-ALL
When the moon arises, come to my camp.
ngatja mayu njinja marlaku yana-nta kurl-tjanu
I child see-PAST return come-C.A. school-ABL
I saw the children coming home from school.
(230) yamatji-lu njinja njarlu-ngku mana-nta lizard
man-ERG see-PAST woman-ERG get-C.A. lizard
The man saw the woman get the lizard.
B. Dependent clauses with subsequent action. These purpose clauses are indicated by -ku following -YA class verb stems, -lku following -LA class verb stems; -kurlu frequently occurs following the verb 'to hit'.
predicate object clause purpose clause
tjatja-n mayu tjamparni-njtja pinja-kurlu
chase-TMP child run-C.A. hit-PURP
Chase the children who are running away so as to punish them.
object subject predicate purpose clause
puraku ngatja kangkarni-nja njinta tjunayi-ku
frock I bring-PAST you(sg.) put on-PURP
I've brought the frock for you to put on.
vocative location predicate purpose clause

| njinta | ngura-ngka | njina-ma | ngatja yana-ku kuka-ku |
| :--- | :--- | :--- | :--- |
| you | camp-LOC | sit-IMPERF IMP | I |

You remain in camp so I can go out for meat.
subject time predicate purpose
(234)
mayu urta yara piya-ku
children later go-FUT play-PURP
The children will be going out later-on to play.

### 4.2 PHRASE STRUCTURE

4.2.1 THE NOUN PHRASE. A noun phrase usually has a common noun head, which may be accompanied by one or more modifiers or other peripheral elements; or it may be a proper name, in which case there is no recorded evidence that other periph-

FIGURE 4.1 The structure of the noun phrase


Translations of these noun phrases are:
(235) Those many little sick children of yours --
(236) These two big b1ind children belonging to the man --
(237) That good speech of Akurtu's --
eral elements occur with it.
The head of a noun phrase, when a common noun, may be a single noun or a noun complex (such as mara pirri 'finger nail', tjina pirri 'toe nail', yamatji pakarli 'an Aboriginal man', etc.). Possessives usually precede the noun in linear order, and adjectives of colour, size, state. then quantity follow in that order. An adjective of quantity may precede the noun, however, in which case it follows the possessive. The possessive may be a possessive pronoun, proper name or common noun.

Demonstratives occur finally in the noun phrase. Case markers occur after the final element in the phrase and the form of the case marking suffix depends on the form of the final word in the phrase, that is, whether it ends with a consonant or a vowel (see 3.2.2).

Figure 4.1 shows the general structure of the noun phrase.

The noun phrase may occur as subject, object, or loca-tion-direction in a clause, taking the appropriate case markers. It may also occur as instrument or as time, the former taking the ergative case marker, the latter taking the locative case marker.

Any common noun may occur as the head of a noun phrase. A noun complex occupying the head of a phrase may be any of the following combinations of nouns:
Inalienable possession combination: marlu kantja '(lit.) kangaroo skin', 'rug', as in
(238) ngatjangu marlu kantja parnangka ngayimanja
lsg-POSS rug ground-LOC lie-PRES
My rug is lying on the ground.
Other examples include:
mulja tja 'nostril', lit. 'nose - hole/mouth'
mulja yirti 'nose bone', lit. 'nose - skewer'
tjina puka 'boots', 'shoes', lit. 'foot - covering'
mara pirri 'finger nails', lit. 'hand - claw'
Contrast with the above forms marlu parriya 'kangaroo pad/ track' and yalipirri warla 'emu egg' which will not take another possessive as marlu kantja does in (238). marlu parriya would better fit the form Akurtu wangka, (237), in which the combination is one of inalienable possession, but wangka is head of the phrase and the possessive, Akurtu, is peripheral.
'Gender' combinations:
njarlu katja 'daughter', lit. 'woman (female) - offspring'
yamatji pakarli 'Aboriginal man', lit. 'Aboriginal male - man, initi-
ated'
yamatji katja 'son', lit. 'male - offspring', as in
(239) njintangu yamatji katja kutjarra ngulamanja
your male offspring two cry-PRES
Your two sons are crying.
Generic - specific combinations with a generic noun followed by a more specific noun, e.g.
njarlu warluwura 'adolescent girl', lit. 'woman - adolescent' mayu murilja 'a preinitiate', lit. 'child - uncircumcised male' kuka marlu 'kangaroo meat', lit. 'meat - kangaroo' kuka puluku 'bullock meat'
ELLIPTICAL NOUN PHZRASES may be used to convey ambiguity or when the referent is known or has been referred to previously. The sole filler of a noun phrase may be an adjective of quantity:
(240) itjapa, kutiya-lu waka-Imara kurartulu certainly one-ERG spear-HISTORIC PAST spear-WITH Right enough, one spears with a barbless spear.

Or an adjective of size:
(241) yarnta-lu pinja
big-ERG hit
It was the big one who hit him.
Or an adjective of state:
(242) pika ngarimanja
sick lie-PRES
The sick (one) is lying down.
Demonstratives also may fill this position; but in such case they may be regarded as positional pronouns.

WORD ORDER in the noun phrase is more fixed than word order on clause level. As indicated in the brief initial statement on the noun phrase, possessives precede the noun head. Possessives have not been found in a headless noun phrase, that is, in association with an adjective functioning as the sole filler of a noun phrase. This fact may be one criterion for separating adjectives from nouns.
A QUANTITATIVE ADJECTIVE may occur preceding or following the noun head in an unexpanded phrase; in the expanded phrase, however, in which adjectives of size and state may occur, the adjective of quantity tends to occur before the noun head.
(243) yaljpa mayu kultjanu yanatjimanja
many child school-ABL come-PRES
There are a lot of children coming home from school.
(244) njarlu mayu marnkurrpa wayi ngayimanja
woman child three not lie-PRES
The three girls are not lying down.
SIZE and STATE adjectives follow the noun in that order; but if COLOUR occurs, it precedes size and state and immediately follows the noun head. See (235), (236).

An APPOSITIONAL PHRASE, usually a more specific presentation of the initial noun phrase, may follow the main phrase after a non-final intonational juncture (rising pitch). The appositional phrase takes the same case marking as the main noun phrase, and is followed by another temporary pause, e.g.
(245) yamatji-lu, Mingkurl-ku mama-lu, kuka marlu ngura-ki
a man-ERG " -POSS father-ERG kangaroo-meat camp-ALL kangkarnimanja bring-PRES
A man, Mingkurl's father, is bringing kangaroo meat to the camp.
Examples of noun phrases in other than subject position include:
(246) njarlu-ngku kutjarra mayu pika hospital-ki kangkangamanja woman-ERG two child sick hospital-ALL take-PRES That woman is taking the two sick children to hospital.
palu yamatji pika njanja kangkangaya nganatjungu ngurlurn
he-NOM man sick this take-FUT my windbreak yarnta-ki
big-ALL
He will take (carry) this sick man to my big windbreak.

EMBEDDED NOUN PHRASE. A noun phrase may be found embedded in another noun phrase as a modifier of the noun head of the main phrase, e.g.
(248) yamatji panja pakarli martungu kutjarra-njuwa
man that initiated man spouse two-WITH
That man (previously referred to) is an initiated man with two wives.
In this sentence, martungu kutjarra, a noun phrase, is related to the main phrase by the relator $-n j u w a$ which may be regarded as an adjectivisor.
4.2.2 ADJECTIVAL PHRASE. This phrase type may be embedded in a noun phrase or it may occur as the predicate of a verbless clause of state. There are two types of expansion of the adjective phrase, one is the introduction of an intensifier, which has been found only with adjectives of state, and the other the use of a negative. The intensifier occurs before the adjective and the negative also occurs before the adjective and also before the intensifier if this is present in the phrase, or it may occur finally if in the predicate. E.g.
(249) ngatja ngarti pika

I-NOM very sick I am very sick.
(250) mayu ngarti pika panja parnangka ngayimanja child very sick that ground-LOC lie-PRES That very sick child is lying on the ground.
(251) ngatja wayi malarti

I-NOM not tired I aill not tired.
(252) palu ngarti pika wayi or palu wayi ngarti pika he-NOM very sick not He not very sick He is not seriously ill.
4.2.3 THE VERBAL PHRASE. The intensifier may also be used in the verbal phrase and it has been found in the pre-verb and the post-verb position, e.g.
(253) palu ngarti tjurnimanja He is laughing loudly (forcefully).
(254) tjana pinjarimanja ngarti They are fighting vigorcusly.
(255) mutuka pukurntamanja ngarti There's a motor car running along really fast.
4.2.4 TEMPORAL PHRASE. This may precede or follow the verb or it may occur first in the clause. There are a number of words which may be regarded as 'adverbs of time' or they may be classed as a separate class of time slot fillers (using tagmemic terminology). See the list in the vocabulary and note also that phrases may occur in this position, e.g.
(256) palu wapa karangu yanatjinja

He-NOM another sun come-PAST
He came yesterday.
(257) karangu kutjarratjanu palu marlaku yanatjinja day(sun) two-ABL he back come-PAST He returned after two days.

### 4.3 CONJUNCTIONS AND SENTENCE FORMATION

No examples of conjunctions have been found in field data, except where prolonged association with English has led some speakers to insert 'and' (as ' $n$ ) between clauses when asked if they have any equivalent for the English conjunction. Independent clauses are strung together without any formal conjunctions. Intonation contours, however, supply links between related clauses, e.g.
(258) pikayinjarna, malartiyinjarna. I've become sick and I have become tired.
The comma (,) indicates a non-final pause with rising intonation, whereas the full stop (.) indicates a final, falling intonation.

Relationships between independent and dependent clauses are indicated by suffixation, already described in the appropriate sections.

Sentences may, then, be utterances which contain part clauses or exclamations; complex clause constructions (in which there is a main clause and one or more dependent clauses); or coordinate clauses (simple or complex) bound together by intonational features as described above.

### 4.4 SENTENCE PARTICLES

A sentence may be comprised of a single sentence particle, such as an exclamation, an interjection, an affirmative, negative, or certificative (as well as an interrogative, a partial clause or word ... as in answer to a question... or a larger construction such as an independent clause, a complex clause, or a coordinate clause). A sentence particle may be added to a sentence without affecting its lexical meaning, as when an exclamation occurs as an opener; or it may affect the meaning of the whole sentence, as when a certificative is added. Examples below illustrate the few particles recorded in the data.
Exclamations and interjections:
(259) karla! 'Go ahead!' 'Proceed!' as in karla! waranpa 'Go on, sing!'
(260) katji: 'Beware:', 'Don't approach!', as in katji! panja karlatjanu 'Get away from that fire!'
(261) walay!: 'Look out:', 'Caution:', as in walayi! martanju 'look out: Police'. ('Watch out! Policeman coming!')
(262) njanja! 'Look here!', 'Attention!' as in njanja! kuka 'Look here: Meat
(263) putju: 'Come now:', 'Knock off:', 'Right ... finish what you're doing!' as in putju! 亡japa kuwarti 'Finish up! It's suppertime'
Affirmation:
(264) kuwa 'Yes!', as in kuwa: 'Yes:' or kuwa, tjana pakaranganjtja kuwiyarl 'Yes, they were arousing the goannas'.

Negation:
(265) watji! 'No', 'Nothing', as in watji, wayi njanganja 'No, I'm not looking at it'
(266) njinta tina tjuna? 'Have you put the dinner (tina) on?'
(267) watji, wayi pawurna 'No, it's not cooked'

Certification:
(268) itja: 'True', 'Truly', 'Certainly', '0 yes'; itja? 'Is it true?'
(269) itjapa, kutiyalu wakalmara kurartulu .... 'That's true now' One would spear with a spear ....' (as part of text)

## VOCABULARY

In the alphabetical vocabulary of Watjarri, the following order is employed:
$a, i, k, l, l j, m, n, n g, n j, p, r, r l, r n, r r, r t, t, t j, u, w, y$
Each word is given both in the alphabetical listing, and then again in the vocabulary by semantic fields.

## ALPHABETICAL VOCABULARY

arnmanu, $\mathrm{N}:$ Arnmanu coastal dialect; man, in this dialect
ika, N: bone
ikirl, N: a rip, tear, or hole in skin or cloth covering
iku, $\mathrm{N}:$ younger sister
ilili, N: the rattling noise of wooden weapons knocking together
ilimpiri, Place name: Twin Peaks near Murchison River
iliwaka, N: large edible ground frog
ilkari, $N:$ the day, sky (from Western Desert language)
ingkarta, $N$ : the Ingkarta language
ini ~ yini, $N:$ name (an inalienable possession)
inja, Vtr: past tense of yu- to give
inti-, Vintr: to flow, -YA class
intirri, $N:$ the daytime sky; Adj: high
intjiwarni, $N:$ the Intjiwarni language
ipinj, $N:$ tinder (for firelighting)
ira ~ yira, N: mouth, lips, language
irapiya ~ yirapiya, N: cumulonimbus or storm clouds generally
iri, N: point of spear or digging stick
irilja, N: scraper (usually white quartz) used for scraping skins
irli, $N$ : meat from the back of an emu
itja, Sentence Particle: certitive, surely, certainly, truly
itjitji, N: the Ta-ta 1izard
kaka, N: child, variant of mayu kakararra, N : east
kaki, N: galah (from English cocky)
kaku, N: crow (Corvus orru)
kakulj, Adv: by oneself, alone
kakurla, N : the native or silky pear
kalatjarra, Adj: sorcerized
kalatjarrayi-, Vintr: to become sorcerized, -YA class
kalja, N: armpit, axilla
kaljartu, $\mathrm{N}:$ substitute reference to a deceased person
kaljawirri, N: rock wallaby
kalpatji-, Vintr: to climb, -YA class
kami, N: grandfather, grandson
kamitjunu, N : my own grandfather
kamparnira, $N:$ uncle-nephew relationship
kamparnu, $N$ : mother's brother, uncle
kampu, Adj: cooked (meat)
kampurarra, $N:$ wild tomato, solanum
kan ~ kana, N: gun, shotgun (from English)
kangka-, Vtr: to take away, -YA class
kangkanga-, Vtr: to carry (in direction away from speaker), -YA class
kangkarni-, Vtr: to bring, fetch, -YA class
kangku, $N$ : mother's brother, uncle, (probably borrowed from Njungar kongk)
kangku, $N$ : knee (dialect variant)
kaninjtjarra, $N:$ subincision (from Western Desert language, underneath)
kanjarra, $N:$ the Kanjarra language
kanjtjari, $\mathrm{N}: ~ g r a n d m o t h e r$, granddaughter
kankararra, Adv: above, upwards
kanparrka, N: spider (Patimaya)
kantara, $N$ : tortoise
kanti, $N:$ knife, stone knife or chisel
kantja, $N:$ skin bag, fur rug or covering; see marlu kantja
kantjari, N: a head ring (used by women when carrying a load on the head)
kapi, N: water (from Western Desert language)
kapu, N: calf (from English)
kapurtinj, N: kidney(s)
kapurtu, N: egg
karakara, $N:$ Temp: afternoon
karangu, $\mathrm{N}: ~ s u n$, day
kari-, Vintr: to stand, to dance, -YA class
kari-, Vtr: to reenact a myth or ceremony; see mama
karimarra, $N$ : skin group (male marries purungu)
karla, $\mathrm{N}:$ fire (generic), firewood, firestick
karla, Excl: Go on! Go ahead! Get on with it!
karlama-, Vtr: to heat up, to heat a meal, -LA class
karlanga, Adj: hot
karlanga-, Vtr: to heat, to make (something) hot, -YA class
karlaya, N: emu (from Western Desert language); see yalipirri
karlayi-, Vintr: to become hot, -YA class
karta-, Vtr: to break, -YA class
kartanga-, Vtr: to cause to break, -YA class; alternate karlatji-
kartanganj ~ kartanj, Adj: broken
kartapaya-, Vtr: to cut, to carve (meat) to apportion or distribute meat or food, -LA class
kartawala, $\mathrm{N}: ~ s p i d e r$
karti-, Vtr: to lift, to raise cooked meat from the hot ashes, -YA class
kartiyanga-, Vtr: to cause to lift cooked meat from the hot ashes, -YA class
kati, $N:$ forearm, arm (generally)
katja, $N:$ one's offspring, son or daughter
katjanja, $\mathrm{N}: ~ p r o c e s s i o n a r y ~ c a t e r-~$ pillar
katjara, $\mathrm{N}: ~ r i v e r$
katjayara, $N:$ son-father relationship, daughter-mother relationship
katji, N: a spear
katji, Excl: Hop it! Get away! Move out of the way!
kawilkura, $N:$ a rainbird, probably the pallid cuckoo or the fantailed cuckoo. It is said to drag the rain along behind it
kayi-, Vintr: to stand, to exist (as trees); alt. kari-, -YA class
kirrkurta, $\mathrm{N}: ~ b r o w n ~ h a w k ~(F a l c o ~$ berigora)
kitikiti-, Vtr: to tickle, -YA class
kuka, $\mathrm{N}: ~ f l e s h, ~ m e a t ~(a l l ~ f l e s h ~$ foods) (from Western Desert language); see kuwa
kuka mantu, $N$ : cooked meat
kuka marlu, $N$ : kangaroo meat
kuka puluku, $\mathrm{N}: ~ b u l l o c k$ meat
kukuntjirri, $N$ : sheep (east and north dialects) ; see tjipu
kukurl ~ kukurr, Adv. continually
kul ~ kurl, N: school (from English)
kula, Adj: close, near; Adv: closely
kulari-~ kulayi-, Vintr: to become
nearer, closer, -YA class
kuljpa, $N:$ clothes, garments
kulju, $\mathrm{N}:$ native sweet potato
kulu, N: fleas
kumarta, $\mathrm{N}: ~ s t o r m ~ c l o u d, ~ c u m u l u s, ~$ thunderstorm
kumparta, $\mathrm{N}: ~ n i g h t, ~ n i g h t ~ s k y$ (Patimaya)
kumpu, $N:$ urine
kumuru, $\mathrm{N}: ~ b l i n d, ~ s i g h t l e s s$
kunt ja, $N: ~ e l d e r ~ s i s t e r ~$
ku(r)ntuwara ~ kuntuwaa ~ kuntuwa
~ kurntuwa, $N:$ echidna, spiny anteater
kupa, $\mathrm{N}: ~ a s h e s, ~ w h i t e ~ a s h ~$
kupulja, N: sleep; Adj: asleep (Patimaya)
kurarra, $N:$ needle tree
kurartu, $N$ : spear, a straight spear without a barb
kuripi, $N:$ bullock
kuripi njurnti, $N:$ bullock tail
kurl ~ kul, N: school (from English)
kurlka, N: ear, ears
kurlkarta, Adv: attentively
kurlkaturangu, $\mathrm{N}: ~ p r i c k l y$
flannel bush
kurlku, N: a sling for carrying a baby
kurninj, Adj: pitiable, poor, hapless, unfortunate
kurninjpara, $N:$ poor old
fellows, pitiable ones
kurnta, $N:$ shield
kurnti, $N:$ short hitting stick, also a magic pointing stick
kurntuwa, see kuntuwara
kurrakurra, Adj: pesty (e.g. f1ies)
kurrarra, $N:$ seeds, small seeds said to be carried by ants to their holes and to be eaten by a certain small lizard, the wuntiljarra
kurri, N: spouse (from Western Desert language) used more specifically in Watjarri for husband; see martungu, watji
kurriya ~ kutiya, Adj: one (sometimes shortened to kurri)
kurrkurtu, N: owl, the Boobook (Ninox novaeseelandiae)
kurrparu, $N:$ magpie (probably Gymnorhina dorsalis)
kurruri-, Vintr: to fly, circle or glide (as birds), -YA class
kurrurn, $N$ : the spirit of a living person, the inner being
kurta, $\mathrm{N}: ~ o l d e r ~ b r o t h e r ~$
kurtikurti, shortened form of kuwarti-kuwarti, Temp: a short time, not for long
kurturtu, $N:$ heart, the human heart
kurturtu, $\mathrm{N}: ~ c e r e m o n i a l$ ground (a special place where parents wait while their son is undergoing initiation rites)
kuru, $N$ : eye, eyes; also tjurla
kurupurlkartu, N: the Sturt pea (Clianthus formosus)
kutiya ~ kurriya, Adj: one; $N:$ a certain person
kutja-, Vtr: to ignite, to light a fire, -LA class
kutjarra (sometimes shortened to kutja), Adj: two
kutjarta, $N:$ a many-barbed spear
kutjita, $N:$ water snake (said to control pimarra springs)
kutju, Adj: another (of the same kind)
kutjulilin, $N:$ tadpoles
kutjurta, Adj: all, every (in NP + -pa, kuka kutjurtapa, every bit of meat)
kuwa, Affirmation: yes
kuwa, $N$ : meat, all game meats, flesh
kuwarti, Temp: now, soon, directly
kuwarti-kuwarti, Temp: shortly, not for long; see kurtikurti
kuwiyarl, $\mathrm{N}: ~ g o a n n a, ~ p e r e n t i e$ (Varanus giganteus)
kuyu, N: variant of kuru, eye(s) (also in Pulinja)
likarra, N: dry bark (Patimaya and Western Desert language); see pingara
ma-, Vtr: to get, pick up, obtain (irregular verb)
maka, N: head
maka, $N:$ cup, drinking vessel (from English mug)
maka wintja, N: a grey-haired man
makanga-, Vintr: flying (lit. over-heading), -YA class
makayarla, $N$ : doctor, diagnostician (refers to 'the third eye' but in some dialects means lit. 'bald head', a symbol for eldership or wisdom)
makuta, $N$ : a meat portion
malarti, Adj: tired, weary
malarti-, Vintr: to become tired or weary, -YA class
maliyara, $N$ : east, an eastern group, a desert native; see wanmala
malju, N: younger sister
malka, Adv: soundly, fast (asleep), deeply, still (unmoving), silently (unresponsively) (depending on verbal context)
malkakayi-, Vintr: to appear inattentive, to stand as though ob1ivious to circumstances, -YA class
malkana, N: the Malkana language
malka, PN: Malka, nephew of Putjtilkura (in traditional folk tale)
malura, P1ace name: Malura, probably original of Mileura (pastoral station)
mama, N: father, father's brother
mama, N: song, ceremony, corroboree
mama karimanja,'Vtr. phrase: reenacting a myth, ceremony, dreaming; see kari- and wara-
mamanji-, Vintr: to be/become angry, irritated, peeved, -YA class
mamayara, $N:$ father-son relationship
mampu, N: lower leg
mampu ngartara, N : bowlegged, bandy
manatja, $N:$ policeman (from Njungar manatj, black cockatoo)
manatji-~ manayi-, Vtr: to pick up (e.g. to pick up a freshly killed kangaroo), -LA class
mangarta, $\mathrm{N}: ~ j a m$ tree, the edible gum from this tree
mangka(lja), $N:$ head hair
mangkawarla, $N:$ man's hat
mangkuru, N : the red kangaroo (Ethel Creek dialect)
manjtjanjtjarra, N: termites
manjtjunjtjurru, $N$ : termites (variant)
mantu, Adj: cooked (meat)
maparn, $\mathrm{N}:$ doctor, sorcerer (from Western Desert language magic stone)
maparnpayi ~ maparntjarra, Adj: describing a man with the power of magic or sorcery
mara, $N$ : hand, forepaws of an animal
mara, Adv: manually, as in mara parntimanja, doing a job well by hand (manually)
mara pirri, $N$ phrase: finger nail
mara tjuti-, Vtr. phrase: to handcuff, lit. 'to tie hands', -LA class
maranga-, Vintr: to crawl, to walk on the hands and knees, -YA class
maraya-, Vintr: to crawl, to go along on the hands (mara yanmanja); as ya- (irregular verb)
marinjmarinj, $\mathrm{N}:$ large black 'soldier' ants
marinjmarinj, Adj: proud, conceited
maritji, N: brother's wife
marla, Adv: behind
marlakarti, Adv: back, at a starting point
marlaku, Adv: back, to a starting point
marlatja, N: calf of the leg
marlpa, N: the sky; Adj: high
marlpa, $\mathrm{N}:$ an initiated man (Ethel Creek dialect)
marlu, $N$ : kangaroo, the red kangaroo (Megaleia rufa); also used metaphorically for red wine
marlu, Place name: Marlu - the kangaroo (or Creation Being in the traditional myth)
marlu kantja, N: kangaroo skin, fur blanket
marlu parriya, $N:$ kangaroo pad/ track (these pads indicate the presence of water in the vicinity)
marlukuru, N: Sturt pea (Clianthus formosus)
marlupirri, $N:$ kangaroo paw (iit. 'kangaroo claw') (Anigosanthos manglesii)
marlurnka, N: spinifex grass (Triodia)
marna, N: rump, buttock
marna, $N$ : money; see also marta
marnkurr, Adj: three
marnpi ~ marnpinju, N : common bronzewing pigeon (Phaps chalcoptera)
marnta, $N$ : anus, buttock
marntuta, $N:$ rain cloud
marnun, $\mathrm{N}:$ arm, upper arm
marrarn, $N:$ fair weather cumulus and the cool wind from the south which brings these clouds
marrkarn. N: frog (Patimaya); see wantitu
marrpu, N: achilles tendon, kangaroo sinew used for binding in implement making
marta, $\mathrm{N}:$ rock, stone, range, breakaway
marta, $\mathrm{N}:$ money, coins
martalmartalpayi, $N:$ policeman
(1it. 'the very rich one'), sometimes reduced to martapayi
martamarta, $N:$ a small stonecoloured 1izard
martanju, N: policeman (from martanjuwa, Adj: having money)
martumpura, $\mathrm{N}:$ budgerigar (Melopsittacus undulatus); also njingarri
martungu, N: spouse, potential spouse, the spouse relationship
martungu, $\mathrm{N}: ~ b o y f r i e n d, ~ g i r 1-$
friend (a modern usage)
martungunjuwa, Adj: married; Adv:
accompanied by a spouse
maru, Adj: dark, black
marun, $N$ : quandong (Patimaya); see walku
marungapa, Temp: at sunset, at dark
marunmarta, $N$ : the nuts of the quandong tree
marurtu ~ mawurtu, Adj: black
maruwara, Temp: early in the morning
matja, N: boss, master, government official
matja-, Vintr: to wait, -LA class
mawatu, Directive: direction away from speaker (precedes verbs of locomotion)
mawu, Pos.Pn: that (distant); mawunja, that distant person
mawu-mawuyi-, Vintr: to move over, to move away (as from a fire or in bed), -YA class
mayu, N: child (generic), baby in arms, an uninitiated boy
mayu kurninj, $N:$ a pitiable person or child, poor old soul (idiom)
mayu kurninjpara, $N$ : another idiom for unfortunate characters, pitiable ones
mayu murilja, $N:$ a preinitiate, a boy beginning the initiation cycle
mayu yanakupa, N: a child just learning to walk
mayurru, N : a young man, a youngster
mikinj, N: grey hawk (? Falco hypoleucus)
mila, N: a bonfire, a large community fire in winter time
mili, N: a light
milima-, Vtr: to light, to ignite, to make a fire, -LA class
milimili, N: north
milja, $N$ : entrails (of animal); Adj: soft
miljirrinj, $N$ : white froth on the edge of a claypan (metonym for claypan)
milju, N: bark lizard, skink
miljurra, $N:$ venomous snake
milki, N: milk (usually referring to powdered milk) (from English)
milku, N: a song for initiated men only
mimi, N: breast, nipple; (hence milk) ; also titi, pipi
mimpurtu, $\mathrm{N}: ~ b r e a s t b o n e ~(s t e r n u m) ~$
minga, N: ants (generic)
mingkari, $N:$ digging bowl; also tjaka
mingkarri, $\mathrm{N}:$ humpy, dwelling
miniyara, N: centipede
minta, $N:$ shade, shadow
minta, $N:$ mug, cup, any drinking vessel
mintinari, $N:$ beetles
mintinmintin, $N:$ beetles (generic)
mintjinj, $N:$ mountain devil (Moloch horridus)
mira, N: a venomous snake
mirla, N: a rock catchment, rockhole
mirli, N: diarrhoea, watery faeces
mirnangu, $N$ : south (from Njungar, mirnong)
mirnti, $N:$ egg shell, shell (generic)
mirru, N: spearthrower, firesaw
mirru, $N:$ the male umbilicus/navel
miti, $N$ : common goanna (Varanus tristis)
mitu, $N$ : friend (male or female) (from English mate)
miyurtu, N: mouse
mula ~ murla, Adj: dead
mulja, $N$ : nose (metonym for face)
mulja tja, N: nostril, nose hole (for nose bone), i.e. pierced septum
muljayirti, $N:$ nosebone, and, by association, the pierced nasal septum
muluwi, Place name: Mullewa
munga, $N$ : the night sky, nighttime
mungal, $\mathrm{N}: ~ m o r n i n g ; ~ T e m p: ~ t h i s ~$ morning, tomorrow morning (depending on the tense of the verb and the time of day)
mungalji-, Vintr: to become dark/ night, -YA class
mungal purntara, $N:$ Venus, the morning star
mungamunga, $\mathrm{N}: ~ e v e n i n g$
mungarta, Adj: dark (as at night time)
mungku, Proper name: Mungku, the personal name of a male
muni, N: money (probably from English)
muniya, $N$ : pneumonia (from English)
muntungu, $N$ : devil, evil spirit, a European-Australian (derogatory)
murilja, $N:$ a preinitiate, an adolescent; also murtilja
murla ~ mula, Adj: dead
murlantji, N: green parrot (Barnardius zonarius)
murlayi ~ mulayi, Vintr: to become dead, to die, -YA class
murni, $\mathrm{N}:$ wife (Pulinja)
murrkarmurrkar, Adj: clever, wise
murti, N: knee (from Western Desert language); see purru
murti, Adj: cold
murti papa, $N:$ cold water
murtilja, N: a preinitiate, an adolescent boy
murtilju, Adj: cold (weather), wintry
murtinj, $N$ : an uninitiated boy
murtitja-, Vintr: to become cold, -LA class
murtu, $\mathrm{N}:$ bone marrow
murupurlkartu, $\mathrm{N}: ~ t h e ~ S t u r t$ Pea; see kurupurlkartu
mutji, $N$ : husband (as used by a woman addressing her daughter
mutuka, N: motor car (from English)
muya, $N:$ the rabbit bandicoot or bilby
nakalju, Interrog: how many? nani, $N$ : goat (from English) nanpa, $N$ : hairbelt (Patimaya, Western Desert language)
nanta, $N$ : the Nanta language
nanti, Adv: there (distant)
(Patimaya)
nanu, $N$ : the Nanu language (the word means the negative, no)
napa, $N: f a t$, animal fat, kidney fat
nara, $N:$ lips, mouth (Ethel Creek)
nawu-, Interrog: why? (takes erga-tive-absolutive markers)
niyanniyan ~ njannjan, Adj/Adv: secretive, secretly, with care
nurilj, N: umbilical cord (kept wrapped in a cloth, 'If they throw it away the baby will miss it and cry all the time')
nga-, Vtr: to consume, to eat, to drink (irregular verb)
ngaka-, Vtr: to catch, to grasp, -LA class
ngakalalanj, $\mathrm{N}:$ Major Mitchell cockatoo (Cacatua leadbeateri)
ngali, Pn: first person dual inclusive nominative form, sometimes made more specifically inclusive in njinta-ngali
ngalitja, Pn: first person dual exclusive nominative form
ngalitju, Pn: first person dual inclusive reciprocal form
ngaljayarla, $N: ~ a ~ d o c t o r, ~ a ~ d i a g-~$ nostician (lit. 'forehead-hole')
ngalpuka, $N$ : summer, the hot season
ngalungu, $N$ : totem, forbidden food
ngana, Interrog. Pn: who? (takes ergative-absolutive case markers)
nganatju, $P n$ : for me
nganatjungu, Pn: first person singular possessive pronoun; occurs also as nganayangu
ngangkarangu, Place name: reputed for its spring with a watersnake
ngangkari, $\mathrm{N}:$ day sky (Patimaya)
ngangku-, Vtr: to hear (a sound), to perceive aurally, -LA class with irregular purposive form ngangkunku
ngangkungangku-, Vintr: to think, to be thinking, -LA class with purposive as above
nganirri, N: bullroarer (Patimaya); see tjilpirrpa
nganiu, Pn: first person plural inclusive nominative form
nganku, $N$ : cheek (body part)
ngantju, Pn: first person plural exclusive nominative form
ngant jungantju-, vintr: to be shy (boys and gir1s embarrassed in each other's company), -YA class ngapu, N: a sweet, white edible root
ngapuri, N: brother-in-law, wife's brother, brother's wife's brother
ngarangu, $N:$ a totemic group; see also yarlpu and ngalungu
ngaraya, N: nephews, nieces, brother's children; variant ngayaya
ngari- ~ ngayi-, Vintr: to lie
down, to recline, to sleep, to exist (as regards animals), -YA class
ngaritju- ~ ngayitju-, Vtr: to cause to lie down, to put down to sleep, -IA class
ngarla, N: the Ngarla language
ngar|ku, N: bulb of flax lily
ngarlpukala, Temp: in the summertime
ngarnamara, N: mallee fowl
(Leipoa ocellata)
ngarnawara, $N$ : white cockatoo; see puli
ngarnka, $\mathrm{N}: ~ c a v e$
ngarnkilirri, $N$ : temple (body part)
ngarnkurr, N: beard
ngarnngarn, $N: ~ l o w e r ~ j a w, ~ c h i n ~$
ngarnti, N: small stick, small
wood for kindling
ngarrka, N: chest (body part)
ngarrpa, N: seeds for grinding
into flour, the plant which
produces these seeds
ngartara ~ ngartaya, Adj/Adv:
uncomfortable, uncomfort-
ably, bent, crooked, lying
in an awkward position
ngarti, Adv: forcefully, loudly (depending on verb);
Intensifier: very
ngartingka, $N:$ post-initiate in seclusion
ngartiyarra, Adv: beneath, underneath, inside, under
ngartura, $\mathrm{N}: ~ a ~ s m a l l ~ b a g ~$ for carrying food, etc., a skin bag
ngaruwa, N: black duck (Anas superciliosa)
ngatja, Pn: first person singular nominative form
ngawu, $N$ : mallee fowl (ngarnamara)
ngayi- ~ ngari-, Vintr: to lie down, to rest, to exist (e.g. animals); see under ngari-, -YA class
ngayitju-, Vtr: variant of ngaritju-, to lay down (someone or something), -LA class
ngula-, Vintr: to cry, to weep, -YA class
ngunja, $N:$ fur, animal fur
ngunuru ~ nguluru, Adv: between, in between two points, in the middle of
ngupanu, Adj: wild, untamed, nondomesticated; sometimes used without tjutju for dingo
ngura, $N:$ camp, campsite, place (ngurra in Western Desert language)
nguri, N: small bag for carrying food
ngurlal, $N:$ eaglehawk (Acquila audax)
ngurli-, Vintr: to be afraid, to become frightened, -YA class
ngurlu, Adj: afraid, fearful
ngurluma-, Vtr: to hunt away, to frighten, -LA class
ngurlurn, $\mathrm{N}: ~ a ~ w i n d b r e a k ~$
ngurnku, N : elbow; also tjulka
ngurrinjngurrinj, $N$ : sugar, sweet excretion from flowers and plants
ngurru, N: horse; also yawarta (ngurt in Njungar)
ngurtinga, $N$ : spear wood, a type of tree from which spear wood is obtained
ngurtu, $N:$ brains (sometimes used for marrow, but see murtu, tjilu )
nja?, Interrog. Pn: what? (interrogative substitute for common noun)
nja-, Vtr: to see (it), to watch (it) (irregular verb)
njangamarta, $N:$ the youngest child in a family
njangka?, Interrogative substitute for both time and location: when?, on what?, where?
njanja, Pos. Pn: this (near the speaker)
njanja!, Excl: Look!, Attention: Here!, This way!
njanjarnikarti, Adv: this side of njanjura, Adj: hungry
njanka, $N:$ back of neck; also njinka
njannjan, variant of niyanniyan, q.v.
njararni-~njawarni-, Vintr: to become hungry, -YA class
njarlu, $\mathrm{N}: ~ a ~ f e m a l e ~ p e r s o n, ~$ usually refers to a married woman
njarlu katja, $N:$ daughter (lit. 'female offspring')
njarlu martungunjuwa, $\mathrm{N}: ~ a$ woman with a spouse, a married woman
njarlu tjukarnu, $N$ : a female elder, an old woman (generally)
njarlu warluwura, $N$ : an adolescent girl
njarlu wayitwan, $N$ : a white woman, a European woman; also wiljpila njarlu
njarra, Pos.Pn: that (distant from speaker), also in Western Desert language
njarrat janu, Adv: from there
njatja, $N$ : sand, ground, dirt (also a euphemistic term for the dead: a corpse)
njilin, N: hole in roof of a cave
njina-, Vintr: to sit, to exist (of humans), to stay, -YA class
njinaranga-, Vintr: to proceed to sit down, to move into a sitting position
njinawu!, Excl: wait! stay!
njingarri, N: zebra finch (Taeniopygia castanotis)
njinka, N: back of neck; variant of njanka (both forms acceptable in Watjarri)
njinkururru, $N: ~ a ~ s m a l l ~ c r e s t e d ~$ bird said to deceive by mimicry
njinta, Pn: second person singular nominative form
njinta-ngali, Pn: first person dual inclusive
njirrinjirri, N: savoury smell
njirrku, $N:$ mosquito (from Patimaya)
njiyapali, N: the Njiyapali language
njukarn, $\mathrm{N}:$ the Njukarn language (see 1.5)
njumulpunjira, Adj: full, satisfied
njupali, Pn: second person dual nominative form
njupar ngayi-, Vintr. phrase: to sleep, to lie down sleeping, -YA class (in rapid speech, njuparangayi-)
njurlarrku-, Vtr: to extinguish (fire), -YA class
njurni, $N:$ mosquito
njurnti, $N:$ tail (of animal)
njurra, Pn: second person plural nominative form
njurta, N , Adj: another (of a different kind), somebody else
njurta-, Vtr: to apportion (meat), to distribute portions to various relatives, -YA class
paka-, Vintr: to ascend, to arise, to go out of a low shelter, -LA class with present tense pakarnmanja
paka-, Vintr: to increase (in height), to grow tall, -LA class (-rla)
pakara, N: sacred kingfisher (Halcyon sancta)
pakaranga-, Vtr: to arouse (someone/something), to cause to arise, -YA class
pakarli, N: a fully-initiated man
pakarli katja, N : an initiated offspring, a mature son
pakarn, N: throat
pakati, $N$ : bucket (from English)
paki, N: tobacco, usually refers to chewing tobacco (from English)
pakitji, N: box (from English)
pakunpakun, $\mathrm{N}: ~ b e l l b i r d ; ~ s e e$ parnparnkarlarla
pala, Pos.Pn: that (mid-distant); Adv: there (mid-distant)
pali, N: vemit
pali-, Vintr: to vomit, to retch, -YA class
paljpa, Adj: tired, weary
paljpayi-, Vintr: to become tired, weary, bored, -YA class
palparu, Adj: mad, stupid, crazy
paltjarri, N: skin group (paltjarri male marries purrkurlu)
paltjiri, N: the Paltjiri language
palu, Pn : third person singular nominative form
paluka, Pn: third person singular emphatic, nominative form
palutja, Pn: third person singular outside the local group nominative form
pampurru, N : message stick (Patimaya)
pani-, Vtr: to grind (e.g. seed), -LA class
panin, N: seed, seed foods generally
panja, Pn: third person singular previously referred to absolutive form
panjakarti, Adv: behind, at the rear, out of sight
panjarnikarti, Adv: beyond a previously known place
panjatja, Pn: third person singular substitute for a common noun previously referred to
panjatjanu, Temp: after that, then
pantuma, N: the Pantuma language
 colloquially named standback bush, a prickly bush
papa, $N$ : water, rain
papa warnimanja, Vintr. clause: it is raining. (lit. 'the water is falling')
papul, $N$ : a hole in top of a cave, a cave air-vent
para, Place name: Perth
parapara, $\mathrm{N}:$ a gecko lizard
parla, N: forehead
parlkuma-, Vintr: to bark (e.g. a dog), -LA class
parlpa, $N:$ anklebone (Ma1leolus)
parna, N: ground, earth, sand (en masse)
parnaparnayat in, N: quail (probably Turnix velox)
parnka, $N:$ a type of small goanna
parnparnkarlarla, N: bellbird (Oreoica gutturalis)
parnta, N: kidney(s); also kapurtinj
parnti, Adj: good, well
parnti-, Vtr: to perfect (it), to complete (a task) well, to make good, to finish or polish (an implement), -YA class
parnti-, Vtr: to produce a pleasant or unpleasant sme11, -YA c1ass
parntilku, N: a savoury smell, the smell of meat cooking
parntinga-, Vtr: to smell (something), to perceive the smell of something, -YA class
parnti- tju-, Vtr. complex: to put (something) in good order, to fix (it), to put (it) right, parnti-, -YA class; tju-, irregular
parntiyarra, Place name: a place near Wooleen, mentioned in song parriya, N: track, footpad, road; see marlu parriya
parrka, $\mathrm{N}:$ narrow or spiny leaves, as contrasted with yarlu, broad leaves; a narrow-leaf tree
parrtji, $\mathrm{N}: ~ a r m, ~ f o r e a r m$
partarnu, $N:$ a male elder, an old man (generally)
partarnukarti, N: elder sister
parti, $N:$ edible grub, the 'bardy' grub, (probably from English)
partura, N: bustard, wild turkey (Eupodotis australis)
paru, $N$ : gum (for affixing flints, etc.), a gum obtained from a type of spinifex grass, gum colour (a dark brown to black)
patawi-, Vintr: to become legweary, to become stiff in the legs, -YA class
patimaya, N: the Patimaya language patja, Adj: angry, upset
patja-, Vtr: to bite (metaphorically, to be angry, to snap at someone in anger), -LA class
patjapatja, Adj: drunk, intoxicated, silly, abusive
patjari ~ patjayi-, Vintr: to become angry, to become desperate (e.g. for food), -YA class
patjikil, N: bicycle (from English)
pawu-, Vtr: to cook (it), to roast (meat), -LA class
pi-~pu-, Vtr: to hit, fight, kill, (irregular, see under pu-)
pika, Adj: ill (generally), sick, sore, aching, sorcerized
pika, N: sorcery, sickness, an ache, a sore
pikayi-, Vintr: to become ill or sick or sorcerized, -YA class
pikurta, $N$ : euro, (Macropus robustus)
pila, N: spinifex grass (Patimaya); see marlurnka
pilapirti, $N:$ Eucalyptus pyriformis
pilara, N: a many-barbed spear
pilat, $N$ : fat (from English)
pilingki, Adj: white, bright, shiny
pilingki, N: whiteman, European
piljinji, Adj: red
pilti, N: belt; see also tartatjipilti, policeman
pimarra, $N:$ spring, a rock spring (said to be controlled by a water snake)
pimpilj, N: ribs, rib portion of a kangaroo
pinarangura-, Vtr: to burn (found only in tjina pinarangurakurla 'in case you burn your feet'), -LA class
pinatju-, Vtr: to burn (something), -LA class
pingara, N: dry bark
pinikurra, N: the Pinikurra language
pinjari-, Vtr: to fist-fight (someone), -YA class
pinta-, Vintr: to flash (as lightning), -YA class
pintama-, Vtr: to kill, to strike down, -LA class
pintu, Adj/Adv: quiet, quietly (of voice)
piparlu, $N$ : paper (probably from English)
pipi, N: breast, nipple
pipitjali, $N:$ an edible root or bulb, lit. 'largenipp1e'; see puntuwanj
pirinj, Adj: white, shiny; also pirlunj
piritji ~ pirtirta, N: shoulders
pirri, N: claw, nail (of finger/toe), tjina pirri 'toenail'; mara pirri 'finger-nail
pirti, N: den
pirtipirti, $N:$ butterflies, moths
piti, N: carrying dish
pitara, N: kindling wood
pitjanga- ~ piyanga-, Vintr: to prowl, to approach stealthily, -YA class
pitjarn, N: liver
piyanga- ~ piyinga- ~ piya-, Vintr: to play, to fly, -YA class
piyarli, $\mathrm{N}:$ pink and grey galah (Eolophus roseicapillus)
pu- ~ pi-, Vtr: to hit, to kill (irregular, pumanja ~ pinjmanja recorded as present tense forms)
puka, $N$ : traditional body-covering made of fur-skin; also kantja (the fur-skin); and tjina puka, foot-covering
pukararri-, Vintr: to meet, to mix with (people), -YA class pukarr, $N$ : echo
puku, N: buttock; also marnta
pukurnanga-, Vintr: to run,
-YA class
pukurnta-, Vintr: to run along swiftly (as a motor car), -YA class
pula, Pn: third person dual nominative form
pularakartu, $N$ : (a term used by some speakers for) God; a shorter form recorded is pularartu
pularra, variant of punarra, N: eucalyptus tree
puli, N: little corella (Cacatua sanguinea)
pulinja, N: the Pulinja language
puljaman, N : doctor, sorcerer
puluku, $N$ : bullock; see also kapu
punarra, $N$ : eucalyptus tree
pungkurni-, Vintr: to sleep, -YA class
pungkurninj, N: magic pointing stick (Patimaya); see kurnti
puntjarrnga-, Vtr: to love (someone), to court (a person), -YA class
puntuma-, Vtr: to close or shut (e.g. a door), -LA class
puntuwanj ~ puntuwarinj, $N$ : an edible root or bulb (known by different names; pipitjali, wilupurl, ngapu)
pupanji-, Vintr: to bend down, to crouch, to stoop, to hide (metonym: to vomit), -YA class
puraku ~ puraaku, N: dress, frock (from English frock); puraaku wirri, black dress for funeral
purlakupa, Temp: already
purli, N: carpet snake
purlka, Adj: big
purntara, $\mathrm{N}: ~ s t a r, ~ s t a r s$
purrkurlu, N: skin group (purrkurlu male marries paltjarri)
purru, $\mathrm{N}:$ knee; also murti, kangku
purtuntja, N: owlet-nightjar
(Aegotheles cristatus ?murchisonianus)
purtupuri, N: blowfly, blowflies
(generic), purtupi in Byro dialect
purturna. N: the Purturna language,
spoken in the Onslow area
purungu, N : skin group (purungu
male marries karimarra)
purunjmarta, Adv: quietly (Patimaya)
puta, N: a louse, lice (generic)
putiputi-, Vintr: to circumambulate (as when approaching a new place) -YA class
putju! Interj: finish up!, righto!, come now ...: (an idiosyncrasy of the Byro dialect)
putjulkura, $N$ : a type of pigeon; Proper name: Pigeon (an anthropomorphic being in mythology, uncle of Malka)
puwa, $N$ : mother's brother's son
talantji, $N:$ the Talantji language
talkayi, N: banded anteater, rabbit bandicoot, bilby
tampa, $N$ : damper, camp bread (from English)
tarlka, N: hook or peg of spearthrower
tarrkari, N: the Tarrkari language
tartatji, N: trousers (from English)
tartatji-pilti, N: policeman, the police (lit. 'trousers-belt', a symbolic reference)
tawun, N: village, town, city (from English)
tiljtiljma-, Vintr: to croak
(as a frog), to knock (as on a door), -LA class
titi, $N$ : breast(s), nipple(s)
tungkuru, $\mathrm{N}: ~ s a n d h i l l$
turapa ~ turaapa, $N$ : trough, drinking trough (from English)
turayin, N: train (from English)
turnku, $N:$ range, hills; warta turnku, a distant range
tuwa, $N$ : house, a town house
tja, N: hole, opening, mouth, language (see ira ~ yira, the more generally accepted form for 'mouth' and 'language' in Watjarri)
tja urra, $N$ : the Tja Urra language
tjaka, N: a wooden carrying dish or bowl
tjakartu, N: a tree gall, commonly known as a mulga apple
tjaku-, Vintr: to set/enter, -LA class (short form of next entry)
tjakulanga-, Vintr: to enter, to set (e.g. the sun), -YA class
tjakultjunga-, Vintr: to flow (e.g. water), -YA class
tjakutja-, Vtr: to chew (e.g. tobacco), -YA class
tjalanj, $\mathrm{N}:$ tongue (variant of
tjarlinj)
tjaljanjara, N: robin redbreast (probably Petroica goodenovii)
tjamarni-, Vintr: to run, to go along swiftly (as in a motor car), a short form of tjamparni-
tjamparn, Adj: quick; Adv: quickly, speedily; Excl: hurry up:
tjamparni-, Vintr: to run, to locomote speedily, -YA class
tjampinu, Place name: Geraldton
tjampu, $\mathrm{N}: ~ l e f t ~ h a n d, ~ l e f t ~ s i d e, ~$ Adv: tjampuki, to the left
tjana, Pn: third person plural nominative form, they
tjanta, Adj: cold; see murti
tjantat ja, $N:$ cold, that which is cold
tjantayi-, Vintr: to become cold, -YA class
tjapa, N: supper (from English)
tjapanpirti, Place name: Tjapanpirti, the place of lightning
tjapl-, Vtr: to ask (a question), -LA class
tjapurta, $N:$ a male elder (Ingkarta)
tjara, N: shield (from Western Desert language) ; see wurnta
tjari-, Vintr: to lie, to report falsely, -YA class (Njukarn)
tjarli, N: neck base (referring to the part of the neck encircled by a baby's legs when it is carried on the shoulders)
tjarlinj ~ tjalanj, $\mathrm{N}:$ the tongue
tjarlura, N: a long fighting-stick
tjarnkurna, N : emu (Northern dialect); see yalipirri
tjarnta, $N$ : heel
tjarnu, Interrog. substitute for manner (intransitive): how?, in what manner?
tjarta, N: calf muscle (gastrocnemius)
tjartatji-, Vtr: to insert, to put (it) in, -YA class
tjatja-, Vtr: to chase, to pursue to hunt, -LA class
tjatjara, $N: ~ a ~ s m a l l ~ j e w ~ l i z a r d ~$
tjika, N: snake (probably from EngIish)
tjikarl, $N$ : hot coal, ember
tjikarnu, Place name: Outcamp Hill (marta tjikarnunja, Tjikarnu Hill)
tjila~tjili, N: tail
tjilawara, $\mathrm{N}:$ a long-tailed goanna

## (Patimaya)

tjilin, $N$ : native sweet potato (may be mashed and made into a type of flat bread, like damper)
tjilinpiti, N: magpie lark (Grallina cyanoleuca)
tjiljatji-~ tjiljayi-, Vintr: to lie, to speak untruthfully, to be or to become untruthful, -YA class
tjilkari- ~ tjilkayi-, Vintr: to
be or become happy, to be plea-
sed, to rejoice, -YA class; also tjukayi-
tjilku, N: river gum (tree)
tjilpirrpa, $N:$ bullroarer (Patimaya)
tjilu, $N$ : bone marrow
tjina, $N$ : foot, feet, footprint, track
tjina, as Adv. of manner: by foot - followed by verb of locomotion
tjina pirri, N: toenail
tjinapuka, $N:$ shoes, traditional foot-covering
tjintja(marta), Adj: small, young; N : younger brothers and sisters, a baby in arms, small pieces of meat ready for distribution
tjintjayi-, Vintr: to become small/smaller, -YA class
tjipu, $N:$ sheep (from English)
tjipula, $N:$ a spring (of water), a soak (in sandy country, in contra-distinction to pimarra)
tjirala, $N$ : centipede (Patimaya) (tjiralj in Njungar); see miniyara
tjirarnti, N: black cockatoo (Calyptorhynchus magnificus)
tjirli, N: shoulder blade
tjirnti, Adj: quiet (as regards the sounds of movement); Adv: quietly (in movement)
tjirrtjirr, Adj: shy, ashamed, embarrassed (in child speech, the flap is usually omitted)
tjirr-yanga-, Vintr: to become shy/ embarrassed, -YA class (sometimes reduced to tji-yanga-, or tjiyi-yanga-, in children's speech)
tjirtartu, N: wedgebill, 'Jinny Linthot' (Sphenostoma cristatum)
tjirtu, $N:$ small varieties of
venomous snakes
tjitja, $N$ : sister, esp. hospital sister (from English)
tju-, Vtr: to put, to place (irregular)
tjukarnu, $N$ : an elderly female
tjukayi-, Vintr: to be or become
happy, to be satisified, to rejoice, -YA class
tjukurn, Adj: quick; Adv: quickly
tjuljara, N: afternoon; Temp: in the afternoon
tjuljku, N: an infant, a baby in arms
tjulka, N: elbow (dialect variant of ngurnku)
tjuna-, Vtr: to leave, forsake, reject, to discountenance, -YA class
tjunayi-, Vtr: to clothe (a person), to don clothes, -YA class (with clothes as Object)
tjunkuma-, Vintr: to swim, to splash about (in water), -LA class
tjunta, $N$ : thigh, leg of meat
tjunta kutjarra, $N$ : skin of kangaroo (idiom)
tjupa, N: child (Patimaya); dialect variant of mayu
tjuparn, Adj: true, straight
tjuparni-, Vintr: to straighten or stretch out, -YA class
tjura, N: child, girl (a Watjarri borrowing from Nanu, in which tjura means 'a marriageable girl')
tjurla, N: eye(s) (a dialect variant)
tjurna, N: a short hitting stick
tjurni, N : carpet snake (Malkana)
tjurni-, Vintr: to laugh, -YA class
tjurnu, N: rockhole, waterhole
tjurtu, $\mathrm{N}:$ father's sister, aunt, a female cousin, and (in some dialects) elder sister
tjuti, $N$ : headband, see yalkirri
tjuti-, Vtr: to bind/tie, to handcuff, -LA class
tjutila, $n$ : policeman (from tjutila, will bind, will handcuff)
tjutja, $N:$ an old man, old fellow
tjutju, N: dog (domesticated) (in one dialect, tjutju means hair)
tjutju ngupanu, $N$ : wild dog, dingo
tjuwari, N: red ochre; see also wilki
tjuwi, N: tawny frogmouth (Podargus strigoides)
ukarla, Temp: before, previously,
long ago, once upon a time
urnta ~ wurnta, $N$ : shield
urta ~ wurta, Temp: by and by, later
urtama!, Interj: wait!, later on!
waka-, Vtr: to spear (with a spear), to stab, -LA class
waka-, Vintr: to shine (e.g. the sun), to flash (as lightning), -LA class
wakaltju-, Vtr: to scratch, to write, to etch, -LA class
waku, N: hole, pit (means camp in Patimaya)
walararra, $\mathrm{N}:$ crested, grey pigeon (Ocyphaps Iophotes)
walayi!, Excl: look out! beware!
walinja, Adj: bad, unfit, unwell, weak
waljtji, Adj: not right, filthy, foul
waljtji-, Vintr: to become bad, corrupt, rotten, -YA class
waljtjima-, Vtr: to belittle to scandalize, to corrupt, to make bad, to embarrass, -LA class
walku, N: quandong tree (Santalum acuminatum)
wama, N : wine (from Western Desert language sweetness)
wana, N: digging stick, crowbar
wana, N : the female navel (umbi1icum), (probably metaphorical use of wana, digging stick, which is associated with women)
wana, $\mathrm{N}: ~ s c o r p i o n ~(w a n a t j i l i n g k a$ in Patimaya)
wanatja, $N$ : upper leg, leg of kangaroo meat (regarded as the best cut of meat; it is usually cut off and grilled in the hot ashes) ; see also tjunta
wangka, N: language, speech
wangka-, Vtr: to say (something), to tell, -YA class
wangkatji-, Vintr: to talk, converse, yarn, -YA class
wangunj, Adj: shy, nervous, ashamed wangunju-, Vintr: to be or become shy, nervous, ashamed, diffident, -YA class
wanjtjakutja?, Temp, Interrog: how long?, for what length of time?
wanka, Adj: fresh, raw (e.g.
kuka wanka, raw or uncooked meat)
wanmala ~ warnmala, N: desert
native, an avenger, a warrior
(if a desert dweller comes to
Watjarri country it is assumed
he has come to carry out revenge) wanta, $\mathrm{N}:$ winter, the cold season; also warlulu
wantangka, Temp: in the winter time wantipul, N : a rat
wantitu, $\mathrm{N}:$ the April frog (marrkarn in Patimaya)
want ja, $\mathrm{N}: ~ d o g$ (Ethel creek dialect) wantu-, variant of warntu-, q.v. wapa, Adj: another (of a different kind)
wapakarangu, Temp: on another day
(sometimes shortened to waparan-
gu ). The time (future or past)
depends on the tense of the verb. wara, Adj: long
wara-, Vtr: to chant (songs), to
sing (a song), -LA class
waranj, $N:$ song; see mama
warayi, $N: f l y, f l i e s ~(g e n e r i c) ~$
warimara-, Vintr: to worry (from
English), -YA class
warinj ~ wayinj, N: food (all vegetable foods)
warla, $N$ : egg, bird's eggs (gener-
ic); also kapurtu
warlarnu, $\mathrm{N}:$ boomerang
warlpa, N: sacred kingfisher (dia-
lect variant of pakara, q.v.)
warlukura, $\mathrm{N}:$ an adolescent girl,
a virgin; other variants are
warluwura, tjura
warlulu, $N$ : cold season clouds
(altostratus), the cold season,
winter, a fine cold drizzle
warni-, Vintr: to fall; papa
warnimanja, raining, -YA class
warnitja-, Vtr: to throw away, -LA class
warnkura, N : green frog(s)
warnmala, variant of wanmala, q.v.
warntu, $\mathrm{N}: ~ f u r ~ s k i n, ~ b l a n k e t, ~ r u g, ~$ clothes (see kuljpa)
warntu-, Vtr: to follow, to track, -LA class.
warri, $\mathrm{N}: ~ s t o m a c h, ~ a b d o m e n, ~ v i s c e r a ; ~$ njarlu warri, the Pleiades (lit. 'woman's belly')
warru, $N$ : lumbar region, the back
warta, Adv: afar, distantly: Adj:
distant, far away
wartalj, $\mathrm{N}: ~ t h e ~ W a r t a l j ~ l a n g u a g e ~$
wartapi, N: a racehorse goanna (smaller than the Perentie) wartawartayi-, Vintr: to become more distant, -YA class
waru, $N$ : firelight, a lamp, a light (from Western Desert language)
warungutu, $N$ : rainbow
watat jarri, $\mathrm{N}: ~ l i g h t n i n g ~(P a t i-$ maya)
watja-, Vtr: to reproach, reprove, upbraid (someone), -LA class
wat jarri, N: the Watjarri language
watjarrwatjarr, Adj: leg-tired, weary

wat $i$, $N:$ husband, sweetheart (in Wirtimaya)
watji, N: none, nothing; Inter: no!
watji ~ wayp, Negative: not, no
watji-, Vtr: to complete, to finish, -YA class
watjitji- ~ watjiyi-, Vintr: to become finished, complete, -YA class
waya, Inter: no! (Ethel Creek)
wayi ~ watji, negative (as watji, above)
wayurta, $\mathrm{N}: ~ p o s s u m$
wi?~wiyi? General Interrogative
wila, N: creek, creek bed
wilalanga-, Vintr: to spill, to leak out, -YA class
wilara, $N:$ the moon
wilara, $\mathrm{N}:$ month, a lunar month
wilja-, Vtr: to spill, to sprinkle, -LA class
wiljari-, Vintr: to bathe, to become splashed or sprinkled, -YA class
wiljka, N: tooth, teeth
wiljki, Adj: wet
wiljki-, Vintr: to become wet, -YA class
wiljkima-, Vtr: to wet (something/someone), to cause (it) to be wet, -LA class
wiljpila ~ wilpala ~ wuljpala ~ witpala, variants for N : whiteman, European-Australian (from English)
wiljpila njarlu, N: a white woman
wiljpirri, Adj: thin, skinny
wilju (recorded also as wilu),

N : curlew (Burhinus grallarius)
wilki, N: red ochre, also tjuwari
wilpa-, Vtr: to grill (meat), -LA class
wilpint janu, $N:$ a bulb which produces a purple flower
wilu, N: penis
wilupurl, $\mathrm{N}:$ edible root or bulb; see puntuwanj
wilura ~ wirlura, $\mathrm{N}:$ west; see wirlu, sea, which is west of Watjarri country (present-day speakers differed in their opinions on the pronunciation of this word)
wilwil, N: aeroplane (probably
from English windmill)
wingku, N: black ants (Patimaya)
winjtju, $\mathrm{N}:$ the wind
winta, $\mathrm{N}: ~ t r e e ; ~ v a r i a n t ~ o f ~ w i r n t a ~$
wint lljarra, $\mathrm{N}: ~ a ~ s i l v e r y ~ c o l o u r e d ~$ fish, also applied to a silver coloured lizard; see wuntiljarra
wintja, $N:$ elderly male, an old man; Adj: old, greyheaded
wintjintji, $N$ : grasshoppers (generic), a large green grasshopper
wirlka, N: teeth; variant of wiljka
wirlu, $N$ : the sea (see note under wilura)
wirlu, N: kingfisher; see pakara
wirlunju, N: the seacoast people
wirlutjarutjaru, $N$ : plover (probably Peltohyas australis); see also purtuntja
wirnta ~ winta, $N$ : tree (generic), fire-wood, stick(s); wirnta watjan, N: firestick (in Patimaya)
wirntu, $\mathrm{N}:$ quandong tree (Patimaya)
wirrangu, N: a single barb spear (the barb is made by cutting a notch a short distance from the point of the spear)
wirri, N: black ants, sometimes used to contrast an Aboriginal person with a European, thus 'blackfellow'
wirri, Adj: black
wirriya, N: creek sand, black sand
wirrki, $\mathrm{N}: ~ s a l i v a, ~ s p i t$
wirrkirinj, $\mathrm{N}:$ froth on the edge of a claypan, white froth, soap suds
wirta(ra), Adj: tall
wirtawirta, $N:$ honey ant(s)
wirti, Negative: no (in Wirtimaya), a form which has spread into the

Watjarri speaking area
wirtimaya, N: the Wirtimaya language
witjarnu, $N:$ a stranger (probably one who has arrived)
wiyartu, $\mathrm{N}: ~ a ~ s i n g l e-b a r b ~ s p e a r ; ~$ see wirrangu
wiyi-, Vintr: to arrive, -YA class wulaya, $N$ : moon, variant of wilara
wuljpala, see wiljpila
wuntiljarra (see wintiljarra), N :
a small silver-coloured lizard
wurnta ~ urnta, $N:$ shield
wurta ~ urta, Temp: by and by 1ater
ya-, Vintr: to go (direction away from the speaker) (irregular verb)
yakarra, Adv: beyond
yaku, $N$ : mother, mother's sister
yakuyara, $N$ : mother-daughter relationship
yal?, Interrog. substitute for state: how (are you)?, what?
yalamparri, N: emu (Geraldton); see yalipirri
yali-, Vtr: to do (something), to make (it), -YA class
yalipirri, N: emu (Dromaius novaehollandiae)
yaljma-, Vtr: to create, to make, -LA class
yaljpa, Adj: many, all, much
yaljpayi-, Vintr: to increase (in number), -YA class
yaljtju?, Interrog. substitute for manner (transitive); how? yalkatji, $N:$ claypan, flat area yalkatji-, Vintr: to lie flat (as a body of water covering a claypan), to become flat, -YA class
yalkirri, $N$ : head band, symbol of initiated manhood; see tjuti yamatji, $N:$ a person (usually male), a man, an Aboriginal person, the Watjarri people ('The Yamatjis')
yamat $j i$ katja, $\mathrm{N}: ~ s o n$
yamatji martungunjuwa, $N$ : a married person/man, a person with a spouse yamatji matja, $\mathrm{N}:$ an Aboriginal Affairs Officer
yamatji njarlu, $N:$ an Aboriginal woman (as contrasted with wiljpila njarlu, a white woman)
yamatji pakarli, $N:$ an Aboriginal
man who is fully-initiated yanarti, $N:$ the Yanarti language yanatjaki, N: a hunting trip, walkabout
yanatji-, Vintr: to come (towards the speaker), to locomote, -YA
class; alternates with yanayiyangka, $\mathrm{N}: ~ a ~ s h o r t ~ h i t t i n g ~ s t i c k ~$ yangkarl, $\mathrm{N}: ~ h i p, ~ h i p b o n e$ yanjalpa-, Vintr: to escape, -YA class
yanma-, Vintr: to blaspheme, to use taboo words, to swear, -IA class
yanmanjarni, Vintr: present tense of ya-, to go, with suffix -rni, changing meaning to indicate direction towards speaker; only
recording (irregular verb)
yapu, $N$ : rock, stone, range, breakaway
yapurtu, $N:$ north
yaputji, $N:$ rock wallaby; dialect
variant of kaljawirri
yara, Adj: ripped, torn
yaralj, N: lungs
yaranga-, Vintr: to becone torn, ripped, -YA class
yarla, N: hole
yarlarlang, Place name: Yallalang Station and its Watjarri name
yarlku, N: blood
yarlku, Adj: red, blood colour
yarlku-, Vtr: to rip or tear (something), -LA class
yarlpu, $N$ : totem, kin avoidance, forbidden food
yarlu, $N$ : leaf, a broad leaf, broad leaves
yarlurr, $N$ : white gum (tree)
yarlurt, N: mulga tree (Acacia aneura) (yalurt seems to be an aberrant form; may be some confusion with yarlurr)
yarluyarlura, $N: ~ a ~ b l a c k ~ g e c k o ~$
yarnta, Adj: big, large
yarntayi-, Vintr: to increase (in size), to grow big, to become inflated, -YA class
yarrari-, Vintr: to leak or run out, -YA class
yatj-ku-, Vtr: to tear, -LA class (a seemingly aberrant form)
yatj-yatj, Adj: ripped, torn; see yara
yawarta, N : horse (kangaroo in the Geraldton area)
yayiliri, Adj: hysterical (found only in a song)
yl? Interrog. (functions like wi/wiyi?); kurninjpara yi? what are we poor fellows going to do? what about us?
yimpiljyimpilj, Adj: untidy
yini ~ ini, N: name, one's proper name
yipiljyipilj, N: a night-flying bat
yira ~ ira, N: mouth, the oral orifice (including lips and teeth), language
yirapiti, Place name: name of a hill near Narryer station
yirapiya ~ irapiya, $N$ : heavy rain-cloud, storm clouds (cumulo-nimbus) (Byro dialect); see marntuta
yirti, N: a skewer, a peg; mulja yirti, a nose bone, a nose peg
yu-, Vtr: to give (irregular verb)
yukala ~ yukurla, N: the Yukala (Eucla) language
yuljitjana-, Vintr: to burrow (as frogs or goannas), -YA class
yumpu, N: death charm (bundles of hair and gum or other binding substances; used to carry a death curse to a particular person)
yungarra, Adj: one's own (in

Watjarri song) ; an initiated man (Pulinja)
yungkatji, N: the Yungkatji dialect spoken north of Watjarri area
yurilji-, Vintr: to move, to move about, -YA class
yurla, $N$ : smoke (in smoke signalling; produced by burning green leaves)
yurlaranga-, Vintr: to smoke (as a fire), to be smoky, -YA class
yurlatju-, Vtr: to cause to smoke, to produce smoke, to send up a smoke signal, -LA class
yurlpa, $N$ : smoke, smoke from an ordinary fire as distinct from signalling smoke
yurlpari, $N$ : an initiate, one passing through initiation rites
yurna, Adj: smelly, rotten, a derogatory term for a government official
yurtanji-, Vintr: to be or become thirsty, -YA class
yutila, N: policeman (from Njungar)
yuwa-, Vtr: to hit (by throwing a stick or boomerang), -LA class
yuwaka-, Vintr: to blow (as the wind), -LA class (Patimaya)
yuwin, N: a reef or rocky outcrop; Place name: Yuin Reef (the 'Two Brothers' of mythology in the form of white stones)

VOCABULARY IN SEMANTIC FIELDS

## NOUNS

A - Body Parts
abdomen: warri
achilles tendon: marrpu
animal fat: pilat, napa
anklebone (malleolus): parlpa
anus: marnta
arm, forearm: kati, parrtji
upper arm: marnun
armpit (axilla): kalja
back, lumbar region: warru
back part of emu meat: irli
beard: ngarnkurr
belly: warri
blood: yarlku
bone: ika
bonemarrow: murtu, tjilu, (ngurtu)
brain: ngurtu
breast, nipple: mimi, titi, pipi
breastbone: (sternum) mimpurtu
buttock: puku, marnta
calf of leg: marlatja
calf muscle (gastrocnemius): tjarta
cheek: nganku
chest: ngarrka
chin, lower jaw: ngarnngarn
claw (of animal): pirri
corpse: njatja
diarrhoea: mirli
ear: kurlka
elbow: ngurnku, tjulka
entrails (of animal): milja
eye(s): kuru, tjurla
face: mulja ('nose', used as metonym)
fat, kidney fat: napa
feet, foot: tjina
finger nail: (mara) pirri
flesh: kuka, kuwa
forehead: parla
foreleg, of animal: mara (hand)
fur: ngunja, kantja
hair, of head: mangka(lja)
hand: mara
head: maka
heart: kurturtu
heel: tjarnta
hip, hipbone: yangkarl
inner being, spirit: kurrurn
kidney: parnta, kapurtinj
knee: purru, murti, kangku
left, hand or side: tjampu
leg, upper: wanatja, tjunta
lower: mampu
lips, mouth: yira, ira, nara
(Ethel Creek dialect)
liver: pitjarn
lumbar region: warru
lungs: yaralj
marrow: ngurtu, tjilu, murtu
meat: kuka, kuwa
mouth: yira, ira, tja
navel (umbilicus) male: mirru female: wana
neck, base: tjarli (where a baby's legs circle)
back: njanka, njinka
nipple: titi, pipi, mimi
nose: mulja
nostril: mulja tja
pierced septum: muljayirti
penis: wilu
pneumonia: muniya
ribs: pimpilj (also rib portion of kangaroo)
rump: marna
saliva: wirrki
shoulder: piritji, pirtirta, (tjarli, see neck)
shoulder blade: tjirli
sickness, pain: pika
sinew: marrpu
skin: kantja, warntu, puka
skin of kangaroo: tjunta kutjarra
(metaphorical expression)
spirit, human: kurrurn
stomach: warri
subincision: kaninjtjarra
tail, of animal: njurnti, tjila/i
teeth: wirlka, wiljka, yira
temple: ngarnkilirri
tendon: marrpu
thigh: tjunta
throat: pakarn
toenail: (tjina) pirri
tongue: tjarlinj, tjalanj
umbilicus, see navel
umbilical cord: nurilj
urine: kumpu
viscera: warri
vomit: pali
$B$ - Human Classification Aboriginal person: yamatji
a dark-skinned person: wirri
adolescent, boy: murtinj
girl: warlukura, njarlu warluwura
avenger: wanmala, warnmala
baby, in arms: tjuljku, mayu, tjintjamarta
boss, master: matja
boy, beginning initiation: mayu murilja
child, generic: mayu, kaka, tjupa
a preinitiate: murtinj, murtilja
the youngest child: njangamarta
just walking child: mayu yanakupa
a pitiable child: mayu kurninj (used also for any person)
deceased person: njatja
substitute name for: kaljartu
desert native: wanmala, maliyara
devil, evil spirit, whiteman: muntungu
diagnostician: makayarla, ngaljayarla (lit. 'head-hole')
doctor, sorcerer: maparn, maparntjarra, puljaman, maparnpayi
elder, male: wintja, maka wintja 'greyhead', partarnu, tjutja, tjapurta (Ingkarta)
female: tjukarnu, njarlu tjukarnu
'European', whiteman: wiljpila, wilpala, wuljpala, witpala, pilingki (white), muntungu (devil)
girl: warluwura, warlukura, tjura (Nanu)
initiate, a preinitiate: mayu murilja
passing through the rites: yurlpari (yurlpa 'smoke')
post-initiate in seclusion: ngartingka
a fully-initiated man: pakarli
man, person: yamatjl, yamatji pakarli
a male initiate: marlpa (Ethel Creek), yungarra (Pulinja)
married man: yamatji martungunjuwa
married woman: njarlu, njarlu martungunjuwa
master, Government official: matja
Aboriginal affairs officer: yamatji matja
old person, see elder
person: yamatji (see also 'European')
policeman: martanju (from martanjuwa, 'having money'), martalmartalpayi ('the very rich one'), tjutila (from 'will bind', 'will handcuff'), manatja (derived from Njungar manatj), tartatji-pilti (Lit. 'trousers and belt', a symbolic reference to a policeman), yutila (from Nyungar)
sorcerer: maparn, etc. (see under doctor)
spouse: martungu
stranger: witjarnu
unmarried girl: warluwura
whiteman, see 'European'
whitewoman: wiljpila njarlu, njarlu wayitwan
woman: njarlu, yamatji njarlu
youngster: mayu, mayurru, murilja, njangamarta

C - Kinship
aunt, father's sister: tjurtu
boyfriend, girlfriend: martungu
brother, older: kurta
younger siblings: tjintjamarta
brother-in-law, wife's brother: ngapuri
brother's wife's brother: ngapuri
mother's brother's son: puwa
brother's children: ngaraya
brother's wife: martungu, maritji
child, one's own offspring: kałja
daughter: njarlu katja
daughter-mother relationship: kat jayara
elder brother: kurta
elder sister: tjurtu, partarnukarti, kuntja
father: mama
father-son relationship: mamayara
friend, male or female: mitu (from English 'mate')
grandfather, grandson: kami
grandmother, granddaughter:
kanjtjari
husband: martungu, watji, kurri (Western Desert language)
husband, as referred to when a woman addresses her daughter: mutji
mother: yaku
mother-daughter relationship: yakuyara
mother's brother: kamparnu, kangku
nephews, nieces, brother's children: ngaraya
siblings: tjintjamarta
sister, older: tjurtu, kuntja partarnukarti, tjitja
younger: malju, iku
son: yamatji katja
son-father relationship: katjayara
spouse, male: martungu, mutji, kurri
female: martungu, murni
uncle, mother's brother: kamparnu, kangku
uncle-nephew relationship: kamparnira
wife: martungu, murni
wife's brother: ngapuri
Ca - Skin groupings
intermarrying groups (marriage $=$, mother-child relationship $\leftrightarrow$ ) :

тpurungu $=$ karimarra
purrkurlu = paltjarria
skin, totem (re kin avoidance and forbidden foods): ngalungu ngarangu, yarlpu
D - Mammals
anteaters, banded: talkayi
spiny: kurntuwa(ra), kuntuwara
bandicoot, or bilby: talkayi, muya
bat: yipiljyipilj, milatjari
bullock: kuripi, puluku
calf: kapu (from English)
dingo, wild dog: ngupanu, tjutju ngupana
dog, domesticated: tjutju, want ja (Ethel Creek dialect)
echidna: kurntuwa
euro: pikurta
goat: nani (from English)
horse: ngurru, ngurt (Nyungar), yawarta
kangaroo, grey: yawarta (Geraldton area)
red: marlu, mangkuru (Ethel Creek dialect)
mouse: miyurtu
possum: wayurta
rat: wantipul
rabbit bandicoot: talkayi, muya
rock wallaby: kaljawirri, yaputji
sheep: tjipu, kukuntjirri
F - Reptiles
bark lizard, skink: milju
bungarra: kuwiyarl
carpet snake: purli, tjurni (Malkana)
goanna, perentie (Varanus giganteus): kuwiyarl
common (Varanus tristis) miti
a long-tailed variety: tjilawara
others: parnka, wartapi
gecko, black: yarluyarlura, parapara
'Ta-ta lizard': itjitji
lizards, smal1, 'Jew lizard': tjat jara
stone-coloured: martamarta
silvery: wuntiljarra (see wintiljarra 'a silvery fish' under G)
mountain devil (Moloch horridus) : mintjinj
snakes, carpet snake: purli
water snake: kutjita (said to control pimarra 'spring')
venomous: miljurra, mira, tjika small varieties: tjirtu
$F-B i r d s$
bell-birds (Oreoica gutturalis): parnparnkarlarla, pakunpakun
budgerigar (Melopsittacus undulatus) : martumpura
bustard, wild turkey (Eupodotis australis): partura
cockatoo, black (Calyptorhynchus magnificus): tjirarnti
little corella (Cacatua sanguinea): puli
Major Mitchell (Cacatua leadbeateri): ngakalalanj
crow (Corvus orru): kaku
curlew (Burhinus grallarius): wilju ~wilu
duck (Anas superciliosa): ngaruwa
eagles and hawks,
eaglehawk (Aquila audax): ngurlal
brown hawk (Falco berigora): kirrkurta
grey hawk (? Falco hypoleucus) : mikinj
egg: warla, kapurtu
egg shell (any shell): mirnti
emu (Dromaius novaehollandiae): yalipirri, karlaya, yalamparri (Geraldton), tjarnkurna (Northern)
finch, zebra (Taeniopygia castanotis): njingarri
galah, pink and grey (Eolophus roseicapillus) : piyarli, also kaki (from English)
kingfisher, sacred (Halcyon sancta): pakara, warlpa, wirlu
magpie (probably Gymnorhina dorsalis): kurrparu
magpie lark (Grallina cyanoleuca): tjilinpiti
mallee fowl (Leipoa ocellata): ngarnamara, ngawu
owl, Boobook (Ninox novaeseelandiae): kurrkurtu
owlet-nightjar (Aegotheles cristatus ? murchisonianus) : purtuntja
parrot, green (Barnardius zonarius): murlantjl
pigeon, common bronzewing (Phaps chalcoptera): marnpi, marnpinju
crested (grey) (Ocyphaps lophotes): walararra
an anthropomorphic pigeon in the mythology: Putjulkura
a small crested bird said to mimic or deceive: njinkururru
plover (probably Peltohyas australis): wirlutjarrutjarru
quail (probably Turnix velox): parnaparnayatin
'rainbird' (said to be swallowtailed; probably Cuculus pallidus or Cacomantis pyrrhophanus, i.e. the pallid cuckoo or the fan-tailed cuckoo): kawilkura
robin redbreast (probably Petroica goodenovii): tjaljanjara
tawny frogmouth (Podargus strigoides): tjuwi
wedgebil1, 'Jinny Linthot' (Sphenostoma cristatum): tjirtartu

G - Amphibia and fishes
fish, a silvery river fish: wintiljarra
frogs, green: warnkura
the April frog: wantitu, marrkarn (Patimaya)
large edible stripey: iliwaka
tadpoles: kutjulilin
tortoise: kantara
$H$ - Insects and Arachnids ants (generic): minga
small black: wirri, wingku (Patimaya)
large black 'soldier': marinjmarinj
honey ant: wirtawirta
beetle (generic): mintinmintin, mintinari
butterflies and moths: pirtipirti
caterpillar, processionary: katjanja
centipede: miniyara, tjirala (Patimaya)
fleas: kulu
fly, flies (generic): warayi
blowflies: purtupuri, purtupi
grasshoppers: wintjintji
grub, edible 'bardy': parti
lice: puta
mosquito: njurni, njirrku (Patimaya)
scorpion: wana, wanatjilingka (Patimaya)
spider: kartawala, kanparrka (Patimaya)
termites: manjtjunjtjurru manjtjanjtjarra

I - Language and ceremony (For list of languages known to the Watjarri, see section 1.5)
bullroarer: tjilpirrpa, nganirri
ceremonial ground (a special area in which parents wait while their son is undergoing initiation rites) : kurturtu (Lit. 'heart')
ceremony, corroboree: mama
death charm (bundles of hair and gum or other binding substances; used to carry a death curse to a particular person): yumpu
language, speech: wangka
magic pointing stick: pungkurninj (Patimaya)
message stick: pampurru
name (an inalienable possession): yini~ini
'What is his/her name?': ngana yini palu?
red ochre: tjuwari, wilki
song, ceremony, corroboree: mama
song, that which is sung: waranj song for initiated men only: milku
sorcery, sickness: pika
subincision: kaninjtjarra
J - Artefacts, possessions
(including some cross-cultural
borrowings)
aeroplane: wilwi!
bag, small, for carrying food, etc.: ngur:, ngartura
for carrying a baby, a sling:
kurlku
skin bag, also used for a covering: kantja
barb, of spearthrower: tarlka
belt: pilti
bicycle: patjikil
blanket: warntu
boomerang: warlarnu
box: pakitji
bucket: pakati
carrying bowls, dishes: tjaka, piti
clothes: kuljpa
covering, traditional body covering: puka, also kant ja
traditional foot covering:
tjinapuka
digging tools, bowl: mingkari
stick: wana
dress (originally referred to black
dresses sold by Afghan traders):
puraku (from English 'frock')
fire saw: mirru
fire stick: wirnta watjan, karla
gum (for affixing flints, etc.): paru
gun: kan~kana
hairbelt: nanpa
hat, men's: mangkawarla
head band, symbol of manhood:
tjuti: yalkirri
head ring, used by women for carry-
ing: kantjari
hitting sticks (generic), tree or stick: wirnta
short hitting sticks: yangka tjurna, kurnt!
a long, fighting stick: tjarlura
house, a town house: tuwa
humpy: mingkarri
knife, stone knife or chisel: kanti
money: marna, marta ('stone'), muni
motor car: mutuka
mug, cup: minta, maka
nose bone: muljayirti
paper: piparlu
point of spear or stick: iri
scraper, white quartz stone: irilja
(used for scraping kantja)
shield: kurnta, wurnta, tjara
skewer, peg: yirti
smoke, in smoke signalling: yurla
spear, straight with no barb:
kurartu, katji (Patimaya)
single barbed: wirrangu, wiyartu
many barbed: kutjarta, pilara
spear wood: ngurtinga
spearthrower: mirru
stone tools: marta
train: turayin (from English)
trough: turapa (from English)
trousers: tartatji (from English)
K - Fire, food, water
fire, generic: karla, watjan
(Patimaya)
firewood: karla, wirnta
hot coal, ember: tjikarl
ashes: kupa
bonfire, large fire: mila
firelight: waru
tinder: ipinj
kindling wood: pitara, ngarnti
dry bark: pingara, likarra smoke: yurlpa, tjurtu wat jan (Patimaya)
food, all vegetable foods: warinj, wayinj
fruits
native pear: kakurla
native tomato, a solanum: kampurarra
quandong (Santalum acuminatum) : marun
'mulga apple', a tree gall: tjakartu
game foods: meat (generic) : kuka, kuwa
kangaroo meat: kuka marlu
(see also under Mammals, Rep-
tiles, for other edible game.)
cooked meat: (kuka) mantu
savoury smell: njirrinjirri, parntilku
distribution of cooked meat, portions: makuta, tjintjamarta, kutjurtapa
gums, edible from Jam tree: mangarta
introduced foods and drinks:
bullock meat: kuka puluku
damper: tampa
milk (usually refers to powder milk) : milki
sugar: ngurrinjngurrinj
supper: tjapa
tobacco, chewing tobacco: paki
wine: wama
root foods and bulbs:
bulb of flax lily: ngarlku
native 'sweet potato': tjilin, kulju
other: pipitjali, puntuwanj, wilpintjanu, wilupurl, ngapu
seed foods, seed (generic): panin
plant seeds which are ground into
flour and made into dampers: ngarrpa
small grass seeds, 'ant seeds': kurrarra
quandong nuts: marunmarta
water: papa, kapi
cold water: murti papa
$L$ - Celestial, weather
celestial bodies:
moon, month: wilara, wulaya
sun: karangu
stars: purntara
morning star: mungal purntara
clouds, alto-stratus, in cold season: warlulu
fair weather cumulus: marrarn
heavy rain cloud: yirapiya, marntuta
thunderstorm clouds: yirapiya, kumarta
day, sun: karangu
daytime sky: ilkari, intirri, marlpa ('high'), ngangkari
divisions of the day
morning: mungal
afternoon: tjuljara, karakara
evening: mungamunga
(see also section 3.6 for Adverbs
of time.)
Iight: mili, pinma (Patimaya)
lightning: watatjarri
month: wilara
night: munga
night sky: munga, kumparta (Patimaya)
rainbow: warungutu
seasons, cold season/weather: wanta, warlulu
hot season/summer: ngalpuka
wind: winjtju

M - Geography
camp, place, campsite: ngura
cave: ngarnka
claypan: yalkatji, miljirrinj
creek, creek bed: wila, waan (Patimaya)
creek sand: wirriya
directions, north: milimili, yapurtu
south: mirnangu
west: wilura
east: kakararra
froth, on edge of claypan or on
water: wirrkirinj, miljirrinj
ground, earth: parna
dirt, sand: njatja
hole, pit: waku
hole in top of cave: papul, njilin
reef: yuwin
river: katjara
rock, stone, breakaway: marta, yapu
range: turnku
rock hole: tjurnu, mirla
sandhill: tungkuru
school: kul
sea: wirlu
shade, shadow: minta
spring, rock spring: pimarra
(said to be controlled by a water snake)
spring in sand, soak: tjipula
stone, boulder: yapu
track (generic): parriya, tjina
kangaroo pad: marlu parriya
town: tawun
windbreak: ngurlurn
N - Arboreal
bulbs and roots (see edible varieties listed under Food)
bushes, shrubs and flowers
flannel bush (prickly):
kurlkaturangu
kangaroo paw: marlupirri
'standback bush': pantutjilj
Sturt pea: murupurlkartu, marlukuru
wild tomato: kampurarra
grasses (producing edible seeds): ngarrpa, kurrarra
spinifex: marlurnka, pila (Patimaya)
leaves, spiny: parrka
broad: yarlu
tree, (generic): wirnta
eucalyptus: pularra, punarra
mallee: pilapirti
mulga: yarlurt
needle tree: kurarra
pear: kakurla
quandong: walku, wirntu
river gua: tjilku
white gum: yarlurr

## O - ADJECTIVES

Adjectives of state
aching: pika
afraid: ngurlu
angry: patja
ashamed: tjirrtjirr, wangunj
bad, unfit, unwell: walinja
not right: waljtji
rotten, smelly: yurna
pesty, as flies: kurrakurra
bent, crooked: ngartara
blind: kumuru
bow-legged: mampu ngartara
broken: kartanj, kartanganj
clever: murrkarmurrkar
cold: murti, tjanta
cold weather: murtilju
conceited, proud: marinjmarinj
cooked meat: kampu, kuka kampu,
kuka mantu
dead: murla
distant: warta
drunk: patjapatja
fresh, raw: wanka
full: njumulpunjira
good: parnt
hot: karlanga
hungry: njanjura
hysterical: yayiliri
ill (generally): pika
sorcerized: kalatjarra
mad: palparu
pitiable: kurninj
ripped, torn: yara, yatjyatj
shy: wangunj
tired: malarti, paljpa, manga
leg-tired: watjarrwatjarr
true, straight: tjuparn
untidy: yimpiljyimpilj
wet: wiljki
wild, untamed: ngupanu
Adjectives of number and quantity
one: kurriya, kutiya
two: kutjarra
three: marnkurr
many: yaljpa
another, of the same kind: kutju of a different kind: wapa, njurta

Adjectives of size
big, large: yarnta, purika
sma11: tjintja(marta)
long: wara
tall: wirta(ra)
thin: wiljpirri
Adjectives of colour
black: wirri, mawurtu, marurtu, maru
white: pirinj, pilingki
red: piljinji, yarlku ('blood')
dark: mungarta

## VERBS

(illustrated in the present
tense forms: -(r)nmanja $=-\mathrm{LA}$
class; -manja = -YAclass)

## P - Motion

arrive: wiyimanja (Intr)
bend down (to hide, to vomit. etc.): pupanjimanja (Intr)
blow, as the wind: yuwakanmanja (Intr)
burrow, as goannas: yuljitjanamanja (Intr)
chase: tjat janmanja (Tr)
circle, glide (as birds) : kurrurimanja (Intr)
circumambulate, as when approaching a new place: putiputimanja (Intr)
climb: kalpatjimanja (Intr)
closer, become: kulayimanja (Intr), kulakulayimanja (Intr)
come, towards speaker: yanatjimanja (Intr)
crawl: marangamanja, maramarangamanja, marayanmanja (Intr)
dance: karimanja (Intr)
dance a corroboree: karimanja (Tr)
enter, set (as the sun):
tjakulangamanja (Intr)
escape: yanjalpamanja (Intr)
fall: warnimanja (Intr)
flow, as water: intimanja tjakultjungamanja (Intr)
fly: kurrurimanja (Intr)
follow, track: warntunmanja (Tr)
foot-walk: tjina yanmanja (Intr)
go, direction away from speaker: yanmanja (Intr)
go out of a shelter: pakarnmanja (Lit. arise) (Intr)
hunt game: tjatjanmanja (Tr)
leak out: yarrarimanja,
wilalangamanja (Intr)
locomote, direction away from speaker: yanmanja (Intr)
towards speaker: yanatjimanja (Intr)
as a motor vehicle: pukarntamanja (Intr)
move, about: yuriljimanja (Intr)
away from speaker:
wartawartayimanja (Intr) (Lit.
'become more distant')
over, away: mawumawuyimanja (Intr)
near, become, see closer, become prowl: pitjangamanja (Intr)
pursue: tjatjanmanja (Tr)
rain: papa warnimanja (Intr)
re-enact a 'dreaming': mama
karimanja (Tr)
rise: pakarnmanja (Intr)
run: tjamparnimanja, tjamarnimanja pukurnangamanja (Intr)
run out, as sand or water: yarrarimanja (Intr) (see leak)
run along, as a river: intimanja (Intr)
set (as the sun), see enter sit, the act of moving into a
sitting position: njinarangamanja (Intr)
spill, see leak
straighten, stretch: tjuparnimanja (Intr)
swim: tjunkumanmanja (Intr)
track: warntunmanja (Tr)
walk, see foot-walk, locomote
Q - Rest
ascend, arise: pakarnmanja (Intr)
crouch: pupanjimanja (Intr)
exist (humans): njinamanja (Intr)
(animals): ngayimanja (Intr)
(trees): kayimanja (Intr)
lie down: ngayimanja, ngarimanja (Intr)
sleep: njupar ngayimanja (Intr)
lie flat, as water in lake: yalkatjimanja (Intr)
rest, recline: ngayimanja (Intr)
rise (as the sun) : pakarnmanja (Intr)
sit, stay: njinamanja (Intr) sleep, see under lie
stand: karimanja, kayimanja (Intr)
wait: matjamanja (Intr)
$R$ - Induced position
belittle, scandalize:
waljtjimanja (Tr)
bind: tjutinmanja (Tr)
bring: kangkarnimanja (Tr)
catch: ngakarnmanja (Tr)
carry away: kangkangamanja (Tr)
complete, finish: watjimanja (Tr)
corrupt, make bad: waljtjimanja (Tr)
embarrass: a metaphorical usage of waljtjimanja (Tr)
fetch, see bring
get: manmanja (Tr)
give: yungamanja (Tr)
grasp: ngakarmmanja (Tr)
handcuff: tjutinmanja (Tr)
hunt away: ngurlumanmanja (Tr)
lay down (someone/something): ngari-/ngayitjunmanja (Tr)
leave, reject: tjunamanja
lift: kartimanja (Tr)
lift cooked meat from fire: kartiyangamanja (Tr)
pick up, get: manmanja, manat $j$ !-/manayimanja (Tr)
seize, see grasp
spill, sprinkle: wiljanmanja (Tr)
take away: kangkamanja (Tr)
throw away: warnitjanmanja (Tr)
$S$ - Affect
apportion, distribute: njurtamanja (Tr), kartapayanmanja (Tr)
arouse (something/someone): pakarangamanja (Tr)
bathe: wiljarimanja (Intr)
break: kartamanja (Tr)
burn (something): pinatjunmanja (Tr)
chew: tjakutjamanja (Tr)
close (something): puntumanmanja (Tr)
clothe (one): tjunayimanja (Tr)
cook: pawunmanja (Tr)
create: yal jmanmanja (Tr)
cut, carve (meat):
kartapayanmanja (Tr)
distribute, divide (meat), see apportion
do: yalimanja (Tr)
etch: wakaltjunmanja (Tr)
extinguish (fire): njurlarrkumanja (Tr)
fight: pinjarimanja (Tr)
finish, polish: parntimanja (Tr)
fix: parntitjummanja (Tr)
grill (meat): wilpanmanja (Tr)
grind (seed): paninmanja (Tr)
heat, make hot: karlangamanja, karlamarnmanja (Tr)
hit, kill: pumanja, pinjmanja (Tr)
hit with a stick or boomerang: yuwanmanja (Tr)
ignite: kutjanmanja, milimanmanja (Tr)
insert: tjartatjimanja (Tr)
kill: pintamanmanja, pumanja (Tr)
light fire, see ignite
make: yaljmanmanja (Tr)
meet, mix with: pukararrimanja (Intr)
perfect: parntimanja (Tr)
put, place: tjunmanja (Tr)
put on clothes, see clothe
put in, see insert
put right, see fix
raise, cause to arise: pakarangamanja (Tr)
rip, tear: yarlkunmanja, yatj-kumanja (Tr)
become ripped, torn:
yarangamanja (Intr)
roast, see cook, grill
scratch (marks), see etch
set apart, see apportion
shine (as the sun): wakanmanja (Intr)
shoot, hit with an instrument: yuwanmanja (Tr)
shut (a door or lid): puntumanmanja. (Tr)
skin (an animal): warntumanmanja (Tr)
smell, produce a sioell, scent: parntimanja (Tr)
smoke, produce smoke signal: yurlatjunmanja (Tr)
spear: wakanmanja (Tr)
splash about in water: wiljarimanja (Intr)
tear, see rip
tickle: kitikitimanja (Tr)
unite with, see meet, mix
write, see etch
$T$ - Attention
listen, hear: ngangkunmanja (Tr)
reject, discountenance:
t junamanja (Tr)
see, watch: njanganja (Tr)
stand, as though inattentive: malkakayimanja (Intr)
think: ngangkungangkunmanja (Intr) wait: matjanmanja (Intr)

U - Communicating
ask: tjapinmanja (Tr)
bark: parlkumanmanja (Intr)
blaspheme: yanmanmanja (Intr)
chant (songs): waranmanja (Tr)
converse: wangkatjimanja (Intr)
croak, as a frog: tiljtiljmanmanja (Intr)
lie, speak untruths: tjiljatji-/ tjiljayi-/tjari-manja (Intr)
reproach, reprove: watjanmanja (Tr)
say (something): wangkamanja (Tr)
sing (a song): waranmanja (Tr)
swear: yanmanmanja (Intr)
tell (something): wangkamanja (Tr)
upbraid: watjanmanja (Tr)
yarn: wangkatjimanja (Intr)
$V$ - Corporeal
afraid, be: ngurlimanja (Intr) angry, become: patjayimanja (Intr)
ashamed, be: wangunjumanja (Intr)
bad, become: waljtjimanja (Intr)
bashful, be: ngantjungantjumanja (Intr)
big, become: yarntayimanja (Intr) bite, snap at: patjanmanja (Tr) cold, be: murtitjanmanja (Intr) complete, be: watjiyimanja (Intr)
consume (food, water) : nganmanja (Tr)
corrupt, be: waljtjimanja (Intr)
court: punt jarrngamanja (Tr)
cry, weep: ngulamanja (Intr)
decrease (in size): tjintjayimanja (Intr)
desperate, become (as for food): patjayimanja (Intr)
drink: nganmanja (Tr)
die: murlayimanja (Intr)
eat: nganmanja (Tr)
embarrassed, be: tjirryangamanja, tjlyiyangamanja (Intr)
finished, become: watjiyimanja (Intr)
frightened, be: ngurlimanja (Intr)
grow, see increase
happy, become: tjilkari-/tjilkayimanja, tjukayimanja (Intr)
hot, become: karlayimanja (Intr)
hungry, be: njararnimanja,
njawarnimanja (Intr)
ill, become: pikayimanja (Intr) increase, in number: yaljpayimanja (Intr)
in size: yarntayimanja (Intr)
in height: pakarnmanja (Intr)
irritated, be: mamanjimanja (Intr)
laugh: tjurnimanja (Intr)
lightning flashes: pintamanja (Intr)
love, court: puntjarrngamanja (Tr)
nervous, be: wangunjumanja (Intr)
night approaches: mungaljimanja (Intr)
peeved, be, see irritated
play: piya-/piyanga-manja (Intr)
rejoice: tjukayimanja (Intr)
retch: palimanja (Intr)
rip, become torn: yarangamanja (Intr)
shy, be (as boys and girls with
each other) : ngant jungant jumanja (Intr)
sick, become, be sorcerized: pikayimanja, kalatjarrayimanja (Intr)
sleep: njupar ngayimanja pungkurnimanja (Intr)
small, become: tjintjayimanja (Intr)
smell (something): parntingamanja (Tr)
produce smell, scent: parntimanja (Tr)
smoke, produce smoke (as a fire): yurlarangamanja (Intr)
stiff, become (legs): patawimanja (Intr)
tear, become torn: yarangamanja (Intr)
thirst: yurtanjimanja (Intr)
tire, become tired generally: malartimanja (Intr)
become bored: paljpayimanja (Intr)
become leg weary: patawimanja (Intr)
upset, become, see angry, irritated
vomit: palimanja (Intr)
weary, become, see tire
weep, see cry
wet, become: wiljkimanja (Intr)
worry: warimaramanja (Intr) (from English)

## ADVERBIALS

(Several of these forms are noun phrases or adjectival, but occur as verb modifiers without derivational
affixes.)
W - Manner
alone, by oneself: kaku!j
attentively: kurlkarta
by foot: tjina (+ verb 'to locomote')
by hand: mara
continually: kukurl ~ kukurr
filthily, foully: waljtji
forcefully: ngarti
how?: tjarnu (Intr), yaljtju (Tr)
loudly: ngarti ( + appropriate verb)
quickly: tjukurn, tjamparn
quietly, of voice: pintu
of other sounds: tjirnti, purunjmarta (Patimaya)
secretly: niyanniyan, njannjan
soundly: malka (+ appropriate verb)
surely: itja
uncomfortably: ngartaya, ngartara
very (in phrase): ngarti
$X$ - Place and dipection
above: kankararra
afar: warta, wartararrpayi (in song)
away, direction away from speaker: mawatu
back, at a starting point: marlakarti
back, to a starting point: marlaku behind: panjakarti, marla
beneath: ngartiyarra
between, in between two points: ngunuru, nguluru
beyond: yakarra, panjarnikarti
closely: kula
distantly: warta
inside: ngartiyarra
middle, in the: ngunuru
near: kula
this side of: njanjarnikarti
under-(neath): ngartiyarra
upwards: kankararra
Y - Time
afternoon: tjuljara
after that: panjatjanu
already: purlakupa
another day, on: wapakarangu
before, previously: ukarla
by and by, later: urta ~ wurta
continually: kukurr
directiy, soon: kuwarti
evening: mungamunga
how long?: wanjtjakutja?
later: urta ~ wurta
long ago: ukarla
morning, in early: maruwara this morning: mungal
next morning: mungal (depending on time of day and tense of verb.)
now: kuwart i
previously: ukarla
shortly, not for long: kuwartikuwart i
summertime, in: ngarlpukala
sunset, at: marungapa
tomorrow: mungal (with future tense), wapakarangu
when?: njangka
winter time, in: wantangka
yesterday: mungal, wapakarangu (with past tense of the verb)

2 - Interjections and
exclamations
(see section 4.4)

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Over and above all other expressions of thanks, I thank God for introducing me to the Australian Aborigines and for allowing me to share in the richness of their languages and cultures, the warmth of their friendship, and the radical differences of their world view.


Map 5: Margany, Gunya and Other Languages of the Upper Builoo and Warrego

# Margany and Gunya by J.G. Breen 

## 1. THE LANGUAGE AND ITS SPEAKERS

### 1.1 LINGUISTIC TYPE

The language of which Margany and Gunya are dialects is, like probably the majority of Australian languages, nameless; the speakers were aware of their own speech as being different from that of their neighbours (although very similar in some cases) but were not aware of, or at least did not attach much importance to the larger group bounded by, but nowhere cut by, what one might call lines of mutual incomprehensibility. (See Dixon (1976a), especially pp.214-6. I use the term 'language' in the sense of his language ${ }_{2}$ while my 'dialect', which may not be definable on linguistic criteria, happens to correspond to his language:.) Margany and Gunya are the south-westernmost of the long chain of closely related dialects (it is not clear yet how many languages they formed) known to Queensland Aborigines as 'Murry talk' and to linguists as the Mari languages, which stretches from the central part of the NSW-Queensland border to north-east Queensland.

They are typical Pama-Nyungan languages in most respects, being suffixing languages with simple nominal morphology and rather more complex (and very incompletely understood) verb morphology. Nouns are of the ergative type in morphology while pronouns are accusative. Gunya has a transparent and obviously recent system of pronominal suffixes to the verb, which Margany lacks. Verbs are divided into two conjugations (differing only in the form of the purposive suffix) and this division corresponds exactly with the division into transitive and intransitive.

Phonologically these dialects are relatively simple but they differ from many other Australian languages in having (to a limited degree) an opposition between voiced and voiceless stops, and in having a voiced apico-alveolar stop in complementary distribution with an alveolar tap. They also differ from many other Mari dialects in having six points of
articulation for stops and nasals.

### 1.2 TRIBAL AND LANGUAGE NAMES

No alternative names for the dialects are known, although a number of different spellings of the names are found in the literature. No local group names are known.

There appears to have been some regional variation within these dialects, as can be seen by comparing the material obtained from the writer's informants with wordlists published by Curr (1886-7). The speakers available for the present study belong to the southern part of Margany and Gunya territories, while Curr's material came from the north. Curr combined four vocabularies for the Upper Warrego and Paroo Rivers and Mungalalla Creek under his number 177 (Vol. III: 270-286). Oates and Oates (1970:281) identified these as Bidjara while Breen (1971:13) thought three of them might be Gunya.

These have now been examined more closely and some attempt (successful with only one of them, however) has been made to find out exactly where they come from. (I am grateful to John Dymock for making available historical material on the area and the Queensland Lands Department for locating pastoral leases.) One of these vocabularies (from Mungalalla Creek, contributed by W.H. Looker) can be identified with confidence as Gunggari. Table l.l gives the cognate percentages of the other three, contributed by L.M. Playfair, Joseph Hollingsworth and William R. Conn, with one another and with Gunya and Margany (from present day information), Dharawala (Tindale's Wadjalang) and Bidjara.

TABLE 1.1-Curr Vocabularies: Cognate Percentages

PLAYFAIR HOLLINGSWORTH CONN

| Margany | 72 | 66 | 55 |
| :--- | :--- | :--- | :--- |
| Gunya | 71 | 77 | 64 |
| Bidjara | 69 | 79 | 79 |
| Dharawala | 69 | 77 | 80 |
| Playfair |  | 81 | 75 |
| Hollingsworth |  |  | 87 |

In Hollingsworth's list a small number of words are given in two forms, one of which corresponds to Gunya and one to Bidjara. However, he also gives a list of additional words, about equal in size to the standard Curr list, and with this Gunya shares $71 \%$ and Bidjara only $58 \%$ (very few of these words are known for Dharawala). It is therefore concluded that Hollingsworth's list (apart from perhaps a few words which are given as one of two forms) is Gunya.
L.M. Playfair is presumably the Playfair who was a cofounder of Beechal Station in the early 1860 s and a colessee of the pastoral leases Beethana (?), Karjie and Watchum in 1876 (Dymock, pers. comm.). These three leases
were probably contiguous and Beethana (which name may be an error, resulting from a misreading) is almost certainly the present Buthana, which is roughly half way between Beechal and Cheepie. Watchum was in the neighbourhood of Buthana, but it has not been possible to locate Karjie (Qld. Lands Dept., pers. comm.). Playfair's list, then, seems to apply to an area in the north-eastern portion of Margany country, or possibly in Gunya country. It is impossible to be more definite.

Conn's vocabulary seems to be Dharawala or Bidjara and the former seems the more likely choice if we are to accept Tindale's statement that Gunya territory went as far north as Augathella and Burenda. This statement, incidentally, would not be accepted by present day informants; however, Tindale's information is probably more reliable and certainly far more specific.

Playfair's and Hollingsworth's vocabularies are republished, with notes, in Appendix $I$.

Table 1.1 will be discussed further in 1.3.

### 1.3 TERRITORY AND NEIGHBOURS

The location of Margany and Gunya tribal territories is shown on the map, on which, however, boundaries have not been drawn.

According to Tindale (1974:178, 181) Margany tribal territory is: 'Quilpie to Cheepie and Beechal, thence Paroo River to Eulo; on Bulloo River south to near Thargomindah; at Dynevor Downs and Ardoch'. And Gunya tribal territory is: 'Warrego River from Cunnamulla north to Augathella and Burenda; west to between Cooladdi and Cheepie; east to Morven and Angellala Creek; at Charleville'. These descriptions are slightly different from those given earlier (Tindale (1940: 164, 166)). However, Tindale's (1974) map does not seem to be completely consistent with the above description, in that the boundary between Margany and Gunya heads more or less directly south from half-way between Cooladdi and Cheepie and thus passes a considerable distance east of Beechal.

Neighbouring tribes are as shown on the map. According to Tindale's map, Bidjara, Nguri and Gunggari have a common boundary with Gunya, Garlali and Punthamara have one with Margany, Badjidi on the south and Wadjalang (my Dharawala) on the north adjoin both. It shows Muruwari country as meeting Gunya country at a point and a similar situation for Ngandangara (my Yarumarra) and Margany. Muruwari and Yarumarra are not included in the following comparisons. Information on Nguri is inconsistent; Tindale places it on the Maranoa River and Mathews (1905) further west, on the middle Warrego, but Barlow (1872) has it to the south-east, near the Moonie River. Tindale and Barlow both give wordlists which support their statements on the location (and, consequently, differ greatly from one another). The present writer could not obtain any reliable information (although one Bidjara speaker thought the Nguri were on the Langlo River, i.e. north-west of Tindale's location) and
suspects that Nguri might not be a genuine language name.
A name Ngarigi, which has been heard a couple of times, seems to apply to a branch of the Gunggari and is probably to be identified with Ngaragari, which Tindale (1974:178) gives as a Koamu (Guwamu) term for the language between Bollon and Nebine Creek.

Table 1.2 gives cognate percentages, based on the 100 word list published by O'Grady and Klokeid (1969). Two sets of figures are given for Gunggari; one from the western or Nebine Creek area which actually adjoins Gunya country but for which only 54 of the 100 items are available, and one from the eastern or Maranoa River area, for which much fuller data are available. Other dialects for which there is not much available are Dharawala (61 items) and Nguri (42 items). Most of the data are from the writer's own field work, but the Nguri vocabulary is from the unpublished list by Tindale, Dharawala from the Tindale list (Wadjalang) and from Curr (Vol. III: 78-87, 278-9) and Badjidi from Mathews (1905), supplemented by the writer's field work. Counts based on a larger number of words (the 250 word list used by Breen (1971)) give essentially the same figures.

TABLE 1.2 Cognate Percentages: Margany, Gurya and Neighbours

|  | G | NG | MG | Ng | Bd | Dh | Pn | G1 | Bj |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Margany (M) | 78 | 59 | 47 | 49 | 55 | 58 | 21 | 23 | 26 |
| Gunya (G) |  | 83 | 57 | 57 | 64 | 71 | 15 | 21 | 28 |
| Nebine Gunggari (NG) |  |  | 80 | 77 | 75 |  |  |  | 25 |
| Maranoa Gunggari (MG) |  |  |  | 80 | 77 |  |  |  | 16 |
| Nguri (NG) |  |  |  |  | 95 |  |  |  |  |
| Bidjara (BD) |  |  |  |  |  | 85 |  |  |  |
| Dharawala (Dh) |  |  |  |  |  |  | 17 |  |  |
| Punthamara (Pn) |  |  |  |  |  |  |  | 48 |  |
| Garlali (G1) |  |  |  |  |  |  |  |  | 46 |
| Badjidi ( $\mathrm{Bj}^{\text {) }}$ |  |  |  |  |  |  |  |  |  |

In a very few cases items which are clearly cognate have been counted as non-cognate because borrowing is suspected. Thus Gunya dandi 'ground' must be cognate with Bidjara nandi, but since there is no other evidence of initial /n/ in Bidjara (even though it derives from earlier /n/) corresponding to initial /d/in Gunya it is assumed that the relationship is not direct. Undoubtedly there are other borrowed items involved in the counts which have not been recognised as such, especially between contiguous but not closely related languages (such as Gunya / Badjidi). As mentioned above (1.2), the informants for Margany and Gunya come from the southern parts of their respective territories and their vocabularies would be further removed from those of neighbouring dialects on the north than the vocabulary of speakers from further north would be. This is illustrated in Table 1.1; note that the cognate percentages in this table are based on the Curr wordlist and
so are not strictly comparable with those in Table 1.2. The figures in Table 1.1 suggest that there is greater lexical similarity between the speech of geographically close tracts in different dialect areas than between widely separated tracts in the same dialect area. This may be so; nevertheless it is believed that there were clear-cut boundaries between dialects but only gradual changes within dialect areas, Gramatical changes are probably a better indication of a dialect boundary than lexical changes.

Table 1.3 gives a brief grammatical comparison of the languages and dialects (except Nguri) compared in Table 1.2. Only the major allomorphs of bound morphemes are given (in the case of nouns, only the form used with a vowel-final stem). Where two forms are given they are separated by a comma if allomorphs and an oblique if differing in function.

It is clear that the dialects compared in the first five columns of Table 1.3 form a closely related group clearly separate from the other three, and this is confirmed by Table 1.2. Margany and Gunya share a few features that the other closely related dialects (Bidjara and Gunggari at least) do not have: an allative separate from the dative, a recent past tense, a potential verb inflection and two verbal conjugations.

### 1.4 SOCIOLINGUISTIC INFORMATION

Little is known of the life of the Margany and Gunya people before its disruption by white settlement. Curr (1886-7, Vol. III, 270-5) gives a few pages of notes, made up from the similar accounts given by his four informants, for an area which includes the northern part of Margany and Gunya territories, and Kelly (1935) gives some anthropological information for a large area of Queensland including these territories.

According to Curr's correspondent L.M. Playfair, whose information applies to the area of the present Buthana Station near the north-eastern extremity of Margany country (roughly half way between Beechal and Cheepie), the marriage system was as follows:

| any | Murri | male | may | marry | any | Combo | female, | offspring | Ippai |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| " | Combo | " | " | " | " | Murri | " , | " | Cubbi |
| " | Cubbi | " | " | " | " | Ippai | " , | " | Combo |
| " | Ippai | " | " | " | " | Cubbi | " , | " | Murri |

These section names are used over a wide area to the south, notably among the Kamilaroi (Gamilaray) and Wiradjuri of New South Wales.

Another correspondent, W.H. Looker (Mungalella Creek, in Gunggari country, just east of the Gunya) gives seven classes, with both masculine and feminine forms of the names; these are:

| Masculine | Feminine | Masculine | Feminine |
| :--- | :--- | :--- | :--- |
| Murri | Matha | Combo | Botha |
| Wongoo | Wongo-gan | Umbree | Umbreegan |
| Cubbi | Cubbotha | Hippi | Hippatha |


| elear | i | i | ！${ }^{1 /}$ |  | ！${ }^{\text {－}}$ | ebu－ | ep－ | Tevordỵozy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ：！－ | ¿ | ¿ | 11－ |  | 11－ | ！ $1-$ | ！1－ |  |
| eyunu－／eq－ | ！1ey－ | ¢7－ | eur－ |  | eur | eur－ | еш－ | әntzesnej |
| nue， | ！$\times 7$ | ¿ | （әuou） |  | （auou） |  |  | tetauazod |
|  |  |  |  | － $\mathrm{Cl}_{1}$ | n61－ | （•x7） n61－$^{\text {－}}$ | （＊x7） nl － | astcodanc |
| セ－1－ | n － | nqu－ | n¢1－ | ＇ $\mathrm{Ol}_{1-}$ | 180－ |  | ＇（＊xไu¢）nธu－ | 1 2xnanis |
| ！ $\mathrm{e}_{\text {en－／eu－}}$ | （ef） eu | eu－ | e1－ | el－ | el－ | el－／！${ }_{\text {u }}^{\text {：}}$ | e！－／！ | $7 \mathrm{SE}_{\mathrm{d}}$ |
| eje（6）－ | nu！1－ | ！uem－＇！u：eu－ | eu－ |  | eu－ | ！${ }_{\text {u }}$ | ！й－ | 7upsex $_{\text {d }}$ |
| naunk／！u！ | npunk | nұun人／！u！＾ | epu！ | epu！ | epu！ | epu！ | epu！ | －8s nox |
|  | ņ̧eu | ก⿹\zh26⿺𠃊／！！uea | eneu | ekes | eneu | erea | e人eu | I |
| ก¢̆unu－ | อ就nq－ | i | eqpe－ |  | eqpe6－ | eqpeb－ | eqp！－ | antzențad |
| njeq－ | $!7!\times-$ | e1！－ | ！ Req－ | ！ Neq－ | ！ ＾eq－ | ！jeq－ | ！jeq－ | 7uezțuovuo |
| nuue－ | ！ủen | ！uew－ | npunu－ |  | npunu－ | npunu－ | npunu－ | әงฺフetq\％ |
| ef－ | nM－ | n6－ | n6－ |  | n6． | $\left\{\begin{array}{r} \wedge u!\dot{\mathrm{p}} 6- \\ \mathrm{n} 6- \end{array}\right.$ | $\begin{array}{r} \text { ! pe } \overline{\mathrm{p}}- \\ \mathrm{n} 6- \end{array}$ |  |
| efel－ | ef－ | e1－ | e6u－ |  | efo | e6u－ | e6u－ | จงบา7eวot |
| ก1－ | nu－ | п1－ | nธu－ |  | n －1－ | nbu－ | nбu－ |  |
| елеury\％und | ¢¢¢ | بртfpeg | tuessung | eqemexeya | exe¢pta | exung | кие8̇ен |  |

TABLE 1．3 Morphological Comparison of Margany，Gunya and Neighbours

However, the marriage rules he gives correspond exactly (apart from the use of feminine as well as masculine names) to those of Playfair; the three extra sections are not mentioned at all, In fact, Looker is mixing two separate sets of names, as witness the Bidjara section names (in the orthography of Breen 1973), gurgila, guburu, ganbayi and wun-gu with feminine forms formed by a suffix -gan (the Gunggari forms would be minus the initial $g$, hence Looker's spellings ogil!a, umbree, etc.). It seems that this set was used by the eastern or Maranoa River Gunggari but not by the western or Nebine Creek Gunggari, who used the Kamilaroi set. The two sets differ only in the names; the marriage rules are exactly the same. It seems that the boundary between the two sets must run between the two branches of Gunggari and between Bidjara and Gunya.

This may explain the comparative lack of social contact at the present time between the Cunnamulla and Quilpie Aborigines, mostly of Margany, Gunya, Garlali, Punthamara, Badjidi and Nebine Gunggari origin, and the Charleville and Mitchell Aborigines, mostly Bidjara, Gungabula and Maranoa Gunggari (as compared with the extensive contacts between Cunnamulla, Eulo and Quilpie and between Charleville, Augathella and Mitchell). However, other factors, such as the effect of the former mission at Tinnenburra, south of Cunnamulla, may also be relevant.

In addition to the section names Playfair added 'the following class-names (no doubt subdivisions) viz. opossum, snake, kangaroo, emu, crow and eaglehawk' but gave no details of how these fitted into the system. Present day memories of the system are vague and fragmentary and mostly confined to one or two of these 'subdivisions'; thus one of the Gunya speakers said he was bilby (a type of bandicoot) and his wife /bawuda/ (red kangaroo). Their children were also /bawuda/. He also knew a word/bidyudu/ but did not know how it fitted in; it could be a clan or moiety name. (Among the Bidjara there were two exogamous clans, yangurru (comprising the sections ganbayi and gurrgila) and wudhurru (comprising wun-gu and guturu) and, it seems, also two moieties, called bumbira and magula. The nature of the latter division is not known.)

Nothing is known of any form of avoidance or other 'special' language.

### 1.5 PRESENT SITUATION

Margany and Gunya are virtually extinct. The only Margany speaker is Mrs. Jessie Shillingsworth who now lives in Cunnamulla. She is probably close to 80 . The most knowledgeable of my Gunya informants was Mrs. Margaret McKellar, of Eulo and Cunnamulla, who died at a great age (at least 95, perhaps over 100) in 1972. Other speakers with whom I have worked are two of Mrs. McKellar's sons, Charlie and Pred, and her daughter Mrs. Ruby Richardson. None of these has a full knowledge of the grammar although they have fair vocabularies. Their language is slightly contaminated by Margany and perhaps other dialects.

### 1.6 PAST INVESTIGATIONS

Margany and Gunya vocabularies published by Curr (1886-7) have been discussed above (1.2); see also Appendix I.

Tindale collected a vocabulary in Margany in 1939; see Appendix II.

A list of 41 items collected by Barry Foster, then bookkeeper at Thylungra Station, from an unknown informant at Cunnamulla, probably in the early $1960^{\prime} \mathrm{s}$ and sent to the writer in 1968, is in Margany (see Appendix III). A few items from this list can be added to the lexicon. A notable feature is the deletion of expected initial /g/ before /a/ (see 2.7).

Holmer (n.d.) worked in 1971 with an informant who claimed to speak Margany; however, her language was in fact Bidjara.

Mrs. Hazel McKellar of Cunnamulla has recorded some Gunya from her sister-in-law Mrs. Ruby Richardson, and some of this material appears in the Vocabulary.

### 1.7 CONVENTIONS

(M) denotes that an example is Margany, (G) that it is Gunya. An example is not marked (M) or (G) if the context renders it unnecessary or if it occurs in the corpus for both dialects.

Where a translation is that given by the informant it is in double inverted commas. Otherwise, the English equivalent given for a sentence is usually the sentence that the informant was asked to translate, even if the sentence given does not seem to be an exact translation. Only if there is a gross discrepancy between the sentence asked and that given is an attempt made to translate the latter.
The English sentences are not, therefore, to be thought of as exact translations.
/ in a sentence denotes a pause. I have avoided marking pauses that seem to be due only to the speaker's hesitancy.

## 2. PHONOLOGY

### 2.1 THE PHONEMES

The phoneme inventory for both dialects consists of 25 consonants and 6 vowels and is shown in Tables 2.1 and 2.2.

TABLE 2.1 Margany and Gunya Consonant Phonemes

|  | Peripheral |  | Apical |  | Laminal |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bilabial | Dorsovelar | Alveolar | Postalveolar | Dental | Alveopalatal |
| Voiced stop | $b$ | g | d | d | d | $d^{Y}$ |
| Voiceless stop | $p$ | k | $t$ | $\pm$ | $\pm$ | ty |
| Nasal | m | 7 | n | n | n | $\mathrm{n}^{Y}$ |
| Lateral |  |  | 1 | ! |  | $1^{Y}$ |
| Trill |  |  | r |  |  |  |
| Glide | w |  |  | r |  | Y |

TABLE 2.2 Margany and Gunya Vowel Phonemes

| Front | Back |  |
| :--- | :--- | :--- |
| High |  |  |
| Low | is i: |  |
|  |  |  |
|  |  |  |

The following abbreviated names for the consonant articulators will be used: bilabial, velar, alveolar, retroflex, interdental, palatal.

The only unusual feature of this inventory is the existence of two series of stops, labelled above voiced and voiceless, but perhaps more correctly lax and tense. In the environment in which they most commonly contrast, i.e. intervocalically, the former are frequently lenited to fricatives (in the case of $/ \mathrm{b} / \mathrm{l} / \mathrm{g} /$ and /d/) or a tap (/d/) while the latter are characterised by length (especially in Margany) as well as absence of voice. These phonetic facts suggest that, at least intervocalically, the voiceless stops could be regarded as geminate clusters (as has been done in, for example, Burarra (Glasgow 1967, p.9) and Rembarnga (McKay 1975, pp. 17-21)). However, this is not favoured since heterorganic stop clusters, such as /db/ and /dg/, which occur inter-morphemically, remain voiced. Voiced and voiceless stops contrast also in clusters with lateral or nasal as first member. With laterals the voiced stops may be lenited while with nasals they are realised as voiced stops. In both cases the voiceless stops are voiceless but not long.

The possible origin of the voiced-voiceless stops distinction will not be discussed in detail here. However, it is worth noting that - while phonetically voiced stops are the norm in Mari languages - a number of the words containing voiceless stops, such as nuta 'dog' (G), natyu 'my', gatya 'rotten', bati 'to cry' (G), yatyu 'flame' (M) and nuka 'to taste' (M) are reflexes of forms which can be
reconstructed as ancestral to both the Mari and Pama languages. It seems likely, therefore, that the distinction arose as a result of internal phonological change rather than borrowing.

The following minimal and other pairs illustrate the contrast between the two series. Note that the voiceless stops are of low frequency.

## MARGANY

b/p ibalu 'you two'/ipany 'dew' bạbila 'pierced'/bapiri 'fart' gubuḍu 'gidgea' / gupu 'short'
gabuny 'egg'/gapuny 'small'
g/k gunga 'raw'/gunkuru 'coughing' budgu 'shield'/yu!ku 'heart' buguny 'antbed' / bukuny 'quiet'
baga 'tree' / maka 'bone'
$d / t$ bindata 'sit-CONJ'/bintada $\quad$ 'cormorant'
d/t biḍi 'tail'/miti 'hard'
bựi 'fire'/cuṭi 'elbow' maḍi 'man' / baṭi 'stomach'
$d / \pm$
dada 'to excrete' / data 'sick'
wadi 'already' / wati 'scrub'
dy/ty gudya 'honey'/gutya 'to spear'
wadya 'to go'/matya 'long ago' munydya 'body hair'/nunytya 'face' (only for F. McKellar; others say nunydya, which is also the Margany form.)

The following pairs illustrate the contrast between the alveolars and retroflexes. Note that retroflexes do not occur initially and it is doubted that alveolars do (see 2.3).


Contrasts between interdentals and palatals are very scarce; in fact, there seem to be only a couple of words in the corpus for each language with intervocalic /ny/. /ny/ does not occur word-initially and there is only one known
word in Margany and three in Gunya with initial /dy/.

| M. yutal | 'skin' | 1 | gutra | 'to spear' |
| :---: | :---: | :---: | :---: | :---: |
| M. data | 'stick' | 1 | datYa | 'to kick' |
| gunu | 'humpy' | 1 | bunyul | 'lignum' |
| G. gana | 'yamstick' | 1 | banya | 'big' |
| M. wadin | 'right', | 1 | wadyi:n | 'white woman' |
| buda | 'ashes' | 1 | gudya | 'honey' |
| G. diba | 'liver' | / | budyabud ${ }^{\text {dyipu }}$ | 'light <br> 'small' |

Word-final consonant oppositions are illustrated by:

| M. | gabun | 'baby' | / | gabuny | 'egg' |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M. | wakan | 'father's sister' | 1 | wakan | 'crow' |  |
|  | udun | 'grass' | 1 | budun ${ }^{\text {y }}$ | 'mosquito' |  |
| G. | gudgan | 'long' | 1 | dilgan | 'moon' |  |
|  | udun | 'grass' | 1 | mutun | 'shingleback | lizard' |
| M. | buwanygil | 'summer' | 1 | niki! | 'hot coals' |  |
| G. | bukul | 'daughter' | 1 | wanud | 'a few' |  |
|  | dawu! | 'wild' | 1 | nawudna | 'frog sp.' |  |
|  | danud | 'possum' | 1 | gudgud | 'mopoke' |  |
|  | bangad | 'back' | $/$ | mangad | 'bag' |  |

The analysis of vowels posed some problems. The possible solutions were (a) three short vowels /a, i, u/ plus three corresponding long vowels and no VV sequences or (b) three short vowels, with length interpreted as reduplication (e.g. /aa/) and VV sequences not broken by predictable glides (thus /ia/ not /iya/) or (c) three short vowels, length interpreted as reduplication in the case of the low vowel and as vowel-glide-vowel (e.g. /iyi/) for the high vowels, and VV sequences (apart from /aa/) broken by glides or (d) a combination of (a) with (b) or (c).

Phonetic data do not particularly favour any one of these solutions against the others. Phonotactic and morphophonological data make (d) seem tempting. Thus, for example, writing daa instead of da:, guwu or guu instead of gu: and so on eliminates the only six monosyllables in the corpus. Long vowels, however, seem more fitting in such borrowed words as [du:bu] 'soap', [ma:da] 'boss', [ma:bu] 'many' and [wadyi:n] 'white woman'. It is simpler to write the recent past tense suffix on verbs as -: $\boldsymbol{q}^{1}$ (in accordance with solution (a) than as -ani after stem-final /a/, -ini (or -yini) after /i/, -uni (or -wuni) after /u/ (solution (b) (or (c))). However, the privative suffix in Margany is most economically written as -idba and would be with solution (b), but with solution (a) it must be written -yidba after /a/, -:dba after /i/, -widba after /u/ and - idba after a consonant, and with solution (c) it is almost as complicated. The allomorphs of this suffix can also, of course, be described by a morphophonological rule, but as no other bound morpheme functions in exactly the same way this does not simplify the description.

Clearly solution (d) cannot be justified without
strong evidence of contrast between long vowels, like [u:], and sequences like/uu/ or /uwu/. There is, in fact, some slight evidence; the ablative form of the word for 'mouth' is [gúmùndu] and the presence of the secondary stress on the penultimate vowel suggests that this word is to be regarded as having four syllables, i.e. /guwumundu/. The dative of the (borrowed) word for 'soap' is [dúbugu], which seems to be trisyllabic /du:bugu/. However, this difference in stress may be related to the fact that the suffix is disyllabic in the former case and monosyllabic in the latter. There is no other evidence and solution (d) must therefore be rejected.

Partly, but not entirely, because of the frequency of the 'recent past' form of the verb, solution (a) seems to be the most economical and has been adopted. Length contrasts are illustrated in both dialects by the suffixes -ni 'present tense' and -:ni 'recent past tense'. A few other bound morphemes condition length in the preceding vowel (in some cases only with one or two of the short vowel phonemes). Otherwise long vowels are rare. Other pairs noted or (in the case of da:gu which has not actually been heard) presumed include:

| G. da:gu | 'mouth-DAT' | / dagu | 'to ask' |
| :--- | :--- | :--- | :--- |
| M. wa:la | 'gave' | / wala | 'where?' |
| G. gudu: | 'blowfly' | / gundu | 'away' |
|  | gu:mundu | 'nose-ABL' | / guma |
|  | 'blood' |  |  |

### 2.2 DESCRIPTION OF THE PHONEMES

The following description is based on the speech of the two main informants, Mrs. Shillingsworth and Mrs. McKellar. Their speech is generally clear although Mrs. Shillingsworth's interdental (or better, perhaps, dental) consonants are often difficult or impossible to distinguish from alveolars. There are slight differences in the speech of the younger Gunya informants which would possibly result in a different distribution of the phonemes /d/ and /r/; this will be discussed below. There are also some indications of simplification on the part of younger informants; thus the younger Gunya speakers give/dirul for 'lapunyah (tree)' as compared to Margany /diwuru/, and /dura/ for 'dust' as compared to Mrs. McKellar's /durura/.

The voiced stops are realised usually as lenis voiced stops in word-initial position after /d/ and in nasal-stop clusters. Intervocalically and following a lateral some stops are typically softened to fricatives: /b/ to [ $\beta$ ], /g/ to $[\gamma], / d /$ to [d]. /d/ in these positions becomes a tap, occasionally heard as a stop, while /dy/ and /d/ are voiced stops (although /dy/ may be softened to [y^] (a voiced palatal fricative) in the speech of the younger informants and /d/ is occasionally a retroflexed flap [r]). Word-finally /d/ is generally a voiced stop and /d/ a tap but both tend to be devoiced.

The spellings in the lists published by Curr suggest a tendency for stops to be less strongly voiced and perhaps
more strongly articulated than was heard from the main present day informants; thus they frequently (but by no means exclusively) used $p, k, c$ and $t$ to represent word-initial stops. There seems to be little point in discussing the possible reasons for this.
/d/ is the only stop to occur as first member of a cluster (commonly in /db/ and /dg/, rarely in /dm/, /dp/ and /dk/). When a voiced consonant follows it is a strong tap, occasionally heard as a stop. Followed by a voiceless consonant it may be trilled. Note, however, that in the speech of the younger informants a trill is sometimes heard instead of the tap even when a voiced stop follows. It is possible that in a phonological description based only on their speech the first member of these clusters would be assigned to the phoneme /r/ rather than $/ \mathrm{d} /$.

The following examples illustrate the pronunciation of the voiced stops:

```
M. /bubalu/ [bưßalu] 'will rub'
    /bagalal [bádala] 'bit'
M. /balga:ni/[bálya:ni] 'hit'
G. /gudya/ [gúdya] ~ rarely [gúy^a] 'honey'
M. /bac̣i/ [bádi] 'maybe'
G. /baçia:du/[bád̃a:ru] ~ [barrra:ru] 'today'
G. /guyugu/ [güyuyu] 'for fish'
M. /dangingu/ [dángingu] 'will fall'
M. /mandi:ni/[mándini] 'burnt'
        /malaḍ/ [málad] 'box tree'
M. /mada/ [mára] 'get (it)'
        /budala/ [búrala] 'got up'
M. /wamada/ [wómara] 'spear'
        /nadgu/ [ gárgu] ~ [ nárdəgu] 'grey kangaroo'
        /bacbida/[bárbida] ~ [bádbida] 'porcupine'
M. /yadpalany/[yárpolany] 'flat'i
```

The voiceless stops are typically long, often reduplicated, except when they occur in a consonant cluster (of which they can only be second member). The length is much less pronounced in Gunya.

|  | /baṭi/ | [battol] (M) | [batti] (G) | 'stomach' |
| :---: | :---: | :---: | :---: | :---: |
| M. | /bikany/ | [bikkmn ${ }^{\text {c }}$ |  | 'fingernail' |
|  | /matya/ | [mátytya] |  | 'long ago' |
| M. | /dulbata/ | [dúlbat ${ }^{\text {a }}$ ] |  | 'put out (fire)-CONJ' |
| M. | /ba!para/ | [bá! -pàra] |  | 'kite-hawk' |
| G. | /bukul/ | [búkul] |  | 'daughter' |
| G. | /dyipu/ | [dy¢pu] |  | 'sma11' |

In Gunya, where an ergative or instrumental suffix -tu or a locative suffix -ta is added to a stem ending in a retroflexed consonant, the long stop in a word such as [bángat.a] 'back-LOC' is interpreted as cluster /dt/ rather than as involving a deletion, since length would not be expected in a stop in this position, following an unstressed vowel. (This reasoning would not apply, however, in Margany).

Nasals are frequently long when following a stressed vowel in a disyllabic word:

| M. | $/ \mathrm{minya}$ | [míny:a] | 'full' |
| :---: | :---: | :---: | :---: |
| M. | /danginy/ | [dán $\cdot \mathrm{gin} \mathrm{n}^{\text {y }}$ ] | 'blue crane' |
| M. | /mangu/ | [mán•gu] | 'beefwood' |
| M. | /mangu/ | [mán•gu] | 'arm' |
|  | /bana/ | [bán:a] | 'goanna' |
| G. | /banya/ | [bán $y_{n} y_{a}$ ] | 'big' |
| G. | /yama/ | [ y ̛́mma] | 'nothing' |

(Note: [mm] differs from [m:] in that there seems to be a syllable boundary between the two segments, i.e. one syllable ends with [m] and the next begins with $[\mathrm{m}]$; [m:] does not give this impression.)

Following stressed /u/, the alveolar nasal is occasionally very much retracted in Gunya, so that, for example, /guni/ 'to hit' bas been heard as [gúni].

There are no noteworthy features of the pronunciation of the nasals in other environments.

The only noteworthy feature of the laterals is a tendency (in Margany only, and not so noticeable as with the nasals) for the sound to be lengthened when it follows a stressed vowel and precedes a consonant.
M. /ba!galu/ [bál•galu] 'will hit'

The trill occurs only intervocalically (the rare occurrences of [ $r$ ] in clusters are interpreted as realisations of /d/). It is normally a voiced alveolar trill, sometimes prolonged after a stressed vowel. It is rarely voiceless.

|  | /bari/ | [bári] ~ [bár•i] | 'stone' |
| :---: | :---: | :---: | :---: |
| M. | /nadYari:ni/ | [ nádyarilni] | 'is thirsty' |

The glides /w/, /r/ and /y/ have no noteworthy features. Note, however, that /r/ is sometimes dropped by the younger Gunya speakers from the concomitant suffix -bari, resulting in the form -bayi.

The short vowels /i/, /u/ and /a/ are basically medium high front unrounded (about [i]), medium high back rounded (about [ $\circ$ ]) and medium low central (about [e]) respectively.

When a palatal consonant follows a stressed non-front vowel there is frequently a palatal on-glide to the consonant; alternatively (or, rarely, in addition) the vowel may be fronted and raised, as may a front vowel in this position.

| M. | /mayi/ | [mx́y ${ }^{\text {c }}$ ] | 'bread' |
| :---: | :---: | :---: | :---: |
|  | /banydyara/ | [béynydere] | 'pine' |
|  | /dalany/ | [délæny] | 'tongue' |
|  | /gabuny/ | [gébu $y_{n} y$ ] | 'egg' |
| G. | /buduny/ | [bátuiny] | 'mosquito' |
| M. | /dyinguya!/ | [dyíngüymi] | 'parrot sp.' |
| M. | $/ \mathrm{min} \dot{Y}_{a} /$ | [míny:e] | 'fu11' |

A preceding /y/ also frequently causes fronting and raising
of a following vowel，as do other palatal consonants if the vowel is unstressed．

In Gunya the unstressed sequence／aya／，common in verbs，is often realised as［ex］．

## G．／unayangu／［ónæengo］＇will be 1ying＇

Before retroflexed consonants the high vowels tend to be lowered and retracted and／a／is retroflexed（i．e．the tongue approaches the apico－post－alveolar position，as for ／r／，but somewhat less closely）．

$$
\begin{aligned}
& \text { M. /badbida/ [bérbtde] ~ [bésbade] 'porcupine' } \\
& \text { M. /niki! [nika!] 'hot coal' } \\
& \text { /nanybaḍ/ [万éynybed] 'sweat' } \\
& \text { /yuḍi/ [yóḍu] 'meat' }
\end{aligned}
$$

Between peripheral consonants stressed／a／tends to be retracted，especially if the preceding consonant is／w／．

$$
\begin{array}{ll}
\text { /wakan/ } & {[\text { wóken }]} \\
\text { /mana/ } & {[\text { mórje }] \sim[\text { méne }]}
\end{array} \quad \text { 'crow' }
$$

／u／may become a glide［w］when preceded by a periph－ eral stop and followed by $/ w /$ or $/ y /$（the two glides merg－ ing in the former case and［i］being inserted in the second）． The stress then falls on the vowel following the $[w]$ ，and this vowel may be lengthened．

$$
\begin{aligned}
& \text { /buwany/ [bwóyny 'hot' } \\
& \text { M. /guwadu/ [gwá.su] 'crab }
\end{aligned}
$$

The sequence［ay］before a consonant is interpreted as ／ayi／．It occurs in only a few words，e．g．gaylmba＇now＇， wayilbala＇white man＇and is occasionally realised with a vocoid between the $/ y /$ and the next consonant．

Initial／i／and／u／are rarely preceded by the homor－ ganic glide：

$$
\begin{aligned}
& \text { /inda/ [yínde] but usually [inde] 'you' } \\
& \text { /udun/ [wó丈on] but usually [ó丈on] 'grass' }
\end{aligned}
$$

Occasionally a vocoid is added at the end of a conson－ ant－final word（and in a couple of cases it is not clear whether a word ends in a vowel or not）．

M．／buwanºgil／［búwanygil］～［búwanygila］＇summer＇
The long vowels are realised either as long vocoids，
sometimes with minor change of quality or change in stress during the course of the vocoid, or as sequences of vocoid-glide-vocoid (/i:/ and /u:/ only). They are closer to the appropriate cardinal vowels [i], [u] or [a] than are the corresponding short vowels.

| /da:/ | [da:] | 'mouth' |
| :---: | :---: | :---: |
| G. /banya:ri/ | [bénya:ri] | 'big' |
| M. /buri:ni/ | [bóri:ni] | 'is tired' |
| M. /gundi:ni/ | [góndilimb | 'died' |
| M. /biri:lku/ | [bíriyliko] | [biriyelko] |
| M. /bity $\mathrm{y}_{\text {a }} \mathrm{n}$ / | [bít yuwəni] | 'is throwing' |

### 2.3 PHONOTACTICS

Root structure is (with the exception of a handful of monosyllables and five syllable roots):

$$
\left(\mathrm{C}_{1}\right) \mathrm{V}_{1}\left(\mathrm{C}_{2}\right) \mathrm{C}_{3} \mathrm{~V}_{2}\left(\mathrm{C}_{4}\right)\left(\mathrm{C}_{5} \mathrm{~V}_{3}\left(\mathrm{C}_{6}\right)\right)\left(\mathrm{C}_{7} \mathrm{~V}_{4}\left(\mathrm{C}_{8}\right)\right)
$$

The following phonemes can occur word-initially: peripheral voiced stops and nasals /b, g, m, g/interdental voiced stop and nasal /d, $n /$, high vowels and the corresponding semivowels /i, u, y, w/. In addition a very few words (including one very common word in Gunya, /dyipu/ 'small') have initial /dy/. Also, a few words in each dialect have been transcribed with initial /n/. This may be genuine, or it may result from mishearing of initial /n/. Alternatively, there may be free variation between the two in initial position, or possibly even a certain amount of complementary distribution; /n/ seems much more common than $/ \mathrm{n} /$ before $/ \mathrm{u} /$, less common before /i/ (especially in Gunya) and about equally common before /a/.

Note that initial /i/ is written instead of /yi/; there is no contrast between the two in this position and the initial glide is almost never heard in the speech of the older informants, and is not common in the speech of the younger informants. Note also the reduplicated form idginidgin 'cheeky' (G), heard [isgunisgin]; there is clearly no /ny/ cluster although such a cluster is presumably allowed, since /ly/ occurs (in yagalyagal (G), meaning not clear; it was given for 'hot coal' but as yagal is 'cold' there is probably a mishearing involved and it may mean 'cool', 'not very cold').

For similar reasons /u/ is written initially in preference to /wu/.

Table 2.3 gives the percentage frequency of each phoneme in initial position in lexical items heard from at least two Gunya informants (about 460 items) and from Mrs. Shillingsworth (about 590). In addition the frequency of initial CV sequences in the Margany vocabulary (for short vowels only) is given. The only initial CV sequences containing a long vowel are in the words da: 'mouth', gu:
'nose', na: 'to see' (Margany only), wa: 'to give', di:ti 'soldier bird', and the borrowed word ma:da 'boss'. (There are a handful of others, mostly borrowed, in Gunya.) Voiceless stops, retroflex consonants, laterals, rhotics and /a/, which never occur initially, are omitted.

TABLE 2.3 Initial Phoneme and CV Frequencies

| Initial <br> Phoneme | \% Frequency in Gunya | \% Prequency <br> in Margany | \% Frequency in Margany |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Ca | Ci | Cu |
| b | 22 | 22 | 10 | 4 | 8 |
| $g$ | 23 | 20 | 10 | 0.2 | 10 |
| d | - | - | - | - | - |
| d | 14 | 15 | 7 | 4 | 4 |
| $d^{y}$ | 0.6 | 0.2 | - | 0.2 | - |
| m | 13 | 14 | 8 | 2 | 4 |
| $\square$ | 6 | 6 | 4 | - | 2 |
| $n$ | 1 | 1 | 0.3 | 0.7 | 0.3 |
| $\square$ | 2 | 3 | 0.5 | 0.8 | 1.2 |
| $n^{4}$ | - | - | - | - | - |
| $y$ | 6 | 5 | 3 | NA | 2 |
| w | 7 | 9 | 7 | 2 | NA |
| i | 3 | 3 | [ Not | Applicable | ] |
| $u$ | 2 | 2 |  |  |  |

Table 2.3 shows that /a/ occurs as the stressed (i.e. first) vowel in about $50 \%$ of vocabulary items, /i/ in $17 \%$ and /u/ in about 33\%. The corresponding figures for Gunya are about 50, 15 and 34 .

Phonemes which can occur word-finally are the vowels, apical nasals and laterals (but there are no confirmed examples of final retroflex lateral voiced stops in Gunya), and $/ n^{y} /$. Note that all verb stems end in vowels, $/ a /$ and /i/ being by far the most common.

Table 2.4 lists percentage frequencies of final phonemes.

TABLE 2.4 Final Phoneme Frequencies

|  | Margany | Gunya |  | Margany | Gunya |
| :---: | :---: | :---: | :---: | :---: | :---: |
| a | 39 | 39 | d | 0.7 | 0.4 |
| i | 20 | 17 | d | 2 | 3 |
| u | 18 | 16 | n | 2 | 2 |
| a: | 0.5 | 0.4 | ! | 0.3 | 1.5 |
| i: | 0 | 0.4 | ; | 6 | 5 |
| $u$ : | 0.2 | 0.4 | $!$ | 0.3 | 0 |
|  |  |  | $n^{Y}$ | 11 | 14 |

The only words ending in a long vowel are the monosyllables da: 'mouth', gu: 'nose', wa: 'to give', ma: (Margany)
'to see', di: (Gunya, borrowed) 'tea' and the Gunya words bidi: 'turtle' and gudu: 'blowfly'.

Any consonant can occur in intervocalic position. The following intra-morphemic consonant clusters, all binary, can occur: homorganic nasal plus stop; apical or laminopalatal nasal or lateral or tap (i.e. voiced alveolar stop) plus peripheral voiced or voiceless stop or nasal; and also /lt/ (doubtful). In fact, a few of these have not been heard - in particular, the lateral-nasal clusters, which may not be permitted - and some have been heard only in Margany or only in Gunya. Table 2.5 lists clusters that have actually been heard. Crosses mark clusters that are thought to be acceptable but have not been heard. Brackets denote clusters known in only one word in each dialect, ( )M means known only for one Margany word and ( )G known only for one Gunya word.

Note that the above schedule allows clusters /db/,/dg/ but not /db/, /dg/.

Note also that all clusters are intervocalic. About $38 \%$ of stems in Margany and $29 \%$ in Gunya have a consonant cluster (a few have two).

It will be noted that a substantial proportion of these clusters are rare; in fact, in Gunya, over half the clusters occurring in the lexicon are /mb/, /nd/, /ad/ or $/ \mathrm{dg} /$, each of which makes up over ten percent of the total. In Margany the situation is a little different, as /ng/ is the only cluster with over ten percent of the total, while $/ \mathrm{mb} /$, /nd/, /nd/, /dg/ and /lb/ all have between six and nine percent.

Considering only clusters that are not rare, we could simplify the schedule to read: homorganic nasal plus voiced stop; alveolar nasal, lateral or tap (voiced stop) plus peripheral voiced stop. This covers $85 \%$ of Margany intramorphemic clusters (the other $15 \%$ being divided among 22 different clusters) and $87 \%$ in Gunya.

In theory, inter-morphemic clusters can be made up of any consonant that can occur word-finally plus any consonant that can occur word-initially. The consonants $/ \mathrm{g} /$, $/ \mathrm{m} /$ and $/ \mathrm{b} /$ occur initially in common nominal suffixes so that clusters such as /ḍg/, /db/, /dm/, /nym/, //m/, which are rare or non-existent within a morpheme are not uncommon across morpheme boundaries. A particularly unusual cluster (in Australian languages generally) which occurs in Gunya (according to the analysis adopted above) is /dt/, which occurs when a stem with final /d/ is marked for ergative, instrumental or locative case.

Margany has a nominal inflectional suffix with initial /d/, which, with stem-final/n/, gives a cluster /nd/ unless assimilation occurs, to give /nd/; the facts are not clear. Assimilation occurs with final /ny/, to give /nydy/. With final /l/ and /di/ /|d/ and /dd/, respectively, are formed. Attempts to elicit combinations with final /d/, /n/ and/!/ were unsuccessful.

Table 2.6 gives the percentage frequency in Margany of all consonants for positions other than word-initial and word-final (the total number is 1084). Figures for Gunya (total 850) are given in brackets only if they differ by $20 \%$


or more. Table 2.7 gives the percentage frequency of unstressed non-final vowels (total $360 \mathrm{M}, 296 \mathrm{C}$ ). Long vowels do not occur in unstressed non-final position in a root except in the Gunya word bada:du 'today' (from Mrs. McKellar only) and a couple of English loan-words (wadyi:n 'white woman' and yuda:mu 'alcoholic drink').

TABLE 2.6 Consonant Frequencies, Non-Initiar, Non-Final

|  | Labial | Velar | Alveolar | Retroflex | Interdental Palatal |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Voiced <br> $\quad$ Stops | 10 (12) | I1 | 9 | 5 | 5 | 2.5 |
| Voiceless | $0.6(0.8)$ | $2.5(1.8)$ | $0.7(1.3)$ | $2(1.6)$ | 0.6 | $2(0.6)$ |
| Stops | 7 | 3 | 8 | 2 | $2.5(2)$ | 3 |
| Lasals <br> Laterals <br> Trill <br> Glides | 7 | $2.5(1.2)$ | $7(9)$ | $1.2(2)$ |  | 0.7 |

TABLE 2.7 Vowel Frequencies, Unstressed and Non-Final

|  | High Front | Low | High Back |
| :--- | :---: | ---: | :---: |
| Margany | 25 | 49 | 26 |
| Gunya | 27 | 46 | 27 |

$0.7 \%$ of Margany roots are monosyllabic, $73 \%$ disyllabic, $20 \%$ trisyllabic, $6 \%$ of four syllables and $0.3 \%$ of five syllables (i.e. two words in the corpus, gatyuwilada 'turtle' and guwan Ymangadi, a place-name). The corresponding figures for Gunya are $1,76,17,6,0$. The longer roots include a number of items that are perhaps compound or derived forms (and certainly many that are historically not simple forms). A number of reduplicated forms are counted as roots, e.g. onomatopoeic words like guțaguta, a type of bird.

Overall phoneme frequencies have been studied only for the speech of Mrs. McKellar (Gunya); it is assumed that the figures of Margany and for other Gunya speakers would be similar. Table 2.8 shows the number of occurrences of each phoneme in the 294 lexical items recorded from Mrs. McKellar. Column I shows word-initial occurrences (or, for vowels, initial syllable occurrences), Column III word-final occurrences, and Column II other occurrences. One interesting feature is the preference of certain phonemes for initial position; $80 \%$ of $/ \mathrm{w} / \mathrm{s}$ occur initially despite the decision not to write /wu/ initially, as do about $65 \%$ of $/ \mathrm{y} / \mathrm{s}$ and $/ \mathrm{g} / \mathrm{s}, 60 \%$ of $/ \mathrm{b} / \mathrm{s}$ and half the $/ \mathrm{g} / \mathrm{s}$ and $/ \mathrm{m} / \mathrm{s}$. $70 \%$ of $/ n^{y} / \mathrm{s}$ occur stem-finally. Other consonants show a preference - total in many cases - for medial positions. $60 \%$ of $/ \mathrm{n} / \mathrm{s}$ occur as the first member of /nd/ clusters. /u/
shows a marked preference for the first syllable of a word, and in other positions occurs about as often as /i/.

TABLE 2.8 Number of Occurrences of Phonemes in Gunya

|  | I | I I | I I I | Total |  | I | II | III | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| b | 66 | 42 | - | 108 | p | - | 6 | - | 6 |
| g | 58 | 56 | - | 114 | k | - | 8 | - | 8 |
| d | - | 37 | 1 | 38 | t | - | 4 | - | 4 |
| d | - | 24 | 8 | 32 | t | - | 6 | - | 6 |
| d | 37 | 42 | - | 79 | $\pm$ | - | 2 | - | 2 |
| dy | 1 | 13 | - | 14 | ty | - | 4 | - | 4 |
| m | 34 | 36 | - | 70 | 1 | - | 47 | 8 | 55 |
| $\bigcirc$ | 26 | 15 | - | 41 | ! | - | 6 | - | 6 |
| n | 3 | 48 | 13 | 64 | i Y | - | 3 | - | 3 |
| n | - | 7 | 4 | 11 |  |  |  |  |  |
| n | 5 | 22 | - | 27 | $r$ | - | 15 | - | 15 |
| $n^{Y}$ | - | 15 | 37 | 52 | r | - | 16 | - | 16 |
|  |  |  |  |  | W | 24 | 5 | - | 29 |
|  |  |  |  |  | Y | 20 | 10 | - | 30 |
| a | 149 | 94 | 121 | 364 | a: | 2 | 2 | 11 | 4 |
| i | 43 | 39 | 48 | 130 | i : | 1 | 1 | 12 | 2 |
| u | 99 | 37 | 48 | 184 | $u$ : | $2^{1}$ | - | 2 | 4 |
| These are monosyllables. |  |  |  |  |  |  |  |  |  |

No counts have been done on textual material, there being virtually none in the corpus. However, the following observations can be made:
(a) Initial $/ \mathrm{n} /, / \mathrm{n} /$ and $/ \mathrm{i} /$ would be more frequent than in the lexicon, due to their use in a number of pronouns.
(b) Final vowels would be even more preponderant than in the lexicon, as almost all inflectional suffixes (one exception in Gunya) and most derivational suffixes end in a vowel.
(c) Long vowels would be much more frequent in unstressed positions due to the frequency of verbal inflections of the form -:CV, which lengthen the preceding stemfinal vowel. This applies much more to /a:/ and /i:/ than /u:/ as few verb stems end in /u/.
(d) Obviously, words would be longer on average, probably by about one syllable.

### 2.4 STRESS

Main stress is regularly on the first vowel of a word.
Where the first vowel has zero realisation as in, for example, the optional pronunciation [gwá.so] of /guwaḍ/ 'crab' (M), the stress is on the second vowel (which is, of course, the first vocoid). Length in a non-initial vowel
(because it is phonemically long or because it is followed by a glide and its homorganic vowel, which sequence may be realised as a diphthong) results in an apparent stress which may sometimes detract from the regular stress on the first vowel, thus [bíyá:lku]/biya:lku/ 'hunt (purposive)'. This is more likely with /a:/ than /i:/ or /u:/ because the latter two are more likely to be realised as two syllables (e.g. [iı] [uwa]).

There are rare examples in sentences of irregular stress on non-initial vowels but there is not sufficient evidence to justify any further comment on this. An example is: [gámumugálgiya]/gamu mugalgiya/ 'I'm going to get water' (G).

There may be a secondary stress on the third syllable of a four syllable word especially if the word is a reduplication or a compound form. The third syllable will not be stressed if the second is stressed by virtue of its length

| G. | [gábalgabal] | /gabalgabal/ | 'old man' |  |
| :---: | :---: | :---: | :---: | :---: |
|  | [ dátubira] | /datubira/ | 'waddy' | 'is hungry' |
| M | [gábira•ni | [gábirá:ni] | /gabira:ni/ |  |
|  | [bádiaiya] | /badiniya/ | 'I am sick |  |
| M. | [wábá: nmani] | /waba:nmani/ | 'is going |  |

When a word is of five or more syllables a secondary stress will appear on the first syllable of a non-initial disyllabic or longer morpheme or, where the bound morphemes are all monosyllabic, on the first or second of these (the rule for predicting which is not known).
G. [wádyeyindàna] ~ [wádyainidana]/wadyayinidana/ 'they (plu.)
M. [wábatabàni] /wabatabani/ 'is going along'
M. [wángulininga] /wangulininga/ 'while he was barking'

There are not sufficient data to show clearly whether an initial syllable containing a long vowel functions as two syllables for stress purposes, but it probably does [gú:mùndu]/gu:mundu/ 'from the nose'.
The verb waba (M), wadya (G) 'to go' is often phonologically incorporated with a preceding ugu 'hither' and not stressed as a separate word; thus [úguwaba] 'come here'. It is interesting in this connection that Fred McKellar, who normally used the Margany verb waba instead of his Gunya verb wadya in all other contexts (until I pointed out to him that his mother used wadya), used the imperative [úguwadya] 'come here!'. It appears that, at least in his idiolect, this had been reanalysed as a single morpheme which was not lost when the morpheme wadya was replaced by waba.

### 2.5 INTONATION

Little can be said about intonation owing to the scarcity of fluent speech in the corpus. A statement is characterised by a falling intonation on the final syllable and a choice (or yes/no) question by a rising intonation towards the end.

Three intonation patterns have been heard for questions involving an interrogative pronoun (which normally takes first place in the sentence). There nay be a rising intonation on the interrogative word followed by a fall so that the remainder of the sentence has a statement-like intonation. Alternatively, the rising intonation, followed by a fall, may occur on the last word of the sentence. Or the tone may be evenly high throughout.

A word in a statement sentence may be strongly stressed and this may be associated with a high tone, e.g. the first word in [gúta gúniliya dátaŋgu] (G) 'I hit the dog with a stick*.

The clauses of a compound sentence (i.e. involving coordination) seem to have the same intonation pattern as simple sentences, although a non-final clause may lack the final fall. The first clause of a complex sentence (i.e. involving subordination), however, ends with a rising intonation while the second clause is intoned as a simple sentence.

Some of the above statements are based on only one or two examples, and this section should therefore be treated with reserve.

### 2.6 MORPHOPHONOLOGY

A reduction of gu to : following a morpheme boundary seems to be optional in several bound morphemes; however, the data in some cases are very inconclusive. The alternation is well established in Margany non-singular pronouns, where it is likely that both forms are acceptable whenever a nominal inflectional suffix follows -nun- (i.e. all inflected forms except accusative and genitive; see 3.2, especially Table 3.2). Thus dananungu ~ dana:ngu '3 pl DAT', ibalunummundu (not attested, but some other ibalununforms are) ~ ibalu:nmundu '2 du ABL' and so on. There are no examples of the long vowel forms where the vowel is high front (such as nali:ngu as an alternative to galimungu 'l du DAT), but this may be due simply to the paucity of data. This alternation also occurs in Gunya with compass point names and wanda 'where'; thus wanda:ndu ~ wandanundu 'where to (ALL)'. The long vowel form is far more common and is the only form noted in Margany compass point names. There is evidence also that some other forms usually involving long vowels in Gunya may also be reduced from forms with -nu-. Thus winydyunula, translated "he might have asked" (C. McKellar) may be an alternative to winydy:la (see 3.6.4(f)) and the question form -:nda was once heard as - bunda from the same informant (bityununda, changed to bityu:nda).

The only example of assimilation across a morpheme boundary involves the Margany allative suffix -dadi which becomes -dyadi after stem-final / $n^{y} /$.

Given a different interpretation of the vowel phonology a few other alternations could have been described under Morphophonology (see 2.1).

### 2.7 PHONEME CORRESPONDENCES

The only regular sound correspondence attested is between Gunya retroflex stop and Margany retroflex glide between non-front vowels, the preceding one stressed, exemplified by the following pairs:

| GUNYA | MARGANY |  |
| :--- | :--- | :--- |
| mada | mara | hand |
| mada | wara | to run |
| gada | gara | not |
| badu | baru | river |
| dudu | duru | sun |
| guḍuny | guruny | alone |

The only counter exaraple is nudama 'to move (trans.)' (M), Duda 'to move (intr.)' (G); the latter was heard only from Charlie McKellar. (The reverse correspondence, in the environment i-a, is illustrated by ita (M), ira (G) 'tooth'.)

The above correspondence could be part of a more general correspondence involving apical and velar stops, Margany having a voiced stop or tap corresponding to a voiceless stop in Gunya and a glide or zero corresponding to a voiced stop in Gunya.

GUNYA

| bati | badi |
| :--- | :--- |
| nuta | nuda |
| wata | wada |
| naga | na: |
| yu!ku | ulgu |

```
to cry
dog
to dance
to see
heart
```

Counter examples are guta 'south' and baga 'tree', both found in both dialects. Note also the reverse correspondence for velars in binguny (G), bikany (M) 'fingernail' and wangara (G), wakany (M) 'one'. The latter pair may not be cognates and the former may involve borrowing.

A reverse correspondence involving palatal stops, voiceless in Margany and voiced in Gunya, is indicated by gatyu (M), gadyu (G) 'to tie'. gutya (M), gudya (G) 'to hit with a missile' and bityu (M), bidyu (G) 'to throw', but note natyu 'my', butyu 'deep', gudva 'honey', gatya 'rotten' and other words common to both dialects.

Lenition of stop, in particular of earlier retrofiexed stops to the glide /r/ is common in the Mari dialect area, the more northerly dialects having no retroflexed consonants apart from the glide.

It appears that Foster's informant in Margany spoke a variety in which initial /g/ has been lost before /a/ (thus amu for gamu 'water', agada for gagada 'moon' and ara for gara 'no'). The loss of initial $/ \mathrm{g} /$ - before all vowels has occurred in some other Mari dialects: Gunggari (complete in the eastern form, incomplete and inconsistent in the western form) and the dialect (name unknown; tentatively called Yandjibara after the name - spelt Yangeeberra in Curr (Vol. III: 72) - of a group speaking it) which was spoken north of Dharawala, in the Ravensbourne Creek area.

There is slight evidence of a correspondence between $/ d y /$ in Gunya and/d/ in Margany in initial position. However, initial $/ d y /$ is rare in both dialects and may be due to borrowing in both items below.

GUNYA

| dyibidyara | (C. McKellar) |
| :--- | :--- |
| dibidyara |  |
| dyindidyindi | (R. Richardson) |

## MARGANY

```
dibidyara duck sp.
dindidindi willy wagtail
```

The only common word with initial /dy/ is Gunya dyipu 'small', and it is interesting to note that Hollingsworth in Curr (1886) gives it as 'thippo'. This suggests a recent change from initial /d/ to /dy/, which, however, is hardly likely as initial /di/ is common in Gunya at present (e.g. diba 'liver').

There are a few other isolated correspondences, such as wanygu (G), wangu (M) 'to bark', ingu (G), yungu (M) 'to grow' and muni (G), munany (M) 'soft'.

An interesting correspondence involving neighbouring dialects is that between initial/p/ in Margany and Gunya, $/ n /$ in Bidjara and $/ \mathrm{g} /$ in Gunggari. The /n/ in Bidjara seems to have resulted from a general loss of the distinction between $/ \mathrm{n} /$ and $/ \mathrm{n} /$ in this dialect (see Breen 1973: 222-3, 1974: 1-2) but no explanation can be given for the change to /n/ in Gunggari ( $n$ being the ancestral form). Examples are few (because initial /n/ and $/ n /$ are uncommon) but consistent (the one clear exception may be a loan word in Bidjara).

| ENGLISH | MARGANY | GUNYA | BIDJARA | GUNGGARI |
| :---: | :---: | :---: | :---: | :---: |
| name | nari | nar: ${ }^{\text {a }}$ | nay: | nari |
| to see | na: | naga | naga | naga |
| navel | nimbiny | nimbiny |  | nimbiny |
| fly | nimun | nimun | nimun | gimun |
| to sme 11 | nuda | nuda | juda | nuda |
| 3 sg | nula | nula | nula | nula |
| skin |  |  | numan | Duman |
| saliva |  |  | numba | gumba |
| ant sp. |  | (nimany?) | nimany | 万iman $Y$ |
| to look for | nityu (n?) |  | nidyu | gidyu |

### 2.8 ORTHOGRAPHY

During June 1978 some talks were given to children in the Cunnamulla schools on the Gunya language, with particular reference to the spelling of words; these talks were interpolated into a course on Aboriginal culture, one lesson per month, given by Mrs. Hazel McKellar. An orthography had to be hastily invented for this purpose.

It is difficult to decide on certain features of an orthography to be used by people whose native language is English and who are never going to learn to speak the Aboriginal language. For example, does one write /dy/ as
dy (in the hope that it will be pronounced [dy] and not [day]) or as $j$ (accepting with resignation that people will not get any closer to the correct pronunciation than [dj])? Does one try to use only the vowel letters a, i and u, or does one use English spelling rules and write, say, jipoo instead of dyipu, murra instead of mara (thus, in the latter case, losing the distinction between the two rhotic phonemes)?

It was decided to adopt the alternatives which gave an orthography closer to the phonemic system for the following reasons:
(a) Lnless a wholesale loss of phonemic distinctions is to be accepted, there must be some spelling rules different from English, and it seems less confusing to have a system clearly distinct from English;
(b) Many native speakers of English cannot use English spelling rules very well and will find even the most anglicised system unworkable.

The system adopted is shown in Table 2.9; some additional explanation follows.

TABLE 2.9 Gunya Orthography

| Voiced stops | $b$ | g | d, rr | $r d, d$ | dh | dy |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Voiceless stops | $p$ | k | $t$ | $r t, t$ | th | ty |
| Nasals | m | $n g$ | ก | $r n$ | $n \mathrm{~h}, \mathrm{n}$ | $n y, y n, n$ |
| Laterals |  |  | 1 | $r 1$ |  | $\|y, y\|$ |
| Trill |  |  | rr |  |  |  |
| Glides | w |  |  | $r$ |  | y |
| Vowels | u, us |  | a,aa |  |  | i, i i |

The voiced alveolar stop/flap is written d intervocalically where it contrasts with the trill, and after a nasal, and rr elsewhere. Thus /buda/ is buda, /gandu/ is gandu, /budgu/ is burrgu, /wagud/ is wangurr.

The lamino-alveo-palatal nasal is written $y n$ word-finally and before a consonant (except before a homorganic stop intra-morphemically where it is written n) and ny elsewhere. Thus /gunya/ is Gunya, /bungany/ is bun-gayn, / ounydya/ is ngundya. Similar rules apply to the lateral.

Clusters /nd/, /nt/, /nḍ/ and /nt/ (if it exists) are written ndh, nt $h^{\prime}$, rnd, rnt. The cluster /ng/ is written with a hyphen, $n-g$.

This orthography is not used in this grammar; phonemic notation is used in the following chapters.

## 3. MORPHOLOGY

### 3.1 WORD CLASSES

Margany and Gunya words may be classified, on morphological grounds, into three classes: nominals, verbs and
particles. Nominals are those words whose stems can combine with some or any of the set of nominal inflectional suffixes (see 3.2 and 3.3). Verbs are those words whose stems can combine with any of the set of verbal inflectional suffixes (see 3.5 and 3.6). Particles do not combine with inflectional suffixes.

Nominals can be subdivided into nouns, which are morphologically unmarked when functioning as subject of an intransitive verb or object of a transitive verb, personal pronouns, which are morphologically unmarked when functioning as subject of any verb, and adverbs, which do not function as subject of a verb and which combine with a very limited set of nominal inflectional suffixes (see 4.9).

A possible absolutive suffix -na has been heard on wandu 'who' in both dialects. It is optional.

The demonstrative pronouns are inflected as nouns, although there are a number of forms for which there are no equivalents among the other nominals. Details are given in 3.2, especially Tables 3.4 and 3.5 .

The names of the compass points form a small subclass of adverbs; they do not occur in an uninflected form but, when used with a locative or allative meaning, carry the suffix - :ndu (rarely -nundu in Gunya). They do not combine with other inflectional suffixes except the ablative -mundu; locative forms, using the normal locative inflectional surfix, have been elicited from Fred McKellar but their correctness is doubted. In Gunya wanda 'where', an interrogative adverb, also combines with an allative -:ndu (also heard as -nundu) but the uninflected stem is permitted (with a locative meaning). No allative form of Margany wala 'where' has been heard.

There is no separate class of adjectives; concepts denoted by adjectives in English are mostly denoted by nouns (e.g. size, shape, physical qualities). English adjectives of state may be translated by verbs, but these are sometimes derived from abstract nouns, e.g. gabira 'to be hungry' from gabid 'hunger'. The state of being hungry may also be denoted by a derived noun, in this case gabidbari, literally 'hunger-having'.

There are virtually no roots functioning as both noun and verb; note only bungu 'swelling' and 'to swell' in Gunya and wangawanga 'winding', wanga 'to be bent' in Margany. Neither of these pairs is well established.

### 3.2 NOMINAL PARADIGMS

Table 3.1 shows the inflected forms of nouns; examples include nouns with final vowel, /n/, /ny/, /// and /d/. Final /d/, /n/ and /!/ have not been included; nor has locative-2. Instrumental forms are the same as ergative, and genitive function is fulfilled by the dative. Most forms in this table have not been heard but can be predicted by analogy with similar stems. The only morphophonemic alternation involves the Margany allative suffix -dadi. Note that with final $/ \mathrm{n} /$ the cluster is written nd although it may be indistinguishable from nd; in fact [ñd] was heard

| npunmpé¢ueq | npunujegem |  | npunuun ${ }^{\text {prn }}$ | npunu!aeg | วงฯ7etqy |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ки! ${ }^{\text {enebpebueq }}$ | su!péperem |  | su!pe¢unpn | su!peb! |  |
| ! pep̆ṗeбueq | ! pep̆ |  | ! pep̆un¢̆n | $!\mathrm{pe} \overrightarrow{\mathrm{p}}$ ! seg ( W ) | องบ̧e ITV |
| nбpebueq | nбןeciem | n6_un6ep | nธ́unp̆n | n6!ueq | astıea |
| ejpebueq | eflecem (9) |  |  |  |  |
| epeбueq | elevem (h) | $\mathrm{e}_{\lambda} \mathrm{P}_{\lambda}$ unбe $\vec{p}$ | epunpı | e60! deg | әлтұеวот |
| nipeбueq | nzleuem (9) |  |  |  |  |
| npebueq | пleuem (W) | $\mathrm{n}_{\lambda} \mathrm{P}_{\text {K }}$ unbe $\mathrm{p}^{\text {a }}$ | npunp̆n | n60!.eg | 2¢T7e8x |
| pebueq | jefem | $\lambda_{\text {uñep }}$ | unp̈n | !.1eq | ənŢnTosqV |
| หวอq | 8иедәшоо9 |  | ssex8 | 2007s | บsfi |


in the only example in which the point of articulation of the nasal could be determined with any confidence.

Demonstrative and interrogative pronouns are inflected in general as nouns but see 3.1.

The Margany personal pronoun paradigm is given in Table 3.2. Unattested forms are not included. Note that the dative, instrumental, locative, locative-2, allative and ablative case forms for the non-singular pronouns are based on a stem consisting of the genitive case form augmented by $-n$, but that there is an alternative form of some, probably all, of these in which the genitive suffix -gu is replaced by length in the preceding vowel (see 2.6). Thus nana:nbitya is an alternative to janaŋunbitya 'near us (pl.)'.

TABLE 3.2 Margany Personal Pronoun Paradigm

| SINGULAR |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Ist | 2nd | 3rd |
| Nominative | naya | inda | nula |
| Accusative | rana | inana | nupuna |
| Genitive | nat $y_{u}$ | inu | nupu |
| Dative | nat yungu | inungu | nunungu |
| Instrumental | nat yundu | inundu |  |
| Locative | nat $\mathrm{y}_{\text {unda }}$ | inunda | nupunda |
| Locative-2 | natyunbitya | inunbitya | numunbitra |
| Allative | nat yundadi | inundadi | nurundadi |
| Ablative | patyunmundu | inunmundu |  |
| DUAL |  |  |  |
| Nominative | nali | ibalu | bula |
| Accusative | nalinana | ibalunana | bulanana |
| Genitive | nalinu | ibalumu | bulanu |
| Dative | nalinungu | i balunungu | bulanungu |
| Instrumental | nalinundu |  |  |
| Locative | nal i nunda | i balununda | bulanunda |
| Locative-2 | nalinunbitya | ibalu:nbitya | bula:nbitya |
| Allative |  | ibalunundadi | bula:ndadi |
| Ablative | nal i qunmundu | ibalu: nmundu | bula: nmundu |


| PLURAL |  |  |  |
| :---: | :---: | :---: | :---: |
| Nominative | ŋana | ida | dana |
| Accusative | nananana | idanana | dananana |
| Genitive | 刀anaru | idaru' | danaju |
| Dative | panajungu | ida:ngu | danarjungu <br> dana:ngu |
| Locative | nanajunda | idanunda | danayunda |
| Locative-2 | nananunbitya <br> nana:nbitya | idanunbitya | dana:nbitya |
| Allative | nanajundadi | ida:ndadi | dana:ndadi |
| Ablative | ganajunmundu nana: nmundu | ida:nmundu | dana:nmundu |

The Gunya personal pronoun paradigm is given in Table 3.3. Unattested forms are not included. Dative, allative and ablative and non-singular accusative forms have been heard only from the younger informants. The use of bound forms will be described in 3.6.2.

TABLE 3.3 Gunya Personal Pronoun Paradigm

| SINGULAR |  |  |  |
| :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3 rd |
| Nominative, free | пауа | i nóa | nula |
|  | -ya, -iya | -nda, -inda | -la |
| Accusative, | nana | i nana | nununa |
|  |  | -nana | -na |
| Genitive | nat $v_{u}$ | inu | nuru |
| Dative | nat $\mathrm{y}_{\text {ungu }}$ | i mungu | nupungu |
| Locative | natrunda |  |  |
| Locative-2 | natyunbidya | inunbidya |  |
| Allative Ablative | nat yungadiny |  |  |
|  | nat yunmundu | inunmundu | numunmundu |
|  |  | DUAL |  |
| Nominative, | nali | ibalu | bula |
|  | -ii, -inali | -ibalu | -bula, -ibula |
| Accusative, free | nalina | ibaluna | -wula |
| Accusative, |  | -baluña | -bulana |
| Genitive | nalinu | i balunu | bulanu |
| Dative | nalinugu |  |  |
| Allative | nalinugadiny |  |  |
| Ablative | nalimundu | i balumundu | bulamundu |
|  |  | LURAL |  |
| Nominative, | nana | yura, yu:lu(?) | dana <br> -idana |
| Accusative, | nanana | yurana | dañana |
|  |  |  | -ndanana |
| Genitive | nanaju | yuranu | dananu |
| Allative |  |  | dananugadiny |
| Ablative | nanamundu | yuramundu | danamundu |

Margany demonstrative pronouns are listed in Table 3.4. narany has been heard only once and the meaning is accordingly doubtful. guni has been heard with the meaning 'that' and 'there' (compare guna in Gunya); note also the change in the stem in its inflected forms. The difference in meaning between nuwa and nubany is not completely clear (the translation 'over there' is the informant's), but gubany is clearly a marked form relative to nuwa, which is very common.

TABLE 3.4 Margany Demonstrative Pronouns

|  | this here | that, there | that, over there | that <br> (mentioned before) | someone, somewhere |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Absolutive | ina, ini | nuwa | nubany | 刀aran ${ }^{\text {y }}$ | guni |
| Ergative | inangu | nuwangu |  |  | gunaggu |
| Locative | inanga | nuwanga | nutan ${ }^{\text {d }}$ Ya |  | junanga |
| Ablative on this/ that side | ina:di | nuwamundu | guba:di |  |  |
| along here/ there | i namandi | nuwamand i |  |  | Junamand i |
| Dual |  | nuwabuladu |  |  |  |
| Plural |  | nuwan ${ }^{\text {y }}$ Yada |  |  |  |

A form nuwami, heard once, may be an error.
Gunya demonstrative pronouns are listed in Table 3.5. No differences in meaning in the first four forms in the ina column, in the first four forms in the guna column or in the yanga forms are known. The -gadiny forms could be allatives (and so probably -gadiny); note that -gadiny also appears, with no discernible meaning, on yanydyagadiny (yanydy 'true'), -gadiny forms have been heard only from the younger informants. The suffix -naniny occurs also in nliyananiny 'now', 'soon'. The free form nilya does not occur in the corpus, but does occur in some of the old vocabularies of related dialects (Curr 1886-7, Vol. III, 71, 85, 99, 255, 257, 277, 279, 281) and also, in Gunya, with a suffix probably -mbu (Curr 1886-7, Vol. III, 283). The yanga forms have been heard only from Fred McKellar.

TABLE 3.5 Gunya Demonstrative Pronouns

|  | this, here | that, there | that sort, like that |
| :---: | :---: | :---: | :---: |
| Nominative | ina | Juna | yanga |
| forms? | inany | Junan ${ }^{\text {y }}$ | yangada |
|  | inan ${ }^{\text {V }}$ gani | gunan ${ }^{\text {Y }}$ gani | yangara |
|  | ina:da | gunamaniny |  |
| Locative |  | junaninga |  |
| On this/that side | inagadlny | Dunagadin ${ }^{\text {r }}$ |  |

### 3.3 NOMINAL INFLECTION

3.3.1 NOMINATIVE. Nominative case applies only to personal pronouns. The nominative case form is used to denote subject of any sentence (where the term 'subject' is used with its semantic sense, i.e. agent of a transitive action; person or thing directly involved in an intransitive action; and topic of a sentence where no verb is involved).

The nominative form of non-singular pronouns is unmarked while that of singular pronouns is irregular (although all case forms in the singular have initial /oa/ for first person, /in/ for second person and /nu/ for third person, and all nominative forms have final /a/, accusative forms final /na/ and genitive forms final /u/, the full forms for these cases are not predictable).
(1M) nuwa gala nula $/$ udunda
there again 3sgNOM / grass-LOC
There it is, in the grass!
(2M) naya nunu wabani
1sgNOM always come-PRES
I always come here.
(3M) bama gaya winydydulu
brother-ABS 1sgNOM ask-PURP
I'11 ask my brother.
The gloss NOM will not be used in any further examples; thus, for example, naya will be glossed lsg not IsgNOM.
3.3.2 ACCUSATIVE. Accusative case applies only to personal pronouns. It marks object of a transitive verb.

The suffix is basically -na (-nana for Margany nonsingular pronouns) but the singular forms are not regular (see 3.3.1).
(4) matya inda nana wa:la
before 2sg 1sgACC give-PAST
You gave me (money) before.
gunda naganiya danana
yesterday see-PRES-Isg 3pl-ACC
I saw them yesterday.
3.3.3 ABSOLUTIVE. This is the unmarked case for nominals other than personal pronouns (but see the remark on wandu in 3.1). It is used for the subject of a verbless or intransitive sentence, object of a transitive sentence and often for the complement of a verbless sentence (see 4.2), as well as being the citation form.
(6M) gamu barunga
water-ABS river-LOC
There's water in the river.
(7M) yugan dangini
rain-ABS fall-PRES
It's raining.
(8) buḍi dulba
fire-ABS put out
Put out the fire.

| (9M) | mudga nat $y_{u}$ <br>  good-ABS <br>  IsgGEN-ABS <br> I've got a good dog.  <br>  dog-ABS |
| :--- | :--- | :--- | :--- |
|  |  |

The gloss ABS will not be used in any further examples.
3.3.4 ERGATIVE. Ergative case does not apply to personal
pronouns. It marks subject of a transitive verb.
The form is -ggu after a stem-final vowel, homorganic voiced stop plus /u/ after a stem-final nasal, and -u (in Margany) or homorganic voiceless stop plus /u/ (in Gunya) after other consonants.
(10M) nudangu yudi gamba:ni
dog-ERG meat bury-REC.PAST
The dog buried the meat.
(11M) matya naya balgannandala yudi / nangangu
before lsg hit-HAB-PAST meat / young-ERG
I used to kill a lot of kangaroos when I was young.
See also 3.4.5, especially (48M).
3.3.5 INSTRUMENTAL. The instrumental case suffix denotes the instrument of an action (which may be transitive or intransitive). The term 'instrument' here has a rather wide range of meaning, and can include the cause of an action, thus overlapping with the range of meaning of the ablative (see 3.3.10); it can also refer to the material of which something is made. It also denotes duration of an action (attested for intransitive verbs only and for Margany only).

In form the instrumental suffix is the same as the ergative; it is treated separately because it can be used with personal pronouns. The only examples of instrumental case of personal pronouns involve its "causal" use, and it is attested only for Margany.
(12G) naya guniliya wagaltu
lsg hit-PAST-1sg boomerang-INST
I killed him with a boomerang.
(13M) naya gunu bandilu dumba:ni
lsg humpy bark-INST erect-REC.PAST
I made a humpy out of bark.
(14M) ugu waba $/$ budingu mandi: $n y_{d} y_{u}$ inda
hither come / fire-INST burn-POT 2 sg
Come away from the fire, you might get burnt.
(15M) nuwangu naya yadi: ni
that-INST 1sg laugh-REC.PAST
That man made me laugh. (or I laughed because of that man.)
(16M) gabun nuwa galani jatyundu
child that fear-PRES lsg-INST
That kid's frightened of me.
(17M)

> gundu naya ganydyangu / urangu unata
> away Isg go down-PURP / two-INST lie-CONJ
> I'm going down there to stay for two days.
3.3.6 LOCATIVE. The function of the locative suffix is to denotelocation or (when attached to a nominal denoting a person) accompaniment, or to denote the goal of a motion (either free or induced). The last named function resembles that of the allative suffix (3.3.9) and the difference between the two is not clear. However, it appears that the locative is used when the goal is almost immediately attainable, requiring only, a very brief movement, while the allative i's used when the attainment of the goal requires a prolonged movement (travelling) or when the action directed towards the goal is not motion (e.g. facing or pointing). This use of the locative is illustrated in (20M) and (22M).

In form the locative suffix differs from the ergativeinstrumental only in that the final vowel is /a/ instead of /u/.
(18M) baganga gat $\mathrm{y}_{\mathrm{u}}: \mathrm{mi}^{\mathrm{i}}$ nuda
tree-LOC tie-REC.PAST dog I tied the dog to the tree.
(19G) baḍunga bangayiniya
river-LOC cross-CONT-PRES-1sg
I'm going across the creek.
(20M) yuḍi dulu mangada
meat put in bag-LOC
Put the meat in the bag.
(21G) ugu wadya naigalgunda natyunda
hither come talk-PURP-2sg 1sg-LOC
Come and talk to me.
(22M) dandany dumba:ni natyunda bangada
frog jump-REC.PAST 1sg-LOC back-íOC
A frog jumped onto my back.
Compare gatyunda, 1 sg-LOC with natyunga, 1 sgGEN-LOC (in (25)). See also 3.5.2(h) for the use of -nga as a verb suffix in Margany.
3.3.7 GENITIVE. This category applies only to personal pronouns and denotes ownership. The genitive suffix is -nu with non-singular pronouns; singular pronouns are irregular (see 3.2, Tables 3.2 and 3.3 ). A genitive pronoun is a derived noun (as it can be inflected as a noun); however, there are a few examples of genitives taking non-zero inflection. With nouns dative (3.3.8) marks ownership.
(23M) wandungu paty guyu mada:ni
who-ERG lsgGEN fish take-REC.PAST
Who took my fish?
(24M)
nanimiri gabun inu how many child 2sgGEN How many kids have you got?
naya wabangu natyunga bamanga
lsg go-PURP lsgGEN-LOC brother-LOC I'm going with my brother.

Note that Hollingsworth's material in Curr includes a possible nominal genitive suffix -galu in "goondy-gallo" 'belonging to a house'.
3.3.8 DATIVE. This marks ownership (except with personal pronouns) or indirect object of a verb (and so purpose or beneficiary of an action, state or feeling). A dative indirect object may be obligatory with a few verbs, such as nityuli (M), walka (G) 'to look for' and dati 'to like'. The dative suffix is $-g u$.

There is no evidence on whether a dative noun can, like a genitive pronoun, function as a derived noun stem.
(26M)

```
naya gamugu nadyari:ni
lsg water-DAT thirst-REC.PAST
I'm thirsty.
```

(27M)
naya nityulini inungu
lsg look for-REFL-PRES 2sg-DAT
I was looking for you.
(28M) nuwa gabungu nuda
that child-DAT dog
That's the little boy's dog.
(29G) wadyaniya gudyagu
go-PRES-1sg honey-DAT
I'm going away to get some honey.
See also (32G).
3.3.9 ALIATIVE. This marks the goal to which or towards which an action, usually motion, is directed (see also 3.3.6). The suffix is -dadi in Margany and -gaḍiny in Gunya.
(30M) yambadadi naya gambingu
camp-ALL lsg go back-PURP
I'm going home soon.
(31M) naya bindani inundadi
1sg sit-PRES 2sg-ALL
I'm sitting facing you.
The dative has been used instead of allative (or perhaps locative - see 3.3.6) in (32G); the reason is not known and it may be a mistake.


| Wandadi | inda nandingu |  |
| :--- | :--- | :--- |
| where-SIDE | 2 sg | speak-PURP |
| What language do you speak? |  |  |

The corresponding Gunya suffix, heard only from the younger informants, is -gadiny (compare the allative -gadiny) and is attested on compass point names, e.g. gutagadiny on the South side', as well as on demonstratives.
3.3.13 LOCATIVE-4. The suffix -mandi, translated 'along', is known only in Margany and is used only with demonstrative pronoun stems. (Note that 'along the river' is barubaru; presumably a reduplication of baru 'river'. Neither -mandi nor -baru is accepted with other nouns.)
(41M) nuwamandi naya waba:ni there-aiong lsg go-REC.PAST
I was going along there [when the dog bit me].
3.3.14 LOCATIVE-5. The suffix -miri occurs in Margany and is attested only with body part names. It is translated 'up to'. Thus yandimiri '[The water is] up to [my] waist', mugumiri 'up to [my] knees'. (Compare ganimiri, derived from nani 'what?' and meaning 'how many?').

### 3.4 NOUN STEM FORMATION

Noun roots are typically disyllabic, e.g. mugu 'knee', baluny 'axe', gunga 'raw', mangad 'bag'. Trisyllabic roots are not uncommon, e.g. du!idi 'centipede', guyibiny 'curlew' (M), binbiri 'ribs', gugumba 'fog'. Monosyllables are rare and consist of a long open syllable - da: 'mouth', gu: 'nose'. Roots of more than three syllables are uncommon and probably historically compound, e.g. daṭubira 'waddy', matyambiḍany 'bat', gatyuwilaḍa 'turtle' (M).

Noun stem formation is by reduplication, compounding and derivation. Derivation of nouns from nouns by means of productive formatives is dealt with in sections 3.4.1 to 3.4.4. Derivation of nouns from verbs is described in 3.4.5.

Reduplicated forms whose corresponding simple form is known separately are very few. Charlie McKellar explained the difference between malu 'shade' ("because it's in the one place") and malumalu 'shadow' ("moving around"). Note also baru 'river' and barubaru 'along the river' (M). gudigudi 'red' is the colour of 'red ochre', (gudi (M) gudin (G)) and budabuda 'white' (G) the colour of 'ashes' (buda). makamaka 'thin, bony' (M) is derived from maka 'bone'. matya 'before, long ago' is reduplicated in Gunya to matyamatya 'yesterday' (or perhaps 'recently'). These reduplications all conform to a common Australian pattern: XX has something of the nature of $X$, or denotes the quality for which X is notable.

Roots with inherent reduplication are most commonly names of qualities, like some of the preceding examples or budyabudya 'light (in weight)', gadugaḍu 'quickly' (G),
gulyagulya 'weak' (M), wadguwadgu 'bad', badabada 'mad', or names of fauna or flora such as mankumanku (M) mangumangu (G) 'mouse', gilagila 'galah', dindidindi (M) dyindidyindi (G) 'willy wagtail', गawudnawud (M) 'big green frog', muyulmuyul (M) 'sandfly', bingubingu (M) 'wild banana'.

Note that no partial reduplications are known.
Compounds of known composition are too few to allow any generalisations. Examples include dilibugu (M) dilimuga (G) 'blind' (dili 'eye'), manabugu (M) 'deaf' (mana 'ear'), makabindany (G) 'thin' (maka 'bone'), madaguwadu (G) 'crab' (maḍa 'hand', guwadu 'crab' in M), bidungali (G) 'different' (bidu 'other').

Possible non-productive formatives include -gil in buwanygil (M) 'summer' (buwany 'hot(weather)'), -mbal in gayadamba! (G) 'old man' (gayada 'old') and in Fred McKellar's guyadambal 'wife' (guyaḍa also 'wife') and -di, -du and -nu in some kinship terms such as yajadi and yajanu (also yana) 'mother, mother's sister' and yabuḍ: (M) and yabunu (also yabu) 'father, father's brother' (and note also yabudu (G) given for 'father's sister'). An indication of the meaning of such suffixes is given in the Margany pair duwany 'son of a female speaker' and duwana 'son of a female, not the speaker', but no further examples or information could be obtained. Such suffixes peculiar to kinship terms are common in Mari languages; see for example Breen (1976:292).
3.4.1 NUMBER MARKERS. A dual suffix -buladu occurs twice in the Margany ccrpus: gudabuladu 'two dogs' and nuwabuladu 'those two'. (Nore that 'two' is buladi in Gunya and buladu in Bidjara but ura in Margany.) Margany also has a plural suffix, -nydyada, attested only with the demonstrative pronoun nuwa. A possible dual suffix -bula occurs once in the Gunya corpus, in nunabula 'those two'. However, bula is the third person dual pronoun. A plural in -nu - gandunu 'children' - is used by Fred McKellar but may not be genuine Gunya. It occurs in Bidjara and some other Mari dialects.
3.4.2 CONCOMITANT. The suffix -bari (sometimes -bayi in Gunya) marks a thing or quality that is possessed in some way by a person or thing. It can often be translated 'with' or 'having', although more concise translations in English are frequently in the form of a derived adjective. Thus nangabayi (G) 'having a beard' or 'bearded', gabidbari (G) 'hungry' (literally 'having hunger'), dakabari (M) bandinbayl (G) 'dirty'. In some cases the meaning is not predictable and these forms must be included in the lexicon; these include budibari (M) 'brother-in-law' (budi 'fire'), bațibari (G) 'pregnant' (baṭi 'stomach') and gubabari (M) 'oid man' (also gubaguba).
-bar is also affixed to a kinship term to denote a group of people one of whom is called by that term by the other (s) (see Breen 1976:290-7). For example, dagunybari refers to a group of people one of whom is called daguny 'elder brother' by the others.

| (42M) | bula bamabari | balgada:ni |
| ---: | :--- | :--- |
| (G) | 3du brother-CON | hit-RECIP-REC.PAST |
|  | dagunybari | guningalibula |
|  | elder brother-CON hit-RECIP-PAST-3du |  |
|  | Those two brothers had a fight. |  |

3.4.3 PRIVATIVE. The privative suffix denotes that a thing (denoted by the word to which it is suffixed) is 'not possessed', or perhaps better 'no longer possessed'; it can be translated 'without'. The Margany form is basically -idba; -idba after a stem-final consonant, -yidba after/a/ and -widba after /u/ and, presumably, -:dba after /i/.

A form -gadba 'without' has been heard a couple of times from Fred McKellar. It was pronounced as a separate word on both occasions but this may be due to his general hesitancy in the language. It occurs also in Bidjara.
(43M) gundi:ni nula buluwidba
die-REC.PAST 3sg food-PRIV
He died from hunger.
(44G) buyugadba nula
breath-PRIV 3sg
He's not breathing.
The word yama 'nothing' may also function as a privative; thus yama bulu seems to have the same meaning as buluwidba.
3.4.4 RESEMBLANCE. The suffix -gadi marks resemblance and can be translated 'like'. Thus gudyagadi (G) was given as a translation of 'sweet' (gudya 'honey'). madigadi is translated 'like a black man' and can refer to someone who looks like a black man or to something being done in the way an Aborigine would do it.
(45M) duruny gudgan bidalgadi
hair long young woman-LIKE
He's got long hair like a woman.
(46G)
dumbayinila bawudagadi
jump-CONT-PRES-3sg kangaroo-LIKE
He jumped like a kangaroo.
Another aspect of the function of -gad is illustrated by its use in the translation of the comparative form of an English adjective. Thus
(47M) baṭagadi baga
deep-LIKE dig
Dig it deeper (or Dig it so that it's like a deep one).
It is not certain whether the same suffix or a verb (meaning 'to move (intrans.)') is involved in the expression gundugadi (or gundu gadi) 'Move over:' (gundu 'away'). The stress pattern suggests that gadi is a suffix but this
does not solve the problem because verbs may be cliticised to a directional adverb (see 4.10).

It may not be a coincidence that this formative is homophonous with the verb gadi 'to tell a lie'.
3.4.5 NOMINALISATION. An agent nominaliser -: liny occurs in both Margany and Gunya; examples include gunda: iiny 'thief' (gunda 'to steal'), yudi muga:liny (G) 'butcher' (yudi 'meat', muga 'to get', "he gets the meat"), manda dala:liny (G) 'vegetarian' (manda 'vegetable food', dala 'to eat'), mudga banydya:liny (G) 'good singer' (mudga 'good', banydya 'to sing') and possibly bada: liny (G) 'bitter' (bada 'to bite'), gudi:liny (G) 'peewee' and gunga: $\mathrm{in}^{y}$ (M) 'tea tree'. This formative may be more correctly analysed as -: 'habitual action' plus -liny 'agent' to judge from the following example, in which -adu may be an ergative suffix (and see 3.5.3(h)). Unfortunately, this is the only clear example of an inflected nominalisation (with the nominaliser acting as a productive formative; forms such as gunda: liny and gunga:liny, which may be fossilised, inflect regularly).
(48M) junangu danalinyadu
that-ERG stand-AGENT-ERG (?)
The one standing up [hit him].
A suffix - $n^{Y}$ (which suggests a further segmentation of - liny) occurs in mandiny (M) 'cooked' (mandi 'to burn'), gubiny 'whistle' (gubi 'to whistle'), yadiny (G) 'laughter' (yadi 'to laugh'), mulany (M) 'vomit' and perhaps mulany (M) 'flood' (mula 'to vomit') and makabindany (G) 'thin' (maka 'bone', binda 'to sit').

A few other noun stems appear to be derived from verbs with suffixes involving a final /ny/ : mulagadany 'vomit' (mula 'to vomit'), bungudany 'snoring' (cf. bungu (M) 'to blow'), dawadany 'spitting (rain)', mana gududany 'deaf. (mana 'ear') (all G), nimbudany 'sneeze' and perhaps gagaladany 'pink cockatoo'. Note also madourany and dimburany, both 'lizard sp.', and matyambidany (M) madyambidany (G) 'bat'.

A nominaliser -l appears in the Margany words madil 'groundsheet, blanket one sleeps on' from madima (with causative -ma) 'to spread' and bungul 'smoking' from bungu 'to smoke'. It does not seem to be productive.

### 3.5 MARGANY VERB MORPHOLOGY

3.5.1. CONJUGATIONS. There are two conjugations, which coincide with the division into transitive and intransitive. They differ only in their purposive forms, -ngu for intransitive verbs and -lu for transitive verbs.

Note, however, that verbs derived with the suffix -li, which is added to transitive verb stems to mark reflexivity (and is thus an intransitiviser) and is added to intransitive verb stems to mark proximity, have a compound suffix -: |ku which incorporates the -li and the purposive suffix
and is presumably derived from earlier *-|i-ngu.
Also, there is a small group of trisyllabic intransitive verb roots ending in -ra which form tneir purposive by dropping the -ra and suffixing -ngu (thus *-rangu has become -ngu). This includes ganydyara'to go down' and gambira "to return" and perhaps a few more (see also 3.5.3(a)).

Note also that, as in many Australian languages, the verb 'to give' is ditransitive, taking two objects in the absolutive and/or accusative case. There may be a few other such verbs; others observed are gulba 'to tell' and nubari 'to show'.
3.5.2. INFLECTION [a] Imperative. The inperative form of the verb is the unmarked stem. This is used to mark a command sentence, positive or negative.

The gloss IMP will be used only in this section and in 3.6.3(a).
(49) bukuny binda
still sit-IMP
Keep still!
(50) imba wandu wabani
listen-IMP someone go-PRES
Listen, there's someone coming.

```
gara ganydyara dangi:nydyu
not go down-IMP fall-POT
Don't go down [to the river], you might fall [in].
```

[b] Present Tense. This is marked by the suffix -ni. It denotes an action going on at the present time, or habitual or normal action.

> wadin mandini
already burn-PRES
[The fire is] burning now.

$$
\begin{align*}
& \text { nuwa gara wangulin! }  \tag{53}\\
& \text { that not bark-REFL-PRES } \\
& \text { That }[\text { dog] never barks. } \\
& \text { naya nandini }  \tag{54}\\
& \text { lsg talk-PRES Madgany } \\
& \text { I talk Margany. }
\end{align*}
$$

Note also the following example in which present tense is used for an action intended in the near future; probably its use here is dependent on the use of a time word.

> naya wabani mugaru
> lsg go-PRES tomerrow
> I'm going tomorrow.
[c] Recent Past Tense. This tense is marked by the suffix -: $\mathrm{n} i$, which appears to be a compound suffix related to the present tense suffix (see $3.5 .2(b)$ ). In most examples
this form refers to an action completed a short time ago, at most a day. However, it is also used to refer to actions that have been going on and may continue and to habitual actions (see the Text).

> walamundu inda waba:ni
> where-ABL 2 sg go-REC.PAST
> Where did you come from?
nani inda gulba:ni
what 2 sg say-REC.PAST
What did you say?

> naya dangi:ni $/$ inda gara nana mada:ni
> lsg fall-REC.PAST / 2 sg not IsgACC hold-REC.PAST

I fell because you didn't fold me.
gala:ni naya dambalmundu
fear-REC.PAST lsg snake-ABL
I'm frightened of the snake (or I'm frightened of snakes (?)).
(60) Juda nunu balga:ni nuwangu
dog always hit-REC.PAST that-ERG
That fellow hits his dog often.

$$
\begin{array}{ll}
\text { una: ni } & \text { nunu }  \tag{61}\\
\text { lie-REC.PAST } & \text { always } \\
\text { He sleeps all day. }
\end{array}
$$

Present and recent past tenses are presumably indistinguishable for the verbs na: 'to see' and wa: 'to give'.

```
gara naya na:ni inana
not 1sg see-PRES 2sgACC
I can't see you.
```

[d] Past Tense. Past tense is marked by the suffix -la and denotes action in past time, probably more distant past than $-: n i$ although some examples (such as (63)) do not give this impression. According to Mrs. Shillingsworth -:ni denotes action in the past today and -la action before today. -la occurs much less frequently in the corpus than $-: n i$.
(63) dambal gundila
snake die-PAST
The snake is dead.
naya matya budbala
1sg before come-PAST
I came here a long time ago.
(65)
matyamundu naya bindala inanga
I used to live here (or I've lived here for a long time (?)).
[e] Purposive. This suffix (see 3.5.1 for its forms) marks future time or intention when used in a main clause and,
when used in a subordinate clause, probably marks the purpose of the action in the main clause. The latter use is rare in this corpus.
(66) inda wabangu jat yunda

2 sg go-PURP 1sg-LOC
Are you coming with me?
Jaya binda:lku
1sg sit-PROX+PURP
I'Il stop at home.
yungingu jana gamudadi
shift camp-PURP 1p1 water-ALL
We '11 have to shift camp to [somewhere where there's more] water.
(69) ugu waba nali nandingu hither come 1du talk-PURP Come and talk to me.

```
    data naya mada:ni / dambalgu / balgalu naya
    stick lsg get-REC.PAST / snake-DAT / hit-PURP lsg
    I've got a stick to hit the snake.
    [Literally, probably, I got a stick, for the snake, I'11
        hit it.]
```

There is one example known which may involve purposive suffix combined with the past tense to form a past purposive: (cf. Breen 1973:94)
(71) yurinydya inda wabangula / inda na:la natyu
yesterday 2 sg go-PURP-PAST / 2 sg see-PAST IsgGEN mayada sister
If you had come here yesterday you would have seen my sister.
[f] Potentiat. The suffix - $\mathrm{n}^{y_{d} y_{u}}$ after stem-final /a/ or $/ i /$, winydyu after /u/ marks an action which could happen. It may be confined to undesirable events and may be confined to subordinate clauses, the undesirable event being a consequence of the action described in the main clause. There is one example where the potential verb is the only one in the sentence, but a main clause is perhaps understood here.
(72) gan ${ }^{\gamma}{ }^{\text {Y Yara }}$ inda dangi: $\mathrm{n}^{Y_{d} Y_{U}}$
get down 2 sg fall-POT
Get down before you fall.
(73)
gara nandi imba:n $y_{d} y_{u}$
not talk hear-POT
Stop talking about him, he might hear you.
gandanu na: bada:nydyu
spider-? watch bite-POT
Watch out for those spiders, they can bite.
(The "suffix" -nu on ganda could be an unstressed and imperfectly heard demonstrative nuwa 'that, there'.)

```
nuwangu balga:nydyu inana
that-ERG hit-POT you-ACC
He might kill you. (Given in response to 'How would you say,
'He's a murderer"?')
```

[g] Conjunctive. The suffix -ta appears to denote co-ordination without any further specification of the relationship between the verb to which it is affixed and the other clause of the sentence. Mrs. Shillingsworth translates it "and". It normally does not carry any further inflection (but see 3.5.2(h) and 3.5.3(e)). There is in some cases (as in the first example below) no clear difference between the function of this morpheme and that of the purposive in a subordinate sentence (which is however, poorly attested). In general the subject of both clauses of the sentence is the same (but see (79)).
(76) gamu naya madalu budi dulbata water lsg get-PURP fire put out-CONJ I'm going to get water to put out the fire.
(77) gundu गaya wabangu gamudiadi unata
away lsg go-PURP water-ALL lie-CONJ
I'm going to the water to camp.
gabun waba:ni gudya banydyta child go-REC.PAST honey chop-CONJ The boy went away and got some honey.
(79) mudga yugan dangita / inanga
good rain fall-CONJ / here-LOC
"Good if it rains here tomorrow."
(The main clause here is mudga.)
(80) inda ganata / nat $\gamma_{u}$ mayada na:lu

2 sg come-CONJ / IsgGEN sister see-PURP
"If you go, you'll see my sister."
ugu waba / bindata
hither come / sit-CONJ
"Come inside and sit down."
(82) waba:labani nula bulu dalata
go-ALONG-PRES 3sg tucker eat-CONJ
He's eating along (i.e. eating as he goes).
guni nula bindalini / ugu na:ta
someone 3sg sit-PROX-PRES / hither see-CONJ He's sitting down facing this way.
[h] Locative. The suffix -iga, homophonous with the nominal locative suffix (for vowel-final stems) and with a function sufficiently close to suggest that it might be the same morpheme, has been heard on four occasions in
subordinate clauses (for one of these see (107), 3.5.3(e)). It follows other inflectional suffixes (PRES and CONJ only attested).
(84) Juda balga:ni wangulininga dog hit-REC.PAST bark-PRES-LOC He hit the dog because it was barking.
(85) bari naya wa:la inana / naya wabatanga money 1sg give-PURP 2sgĀCC / 1sg go-CONJ-LOC Before I go I'll give you some money.
nula wabatanga / naya unangu
3sg go-CONJ-LOC / 1sg Iie-PURP
As soon as he goes I'm going to have a sleep.
3.5.3 VERB STEM FORMATION. Most verb stems are disyllabic roots, such as babi 'to cut', buba 'to rub', dangi 'to fall'. The only monosyllabic roots are those with the long vowel /a:/ - na: 'to see' and wa: 'to give'. There may be no simple verb roots of more than two syllables. Trisyllabic roots include ganydyara 'to go down', gambira 'to come back', bindidi 'to itch' and nandari 'to be hot'. These may all be derived forms; compare gabira 'to be hungry' (gabid. 'hunger' is not attested in Margany but is in Gunya), nanybara 'to sweat' ( $\quad$ anybad 'sweat') and yaga!i 'to be cold' (yagal 'cold'). These are the only examples in the corpus of trisyllabic verb stems not involving one of the productive formatives to be discussed in the following pages.

Only one of the following formatives, the causative -ma, derives a verb from a non-verb stem; no inchoative formative is attested. This suffix may also derive a transitive from an intransitive verb. The reflexive and reciprocal formatives derive intransitive verbs from transitive. Other formatives have what can be described as aspectual functions.
[a] Causative/Plural Object. A suffix basically -ma may be added to intransitive or transitive verb stems, and has a number of functions. With intransitive verb stems it derives a transitive verb and may act as a causative, in which the subject of the intransitive verb becomes the object of the derived transitive verb, as in (87) (in which, however, the object, gununa 'him', has been omitted) or it may have the function termed comitative by Dixon (1972:96), i.e. the indirect object of the intransitive verb becomes the direct object of the derived transitive verb while the subject of the intransitive verb is subject of the derived transitive verb, as in (88). With a transitive verb stem it appears to act as a marker of plurality in the object (cf. Breen 1973:104), either in what we might call an affective sense, in which it signifies that the verb acts on (or affects) a number of objects, as in (89), or in an effective sense, in which it signifies that the verb causes the object to become more than one object (or effects plurality), as in (90).
(87) inda galama:ni

2 sg fear-CAUS-REC.PAST
You frightened him.
(88) wanduna inda nandima:ni
who-ABS 2sg talk-CAUS-REC.PAST
Who was that man you were talking to before?
(89) bari gaya idamani
stone 1sg put down-PL-PRES
I'm piling up rocks.

| natyungu | bamangu | yudi babimani |
| :--- | :--- | :--- |
| IsgGEN-ERG | brother-ERG meat cut-PL-PRES |  |

My brother is butchering some meat.
inanga naya wambadma:ni
here-LOC Isg lost-CAUS-REC.PAST
I lost [his track] here.
A non-productive use of -ma in which the verb root loses its final vowel is seen in the stem danma 'to stand (something) up' (dana 'to stand') and perhaps banyma 'to count' (compare banya 'big', 'many' in Gunya).

Other rare allomorphs are -dma, occurring in only one stem (see (91)) and -nyma, occurring in a few forms such as gambinyma 'to bring back', imbinyma 'to hang up', bundunyma 'to shake'. Note that gambinyma is derived from gambira (see 3.5.1); it is not known whether there is identity of the group of trisyllabic verb stems in -ra and the verb stems combinable with the allomorph -nyma.

A possible causative suffix - i is suggested by the pair gana 'to come'/gani 'to bring'. (A few such pairs are found also in Bidjara.)
[b] Reflexive/Proximate. The suffix -li is added to a transitive verb stem to form an intransitive verb with a reflexive function, i.e. the object of the action denoted by the transitive verb root is the agent or part of the agent.

$$
\begin{align*}
& \text { naya na: } 1 \mathrm{i}: \mathrm{ni} \text { gamunga }  \tag{92}\\
& \text { lsg see-REFL-REC.PAST water-LOC } \\
& \text { I can see myself in the water. }
\end{align*}
$$

$$
\begin{align*}
& \text { mara nula banydyuli:ni }  \tag{93}\\
& \text { hand } 3 \text { sg chop-REFL-REC.PAST } \\
& \text { He chopped off his own finger. }
\end{align*}
$$

When $-1 i$ is added to an intransitive verb the function seems to be to denote action in the vicinity of the speaker. Its use is optional.

$$
\begin{align*}
& \text { nula bindalini gatyunbitya }  \tag{94}\\
& \text { 3sg sit-PROX-PRES 1sg-Loc2 } \\
& \text { He's sitting down with me. }
\end{align*}
$$

nuwa nula danalini gubaguba / wawunga that 3 sg stand-PROX-PRES old man $/$ behind That man behind us is very old.
(96) danu inda nunalini
just 2sg lie-PROX-PRES
"You just lying down, awake."
(97) gabun waralini child run-PROX-PRES "[ The kids are] running round here."
(98) danu naya bindalini
just 1sg sit-PROX-PRES
I'm just sitting down. (The use of $-1 i$, if interpreted correctly, seems pointless here, since the speaker could hardly be anywhere else but in his own vicinity. However, it could mean that he is staying in the same general area; not moving away. See also (277).)

The verb 'to look for' is irregular in Margany (in common with a number of other languages of South-West Queensland and North-East South Australia) in that it is intransitivised but not reflexivised by the reflexive formative. Compare the use of the transitive verb nityu and the intransitive verb nityuli in the following examples.

| naya nity $y_{u}:$ ni | nat $y_{u}$ | yananu |
| :--- | :--- | :--- |
| lisg | look for-REC. PAST | lsgGEN |
| I wother |  |  |
| I was | looking for my mother. |  |


| bamagu | nula nityuli:ni |
| :--- | :--- |
| brother-DAT | 3 sg look for-REFL. PAST |
| He's looking for his brother. |  |

[c] The suffix -ti. The function of this suffix is not clear; there are indications, however, that it may refer to purposeful action or action with a reason. Thus na:tini means 'is looking at' or 'is watching' and na:ni 'can see' or 'saw'; similarly imbati 'to listen', imba 'to hear'. In (101) the implication suggested by $-t i$ may be that the grass moved because something moved it - it was not just waving in the breeze. It is not clear whether the length in the vowel in this verb, guda:tini, is the vowel length which differentiates present tense -ni from recent past tense -:ni; however, in another context nuda:tini was translated as "moving about all the time".
(101) nuwa udun nụ̣a:tini $/$ dambal gaṭi that grass move-? -ti-PRES? / snake maybe That grass is moving; it might be a snake.
(102) gabun naya na:tini / windini dana child lsg see-ti-PRES / play-PRES 3pl I'm watching the kids playing.

He was cooking a damper (while I was talking to him).
(104) nudangu gamu dalatini
dog-ERG water eat-ti-PRES
The dog's having a drink of water.
[d] Reciprocal. The suffix -da converts a transitive verb into a reciprocal verb, i.e. the agent and object of the action denoted by the transitive verb stem are non-singular and coincide at least partly in membership. There are very few examples.
(105) nali balgada:ni
ldu hit-RECIP-REC.PAST
We hit one another.
(106) naya balga:ni bulanana / bula digada:ni
lsg hit-REC.PAST 3du-ACC / 3du argue-RECIP-REC.PAST
I hit those two for arguing.
[e] Extended actions. A suffix -ba, perhaps derived from waba 'to go', 'to walk' is used in two compound suffixes which signify (a) that an action is performed while the actor is going along or immediately after he goes somewhere or (b) that the action is spread out over an area. It always follows either the suffix -ta, probably to be identified with the conjunctive (see 3.5.2(g); V-ta-ba-gi < V-ta wabani), or the suffix -:!a (origin obscure; possibly itself a compound suffix). While the data are not entirely consistent, it appears that with -ta function (a) is fulfilled (and this is consistent with the proposed derivation) and with -: la, at least with verbs of rest, function (b) is fulfilled. Thus Mrs. Shillingsworth translated bindatabani (binda 'to sit') as "I went over there and I sat down over there", and binda:labani as "Well, others could be there, see, sitting down". The compound morpheme -taba is glossed ALONG and -:laba is glossed ABOUT; there are, however, a number of examples such as (109) and (110) where -:laba seems to mean 'along', and a translation involving 'about' is not accepted for -:laba forms of verbs of motion.
(107)
naya wabatabani inda gana:nmaninga
1sg go-ALONG-PRES 2sg come-UNEXP-PRES-LOC
"I'm going away just as you're coming here."
(108) bula nanditabani

3du talk-ALONG-PRES
Those two are walking along talking.
waba:labani nula bulu dalata
go-ABOUT-PRES 3sg food eat-CONJ
He's eating along (i.e. eating as he goes).

| (110) | nuni | waba: !abani | wandanga |
| :---: | :---: | :---: | :---: |
|  | someone | go-ABOUT-PRES | road-LOC |
|  | Someone' | walking along | the ro |

(111) juda nuna:labani
dog lie-ABOUT-PRES
There's dogs lying around everywhere.
Other verbs in -taba include yulbitabani 'rolling (it) along' (yulbi 'to push'), yadatabani 'pulling (it) along' (yada 'to pull'), waratabani "going somewhere ... running along" (wara 'to run'). Other verbs in -:laba include dumba:labani 'hopping along (of a kangaroo)' (dumba 'to jump') and yangi:labani 'limping along' (yang ' 'to limp').

Another formative denoting action spread out over an area, this time with verbs of motion, is -na. This will be glossed AROUND.
(112) gabun waranan;
child run-AROUND-PRES
There's kids running around all over the place.
(113) đanu naya wabanani
just lsg walk-AROUND-PRES
I'm just walking around (in reply to 'What are you doing?').
The verb banbana 'to shiver' possibly includes this formative.
[f] Habitual. The suffix -nganda- denotes habitual action and may occur only with a following past tense suffix (there are only two examples, but the informant would not accept present or recent past).
(114) bawuda naya unannandala
kangaroo lsg hunt-HAB-PAST
I used to hunt kangaroos.
See also (11M).
[g] Unexpected action. The suffix -:nma may signify that an action is (to the speaker) unexpected, or that the actor came to the notice of the speaker only because of the action (cf. 3.6.3(d)). However, there are only three examples (including (107)).
(115) Juni waba:nmani
someone go-UNEXP-PRES
Someone's coming.
(116) wadi naya na:ni nuła nuḍa:nmani
right 1sg see-REC.PAST 3sg move-UNEXP-PRES
I saw him when he moved.
[h] Vower length as a formative. Vowel length appears in a number of verbal suffixes and in some of these it seems that it may function as a morpheme in its own right. Thus it
distinguishes recent past tense -: ni from present tense -ni (3.5.2(b) and (c)) and it may distinguish a habitual from a casual agent (-:|iny and -liny, 3.4.5). Length also occurs in -:la (3.5.3(e)), although there is no particular reason to relate this to the past tense -la, and in -: nma (3.5.3(g)). It occurs also, apparently not as part of any other morpheme, in guda:tini; see (101) and the sentence preceding it. It also occurs, but not in all allomorphs, in the potential (3.5.2(f)). There is no evidence of any consistent function that it might have in all or any set of these suffixes. See also 3.6.4(f).

### 3.6 GUNYA VERB MORPHOLOGY

3.6.1 CONJUGATIONS. Like Margany, Gunya (as exemplified by the speech of Mrs. McKellar) has two verb conjugations which correspond exactly with the division intransitive/ transitive. They are differentiated only in the purposive forms -ngu for intransitive verbs and -lgu for transitive verbs (cf. Margany -ngu and -lu). The younger speakers use -Igu for all verbs.

Ditransitive verbs noted are wa: 'to give' and gulba 'to tell'.
3.6.2 BOUND PRONOUNS. The bound pronoun system in Gunya was, to judge from the transparency and the variability of the forms, in the very early stages of its development. Singular forms are mainly derived from the free forms by deletion of the first syllable and preposing of /i/ where appropriate (see below); thus -ya ~ -iya from naya 'lsg', -nda ~ -inda from inda ' 2 sg ', - la from nula '3sg' and -nana (~ inana?) from inana ' 2 sgacc'. However, no bound form corresponding to nañ 'IsgACC' occurs in the corpus, and -na corresponds to nuguna '3sgACC'. Non-singular forms are mostly identical with the free forms or have a preceding /i/, but the first syllable of ibalu ' 2 du' and ibaluna '2du-ACC' is deleted. Note also -li '1du' alongside -inali and -wula '3du' (if correct) alongside -bula and -ibula. Note also that -ni-dana 'PRES-3pl' may be realised as [ndana]. '3pl-ACC' is attested as -ndanana. Forms actually attested are listed in Table 3.3.

In general, allomorphs with initial /i/ are used after - la 'PAST' (but note also - inda in (150) and (151) and contrast -na in (131)) and consonant-initial allomorphs elsewhere. However, -iya 'lsg' is also used when the preceding vowel is /u/. Third person singular forms do not have allomorphs with initial /i/. Where a form has initial /i/ the preceding vowel is deleted; thus wadyaliya from wadyala plus -iya.

A bound pronoun may co-occur with the corresponding free pronoun in a sentence, e.g.
(117) nali wadyalinali

Idu go-PAST-1du
We went away.
A bound pronoun may also co-occur with the corresponding noun, e.g.
(118)
gula Qumbayinila
kangaroo jump-CONT-PRES-3sg
The kangaroo is hopping along.
(119)

```
mugaliyana baña
get-PAST-1sg-3sgACC goanna
I caught a goanna.
```

Other examples of the use of bound pronouns will be found in the following sections.
3.6.3 INFLECTION. [a] Imperative. As in Margany the imperative is unmarked; however, with a transitive verb there may be a bound object pronoun. Deletion of the subject pronoun is not obligatory.

| (120) | gada gunina <br> not hit-TMP- <br> Don't hit him? |
| :--- | :--- |
| (121) | binci inda <br> sit-IMP 2sg <br>  <br>  <br> Sit down: |

[b] Present tense. The form (-ni) and function are as in Margany.

| (122) gabirani | naya |
| :--- | :--- |
|  | be hungry-PRES |
| lisg |  |

(123) bac̣unga unaniya
river-LOC lie-PRES-1sg
I'm camped at the creek.
[c] Recent past tense. This has the same form (-:ni) and probably the same function as in Margany. There are very few examples with sufficiently specific translations.
(124) Jaya naga:nibaluna / matyamatya
lsg see-REC.PAST-2du-ACC / a while ago
I saw you two a while ago.
[d] Past tense. This is marked by the suffixes -1 a and -:la. The latter is, of course, a compound suffix and the evidence suggests that the morpheme -: denotes either an action that was not observed by the speaker or an action that was not expected by the speaker (cf. 3.5.3(g) and see also 3.6.4(f)). For an example of observed versus unobserved action compare (125) and (126). Expected versus unexpected action is illustrated by (127) and (128); normally a person would be bitten by a possum only if he attempted to handle it and a bite in such circumstances would not be unexpected, whereas a snake bite is nearly always unexpected. Common to both unobserved and unexpected action is the fact that something - the agent or the action or both - does not come to the speaker's attention until he observes the action,
or is told of it, or sees the result of it. The only cases (out of about 40 in the data) which seem clearly to contradict the above analysis are mara:liya 'I've been running' and gunda:liya 'I was cutting (meat)' (both C. McK). -: will be glossed UNEXP.
(125) naya guniliya wanaltu

1sg hit-PAST-1sg boomerang-INST
I hit him with a boomerang.
(126) wandulu guni:la
who-ERG hit-UNEXP-PAST
Who killed that kangaroo?
(127) dapuḍtu badala jana
possum-ERG bite-PAST 1sgACC
A possum bit me.
(128) dambaltu bada:la nana
snake-ERG bite-UNEXP-PAST lsgACC
A snake bit me.
Other examples show that -1 covers a wide range of times:
(129) baḍa:du budaliya
daybreak wake-PAST-1sg
"Daylight I woke up [this morning]."
(130) matya gaya bindala dinimbulunga
long ago lsg sit-PAST Tinnenburra-LOC
I used to live at Tinnenburra.
Other examples of -:la include
yadamandu datya:lana
horse-ERG kick-UNEXP-PAST-3sgACC
The horse kicked him (in answer to 'What's wrong with that fellow?').
(132) Juda natyu bianya:langa
dog lsgGEN die-?-UNEXP-PAST night-LOC
My dog died last night.
[e] Future. The suffix -ngu seems to denote action in the future, or perhaps intended action. There are a number of examples from Mrs. McKellar of a compound suffix involving -ngu, see 3.6.4(d), but very few in its simple form. (The second form in (133) is from Charlie McKellar.)
(133) dudaningiya (or dudalingiya ?), also badgalingiya scratch-FUT-1sg scratch-REFL-FUT-1sg scratch-REFL-FUT-1sg I'm going to (or want to) scratch myself.
(134) wandany wadyanunda (wadyangunda ?)
when go-FUT(?)-2sg
When are you going?
[f] Purposive. The function of the purposive suffix --ngu (intransitive), -lgu (transitive) - seems to be basically the same as the corresponding morpheme in Margany. However, the difference between the function of purposive as a marker of future action and the function of the future tense suffix described above is not known. Another use of the purposive is to denote ability (at least in a negative sentence - (140)).
(135) nali wadyalgu guyugu

Idu go-PURP fish-DAT
We're going to go fishing.
(136) bindangiya
sit-PURP-1sg
I'm going to sit down.
(137) mugaru nagalgiyanana
tomorrow see-PURP-1sg-2sgACC
I'll see you tomorrow.
(138) wadrani naya badugu gamu mugalgiya
go-PRES lsg river-DAT water get-PURP-1sg I'm going to the creek to get water.

```
ugu wadya nalgalgunda jatyunda hither cone talk-PURP-2sg 1sgGEN-LOC
```

Come and talk to me.
gaḍa bunbalgiya / bari utinybay:
not lift-PURP-1sg / stone heavy-CON
I can't lift [ the stone], it's too heavy.
[g] Stative suffixes. This name is used very tentatively for a suffix, -na, which occurs only in the following examples and perhaps (181) (3.6.4(d)), and may denote action extending over a period of time. Note, however, that Mrs. Ruby Richardson said that bindana, in (142), is a Ngarigi word. (144) and (145) are from Charlie McKellar.
(141) dili gaṭi badina (gaṭi badi 'to be sick')
eye be sick-STAT
I've got a sore eye.
(142) bindananda
sit-STAT-2sg
You're sitting.(?)
(143) gaḍa imbalina
not hear-REFL-STAT
"I don't feel good."
(144) nunu gananala
always come-STAT-3sg
He comes here often. (?)
(145) nagananda dambaimundu
look-STAT-2sg snake-ABL
Watch out for snakes while you're going along.
A second suffix to which the same name will be applied is -ndana:
(146) baga gundindana
wood die-STAT
The wood's rotten.
(147) gaḍa wanygundana
not bark-STAT
[That dog] never barks.
(148) guningandana
hit-RECIP-STAT
They're always fighting.
(149) nimun wadYandana
fly go-STAT
There's a lot of fies about.
Note, however, that [ndana] is a possible realisation of -nidana 'PRES-3pl'. This seems to be a possible interpretation in (149) but not in the others (context suggests that 'they' in (148) are only two in number).
[h] Potentiat. The potential suffix is -nybayina ~ -nybadina. This has the appearance of including a nominaliser $-n^{y}$ and a form of the concomitant suffix (normally -bari, sometimes -bayi). The function is as in Margany (3.5.2(f)). Charlie McKellar normally uses the Margany suffix -:nydyu (as did Mrs. McKellar on one occasion).
(150) gundu wadya buḍimundu / gubanybadininda
away go fire-ABL / burn-POT-2sg
Come away from the fire before you get burnt.
gada waga baganga / banbunvbadiginda
not climb tree-Loc / fall-POT-2sg
Don't climb that tree, you might fall.
(152) badanybayinala nana
bite-POT-3sg IsgACC
He might bite me.
[i] Interrogative. A suffix -: is used in questions. It does not appear to combine with other inflectional suffixes and it is not obligatory. See also 3.6.4(f).

$$
\begin{array}{ll}
\text { nani yama:nda , also nani yamaninda } \\
\text { what do-INT-2sg }
\end{array} \quad \begin{aligned}
& \text { do-PRES-2sg }
\end{aligned}
$$

wanda wadya:nda
where go-INT-2sg
Where are you?

The following examples are from Charlie McKellar.
nanigu gamu bityu:nda buḍinga
what-DAT water throw-INT-2sg fire-LOC Why did you throw water on the fire?
(156)
wadi bựi banydyi:nda
already fire light-INT-2sg
Did you light the fire?
(157)
wadi didba:ndana
already wake-INT-2sg-3sgACC
Have you woken him up?
It will be noted that all examples involve the bound pronoun -nda '2sg'. It is not known whether other bound pronouns can follow this inflection, but note that if -la '3sg' followed -: the resulting -: : a would be homophonous with the 'UNEXP-PAST' ending (3.6.3(d)).
[j] Locative. There is a single example, heard from Fred McKellar, of the usage described for Margany in 3.5.2(h).

> wandu nunany inda nandininga
> who that 2 sg speak-PRES-LOC
> Who was that fellow you were talking to before?
3.6.4 VERB STEM FORMATION. Remarks made above (3.5.3) on verb stems in Margany apply also to Gunya, as also do most of the examples given (but 'to fall' is banbu in Gunya and 'to see' is naga).
[a] Causative. The suffix -ma functions as in Margany (see 3.5.3(a)), at least as regards its use with intransitive verb roots.
(159) Janigu gandu batimaninda
what-DAT child cry-CAUS-PRES-2sg
Why are you making the baby cry?
yadimingiyana (not yadimangiyana ?)
laugh-CAUS-FUT-1sg-3sgACC
I'm going to make him laugh.
(161) nanoima nana (alternative, nandi natyunda)
talk-CAUS 1sgACC talk 1sgGen-LoC
Talk to me!
The nature of the pair wambali 'to be lost' / wambanmali 'to lose' is not clear. Note that -1i is a reflexive marker. These words have been heard only from Charlie McKellar.
[b] Reflexive. The suffix -li has a reflexive function in Gunya, as in Margany (see 3.5.3(b)). There is no evidence that it has any other function, unless it can be regarded as proximate in badili 'to fall (of rain)' (badi occurs also in gaṭi badi 'to be sick', possibly literally 'to fall sick',
although in Margany badi means 'to be damaged').
naya nabili:ni matya
Isg bathe-REFL-REC.PAST long ago
I had a wash before.
(163)
da: bambuli
mouth open-REFL
Open your mouth.
[c] Reciprocal. The suffix -nga corresponds to the Margany suffix -da (3.5.3(d)).
(164) Buna bula guninganiwula
there 3du hit-RECIP-PRES-3du
Those two are fighting.
[d] Suffixes denoting continuing action. The suffix -yi (~ -ya?) combines with the present tense suffix -ni to form a compound suffix which seems to denote a continuing action, or perhaps an action carried out while the agent is going along. If the latter, it can be compared with Margany -ba (3.5.3(e)) and if -ba is derived from waba 'to go', -yi could be derived from wadya 'to go' via $*-d y_{a}$ and -ya. However, it will be glossed 'CONT'. The form -ya has been heard only from Charlie McKellar and seems to have a variant -wiya after /u/. There seem to be no conditioning factors for $h i s$ use of $-y i$ and $-y a$, and he seems to use both with wadya 'to go'. It may be that -yi is the correct form before -ni and -ya before other suffixes (see below) but he has lost this rule from his language.
(165) wandany inda wadrayininda
when 2 sg go-CONT-PRES-2sg
When are you going?
(166) badunga bangayiniya
river-LOC cross-CONT-PRES-1sg
I'm going across the creek.
(167) dili bambayini
eye open-CONT-PRES
I've got my eyes open (or - going along with my eyes open (?)).
(168)
naya nagaliyana madi ganayinila
1sg see-PAST-1sg-3sgACC man come-CONT-PRES-3sg
I can see a man coming.
The following five examples are from Charlie McKellar.
(169) wilu gubiyanila curlew whistle-CONT-PRES-3sg The curlew's calling out.
budi guba gubayinila fire there burn-CONT-PRES-3sg There's a fire over there.
(171)
gundinga dadgayanila house-LOC enter-CONT-PRES-3sg
He went into the house.
(172)

```
yadaman bandayanila
horse track-CONT-PRES-3sg
```

He's tracking his horse.
(173)
gandu watayanidana child play-CONT-PRES-3p1
The kids are playing.
The suffix -ya (-yi?) combines with the future tense suffix - $\ddagger \mathrm{gu} . \quad$ An intended continuing action seems a more likely function in the following examples than action while going.
(174) naya wadyayangiya

1sg go-CONT-FUT-Isg
"I'm going myself."
(175) gamu galgamayingiya
water boil-CONT-FUT-1sg
I'm going to boil some water.
(176) wadyayigiya unayingiya
go-CONT-PRES-1sg 1ie-CONT-FUT-1sg
I'm going to have a sleep.
(177) gamu dalayangiya
water eat-CONT-FUT-1sg
I'm going to have a drink of water.
(178) yulbiyingiyandanana
chase-CONT-FUT-1sg-3pl-ACC
I'11 hunt them away.
There is one example from Charlie McKellar (who hardly ever uses -ogu) of -ya combining with the purposive:
(179) ugu naga nambiyalgiya
hither look swim-CONT-PURP-1sg
Watch me swim! (or, better probably, Watch me, I'm going to swim.)

Another suffix which may denote continuing action is -nyina. The only examples are given below and these give no indication of the meaning, but the suffix may be derived from the widespread Australian word nyina ~nina 'to sit', and nina is used as a bound form in Yandruwandha to denote a continuing action.

```
(180) naya unanyinaniya
    lsg lie-CONT-PRES-1sg
    I'm lying down.
```

bindanyinani and

sit-CONT-PRES $\quad$| bindan $Y$ inanaya |
| :--- |
| sit-CONT-STAT-1sg |

I'm sitting down.
[e] The suffix -nya. This occurs in the following examples.
(182) nuta natyu $u l a n y_{a}: l a \quad$ bitanga
dog lsgGEN die-n $y_{a-U N E X P-P A S T ~ / ~ n i g h t-L O C ~}^{\text {a }}$ My dog died last night. (repeated with ula: la)
wad $y_{a n} y_{a}: 1 a$
go-n ${ }^{Y}$ a-UNEXP-PAST
You two going along now. (?)
(184) gundu wadyanyala / yu:!u
away go-nya-PAST / 2 pI (?)
You mob going along now. (?)
(185) idinya:la $/$ guyaḍa nunu (repeated with run away with-nya-UNEXP-PAST / wife $3 s g$ gen idi:la) That fellow ran away with another fellow's wife.

The last example was from Charlie McKellar, who could see no difference between verbs with and without $-n y a$ and accepted the suggested forms bindanya:la (for binda:la sitPAST') and wadyanya:la (for wadya:la 'go-PAST').

There is one case of confusion of dialects by Fred
McKellar which could be taken as indicating that -nya corresponds in function to Bidjara -nydyada and thus to Margany -taba (3.5.3(e)), i.e. it can be translated 'along'. This does not seem appropriate in (182).

Compare the clitic -:nya 'now' in Margany (see 4.10).
[f] Vowel length and -nu. As noted above (2.6) there is a little evidence of free variation between -: and -nu in the suffixes -:la (past tense, unexpected or unobserved form, 3.6.3(d)) and -: (interrogative, 3.6.3(i)). Another possible example is in

> nutangu gamu duduligulidana (sic)
> dog-ERG water siip-UNEXP-PAST-3p1
> The dogs dirtied the water.
in which, however, the suffixes on the verb, the stem of which the speaker, Charlie McKellar, has got wrong, could not be heard clearly, and the verb was repeated as dudulidana. This possible morphophonological feature of these two verb suffixes is interesting in view of the semantic similarity between these verb forms: in one case the agent and/or the action becomes known to the speaker only when he observes the action or is told about it or sees the result of it; in the other case the speaker is unaware of the circumstances and will know them only when his question is answered. In both cases there is a state of ignorance to be overcome. There seems, therefore, to be some justification for regarding -:, glossed UNEXP in 3.6.3(d), and
-:, glossed INT in $3.6 .3(\mathrm{~h})$, as the same morpheme, which could be glossed UNKNOWN. There does not seem to be any reason to regard the vowel length which distinguishes present tense -ni from recent past tense -:ni as belonging to the same morpheme. (See also 3.5.3(h)).

## 4. SYNTAX

### 4.1 INTRODUCTION

The following description is based mainly on Margany and all examples are Margany except those marked G; the Gunya examples used are taken only from Mrs. McKellar's material except where noted otherwise. The major difference between the two dialects results from the use of bound pronouns and the consequent frequent omission of free pronouns in Gunya.

### 4.2 SIMPLE SENTENCES

The basic constituents of a simple sentence are a subject and a predicate. The subject is a noun phrase and the predicate may be a noun phrase, an adverbial phrase or a verb phrase (which includes an object noun phrase if the verb is transitive). In Gunya a single word may realise a transitive or intransitive sentence.

The following examples illustrate sentences in which the subject and predicate are both noun phrases.

$$
\begin{align*}
& \text { mudga nat } y_{u} \text { juda }  \tag{187}\\
& \text { good IsgGEN dog } \\
& \text { I've got a good dog. }
\end{align*}
$$

(188G) nula bandinbayi
3sg dirt-CON He's dirty.

The next two examples illustrate adverbial phrases (which in their simplest form are either adverbs or inflected nouns) as predicate. The range of types attested is very narrow.
(189) yama yugan
nothing rain It's not raining.
gamu barunga
water river-LOC
There's water in the river.
The following examples illustrate simple intransitive sentences.
(191) gabun windini
child play-PRES
The kids are playing.
(192G) gula dumbayinila
kangaroo jump-CONT-PRES-3sg
The kangaroo is hopping along.
(193G) wadyayangul i
go-CONT-FUT-1du
We [two] are going now.
These sentences are frequently expanded by means of one or more adverbial phrases, which may mark location, time, goal and various other classes of information.
(194) naya ganydrangu gamugu

1sg go down-PURP water-DAT
I'm going down for water.
(195) galani naya dambalmunơu
fear-PRES lsg snake-ABL
I'm frightened of the snake.
(196G) naru banbuliya
nearly fall-PAST-1sg
I nearly fell over.
(197) yabana banydyini yadga
vigorously blow-PRES wind
The wind's blowing hard.
matyamundu naya bindala inanga
long ago-ABL lsg sit-PAST here-LOC
I used to live here.
Examples of transitive sentences follow, including both simple and expanded sentences. The most common expansion is an instrumental phrase.
(199G) dalalgiyana
eat-PURP-1sg-3sgACC
I'm going to eat it.
(200) jaya balgalu idanana

1sg hit-PURP 2p1-ACC
I'11 hit you.
(201) naya dinyil bubalu

1sg blade rub-PURP
I'm going to sharpen it.
(202) bigiri naya ida:ni inana dreaming 1sg put-REC.PAST $2 s g A C C$
I dreamt about you last night. (bigiri seems to be an adverb; see 4.9)
(203G) datangu gunilgiyana
stick-INST hit-PURP-1sg-3sgACC
I'm going to hit him with a stick.
A few verbs appear to require an indirect object in the dative case. See also 3.3.8. These verbs can be called semi-transitive.
$\begin{array}{lllll}\text { (204) gara naya datini } & \text { nunungu } \\ & \text { not } & \text { lsg } & \text { like-PRES } & \text { 3sg-DAT }\end{array}$
I don't like him.
The only ditransitive sentences in the corpus are those with the verbs wa: 'to give', gulba 'to tell' and gubari (M) 'to show'.
(205)

$$
\left.\begin{array}{lll}
\text { yudi nana } & \text { wa:ni } & \begin{array}{l}
\text { nuwangu } \\
\text { meat }
\end{array} \\
\text { 1sgACC } & \text { give- }\left\{\begin{array}{l}
\text { PRES } \\
\text { REC.PAST }
\end{array}\right\}
\end{array}\right\} \text { that-ERG }
$$

That fellow gave me some meat.
Order of constituents is free but there are a couple of strong tendencies: a pronoun object tends to take last place among the basic constituents; in the absence of a pronoun object the verb usually takes last place; a noun precedes a pronoun; an adverbial phrase is usually outside the basic sentence, either in first or last place. Thus an intransitive sentence is usually (perhaps $90 \%$ of the time in Margany) $S V$ and a transitive sentence is SVO if $O$ is a pronoun, OSV if $O$ is a noun and $S$ a pronoun, and SOV otherwise. Where, in Gunya, $S$ and/or $O$ is not a free form it is, of course, suffixed to the verb, with $S$ preceding 0 . These tendencies and rules, as well as some exceptions, are illustrated in (191) to (207).
(206) bawuda jana unannandala
kangaroo lpl hunt-HAB-PAST
We used to hunt kangaroos.
(207)

| nat $y_{\text {ungu }}$ | bamangu gabuny mada:ni |
| :--- | :--- |
| lsgGEN-ERG brother-ERG egg | get-REC.PAST |
| My brother got some eggs. |  |

Noun phrases are most commonly of one word, but phrases consisting of a genitive pronoun or dative noun plus a noun are not uncommon. The order is almost always possessorpossessed. Other phrases of more than one word are rare and nothing can be said about order. The type of phrase that comprises a non-singular pronoun and specification of one or more of the individuals referred to by the pronoun is known only from a single occurrence in Gunya (Mrs. Richardson) of nali inda 'we two (including) you', i.e. 'you and I'.
(208) nuwa gabungu juda
that child-DAT dog
That's the little boy's dog.

| natyugu | yabudigu gund $\quad$ mandi:ni |
| :--- | :--- |
| lsgGEN-DAT | father-DAT house burn-REC. PAST |
| My father's house got burnt. |  |


| inungu | wanbangu | nuda(ngu) | nana |
| :--- | :--- | :--- | :--- |
| 2sgGEN-ERG big-ERG | dog(-ERG) | bada $\log i$ |  |
| Your big dog bit me. |  |  |  |

A verb phrase consists of a verb, with or without an inflectional suffix, which may be preceded by a directional particle. Other adverbs and particles are not regarded as part of verb phrases but as separate (peripheral) constituents of sentences. However, in view of the directional particle's almost invariable position preceding the verb and the frequent realisation of the two together as a single phonetic word it seems clear that it must usually be regarded as part of the verb phrase.
(211) ugu waba [Gguwàba]
hither come
Come here:
However, in a sentence where it does not have this intimate relationship with the verb it may be best to regard it as a peripheral constituent.
(212)

```
gundu naya bangangu
    away lsg go across-PURP
    I'm going across [the river].
```

Note that there is one example in the Gunya corpus of a directional adverb occurring in a verbless sentence; the sentence is incomplete (lacking a subject) and it is not clear whether it should be regarded as an intransitive sentence lacking verb as well as subject (cf. Breen 1973:118 and note that the reference to 7.2 .1 should be to 7.3.1).
(213G) gundu yambagadiny
away camp-ALL
[We're going] back to our camp.
An adverbial phrase consists of an adverb or one or more inflected nominals. Adverbial phrases of more than one word are not common and in the few examples in the corpus contain a noun preceded by a pronoun cross-referencing it or by a genitive pronoun.
(214) Jani nuwa natyunda balanga wandi:ni
what there lsg-LOC leg-LOC climb-REC.PAST
I felt something crawling on my leg.
A phrase may be discontinuous:
(215) matya naya balgannandala yudi nangangu long ago lsg hit-HAB-PAST animal young-ERG I used to kill a lot of kangaroos when I was young.
(216) natyu inda mayada na:lu

1sgGEN 2sg sister see-PURP
You will see my sister.
nangangu in (215) could be regarded as a separate phrase, in apposition with naya, but a similar interpretation does not seem possible for the object phrase in (216).

It appears that it is not obligatory, although it is perhaps the usual practice, for all constituents of a phrase to carry any relevant inflection. It is probably obligatory if the phrase is discontinuous.
(217)
nat Yungu bama dinduni
IsgGEN-ERG Erother know-PRES
My brother knows (how to do it).
and see (210) in which the bracketed suffix was omitted at first and then included on repetition of the sentence.

### 4.3 IMPERATIVE SENTENCES

Sentences expressing a command or request are characterised by omission of the subject (optional, but common) and the use of the imperative (unmarked) form of the verb. Thus an intransitive imperative sentence consists essentially of only a verb stem, while a minimal transitive imperative sentence consists of a noun object followed by a verb or a verb followed by a pronoun object (which may be suffixed in Gunya). Most imperative sentences have one or more peripheral constituents.

| matyala | waba dambalmundu |
| :--- | :--- |
| with caution | go snake-ABL |
| Watch out for snakes as you go along. |  |

(219)
balga nununa yabana
hit 3sgGEN-ACC vigorously
Hit him hard.
See also 3.5.2(a) and 3.6.3(a).

### 4.4 QUESTION SENTENCES

Questions are of two types: those involving an interrogative pronoun and requiring as answer a phrase for which that interrogative pronoun is an appropriate substitute (corresponding to wh-questions in English); and those not involving an interrogative pronoun and (in the only sub-type represented in this corpus) requiring 'yes' or 'no' as answer. (The latter type is often called 'polar questions', but since this type also includes those questions - not represented in this corpus, however - where a choice is required from a list of alternatives ('Is it A or B ...?') the writer prefers the term 'choice questions'. The yes/no answer is required in the special (but most common) case
where the list contains only one item, e.g. 'Is it A?'
The former type is marked by an interrogative pronoun or interrogative adverb (or, more correctly, an interrogat-ive-indefinite pronoun or adverb, as they may also function as indefinite pronouns) which takes the first place in the sentence, and possibly also by a typical intonation pattern (see 2.5). The interrogative words are wandu (M) wandu (G) 'who' and nani 'what', inflected as nouns, wala (M) wanda (G) 'where', also inflected as nouns but having only nominative, locative, allative and ablative forms of which the first two appear to have the same meaning, nanimiri (M) 'how many', probably inflected like a noun, wata (M) 'which way', wandany 'when', wandadi (M) 'how'.

In many Australian languages (including at least one Northern Mari dialect - Warungu - see Tsunoda, 1974:422) the interrogative 'what' can be verbalised to 'to do what'. This does not happen in the Southern Mari dialects; as in English an interrogative pronoun can be used with a verb translated as 'do' (yama).

Examples of questions using interrogative words follow:
(220) wala inda or walanga inda
where 2 sg where-LOC 2sg
Where are you?
(221) wandungu jatyu guyu mada:ni
who-ERG 3sgGEN fish take-REC.PAST
Who took my fish?
(222) nanigu inda gandiny waba:ni
what-DAT 2 sg stealthily go-REC.PAST
"Why'd you sneak up like that?"
(223M)
$\begin{array}{lll}\text { nani } & \text { inda } & \text { yamani } \\ \text { what } & 2 \mathrm{sg} & \text { do-PRES }\end{array}$
(G) yani yama:nda
what do-INT-2sg
What are you doing?
(224M) wandany inda wabangu
when 2 sg go-PURP
(G) wandany inda wadyayininda
when 2 sg go-CONT-PRES-2sg
When are you going?
(225)
$\begin{array}{lll}\text { nanimiri } & \text { gabun } & \text { inu } \\ \text { how many } & \text { child } & 2 \text { sgGEN }\end{array}$
How many kids have you got?
There is little information on the use of interrogatives to denote indefiniteness - in particular, on whether all of them can function in this way. The following example illustrates this usage.
(226) imba / wandu wabani
listen / who go-PRES
"Listen, there's someone coming."

Choice questions are distinguished from the corresponding statement sentences by their intonation (see 2.5). In addition, the question word wayi may occur initially in the sentence.
(227)
wadin mayi wadu:ni
already food cook-REC. PAST
Have you cooked the damper yet?
(228)

$$
\begin{aligned}
& \text { nat } \mathrm{y}_{\mathrm{u}} \text { mangu buri: ni } \quad \text { inda bubalu } \\
& \text { lsgGEN arm ache-REC.PAST / } 2 \mathrm{sg} \text { rub-PURP } \\
& \text { "My arm's aching, will you rub it for me?" }
\end{aligned}
$$

(229)

$$
\begin{array}{llll}
\text { wayi inda / Daya budbangu } \\
\text { Q } 2 s g & \text { Isg come-PURP } \\
\text { "Are you there? } & \text { Can I come in?" }
\end{array}
$$

A verbal inflection used only in questions in Gunya is described in 3.6.3(i); see also (223G).

### 4.5 INTRANSITIVISATION

Reflexive sentences are derived by intransitivisation of a transitive verb by means of the suffix -li with deletion of any ergative marking from the subject and deletion of the object to the extent that it is identical with (rather than part of) the subject. The same suffix intransitivises the verb nityu 'to look for', the object then being marked by dative inflection. See 3.5.3(b) and 3.6.4(b).

Reciprocal sentences are derived by intransitivisation of a transitive verb by means of the suffix -da (M) -nga (G) with deletion of the object and of any ergative marking on the subject. See 3.5.3(d) and 3.6.4(c).

### 4.6 TRANSITIVISATION

A transitive verb is derived from an intransitive verb by means of the suffix -ma. This may also be added to a transitive verb, at least in Margany, to mark plural object. See 3.5.3(a) and 3.6.4(a).

### 4.7 COORDINATION

Two sentences or clauses are coordinated by simple juxtaposition.

```
ugu waba / nall nandingu
    hither come / ldu talk-PURP
    Come and talk to me. (or, Come here so we can talk.)
(231) bukuny binda / naya balgalu inana quiet sit / 1sg hit-PURP 2sgACC Keep quiet or I'll hit you. (note, not 'for me to hit you')
```

(232G)

```
nudaniya yuḍi banydyayini
sme1l-PRES-1sg meat cook-CONT-PRES
I can smell meat cooking (sic.)
```

(233G) ugu wadra nalgalgunda natyunda hither come talk-PURP-2sg lsgGEN-LOC Come and talk to me.
(Compare this with (240). (233G) is regarded, perhaps wrongly, as exemplifying coordination rather than subordination because of the bound pronoun -nda on the second verb. Thus the meaning is thought to be 'Come here and you can talk to me' rather than 'Come here in order to talk to me'.)

This construction was used also to translate English relative clauses; the only examples are from Margany.

```
nuwa nula yudi banydyumalu
    there 3sg meat chop-PLU-PURP
    "That's the man that chops up the meat."
```

(235) nuwa nula danalini gubaguba there 3 sg stand-PROX-PRES oid man
"That one standing there is an o1d man."

### 4.8 SUBORDINATION

The only method of subordination attested for both dialects is the use of the potential form of the verb in a 'lest' construction, in which the main clause is a command (although perhaps not obligatorily so) and the subordinate clause expresses a likely undesirable consequence of a negative reaction to this command.
(236) balga nuwa dambal / bada:nydyu inana hit there snake / bite-POT 2sgACC Kill that snake or it'li bite you.
(237) igaru / inda dangi:nydyu careful / 2 sg fall-POT Be careful you don't fall.
gaḍa dalana / gaṭi badinybayina
not eat-3sgACC / sick fall-POT
Don't eat that, you might get sick.
See 3.5.2(f) and 3.6.3(h) for other examples.
A common method of subordination in Australian languages involves the use of the purposive form of a verb in a clause which gives the reason or purpose or use or other specification of the situation described in the main clause. However, there are few examples of such sentences in the present data; the two following examples are from Margany.
nula bala bindal / biya:lku
3sg that expert / hunt-PURP He's a good hunter.
(240)
nuwa wabani nandingu nalinunda that go-PRES talk-PURP Idu-GEN-LOC He's coming to talk to us.

Generally, where the purposive appears in one clause of a two clause sentence the purposive clause can (sometimes must) be interpreted as coordinate rather than subordinate. Thus a coordinate interpretation is necessary for semantic reasons in (231) (although a subordinate clause using the potential could have expressed the same idea) and is possible in (230). See 3.5.2(e) and 3.6.3(f) for further examples. Clauses using the conjunctive suffix -ta in Margany must be regarded as syntactically subordinate, since they depend on the other clause of the sentence for the expression of the tense and mood, although semantically they sometimes seem to be of equal status with the other clause and related by coordination (as suggested by the translation "and" given for -ta).
(241)

$$
\begin{aligned}
& \text { naya wabangu na:ta dananana } \\
& \text { 1sg go-PURP see-CONJ 3pl-ACC } \\
& \text { "I'm going to see them lot up there." }
\end{aligned}
$$

For other examples see $3.5 .2(\mathrm{~g})$.
Another method of subordination attested reliably only for Margany involves the suffixing of the locative -nga after a tense marker or conjunctive. The only examples are given above (see 3.5.2(h) and 3.6.3(j)).

### 4.9 ADVERBS AND PARTICLES

Adverbs and particles are considered together because of the similarity of their functions and the lack of data which makes it impossible, in many cases, to tell whether a word is adverb or particle. There are, in fact, three groups of words which function as adverbs in that they modify the complement (usually the verb) of a sentence.

The first group consists of those adverbs (as defined in 3.1) which can combine with a limited number of nominal suffixes and most (if not all) of which refer to location or time. Most examples of inflected adverbs involve the ablative -mundu, e.g. walamundu 'where from', yurinydyamundu 'since yesterday' and matyamundu 'for a long time' (i.e. 'since long ago') (all M). The locative occurs in walanga (M) 'where' and the dative is exemplified in (245). The allative form of compass point names is described in 3.1.
(242) gara naya wina wabangu nudabitya not lsg near go-PURP dog-LOC2 I won't go near that dog.

| buyu | naya badi:ni | gambarimundu | waba:ni |
| :--- | :--- | :--- | :--- |
| breath lsg break-REC. PAST | far-ABL | go-REC.PAST | lsg |
| I'm tired from walking a long way. |  |  |  |

(244) biriny waba:ni gadbu:ndu all go-REC.PAST north-ALL They all went north.
(245)

```
gara nuwa yuḍi mada / mugarugu
not that meat get / tomorrow-DAT
Don't touch that meat, it's for tomorrow.
```

The second group consists of nouns functioning as adverbs (or particles); note that in (247) both mudga and madgany seem to behave in this way. In (246) a more correct translation of bikara may be 'strength', as 'strong' has on another occasion been translated by the concomitant form bikarabari; if so, wanba is functioning as an adjective, not an adverb. It appears that there may be a formative $-u$ involved in the word gurunyu 'alone' (see sentence l of the Text), as there seems to be a corresponding noun guruny (see (248)). bigiri 'dreaming', as exemplified in (202), may belong to this group.

$$
\begin{align*}
& \text { nula bikara wanba }  \tag{246}\\
& 3 \mathrm{sg} \text { strong big } \\
& \text { He's very strong. }
\end{align*}
$$

(247) mudga inda madgany nandini good 2sg Margany speak-PRES You're a good Margany speaker.
(248)
gurunydyu naya dumba:ni
alone-ERG lsg build-REC.PAST
I built it on my own.
The third group consists of particles, which refer to the manner of an action or to a wide range of other aspects, some of which are discussed in 4.9.1-4.9.11.

(249) | bukuny binda |
| :--- |
|  |
|  |
| quiet sit |
| Keep quiet. |

(250) ugu waba dawuru

Come here quickly. (or - Come here immediately.)
(251) naru nula dindakuru dangi:ni
nearly 3sg trip fall-REC.PAST
He tripped and nearly fell.
(252) yabana banydyini yadga
vigorously blow-PRES wind
The wind's blowing hard.
(253G) mundu wadyalgul:
(C.McK) together go-PURP-1du

We'11 go together.
4.9.1 NEGATION. Negation is usually marked by the negative adverb gara (M) gada (G) 'not', or, when used with an imperative verb, 'don't'.

```
(254) gara naya na:ni inana
        not 1sg see-PRES 2sgACC
        I can't see you.
(255) nani inda gulba:ni / gara naya imba:ni
        what 2sg say-REC.PAST / not 1sg hear-REC.PAST
        "What did you say, I didn't hear you."
(256G) gaḍa gunina
        not hit-3sgACC
        Don't hit him.
(257G) gaḍa naya gundinga
        not 1sg house-LOC
        I'm not in the house.
    yama 'nothing' may negate a verbless sentence.
```

(258) yama yugan
nothing rain
It's not raining.
(259) yama jat $Y_{u}$ yadaman
nothing lsgGEN horse
I haven't got a horse.
(260) gamu yurinydya / yama: $n^{y}$ a
water yesterday / nothing-NOW
"Water been there yesterday, but there's no more."
Negation is also implied by some other adverbs: garu
'nearly' (see 4.9.7), garu 'in vain' (see 4.9.8). These,
as well as the two negating particles illustrated above,
normally take first place in a sentence.
4.9.2 DIRECTIONAL PARTICLES. ugu 'hither' and gundu
'away' are extremely common in both dialects; so much so
that, as mentioned above (4.2, (211)) they are frequently
combined with the verb they precede (usually 'to go', but
glossed 'come' instead of 'go' when preceded by ugu) to form
phonetically a single word, the verb stem losing its primary
stress.
(261) ugu waba:ni / gunduwinya nuła gambira:ni
hither come-REC.PAST / away-then 3sg return-REC.PAST
He was coming this way, and then he turned away.
(262G) gundu ida mira
(C.McK) "Puay put high

Other examples include (212, 213G, 230, 233G, 250).
4.9.3 PERFECTIVE PARTICLES. The perfective adverbs denote successful completion of an action; they are sometimes translated as 'already' or, when used as an interjection, 'that's right' or 'yes'.
already burn-PRES
The fire's burning (i.e. I have succeeded in lighting or
reviving it).
(264G) wadi dinduniya nuguna
already know-PRES-1sg 3sgGEN-ACC
I already know him (as a response to an offer of an
introduction).

The younger Gunya informants also use wadi as a question marker, instead of wayi (see 4.4); however, it is believed. to be a perfective in sentences like (156) (3.6.3(i)) in which the interrogative form of the verb is used. Its function in the following example is not clear.
(265G) wadi binda / gaḍa nalga inda nunu already(?) sit / not talk 2sg always Keep quiet; don't talk all the time.
4.9.4 FREQUENTATIVE. The particle nunu denotes frequent repetition or long continuation of an action. See also (265G).
(266) nunu nula waba:ni always 3 sg go-REC.PAST He comes here every day.
(267) nunu naya gunkuru baba:ni always lsg cough pierce-REC.PAST I've been coughing a lot.
4.9.5 REPETITION. gala 'again' denotes that an action is repeated. The form galadu also occurs in Margany. Hollingsworth's vocabulary in Curr gives cullar 'more' and cullaro 'to do again', which suggests that the former refers to a noun and the latter to a verb, and this may apply also in Margany.

$$
\begin{align*}
& \text { nuwa gala nula / udunda }  \tag{268}\\
& \text { there again } 3 \text { sg / grass-LOC } \\
& \text { "There he is there, in the grass" (of a lizard which } \\
& \text { disappeared in the grass and has just been seen again). }
\end{align*}
$$

(269) nudangu nana bada:ni yurinydya / galadu gayimba dog-ERG 1sgACC bite-REC.PAST yesterday / again today The dog bit me yesterday, and again today.
(270G) gala gudba nana
(C.McK) again tell IsgACC

Tell me again.
4.9.6 POTENTIAL. The particle gati, glossed 'maybe', denotes possibility or probability in Margany. It follows the word to which it refers and may perhaps be more correctly analysed as a clitic. See also (101).
(271) wandu nuwa wabani / inu bama gaṭi
who that go-PRES / 2sgGEN brother maybe
Who's that coming? It might be your brother.
(272) mugaru gaṭi yugan dangingu tomorrow maybe rain fall-PURP It might rain tomorrow.
4.9.7 'NEARLY'. The particle naru, signifies that an event almost happened, in both dialects. See also (251).
(273) baringu nula nana gutya:ni naru stone-INST 3sg 1sgACC hit (with missile)-REC.PAST nearly He nearly hit me with a stone.
(274G) naru banbuliya
nearly fall-PAST-1sg
I nearly fell.
4.9.8 'IN VAIN". The particle garu, known only from Margany examples, signifies that the aim of an action has not been achieved.
(275) inanga naya wambadma:ni / garuwinya naya
here-LOC lsg lose-REC.PAST / in vain-now lsg
nityuni
look for-PRES
I lost it here and now I can't find it.
(276) garu naya gulba:ni numuna $/$ gara nula
in vain 1sg tell-REC.PAST 3sgGEN-ACC / not 3sg wa bangu go-PURP
"I told him to go and he won't go."
4.9.9 PURPOSELESS ACTION. Many Australian languages have a particle or a suffix, translatable 'just' or 'only', denoting a more or less purposeless action, as in 'I'm just looking around (that's all, not doing anything)' or 'He (just) hit me, for nothing'. Thus in Bidjara yugu would be used in both these cases. In Margany and Gunya the function illustrated in the former example is fulfilled by the particle danu while the idea of '(hitting) for nothing, for no reason' is denoted by an inflected form of a noun gudu, whose meaning is not known. The locative gudunga is attested in Margany and Gunya (RR) and the ergative or instrumental gudungu in Gunya (C.McK).

In (278G) danu seems to denote 'just' or 'only' in the sense 'nothing but' rather than in the sense 'to no purpose'.
(277) danu gaya wabalini
just isg go-PROX-PRES
I'm just walking arounc.
(278G) junydya guma danu
(C.McK) face blood just

His face is covered with blood.

| (279) $\quad$ nana balga:ni $/$ guduga |  |
| :--- | :--- |
|  | lsgACC hit-REC.PAST / for nothing |
|  | That bloke hit me for nothing. |

4.9.10 POSSESSIVE PARTICLE. The particle magunya, attested in Margany only, emphasises ownership and is translated 'own'.
(280) patyu yadaman gandi / no / naya gandilu natyu 1sgGEN horse take / no / 1sg take-PURP 1sgGEN magunya
own
Take my horse. No, I'll take my own.
4.9.11 DEMONSTRATIVE PARTICLE. bala may be a demonstrative particle; Mrs. Shillingsworth has translated it as "that's the one". See also (239).
(281) ini bala
here that
Here. (in answer to 'Where are you?')
(282) nuwa bala bidal mudga waduni
there that woman good cook-PRES
That woman's the best cook in the camp.
(283) ini bala naty yamba
here that lsgGEN camp
I always camp here.

### 4.10 MISCELLANEOUS CLITICS

The suffix -:nya ~ -winya is used to signify a changed situation and can be translated 'now' or 'then' according to the tense of the verb. The allomorph -:nya occurs after final /a/ and /i/ and -winya occurs after /u/; there are no examples where it follows a consonant. There are probably no restrictions to the type of word this clitic can follow, although there are no examples where it is attached to a verb. See also (261) and (275).
(284) bawuda nanagu yuḍi / dumba:nª nana dalani kangaroo 1p1-GEN meat / sheep-now 1pl eat-PRES We used to eat kangaroos but now we eat sheep.
(285) gamu yurinydya / yama:nya water yesterday / none-now "Water been there yesterday but there's no more."
(286) gununga naya bindala / gundinga:nya naya bindani humpy-LOC lsg sit-PAST / house-LOC-now lsg sit-PRES I used to live in a humpy but now I live in a house.
manda and munda may be two different morphemes; however, the first vowel is sometimes unclear. They have been heard only in Gunya and their function is not known; all
known examples are therefore given. Examples (287-291) are from Mrs. McKellar and (292-298) from Charlie McKellar. On a couple of occasions manda has been heard as a separate word, with a primary stress, and is written separately, but this may be due to the speaker's hesitancy.
(287) banvamanda wadyayindana
many- go-CONT-PRES-3p1
They are going.
(288)
(289) nunananiny wadyandanamunda
that go-PRES-3p1- (?)
Someone's coming. (?)
(290) dadgangiyamunda
go in-PURP-1sg-
I'm going to go in (to the water, for a bath).
(291) gạ̣amunda imbaliniya / unayangiyamundawiniya
not- hear-REFL-PRES-1sg / lie-CONT-FUT-1sg--??
"I don't feel good. I want a sleep." (imbali-, literally
'hear oneself', seems to mean 'feel good'. Winiya may be
wiyiniya 'be PRES-1sg'; see 4.11.)
(292) banyamanda inguyanila
big- grow-CONT-PRES-3sg
The baby's growing up now.
(293) udun inguyanila manda
grass grow-CONT-PRES-3sg
The grass is growing.
(294) dyipumanda wiyinila
smali- be-PRES-3sg
It's getting small.
(295) dyipumanda gamu
small- water
The water's getting low.
(296) buwany manda waganila
hot rise-PRES-3sg
"The summer's coming in."
(297) ugamanda wiyinila
dark be-PRES-3sg
It's getting dark.
(298) dudumanda ganiyanila (ganayanila?)
sun- come-CONT-PRES-3sg
The sun's rising.
The above examples from Charlie McKellar were all
elicited in a single recording session. Other sentences elicited at the same time in which manda was not used (and, at least in some cases, not accepted) included 'the sun's setting' and 'I'm getting sick/getting better/getting worse'.

A suffix -na occurs in two sentences in the Margany corpus. The first was repeated without the -na.
(299) gare inda gunda waba:ni / naya yudi wa:luna not 2 sg before go-REC.PAST / lsg meat give-PURPinana $2 \operatorname{sgACC}$
If you had come here before I would have given you some meat.
(300) buḍina banydyma
fire(wood)- chop-PLU
"Split that log:"
A suffix -la, possibly an adverb formative, occurs in Margany in:
(301) matyala waba / dambaimundu watch- go / snake-ABL Watch out for snakes as you go along. (i.e. Go watchfully...?)
-mi occurs in the Margany sentence:
(302) ganḍa nuwami / bada: $n y_{d} y_{u}$
spider there- / bite-POT
"Watch that spider, he might bite."
-:ndi occurs in the Margany word gara:ndi 'no' (as answer to a question), from gara 'no', 'not'.

### 4.11 COPULA VERB

A possible copula verb wiyi, meaning 'to be' (and/or perhaps 'to become') occurs in the speech of Charlie McKellar and possibly also of Mrs. McKellar (see (291)). The same verb, with the same function, is common in Bidjara.
(303) gulbaliya ma:da / gaḍa dadba wiyiliya tel1-PAST-1sg boss / not sick be-PAST-1sg "I told [the boss] I wasn't sick."
(304) nuta dawul waganila $/$ dawul wiyinila dog anger rise-PRES-3sg / anger be-PRES-3sg The dog's growling.

See also (294) and (297), and note the similar use of waga 'to rise, to climb', in examples (296) and (304).

## ACKNOHLEDGEMENTS

I want to thank most of all my informants, Mrs. Jessie Shillingsworth, Mrs. Margaret McKellar, Mrs. Ruby Richardson, Charlie McKellar and Fred McKellar for their help. None of them found the task of answering questions about a long-disused and half forgotten language congenial, but all were friendly and tolerant. I am very grateful also to Mrs. Hazel McKellar for her help and hospitality (not only to me, but to my wife and five children as well) and to various other Cunnamulla people who helped in small ways.

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## TEXT

The following brief story, describing how a man would camouflage himself in order to hunt emus, is in Margany. The version given is an edited combination of two versions actually given by Mrs. Shillingsworth.

No other texts could be obtained.

1. nula waba:ni / gurunyu

3 sg go-REC.PAST / alone
He would go on his own.
2. daninydya nula nudbali:ni
mud-LOC 3 sg roll-REFL-REC.PAST
He would roll in the mud.
3. and dala nula gatyu:ni yandinga bush 3sg tie-REC.PAST waist-LOC
He would tie bushes round his waist.
4. wamadu nula namba:ni dañinyy (u?)
spear 3 sg smear-REC.PAST mud-INST (?)
He would smear mud on his spear.
5. gulbarigu nula waba:ni / wamadubari
emu-DAT 3sg go-REC.PAST / spear-CON
He would go after emus with the spear.

## VOCABULARY

The vocabulary is in two parts. First is an alphabetical Margany-Gunya/English vocabulary, which gives only brief glosses; more detailed glosses with notes on the reliability of the forms or translations are given in the second part, which is arranged in semantic fields. However, notes or cross references on derived, reduplicated or other compound forms are not given in the second part if the information is readily available in the first part.

Pronouns and other grammatical words (such as those discussed in the various sub-sections of 4.9) are included only in the alphabetical list. One word, a place name, is included only in the semantic list because it cannot be phonemicised.

See also the Addendum (abbreviated Add below) for some late additions.

## ALPHABETICAL VOCABULARY

$$
\begin{aligned}
& \text { Order: } a, a:, b, d, d, d, d^{y}, g, i, i:, k, l, m, \\
& n, n, n, n^{y}, n, p, r, r, t, t, t, t^{y}, u, u: w, y .
\end{aligned}
$$

Strict alphabetical order is not adhered to in the case of forms which are derived by one or other method of word formation (see 3.4 and its sub-sections, 3.5 .3 and 3.6.4) from a root which is known or believed to exist currently as a free form. Such derived forms (including two word compounds) immediately follow the root (the first root if there are more than one) and are inset. Thus, for example, dangima follows dangi, from which it is derived, and precedes dangil. Where the root is not attested as a free form but is believed to exist as such it is given in parentheses.

```
baba, M: to stab, to sew (see also badi, M: maybe
    gunkuru)
babaya, G: sister
babi, to cut
babiny, father's mother
bada, to bite
badara, see bundany
badi, to be torn, broken or other-
    wise damaged; see also buyu,
    gaṭi, yamba
- badili, G: to fall (of rain)
badid, mussel
bada, G: to scratch
badabada, mad, stupid
badbida, porcupine
badga, G: to scratch
badg!, ankle, G also shin
badgiri, M: dogwood or curran bush
badi, M: to cry
bada:du, G: today
baḍi, G: jealous
baḍi, M: maybe
baḍu, G: river
badyid:, G: language name
baga, tree
baga, to dig
bagul, hill, mountain
bagura, coolibah
bakubaku, bellbird
bala, M: that one
bala, M: leg, calf
balbi, to talk about
balga, M: to hit, to kill
balgabida, M: coot (bird)
balgara, root
baluny, axe
ba!a, G: leg
ba!iny, G: untrue, a lie
balka, M: string, rope
ba!para, M: hawk sp., policeman
balu, G: child
balyku, frog sp.
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bama, M: brother
bambu, to open (eye, mouth), also
G: to tear, pull apart
banba, $G$ : to stab, to sew
banbana, M : to shiver
banbu, $G$ : to fa 11

- banbuma, G: to drop
banbudu, catfish
banda, G: to track
bandaḍa, sky
band i, beeswax
bandll, M: bark
bangad, back
bangani, M: sandalwood
bangara, $M$ : nest
bangara, M: needlewood
banglu, M: nit
bana, sand goanna
banda, penis, also $G:$ tail
- bandayi, G: male
bandin, $G$ : dirt
bannara, $\mathrm{M}: ~ c l o u d$
banya, G: big
- banYa:ri, G: big
banydYa, boney bream
banydya, to sing
banydyara, pine tree
banydyi, G: to light (fire)
banydyi, M : to come out, to blow (wind)
banydyima, $G$ : to make (fire)
banydyu, to chop
banydyud, $G:$ belly, pauch
- banydyuḍbayi, G: pregnant
banYma, $M$ : to count
banga, to go across
bangu, $G$ : knife
bangun, $G$ : head
bapapany, G: pup
bapiri, G: fart
bapudu, G: personal name
bari, stone, money
barinv, thunder
baramba, thistle
barany, M: axe
baru, M: river
baruwadu, M: Milky Way
bati, G: to cry
bata, West
baṭa, $G$ : to hold
bața, M: deep
bat i, stomach, belly
- batibari, pregnant
- bat i manda, full (of stomach), satisfied
batyi, clothes, swag, bed
bawiny, M: soon
bawuda, red kangaroo
baya, bird
bayu, G: pipe
bidal, $\mathrm{M}:$ woman, girl
bidu, G: another, different
- bidunga!i, $G:$ different
bidgil, G: chips
biḍ, M: tail
bidi:, G: turtle
bidyu, G: to throw
bidYudu, $G:$ possibly a moiety name
bigi, M: beak
bigibigi, G: pig
bigiri, dream
bikany, M: (finger or toe) nail, claw
bikara, M: strong
bila, G: apart
bilabila, $G:$ diverse
bi!any, pigweed
bimbul, G: catfish sp.
bindat, $G: ~ c l e v e r ~$
bindi, caterpillar
bindidi, M: to itch, G: to scratch(?)
binbida, see binbira
binbiri, ribs
binbira, budgerigar (G: also
binbida)
binda, to sit, to stay
bindal, $M$ : clever (as a hunter)
bindiny, $G:$ near
bindiri, mulga
binga, see dina
bingubingu, wild banana
binguny, G: (finger, toe) nail, claw
binna, to pinch
bintada, $M$ : pied cormorant
bindu, sinew
binydyi, G: kurrajong
biri, M: to scratch
biriny, M: all
birat $y_{u}$, waterhen
bitan, G: wide
bita, night, dark
bitubițu, hawk sp.
bityu, M: to throw
biwiny (?), M: spear
biya, G: flame
biya, to hunt
biyaga, tobacco
bi:ba, bi:pa, G: paper
buba, to rub
bubany, carney (lizard)
bubuḍi, whirlwind
buda, ashes
- budabuda, G: white
budibudi, $G:$ lungs (see Add)
buduny, G: mosquito
buda, to get up, to wake up
buda, M: feather, G: duck's down budany, M: another, more
budanybudany, buin-buln (parrot)
budba, M: to come
budbal, whitewood
budgu, shield
budgu, G: bottle tree
budgul, G: daughter
budi, fire
- budibari, M: brother-in-law
bựibaka, G: place name
budyabudya, light (in weight)
budyigat, G: cat
bugili, crayfish
bugu, M: blunt, and see dili, mana buguny, antbed
bukul, daughter
bukuny, quiet, still
bula, they (dual)
bulaḍi, G: two
bulbabar:, M: jealous
bulgura, M: dust
buliki, M: cattle
bulu, food
bula, G: calf of leg
bulany, $G: s p$. nocturnal bird
bulanybulany, G: parrot sp.
builya, to suck
bulyu, M: lump
bumbad, G: twigs, small branches
bumbara, mulga snake
bumbiny, G: smoking
(bundany)
- bundany badara, $G:$ to be tired
bundunyma, M : to shake (tr.)
bunduru, daughter's child
bunba, to lift
bundu, G: to run (of blood)
bunduny, M: white
bungany, plain turkey
bunu, M: bank
bunydya, son-in-law
bunyul, 1ignum
buna, M: penis
bunginy, M: mosquito
bungu, swelling, to swell
- bunguli, to swell
bungu, to smoke (tobacco), also M: to blow
- bungudany, G: snoring
buri, M : to be tired, to be sick butu, buttocks, behind
butiny, G: semen
butya, M: sharp
butyu, deep
buwada, G: brother
buwadi, G: parrot sp.
buwa! buwa!, M: echo
buwany, hot, hot weather, also M: daytime
- buwanygil (a), M: hot weather
buwiny, G: a lump (see Add)
buya, G: to blow, to smoke
(tobaćco)
buyu, breath
- buyu badi, M: to be out of breath
- buyu bidyu, G: to breathe
- buyu bityu, M: to breathe
- buyu gundi, G: to be out of breath
bu:dya, M: brother
daba, G: to ask for
dabi, to send, to let go
dada, to excrete
dadi, $G:$ to move (tr.)
dadadi (?) G: teal duck
dadba, sick
dadga, to go in
dadal, edible grub
daḍal, G: saddle
daḍi, G: wilga (tree)
daḍu, $M$ : to tear
dagu, G: to ask
daguny, elder brother
daka, M: dust, ground, dirt
dakara, water snail
dala, M: leaves
dala, to eat, to drink
dalany, tongue
dalbany, edible grub
(da!iny)
- da!inybari, cheeky, disobedient
dambal, snake
dambudu, $M$ : native cat
dami, fat
danda, to copulate
dandi, G: ground
dandi, $M$ : to be wet
dana, they (plural)
dana, to stand
- danma, to stand up (tr.)
dandany, frog
dandi, river wattle
danginy, M: grey heron
danu, G: just, only
daniny, M: mud
danybad, G: quandong (tree)
dang $i, M$ : to fall
- dangima, M: to drop
dangil, wild orange
dangu, to take out

| dangu, M: bilby (animal) | dintiny, G: rosewood |
| :---: | :---: |
| danuḍ, possum | diriny, M: bloodwood |
| dara, thigh | diru, G: lapunyah (tree) |
| darawuli, M: trousers | diru, apostle bird |
| dari, G: language | diti, louse |
| daralawidyi, G: pig | diwala, M: many |
| dararu, M: black cormorant | diwiny, G: hopbush |
| darawulu, G: trousers | diwuru, M: lapunyah (tree) |
| darifoda, G: cloud | di:, G: tea |
| darinara, M: cloud | di:gal, G: itchy (?) |
| data, stick | di:ti, soldier bird |
| daṭa, M: pelican | dudad, urine |
| dati, to like | duda (ni), G: to scratch |
| - dațima, M: to like | dudu, G: sun, daytime |
| datubira, waddy | duduli, to slip over |
| datya, to kick | dugun, G: flood |
| dawadany, G: spitting rain | dula, G: sandalwood |
| dawul, angry, savage | dulba, to put out (fire, with |
| - dawul waga, to get wild | water), G: to shut, to block |
| dawuru, quickly, straight away | dulgada, log |
| da:, mouth | dulu, M: to put in |
| da:gin, G: sock | duluny, ironwood |
| diba, 1iver | du!idi, centipede |
| dibala, M: urine | du!u, M: kingfisher |
| dibidrara, duck sp. | dumba, to jump, to hop |
| dida, sister | dumba, sheep |
| didba, to wake, to wake up (tr.), also M: to chase | dumba, to erect dumbiny, G: smoke |
| didgi, son (of man) | dundal, M: shrimp |
| diga, to scold | dundu, G: body |
| digaḍi, white cockatoo | dunga, to dip up (water) |
| diginy, G: gall (body) | dunbany, leech |
| diguru, G: lightning | duñuny, M: smoke |
| dilgan, G: moon | dupa, G: to crawl |
| dili, eye | dura, G: dust |
| - dilibugu, M: blind | duru, M: sun |
| - dilimuga, G: blind | duruny, hair |
| dimbany, G: vagina | durura, G: dust |
| dimburany, lizard sp. | duti, M: ellbow |
| dindu, to know | duty ${ }_{\text {u }}, \mathrm{M}$ : narrow |
| dina, foot | duwad, alive |
| - dina binga, M: to sneak up | duwadi, shirt |
| - dina matya, dina wala, M: to track | duwana, son (of woman) (also duwan, G, duwany, M) |
| dinba, G: to taste | duwi!, bower bird |
| dinbi, G: to disappear | du:bu, G: soap |
| dindakuru, M: trip |  |
| dindidindi, M: willy wagtail | dyibidyara, G: duck sp. |
| dindiny, M: bee | dyindidyindi, G: willy wagtail |
| dingany, M: step cut in tree trunk | dyinguyal, M: parrot sp. |
| dingil, straight | dyipu, G: smali |
| dinid, M: clitoris | dyuga, G: sugar (see Add) |
| dinimbulu, G: place name |  |
| diniyada, M: place name | gabad, armpit |
| dintiny, G: rosewood | gabalgabal, G: old man |
| dinbudi ${ }^{\text {d }}$ d, G: white-headed stilt | (gabid) |
| dinyil, M: blade Cof spear, knife, | - gabidtbari, G: hungry |
| axe) | - gabira, to be hungry |

dangu, M: bilby (animal)
daruḍ, possum
dara, thigh
darawu,i, M: trousers
ara: language
daralawidyi, G: pig
dararu, M: black cormorant
darawulu, G: trousers
darifada, G: cloud
darinara, M: cloud
data, stick
daṭa, M: pelican
dati, to like

- dațima, M: to like
datubira, waddy
datya, to kick
dawadany, G: spitting rain
dawul, angry, savage
- dawul waga, to get wild
dawuru, quickly, straight away
da:, mouth
da:gin, G: sock
diba, 1iver
dibala, M: urine
dibidyara, duck sp.
dida, sister
didba, to wake, to wake up (tr.),
also M: to chase
didgi, son (of man)
iga, to scold
gayt, white cockatoo
diguru, G: lightning
dilgan, G: moon
dili, eye
- dilibugu, M: blind
- dilimuga, G: blind
dimbany, G: vagina
dimburany, lizard sp.
n indu, to know
din, foot
- dina binga, M: to sneak up
- dina matya, dina wala, M: to
rack
dinba, $G:$ to taste
dinbi, G: to disappear
dindakuru, M: trip
dindidindi, M: willy wagtail
dindiny, M: bee
dingany, M: step cut in tree trunk
ding il, straight
dinid, M: clitoris
dimbulu, G. place name
dintiny, G: rosewood
dinbudinbu, G: white-headed stilt
axe)
gabira, G: lily
gabu, $G:$ to return
gabudi, G: hat
gabul, carpet snake
gabun, M: child
gabuny, egg, brains
gabuti, M: hat
gada, $M$ : head
- gada gunari, M: bald
gadi, to move (intr.)
gadi, $M$ : to tell a lie
gadiya, $G$ : mother's brother,
father-in-Iaw
gadu, ant
gadbu, north
gadga, hip
gadgal, G: leaves
gadgany, M: sparrowhawk
gadgil, $G$ : hard
gadkany, G: sparrowhawk
gadkiny, windbreak
gada, $G:$ no, not
gadila, sand
gadugaçu, G: quickly, hurry up
gadyu, $G$ : to tie
gagaça, M: moon
gagaladany, pink cockatoo
gagula, river red gum
gagungudu, kookaburra
gala, to be frightened
gala, again
- galadu, M: again
galburu, M: sandhill
galga, to pour, to spill (tr.)
- galgama, G: to boil (trans.)
galu, G: testicles
gamara, M: left (hand side)
gamba, to cover, to bury, to shut
(eyes, mouth)
gambari, far
(gambi)
- gambinyma, M: to bring back
- gambira, $M$ : to come back
gambul, G: bloodwood
gaminu, $M$ : elder sister
gaminy, mother's mother
gamu, water
gana, G: yamstick
gana, to come
ganamala, G: place name
gani, to bring, to take
gand $i$, $M$ : to call, to name
gandi, M: to get
gandu, $G:$ child
gangima, to tease
gannanu, M : mother's brother
ganuru, canoe
gaṇ̃a, $M$ : spider
gandiny waba, M : to sneak up
gannany, G: cheeky
ganydyara, to go down, to get down
ganydyibul, G: policeman
ganyga, to swallow
gapuny, M: small
gari, yellowbelly (golden perch)
garu, grey (haired)
- garugaru, G: old
gara, to step on
gara, M: no, not
- gara:ndi, $M$ : no, not
garadany, $G:$ bilious
garu, M: in vain
garudu, G: bottle
gatuny, G: shrimp
gati, bitter, salty
- gati badi, $G$ : to be sick
gatya, rotten
gatyabiri, M: wild lemon
gatyin, $M$ : rainbow
gat $\mathrm{Y}_{\mathrm{u}}, \mathrm{M}$ : to tie
gatyuwilada, $M$ : turtle
gawiri, gruie tree
(gawud)
- gawudbari, G: desiring sexual intercourse
gawula, young (of animal)
gawun, dress
gayadambal, G: old man
gayimba, $M$ : now, today
gidyima, G: to tickle
gilagila, galah
gilyala, G: many
giyadal, giyadu, G: cattle (see Add)
guba, G: to burn (intr.)
(guba)
- gubabari, M: old man
- gubaguba, M: old man
gubal, M: hollow in tree
gubi, clever
gubi, to whistle
gubil, blue-tongue lizard, also
G: personal name
gubudu, gidgea (tree)
gudala, eaglehawk
gudari, see mana
gudi, M, gudin, G: red ochre
- gudigudi, red
gudu, see 4.9 .9
(gudu)
- gududany, see mana
- guduli, G: to close (eyes)
gudalburu, M: magpie
gudama, $M$ : to stop (tr.)
gudba, bobbies (fish)
gudbara, M: a few gudbiny, G: bare, bald gudga, $G:$ nape, back of neck gudgan, long
gudgi, G: strong
gudgud, mopoke
gudi: liny, G: peewee
gudul, black
gudigudi, G: winding
guduny, $G$ : alone
guduru, M, gudu:, G: blowfly,
maggot
gudu:guny, G: dove gudya, honey, sugarbag gudya, G: hit with missile guga, pot, pannikin gugumba, fog
gukunburu, M: dove
gula, G: red kangaroo
gula, $G$ : to sing out
gulany, net, fish trap
gula:budiny, G: bałl
gulba, to say, to tell
gulbarí, emu
gulgun, G: string
guli, M: billycan
gulidi, snake sp.
guliny, G: louse
gultapa, M: whistler duck
guludku, G: brolga
gulyagulya, M: weak
gulyud, M: tiger snake
guma, blood
gumada, honey bread
gumilbada, M : heron sp .
gumira, to sulk
gumun, hawk sp.
gunda, to steal
gundi, house
gundi, to break (intr.), to die
guntara, M: brolga
gunu, humpy
gunun, G: curran bush
guna, faeces
gunari, plain (see also gada)
gunda, M: already, G: yesterday
gundu, away
gungal, husband
gunga: liny, tea tree
guni, $G$ : to hit
gunkuru, cough, coughing
- gunkuru baba, M: to cough
gunma, to break
guna, G: faeces, guts (see Add)
gunga, raw, green (of fruit)
gunma, M: wood duck
gunya, $G:$ language name
gunydyi, $G$ : to hide
gunydy, $G$ : slow
gunyi, $G:$ to hide (intr.)
- gunyili, M: to hide (intr.)
- gunyima, to hide (tr.)
gungari, $G:$ language name
gunu, M: food
gupu, G: elbow
gupu, short
guragura, G: clover
guri, G: clothes
guruguru, $G: ~ a l l, ~ c o m p l e t e l y ~$
gurara, $M$ : up there, high
guruny $(u), \mathrm{M}$ : alone
guta, south
guturu, swan
guṭaguta, bird sp.
gutya, M: to hit with a missile
guwadu, M : crab
guwanymangadi, M: piace name
guyada, wife
- guyadambal, G: wife
guyan, M: stone knife, grinding stone (?)
guyibiny, M : curlew
guyidi, black bream
guyu, fish
gu:, nose
lbalu, you (dual)
ida, to leave (tr.), to put down
- idama, M: to pile up
- idari, M: to run away with
idi, G: to run away with, $M$ : to run away
ida, M: you (plural)
idginidgin, G: cheeky
idiny, $C$ : noisy
- idinyidiny, G: noisy
igaru, slow, quiet
igura, iguri, see mana
i!iny, G: coot (bird)
i|yari, $M$ : noisy
imba, to hear, to listen
- imbali, G: to feel well
imbinvma, to hang up (tr.)
ind $i, M$ : anus
ina, $G$ : here
- inadi, $M$ : on this side
- inagadiny, $G$ : on this side
- inany, G: here, this
- inanygani, G: here
- ina:da, G: here
ina, ini, M: here
inana, you (acc.)
inda, you
ini, see ina
inu, your
inydyimalu, M: place name
inydyu, M: to smoothe, to sweep
ingaḍa, rockhole, native well
ingu, $G$ : to grow, to sweep (?)
ipany, M: dew
ira, G, ița, M: tooth
mada, G: run (of water) (?)
madamada, see matamata
(madi)
- madil, M: groundsheet, blanket
- madima, to spread
mada, black goanna
mada, M : to get
madburany, bicycle lizard
madga, M: gully
madgama, M: to gather up
madgany, language name madgara, M: gir1
madinYmadiny, M: Seven Sisters
mada, $G:$ to run
maḍa, G: hand
- maḍaguwaḍ, G: crab
- maḍa maga: liny or
maḍamaga: $\mathrm{I}^{\mathrm{y}}, \mathrm{G}$ : policeman
madi, man, person
- madi gabun, M: boy
madyambiḍany, G: b.at
magara, M: crotch, fork
magida, copi, clay
magunya, M: own (see 4.9.10)
maka, bone, shin
- makabindany, G: thin
- makamaka, thin
mala, G: arm, M: wing
malad, box tree
malu, shade
- malumalu, shadow
ma!a, M: mark
mamadu, M: crested pigeon
mambu, M: song
manany, M: burr
manda, G: vegetable food
manda, see baṭ
mandi, $M$ : to burn (intr.)
- mandiny, M: cooked manaru, G: wood duck manatara, G: place name mandari, G: lazy, tired
mandiri, boot, shoe
mangad, bag
mangu, beefwood
mani, G: money
maniny, lightning
manu, throat
manmada, $G:$ duck $s p$.
mana, ear
- manabugu, deaf
- mana gududany, G: deaf
- mana igura, M, mana iguri, G: to forget
manara, black duck
mangala, G: sand hill
mangany, young woman
mangu, M: arm
mangumangu, $G$, mankumanku, M : mouse
mara, M: hand
marany, mother's mother's brother
matamata or madamada, $G$ : soon
matya, long ago
matya, see dina
- matyala, M: watchfully (?)
mat Yambiḍany, M: bat
mayada, sister
mayi, M: vegetable food
ma:bu, G: many
ma:da, boss
ma:dyin, G: matches
mida, G: charcoal
midad, frost, also G: cold weather, winter
midili, to shine
milamila, G: poor fellow
milgan, M: forehead
milgin, G: milk, cattle
miliny, M: tired
milyad, tears
mimany $, G:$ ant $s p$.
mimi, lips
minga, G: bank of river
minany, vagina
minya, M: full
minydyidi, leopard wood
minydy, to peep
mingu, G: fork (of tree)
mira, G: high, up there
miti, M: hard
miṭi, M: to float
miya, G: to wait
muda, G: black soil
mudun, $G$ : song
muda, see mura
mudga, good
mudguny, old woman
mudguny, G: bark (see Add)
mudi, water rat
muduwadi, G: language name
mudun, ant sp.
muga, G: blind
- mugamuga, G: blind
muga, G: to get
mugadi, hail
mugana, $M$ : son's child, G: son(?)
mugany, gum
mugaru, tomorrow
mugu, knee
mukada, G: burr
mukin, G: bumble tree
mukiri, M: by and by
mula, to vomit
- mulagadany, G: vomit
- mulany, M: flood, vomit
- mulanymulany, G: nauseated
mu!u, spring
muma, M : to point
munda, $M$ : to hold
mundu, $G$ : together
munbima, $M$ : to mix
munda, dilly bag
munga, M : to block
munnidany, $M$ : crab
munanv, $M$ : soft
muni, G: soft
muniny, $G:$ spider
munydya, body hair

munguny, wallaroo
muru, nulla-nulla
mura, yam sp. (G; also muda)
mutun, shingleback lizard
muyi, M: to leave alone
muyulmuyul, M : sandfly
Note: It is not clear whether $n$ can occur initially. Initial $n$ and
(apparent) $n$ are grouped together.
naga, $G$ : to see
nalga, $G:$ horn
- nalganalga, horn
namba, $M$ : to paint, cover
nandu, M: to wait
nanga, $M$ : young
nangadu, $G:$ young man, boy
nanigudu, $G$ : goat
nari, name
nawul, nawud, $G$ : swag
na:, M: to see
nidan, owl sp.
nikil, $M$ : charcoal
(ni|Ya)
- nilyananiny, $G$ : now
nima, M: to ask for
nimany, $G$ : ant sp.
nimbiny, navel
nimbudany, sneeze
nimun, fly
nindiny, G: bee
ninduny, M: diver (bird)
nity $y_{u}$, M: to look for
niyadu, star
ni:lbura, G: sandfly
nuda, to smell
nudba, $M$ : to roll (tr.)
nuka, M: to taste
nula, he, she, it
gunda, to kiss
nungud., nasal mucus
nunu, always
numu, his, her, its
nupuna, him, her, it
nuwa, $M$ : that ( $p 1$ nuwanydyada)
nabi, to wash
nadiny, father's father (see Add)
nadanada, $M$ : bulrushes
nadba, east
nadgu, grey kangaroo or wallaby
गada, M: testicles
nadyari, $M$ : to be thirsty
nala, G: crotch
nalga, G: to speak, to talk
jali, we two (dual)
malku, mate, relation (?)
na!awida, G: crested pigeon
nalyi, saliva
namala, G: female
namany, G: yam sp.
namara, M: place name
namun, breast, milk
nana, me
nanda, $G:$ to lay (eggs), to give birth
nandar: to feel hot, also $G$ : to be thirsty
nandi, to speak, to talk
nana, we (plural)
nanga, $M$, nangad, $G:$ beard
gani, what?, something
- nanimiri, M: how many?
nanmu, chin
nanybaḍ, sweat
- nanybara, M: to sweat

クarany, M: that (mentioned before)
nari, $M$ : to disappear
narigi, $G:$ language name
naru, nearly
natama, to dry (tr.)
nati, mate
nat $y_{u}$, my
nawa, yes
クawudgawud, frog sp.
gaya, I
Dindin, G: nasal mucus
guba, $G$ : over there

- gubadi, M, nubagadiny, $G$ : on the other side
- nubany, M: over there
ŋuban, $G:$ frog $s p .$, also personal name
nubari, M : to show
Duda, M: dog
nuda, to move (intr.)
- Judama, $M$ : to move (tr.)
juduma, $G$ : to heap up
万ulguny, M : watching, as a spectator
gulunydyuru, $M$ : tadpole
gulku, cheek
numbi, G: to swim
ुumbidal(a), $G:$ frog $s p$.
numbiny, anus
puna, M: to lie
Juna, see guni
Duna, $G$ : that, there
- nunagadiny, $G$ : on that side
- ounany. G: that, there
- gunanygani, $G$ : that
- Dunananiny, G: that
nuni, $M$ : someone (inflected
forms have stem guna-)
junydya, face (G: also nunytya)
guru, M: some
puta, G: dog
guṭi gut i, G: bent
刀uya, G: smart, clever
udiny, sore
udun, grass
uḍal, M: waterlily
uc̣u, G: old
uga, G: dark, nighttime
ugana, $G$ : to run
ugu, hither
ula, G: to die
ulgu, M: heart
umidal, M: kidney
una, to lie, to sleep
una, to chase, to hunt
ura, M: two
utiny, heavy
utu, M: nape
waba, to go, to walk
wabudu, younger brother
wada, $M$ : to call out
wadi, yes, already, right
- wadiganiny, G: right, true
- wadin, M: already, that's true
wadu, to cook, to burn
wadu, G: old (of person)
wada, $M$ : to dance
wadgu, G: Bad
- wadgudany, G: old
- wadguwadgu, biad
wadguny, M: right (hand side)
wada, G: gap
wadya, $G$ : to go
wadyawadya, $M$ : place name
wadyi:n, white woman
waga, to rise (of sun), G: also to climb, to go up, and see dawu!
wakada, $G:$ jaw
wakan, M: father's sister
wakan, crow
wakanvu, $M$ : one
wakara, M: jaw
wala, see dina
wala, M : where?
walbi, to carry
wala, stranger
wali, G: catfish sp.
walka, $G$ : to look for
wamada, wamadu, M , wamara, G :
spear
wamba, $G:$ silly, also to be lost(?)
- wambadma, M: to lose
- wambali, $G$ : to be lost
- wambana, M: to be lost
- wambanma, G: to lose
wambu, M : yamstick
wanda, $G$ : where?
- wandadi, M : how?
- wandany, when?
wand i, G: dingo
wandu, who?
wanana, $G:$ queen bee
wanba, M: big
wanbu, devil, ghost
wand $i$, to climb
- wandima, to hang up (tr.)
wangul, $G$ also wangud, pillow
wangu, $G:$ woman
wanda, $M$ : road
wanga, chest
wanggu, $M$ : to bark
wanygul!, G: to bark
wanal, boomerang
wanga, M : to be bent
- wangawanga, M: winding
wangara, $G:$ one
wanud, $G:$ a few
waran, M: billabong
wara, $M$ : to run
waribinda, $M$ : to think about
wati, scrub
wata, $G$ : to play, to dance
wata, M: which way?
wawugga, behind
wayanbida, woman
wayi, question marker
wayilbala, white man (G: also wayibala)
wa: , to give
widbil, G: dogwood
widgu, on the side, sideways
widila, G: supplejack (tree)
widila, M: wilga (tree)
widiti, M: peewee
wilpidyuru, dotterel
wi!u, G: curlew
wilyaru, M: young man
windi, M: to play
wina, $M$ : near, close
wingal, shoulder
winvan, $M$ : frog sp.
winydyu, to ask
wira, G: lightning
wita, M: many
wi:, $G$ : to be, to become (as in
dawul wi: to be angry, wadgu wi:
to get worse, bungu wi: to swell, gatya wi: to fester)
yabana, vigorously, hard, fast
yabu, yabunu, father
- yabudi, M: father
- yabudu, kinship term
yada, to puli
yadi, to laugh
yadaman, horse
yadga, wind
yadpa!any, M: flat, shallow
yagal, cold
- yagali, to be cold
yalka, G: greedy
yalud, $G: ~ s p$. of aquatic plant
ya!ga, dry
yama, none, nothing
yama, to do, to say
yamal, cod
yamba, camp, place
yamba:liny, G: heron
yamuru, M: teal duck
yanta, $G: ~ p e r s o n a l ~ n a m e ~$
yangi, $\frac{{ }_{x}^{x}}{1}$ : to limp
yandi, waist
yañ $\dot{y} y^{3} a$, true
yana, yanadi, yananu, mother
yanga, $G:$ like that, that sort
yang $i, M$ : sister
yangud (d?), M: male
yapany, $\dot{G}$ : lapunyah (tree)
yatyu, M: flame
yuda:mu, G: alcohol
yudi, meat
yugan, rain
yukala, G: pink-eared duck
yulany, G: skin
yulbi, to push
yuli, M: to stoop (perhaps also in
$G$, but given as 'to creep')
yu!iny, $G$ : mud
yu!ku, G: heart
yulu, M: body
yungi, $M$ : to move (camp)
yuna, hole
yunany, G: mean, greedy
yunara, $M$ : to swim across
yungu, M : to grow
yurinydya, M: yesterday
yura, $G:$ you (plural)
yutal, skin, hide
yu:!u, G: you (plural) (?)
yuwaringa, $M$ : poor fellow


## yOCABULARY IN SEMANTIC FIELDS

Margany and Gunya words are given side by side, Margany on the left, and separated by an oblique line, /. Where there is a dash on one side of the line the word is not known for that dialect. Where there is no oblique line the word is the same in both dialects. If the writer has some doubt about a word a question mark is used and if he thinks it probably wrong it and accompanying references are parenthesised; in the latter case it is usually because he thinks it is the wrong dialect or the wrong meaning and cross-references are given if needed. In some cases a word is parenthesised because it is given by only one informant who is not regarded as very reliable, while other informants give something different.

In general, the source of Margany items is Jessie Shillingsworth; if not, the initials of the informant(s) are given (and these items are regarded as doubtful). Gunya items are accepted as correct if given or accepted by two
informants (one of whom can be Hollingsworth in Curr) and no other informant expresses disagreement or doubt (note that the Hollingsworth list is used only to provide confirmation, never for disagreement). Other Gunya items are regarded as unconfirmed and initials are used to identify the source. Note that Gunya informants are identified by single initials and Margany informants by pairs of initials. The Gunya informants are Margaret McKellar (M), Ruby Richardson (R), Charlie McKellar (C) and Fred McKellar (F). The Margany informants are Jessie Shillingsworth (JS), Doug Young (DY), Baker Lucas (BL), May Clark (MC) and (collected by) Barry Foster (BF). Abbreviations for language or dialect names are Mg (Margany), Gn (Gunya), Bd (Bidjara), Gg (Gunggari), Bj (Badjidi), E (English). Other abbreviations used are $n$ (denied), a (accepted), d (doubted), o (other), u (unknown), poss (possibly), prob (probably), pres (presumably), Lg (language), Sp (species).

To help with the decipherment of notes some examples will now be explained in some detail. Item A15 was given as ita for Mg by JS (as indicated by the absence of initials; no identification is given even if other Mg informants also gave the word); for $G n A$ and $C$ gave it as ira, $M$ and $F$ gave it as itta but $P_{2}$ said that this was not Gn but Mg. As the writer believes that $R$ is probably correct on this point the last part - ita, M, F, MgR - is enclosed in brackets. Items B3: the two Mg words were given by (at least) JS, gabalgabal was given by two Gn informants as was gayadambal, but the latter word was not recognised by R. Item B9: balu was given by $F$ and accepted by $M$ but assigned to Bj, probably correctly, by R. Item Cl5: didgi was given for Mg by JS and accepted, but doubtfully, for Gn by R. Item D13: given for $G n$ by $C$ and known to $R$ but she was not sure what species it applied to. Item E24: $R$ thought C's word was the name of some kind of duck but had no idea what kind. Item 075: note the effect of the comma: (C, "rude") means that the item was given only by C and translated by him as "rude"; (C "rude") would mean that the item was given by two or more informants and translated "rude" by C.

Note that fauna terms (sections D to $H$ ) are translated only by common names; no scientific names are given as proper identifications have not been made. Where two names are given the former is the local common name and the latter the "specialists common name" as found in such sources as Cayley (1971) or McPhee (1959). In a few cases a few words of description are added.

| A - Body Parts and Products |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | head | gada | $/$ | bangun |
| 2. | brain |  | gabuny | (=egg) |
| 3. | head hair |  | duruny |  |
| 4. | grey (haired) |  | garu |  |
| 5. | bald head | gada gunari | 1 | bangun gudbiny |
| 6. | forehead | milgan | 1 | balga |
| 7. | face |  | nunydy ( F | gunytya) |
| 8. | eye |  | dili |  |
| 9. | tears |  | milyad |  |
| 10. | nose |  | gu: |  |




| 19. Alf McKellar |  |
| :--- | :--- |
| 20. Jinmy Hoopine |  | | yanta (seems also to be |
| :--- |
| the name of a sacred |
| stone) (C) |

C - Kinship
(Note: it is presumed that when the system was intact the terms given below were more complex in meaning, at least in English terms, than shown. For example, as well as father and father's brother, yabu may have been father's father's brother's son, father's father's father's brother's son's son, etc.)

1. father, father's brother yabu, yabunu, also yabudi (JS), (yabudu, $F$, see 2)
2. father's sister, mother-in-law wakan / yabudu ( $R$, see 1 and Add)
3. mother, mother's sister yaja, yananu, yanadi
4. mother's brother, father-in-law ganganu / gadiya (see also I8)
5. elder brother daguny
6. elder sister gaminu $/$ babaya (M) (mayada (C, MgR , see 8))
7. younger brother wabudu (aR)
8. younger sister mayada (see 6)
9. brother (not the eldest nor
the youngest) bama (
10. brother (unspecified) bu:dVa (or / buwada (R) (both from E)
11. buwadya(?)), (MC)
12. sister (unspecified) yangi (MC)
dida (BL) / dida (R, from E)
13. husband
14. brother-in-law budibari / (oadiny, C, cf. 20)
15. wife, sister-in-law guyada ( F also guyadambal)
16. son (of a man) didgi / didgi (adR), mugana (C, cf. 25)
17. son (of a woman) duwany (son of / duwan (M), duwana
speaker) duwana
(son of other)
18. daughter (of a woman (only?)) bukul / bukul (M, a later oLgR, C"cousin's daughter").
budgul (R)
19. son-in-law bunydya (also 'father-in-/ bunydya (R, also law' and 'mother's father', 'daughter-in-law', oLgC see 4)
20. daughter-in-law yabudu (also 'mother-/ (see 18) in-law', but see 2)
21. father's father nadiny (see also 13 and 22)
22. father's mother babiny (and see 23)
23. mother's father (see 18) (nadiny, C,F, see 20)
24. mother's mother gaminy / gaminy (C also 'father's mother'), bunduru (M, see 26 )
25. mother's mother's brother marany
26. Son's child (of woman?) mugana $/$ —... (see 15)
27. daughter's child (of woman?) bunduru ( $C$ 'son's child (of man?)')

D - Mammals

1. male
yangud (or yangud) $/$ bandayi $(F$, a d R).

| 3. | young (of animal)fur |  | gawula | (cf. Appendix 1, B5) |
| :---: | :---: | :---: | :---: | :---: |
| 4. |  |  | munydya | (cf. A66) |
| 5. | tail | bidi | , | banda ( $\mathrm{C}, \mathrm{dR}, \mathrm{cf}$. A48) |
| 6. | claw | bikany | 1 | binguny (C) (cf. A29) |
| 7. | horn | nalgana!ga | 1 | nalga, nalganalga |
| 8. | dog | nuda | 1 | nuta |
| 9. | wild dog, dingo |  | wand i |  |
| 10. | pup | (see 3) | / | bapapany ( M , from E?) |
| 11. | red kangaroo | bawuda | 1 | gula (bawuda (M, MgR)) |
| 12. | grey kangaroo |  | $/$ | fadgu (also in Bc, but cf. 14) |
| 13. | wallaroo | munguny | 1 | munguny ( $\mathrm{C}, \mathrm{SpdR}$ ) |
| 14. | wallaby | nadgu (cf. 12) | 1 |  |
| 15. | bilby | dangu | 1 | - |
| 16. | water rat |  | mudi |  |
| 17. | mouse | mankumanku | 1 | mangumangu |
| 18. | native cat | dambudu | / |  |
| 19. | possum |  | danud |  |
| 20. | porcupine, echi |  | badbida |  |
| 21. | bat | mat Yambidany | 1 | madyambidany |
| 22. | horse |  | yadaman |  |
| 23. | cattle | buliki <br> (from E bullock) | / | milgin (M, from E <br> milk (ing)), giyadu (C), <br> giyadal (F), giyada (R) <br> gi:dal (C) (all from E) |
| 24. | sheep |  | dumba |  |
| 25. | pig | $\cdots$ | / | daralawidy $(F, \quad o L g C)$, <br> bigibigi (from E) |
| 26. | goat | - | / | nanigudu ( C , from E nannygoat) |
| 27. | cat | - - | 1 | budyigat (from E pussycat) |
| E-Birds |  |  |  |  |
| 1. | bird |  | baya |  |
| 2. | wing | mala | 1 | $\qquad$ (cf. A26 but note that mala is not 'arm' in Mg ) |
| 3. | beak | bigi | 1 | - .-. (= 'lip' Bd) |
| 4. | feather | buda | 1 | buda (aR, 'duck's down') |
| 5. | egg |  | gabuny |  |
| 6. | nest (in tree) | bangara | 1 |  |
| 7. | emu |  | gulbari |  |
| 8. | plain turkey |  | bungan ${ }^{\text {y }}$ |  |
| 9. | brolga | guntara | 1 | guludku |
| 10. | pelican | daṭa | 1 |  |
| 11. | crane, heron |  | / | yamba: 1 iny |
| 12. | blue crane, grey heron | danginy | $/$ |  |
| 13. | crane, whitenecked heron | gumilibada | 1 | - |
| 14. | shag, b.lack cormorant | dararu | 1 |  |
| 15. | shag, pied cormorant | bintada (d) | 1 | - |
| 16. | diver | ni induny | / | - |




```
13. water snaiI
        dakara
H - Insects, etc.
    1. (bush) fly nimu
    2. blowfly, maggot guduru (also F) / guc̣u:
    3. mosquito bunginy / buduny
    4. sandfly muyulmuyul / ni:lbura (F 'march fly')
    5. bee dindiny
    6. (queen?) bee
    7. meat ant
    8. Sp. ant (little)
```

$\qquad$

```
        gadu
    9. Sp. ant mudun ('jumper ant') / muduu ('greenhead ant')
10. anthill
11. centipede
12. spider
ganda
    buguny
    du!idi
13. louse dit!i
14. nit bangu
/ mimany (M, see Appendix
    1, H5), nimany (?, R)
15. caterpillar
        nimun l
        nimun l
        nimun l
```



```
        _
        --
    /
        / muniny
        / guliny (M 'flea')
bind:
16. edible grub (in mulga (JS) and/or
        gidgea (R)) dalbany
17. edible grub (in coolibah (JS),
                in ground (R)) dadal (R)
18. leech
dunbany (R)
```

I - Language, Ceremony

1. language, speech nandiny (derived / dario from verb 'to speak'; may mean only 'speech')
2-7 Language names occurring in recorded corpus

J - Camp, Artefacts

2. camp yamba
3. house (European) gand $i$
4. humpy
5. humpy gunu
6. windbreak gadkiny (R)
7. spear wamada, wamadu, biwiny (?, BF) / wamara (F)
8. boomerang wanal
9. nulla-nulla (throwing stick) muru (F 'like a nulla-nulla
10. waddy (club)
11. shield
1. axe baluny, barany
11. knife, chisel guyan (see also 15)
daṭubira
budge
but smaller')
12. blade (of spear, knife) dinyil
1 baluny
15) / bangu (C, = BD 'stone')
2. yamstick (digging stick) wambu
3. pot, pannikin
1
1 gama
gaga (=Bd 'bark from elbow of
tree')




## N - FZora

(Note: where a botanical name is given, unless the initials JGB follow, a specimen has been identified by the Queensland Herbarium.)

| 1. tree | baga |
| :--- | :--- | :--- |
| 2. log | dulgada |
| 3. stick | data |

3. 
4. twigs, small branches - -
5. chips
/ bumbad
$/$ bidgii
/ mudguny (M, oLGR)
(bidgil, dR, see 5)
6. root
band il
7. fork magara (cf. A55)
balgara
8. leaves
dala
9. gum
10. hollow gubal

| $/ \quad$ mingu (R) |
| :--- |
| mugany |

12. step cut in tree trunk dingany
13. river gum (Eucalyptus camaldulensis - JGB)
gagula
14. coolibah (E. microtheca - JGB) bagura
15. box (E. populnea)
malad
16. bloodwood (E. dichromophloia; perhaps also E. terminalis - JGB)
diriny / gambul
17. Iapunyah (E. ochrophloia)

$$
\text { diwuru } / \text { diru (M yapany) }
$$

18. mulga (Acacia aneura)
19. gidgea (prob. A. cambagei - JGB)
bindiri (F bindidi)
20. ironwood (A. excelsa sp. angusta)
gubudu
21. river wattle (A. victoriae)
22. needlewood (A. farnesiana) bangara
23. rosewood (Acacia sp. - JGB) -

``` \(/ \overline{\text { dintiny }}\)
```

24. whitewood (Atalaya hemiglauca)
duluny
dand $i$
25. pine (Callitris columellaris)
26. kurrajong (Brachychiton populneum) -
$\qquad$ budbal
27. bottle tree (B. rupestre)
/ binydyi
28. sandalwood (Myoporum deserti) bangani
/ budgu (R)
/ dula
29. beefwood (Grevillea striata)
mangu ( R )
30. tea tree (paperback, Melaleuca linariffolia) gunga:liny (aR)


| 18. | long, tall | gudgan |  |
| :---: | :---: | :---: | :---: |
| 19. | short | gupu |  |
| 20. | wide | - / | bitan (C) |
| 21. | narrow | dutru / |  |
| 22. | straight | ding:1 | (R) |
| 23. | bent | wanga ('to be <br> bent', cf. 24) | nutinuti |
| 24. | winding | wangawanga / | gudiguḍi (C, olgR), wangawanga (aR) |
| 25. | a ball | / | gula:budiny (last vowel possibly u) |
| 26. | flat, shallow | yadpa!any / |  |
| 27. | deep | butyu, bața / | butyu |
| 28. | sharp | butya $/$ |  |
| 29. | blunt | bugu (cf. 55, 56) / |  |
| 30. | (be) wet | dandi / |  |
| 31. | dry | ya!ga |  |
| 32. | hot | buwany |  |
| 33. | cold | yaga |  |
| 34. | full | minya |  |
| 35. | heavy | utiny |  |
| 36. | 1ight | budyabud | dya (aR) |
| 37. | rotten | gatya |  |
| 38. | hard | miti / |  |
| 39. | soft | munany / | muni |
| 40. | strong | bikara / | $\begin{aligned} & \text { gudgi (also 'tight', } \\ & \text { 'fast (of running)') } \end{aligned}$ |
| 41. | vigorously (e.g. (hi fast, (speak) lo | hit) hard, (run) oudiy) yabana | $a$ |
| 42. | quickly | / | gadugadu (see also Y4) |
| 43. | slow, quiet, gentle | e igaru |  |
| 44. | slow (sluggish) |  | gunydyu |
| 45. | noisy | ilyari / | idiny , idinyidiny (C) |
| 46. | quiet, still | bukuny |  |
| 47. | old (of things) | matya (= Iong ago)/ | udu (M), wadgudany ( $F$, cf. 49) |
| 48. | good | mudga | (F also mudgamudga) |
| 49. | bad | wadguwad | dgu (C also wadgu) |
| 50. | true, right | yanydya | yanydya (C), wadi (R), wadiganiny (R) |
| 51. | false | 1 | ba! iny |
| 52. | salty, bitter | gat 1 |  |
| 53. | raw, green (unripe) | $)$ gunga |  |
| 54. | bare, bald . | -- (see A5) $/$ | gudbiny |
| 55. | blind | dilibugu / | dilimuga, muga, mugamuga |
| 56. | deaf | maņabugu $/$ | mana gududany, mana bugu (R) |
| 57. | (be) hungry | gabira 'hunge gabiḍb | (M) (Root is gabid. <br> $r$ ', hence also $F$ <br> ari 'hungry') |
| 58. | (be) thirsty | nadyari $/$ | nandari (R, cf. V35) |
| 59. | greedy | 1 | yunany, yalka |
| 60. | bilious | - $/$ | garadany |
| 61. | nauseated <br> (Note: the diffe | erence between 60 and | mulanymulany (cf. A73,V7) 61 is not clear.) |



| 24. | disappear | nari | dinbi |
| :---: | :---: | :---: | :---: |
| 25. | track | dina wala dina matya | banda |
| 26. | hunt, go hunting | biya |  |
| Q - Rest, existence |  |  |  |
| 1. | sit, stay | binda |  |
| 2. | stand, be standing | dana |  |
| 3. | stoop | yuli / |  |
| 4. | iie, camp | una (occasionally nuna) | una |
| 5. | hide (intr.) | gunyili (presum- / ably reflexive of gunvi) | $\begin{aligned} & \text { gunyi (R), gunydyi (C) } \\ & \text { (cf. R 29) } \end{aligned}$ |
| 6. | be lost | wambana / | wamba (R), wambal i <br> (presumably reflexive of wamba, C) (cf. R 26) |
| 7. | float | miṭi / |  |
| 8. | be, become | 1 | wi: (C) (see 4.11) |
| R - Induced rest and motion |  |  |  |
| 1. | chase, hunt away | una |  |
| 2. chase (fish towards net) didba (cf. v 26) |  |  |  |
| 3. | run away with | idari / | idi (cf. P 10) |
| 4. | send, let go (cf. 8 | 8) dabi | (C) |
| 5. | move (trans.) | nuḍama / | dadi (R) |
| 6. | shift camp | yungi / | dadi (R) |
| 7. | leave (trans.), put | t down ida |  |
| 8. | let go, leave alone | muy (MC) 7 |  |
| 9. | stand up (trans.) | danma |  |
| 10. | get, pick up, catch | mada / | muga |
| 11. | get | gandi / |  |
| 12. | bring, take | gani |  |
| 13. | bring back | gambinYma / |  |
| 14. | carry | walbi | (C) (F wilba "cart") |
| 15. | dip up (water) | dunga | (aR) |
| 16. | put in | dulu / | (dulba ? R, cf. 35, S22) |
| 17. | take out | dangu | (R) |
| 18. | gather up | madgama / |  |
| 19. | hold | munda / | baṭa |
| 20. | lift, pick up | bunba |  |
| 21. | hang up | imbinyma | (F), wandima (C wandi) |
| 22. | spread | madima |  |
| 23. | heap up | idama (cf. 7) / | nuduma (C) |
| 24. | drop | dangima / | banbuma |
| 25. | spill, pour | galga | (R) |
| 26 | lose | wambadma / | wambanma (R) <br> (wambanmali C) (cf. Q6) |
| 27. | give | wa: |  |
| 28. | steal | gunda |  |
| 29. | hide (trans.) | gunyima | (R) (gunydyi C) (cf. Q5) |
| 30. | push | yulbi |  |
| 31. | pull | yada |  |
| 32. | roll (trans.) | nudba / |  |
| 33 | point (trans.) | muma (indirect / |  |
|  |  | object in allative cas |  |



| 4. | talk about |  | balbi | (C. ABS object) |
| :---: | :---: | :---: | :---: | :---: |
| 5. | say, tell |  | gulba |  |
| 6. | show | nubari | 1 |  |
| 7. | call (out to) | manydya (ABS object) | 1 | gula (ABS (C), DAT (F) object) |
| 8. | call out (intr.) | wada | 1 |  |
| 9. | scold, rouse on |  | diga |  |
| 10. | sing |  | banydya |  |
| 11. | whistle |  | gubi |  |
| 12. | tell lies | gadi | $/$ | baliny gulba |
| 13. | ask (someone to do | something) | winydy |  |
| 14. | ask (a question) |  | / | dagu (C) |
| 15. | ask for | nima | 1 | daba (C, MgR) |
| 16. | count | banyma | 1 |  |
| 17. | call, name | gandi | 1 |  |
| 18. | forget | mana igura | $/$ | mana iguri (R) |
| 19. | send (a message) |  | dabi | (R) (cf. R 4 ) |
| V - Corporeal |  |  |  |  |
| 1. | eat, drink |  | dala |  |
| 2. | bite |  | bada |  |
| 3. | taste | nuka | 1 | dinba (dR) |
| 4. | suck |  | bulya |  |
| 5. | swallow |  | ganyga | (a LgdR) |
| 6. | be full, be satisfied |  | (bat i 'stomach') |  |
| 7. | vomit |  | mula |  |
| 8. | smell |  | nuda |  |
| 9. | breathe | buyu bityu |  | buyu bidyu |
| 10. | blow, pant, smoke (tobacco) | bungu |  | buya ( R also bungu 'to smoke') (cf. S21) |
| 11. | smoking (tobacco) |  |  | bumbiny ( $F$, from a verb bumbi?) |
| 12. | be out of breath | buyu badi | 1 | buyu gundi |
| 13. | cough | gunkuru baba | 1 | -- |
| 14. | kiss |  | nunda |  |
| 15. | open (eyes, mouth) |  | bambu | (cf. S9) |
| 16. | close (eyes, mouth) | gamba, munga mouth | (of / | dulba (of mouth M, of eyes R) (cf. S2 ), guduli (of eyes M) |
| 17. | sweat | nanybara (cf.A72) / |  | guduli (of eyes M) |
| 18. | excrete (urine, fae | ces) | dada | (BL) |
| 19. | copulate |  | danda | (BL, DY, F) |
| 20. | give birth | gat $y_{u}$ ( $=$ tie) | 1 | nanda (C, cf. W2) |
| 21. | grow | yungu | 1 |  |
| 22. | be tired | - | 1 | bundany badara (M), mandari |
| 23. | sleep | una |  |  |
| 24. | dream |  | bigiri | (Rbigiri) |
| 25. | wake up (intr.) |  | buda | (cf. P6) |
| 26. | wake up (trans.) |  | didba |  |
| 27. | feel well | - |  | imbali (M, reflexive of 'hear') |
| 28. | be itchy | bindid: <br> biri | 1 | di:gal (?R) |
| 29. | scratch |  |  | duda(ni) (M), bada (R), <br> badga (C), (bindidi, F, |
|  |  |  |  | cf. 28) |


| 30. | tickle | - | / gidyima |
| :---: | :---: | :---: | :---: |
| 31. | tease |  | gangima |
| 32. | swell |  | bunguli ( R ) (cf. A79, but seems to be reflexive form of a verb root) |
| 33. | be sick | buri | / gati badi |
| 34. | die | gundi (cf. S4) | / ula, gundi |
| 35. | feel hot |  | nandari (cf. 058) |
| 36. | feel cold |  | yagali (cf. 033) |
| 37. | shiver | banbana | 1 .... |
| 38. | be afraid |  | gala |
| 39. | like | dati (DAT object) datima (ABS obje | t), dat! (DAT object) ject) |
| 40. | laugh |  | yadi |
| 41. | cry | badi | 7 bati |
| 42. | sulk |  | gumira (adR) |
| W - | Non-human actions bark | and states wangu | / wanyguli (M) , (wangu R) |
| 2. | lay (eggs) | $\qquad$ | / クanda (M) (F dada, cf. |
| 3. | rise (of sun) |  | waga ( F also of dust) (gani C) |
| 4. | set (of sun) |  | ganydyara (= go down) |
| 5. | shine, be shiny |  | midili |
| 6. | fall (of rain) | dangi (= fall) | / badili (presumably |
| 7. | run (of water, bloo | d) wara (= run) | reflexive of badi, see 9) <br> / mada (?R), mada (C, of water, = run) bundu (C, of blood) |
| 8. | blow (of wind) | $\begin{aligned} \text { banydyi }(= & \text { come } \\ & \text { out }) \end{aligned}$ | / buya ( $\mathrm{R}, ~=\mathrm{blow}$ ), (buba, $C$, = rub) |
| 9. | be damaged, torn, b | broken | badi (see 6 and V33 for the only known uses of this verb in Gunya; also V12) |


| X - Location |  |  |  |
| :---: | :---: | :---: | :---: |
| 1. | north |  | gadbu |
| 2. | south |  | guta |
| 3. | east |  | nadba |
| 4. | west |  | bata |
| 5. | near, close | wina | $/$ bindiny |
| 6. | far |  | gambari |
| 7. | in front | - | / (gadbula C, cf. 1) |
| 8. | behind |  | wawu (C) (heard only as locative) |
| 9. | on the side |  | widgu (R) |
| 10. | right | wadguny (d) | 1 - |
| 11. | left | gamara | $/$ - |
| 12. | on this side | inadi | $/$ inagadiny |
| 13. | on the other side | nubadi | / 万unagadiny ( F ) , nubagadiny |
| 14. | high, up there | gurara | / mira (R) |
| 15. | hither, this way |  | ugu |
| 16. | away |  | gundu |

[^3]1- yesterday yurinydya / gunda (M, dR), (guliru, $=\mathrm{Bd}$ ), (matyamatya M, cf. 5,7)


## APPENDIX I

## MARGANY AND GUNYA VOCABULARIES FROM CURR

For some discussion of these vocabularies see 1.2. The vocabularies are given with the order and numbering as in the semantic fields vocabulary; items not found there are numbered with a postposed letter, as H4a. The ordering and numbering are according to what are believed to be the actual meanings of the words; these may differ from the meanings given in the English column. This gives Curr's English gloss, the next two give Playfair's and Hollingsworth's words, respectively, and the last gives references to other items to which they might correspond, corresponding items from Bidjara or other dialects, or any other relevant comments. If the word is the same in Margany, Gunya and Bidjara a phonemicisation only is given in this column. References to other dialects are given only if the word does not seem to belong to any of these three. Where a crossreference uses the word 'above' it is to the semantic fields vocabulary; otherwise it is to the appropriate item in the appendix. The abbreviation $u$ means 'the word for this is not known in the dialect(s) whose abbreviation(s) follow(s) (or in Mg , Gn , and Bd if no abbreviation follows)'; for language name abbreviations see the introduction to the semantic fields vocabulary.

| No. | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| A |  |  |  |  |
| 1 | head | toogo | thoonggoo | Bd dungu |
| 3 | hair of the head | turoin | thooroo | Mg , Gn duruny |
| 5 | bald |  | goorpin | Gn gudbiny |
| 8 | eye | tille | teelee | dili |



| No. | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| B |  |  |  |  |
| 4 | an old woman | kamin |  | Mg 'elder sister' <br> gaminu, C6 'mother's mother' Mg, Gn gaminy, C23, Bd gami |
| 4 | " |  | yungun-kyearroo 'mother' yana(nu) C3 and see B3 |  |
| 5 | a young man | nauka |  | 'young' 071, Mg nanga, Bd nanga, Gn 'young man' nangadu |
| 5 | " | kow1a | coul, cowel | Bd 'young man who has been through a certain (details unknown) grade of initiation' gawula, and cf. D3 above. |
| $\begin{aligned} & 9 \\ & 9 \end{aligned}$ | a baby | kando barko-de | carndoo | Gn, Bd 'child' gandu |
| 9 | children | yauga | carroo |  |
| 10 | a friend |  | noola | Bd nula |
| 11 | a stranger |  | coongai | ?cf. Yanda (Curr No. 103), 'white man' |
| 12 | $\begin{gathered} \text { white } \text { man } \\ \hline \end{gathered}$ | wedo |  | Bd widu |
| 12 |  |  | coign | Prob. guwiny; cf. <br> Kungkari (Curr No. 107 |
|  |  |  |  | Koongeri 'ghosts' |
|  |  |  |  | gooing), Iningai (Curr No. 152 'white man' coyn), and |
|  |  |  |  | Wadiigu (?, Curr No. 157, Kanoloo, 'white man' koin). |
| 16 | $\begin{gathered} \text { ghosts } \\ \text { " } \end{gathered}$ | wanbo |  | Mg , Gn wanbu |
| 16 |  |  | weettho | Bd widu 'white man', 'dead person' |
| C |  |  |  |  |
| 1 | father | yabino <br> yangardo kaugerno takkoin maiara | yabboon <br> (cf. B4) | yabu(nu) |
| 3 | mother |  |  | yana (di or nu) |
| 4 | uncle |  |  | Mg ganņanu, Bd gañan |
| 5 | elder brother |  |  | daguny |
| 6 | elder sister |  |  | $\overline{M g}$ mayada, see C6, C8 above; Bd mayada 'woman' |
|  | younger brother | wabardo | wobboodoo | $\left\{\begin{array}{l}M g, ~ G n ~ w a b u ̛ ̣ u, ~ B d ~\end{array}\right.$ wabu 'elder sister' barinu, Gn 'elder sister' bayidila, ?Gn 'elder sister' babaya |
| 7 | mother |  |  |  |
|  | unger sister | bairno |  |  |
| 12 | husband | koungal | coongul | Mg , Gn gungal, Bd gungayila |
| 14 | wife | querda | cooeearter | Mg , Gn guyaḍa, Bd guyadiyila |
| 14 ? | sweetheart |  |  | See 010. |


| No. | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| C |  |  |  |  |
| 15 | son | tirgi |  | $\mathrm{Mg}, \mathrm{Gn}$ didgi, Bd dilgiyila 'son (of a man)' |
| 16 | daughter | toana |  | duwana 'son (of a woman)' |
| D |  |  |  |  |
| 8 | tame dog | oura | ngoora | $\mathrm{Mg}, \mathrm{Bd}$ guda, Gn guta |
| 9 | wild dog | wante | wunthie | wand i |
| 11 | kangaroo | bowra | bowerra | bawuda |
| 14 a | wallaby |  | barapa | Bd badba 'pademelon' $(\mathrm{uMg}, \mathrm{Gn})$ |
| 15a | bandicoot |  | ornee | ?Bd wanany 'doe possum' (u Mg, Gn) |
| 19 | possum | tangort | dongoorel | dagud |
| 21 | the bat |  | mutchanbirra | Mg matyambidany Gn madyambidany, Bd madyambiny |
| 23 | cattle |  | gareril | Gn giyadu, giyadal |
| E |  |  |  |  |
| 1 | birds |  | bee-ee | Mg , Gn baya |
| 4 | feathers |  |  | See A66 |
| 5 | egg | kapoin | carboon | gabuny |
| 7 | emu | koolberri | goolbae | gulbari; Bd also gulbayi |
| 8 | wild turkey | bungain | boongie | bungany |
| 9 | native companion | kountara |  | Mg guntara (uBd) |
| 10 | pelican | tarta |  | Mg datta (u Gn, Bd) |
| 17 | swan | kotero |  | Mg , Gn guturu (u Bd) |
| 18 | wood duck | kournma |  | Mg gunma (u Gn, Bd) |
| 19 | black duck | mangara |  | Mg , Gn manara (u Bd) |
| 24 | black duck |  | munburra | ? Gn manmada 'Sp. duck' |
| 30 | eaglehawk | koothalla | kootthulla | gudala |
| 32 | a kite (blood) |  | coomma | Mg?, Gn gumun and cf. A69 |
| 38 | crow | wada | wotthar | Gn wada |
| 38 | " | wagin |  | $\mathrm{Mg}, \mathrm{Gn}$ wakan, Bd . waragan |
| 39 | laughing jackass | kakonbur |  | $\mathrm{Mg}, \mathrm{Gn}$ gagungudu, Bd gagubada |
| 47 | white cockatoo | tigarde | teecaddy | digadi |
| F |  |  |  |  |
| 1 | snake | munta | moonta | Bd munda |
| 6 | iguana | barna |  | $\mathrm{Mg}, \mathrm{Gn}$ bana |
| 7? | iguana |  | quarrin | Bd waruny |
| 13 | fresh-water turtle |  | beerdee | Gn bidi |
| G |  |  |  |  |
| 1 | fish |  | gooioo | guyu |
| 1 ? | " | ude |  | See K8 |
| $5 ?$ | " | munge |  | Mg , Gn banydya 'boney bream' (u Bd) |
| 3 ? | golden bream |  | cuarree | Mg, Gn gari, Bd gaḍi <br> 'yellowbelly' (= <br> 'golden perch') |


| No. | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| G |  |  |  |  |
| $6 ?$ | perch |  | 00-cooroo-coo | a Mg, Gn gudba (u Bd) |
| 10 | crayfish | boga11y | bookillee | bugi ${ }^{\text {i }}$ |
| 13 | mussel |  | botherercur | Mg, Gn badid |
| H |  |  |  |  |
| 1 | fly | nemon | neemun | $\mathrm{Mg}, \mathrm{Gn}$ nimun, Bd nimun |
| 2 | blowfly |  | qoodooroo | Mg, Bd guduru, Gn gudu: |
| 3 | mosquito | boithon | boothoon | Gn, Bd buduny |
| 4 | sand fly | bea |  |  |
| 4 a | march fly | Eunge |  | ( $1 \mathrm{Mg}, \mathrm{Gn}$ ) |
| 5 | native bee |  | meemun | Gn mimany 'Sp. ant'?, see H8 above |
| 8 | ant | nimmein |  | Gn nimany |
| 13? | louse |  | carra | ? Bd gara 'centipede' |
| 18 | leeches |  | moonquin | (u Bd) |
| I |  |  |  |  |
| 8 | name |  | ngy | Mg, Gn nar: , Bd nay i |
| J |  |  |  |  |
| 1 | camp | yamba | yumba, yumborra yamba |  |
| 2 | house |  | goondy Calso <br> goondy-gallo <br> 'belonging to house') | Mg, Gn gund $i$, Bd gund $i$ a |
| 5 | war-spear | mingoo |  |  |
| 5 | " | babaino |  | ?cf. Mg baba 'to stab', 58 above |
| 5 | 11 | baka | barga | baga, see N1 |
| 6 | boomerang | wangal | wongel | wanal |
| 7 | wommera | morro | mooroo | see next item |
| 7 | a club |  | mooroo | $\mathrm{Mg}, \mathrm{Gn}$ muru, Bd mudu |
| 9 | shield | bongo | bauroogoo | budgu |
| 9 | " | uba |  |  |
| 10 | tomahawk | paloin | ballone | Mg, Gn baluny |
| 11a | fish-hook |  | au |  |
| 13 | a yam-stick |  | cuntha | Mg, Gn gana, Bd gana |
| 14 | calabash |  | cookar | guga |
| 19 | net | kooli | coolin | Mg, Gn gulany |
| 25 | rug, clothes |  | corrie | Mg , Gn guri, Bd gudi |
| 25a | girdle |  | beera | Bd biran 'waist strap to hold boomerang' |
| K |  |  |  |  |
| 1 | fire | boodi | booardie | budi |
| 1 | " | wee |  | Bjetc. wiyi |
| 3 | smoke | toga, tuka | thook | Bd duga |
| 7 | food | (see V1) | muntha | Gn manda, Bd manda |
| 8 | food | yude | yuddy | yudi 'meat' |
| 9 | honey, sweet |  | gootcha | gudya |
| 9 | native bee | gudja |  | gudva |
| 12 | milk | pathan |  |  |
| 16 | water | koommoo | kanmo | gamu |


| No. | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 16 | water |  | ammo | Gg amu |
| 16 | " | kallan |  |  |
| L |  |  |  |  |
| 2 | the sky |  | bandara | bandada |
| 3 | sun | todo | thoodoo | Gn, Bd dudu, Mg duru |
| 3 a | sunbeams |  | gangara | u |
| 4 | moon | kokkarra | kakada | Mg, Bd gagada |
| 5 | star | neo-do | nguardoo | Mg, Gn niyadu |
| 6 a | Magellan clouds |  | millerrie | u |
| 7 a | Evening Star |  | tar | u |
| 8 | day | thanauga |  |  |
| 8 | 11 |  | nulyambo goondaroo see Y3 and Y8 |  |
| 8 | Iight | boain |  | Mg 'daytime' buwany and see 030 above |
| 8 | " |  | teelee bookooroo cf. A8 |  |
| 8 ? | heat | yattin |  | Bd yada 'daylight' |
| 9 | night | pitta |  | Mg bitta |
| 9 | night, dark |  | gobear |  |
| 10 | a shade |  | mullo | malu |
| 14 | clouds |  | yo-gan | Bd yugan, and see 16 |
| 16 | rain | ukau |  | Mg, Gn yugan, cf. 14 |
| 16 | " | tantinga |  |  |
| 16 | " |  | cammotyingoora cutchun | See K16 |
| 18 | rainbow |  |  | Mg gatyin (u Gn) |
| 19 | thunder | barri |  | Mg , Gn bariny |
| 19 | " |  | noola-noola |  |
| 21 | hail |  | mookooloo | ?mugadi |
| 23 | frost |  | meetharra | midad |
| 24 | dew |  | bauanee | ( u Gn ) |
| 25 | wind | yerga | yarraga | yadga |
| 25a | north-east wind | kauymo |  | u |
| M . |  |  |  |  |
| 2 | a watercourse |  | thulla |  |
| 7 | a spring |  | mootangurra | (Place Name?) |
| 8 | native well |  | incurra | $\mathrm{Mg}, \mathrm{Gn}$ ingada (u Bd) |
| 9 | ground | tante | thundi | Gn dandi, Bd nandi |
| 9 | " | taka |  | Mg daka |
| 10 | hill | banko | bungo carripooi Bd bangu, see M17 (stones high) and Xl |  |
| 10 | hill | morella |  |  |
| 11 | plain country |  | goonni | Bd gunayi, Mg Gn gunari |
| 13 | Warrego River |  | curdeela (i. river of sand | Mg, Gn gaḍila, Bd gadiya 'sand' |
| 13 | sand | banko barre | curdeer | see previous item |
| 17 | stone |  | bungo | Bd bangu |
| 17 | " |  |  | Mg, Gn bari <br> Mg, Bd gudi, Gn gudin |
| 19 | red ochre or red |  | cootthae |  |
| 21 | scrub |  | bardoo | ?Gn badu 'river' |
| N |  |  |  |  |
| 1 | tree | pugga | barga | baga |
| 1 | wood | baka | bargar | baga |
| 6 | bark | beya | biar | Bd biya |


| No. | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| ${ }_{6}$ |  | morgoin |  | Gn mudguny |
| 9 | leaves of tree |  | thallar | Mg, Bd dala |
| 9 a | flowers |  | oba | Bd uba (u Mg, Gn) |
| 9b | seed |  | pulpart | ( $\mathrm{u} \mathrm{Mg}, \mathrm{Gn}$ ) |
| 10 | gum |  | mookine | mugany |
| 13 | gum tree | kacola | carcoola, carcoolin | Mg , Gn cagula |
| 14 | box tree |  | barcoora | bagura 'coolibah' |
| 14 | " " |  | koola bar | English? |
| 16 | bloodwood tree |  | cambool | Gn gambu! |
| 18 | mulga tree |  | pindeea | Mg , Gn bindiri |
| 18a? | yarran tree |  | weelbala | Bd widbal 'myall' but note Gn N34 'dogwood' widbil |
| 19 | gidya tree |  | cobardoo | gubudu |
| 25 | pine tree |  | pyingerra | Mg, Gn banydyara |
| 26 | currajong tree |  | bingee | Gn binydyi (u Mg) |
| 27 | bottle tree |  | minderra | Bd mindad ( u Mg ) |
| 38 | wild orange |  | bumble | Galali bampuli (u Mg) |
| 40 | quandongs (red) |  | thianburra | Gn danybad (also perhaps Bd ; i Mg ) |
| 40a | quandongs (white) |  | theewau | 1 |
| 46 | root of water-1ily |  | gobbeer | Gn gabira (u Bd) |
| 49a | reeds |  | teecull | u |
| 50 | grass | woton | ootthoon | udun |
| 50a | kangaroo-grass see |  | quoilpin | u |
| 0 |  |  |  |  |
| 1 | no | yamma | yumma | Mg, Gn yama 'no, nothing' |
| 2 | one | wongara | onkera or wonk | era Gn , Bd wangara |
| 3 | two | boolardoo | paulludy | Gn bulaḍi, Bd bulaḍu |
| 3 a | three |  | paulludy onker | a cf. 2,3 |
| 35 | four | boolardooboolardoo | paulludy paull | udy cf. 3 |
| 4 | three | koorbara |  | Mg gudbara 'a few' |
| 5 | plenty | waintu |  | ? Punthamara wanru |
| 5 |  |  | mu1la-mulla | gn malamala |
| 5 | big | mulla-mulla |  | Gn malamala 'many' |
| 10 | together or sweetheart |  | æilpau |  |
| 13 | black colour |  | goorol | Mg , Gn gudul |
| 14 | white |  | coba-coba | Bj etc. kupa |
| 15 | red |  | (see M19) |  |
| 16 | big |  | bunyarty | Gn banya:ri |
| 17 | 1ittle | kioo | kyeu | Bd gayu (usually |
| 17 | " | kapoin |  | Mg gapuny |
| 17 | " |  | thippo | Gn dyipu |
| 18 | tall |  | goorriccan | Mg , Gn gudgan |
| 18 | big |  | gooricanbe | Bd gudganbadi 'tall' or -be may be bari ~ -bayi 'CON' |
| 19 | short |  | coongoon |  |
| 27 | deep |  | bootchoo | Mg , Gn but ${ }^{\text {u }}$ |


| No. | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 0 |  |  |  |  |
| 32 | heat | poath (and | see L8) |  |
| 32 | " |  | booine | buwany |
| 33 | cold | yakul | yuckall | yagal |
| 37 | a stink |  | cutcha | Mg, Gn gatya, Bd gadya |
| 38 | hard |  | gurrikill | Gn gadgil |
| 39 | soft |  | mooning | Mg munany, Gn muṇi |
| 42? | run quick |  | ty-ty |  |
| 43 | gently |  | ee-ik-carra | Mg, Gn igaru |
| 47 | old, worn out |  | mutcha | Mg mat ${ }^{\text {a }}$ |
| 48 | good | murga | mooricar | Mg , Gn mudga |
| 48 | " |  | mickanberri | Bd miganybadi |
| 49 | bad | warwarro | warricowarrico | $\mathrm{Mg}, \mathrm{Gn}$ wadguwadgu, Bd wadgu |
| 49 | " | bauya |  | Dharawala probably banya |
| 50 | truly |  | yangger | yan $y_{\text {dya }}$ |
| 52 | nasty |  | curtee | $\mathrm{Mg}, \mathrm{Gn}$ gaṭi, Bd gadigadi |
| 52 | bad |  | curthee | see preceding item |
| 54 | bald |  | goorpin | Gn, Bd gudbiny |
| 55 | blind |  | mootchoo | Kungkari mutyu (Gn mudyimudyi) |
| 57 | hungry | kabid | cobertabae | Mg, Gn gabid 'hunger' gabidbari 'hungry' |
| 57 | $1:$ | kuliatin |  |  |
| 68 | thirsty | koballa |  | cf. 57 |
| 58 | " | mariatin |  |  |
| 53 | unwell |  | wee-wee | Pidgin? |
| 66 | tired |  | coolyarlar |  |
| 73 | wild |  | booramby |  |
| P |  |  |  |  |
| 1 | walk | wegauga | wygella | Gn, Bd wadya |
| 1 | " | tala |  | ? Mayi-Kulan, Ngawun tala 'go away' |
| 1 | come on | wadyinko |  | Gn, Bd wadya |
| $2 ?$ | come on | kuga |  |  |
| 2 | come on |  | ookoo cuntha | ugu 'hither', Mg, Gn gana 'come' |
| 6 | to get up |  | boorangee | Mg, Gn buda, Bd bura |
| 9 | run |  | bawdinya |  |
| 21 | to swim |  | gnoombula | Gn numbi, Bd nunbida |
| Q |  |  |  |  |
| 1 | sit | binda | pinda | binda |
| 1 | " | begauge |  |  |
| R |  |  |  |  |
| 10 | take hold |  | murrel | Mg mada, Bd mara |
| 14 | to carry |  | bungil | ? Bd bunda |
| 27 | to give |  | goombul | Bd gumba |
| 27 a | to exchange |  | buck-kin |  |
| 28 | to steal |  | goonthama | $\mathrm{Mg}, \mathrm{Gn}$ gunda, Bd gunda |


| $\frac{\text { No }}{\mathrm{S}}$ | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| 1 | to shoot or kill |  | goonill | Gn , Bd guni |
| 2 | to throw |  | coochamyar | Mg gutya, Gn, Bd gudya 'hit with missile ${ }^{\prime}$ |
| 4 | broken |  | goondilla | Mg , Gn gund i |
| 6 | to cut |  | bobellar | babi |
| 7 | to chop out |  | bunge 1 | banydyu |
| 14 | to dig |  | barcuila | baga |
| 15 | to cover |  | gumbun | gamba |
| 17 | to cook or burn |  | cobella | Gn, Bd guba |
| 18 | to roast |  | wat-thool | wadu |
| T |  |  |  |  |
| 2. | see | naga | knarku1la | Gn naga, Bd naga |
| 2 |  | neinne |  | Mg na: |
| 7 | to hear |  | imbella | imbá |
| $7 ?$ | listen |  | qooroo | an interjection? |
| U |  |  |  |  |
| 5 | to talk |  | goolparra | Mg, Gn gulba |
| 7 | to cooee |  | coolella | Gn gula |
| 11 | to whistle |  | coobeel | gubi |
| 12 | to pretend |  | cotthingella | Mg, Bd gadi |
| V |  |  |  |  |
| 1 | eat | ukal | uckerrer, uga | Bd yuga |
| 1 | food | ukulgo |  |  |
| 1 | crink |  | uckerrer | " |
| 1 | " | tappa |  | Wangkumara tapa |
| 1 | " | wadya |  |  |
| 1 | thirsty |  | cammo yuckerer | gemu 'water', Bd yuga 'eat, drink' |
| 2 | to bite |  | bothilla | bada |
| 2 | eat | pautein |  | bada 'bite' |
| 3 | to taste |  | thallal | $\mathrm{Mg}, \mathrm{Gn}$ dala 'eat, drink' |
| 5 a | to spit |  | cunther |  |
| 8 | to smell |  | eer-ai-bae | Noun with CON suffix -bari ~ -bayi; Bd idi' 'smell (noun)' |
| 10 | to pant |  | booeeyar | Gn buya |
| 17 | to perspire |  | gnumburra | Mg (and Gn ?) nanybara |
| 23 | sleep | uga | oga | Bd uga 'asleep' |
| 24 | to dream |  | pigeelar | Mg, Gn bigiri, Bd bigiyi |
| 30 | to itch |  | gidgeela | $\begin{aligned} & \text { Gn gidyima 'tickle' } \\ & \text { (u Mg) } \end{aligned}$ |
| 33 | to be sick |  | (see A22) |  |
| 34 | dead | kuntine |  | Mg gund i |
| 34 |  |  | woollul | Gn, Bdula |
| 38 | frightened |  | cullulla | Mg, Gn gala |
| 40 | to laugh |  | yat-thin | yadi |
| 41 | to cry |  | parrin | Mg, Bd badi, Gn bati |


| No. | English | Playfair | Hollingsworth | Comments |
| :---: | :---: | :---: | :---: | :---: |
| X |  |  |  |  |
| 1 | North |  | carripooi | Mg , Gn gadbu (and see M10) |
| 2 | South |  | goorarndoo | Mg , Gn guta |
| 3 | East |  | nararpararndoo | Mg, Gn nadba |
| 4 | West |  | parrarndoo | Mg , Gn batta |
| 6 | a long distance |  | cumburrie | $\mathrm{Mg}, \mathrm{Gn}$ gambari, Bd gambadi |
| 15 | come on |  | ookoo cuntha | See P2 |
| 16 | be gone |  | goondoo | gundu 'away' |
| Y |  |  |  |  |
| 1 | yesterday | urindia |  | Mg yurinydya |
| 1 |  |  | coollerie <br> moockeroo | Bd guliru, mugaru both 'yesterday', see Y8 |
| 2 | today | ̇imba |  | Mg gayimba, Curr No. 153 Yangeeberra ayimba |
| 3 | today | nelya |  | Gn nilya, Bd niyila 'now' (u Mg) |
| 3 | by-and-by |  | ngeelyambo | See previous item |
| 6 |  | baboo | bobo | Dharawala babu; Bd gabu 'later' |
| 6 | directly |  | bobbo | See previous item |
| 8 | tomorrow | kundaroo | goonderroo | ```gunda, 'yesterday' in Gn, 'night time' in Bd``` |
| 8 | " |  | mookerroo | mugaru (also <br> 'yesterday' in Bd) |
| 9 | long since |  | wiearra | ?cf. B3 |
| 10 | always |  | wundoo | Bd wandu 'often' |
| 11 | more |  | cullar | gala, 'again' in Mg , Gn , 'now' in Bd |
| 11 | to do again |  | cullaro | Mg galadu 'again' |
| Z |  |  |  |  |
| 1 | yes | yoko |  |  |
| 1 | 11 |  | ngowa | Mg , Gn yawa |
| 1 | " |  | yowie | [yuwai], may be Pidgin |
| 2 | no |  | curther <br> (also 'not') | Gn, Bd, gada, Mg gara |
| 2a | I don't know | y amme |  | ?cf. 01 |
|  |  | items ar | not found in | the semantic |
| fields vocabulary: |  |  |  |  |
|  | I | ngai-ia | ngia, ngyer | naya |
|  | I |  | nginya | ?Mg, Gn nana 'me' |
|  | I | itu |  | See next item |
|  | mine |  | ngatchu | $\mathrm{Mg}, \mathrm{Gn}$ gat $\mathrm{y}_{\mathrm{u}}, \mathrm{Bd}$ gadyu |
|  | you | yinda | inda | inda |
|  | you | idno |  | Mg , Gn 'your' inu (Bd yunu) |
|  | you and I |  | ngulii | nali |

```
English 
who?
what?
where?
\begin{tabular}{|c|c|}
\hline Ho & Comment \\
\hline yourra & \[
\begin{aligned}
& \text { Gn, Bd you (plural) } \\
& \text { yura (Mg ida) }
\end{aligned}
\] \\
\hline oonthooroo & Bd nunduru \\
\hline annee & nani \\
\hline ntharndo & Bd indiya, Gn ind \\
\hline
\end{tabular}
A number of bound morphemes can be found in the above
lists. They include the following:
-nu and du on kinship terms (see 3.4, and Breen 1973: 137-8), Cl,
    C3, C4, C7, C8.
-galu, genitive, J2
-bayi, concomitant, 018, 057, V8
-:ndu, on 'where' and on compass point names, X2, X3, X4, (cf.
        3.1)
-badi, as in Bd (Breen 1973:140) 048, 018?
-ny, nominaliser (cf. 3.4.5) V34 and perhaps S15, V2, V40, V41
-nydyala, nominaliser (Breen 1973:141) U12
-la, past tense, numerous examples in sections P to V, and note
the sentence in Hollingsworth
\begin{tabular}{lll} 
curther & ngyer & imbella \\
gada & jaya & imbala \\
not & I & hear-PAST
\end{tabular}
    given as the translation of 'I don't know'.
-ngu, purposive of intransitive verb (as in Mg and Gn), P1 and
    perhaps P6
-gu, purposive of transitive verb (as in Gn and - for all verbs -
    in Bd), V1
-ma, added to transitive verbs (cf. 3.5.3(a) and Breen 1973:104
    and 143-4), R28, S2
-ya, verbal inflection, P9, S2
-da, -ra or -ra, verbal inflection, U5, V1
-du in galadu, function not known, as in Mg (see 4.9.5)
and possibly others in Bl, J1, N13, Y3.
```


## APPENDIX II

## TINDALE'S MARUKANJI VOCABULARY

The vocabulary was collected at Lake Tyers, Vic., in January 1939. The informant was Jerry Jerome. The spelling system uses the International Phonetic Alphabet, in the form set out in Tindale (1940:147). The language is clearly Margany, but the vocabulary differs slightly from that given above, being, like Playfair's vocabulary, closer to Bidjara and Dharawala.

The vocabulary has been reordered and numbered as in the semantic fields vocabulary and a comments column has been added in which, if the word differs from that given above for Margany, relevant further information is given.

| No. | English |  | Marukanji |
| ---: | :--- | :--- | :--- |


| No. | English | Marukanji | Comments |
| :---: | :---: | :---: | :---: |
| 6 | forehead | Tbalga | =Gn; cf. A8a |
| 8 | eye | 'di: li |  |
| 8 a | eyebrow | 'melgan | Given as 'forehead', A6 above |
| 10 | nose | 'ko: |  |
| 12 | mouth | 'ḋa: |  |
| 13 | lip | 'bigi | Given as 'beak', E3, above; 'top 1ip' in Bd |
| 14 | tongue | 'talanj |  |
| 15 | teeth | 'irta |  |
| 17 | ear | 'mana |  |
| 20 | jaw | t takan | Bd, Dh dagal |
| 21 | beard | ' nanka |  |
| 21a | moustache | 'monu | Wadjabangayi mundu; Bd 'bottom 1ip' munu |
| 28 | hand | 'mara |  |
| 36 | belly | baçti |  |
| 42 | back | 'buru'ku | Bd budgu |
| 46 | faeces | kuna |  |
| 48 | penis | 'buna |  |
| 49 | urine | 'to:taru |  |
| 50 | testicles | ' nara |  |
| 59 | knee | 'mugu |  |
| 63 | foot | 'dina |  |
| 69 | blood | ' $\mathrm{kom}:$ a |  |
| B |  |  |  |
| 1 | man | 'wallbala | 'white man', B12 above |
| 2 | woman | 'wadji:m | 'white woman', B13 above |
| D |  |  |  |
| 8 | dog | ' nura |  |
| 9 | dingo | want i |  |
| 11 | kangaroo | ' baural |  |
| 14 | wallaby | 'baura | red kangaroo', D11 above |
| 14 a | rock wallaby | munkun | 'wallaroo', D13 above |
| 19 | opossum | ' 'pangur |  |
| 20 | porcupine | 'par:'bira |  |
| E |  |  |  |
| 5 | egg | ' kabun |  |
| 7 | emu | - kolbari |  |
| 8 | plain turkey | 'bunkanj |  |
| 9 | native companion | 'koruru | Gn guludku, Dh gurur (?), Gugu Badhun gurur, etc. |
| 10 | pelican | 'dar:'ta |  |
| 17 | swan | 'kotu'ru |  |
| 18 | wood duck | kunma |  |
| 19 | black duck | majara |  |
| 23 | whistling duck | 'kopi'tjur | gultapa above |
| 30 | eaglehawk | ' ku才ala |  |
| 38 | crow | 'wakan |  |
| 41 | magpie | ' kulbun | Bd, Dh gulbu |
| 48 | cockatoo, white | 'teikari |  |
| 48a | cockatoo, black | 'bigar | Bd gungidala (n Mg, Gn) |




## APPENDIX III

VOCABULARY COLLECTED BY BARRY FOSTER, THYLUNGRA

| English | Aboriginal Word | Phonemicisation and notes |
| :---: | :---: | :---: |
| Coopers Creek | Nockatunga | nakatunka, a Wangkumara name |
| Paroo River | Marra Gyden | ? |
| Clever man | Goobee | gubi, 068 |
| Plain | Goon aa | gunari, M11 |
| Ridge | Burree | bari'stone', M17 |
| Drunk or insane | Purra purra | badabada, 072 |
| Mulga Snake | Boom burra | bumbara, F5 |
| Crow | Wok kunn | wakan, E38 |
| Wedgetail Eagle | Goo ba 1a | gudala ?, E30 |
| Kite Hawk | Goom mon | gumun, E32 |
| Kite Hawk (Fork Tail) | Britoo britoo | bitubitu, E31 |
| Yes | Na | nawa, Zl |
| No | Urra | ara (gara?), Z 2 |
| Married woman | Queewa urada | guyada, C14 |
| Single woman | Mungine | mangany, B6 |
| Man | Mydie | maḍi ${ }^{\text {a }}$ B1 |
| Fire | Buddi | buḍ, K1 |
| Water | Um 00 | amu (gamu?), K16 |
| Fish | Goyoo | guyu, G1 |
| Camp | Yamba | yamba, Jl |
| Spear | Bewing (Bee wing) | poss. biwiny, J5 |
| Boomerang | Wung uI | wanal, J6 |
| Sun | Dooroo | duru, L3 |
| Moon | Ar gul da | agaḍa (gagaḍa?), L4 |
| Star | Near al doo | niyaḍu, L5 |
| Sky | Bun da loo | bandaḍa ?, L2 |
| West | But tan doo | batas:ndu, X4 |
| East | Nyls ba | nadba, x3 |

English
I go
You
They
I go East
Food (not meat)
Meat
I come
What for
Mountain
River
Flood
White man
White woman
Aboriginal Word
Iya
Wa bon yee
Da na
Dooroo duddy
Myee
Udee
Ny ya
Na kee go
(or Yinda)
Ba gool
Burroo
Mulline
Wal mullya
Waj gin
Phonemicisation and notes
naya 'I'
wabani 'go-PRES', P1
dana 'they (plu.)'
durudadi 'sun-ALL', L3
mayi, K7
yudi, K8
naya' I'
nanigu 'what-DAT' ?
yinda 'you (sing.)'
bagul, M10
baru, M2
mulany, L27
wayilbala?, B12
wadyi:n, Bl3

## ADDENDUM

During a brief visit to Cunnamulla in 1979, some additional material in Gunya was collected. This has been incorporated into the text or vocabulary where practicable but in cases where this would have necessitated extensive retyping, it is given here.

Note also that the language name spelt Garlali in the text (Section 1.3 , including Tables 1.2 and 1.3 , and Section 1.4) and on the map is now thought to be more correctly Galali.

Re the early parts of sections 2.3 and 3.4 , the word formerly phonemicised buwiny is now believed to be bu:ny. This is the only known monosyllable in Gunya with a final consonant (none are known in Margany). (Table 2.8 has been corrected.)

Re Section 2.7, Mrs. Richardson thinks गựa is Margany, not Gunya.

The following corrections apply only to the alphabetic vocabulary, the corrections having been made in the semantic fields list:
budibudi should be butibuti, 'lungs'
buwiny should be bu:ny 'lump'
add didga, $G$ : semen
duga, $G$ : sugar.
Other additions to the vocabulary (ordered as in the semantic field vocabulary) are:

```
gadigadi 'part of intestine', or perhaps 'spleen'
ginydyal 'part of intestine'
nudu 'part of intestine'
```

(The details given for these three items are confused and contradictory.)
imu! (C) 'mother-in-law', accepted as imuḍ by $R$ who, however, did not know the meaning. C also gave yabudu (see C2) as 'mother-in-law'.
bunydya (see C18) was also translated by $R$ as 'mother's mother's brother's son'.
bakuda 'fox'
mudguny 'bush (sp.) with little berries' (R)
gudgiri 'a fast runner' (R, see 040)
गuya (069) is more precisely translated as clever at dodging spears in a fight'.
babu 'later' (aMgR, cf. Y6 and Appendix I).
Note also the term of abuse guna (or guna) budalbari, meaning not known (but guna means 'faeces' and the suffix -bari 'having'). (Regarding the variant form guna see the notes on the pronunciation of nasals in 2.2).

Final proofreading revealed some omissions from the Alphabetical Vocabulary. These are:
balga, $G$ : forehead
ditti, M: Louse
ganyba, M: to light (fire)
manYdYa, M: to call out
mat Yamat $Y_{a, ~} G: ~ y e s t e r d a y$
nambi, to swim
yura:mu, G: alcoholic drink


Map 6: Tasmania, With Localities to which Vocabularies were Assigned

# Tasmanian by Terry Crowley and R.M.W. Dixon 

## 1. LANGUAGES AND SOURCES

### 1.1 LINGUISTIC TYPE

The source material on the now extinct Tasmanian languages is so poor that only very limited conclusions can be drawn concerning the structure of the languages.

They appear to have had a phonological system similar to those of languages on the Australian mainland. There were at least four contrasting stops - bilabial, apico-alveolar, laminal and dorso-velar - and a nasal corresponding to each. There was a phonetic distinction - and perhaps also a phonemic contrast - between lamino-dental and laminopalatal stops (and, conceivably, nasals). There is evidence for a single lateral, two rhotics and two semi-vowels. The vowel system probably had three members, possibly more. The phonotactics also followed a normal Australian pattern words consisted of at least two syllables; consonant clusters were common intervocalically but rare initially; in most of the languages/dialects all words ended in a vowel.

The languages appear to have been suffixing, but scarcely anything can be said about the meanings or functions of the handful of putative suffixes that can be isolated. The sentence material is so slight that it is not possible to say how syntactic function was marked, for instance. The preferred word order appears to have been SVO and NounAdjective (although the former may reflect the fact that most sentences were elicited - perhaps word-by-word - from English SVO sentences).

Although Tasmanian languages seem typologically similar to languages of the Australian family, there are insufficient cognates and systematic correspondences to justify an even tentative hypothesis of genetic relationship. All we can say, is that there is no evidence that Tasmanian languages were not, at a considerable time depth, related to languages spoken on the mainland.

### 1.2 BACKGROUND INFORMATION

The disintegration and extinction of Tasmanian tribes is well documented; it provides what is perhaps the most horrifying example of genocide from anywhere in the world. The original population of from three to five thousand before the white invasion of 1803 - was halved each decade, partly by introduced diseases, partly by murder. Then, during 1829-34, the self-styled missionary George Augustus Robinson gathered together the $\because 00$ or so survivors and transported them to an island in the Bass Strait. Separated from their homeland, numbers decreased even more rapid$1 y$ - there were 82 left in 1838,16 in 1854 and only 6 by 1863. Truganini, the last full-blood Tasmanian left on the island, died in 1876 (fuller details are in Jones 1971). N.B.Tindale (1974:318) reports that the last full-blood among the Tasmanian Aboriginal women who had been taken by white sealers to Kangaroo Island, off South Australia, died there about 1888.

Estimates of the number of 'tribes' in Tasmania range from nine or ten to twenty or more; each had a number of constituent local groups. Limited information is available on their residence patterns, implements, foods, hunting methods, mourning customs and the like. But there is virtually no information about the kinship system, for example, or marriage rules (see Jones 1974 and further references therein).

### 1.3 LINGUISTIC SOURCES

The source material for Tasmanian languages can be divided into five groups:
[i] Journals of maritime explorers. A number of early expeditions spent short periods in Tasmania and took down word-lists ranging from the 9 words of Captain Cook (1777) to between 100 and 200 in the several vocabularies from the D'Entrecasteaux expedition, in 1792-3. All of the maritime vocabularies are from the south-eastern dialects, save for the short list of about two dozen words taken down by Allen Cunningham, botanist accompanying Captain P.P.King, in 1819 from Macquarie Harbour, on the central west coast.
[ii] Early colonial accounts. There are half-a-dozen short vocabularies taken down by early settlers and visitors to Tasmania, commencing with 30 words recorded by Robert Brown at the Derwent in 1804. These were mostly of southeastern dialects - Bruny Island, Oyster Bay and the like. But Jorgen Jorgenson did collect about 60 words from Circular Head, on the north-west coast, and a similar number from the 'western language', while the words gathered by Governor George Arthur include some from the north-east.
[iii] George Augustus Robinson. At the back of Robinson's diaries, during his expeditions to contact and bring in all the remaining Tasmanians, in 1829-34, there are fairly copious word lists covering all parts of the island (although
the south-eastern dialects are again featured most heavily). Robinson's vocabularies comprise perhaps half of the total Tasmanian corpus; it is all the more pity that his transcriptions are so poor.
[iv] Material gathered at the government settlements. After the remaining Tasmanians had been exiled on Flinders Island there were a handful of further attempts to record something of the language. The most ambitious was by Joseph Milligan who was surgeon-superintendent of the settlement during 1844-7. Milligan published, in 1857, comparative vocabularies in three dialects. There were almost a thousand words in each of two south-eastern dialects, and also two hundred words assigned to ' north-west and western tribes'. However, the latter does not correspond too well with earlier vocabularies from these areas. There is evidence that by this time many dialect differences had been lost among the people at the settlement; they appear to have evolved a lingua franca, based mainly on the southeastern dialects (since a majority of the inmates did come from this region.)
[v] Recent work. Some material has been gathered during this century, from people with some Tasmanian blood, or from those who had known Tasmanians. About 1900 the Royal Society of Tasmania made some recordings of songs and speech by Fanny Cochrane Smith, a part-Tasmanian. However, because of the poor quality of the recording, and subsequent deterioration, it is impossible to make out the sounds; the only inferences that can be drawn concern the placement of stress. During 1908-10 Ernest Westlake interviewed about 30 people in Tasmania and gathered around 100 words, some in several versions. In 1941-2 Archibald Meston recorded 19 words from Mary Jane Miller, a daughter of Fanny Cochrane Smith, and someone who had been used as informant by Westlake. Westlake's transcriptions are fair, but Meston's were as poor as most of those of the previous century.

Finally, two scholars with phonetic training had the opportunity to record fragments of Tasmanian. In the 1930 s N.B.Tindale was engaged in ethnographic research among partblood descendants of Tasmanian women and white sealers. The four phrases he recorded on Kangaroo Island were published in Tindale 1937:36. Dr. Tindale has kindly made available to us part of his 1939 journal from Cape Barren Island; he notes three words:
['wogli] 'fern root'
['jała'ni:man] 'wallaby'
['nâratapa] 'white man'
and one sentence:
['tarkja 'ta:ja 'parana 'li: 'pa:jata'ni:man 'nârata'pa]
'Iittle wallaby went into the water, was hunted there by whiteman'

Tindale explained that [ $\dagger$ ] represents a lamino-interdental stop, similar to that found in many mainland languages.

Then in 1972 Crowley made the first, and perhaps the
last, audible sound recordings of Tasmanian. He recorded material from Mrs. Heffernan and Mrs. Mundy, granddaughters of Fanny Cochrane Smith. This comprised five words:

| [lánənə] | 'foot' |
| :---: | :---: |
| [ dágəne] | 'hand' |
| [múkaitina] | 'head' |
| [lámeəni] | 'meat' |
| [təai:lə] | 'native bread' |

and a complete sentence (Mrs. Heffernan gave a translation for the whole sentence but did not gloss individual words; we have been able to do this from consultation of earlier materials):
[tábənti nínənə múmə」ə puóbəbi pad」ú:lə]
go get wood put fire
Get a bit of wood and put it on the fire.
Mrs. Heffernan also sang a fragment of a corroboree song, said to have been sung by Fanny Cochrane Smith before an audience at Government House in Hobart. The song has a lilting melody but unfortunately the meaning of the words has been lost. We have transcribed it as:

$$
\begin{aligned}
& \text { [kumə دayngow ku:nəku:nə!i } \\
& \text { _- hiniyawa: taţima: taţima:] }
\end{aligned}
$$

The two dashes represent an imitation of a bird call.
Mrs. Heffernan had plainly never 'used' the few words she knew and recalled having to beg her mother to tell her what she remembered of Tasmanian. Her pronunciation of this material was almost wholly assimilated to that of Australian English (and on one repetition she added English pluraliser -s to [lánanə] and to [ Jánənə].) Note, though, that these words do show a velar nasal [ n ] between vowels, something that is almost unknown in English, and also the sequence [me]. The forms that Crowley collected for 'foot', 'head' 'meat' and 'bread', are found in Westlake's short list, as is the complete sentence he recorded, suggesting that there has been a small set of words and sentences handed down among the descendants of Tasmanians this century. There can be no certainty that these correspond exactly to the forms occurring in the Tasmanian languages when they were actively spoken. But the Crowley recordings are the only check we have on philological inferences based on comparison of early transcriptions. We discuss this further in 2.1 below.

The Tasmanian materials have long fascinated scholars and there have been many attempts to gather together most or all source materials - by H. de Charencey in 1880, E.M. Curr in 1887, H. Ling Roth in 1890, J.E.Calder in 1901, F. Hestermann in 1936, W. Schmidt in 1952 and finally N.J.B. Plomley in 1976. Plomley's is by far the most complete compendium, being the only one to include the extensive Robinson materials (which only came into notice in the 1950s) and also the Westlake and Meston lists. Plomley has systematically collated all word lists and thoroughly checked his materials against the original sources. We have used his volume as the basis for our study.

There is only a little information on Tasmanian which is not included in Plomley. He does not have the material from Tindale's 1939 journal, nor the 1972 recordings by Crowley; we have given these in full here. Plomley also omits mention of the language material in Calder 1874 (although this was commented on extensively by Capell 1968). And he does not list the four manuscripts in the Marsden collection of the library of the School of Oriental and African Studies, University of London (see Mander-Tones 1972:362) comprising four 'short vocabularies of the languages of natives of Van Dieman's Land, collected by the officers of the French frigates La Recherche and L'Esperance, in 1793'; these are further versions of the vocabularies of the D'Entrecasteaux Expedition (Plomley 1976:13-4).

A sample check of Plomley's materials against the original publications or manuscripts suggests that he has achieved a high level of accuracy and reliability. There do, however, appear to be a few odd omissions. For instance, Plomley does not give Ganna 'teeth' from the Jorgenson vocabulary (Braim 1846:258), and for 'ear' he gives the published spelling pelverata (Braim 1846:257) and does not mention that the manuscript version of this vocabulary in the Mitchell Library Sydney (see Plomley 1976:17) shows a spelling pulverata.

Plomley (1976:5-71) has an extensive and excellent bibliography of source materials and there would be little point in our repeating it here. References in this volume cover sources that we specifically cite; for the attestation of forms etc the reader is referred to Plomley and his bibliographic references.

Almost all the Tasmanian material consists of simple word lists, sometimes indicating the part of Tasmania an item comes from and sometimes omitting this information. Plomley (1976:44-55) gives all known song texts; unfortunately, meanings have not been recorded for most of these. The corpus of sentences in Tasmanian is even slimmer - there are a handful of sentences in Jorgenson and Robinson and about 100 short sentences and phrases were gathered by Milligan; there are also two versions of the translation of some verses of Genesis, by Thomas Wilkinson, and two versions of a sermon in Tasmanian, by Robinson. It is likely that most of this material was translated word by word from English; little about the structure of Tasmanian can be inferred from it. Plomley (1976:34-43) brings together all this material excepting the alternate version of Robinson's sermon, and two or three 'spontaneous' sentences, in Calder (1874:16, 18, 28).

### 1.4 DIALECTS AND LANGUAGES

It is clear that each local group of each tribe had a slightly different dialect from its neighbours, and some dialects could be grouped together as constituting a single 'language' (in the linguistic sense, defined in terms of mutual intelligibility - see Dixon 1980a:33-40). The important question concerns how many distinct languages there
were in Tasmania.
J.W.Walker noted in his journal, at the Flinders Island settlement that every tribe speaks a different dialect, it might almost be said a different language...' (Roth 1899:179). Bonwick (1870:133) discussed the question of language, beginning by quoting Robinson's testimony that 'the different tribes spoke quite a different language; there was not the slightest analogy between the languages'. He continued: 'When a captured woman from Cape Grim, to the north-west, was brought to Flinders, it was found that she was as ignorant of the dialect of the rest as they of hers. It was this ignorance of each other's language that kept alive those tribal jealousies and antagonisms, which so often threatened the peace of the Strait settlement. When, however, they had constructed, by force of circumstances, a sort of lingua franca - a common language - their friendship grew, and local feeling improved. Mr. Clark, the catechist, thus wrote to me of the condition of linguistic affairs then: 'The languages spoken were different; so much so, that, on my first joining them in 1834, I found them instructing each other to speak their respective tongues. There were at one time eight or ten different languages or dialects spoken by about two hundred persons who were domiciled at Flinders." '

Schmidt decided that there must have been five distinct languages - western, northern, north-eastern, mid-eastern, and south-eastern - giving the data on which his conclusions were based. O'Grady, Voegelin and Voegelin (1966:19) suggested just two languages - Schmidt's northern being one, and the other four Schmidt groups making up the second but did not indicate the grounds on which this suggestion was based.

It is, in fact, impossible to come to any definite decision concerning the number of distinct languages in Tasmania. Drawing the line between language and dialect is never an easy matter; it must involve a full comparison of linguistic systems - phonology, grammar and lexicon. The materials on Tasmanian dialects range from poor to almost non-existent; we have two or three hundred words from some of the south-eastern groups but only a dozen or so words from some groups in the western regions. There is almost no grammatical information - at best two pronominal forms.

A preliminary judgement concerning dialect relationship can be made on the basis of vocabulary comparison (lexicostatistics) but this should always be followed up by a full comparison of the complete lexicons and grammatical systems. Work on mainland Australian languages has suggested that lexical replacement (often, following the tabooing of the names of deceased persons, and of lexical items similar to them in form) can apply in all sections of the vocabulary. The sources indicate that tabooing was a major factor in Tasmania (see Milligan 1857:34-5, Bonwick 1870:145), and the lexical pattern found on the mainland may apply here also.

It can be shown that if two, rather different, languages come into contiguity they will borrow back and forth (partly, to replace lexemes that have been tabooed) until the common
vocabulary makes up about $50 \%$ (in practice, say, $40-60 \%$ ) of each language's total vocabulary. If one tribe splits into two new tribes, each will taboo and replace words independently of the other, and the percentage of common vocabulary will steadily drop, until it reaches the $40-60 \%$ equilibrium level.

It is possible to draw tentative inferences concerning genetic relationship from vocabulary comparison; as we have already stressed, these should always be verified by a full comparison of the complete language systems. If two groups have about $70 \%$ common vocabulary or more, it is likely that they are dialects of a single language (and we would expect their grammars to be very similar). If they score between $60 \%$ and $70 \%$ then they are probably two distinct languages which are closely genetically related (and we would again expect there to be more grammatical than lexical similarities). If they score less than $40 \%$ then they are probably not closely related, but have come into contact relatively recently (and there would normally be fewer grammatical than there are lexical similarities). If the lexical score between two contiguous languages is between about $40 \%$ and about $60 \%$ - that is, somewhere around the 'equilibrium level' of $50 \%$ - it is not possible to draw any conclusions about their genetic relationship from lexical score alone.

On the map we show 15 distinct regions to which Robinson and other early investigators assign vocabulary. Collectively, the regions from South-western round to Circular Head are designated 'Western'; Piper River, Ben Lomond and Cape Portland are 'North-eastern'; and Big River, Oyster Bay and Little Swanport constitute 'East central'. It is clear that each locality represents a distinct dialect (or, in some cases, possibly a blend of several closely-related dialects).

We have compared each pair of vocabularies, considering forms for which the same English or French glosses are given. The number of pairs that can be obtained varies from 119 between Little Swanport and Big River, to just 9 between South-Western and Macquarie Harbour. The actual numbers of words compared, and the number that appear to be cognate, are shown in Table 1. The percentage figures are given in Table 2, in cases where the denominator is 15 or more.

The number of words which can be compared is so small that we would hesitate to hazard any conclusions if we were not dealing with so difficult and obscure a situation as that in Tasmania. The following inferences must all be regarded as speculative.
[i] Oyster Bay and Big River have $85 \%$ in common and are very likely to be dialects of a single language.
[ii] There is very little information for Little Swanport but what there is would be compatible with it being a further dialect of the Oyster Bay/Big River language.
[iii] South-eastern appears to be a language distinct from Oyster Bay/Big River; the scores are about the equilibrium range, making it impossible to draw any inferences on genetic connection between these two languages.

TABLE 1 - Lexical comparison (actual figures)

South-Western
$\frac{5}{9}$ Macquarie Harbour
$\frac{14}{25} \quad \frac{5}{12}$ North-Western
$\frac{13}{31} \quad \frac{5}{11} \quad \frac{22}{30}$ Robbins Island
$\frac{8}{19} \quad \frac{6}{14} \quad \frac{12}{22} \quad \frac{12}{23} \quad$ Circular Head
$\begin{array}{llllll}\frac{1}{26} & \frac{0}{9} & \frac{1}{22} & \frac{2}{21} & \frac{0}{17} & \text { Northern }\end{array}$
$\begin{array}{lllllll}\frac{2}{27} & \frac{1}{11} & \frac{1}{21} & \frac{2}{32} & \frac{1}{22} & \frac{7}{34} & \text { Port Sorell }\end{array}$
$\begin{array}{llllllll}\frac{0}{19} & \frac{0}{11} & \frac{0}{18} & \frac{0}{20} & \frac{1}{13} & \frac{6}{28} & \frac{1}{40} & \text { North Midlands }\end{array}$
$\frac{0}{14} \quad \frac{1}{8} \quad \frac{1}{14} \quad \frac{0}{7} \quad \frac{2}{12} \quad \frac{14}{28} \quad \frac{6}{28} \quad \frac{5}{26} \quad$ Piper River
$\begin{array}{lllllllllll}\frac{1}{27} & \frac{2}{9} & \frac{1}{24} & \frac{1}{28} & \frac{1}{19} & \frac{24}{52} & \frac{9}{47} & \frac{20}{37} & \frac{27}{41} & \text { Cape Portland }\end{array}$
$\begin{array}{llllllllllll}\frac{0}{23} & \frac{0}{15} & \frac{1}{23} & \frac{1}{26} & \frac{2}{20} & \frac{13}{39} & \frac{13}{85} & \frac{14}{44} & \frac{25}{41} & \frac{39}{67} & \text { Ben Lomond }\end{array}$
$\frac{1}{36} \quad \frac{2}{18} \quad \frac{1}{33} \quad \frac{3}{40} \quad \frac{4}{33} \quad \frac{8}{52} \quad \frac{13}{56} \quad \frac{9}{59} \quad \frac{13}{37} \quad \frac{12}{62} \quad \frac{19}{64}$ Oyster Bay
$\begin{array}{lllllllllllll}\frac{0}{8} & \frac{0}{2} & \frac{0}{7} & \frac{0}{7} & \frac{0}{8} & \frac{1}{10} & \frac{1}{9} & \frac{2}{8} & \frac{0}{5} & \frac{1}{10} & \frac{2}{8} & \frac{12}{18} & \text { Little Swanport }\end{array}$
$\begin{array}{llllllllllllllll}\frac{3}{28} & \frac{3}{15} & \frac{2}{25} & \frac{4}{29} & \frac{2}{26} & \frac{5}{35} & \frac{15}{48} & \frac{3}{46} & \frac{9}{27} & \frac{11}{40} & \frac{15}{52} & \frac{70}{82} & \frac{6}{10} & \text { Big River }\end{array}$
$\begin{array}{llllllllllllllll}\frac{9}{50} & \frac{3}{21} & \frac{4}{46} & \frac{5}{57} & \frac{4}{30} & \frac{6}{45} & \frac{9}{60} & \frac{7}{58} & \frac{7}{37} & \frac{7}{61} & \frac{9}{76} & \frac{64}{119} & \frac{1}{17} & \frac{29}{79} & \text { South-Eastern }\end{array}$
[iv] Piper River, Cape Portland and Ben Lomond form an interrelated group. The first two - and just possibly all three - could be dialects of a single language. If Ben Lomond was a separate language - as these figures tend to suggest - it was very likely to be closely genetically related to Piper River/Cape Portland.
[v] North Midlands must be a distinct language. Although it scores $54 \%$ with Cape Portland, the figure is only $19 \%$ with Piper River, making a close genetic connection with the Piper River/Cape Portland/Ben Lomond group rather unlikely.
[vi] Port Sorell is a further language, its low scores with all other vocabularies making it unlikely that there is any close genetic connection between Port Sorell and any other language.

TABLE 2 - Lexical comparison (percentage figures)
South-Western

- Macquarie Harbour
56
41 -
[vii] Northern is probably a language on its own, although the figure of $50 \%$ with Piper River (with which it is not contiguous) does not discount it being a dialect of the same language.
[viii] North-western and Robbins Island are probably dialects of a single language.
[ix] Circular Head scores only just over $50 \%$ with Northwestern and Robbins Island, but the data available is so scanty that this is not incompatible with it being a dialect of the same language.
[x] The data available for South-western and for Macquarie
Harbour are so slight that it is bordering on the farcical to draw any inferences from them. There is certainly no strong evidence that they should be grouped with other vocabularies. Note that 50 items can be compared with South-eastern but these yield a score of only $18 \%$, a very low figure for contiguous languages.

The conclusion we draw from this is that there must
have been at least the following six languages:
(a) Oyster Bay, Big River, Little Swanport
(b) South-eastern
(c) Piper River, Cape Portland, Ben Lomond, Northern
(d) North Midlands
(e) Port Sorell
(f) North-western, Robbins' Island, Circular Head

There are in addition South-western and Macquarie Harbour which may well comprise two further languages.

So there were probably at least eight distinct languages in Tasmania. There may have been considerably more. Only the Big River and Oyster Bay lists unequivocably demand to be treated as dialects of a single language. It is possible - although perhaps not likely - that there could have been as many as twelve (or even fourteen?) languages.

The only grammatical data available is forms for 'I' and 'you' in a few dialects (and some putative suffixes, of whose meanings we cannot be sure). These support the tentative conclusions we have drawn from lexical comparison.
'I' and 'you' have quite different forms in Port Sorell, in Ben Lomond (in the single source available for each) and in the mid-eastern region. Oyster Bay and Big River have identical or closely similar forms. Some of the forms in Southeastern are close to those in Big River/Oyster Bay.

The data we have used are so slight that the conclusions we have drawn are very tentative. The real answer to the question 'how many languages were there spoken in Tasmania' is 'we don't know'; to say 'probably somewhere between eight and twelve' is to hazard an only slightly informed guess.

It will be seen that there are no grounds at all for saying that the languages of Tasmania make up a single genetic family. We can do little more than say that - whatever the dialect/language division - each of the groups listed in (a) were probably genetically related, in a linguistic sense, and that the same applies to (c) and to (f). It is possible, perhaps even likely, that (a) and (b) were related, as were (c) and (d). It is certainly possible that South-Western and Macquarie Harbour were related to the North-Western Group, and that both (e) and (c-d) were related to (a-b), giving just two genetic groups, one comprising (a-e) and the other the western and north-western languages. The evidence available is compatible with there being two distinct language families in Tasmania, or with there being four (or even as many as eight) distinct families. And the data available are so slight that we can scarcely exclude any possiblity - such as the languages making up a single family, although there is certainly no evidence in favour of this.

## 2. PHONETICS AND PHONOLOGY

### 2.1 INTERPRETATION OF WRITTEN RECORDS

Determining the phonetic form of words in the Tasmanian languages from the written records available is a far from easy task. There is only a little descriptive information of what the languages sounded like; it is usefully collected together by Plomley 1976:27-31. Most of the comments are of limited value. Robinson, for example, said only 'the eastern native is the most indistinct or gutteral of any natives I have visited'; and 'some said one thing, some another, but as the natives find it difficult to pronounce
the "s", the whole appeared to say instead of "good health" "go to hell": If he had been more perceptive Robinson might have inferred from this that there was no voicing contrast, so that $d$ and $t$ were interchangeable, that since all words ended in a vowel, 'good' would be pronounced like 'go to'. (And pace Robinson's comment, there is no $s$ in 'Good health'; the Tasmanian languages appear to have had a lamino-interdental stop, which may have had a pronunciation rather like English th; the difficulty here concerned the sequence of $l$ followed by th at the end of a word.)

The only informative comments on Tasmanian pronunciation are those of G.W.Walker and especially of Joseph Milligan on the vowels (see 2.3) and also the remarks of R.H.Davis (Plomley 1976:29): 'Their language is very soft and liquid, ending, I think without exception, in vowels... The dialects are numerous, and the language in different parts of the island appears to be wholly different... The aborigines from the westward, and those from the eastward did not at first understand each other, when brought to Flinders' Island... but they afterwards, in common with the whites, used a kind of lingua franca... The aborigines shew great facility in attaining the pronunciation even of English words, dissimilar as that language is to their own; they cannot, however, pronounce the hard letters, as $d$ and $s$; doctor, they pronounce togata, or tokata; sugar, tugana; tea, teana.'

It is possible, by comparing several different renditions of what appears to be a single word, to make a fair attempt at reconstituting its phonetic shape. Milligan gave fairly explicit information about the conventions he employed (see $2.2,2.3$ ) and seems to have followed these reasonably consistently. Compare four versions of 'emu' for the Bruny Island (South-eastern) dialect:

> Robinson: gon.nan.ner, gonanner Milligan: 'ngunannah Roberts: nganana

It is likely that the form was [nanana].
Although Robinson gathered the most data, and probably had more contact with the Tasmanians than any other Europeans, it is plain that he cannot have had any real command of the language, but in all likelihood just strung together some Tasmanian words with a basic English grammar. His transcription is very poor - initial [o] may be represented as $g$ (as in the example just given) or $n$ or $h$ or may be omitted altogether; he seldom deviates from the letter combinations possible in spelling English words:

For many words the only forms we have are those by G.A.Robinson, or by his son Charles Robinson. Consider, for instance 'ear' in the Cape Portland and in the related Ben Lomond dialects:
$\begin{aligned} \text { Cape Portland (G.A.Robinson): } & \begin{array}{l}\text { nin. ne. woon.er } \\ \text { hen.ne.wun. ner } \\ \\ \text { un.ne.woo.ner }\end{array}\end{aligned}$
Ben Lomond (Charles Robinson): yher.na.win.ner yer.na.win.ner

Comparison of the three different beginnings for the Cape Portland word suggest that it may have commenced with [0]; the most likely form for this word is [niniwuna]. The Ben Lomond form may also have begun in [J], and may also have been [ fi inwuna] or else some form very similar to this.

This example should illustrate the difficulties and interdeterminacies surrounding the interpretation of Robinson's and others' early transcriptions; for some dialects the only or almost the only information we have is that recorded by Robinson.

The recordings made by Crowley in 1972 - slight and late as they are - provided an invaluable check on the reconstitutions we had already attempted by comparison of early transcriptions. For 'head' there are three early versions similar to that given by Mrs. Heffernan, all by Robinson:
muck.el.ten.ner (Piper River)
mo.kel.te.
muk.el.ten.ner (Piper River)

Westlake also recorded mookeltina 'head' and, from Mary Jane Miller, mookelteena 'chin'; thirty odd years later Meston recorded mookatinna from Mrs. Miller. We inferred from these a phonetic form [mukVltina], corresponding well with the form Crowley tape-recorded, [mukalina].

There is a single early transcription of a form for 'meat' similar to that given by Mrs. Heffernan. Robinson wrote down larm.ten.er for the Cape Portland dialect (Westlake also noted larnty and larnte and Meston lahmti). From the Robinson form we inferred [lamtina] whereas in fact Mrs. Heffernan said [İ́mөəni]. There is no trace in the earlier versions of the dental sound [ $\theta$ ], and in this instance Robinson's final -er was actually [i] (for 'head' his final -er appears to have been [a]).

There are about twenty early versions of 'foot' that show some similarity to Mrs. Heffernan's [lánənə]; and Westlake recorded lang-ena from two informants. Fourteen of them (including all five by Robinson) have simply -g-or -gg- between the first two vowels, while five show -ng-; there may well have been dialectal differences. Although Westlake's hyphen in lang-ena suggests a form [lanəna], the spellings langana from Jorgenson and McGeary, langena from Backhouse, lãngexhněh from Walker and lãngõonăr from Sterling would not allow us to decide between [D] and [ng].

This comparison between the 1972 recordings and reconstitutions attempted on the basis of the nineteenth century written records suggest that no more than half the reconstitutions are likely to be at least tolerably correct. It suggests that it would not be worthwhile trying to reconstitute the phonetic form of every word, from the forms collated by Plomley. In view of this we do not include a list of words in Tasmanian languages at the end of this paper, but instead refer the reader to the original sources, drawn together in Plomley's compendium.

We can, however, attempt some generalisations concerning the phonetics and phonology of the Tasmanian languages.

We may not be able to reconstruct initial [0] in every word in which it occurred, but we can be quite certain that words did commence with [ n ] in Tasmania. Similarly, comparison of spellings indicates that voicing was not phonologically contrastive in any part of the island. In the next sections we outline what is known and can be inferred about the phonetics of Tasmanian languages, and make tentative deductions concerning their phonology.

Although it seems incontrovertible tha't there were a number of distinct languages in Tasmania (perhaps belonging to a number of distinct language families) there were many areal similarities, as would be expected of languages confined to a small island for any period of time. In particular, they seem to have been very similar at the phonetic and phonological levels.

Discussion of phonetics and phonology, in the remainder of this chapter, is based mainly on the mid-eastern and south-eastern languages, for which the greatest information is available. It seems likely that most of our remarks will also apply to languages in other parts of Tasmania.

### 2.2 CONSONANTS

The full set of consonantal sounds in the Tasmanian languages appears to have been:

|  | apicoalveotar | Zamino- dentaz | $\begin{aligned} & \text { lamino- } \\ & \text { palatal } \end{aligned}$ | $\begin{aligned} & \text { dorso- } \\ & \text { velar } \end{aligned}$ | biZabiat | Zabiodental |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| voiced stop | [d] | [d] | [g] | [g] | [b] |  |
| voicetess stop | [t] | [t] | [ $\dagger$ ] | [k] | [p] |  |
| voiced fricative |  |  |  | [ y ] |  | [v] |
| voiceless fricative |  |  |  | [x] |  |  |
| nasal | [n] | ([n]? ) | [ $n$ ] | [ n ] | [m] |  |
| lateral | [1] |  |  |  |  |  |
| flap | [r] |  |  |  |  |  |
| continuant | [ 1 ] |  |  |  |  |  |
| semi-vower |  | [y] |  | [w] |  |  |

Milligan recognised the velar fricatives, transcribing them by 'ch' and 'gh'; he explained that 'ch and gh are pronounced as in the German word hochachten and in the Irish word lough'. Note that there is no trace of sibilants in Tasmanian languages. Plomley does quote the form riz lia 'mains' from a published vocabulary of the D'Entrecasteaux expedition but this was a typographical error in the original publication; the manuscript version (see 1.3) has ria lia. Similar explanations are probably appropriate for other odd occurrences of $z$ and $s$ in the corpus.

A number of attempts have been made to work out the underlying phonological system, the most extreme being that of Ritz (1910) who suggested that there were just four basic consonants: a labial, a dental, a velar and a liquid (cover-
ing nasals, lateral and rhotics); Ritz correlated this phonological simplicity with the childishness of the minds of the Tasmanians:

We shall discuss a number of phonetic parameters, and decide for each whether it is likely to have been phonologically significant.
[a] Voicing. Schmidt suggested that voicing was not contrastive in Tasmania (as it is not in almost all languages of mainland Australia). There seems no doubt that this is a correct observation, and that it applies to every Tasmanian language. A given word would be transcribed in one instance using a voiced and in another with a voiceless symbol, e.g.

| source spellings | reconstructed forms |
| :---: | :---: |
| Robinson: ko.ger <br> Milligan: koka | /guga/ 'blood' [South-east] |
| Robinson: muth.er <br> Milligan: matta <br> D'Entrecasteaux: mada | /mada/ 'testicles' [South-east] |
| $\begin{array}{ll} \text { Robinson: } & \text { too.deen.ner } \\ " & \text { too.te.yen.er } \end{array}$ | /dudiyina/ 'emu' [East] |
| $\begin{aligned} & \text { Robinson: no. pine.ner } \\ & \text { no.bine } \end{aligned}$ | /nubay(na)/ 'dream' [West coast] |
| Milligan: toggana tokana | /tugana/ 'heel' [Oyster Bay] |
| Gaimard: kible <br> Backhouse: gibbleh <br> Jorgenson: giblee | /gibli/ 'to eat' [North-western] |

Schmidt makes what appcar to be accurate observations: that stops are almost always voiceless at the beginning of a word; and that a stop between the first and second vowels of a word is likely to be voiced if the word begins with a cluster of stop plus $r$, or with one of $r, \eta, m, n$ or $w$.

Either voiced or voiceless symbols could be used for stops in Tasmanian languages; we have chosen to use/b/, /d/, /g/ etc since this is the majority convention for the transcription of languages on the mainland.
[b] Fricatives. The letter $v$ occurs infrequently in the transcription of Tasmanian words. In every case it appears to be an alternant of $w$, suggesting that the articulation of $/ w /$ could occasionally involve slight friction, e.g.
source spetrings
Robinson: vee.ner " wee.nar
Milligan: weenah
McGeary: vena
Gaimard: livore
Lhostky: levira
Jorgenson: leware
Robinson: lee.wur.rer
reconstructed forms
/wina/ 'moon' [North-west]
/liwVra/ 'night' [North-east] NOTE: the quality of the second vowel cannot be determined.
source spellings reconstructed forms
Robinson: vaw.ty /wadi/ 'ice', icicle' [South-east]
Sterling: wor.thy

The velar fricatives mentioned by Milligan appear to have been rather uncommon, and were probably further allophones of $/ \mathrm{g} /$, occurring mainly before $/ \mathrm{r} /$ (and probably also before /l/ or /w/) e.g.

| source spellings reconstructed forms |  |
| :--- | :--- |
| Milligan: tughrah | tuggranah |
| "dugra(na)/ 'to eat' [South-east] |  |
| Milligan: pugherittah /bigrida/ 'swan' [South-east] |  |
| Robinson: pick.rer.dar |  |
| " |  |
| Sterling: pick.er.rer. dar |  |

[c] Laminal stops. All mainland Australian languages have sounds which involve the blade of the tongue. In some languages there is a phonological contrast between lamino-(inter) dentals ( $d, n$ ) and lamino-alveopalatals ( $q, n$ ); in others there is a single laminal stop and nasal, but each may have lamino-dental and lamino-alveopalatal allophones.

The evidence for a lamino-alveopalatal stop occurring in Tasmanian lies in the frequency of spellings such as $t y$ and tch, and the unmistakeable occurrence of [ $\dagger$ ] in Mrs. Heffernan's song. Tindale mentions an interdental stop, and the interdental fricative is attested by th spellings and Mrs. Mundy's [læmeani] 'meat'. It is highly likely that [d], [ $\ddagger$ ] and [ $\theta$ ] were members of a single phoneme - that is, the lamino-dental stop could sometimes involve some friction, as it does in many Australian languages.

It remains to enquire whether Tasmanian had a contrast between two laminal stops. This question is, in fact, impossible to answer from the data available. In mainland languages that have a single laminal stop phoneme, the lamino-palatal allophone often occurs after, or else anywhere next to, /i/ and the lamino-dental allophone elsewhere. Many of the occurrences of the lamino-palatal stop in Tasmanian languages are next to $/ i /$, but there do seem to be some occurrences of the interdental stop in the same environment, e.g.

```
reconstructed forms
/midina/ 'bush'
/drudina/'hang' [N-W]
/badila/ 'opossum' [S-E]
/wadiga/ 'to hold' [N-W]
```

```
deduced from spellings
mẽethěnǎr (Sterling)
droe.thin.ner (Robinson)
par.thel.ler (Robinson),
    pawtella (Milligan) etc.
warth.hick.ar (Robinson)
```

compare with:

$$
\begin{gathered}
\text { /maligi/ 'white' [Oyster } \\
\text { /daygi(na)/ 'white man } \\
\text { devil' [Mid-E, S-E] }
\end{gathered}
$$

```
malleetyé (Milligan),
    mal.lit.yer (Robinson)
rut.yer, rite.cher, raege,
    (Robinson) ragi, ragina
    (Scott)
```

If the Tasmanian languages had a single lateral stop, it is possible that there might have been a certain amount of free variation between the dental and palatal allophones.

We can conclude that Tasmanian certainly had at least one laminal stop, and that there were both lamino-dental and lamino-palatal sounds, at the phonetic level. The question of whether there was a laminal contrast at the phonological level cannot be given a sure answer from the data available.
[d] Apical series. Australian languages have either one or two contrastive stop-nasal series which involve sounds made with the tip of the tongue. If there are two series one involves apico-alveolar and the other apico-postalveolar or retroflex articulation; if there is a single phonological series, there may be alveolar and post-alveolar allophones.

There is no evidence in the Tasmanian materials for any retroflex sounds, let alone retroflex phonemes. The evidence does seem fairly clear that all the Tasmanian languages had apico-alveolar stop /d/, nasal /n/ and lateral /l/.
[e] Nasals. It is a characteristic of Australian languages that there is a nasal corresponding to each stop. The Tasmanian corpus provides clear evidence for four nasals, $/ n /, / n /, / n /$ and $/ \mathrm{m} /$. The contrast between $/ n /$ and $/ n /$ can be exemplified:
reconstructed form deduced from spellings /lina/ 'place' [Oyster Bay] lenna (Milligan), lunna (Bedford) /wina/ 'periwinkle' [Oyster Bay] winnya (Milligan) There is no real evidence for a lamino-dental nasal [n]. But this is a sound which is difficult to distinguish from [ $n$ ], for someone who does not have the contrast in his native language, and we could scarcely expect the sources for Tasmanian to show it.
[f] Laterals. The orthographic sequence ly occurs a few times in Milligan's and also in Robinson's vocabularies, but there is insufficient evidence to support a laminopalatal lateral, in addition to the well-attested apicoalveolar lateral /I/.
[g] Rhotics. There is some evidence that Tasmanian, like almost all languages from the Australian mainland, contrasted a flap or trill /r/ with a frictionless continuant / / / .

Where there is alternation in the sources between $r$ and $l$, or between $r$ and $w$, we infer a continuant /// e.g.
source speltings
Scott: roogara
Arthur: lugarana
Jorgenson: wadebeweanna
McGeary: vadaburena
reconstructed forms
/ uugara(na)/ 'ear' [Oyster Bay]
/wadibviana/'ashamed' [East]

Henry Melville commented: 'What their language is, is not much known, but they have been noticed to sound the letter $R$, with a rough deep emphasis, particularly when excited by anger or otherwise, and that upon these occasions also, they use the word werp, werr very vehemently'. We infer that the alternation of $d r$ with $r$ in the sources indicates a flapped or trilled rhotic, e.g.
source spellings
G.A.Robinson: ree.wool.lar, $\begin{array}{r}\text { dray.wool.ler }\end{array}$

Chas. Robinson: dray.will.ar
Sterling: drãn.gěr
Brown: ranga
D'Entrecasteaux: ranga
[h] Semi-vowels. Evidence from all sources strongly suggests that Tasmanian languages had two semi-vowels, /w/ and $/ y /$.

We have inferred (as tentatively as one must, when dealing with any point concerning the Tasmanian languages) that the consonant system may have been:

/y/ /w/
There may also have been a second laminal stop, lamino-dental /d/. There is no evidence for any phonological differences between the various languages (although of course there may well have been at least minor differences).

This consonantal pattern is a common one on the Australian mainland. Indeed, recent comparative work suggests that proto-Australian may have had exactly this system (with the possible addition of a laminal lateral / / / ) - see Dixon 1980a:150-9.

### 2.3 VOWELS

Deciding on what the vowel system or systems of the Tasmanian languages may have been is a far more difficult matter. Of the early recorders, G.W.Walker gave short notes on how his orthography for Tasmanian related to English sounds (Plomley 1976:29), Joseph Milligan (1857) provided a detailed and useful account of his spelling conventions:
'The orthography of the aboriginal vocabulary agrees as nearly as possible with the ordinary phonetic expression of the English alphabet, with the following qualifications - the vowel $a$ when it stands alone, is to be pronounced as in cat, rap, etc, but aa is sounded nearly as $\alpha w$ in the word $l a w n ; ~ e$ is pronounced as in the English word the, and ee as in thee, me, see, etc, but $\dot{e}$ is to be pronounced like $a$ in potatoe and in day; $i$ is to be pronounced as in sigh, fie, etc.; $O$ is to be sounded as in so, go, flow, and 00
as in soon, moon, etc; $u$ is never to be sounded as in the English word flute, its usual sound being that in the French words, une, usage, usurier, fumer, etc, but when followed by a double consonant, or by two consonants, it is to be sounded as in the English words musk, lump, burm, etc; $y$ is to be sounded as in the English words holy, glibly, yonder, yellow, etc; $i$ before another vowel has a full sound as in the English words shine, riot; ei coming together are to be pronounced as in Leipsic; ou as in nown; oi as in toil, etc.'

We can infer from this that there must have been at least the following vowel sounds, at the phonetic level:
$\left.\begin{array}{ccccc} & \text { front } & \text { front } & & \text { back } \\ \text { unrounded } & \text { rounded } & \text { mid } & \text { rounded } \\ \text { high } & {[i]} & {[\ddot{C}]} & & {[u]} \\ \text { mid } & {[e]} & & {[ə]} & {[0]} \\ \text { Low } & & {[æ]} & & {[a]}\end{array}\right][a]$

We could not distinguish the three low vowels [æ], [a] and [a] from any source but Milligan; and only the records of the French maritime explorers support Milligan's observation concerning [ $\ddot{u}]$. All the other phonetic distinctions do, however, appear to be reflected in the transcriptions of other writers.

Detailed comparison of spelling variations indicates that there was:
alternation between $[\mathfrak{x}],[\mathrm{a}],[a],[e]$ and [o];
alternation between [u], [ï] and [o]; and
alternation between [i] and [e].
This suggests a system of just three vowels, at the phonological level, /a/, /u/ and /i/. It is worth remarking that the most common vowel system on the Australian mainland involves just these three vowels.

Examples of these alternations include:
[a]/[e] Jorgenson: magog; McGeary: megog 'rock' Milligan: nubré; Brown: nubrana 'eye'
[a]/[o] Jorgenson: bacala; Bedford: po.co.la 'cattle' Milligan: yawarrenah, yowarrenah 'mutton fish'
Note that /a/ appears as [o] most frequently next to labial or dorsal consonants, and as [e] most frequently next to laminal or apical consonants.
[u]/[c] Arthur: moona; Robinson: moo.ner; Walker: mõněh 'lips'
Jorgenson: youla; Milligan: yolla 'mutton bird'
[i]/[e] Robinson: lee.peen.ner, le.pe.ner 'eye'
Robinson: leen.her, leieena, leng.in.ner; Milligan: liengana 'buttock'
The open vowels [๕] and [a] are identified only in Milligan's vocabulary; they are pretty certainly allophones of /a/. It is likely that [ï] is an allophone of /u/, when it occurs next to a laminal stop, nasal or semi-vowel.

There is evidence for a central vowel, [ə], in unstressed syllables. Comparison of spellings suggests that perhaps any of the three vowels might be reduced to [ $\partial$ ] in certain
positions in a word (in some languages), e.g.
reconstructed form
/i/ = [e]/|ugrabani/'boat'
$/ \mathrm{u} /=[$ ] $] /$ bviuwida/ 'neck'
/a/ = [ə]/tuga(na)/ 'heel'
source spellings
McGeary: lukrapani; Backhouse: leucropene; Sterling: loo.crop.per.ner
Milligan: pilowettah Robinson: pale.wet.ter
Milligan: tokana; Robinson: touger

It is hard to tell whether vowel length was distinctive in Tasmanian. One recorder may have used a spelling which implied that there was a longish vowel in a certain word, but in most such cases there will be another spelling which suggests a short vowel e.g. Robinson's ware.ter 'limpet' suggests (in terms of the English spelling conventions Robinson used) [wa:ta] while Milligan's transcription of the same word for the same locality (Oyster Bay) is wattah, suggesting just [wata]. These and other examples point to the length of vowel being a phonetic phenomenon, often varying in each pronunciation of a word. On balance, it is unlikely that vowel length was phonologically significant.

Our conclusion that the Tasmanian languages may have just had three short vowels is put forward with great caution; it is perhaps most satisfactory to say that we cannot presently find evidence for more than three contrastive vowels. But there may have been more; and there may, of course, have been slightly different vowel systems in languages from different parts of the island.

### 2.4 STRESS

The position of stress within a word is perhaps the most elusive aspect of Tasmanian phonology. We have the following source material:
[a] Walker marks each vowel with either ${ }^{-}$or ${ }^{*}$; these marks apparently indicate accent rather than quantity (see the comment in Roth 1899, p.l of Appendix).
[b] Norman uses the same marks, probably in the same way. [c] Milligan says 'when a double consonant or two consonants stand together, the first carries the accent, as in the English words cunningly, peppery, cobbler, pipkin.' This somewhat elusive statement perhaps means that the vowel preceding a sequence of two consonants (in Milligan's orthography) bears stress.
[d] Tindale's transcriptions.
[e] The Fanny Cochrane Smith recordings.
[f] The 1972 Crowley recordings of Mrs. Heffernan and Mrs. Mundy.
From these sources it appears that a disyllabic word is always stressed on the first syllable, whereas a trisyllabic word can be stressed on either first or second syllable. Our only general conclusion concerning stress in Tasmanian is thus: any syllable except the last can bear stress.

### 2.5 PHONOTACTICS

Almost every word in the Tasmanian corpus consists of at least two syllables; the few monosyllables all appear to have polysyllabic variants e.g. ler~ler.lare 'foot' [Port Sorell]. There is no evidence for any word beginning with a vowel; vowel-initial spellings often derive from a form with initial/g/ (which is evident from other spellings of the same item) or else may relate to initial $/ \mathrm{w} /$ or $/ \mathrm{y} /$.

About ninety percent of words appear to end in a vowel; sometimes it may be a quite short, central vowel which is scarcely audible in some pronunciations of the word, e.g. Robinson now.hum.mer; Milligan noamma, nowam 'thunder' [North-West]. Words that end in a consonant come almost exclusively from the dialects of the west coast; (some of ) these may, indeed, have an underlying final vowel, which is sometimes not articulated very strongly (as in the example just quoted).

There are some medial consonant clusters, although these are by no means common. The structure of most words in the corpus is thus:

$$
C V(C) C V((C) C V)^{n}
$$

The only exception to this formula - apart from the possibility of consonant-final words in the west - is that perhaps $3 \%$ of words appear to commence with a consonant cluster; the set of initial clusters appears to be /b/ or /g/ followed by a lateral or rhotic, or /d/ followed by a rhotic.

It is likely that all consonants could occur in initial position; we have record of very few initial laminals, but this may be an indication of the difficulty early observers had of transcribing these, and distinguishing them from /d/ and $/ \mathrm{n} /$. Because of the difficulty of making sure reconstructions we hesitate to attempt statistics about the proportion of words that commence with each consonant; we can, however, comment on some points of interest.

On a sample of about 800 reconstructions no less than $17 \%$ of words begin with $/ 1 /$; this is exceeded only by $/ \mathrm{b} /$, with $19 \%$, and is just ahead of $/ \mathrm{m} /, 15 \%$ and $/ \mathrm{g} /, 13 \%, / \mathrm{d} /$, $13 \%$. According to our interpretation of rhotics, about $6 \%$ of words begin with $/ r /$ and perhaps a further $1 \%$ with $/ \mu /$.

Intervocalic consonant clusters can be reconstructed for only about $12 \%$ of the corpus. Those sequences that are reasonably well-attested are [i] nasal followed by (homorganic or non-homorganic) stop; [ii] lateral or rhotic followed by stop; and, the commonest sequence of all, [iii] stop followed by lateral or rhotic.

### 2.6 SUMMARY

We have interpreted the written material on the Tasmanian languages from the point of view of the recurrent phonological patterns on the Australian mainland. Phonetically, and also phonologically, the Tasmanian languages appear to present a familiar Australian pattern. The consonant and
vowel systems we have suggested do in fact accord very closely with the systems that have been reconstructed for proto-Australian.

Tasmanian languages are also similar to most mainland languages in demanding that each word consist of at least two syllables, and commence with a consonant. The most striking differences are, firstly, the fact that very few syllables end with a consonant - it is rare to encounter a word-final consonant, and intervocalic clusters occur in only a small minority of words. The second significant difference from Australian languages concerns the high frequency of the lateral and rhotic(s) in syllable-initial position. Most Australian languages do not have laterals or rhotics in word-initial position; if they can occur in this slot only a very small number of words will begin with a segment of this type. And on the mainland a lateral or rhotic may be the first, but scarcely ever the second, member of an intervocalic cluster. In Tasmanian the rhotics and specially the lateral occur at the beginnings of many words, and can occur as the second element in an intervocalic cluster. The occurrence of a few initial clusters in Tasmanian is another, more minor, point of difference; initial clusters are rare in Australian languages but where they do occur (around Lake Alexandrina, and in Gippsland, for instance) they generally involve a stop plus lateral or rhotic, as in Tasmanian.

We were able, on lexical grounds, to conclude that there were probably at least eight separate languages in Tasmania. With the exception of consonant-final words occurring mostly in the west, we are able to say nothing about phonetic or phonological differences. It does seem that Tasmania was characterised by a fairly uniform phonetics/phonology, as an areal feature. But there must have been some differences between the individual languages; unfortunately, the poverty of the source materials does not allow us to discern these.

## 3. GRAMMAR

### 3.1 NOUN AND VERB SUFFIXES.

The Tasmanian languages appear to have had a variety of suffixes; there is no strong evidence for any prefixes. A word will sometimes be quoted with a final syllable such as -na, -ga and sometimes without it, in vocabulary elicitation. There is little sentence material; the sermons by Robinson and Bible translations by Wilkinson were probably in a sort of pidgin, with Tasmanian words being strung together according to English word order. Probably the only spontaneous sentences are the few recorded by Jorgenson and Milligan (and just a handful in Robinson's diary).

Of the early investigators, Milligan wrote that the affixes, which signify nothing, are la, lah, le, leh, leah, na, ne, nah, ba, be, beah, bo, ma, me, meah, pa, poo, ra, re, ta, te, ak, ek, ik, etc'. Robinson added -na onto English words ending in a consonant when trying to speak Tasmanian, apparently following a common pattern for loan
words; he explained: 'they seem to have had no idea of the existence of a creative, presiding power, implied by the word God, nor any term corresponding with such a sentiment in their vocabulary. The English word has therefore been adopted by the translator, with the native termination superadded, making Gõdneh. The same with respect to several others. Several of these anglified terms are now in such common use among the natives, that they may be considered as incorporated with the language: the word grăssneh, for grass, is more frequently used among those at the settlement, than the original term given above...' (Plomley 1976:41). No other contemporary recorder commented on affixes in Tasmanian languages, their meaning or function.

Some suggestions about morphology were made by Roth, Schmidt and others, scarcely any of them convincing; none of these scholars had access to the substantial material collected by Robinson (which roughly doubles the Tasmanian corpus). We attempted to reassess the morphology by examining the occurrence of putative suffixes and examining possible hypotheses concerning their meaning or function.

Our procedure was to compare variant transcriptions of a single word. Where one appeared to have a final syllable that the other lacked, this syllable was marked as a possible suffix; /na/ as a possible suffix is demonstrated by the forms quoted for 'dream', 'eat', 'white man' and 'ear' in 2.2 , and 'heel' in 2.3 . Using this procedure we were able to isolate 23 suffixes on nouns and 19 on verbs - 16 of them coincide in form. All, except for a putative -way, are of the shape CV. Some of these possible affixes are attested in only two or three words, and it would be impossible to attempt any generalisations concerning them.

We then restricted ourselves to a study of the five most frequent affixes, each of which occurs with both nouns and verbs : /-na/, /-ya/, /-ga/, /-ra/, /-|i/. Two hypotheses suggested themselves, and attempts were made to verify them:
[i] We get the following combinations of these affixes : /-ga/ + /-na/ $\mid$-ra/ +/-na/ $\mid-1 i /+/$-ya/
This suggests that/-ya/ may be in complementary distribution with /-na/; that is, /-ya/ and /-na/ may be allomorphs of a single morpheme. An exhaustive check of the data reveals that /-ya/ only occurs after roots (or the affix /-li/) ending in /-i/. However, there are many examples of /-na/ occurring after /-i/, as well as after /-a/ or /-u/. The data thus does not provide support for our hypothesis.
(It is of course possible that the very frequent -na really covers two distinct suffixes - say /-na/, occurring after all vowels; and /-na/, occurring only after /a/ and /u/ and being in complementary distribution with /-ya/. The poor quality of Tasmanian material makes it impossible to prove or disprove this or similar hypotheses.)
/-na/ does not appear to mark any syntactic function in the limited and unreliable sentence material available it occurs attached to nouns in intransitive subject, transitive subject and transitive object functions.
[ii] /-ga/, /-ra/ and /-li/ appear, from their tactic possibilities, to constitute a 'system' of affixes. The fact
that they can be suffixes to both nouns and verbs suggests that they may in fact carry a pronominal meaning - with a noun they could indicate 'possession' and attached to a verb they might refer to the subject or object of that verb. However, a careful check of the words with which these affixes occur does not lend credence to this hypothesis they occur with body part and kinship nouns (which might reasonably be expected to bear a possessive suffix) but also with words such as 'sun', 'worm', 'grass', 'bark', 'rain', 'moon', 'ice' with which a possessive suffix would be implausible. There is, in fact, no more support for attaching a possessive meaning to /-ga/, /-ra/ and /-1i/ than to /-na/ or other of the suffixes.

Our thorough investigation of the corpus did not support any plausible hypothesis concerning the putative suffixes in the Tasmanian languages.

Capell (1968) provides an exemplary critical account of what is known - or not known - of Tasmanian morphology. Roth (1899:184) had suggested that -na marks the singular but there is really no supporting evidence (there is also no evidence to the contrary). Schmidt decided that -na was a type of definite article - similar comments apply. Roth (1899:184) also repeated La Billardière's suggestion that the disyllabic suffix - Zia (probably /|iya/) marked the plural; it occurs with the words for 'ear', 'eye', 'breast', 'arm', 'tooth', 'testicle' and 'family' in his vocabulary, lending a degree of plausibility to this suggestion. Reduplication may have been used to mark plurality in some instances although there are only a handful of possible examples e.g. nuba nuberai 'eyes' (unreduplicated nubré is also attested), lori lori 'fingers' (there is no record of unreduplicated lori). Note also Gaimard's recording of karde 'five' and karde karde 'ten'.

Most other comments on possible affixes in the literature seem very speculative. On the basis of Milligan's sentences

$$
\begin{array}{ll}
\text { Tallé lenutoo } & \text { 'Tell him to go to the house' } \\
\text { Onnabea nangato } & \text { 'Tell your Father of this' }
\end{array}
$$

Müller (1882, II.88) suggested that - to was the dative case marking on nouns, parallel to dative -to on pronouns.

Although Müller, Schmidt and others have devoted a great deal of attention to the forms of verbs, they have - like us - been unable to draw any significant conclusions.

### 3.2 PRONOUNS

Two sets of pronouns are reasonably well attested:

|  | 'I' | 'you' |
| :--- | :---: | :---: |
| South-eastern, Oyster <br> Bay and Big River | mina(na)/ | nina(na)/ |
| North-west and West | $/$ man(a)/ | /nin(a)/ |

For Port Sorell and Ben Lomond there is one form of each pronoun, given by Robinson:

Port Sorell bi.near.re.ne.re.pare
Ben Lomond
'you'
de.nare.re.pare
yal.ler.me.yoe

Further corroboration would be required before we could be sure that these were the forms of pronouns in these languages.

The only clue concerning a plural pronoun is the form wãrrãnděr 'we' in the Norman vocabulary. Again, there is no corroboration from other sources. A form /narra/ may have been a third person pronoun in some eastern languages; it is glossed 'they, he, her, them, that' by Jorgenson, 'him' by Charles Robinson, 'he, she, they' by Sterling (and 'you, thou' by Backhouse:.). Similarly /niga/ is glossed 'this' by several sources. Some forms for 'what' and 'where' are gathered together by Plomley but most of them were originally glossed 'what's your name?' or 'what's the matter?' etc. We can tentatively reconstruct /diliog/ 'what' for Oyster Bay, but the other spellings show variation of both form and meaning (or are given by just one recorder).

There are one or two tantalising sentences recorded by Milligan which have been commented on by a number of scholars:
(1) Noia meahteang meena neeto linah
' I will not give you any water'
(2) Loona or Loina tyennabeah mito
'Give me a stone'
(3) Tugganna Iunameatah
' I shall go to my house'
On the basis of these Müller suggested neeto is the dative of the second person and mito the dative of the first person pronoun (correlating with the two examples he found of dative -to on nouns - 3.1). This is a quite possible interpretation, although more corroboration would be needed before it could be accepted with certainty.

Sentence (1) can be tentatively phonemicised, and glossed:

$$
\begin{align*}
& \text { nuya miya-diyan mina nidu liyana }  \tag{1}\\
& \text { not } ? \text { give } I \text { you water }
\end{align*}
$$

The interesting point here concerns the first element of the verb word; this could be a prefix mi-, a reduced form of the first person pronoun. Similarly, the second word of sentence (3) could conceivably be segmented into root luna 'house', suffix -mi 'my' and dative -to. There are, however, other examples of a putative affix -mi- where the sentence has no reference to first person. The evidence is not conclusive (nothing is, in Tasmanian studies) but it is in fact rather likely that there were bound forms of pronouns, which could attach to the beginnings or ends of other words, perhaps having a possessive function with nouns and marking subject with verbs.

### 3.3 SYNTAX

Capell (1968) includes a thorough study of word order in the Tasmanian materials. Robinson's sermons and Wilkinson's Bible translations show a Subject-Verb-Object word order but this probably tells us little about Tasmanian grammar; they appear to be written in a type of pidgin and would probably have been translated from English word-byword.

In fact, SVO is the commonest pattern in the sentences recorded by Milligan and Jorgenson (and those in Robinson's diary) but it is by no means the only pattern found. There are examples of the object preceding the verb, as in (2), and of the subject following it, as in (1) above.

An adjective appears to have followed its head noun. There are a fair number of examples, from several sources e.g. 'stomach' + 'full', 'water' + 'salty', 'earth' + 'white'. The only exception is Robinson who in his sermon maintains English word order in 'one God'.

## 4. POSSIBLE RELATIONSHIP WITH AUSTRALIAN LANGUAGES

At the end of the last century it was suggested that Tasmanians differed from mainland Australians in physical type, culture and also language. In recent years anthropologists have inclined more to the view that the Tasmanians were originally a group of Australian Aborigines, cut off when sea-level rose - flooding Bass Strait and cutting off Tasmania - about 12,000 years ago.
N.B.Tindale and J.B.Birdsell (1941) suggested that the peoples of the Cairns Rain Forest region, in North Queensland, were 'Tasmanoid' in physical type. There is, however, so little information on any aspect of the Tasmanians that this theory must be regarded as speculative; there is no real evidence of any particular similarity to the rain forest Aborigines.

The firmest conclusions we have been able to draw concern the phonological system of Tasmanian languages. In section 2 we suggested that the phoneme system and some aspects of the phonotactics were typologically of the predominant Australian variety; the main points of difference are that words in Tasmanian seldom end in a consonant (although there are some groups of Australian languages like this) and that $l$ and $r$ are very common at the beginning of a syllable in Tasmanian.

For proof of genetic relationship we do, of course, need not just typological similarity but systematic correspondences of grammar and lexicon. At the grammatical level, there is scarcely a whisper of similarity. Tasmanian pronouns /mina/, /man(a)/ 'I' and/nina/, /nin(a)/'you' are rather different from the recurrent Australian forms/nay-/ 'I' and /gin-/~/nin-/~/nun-/ 'you'. Only the Ben Lomond form recorded by Robinson, i.tho might be thought to be a candidate for comparison. Words in Tasmanian languages do not begin with a vowel and the initial consonant of this form may have been $/ \mathrm{y} /$ or else perhaps $/ \mathrm{g} /$; if the latter it could have been
/raydu/ which is a frequent form of the first person singular pronoun in Australian languages. But this - the best grammatical cognate we can put forward - does involve several leaps of the imagination.

Even the putative dative suffix - $d u$ differs from the recurrent Australian dative -gu. Australian languages do generally order an adjective after a noun - like Tasmanian - but almost all of them prefer to put the verb at the end of the sentence - unlike the majority pattern in the small corpus of Tasmanian sentences.

Lexical comparison yields equally meagre results. E.M. Curr (1887:III,596) quoted seven possible cognates between Tasmanian and Australian languages; for six of them he was also able to find what for him were plausible cognates from the languages of Africa! John Mathew (1889:361-2) expanded the list to 22 items. There are in fact a few Tasmanian forms that are very similar to recurrent lexemes in Australian languages, notably:

| Tasmanian source spellings | Australian form |
| :--- | :--- | :--- |
| tullah, tullana, tullanee, | /dalan/ 'tongue' |
| tullane [West and North-West] | bula/ 'two' |
| boula, boulla, bõw. $\bar{y}$, pooalih |  |
| bura, bourai [South-eastern] | /bul |

But these, and a handful more, are no more than an acquisitive investigator could uncover through detailed comparison of any two languages.

We concluded, in 1.4, that there may well have been four or more distinct language families in Tasmania.
There is absolutely no evidence that any of these had a genetic relation with the Australian language family. It must be remembered, though, that Tasmanian languages may have been isolated from contact with the mainland for 12,000 years. The facts available are perfectly compatible with a genetic connection having been evident at that time, but having become less and less recoverable over the intervening millenia. The similarity of phonological type would also be consistent with this. The best summary is, perhaps, to say that there is no evidence that some or all of the Tasmanian languages are not ultimately related to the Australian language family.

There is no hint of a relationship with languages from any other part of the world. (Greenberg, 1971, suggested a link between Tasmanian, Andamanese and the Papuan languages of New Guinea. He quoted eleven grammatical criteria - Tasmanian languages satisfy one of them; of the 84 lexical forms considered by Greenberg putative Tasmanian cognates are quoted for less than $25 \%$ - none of them is convincing. Greenberg's is one of the more outrageous of the many hypotheses that have been put forward concerning the Tasmanian languages.)

The material on Tasmanian is so poor that almost nothing can be inferred with any degree of confidence. Standards that are applied to work on other language families tend to be relaxed when scholars approach Tasmanian, so that speculation becomes the order of the day. Not wishing to be
the exception to this general trend, we shall finish with some speculations of our own.

Archaeologists believe that until 12,000 years ago there were people living in the land area of what is now Bass Strait but that there was probably no habitation over most of Tasmania, where the weather and conditions would have been much less favourable than they are today. Sealevel rose when the ice melted, flooding Bass Strait and forcing the people to move to higher ground; at the same time, the temperature would have risen and living conditions improved on Tasmania itself. It is reasonable to assume that some of the people from Bass Strait moved south into Tasmania as the sea-level gradually rose. On the map we have shown (by a broken line) the 35 fathom level, which would have been the coastline at a certain historical stage. It is likely that two groups of people moved into Tasmania a group on the land around King Island could have moved into the north-western region and down into the western corridor, while another group from the land around Flinders Island could have moved into the eastern part of the island.

If this had happened we would expect a severe linguistic discontinuity where the two waves met, at the southern tip of Tasmania. And this is what we find. The figure of $18 \%$ possibly cognate vocabulary between South-western and South-eastern (see Tables 1 and 2 in 1.4) is low, lower in fact for any other score between contiguous languages except for those involving Port Sorell and North Midlands. Turning now to the promised speculation. In Table 2 Northern has a higher score with Piper River, with which it is not contiguous, than it does with any of its neighbours. The statistical pattern in Table 2 would conform to the geographical pattern exactly if Northern speakers lived immediately to the north of Piper River - its scores of $50 \%$ with Piper River, $46 \%$ with Cape Portland, $33 \%$ with Ben Lomond, and so on, would then be perfectly compatible with the relative positions of these groups.

What if the Northern group did originally live immediately to the north of Piper River, just before sea-level reached its present height. When they were forced to move to higher ground they may have had to move to the south-west in order to find country that was not already occupied. This would perfectly explain the vocabulary scores.

Having put forward our hypothesis, we must hasten to demolish it. Sea level rose to its present height many millenia ago. Although we do not know the exact rate at which vocabulary is borrowed between neighbouring languages it must surely be at a fast enough rate for any relationship of this sort to be obscured over a period of ten or more thousand years. This idea is surely as wild and empty as others that have been proposed over the century and more since the Tasmanian languages ceased to be actively spoken.

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[^0]:    wungu - gargay 'small hawk'
    gurguru - gungunu 'thunderstorm'; gurungul 'small hawk'
    (the latter totem was given by Craig, but is not
    remembered by present-day informants).
    gurgila - 'eel'; yungubala 'black python'; yamani 'rainbow'; waga 'crow'

[^1]:    gayba gagay nunangu migagu (nundalagu) I'm going to the camp (to look at it)

[^2]:    * palu and pula refer to 3 rd person singular and dual (respectively) within the local group. To refer to a third person (singular) outside the group palutja is used. To refer to third person dual outside the group pulatja is used.

[^3]:    Y - inme

