EDITORIAL PREFACE

Until quite recently, work on theoretical linguistics and work on language description proceeded almost entirely in isolation from one another. Work on theoretical linguistics, especially in syntax, concentrated primarily on English, and its results were felt to be inapplicable to those interested in describing other languages. Work on describing individual languages was almost deliberately isolationist, with the development of a different framework and terminology for each language or language group, and no feeding of the achievements of language description into linguistic theory. Within the last few years, however, a major rapprochement has taken place between theoretical and descriptive linguistics. In particular, the rise of language typology and the study of language universals have produced a large number of theoreticians who require accurate, well-formulated descriptive data from a wide range of languages, and have shown descriptive linguists that they can both derive benefit from and contribute to the development of linguistic theory. Even within generative syntax, long the bastion of linguistic anglocentrism, there is an increased interest in the relation between syntactic theory and a wide range of language types.

For a really fruitful interaction between theoretical and descriptive linguistics, it is essential that descriptions of different languages should be comparable. The *Questionnaire* of the present series (originally published as *Lingua*, vol. 42 (1977), No. 1) provides a framework for the description of a language that is (a) sufficiently comprehensive to cover the major structures of any language that are likely to be of theoretical interest; (b) sufficiently explicit to make cross-language comparisons a feasible undertaking (in particular, through the detailed numbering key); and (c) sufficiently flexible to encompass the range of variety that is found in human language. The volumes that were published in the predecessor to the present series, the *Lingua Descriptive Studies* (now available from Routledge), succeeded in bridging the gap between theory and description: authors include both theoreticians who are also interested in description (e.g. Peter Cole on Imbabura Quechua) and field-workers with an interest in theory (e.g. John Davies on Kobon).

The aim of the Croom Helm Descriptive Grammars is thus to provide descriptions of a wide range of languages according to the format set out in the *Questionnaire*. Each language will be covered in a single volume. The first priority of the series is grammars of languages for which detailed descriptions are not at present available (thus, the monographs on Nkore-Kiga and Babungo are the first comprehensive descriptions of those languages). However, the series will also encompass descriptions of better-known languages with the series framework providing more detailed descriptions of such languages than are currently available (as with the monographs on West Greenlandic and Kannada).

Bernard Comrie
Norval Smith

MANGARAYI

FRANCESCA MERLAN

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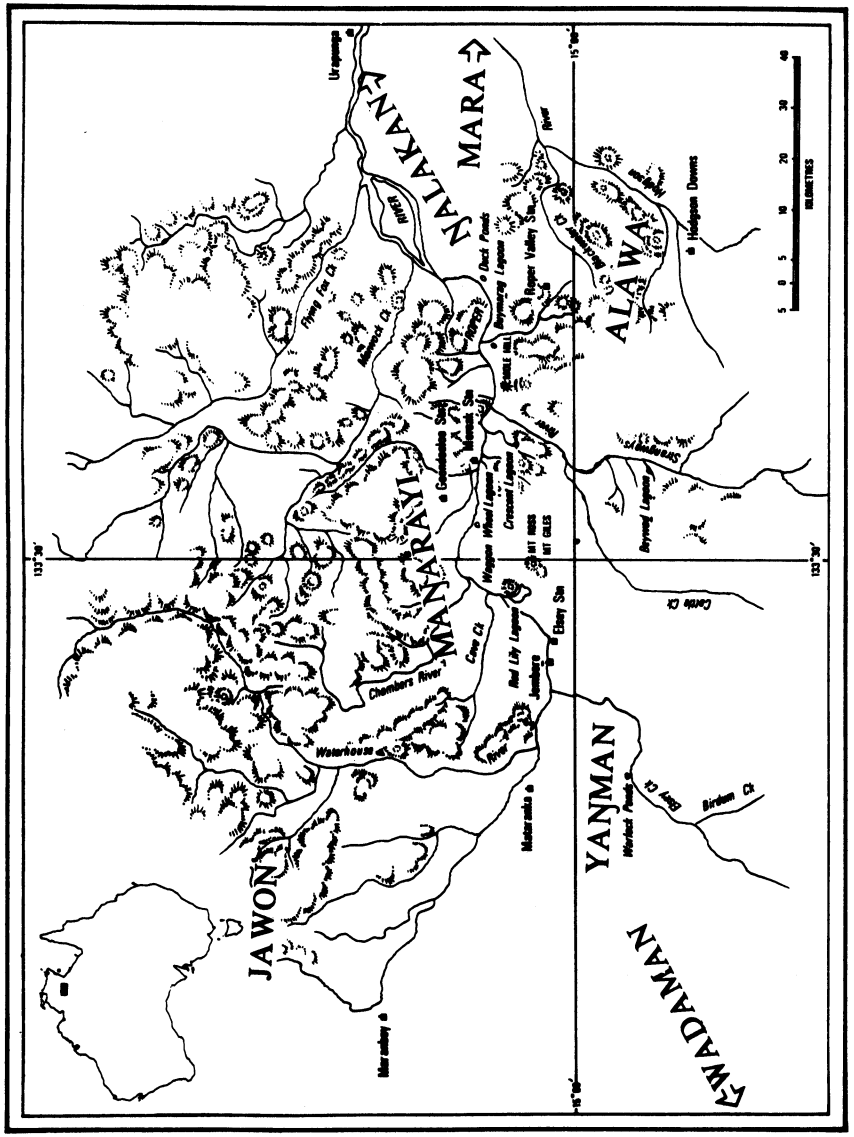


Language groups and locations in the Elsey Station area.

Introduction

Language name and present setting

Maŋarayi is the name of an Aboriginal Australian language indigenous to the western Roper River in the Northern Territory. In the Roper River area, a single name is frequently used both to refer to a language and to members of the social group characterized (at least in part) by speaking that language. Thus along the Roper people use 'Maŋarayi' as a language name and a designation of social identity. The name is linguistically unanalyzable and has no other reference.

Older Maŋarayi say that formerly they and their ancestors also used the name 'Ŋarabadji' for themselves and their language. They claim this name had the same wide reference as 'Maŋarayi' does today, and did not designate a social or linguistic sub-unit of a larger group. Since the Maŋarayi have lived around local pastoral stations for about one hundred years, and have not lived a fully traditional life-style in terms of local group distribution, it is not possible to be certain of the pre-contact usage of the two names 'Maŋarayi' and 'Ŋarabadji'. The Maŋarayi point out that some neighboring peoples have two names for themselves and their language — for example, 'Alawa' or 'Waḷiburu', and the 'Mara' or 'Maraṇbala' further east — both of which are still used in each case. At any rate, the term 'Ŋarabadji' has almost fallen into complete disuse and is only recoverable as a term remembered by older people.

Most of the people who speak Maŋarayi well live at Jembere Aboriginal community (see map), an excision area within Elsey Station, a pastoral property. Jembere community was formed in 1974 after the implementation of Award Wages (in 1968) and a gradually changing political climate hastened the first moves towards Aboriginal autonomy in the post-contact setting. All over the Northern Territory, the requirement of wage parity for Aborigines resulted in a significant lessening of demand for their labor, and a reluctance on the pastoralists' part to maintain large numbers of Aborigines at stations. Large Aboriginal camps at such stations as Elsey dwindled in size as many people moved to settlements like Bamyili and Ngukurr (formerly Roper River Mission). In a few places, excision areas within pastoral properties were demarcated for those who wished to remain. Before these changes began to occur, Aborigines had been concentrated around pastoral stations since the beginning of pastoral settlement in the area in the early 1880s.

Jembere community, situated on the western Roper River at a locality of that name, today has a population which fluctuates between about 45 and 65 persons. The variation depends upon work opportunities at local pastoral stations, and ceremonial and other social events in neighboring communities. The nearby towns of Mataranka and Katherine also draw people for visits ranging from one or two days to several weeks. During my stay at Jembere in 1977-78, several galvanized iron 'cabins' were erected, replacing most of the wood and iron shelters previously used. The community has a water pump, trailers used as school and medical facilities (teachers and medical personnel commute from the town of Mataranka 35 km distant), large storage shed, tractor-trailer, and truck used mainly for transport of people. During a return visit in 1979 I found the first steps had been taken towards installing electricity, a facility which will probably alter the daily round somewhat. The cash income of the community largely takes the form of welfare benefits. Staple foods today are mostly European commodities though people continue to exploit native vegetable resources, fish and game.

Sociolinguistic notes

During my stay at Jembere the number of (primary) school age children ranged from about 20 to 30, or about half the average size of the community. There were generally around 9 to 10 elderly people, most of them permanent or semi-permanent residents of Jembere. These older people and some other speakers who normally reside at Bamyili supplied much of the information in this grammar. During this period there were also generally about 12 permanent and semi-permanent middle-aged residents (in their forties). Again, all of these people at different times helped me, formally and informally. The age group which showed the greatest variation in permanence of residence was that of young adults, both unmarried and those married with young families. There tended to be a disproportionately small number of people of this age group in residence at any one time.

All the elderly permanent residents were fluent speakers of Maŋarayi. Though this was not the first-acquired language of all of them, it was at that time the Aboriginal language most frequently used by all in daily life. Most of the middle-aged were fluent speakers, but a few (especially those who had married in) were semi-fluent or rarely, if ever, spoken Maŋarayi. Those of the young adult and school age categories all understood Maŋarayi; the former very rarely, and the latter never, spoke more than a word or two of Maŋarayi. The lingua franca of the Roper area consists of forms of English ranging from most highly pidginized (generally used by the elderly) to most highly creolized (generally used by children and young adults). 'Most highly pidginized' is used here to refer to those speech varieties which phonetically and morpho-syntactically are least similar to Standard English; while 'most highly creolized' refers to those most similar to Standard English. For example, most highly pidginized varieties, like the local Aboriginal languages, contain no fricative segments; the more creolized varieties do contain fricatives. In general, the more pidgin-like features are most frequently used by people who speak one or more Aboriginal languages natively, while more creolized features are most frequently used by younger people for whom some variety of English is a first language. Descriptions of the 'Kriol' have recently been published (Sandefur 1979, Sandefur and Sandefur 1981). During my stay at Jembere there was nobody there who could speak fully Standard English. This was true of almost all the Aborigines I encountered who had grown up on cattle stations, except for a few adults educated at (formerly) Roper River Mission, now Ngukurr.

All of the elderly people could speak at least one other Aboriginal language besides Maŋarayi. Multilingualism in Aboriginal languages appears to be much less common among the middle-aged, although many people of this category can understand and/or are semi-fluent in more than one Aboriginal language. Altogether, at Jembere and neighboring Roper communities, the number of people who speak Maŋarayi very fluently would probably not exceed around 50. The language is understood to a greater or lesser extent by a much larger number.

The Roper River region is an area of high linguistic diversity, characterized by sharp differences among languages, including those which on the basis of available comparative evidence belong to a single genetic subgroup. Languages which appear to belong to the same genetic subgroup as Maŋarayi are Mara, Waṇdaraŋ, and Alawa. A fourth language, Yugul, which is thought to have belonged to this group is no longer spoken. None of the extant languages within this subgroup is mutually intelligible with Maŋarayi. Work on Alawa has been done by Sharpe (1972), and on Waṇdaraŋ and Mara by Heath (1980, 1981). The writer has done work on a neighboring language,

Jawoñ, which appears to belong genetically within a subgroup including Gunwiñgu, Ŋalkbon, Ŋalakan and other Arnhem-area languages. In inventory of verbal inflectional categories and in some cases even their morphological expression, similarities between Maŋarayi and some languages of this subgroup (especially Jawoñ) are greater than those between Maŋarayi and languages of its own presumed subgroup. For example, Maŋarayi, like Jawoñ, in the past distinguishes past punctual and past continuous conjugational allomorphs for almost all verbs. Maŋarayi has one past punctual allomorph -b, and Jawoñ a past punctual allomorph -m; there is considerable evidence in roots for a correspondence of Maŋarayi final stops to Jawoñ final nasals (e.g., Maŋarayi wab, Jawoñ wam 'honey'). While showing such interesting parallels to Jawoñ in its inflectional verbal categories, Maŋarayi shares evidently archaic features of (semiproductive and frozen) derivational verbal morphology with Waṇdaraŋ and Mara, particularly in its augment system (see 2.1.3.-IIIb).

No dialect variation was found within Maŋarayi. This accords with speakers' views that their language is 'one'. There is an avoidance style, to be used both to refer to, and in speaking with, mother-in-law and certain other types of relatives with whom social interaction is highly constrained. Formal features of the style include escalation of pronominal number (so that a single avoidance category kinsman is referred to by 3Pl forms instead of 3Sg, and addressed by means of 2Pl forms instead of 2Sg), some lexical replacement by a variety of grammatical means, and an overall shift in register so that, for example, solicitous remarks and politely-phrased requests are more frequent than in ordinary speech. The avoidance style is described in the Appendix.

Several hours of songs were recorded, and the linguistic material contained therein proved to be very different from the ordinary spoken language. People claimed different degrees of understanding of song material. Some were able to give word-by-word glosses for some parts of songs at least, and in no case was the grammatical structure within such texts the same as that of ordinary spoken language. In other cases, while entire songs or parts of songs were said to have a meaning, informants were unable to provide meanings for smaller units within the text, though they were able to divide the text into words. It is clear that many of the songs collected contain words from other languages (e.g., Mara, Waṇdaraŋ).

Anthropological and linguistic sources

Brief remarks on Maŋarayi social organization and mythology are to be found in Spencer 1914; see Maddock 1976 for brief interpretive remarks on the latter. More recent sources on totemic belief and social structure are Merlan 1980, 1982.

Two books were written about Elsey Station by European pastoralists. The first is the Australian classic, *We of the Never-Never* (1908/1954), by Mrs Jeannie Gunn, wife of station manager Aeneas Gunn. This contains many references to Aborigines at the station but is mainly personal reminiscence. The second, *Tell the White Man* (1941) was written by manager H.E. Thonemann with the assistance of the late Professor A.P. Elkin, and contains more material of anthropological interest. For ethnohistorical accounts of station life, see also Merlan 1978.

M.C. Sharpe did some work on Maŋarayi in 1977 with the aim of developing a practical orthography for the language. (No bilingual program has ever been implemented at Jembere school, however). Her field notes are lodged at the Australian Institute of Aboriginal Studies, Canberra, as are my

tapes and notes. I lived at Jembere from April 1977 until November 1978, with short periods spent in neighboring communities during this time. I returned to Jembere for brief visits in 1979 and 1980.

Linguistic type

Aboriginally, languages of the proposed Pama-Nyungan family were spoken over most of the Australian continent except for a relatively small area in northern Western Australia and the Northern Territory. Maŋarayi belongs to a non-Pama-Nyungan genetic subgroup. Wider relations among the non-Pama-Nyungan subgroups are presently not well established.

Maŋarayi is a highly inflecting language. Nominal case function is indicated by noun class/case markers which show different patterning by noun class. There are three noun classes, masculine, feminine and neuter (largely inanimate). Case-marking in masculine and feminine classes is organized nominative-accusatively, and in the neuter class, ergative-absolutively. Also pronouns, demonstratives, interrogative-indefinite and plural forms pattern nominative-accusatively. There is evidence, however, that nominative-accusative patterning in at least the feminine noun class is a historical development from an earlier ergative-absolutive pattern (see 2.1.1d).

Verbs inflect by prefixes for mood categories, and by suffixes for tense-aspect and certain additional modal meanings. Verb complexes are of three types. First, the most common construction type consists of free, uninflected particle expressing most of the verb's lexical meaning, combined with one of a number of semantically fairly empty separable auxiliaries which serve as prop for inflectional affixes, e.g., buy? wu- 'to show'. Second, 'compound' verbs consist of an initial (usually unanalyzable) compounding element followed by an inseparable auxiliary. The inseparable auxiliaries are a subset of the separable ones of particle plus auxiliary constructions. An example of the compound type is barañ+bu- 'to dream'. Finally, there are morphologically simple verb roots which can function by themselves with full lexical meaning, such as gawa- 'dig, bury' or bu- 'hit'. Some of these, especially CV roots like bu-, are identical to separable and inseparable auxiliaries found in the other two construction types.

Cross-referencing pronominal prefixes are obligatory in the verb. There are two sets of cross-referencing pronominals, subjective and objective. In the distribution of these case forms over functions, the pronominals pattern nominative-accusatively. There is no mechanism for cross-referencing benefactive or other dative NPs in either transitive or intransitive constructions. These can only be expressed outside the verb by appropriate case forms of pronouns, demonstratives or nouns.

The prefixes used to express subordination are identical to those used to mark irrealis mood (a category used to express uncertainty and possibility, but not negation). The major, weakly subordinated clause type can be interpreted adnominally, temporally or in other ways (see 1.1.2.3).

Syntactic mechanisms for maintaining discourse co-reference are not highly elaborated, unlike those described for some Pama-Nyungan languages (see Dixon 1972).

The phonological inventory is typically Australian in lacking fricatives and affricates, and having complete correspondence between stop and nasal series. There is only one stop series. The morphophonology is fairly simple; alternations tend to affect specific grammatical morphemes instead of having the character of general phonological processes.

Abbreviations

Abl. = ablative
Abs. = absolutive
Acc. = accusative
Adj. = adjective
All. = allative
Ana. = anaphoric
Art. = article
Aug. = stem augment
Aux. = auxiliary verb (bound or free)
Av. = avoidance style element
C. = consonant
Caus. = causative verb
Coll. = collective
Cop. = copula
Dat. = dative
Dem. = demonstrative
Det. = determiner
DI. = desiderative-intentional suffix
Dir. = directional prefix
Dis. = distant demonstrative category
Du. = dual
Emph. = emphatic clitic
Erg. = ergative
Ex. = exclusive
Exp. = experiential
F. = feminine noun class
Foc. = focus clitic
Gen. = genitive
Hab. = habitual
Hort. = hortative
Imp. = imperative
In. = inclusive
Inch. = inchoative
Inst. = instrumental
Irr. = irrealis
IS. = intransitive subject
Loc. = locative
M. = masculine noun class
MP. = mediopassive
N. = neuter noun class
N. = noun (in phrase structure diagrams)
Nec. = necronymic suffix
Neg. = negative
Nom. = nominative
Nom. = nominalizer
Nondis. = nondistant demonstrative category
NP. = noun phrase
PC. = past continuous
Per. = pergressive
Pl. = plural
PNeg. = past negative
PP. = past punctual
Pres. = present
Priv. = privative
Pro. = pronoun

Prohib. = prohibitive
Prop. = proprietive
Purp. = purposive
Qual. = qualitative suffix
Recip. = reciprocal
Red. = reduplicative form
RR. = reflexive-reciprocal
S. = sonorant
Sg. = singular
Sub. = subordinate
Suf. = narrative suffix
TO. = transitive object
TS. = transitive subject
V. = vowel
VP. = verb particle

3 and -3 stand for 'third' and 'non-third' first order prefixes, respectively; see 2.1.3.-I.

Kin abbreviations are standard: B = brother, C = child, D = daughter, F = father, H = husband, M = mother, W = wife, Z = sister. Combinations are interpreted as usual, e.g. MBC = mother's brother's child. Other abbreviations used in kin charts are aff = affinal, WC = woman's child, + designates elder, - designates younger.

1. Syntax

1.1. General questions

1.1.1. Sentence-types

1.1.1.1. Direct and indirect discourse

In Maŋarayi, there is no formal distinction between direct and indirect discourse. In English, we distinguish direct quotation from a report which supposedly reproduces the content of some utterance, but not necessarily in the same words:

(a) He said, 'I'm going to town'.
(b) He said he was going to town.

In Maŋarayi, no such distinction is grammaticalized; all reported speech is represented as if it were the verbal re-creation of an (alleged) earlier utterance. Maŋarayi reported speech is thus not fully comparable to direct discourse in languages like English which have a direct-indirect distinction: unlike the latter, the former cannot be assumed to be a faithful representation of some earlier utterance, since there is no other way of reporting speech with which this 'direct' method contrasts.

The combination of irrealis prefixation with past positive inflection of the verb expresses an evidential meaning which must be mentioned in this context. The precise modal meaning of the irrealis category (2.1.3.4.1.-2) is tense-dependent. With present inflection, irrealis expresses speaker's assessment that the event is merely possible or may occur, but is not certain to occur. Past positive inflection, on the other hand, indicates that the event has already occurred. In combination with past positive inflection, irrealis is interpreted to mean that speaker is unable to vouch for the factuality of the past event (usually because he has not experienced it himself). Past irrealis forms are thus best translated as 'reportedly, allegedly, supposedly', i.e., as representing speaker's imputation that his knowledge of the event is not first-hand. But such verb forms are not reports of speech; they only convey the implication that speaker learned of the narrated event indirectly, by hearsay or the like. Hence these forms need not be considered further here.

In the absence of a contrast between direct and indirect report, the Maŋarayi speaker may choose to represent actions descriptively (by talking about them), or as reported speech. I will briefly consider how reported speech is recognizable as such (i.e., how transitions are made to and from reported speech), and second, the question of when speakers choose to represent events by reported speech rather than by description.

1.1.1.1a. Transitions between reported and descriptive speech

First, speech reported in narrative is very frequently introduced by an attention-getting exclamation of some sort which announces to the listener that a character is about to speak. These exclamations include a! me! e! or e?é; they express certain attitudes of characters within the narrative, towards narrated events. The exclamation a! often expresses an attitude of surprise, e?é an attitude of negation or correction, while the others serve an attention-getting function within the narrative as well as in the speech situation in which the narrative is being recounted. Thus these exclamations function on two levels, within the narrative and within the act of narration.

Second, reported speech is very frequently introduced or followed by a form of the verb ma- 'to say, do', appropriately inflected for person and number of the alleged speaker. Surprisingly, other verbs designating kinds of speech acts (whether monomorphemic, composed of particle+aux, or

compound, see 1.16.3) are not used as framing verbs. That is, no reported speech is ever framed by such verbs as ŋaŋ?+ma- 'to ask', juṛ? bu- 'to list, name', jawaṇ+bu- 'to answer', jay+ma- 'to refuse', juma- 'to mention' or the like. Such verbs are restricted to, and are partly definitional of, contexts in which instances of speaking are being described rather than reported directly; only ma- functions as a framing verb. It sometimes happens that a speaker may describe a former speech act using a verb such as one of those listed, and then go on to construct a stretch of reported speech (perhaps framed by ma-). For example, a speaker in describing the amazement she felt as a child when she learned about a traditional practice said the following:

miŋiwa ṇa-gaṛaṛ-yaḷa ŋiḷa-ṇi, ŋiyan-ga-ni ṇa-baḍa,
already MNom-big-Pl Nom 1ExPl-be PC 3Sg/1ExPl-take-PC MNom-father

ŋiyan-ga-ŋiñ, ṇa-ŋaŋ?+ma-ñ, ŋan-ṇañi waḍij, jaginaŋgu-ba
3Sg/1ExPl-take-PP 1Sg/3Sg-ask-PP FAcc-mother also why-Foc

ḷa-jiray-wa ṇa-ri-yan-wa Ø-guṛugguṛug
2Pl/3Sg-eat PC-Suf MNom-Nondis-Coll-Art NAbs-dead people

Ø-maral ḷa-jiray-wa jaginaŋgu-ba, buy?
NAbs-deceased 2Pl/3Sg-eat PC-Suf why-Foc teach

ŋiyan-wu, ŋiḷa-ma-ñ
2Sg/1ExPl-Aux Imp 1ExPl-say-PP

'We were already big, my father took us, he took us, I asked him (and) my mother too: "Why did you eat those dead people, you ate the dead, why? teach us," we said'.

Third, besides appropriate inflection of the framing verb (if present) for person and number of the represented speaker(s), pronominal shift within reported speech usually demarcates it from surrounding descriptive passages. Examples of this transition are taken from a text involving a small boy and his grandmother as the main participants:

Ø-yaŋar Ø-wa-b Ø-guḷañi-wa mod Ø-may,
NAbs-ironwood 3Sg/3Sg-go to-PP NAbs-long-Art cut 3Sg/3Sg-Aux PP

mod Ø-may mayawa-ja. Ø-ga-ŋiñ, joy Ø-wu-na
cut 3Sg/3Sg-Aux PP all right-Emph 3Sg/3Sg-take-PP give 3Sg/3Sg-Aux-PP

Me! gagag marb a-ña-ṇama Ø-ŋañ-ṇawu, Ø-ma-ñ.
Hey! (take it) MM tie Irr-2Sg/3Sg-Aux NAbs-neck-its 3Sg-say-PP

'He went to an ironwood, cut a long (strip), he cut it, all right now. He took it, gave it (to her): "Hey! (take it) granny, you can tie up its neck" (of a goanna they had killed), he said'.

Here the exclamation me!, the use of a vocative kin term, a 2Sg pronominal in the verb, and the framing verb marked for person and number of the speaker, are all signals of reported speech. Another example is:

....Ø-muña-ṇawu Ø-jiray waḍij ŋamda-ṇawu
NAbs-entrails-its 3Sg/3Sg-eat PC also whachacallit-its

Ø-ŋiṛ?min-ṇawu joy Ø-wu-na. Mayawa-ja mayawa-ba ye?ye
NAbs-liver-its give 3Sg/3Sg-Aux-PP all right-Emph now-Foc play Red

ga-ŋa-ma gana wul wuran-wu.
-3-1Sg-Aux but hide 2Sg/3Du-Aux Imp

Yowo.
Yes

Ye?ye Ø-ma-ṛi ...
play Red 3Sg-Aux-PC

'He ate its entrails, she also gave him whatchacallit, its liver. "All right now, now I'm going to play but hide it (i.e., the goanna remains) from them" (two other characters).

'Yes'.

'He played...'

This kind of evidence for reported speech is of course available only when the speaker and/or addressee of the reported speech event differ from those of the reporting event.

1.1.1.1b. Use of reported speech

The preceding discussion has already suggested that one of the principal functions of reported speech in narrative is the representation of interactions between characters, particularly at certain kinds of critical narrative junctures closely tied to further situational development. A simple example of this comes from a text about the travels of two olive pythons:

wur-ya-j ṇi Wuḷinawu-ḷama wur-ya-j. Naŋganwa waḍij juguḷu?
3Du-go-PP there (place)-All 3Du-go-PP there also coil up

wur-yu-j, yirg wur-gaḍ-jag.
3Du-Aux-PP get up 3Du-Aux-MP PP

A-ŋi-yag.
Hort-1InDu-go

Jibma wur-ju-yag...
descend 3Du-Aux-MP PP

'They (du) went there towards Wuḷinawu. There also they coiled up, (then) got up.

"Let's (you and I) go."

They went down...'

Further travel of the pythons could simply be represented descriptively, as 'they went'. Instead, it is announced and represented as an interaction in which the two said to each other 'Let's go'. Such examples present rich opportunity for cross-stylistic comparison of the extent to which verbal interaction is used as a means of thematic development.

There is also a tendency for descriptive passages in narrative to be summed up as reported speech, thus representing it as the subject of consideration by characters in the narrative. That is, the narrated context of situation, even if it is being built up by the story-teller by largely descriptive passages, is not represented as something being unfolded to the audience only, but also as something which is the subject of discourse among the fictional characters. This is illustrated by the interplay between descriptive and reported speech in the following passage. It is taken from a story about a feared mythological figure, the rainbow serpent, who had assumed the form of trees which were being cut by Aborigines.

Ø-bologban mod Ø-may mod Ø-may mayawa
NAbs-rainbow cut 3Sg/3Sg-cut PP cut 3Sg/3Sg-cut PP now

ḷermbuj Ø-waṛag, bilili Ø-ma-ṛi, Ø-yi-ñi
knock over 3Sg/3Sg-Aux PP crawl 3Sg-Aux-PC 3Sg-go-PC

ṇa-jigiga-bayi malga gad wuḷa-waṛi malga
MNom-little Red-Foc then heap up 3Pl/3Sg-Aux PC then

alub! buriñiñi ñeñ Ø-waṛag gi-nara-bayi Ø-ḷandi.
blub! current engulf 3Sg/3Sg-Aux PP Ana-that-Foc NAbs-tree

Ø-bologban ŋaḷa-mod+mi-ñi-wa wuḷa-mi-yag.
NAbs-rainbow 1InPl/3Sg-cut-Aux-PC-Suf 3Pl-say-RR PP
'He cut rainbow, he cut him, now he knocked him over; the little ones (rainbow serpents) crawled, went; then they heaped it (timber), then blub! the current engulfed that tree. "We've cut rainbow", they said to each other'.

The interweaving of descriptive passages and reported speech seems to integrate situational development with the role played in it by the participants, for the benefit of the audience. These features of narrative and conversational style will be examined at greater length elsewhere.

1.1.1.1c. Representation of reported thought versus reported speech

There is no Maŋarayi verb comparable in sense to English 'think' which represents speaker's attitude (e.g., 'I think he's silly.'). Instead, there are a number of mode particles which the speaker can use to express his attitude towards the content of his utterance (see 1.4.6). Some of them are taken to indicate speaker attitude, unless there is some NP within the text to whom the attitude can reasonably be attributed.

There is furthermore no verb which can be used to express that what is being represented is thought rather than speech. But there are other ways of signalling this difference. One indication (within a reported context in which there may or may not be other participants who could be addressees) is the lack of the framing verb ma-:

Ø-yiri+wa-b, wuyirab Ø-ya-j: ḏinbir
3Sg-look-PP other side 3Sg-go-PP narrow
'He looked, went to the other side (or a river): narrow' (he thought).

See 3.3.4c for the characteristic intonation pattern of such reported thoughts. As discussed above, reported speech is not always framed by ma-; the point here is that reported thought is never framed by it. It is perhaps worth mentioning that the very distinction between reported speech and thought does not seem as salient in Maŋarayi as in English narrative.

The second indication is the representation of all participants within the report as third persons. Whatever other contextual cues and identifications may have preceded to establish that what is to follow is a report, the encoding of otherwise 'addressed' participants within the report as third persons makes it clear that what is being represented is the (alleged) speaker's thought about them, rather than an utterance made to them. An example is:

wawg Ø-mi-ñi gi-nara-bayi Ø-muyg ... nara-bayi
follow 3Sg/3Sg-Aux-PC Ana-that-Foc MAcc-dog that-Foc

ŋa-waŋgij Ø-yiri+wa-b, A! Ø-wiriimayin gal? Ø-jud+ma-ñ.
MNom-boy 3Sg-look-PP Oh! NAbs-goanna climb 3Sg/3Sg-Caus-PP
'He followed the dog ... that boy looked, "Oh! he treed a goanna".'

Were there a second person form: 'Oh! You treed the goanna!' the passage would be identifiable as representing a speech act. Lack of any cue which identifies an interlocutor leads by process of elimination to the conclusion that the reported passage represents someone 'talking to himself', treated as equivalent to thinking.

1.1.1.2. Interrogative sentences

1.1.1.2.1. Yes-no questions

1.1.1.2.1.1. Neutral

There are two interrogative tags which are added to propositions constructed exactly as they would be if they were entirely affirmative in force. The interrogative force is expressed by the tag, often characterized by higher pitch than preceding syllables, and set off by a very slight pause.

The tag ji(?) means 'Is that so?' It questions the formulation of a proposition, and does not express a definite expectation of a positive or negative answer:

ŋaḷi-na ŋaḷa-jaya-ŋga ji??
FNom-Dis FNom-WC-yours Sg is that so?
'She's your daughter, is that so?'

mulugmulug Bamyili-wana jaḏ wuḷa-ja-j ji??
yesterday Bamyili-Abl return 3Pl-Aux-PP is that so?
'Yesterday they came back from Bamyili, is that so?'

This tag may also be used in relative isolation — that is, not immediately following upon the proposition to which the tag refers. The following extract of a conversation between two women attempting to remember someone's name illustrates this:

A: maŋaya X ŋamdiri-ḷa mima-ŋga ŋa-warb+ma-ñ
maybe (name) whachacallim-Emph MF-yours Sg 1Sg-make mistake-PP

ŋawu, X nara-bayi maŋarawa ŋa-yarba, ŋamdiri-ḷa ...
3MSg Dat (name) that-Foc elsewhere MNom-different whachacallim-Emph

B: ga-ña-ḷi?+mi Ø-waŋgij ŋigaŋgu.
-3-2Sg/3Sg-name NAbs-child 1InDu Gen

A: ŋiñjaŋgina? Ji ? maŋaya Y ...
who Acc Is that so? maybe (name)

A: maybe X, what in the world do you call him, your mother's father, I'm mistaken about him, X is a different one, whachacallim ...

B: 'You're naming our child' (the speakers were related as cross-cousins, so the meaning of 'child' here is not 'actual child', but offspring of one of the siblings of the speaker or addressee; the force of the utterance is 'you're naming the wrong one').

A: Whom? Is that so? maybe Y ...

The tag question ji? here asks 'Is that so? (that the person I named was our child)', i.e., refers back to and questions B's statement to the effect that X is the name of a certain person.

The tag evidently expresses no predisposition for a particular answer because it questions the *formulation* of an entire clause, not any part of its content directly. Thus, it is best translated 'Is that so?' (presupposing an entire clause) rather than 'Is that right?' or 'Is that wrong?'

Interestingly, ji? can also be used as a non-interrogative, emphatic particle as in the following example:

Ø-ḏaway ja-wuḷa-yir+ma ja-wuḷa-ja, gulb ja-wuḷa-ma
NAbs-tail 3-3Pl/3Sg-strip flesh 3-3Pl/3Sg-eat pound 3-3Pl/3Sg-Aux

ja-wuḷa-ja ji? Ø-ḏama-ŋawu gulb ja-wuḷa-ma.
3-3Pl/3Sg-eat Emph NAbs-bone-its pound 3-3Pl/3Sg-Aux
'They strip the flesh from the tail, they eat it, they pound it, they do so eat it, they pound the bone'.

The interrogative and emphatic uses have in common that they presuppose an entire clause, showing some similarity to English *so* as pro-verbal element ('they do *so* (eat it)'). The difference is that as emphatic particle, ji? has not been found to occur in isolation from the clause it presupposes. In contrast to ji?, the emphatic element -ja (see 1.11.2) has within its scope only the constituent to which it is attached (which may be nominal or verbal).

1.1.1.2.1.2. Leading

The tag go(?) also presupposes an entire clause, and in reference to its content, expresses the modal meaning 'I hope not!' Though it does not explicitly request an answer, it opens the way for a response to be made and indicates a predisposition for a negative response:

ḏayi wura maŋaya ñim wur-ya-j go?
Neg 3Du Dat perhaps drown 3Du-Aux-PP
'Nothing of them du. (they're gone), maybe they drowned, I hope not!'

1.1.1.2.1.3. Alternative

The only examples of a tag -yi meaning 'what about NP?' were found with genitive pronouns:

ŋanjugu-yi?
1Sg Gen-tag
'What about mine?'

This may be a special usage of the proprietive suffix (see 2.1.1.4.4.-5). To ask 'what about?' in relation to most constituent types, the conjunction gana is used (see 1.3.1.1.2):

gana ŋaya
and 1Sg Nom
'What about me?'

1.1.1.2.2. Question-word questions

The morphology and use of interrogative-indefinite words is described in 2.1.2.6. Many of them begin with the syllable ja-, which however cannot be synchronically segmented, nor can any meaning be attributed to it (jagina 'what', jana or janaŋgari 'where', jananaŋgu 'when', but ŋiñja 'who').

WH- words tend to be the first element in the clause. When clause-initial, they tend to be cliticized with -bayi or its reduced form -ba (termed 'focus' clitic; see discussion in 1.12):

ŋiñja-ba Ø-ṇiŋa-ñ?
who-Foc 3Sg-come-PP
'Who came?'
janaŋgari-ba ja-Ø-yag?
where-Foc 3-3Sg-go
'Where is he/she going?'

It often happens that an item about which information is requested is placed first, followed by an interrogative clause or phrase in which the questioned item may either be re-stated, or simply presupposed:

gaḷa-gaya — ŋanan-bayi — jananaŋgu ya-Ø-ṇiŋa-n?
you-all money-Foc when Irr-3Sg-come-Pres
'You all — (the) money — when might it come?'

(See 2.1.1.4.28 for the form gaḷagaya.)

In general, if the fronted word is not cliticized with -bayi, the interrogative word is, and vice versa, so that -bayi is complementarily distributed over the questioned item and the interrogative word.

Usually the predicate immediately follows an interrogative word (which may be a demonstrative, pronoun or noun in predicate nominal constructions, see 2.1.1.2.3.1):

ŋiñja-ba ŋaḷi-na?
who-Foc FNom-Dis
'Who is that (woman)?'
jagina-ba wuyan-ma-ṛi?
what-Foc 3Sg/3Pl-say-PC
'What did he say to them?'

The interrogative word may also be followed by a demonstrative pronoun or adverb locating the referent of the interrogative:

ŋiñja-ba ṇi-wa ja-Ø-ṇi ṇa-gawar-gan?
who-Foc Dis-Art 3-3Sg-sit high up/on the highway
'Who is that sitting on the highway?'

An emphatic interrogative word may be either clause-initial or final:

ŋiñja-ja ja-Ø-ṇiŋa-n?
who-Emph 3-3Sg-come-Pres
'Who in the world is coming?'
ja-wuḷa-ṇiŋa-n ŋiñja-ḷa-ja?
3-3Pl-come-Pres who-Pl-Emph
'They're coming, who in the world are they?'

Initial versus final placement of the interrogative word makes a difference in the takeoff point of the clause, as the glosses suggest. The first example selects as takeoff point an interrogative word which is nonanaphoric in the sense that it provides no link with what has gone before in the discourse; the second example makes an assertion, then questions an argument presupposed by the assertion. The latter strategy also occurs in nonemphatic interrogations, but less frequently than in emphatic ones:

ṇi-wa ŋiñja?
Dis-Art who
'That is who?'

The above might be used, for example, where a number of people are being identified, so that the point of departure of the question is not '*Who* is that?' but '*That* is who?', which presupposes an identified referent.

The only interrogative words which may occur with great frequency anywhere within the clause are the 'uncertainty' or hesitation forms (see 2.1.2.6.7). By means of these, the speaker points to the need for specification of a particular missing item which he has forgotten. These forms typically occupy whatever position the forgotten constituent would occupy in the clause:

ŋarmiṇgan-gana gal?ma Ø-ṇi-ñ ŋamdiri ... Ḷilirganjan
(place)-Abl climb 3Sg-Aux-PP whachamacallit (place)
'From Ŋarmiṇgan he climbed up to whachamacallit ... Ḷilirganjan'.

Since the form ŋamda 'whachamacallit' is used with auxiliary ma- to form a compound verb expressing 'do whachamacallit', uncertainty forms also occur in the position which would be occupied by the forgotten verb:

Ø-ḏaway gulb ja-wuḷa-ma ja-wuḷa-ŋamda+ma ja-wuḷa-yir+ma
NAbs-tail pound 3-3Pl/3Sg-Aux 3-3Pl-do what 3-3Pl-strip flesh
'They pound the tail and do whachamacallit, they strip the flesh'.

1.1.1.2.2.1. What elements of the clause can be questioned?

It is possible to question any NP constituent, or to request further information regarding the entire NP, by setting off the questioned constituent paratactically:

A: Ø-balayi Ø-ŋugu ja-Ø-ṇi Meremeŋ.
NAbs-big NAbs-water 3-3Sg-is (place)
'There's a big water body/a big body of water is located at Meremeŋ'.

B: nara Ø-bundal?
that NAbs-billabong
'Is that/it a billabong?'

A: Ø-ŋugu ja-Ø-ṇi ṇi ṇa-gawar-gan.
NAbs-water 3-3Sg-is there on top
'There's water there up top'.

B: Ɓalayi-wa?
big-Art
'Big one?' 'A lot?'

It is possible to question a noun within any of the formally distinguished case categories (see case forms of interrogative words in 2.1.2.6). Thus, ŋiñja 'who' has a full set of case forms (except that there is no distinction between genitive and dative, as is also true of nouns), and each form may be questioned.

The question 'what kind of X' is asked by using jagina 'what', followed by the term expressing the general class of objects under which the item falls:

jagina Ø-juya ña-ɖaṛa+wu-b?
what NAbs-meat 2Sg/3Sg-find/see-PP
'What kind of game did you see?'

The use of hesitation form ŋamda to substitute for the verb as well as for NP constituents was mentioned in 1.1.1.2.2. Such a form, however, cannot be used as a pro-verb in questions 'They are doing what? What are they doing?'. This question can only be asked by use of the verb ma- 'do, say':

jagina ja-wuḷa-ma?
what 3-3Pl-do
'What are they doing/saying?'

Any predicate may be questioned by characteristic rising intonation contour instead of the rise-fall pattern of statements (see 3.3.4a, b).

There is no adverbial interrogative word corresponding to our 'how?'. It is necessary to question specific adverbial constituents in order to form 'how' interrogatives.

No examples have been found in which more than one element is questioned in a single clause (i.e., corresponding to English 'Who did what to whom?'), except in cases in which an interrogative clause also contains a hesitation form.

1.1.1.2.2. What happens to the questioned element?

The norm is for WH- words to come first in the clause. Some variations in this pattern were mentioned in 1.1.1.2.2.

1.1.1.2.3. Echo questions

Any constituent which may be questioned can also be echoed (i.e., NP constituents, verbs, adverbs). Interrogative words can also be used in isolation to frame particular questions ('who?', 'where?', and so forth). As mentioned above, no examples have been found of clauses in which more than one constituent is questioned.

1.1.1.2.4. Answers

An interrogative word asks for the specification of a particular item in the answer (as do WH- words in English). Answers to such questions may consist of just the constituent required in response to the interrogative, all the rest of the answer presupposed in terms of the question:

A: ŋiñja-ba Ø-ŋiŋa-ñ buñaŋ?
who-Foc 3Sg-come-PP at night
'Who arrived (last) night?'

B: ŋa-guŋga-ŋga
MNom-MB-yours Sg
'Your uncle'.
- - - -

A: ŋiñja-wu nara-bayi Ø-mawuj?
who-Gen/Dat that-Foc NAbs-vegetable food
'Whose is that food?'

B: ŋanjugu
1Sg Gen
'Mine'.

If the question asked is what someone is doing, the answer (to be considered satisfactorily informative) must contain a verb. Otherwise, response can be made by one of the kind of disclaimers ('I don't know' etc.) listed in 2.1.9. If the answer contains a verb, then all of the affixal positions in the verb must be filled (expressing person and number of up to two NPs, mode, tense, aspect etc.; see 2.1.3d). A verbal response cannot consist of just a verb particle (see 2.1.3a, 2.1.3.7). The response 'no' is ɖayi, the same as one of the negative particles (see 1.4); 'yes' is yowo. The usual response to an utterance with which one wishes to express neither agreement nor disagreement is maŋaya-ja 'perhaps indeed!' with emphatic clitic -ja (see 1.11.2).

1.1.1.3. Imperatives

Positive and negative imperatives are described in 2.1.3.4.3. Imperative verb forms may include pronominal reference to any subject-object combination consisting of a second person acting on any other; imperatives used intransitively cross-reference only the agent. Any indirect object, as always, is expressed outside the verb only, and cannot be cross-referenced. Imperatives may be modified by an adverb, and in transitive and ditransitive imperative constructions there may be a specified nominal object.

guja Ø-yiri+wa-w
there (that way) 2Sg-look-Imp
'Look over there!'

buy? ŋan-wu Ø-baṛagur
show 2Sg/1Sg-Aux Imp NAbs-paperbark
'Show me the letter!'

Ø-wiḷmur ɖuluḷ? Ø-waṛ ŋanju
NAbs-wire send 2Sg-Aux Imp 1Sg Dat
'Make a phone call for me!'

In the avoidance speech style, the use of imperatives and interrogatives is decidedly disfavored. See the Appendix for discussion of functional equivalents.

1.1.2. Subordination: general

Maŋarayi has only two formally distinct subordinate clause types that occur with great frequency, and a few other minor types that occur rarely. The two commonly occurring types will be called *generalized subordinate clauses* and *purpose complements*. In the latter type, the subordinated complement is much more like a noun than a verb: the predicate is expressed by a nominalized verb form, and fewer arguments can be specified within the subordinate clause than in independent clauses. The predicate of the generalized subordinate clause, on the other hand, loses none of its verbal features, and is formally marked as subordinate only by prefixes which occupy first position in the inflected verb. Other minor subordinate clause types include causal and temporal.

1.1.2.2. Noun clauses

1.1.2.2.1. Position of the noun clause

A number of formally distinct clause types function as 'noun clauses'; all types follow the superordinate clause.

1.1.2.2.2. Types of noun clause

1.1.2.2.2a. Equivalents of 'that' or 'what' noun complements

Equivalents of English clauses introduced by 'that' or 'what' ('he knows what he's doing') are structurally the same as generalized subordinate clauses (1.1.2.3). They differ from other instances of the latter only in being understood to function as nouns, instead of adnominally or adsententially, as do the majority of generalized subordinate clauses. An example is:

mun ja-wuḻa-ŋuñjag warwiyan wa-Ø-ma-ṛi
only 3-3Pl/3Sg-imitate NAbs-totem Sub-3Sg-do-PC
'They are only imitating what the totem did'.

Notice there is no overt head introducing the complement clause. However, the zero pronominal cross-referencing warwiyan 'totem' as the object of jawuḻaŋuñjag 'they imitate it' may be analysed as the head to which the complement 'what it did' is subordinated. (See remarks in 1.1.2.3.2.-5 on the syntactic centrality of pronominal cross-reference in main-subordinate clause linkage).

In 2.1.2.5.1.23 the discourse functions of the neuter distant demonstrative nara(-bayi) are discussed. It is shown there that nara-bayi is used as discourse anaphor, and may have a linguistic referent (either a specific nominal constituent, or a more extended stretch of text), or an extralinguistic referent (an event). All the examples given there are of independent clauses; however, frequently clauses are subordinated to nara-bayi, which thus functions as head. An example is:

bamburiyi ñanba-ma-ñ, nara-bayi Ø-waŋgij ya-Ø-bu-ni-wa
good 3Pl/2Sg-say-PP that-Foc NAbs-child Sub-3Sg/3Sg-hit-PC-Suf
'It's good they told you, that (one in which) she killed the child'.

Here the understood referent of nara-bayi was a certain legend.

1.1.2.2.2b. Purpose complements

The dative/purposive nominal case-ending is identical to a purposive verb suffix in many Australian languages (see Dixon 1980:310, 381). A similar parallel between an affix used in nominal and verbal constructions is found in Maŋarayi. The nominal suffix -wḻu (see 3.4.1.1 for the morphophonemic alternation) marks dative/purposive and genitive in (masculine and neuter) nouns. (In pronouns, however, it is the formative used to build genitive case-forms upon the morphologically basic dative ones, which lack the suffix. Genitive and dative case functions are described in 2.1.1.2.5 and 2.1.1.2.5.1; the use of dative case in purposive meaning is described in 2.1.1.4.13).

As verbal suffix, -wḻu is termed 'desiderative-intentional' (DI). It is used to express intention or desire on the part of the agent of the verb within a single clause (see 2.1.3.-IId). It cannot be used to create complex (two-clause) desire or purpose complements in which the second clause has a different subject; i.e., it is not used to express such meanings as 'I want/told/intend him to go', only 'I want/intend to go'. The former can only be expressed as direct (or reported direct) discourse, see 1.1.1.1. Thus, desiderative-intentional is a possible modal modulation of a main clause verb, not a means of creating subordinate complements.

However, -wḻu is suffixed to *nominalized* clausal predicates to create subordinate complements, usually semantically purposive. In these, the only condition on cross-clause NP relations is that the NP of the matrix clause must have a major syntactic function (transitive or intransitive subject, or transitive object) in the subordinate clause.

Purpose complements have as clausal predicate nominalized verb form suffixed with dative-purposive case ending. (Nominalization is discussed

for the high-frequency class of ma- compounds in 2.2.1.5f, for other inflecting verbs in 2.2.1.2.1, and for verb particles in 2.2.1.2.2. Some irregular nominal forms are listed in 2.2.1.6.)

The agent of the purpose complement is most often the same as that of the matrix clause; the verb of the matrix usually expresses motion (towards) to accomplish the expressed purpose. Any noun or adjective direct object of the purpose complement is put into genitive/dative case form; any direct object which is a (first or second person) pronoun or a third person demonstrative is put into genitive case. (Genitive and dative forms are not distinct in nouns, but they are distinct in the pronouns.) Examples are:

ṇa-marb-wañjin-gu ṇa-muyŋ-gu ja-Ø-ṇiṇa-n.
Purp-tie-Nom MPurp-dog 3-3Sg-come-Pres
'He's coming to tie up the dog'.

ṇa-ḏaṛa+wu-jin-gu ṇa-magerŋ-gu ja-wuḻa-ṇi
Purp-finding-Nom NPurp-louse 3-3Pl-sit
'They are sitting (down) to hunt for lice'.

ja-Ø-ṇiṇa-n maŋaya ŋaṇyaŋgu ṇa-yaḻa-jin-gu
3-3Sg-come-Pres perhaps 1InPl Gen Purp-brother-Nom
'Maybe he's coming to bother us'.

ṇa-bamaṛ-wu ṇa-juya-wu Ø-ṇiṇa-ñ.
Purp-stealing NPurp-meat 3Sg-come-PP
'He came to steal the meat'.

In the third example, note 1InPl genitive pronoun ŋaṇyaŋgu (see 2.1.2.1.10 for pronoun morphology).

No examples were found in which this construction was used to express indirect commands.

Though in most instances the subordinate clause expresses purpose of a (co-referential main-subordinate clause) agent, there are examples where the respective functions of co-referential NPs are IS and TO. This happens where the main clause verb is mediopassive yiyi-ji- 'to be afraid (of)' (see 2.1.1.2.5.2). This verb frequently occurs in main clauses with dative noun or pronoun complement. An agent may be expressed in a subordinate complement to a main clause containing yiyi-ji-. In all such examples, the agent has been found to be in dative case:

wuḻa-yiyi-ji-ni ṇa-ḏo?-wañjin-gu ṇa-guṛuggu ṛuŋ-gu
3Pl-be afraid-MP-PP Purp-shoot-Nom MDat-white man
'They were afraid of being shot by white men'.

Notice that the nominalized verb does not cross-reference 3Pl object number of the matrix subject, but a 3Pl referent is 'understood' from the pronominal of the preceding clause.

It is important to note that the number of verbs found to occur in the matrix clause is very limited. No examples were found of purpose complements containing *both* an NP functioning as transitive subject *and* an NP functioning as direct object *different* from the NP of the main clause. Thus, there are no textual examples of purpose complements expressing such meanings as 'they were afraid of white people's-dat shooting their dogs-dat'. The major limitation on cross-clause NP relations is that the NP of the matrix clause *must* have a major syntactic function in the subordinate clause.

1.1.2.2.2c. Causal clauses

Nominalized forms of verb particles and inflecting verbs may be suffixed with ablative case desinence to produce clauses meaning 'due to, on account of, from':

ḷawg-min-gana ga-ŋa-wuy+ma
dig-Nom-Abl -3-1Sg-be tired
'I'm tired from digging'.
jir-wañjin-gana ja-wuḷa-wuy+ma
stand-Nom-Abl 3-3Pl-be tired
'They're tired from standing'.

Such 'clauses' have few of the trappings of full clauses, except that they contain nominalizations of verbal constituents. The nominal(ized) constituent can never be inflected for person or number, and thus cannot have an understood subject different from that of an adjacent clause. It may be better to simply consider such constructions elaborated nominals.

To explicitly express a causal relation between two clauses with different subjects the conjunction warŋgu 'because' is available (see 1.3.1.1.5).

The causal clause could arguably be considered adverbial. Because it involves nominalization and constitutes a clausal parallel to ablative NP, it is considered a noun clause.

1.1.2.2.3.-5. Indirect statements, questions, commands

There are no equivalents to English indirect statements, questions, or commands. All of these are expressed as direct discourse (see 1.1.1.1). An example of a command is:

ga-ña-ja ga-ña-ja Ø-maḷam ña-ḍad+ma-ñ. Ø-yag
-3-2Sg/3Sg-eat -3-2Sg/3Sg-eat MAcc-man 2Sg-finish-PP 2Sg-go Imp

Ø-bu Ø-baḷgij Ø-gaṛawi Ø-jambirina,
2Sg/3Sg-kill NAbs-wallaby NAbs-plains kangaroo NAbs-bustard

Ø-ma-ñ.
3Sg-say-PP
'"You keep on eating people, you're through. Go, kill wallabies, plains kangaroo, bustards,' he said'.

1.1.2.3. Generalized subordinate clauses

The generalized subordinate clause type in Maŋarayi resembles that of some other Australian languages (see Hale 1976) in two ways: first, in its multifunctionality, and second, in its looser, more paratactic relation to the main clause than is often found in subordinate structures cross-linguistically. These two features — multifunctionality of formal construction type and marginal integration into the main clause — are probably related, and result in a flexible means of expression.

The comparable, weakly subordinated structure described by Hale (ibid) for Warlpiri has two functions: first, as adnominal modifier (which Hale refers to as 'NP-relative' interpretation), and second, as adverbial modifier 'used to specify the temporal setting of the event depicted in the main clause, or to make a subsidiary comment holding at the time specified in the main clause' (op. cit., p.79). In this function Hale refers to 'T-relative' interpretation. The Maŋarayi clause type fills both these functions, and exhibits a variety of functional subtypes.

English and some other languages have a distinct restrictive relative construction type which has lent itself to treatment in much recent grammatical theory in terms of purely structure dependent rules, sensitive only to syntactic categories and phrase structure configurations. Restrictive relatives are typically diagrammed as phrase structures with subscripts indicating co-reference of two NPs across clauses. That is, co-reference of the two NPs is represented as the principal (if not necessary and sufficient) condition on relativization. (Sometimes also, following Keenan and Comrie 1977, in describing relative clauses, restrictions are noted on possible cross-clause relations which may exist between the two co-indexed NPs, defined by the syntactic function of each NP within its clause.)

In English, the distinct restrictive relative construction type expresses an invariant logical relation of modification: it restricts the reference of some NP, hence simultaneously indicates the co-referentiality of NPs across the clause boundary.

By contrast, in Maŋarayi we find a single formal subordinate clause type which is variably understood as adnominal or adsentential modifier (and also, as noun complement as per 1.1.2.2.2a). Co-referentiality, for lack of any construction which invariantly expresses it, cannot be assumed as a property of any subordinate structure. The problem in Maŋarayi is that of determining what *is* the logical relation between clauses. Interpretation is a product of interaction between formal and textual features; discussion in 1.1.2.3.2.-5 defines some of the features by which the logical relation between main and subordinate clauses is understood.

1.1.2.3.1. Formal expression of subordination

The most striking formal feature of the generalized subordinate clause is that the prefixes wa-~ya- which mark subordination are also used to mark irrealis mood (2.1.3.4.1.-2), and an inflectional habitual category of the verb (2.1.3.-IIe) used mainly to express characteristic activity of animate beings. (See also 2.1.3.-I for the first-order prefixes wa- and ya-. These approximately correspond to prefixes ga- and ja-, respectively, used in present realis verb forms. The prefix form ga- is labelled 'nonthird' because it is used for nonthird person intransitive subjects, and in any transitive pronominal prefix combination in which either category entering into the combination, or both, are nonthird. The 'third' form ja- is used for third person intransitive subjects, and transitive combinations in which both subject and object are third persons. This distribution over persons is not strictly maintained in the case of irrealis prefixes wa- and ya-, in that wa- is found in all categories. Also, the irrealis prefixes may be phonetically reduced to a-.)

The question arises whether the sharing of prefix forms by the seemingly disparate morphological and syntactic construction types — subordination, irrealis mood, and habitual — reflects some semantic and/or functional link among them. The following briefly outlines a functional analysis of the relations among these constructions.

Irrealis mood in Maŋarayi expresses an attitude of the speaker towards what he is saying, namely, that the utterance is not asserted as fact but is subject to some uncertainty. The precise meaning of irrealis is tense-dependent. Non-past irrealis forms express mere possibility of the event, as opposed to the certain interpretation of present realis. In past positive tenses (punctual and continuous) the reason for uncertainty of irrealis forms is interpreted narrowly (because the narrated event itself is represented as finished) as due to speaker's inability to assert the occurrence of a narrated past event, because he does not have direct evidence of it (e.g., he did not see or hear it personally). Hence, as mentioned also in 1.1.1.1, past irrealis forms have the force of alleged report rather than assertion, and are best glossed as, e.g., ya-Ø-ya-j 'he supposedly went, he is said to have gone' (PP). The general meaning of the mood category is speaker imputation of non-assertability of the content of his utterance. This might also be thought of as an attenuation of the linguistic form's content along an axis asserted versus nonasserted. That is, the form alludes to factors beyond the present instance of speaking upon which the narrated event is contingent.

Below it is shown that the general function of the prefixes as subordinate markers is to signal that the clause in which they occur is not to

be interpreted in its own right, but is to be interpreted with reference to some other constituent. When interpreted adnominally, the subordinate clause functions to restrict the possible class of referents of a main clause NP constituent. When interpreted adsententially, the subordinate clause functions to specify or restrict the event/process/state/relation expressed by the main clause as a whole. (Sometimes, also, there is possible ambiguity between these interpretations.) This function of subordination — signalling that interpretation is to be carried out by recourse to something else in the linguistic context — is evidently to be viewed as the hypotactic equivalent of 'not asserted' (irrealis) in independent clauses. Finally, in 1.1.2.3.6b (see also 2.1.3.-IIe) it is shown that the primary function of the habitual category is as a specialized type of headless subordinate construction.

In many Australian languages, the formal means used to express 'generalized' subordination is also used in some other constructions. For example, in several neighboring Arnhem-area languages, focusing or making salient of (usually) an NP or adverbial constituent is achieved by placing the in-focus constituent in first position in the clause and affixing to the verb the same marker(s) used to express subordination; this produces clauses approximately corresponding to English clefts ('It was fish that we ate' etc.). The 'subordinate' mark serves the function of linking the entire clause to the rest of the discourse, leaving the in-focus item as salient (often contrastive) information. Thus, in many Australian languages 'subordinate' markers are capable of use as information-structuring devices at a variety of structural levels, chiefly the cross-clause level. (Focus in Maŋarayi, however, is not marked in the same way as subordination; see 1.12.)

Formal overlap between a nonasserted (irrealis) category and subordination seems rarer, but such an overlap also appears to exist in the Worora language of the Kimberley area, Western Australia (see Love 1931:59, 67). For further discussion of this issue see Merlan forthcoming.

1.1.2.3.2.-5. Formal and other features determining interpretation of subordinate clauses

Several factors determining interpretation of subordinate structures are discussed in detail below.

(a) Since irrealis and subordinate forms overlap formally, it is important to determine if and how they can be distinguished. A major textual factor is the intelligibility of assigning irrealis meaning to a verb form as determined by what is being talked about. For example, if the speaker makes it clear by some means that he himself has taken part in events he is describing, use of irrealis becomes less likely for at least some verbs within his narrative. Consider the following passage from a narrative describing events which occurred when the speaker was an infant.

jilwa ŋan-ga-ŋiñ ŋi-yari ga-ŋa-baday?+ma
remember 3Sg/1Sg-Aux-PP there-somewhere -3-1Sg-squirm

ŋa-ŋajgan-gan ... warguj ŋanbur-may
NLoc-scrub pick up 3Du/1Sg-Aux PP

ŋa¦a-bugbug-ŋiga-wur-bayi malga jina-biya
FNom-old person-ours (InDu)-Du-Foc then Dir-downriver

a-ŋi¦a-man+bu-b
Irr-IExPl-run-PP
'She remembered me, there somewhere I'm squirming in the bush, the two old ladies (speaker's mother and mother's sister) picked me up, then we're supposed to have run downriver'.

The story describes how, despite their haste to flee from a pursuing white man, speaker's mother and her sister remembered to pick her up from the grass where she was lying. The last verb a-ŋi¦a-man+bu-b is the only irrealis form in the passage; it sums up speaker's presentation of the narrative as reported from hearsay. As in this example, even where it is clear that the speaker has not taken part in events he is narrating, it is not common for all or even a majority of verbs within the narrative to be irrealis. Usually irrealis is used on only a few verb forms; the rest are realis, the distributionally less marked category. Myth is not narrated as irrealis, though often accounts of traditional Aboriginal customs no longer practised (such as ritual necrophagy, or feats of walking, foraging and the like) may be, as are the few legends which seem to be told purely for entertainment but without explicitly 'mythic' content.

See also (e) below; brief remarks there on pause and intonation features suggest that irrealis and subordinate constructions are formally distinct.

(b) A second major factor is the intelligibility of assigning certain subjects and objects to particular verbs. This depends partly on agreement between cross-referencing pronominals on verbs (see 2.1.3.6) with any independent NPs, as well as likelihood of anaphoric cross-reference of previously introduced NPs.

Modifying subordinate clauses interpreted adnominally generally come directly after the nominal constituent which they modify (see (c) below). In them, the relativized NP has some syntactic (as opposed to peripheral) role (see 2.1 for the distinction between 'syntactic' versus other case function, the former distinguished by the fact that they must be cross-referenced by pronominals in the verb). The relative NP must always be one which is cross-referenced on the subordinate-marked verb, even if only by zero. Aside from this requirement, a relative interpretation depends neither upon the NPs in each clause being in *particular* grammatical functions, nor upon the relation between the two NPs being of any particular kind as defined by the functions of each. The NPs in main and subordinate clauses may be in transitive or intransitive subject, or transitive object functions, in any combination across clauses.

Examples illustrating various possibilities are:

TO-TO Ø-Gawa-j gi-nara-bayi Ø-wi¦a wa-Ø-bir?+ma-ñ.
3Sg/3Sg-bury-PP Ana-that-Foc NAbs-string Sub-3Sg/3Sg-twist-PP
'He (a goanna) buried that same string that he'd twisted'.

(For anaphoric gi-, see 1.5.1.5.) The subject (goanna) is cross-referenced by zero in both clauses, and the relativized NP 'string' is also cross-referenced by zero on the verb 'twisted'.

TO-1S wurg Ø-ga-ni Ø-waŋgij jaŋ? wa-Ø-ma-ñ.
hide 3Sg/3Sg-Aux-PC NAbs-child die Sub-3Sg-Aux-PP
'He hid the child who'd died'.

There is no absolute criterion which distinguishes the given translation from an adsentential interpretation 'He hid the child when he died'.

IS-TS ja¦ Ø-jaygi-ni mayawa-bayi ŋa-¦ulmiñi a-Ø-jiray
return 3Sg-Aux-PC now-Foc MNom-sated Sub-3Sg/3Sg-eat PC

ga¦ugu malam waŋgaŋgij.
woman man children (Red)
'Now the sated one who had eaten women, men and children came back'.

TS-TS Garan-gara mod (y)a-wur-may ga¦u-gara-ŋan warguj
two-Dis cut Sub-3Du/3Sg-Aux PP woman-Du-Acc pick up

wuyanba-may wu¦a-man+bu-b.
3Du/3Du-Aux PC 3Pl-run-PP

'Those two who had cut it (a tree) seized the two women, and they ran away'.

Position in relation to a nominal constituent enables us to determine when a subordinate clause *cannot* be interpreted adnominally. Subordinate clauses are often found for which interpretation as adnominal modifiers is clearly impossible, because there is no (overt or understood) modified nominal constituent. These fill the second main function of subordinate clauses: they serve as adsentential modifiers, specifying more closely the temporal or other reference of the main clause verb. Whether these are to be interpreted as temporal or other modifiers seems to depend largely on the meaning expressed by the verb in the main clause. In the following example, the subordinate clause could scarcely be understood as other than a temporal modifier. It is taken from a text which describes the illicit cutting of trees, which caused several natural calamities. The meaning of the main clause suggests an interpretation of the subordinate clause as specifying an event which precedes (and perhaps also causes) that described in the main clause.

wa-Ø-way-(y)ag-bayi, Ø-jalwayi mayawa bulgaraj Ø-ṇiŋa-ñ
Sub-3Sg-fall MP-PP-Foc NAbs-mud now tower up 3Sg-come-PP

ŋawu ñeñ Ø-waṛag
3SgM Dat engulf 3Sg/3Sg-Aux PP
'When it (a tree) fell, mud then came towering up towards him, and engulfed him'.

On the other hand, following a verb of perception, adsentential clauses are often ambiguous between temporal and factive interpretations:

ña-yiri+wa-ni (w)a-ŋaḷa-gala+wu-b ŋa-ḍajam-gan.
2Sg-see-PC Sub-1InPl-hang up-PP NLoc-tree sp.
'You saw when/that we hung it up in a *Capparis umbonata*'.

Adsentential subordinate clauses can be 'stacked up' one after the other, where the interpretation of each may vary depending on the intelligibility of positing temporal or other meaning relations between main and subordinate clause(s). For example:

ganа biya ṇiḷa-ṇi yir? (w)a-ŋaḷa-waṛi Gundaŋala
but downriver 1ExPl-sit PC throw Sub-1InPl-Aux PC (place)

(w)a-ŋaḷa-ṇi.
Sub-1InPl-sit
'But we were camping downriver where/when we were fishing when we were camping at Gundaŋala'.

In the case of yir? (w)a-ŋaḷa-waṛi, either 'where' (cointerpretive with biya 'downriver') or 'when' is perfectly intelligible. The second subordinate verb follows a toponym which already sufficiently specifies place, suggesting a temporal interpretation as more likely, 'when we were camping at Gundaŋala'.

Other examples of adsentential modifiers are:

ŋanaŋganawa Ø-ya-j ḍar?ma Ø-waṛag ŋa-gawar-gan ṇi
from there 3Sg-go-PP emerge 3Sg-Aux PP on top there

ŋa-paddiŋ-gan ḍar?ma wa-ŋar-waṛag
NLoc-paddock (English) emerge Sub-1Tr-Aux PP
'He went from there, and he came out on top there in the paddock where we three came out'.

biya ḍuṛur Ø-bu-yag ŋa-gulu wa-Ø-ṇi jaḷug
downriver crawl 3Sg-Aux-RR PP Nom-tree sp. Sub-3Sg-sit forget

ŋa-ya-j Ø-ṇi-ŋawu ŋa-muṛimuṛi-wuŋya-bayi biyaŋ-gana
1Sg-Aux-PP NAbs-name-his MNom-FF-theirs Pl-Foc downriver-Abl

Ø-gulu-wana ŋan-gina (Ø-bab+ŋamdag) wa-Ø-way-(y)i-ni
NAbl-tree sp. FAcc-Dis 3Sg/3Sg-put PP Sub-3Sg-fall-MP-PC

Ø-jaraṛ-ŋawu, Ø-jibibi a-ŋaḷa-gawa-gawa-ma-n.
NAbs-root-its NAbs-mussel Sub-1InPl-dig(Red)-Aug-Pres
'He crawled downriver to (the place) where the *Eucalyptus camaldulensis* sits, I forgot his name, (of) their grandfather; from downriver, from the *E. camaldulensis* (he put) her, where the roots (and stump) fell, where we always dig mussels'.

(In the last example, the relation between trying to remember a place name and the name of a person (the 'grandfather') is that within the Maŋarayi system of naming, persons are considered intrinsically linked to certain places, and some personal names are the same as place names.) Preceding context makes clear an elliptical verb 'he put', the specified object of which is ŋangina 'that one', FAcc. There are two adsentential clauses, 'where the roots fell' (by which the speaker describes a place known to all of us who were listening); and 'where we always dig mussels', which uses a habitual (and reduplicated) verb form as the predicate of an adsentential clause describing another place known to the audience.

(c) A third major factor is the position of constituents in relation to the subordinate-marked verb. In particular, adnominal interpretation seems to be strongly induced when a nominal constituent immediately precedes the subordinate clause. This is illustrated by several examples above, and also by the following:

ŋel? wuyan-wa-ni-bayi ... mir? Ø-ŋa-ni ŋan-jaya-ŋayawu
sneak up 3Sg/3Pl-Aux-PC-Foc know 3Sg/3Sg-Aux-PC FAcc-daughter-hers

gana ṇiŋgi-wa wa-Ø-bu-b jiniyin malam
but MAcc-Art Sub-3Sg/3Sg-strike-PP falsely suppose man/person

This comes from a myth of an old cannibal woman who for years continued to kill young men who came two by two to visit her and her daughters, for whom the young men were always potential husbands. Two intrepid young men come who decide to find out how she did away with all the others. They put ant-mounds in their beds and watch her at night. As the old woman sneaks up at night, she recognizes one of her daughters (who was sleeping with one of the men), but, the story continues, 'the one that she struck she supposed was a man/person' (instead of the ant-mound, the object that she actually stabbed). See also 1.4.6 for the non-finite verb jiniyin 'falsely suppose', which may combine with any tense).

(d) Another factor which prevents adnominal interpretation of verb forms is the presence of proposition-bounding conjunctions (see further 1.3.1.1):

ṇirana wuḷa-ṇi-ñ wuṛg wuḷa-ma-ñ waḍij jaḍma a-Ø-jaygi-ni
still 3Pl-sit-PP work 3Pl-Aux-PP moreover return Irr-3Sg-Aux-PC

ŋa-ŋayaŋayag, wuḷa-gar?min+ma-ṛi-wa.
MNom-some 3Pl-prepare-PC-Suf
'Still they stayed (and) worked; (but) moreover some were said to be returning, they prepared (it/them).'

This passage describes the situation after a foray by stockmen against some Aborigines. After having returned to the stock camp, the stockmen remained and worked there. The additive (here also, emphatic) conjunction waḍij (see 1.3.1.1.1) is one of several which mark the boundary between propositions. Its presence eliminates the possibility that any nominal constituent preceding it could be sufficiently presupposed to be relativized across this boundary (though NPs may be anaphorically cross-referenced across this boundary). Thus the only nominal constituent which could be relativized upon is ŋayaŋayag 'some', as 'some who were returning'. This interpretation,

however, is precluded for three reasons: first, since waḍij signals the boundary of a new proposition, we are alerted to the possible introduction of a different subject (instead of 'the stockmen' cross-referenced by 3Pl pronominals on the verb); the new subject indeed appears in the form of 'some', this analysis confirmed by appropriate zero cross-reference for indefinite subject on the verb (see 2.1.1.11). Second, 'some' follows the verb, a position which seems to preclude NP-relative interpretation. Third, there is no following clause within which 'some' appears to be cross-referenced on the verb: the next verb, wuḷa-gar?min+ma-ṛi-wa 'they prepared (them/it)' (the object of which later turns out to be 'rifles') returns to 3Pl subject pronominal, indicating that the subject cannot be indefinite 'some'. Thus the interpretation of jaḍma a-Ø-jaygi-ni must be 'some (Aborigines) were said to be returning', i.e. to the place of the previous massacre.

(e) Study of pause and intonation features is not far enough advanced to present definitive results, but there is evidence that adnominal subordinate clauses, which immediately follow their antecedents as noted in (d), are spoken on a single intonation contour with a constant pitch level maintained over the boundary between antecedent and the following verb. By contrast, irrealis forms frequently show a significant rise in pitch level approximately over the first syllable of the irrealis (inflecting) verb (not the verb particle, if present).

It is important to mention that meanings understood as subordinate — i.e. requiring interpretation in terms of another clause — can be expressed by formally non-subordinate structures. For example, a clause which serves as a modifying relative or adsentential one can be juxtaposed to a main clause as in this example:

ḍawuruŋgu buy? buy? ñan-wu-ni ḷa-ṇi
whole lot teach Red 3Sg/2Sg-Aux-PC 2Pl-sit PC

ŋaḷa-bugbug-ŋiga-bayi Yumbuyan.
FNom-old person-1InDu-Foc (place)
'She taught you the whole lot (when) our old woman and all of you were sitting down (i.e. camping together) at Yumbuyan'.

(Note that the subject of ḷaṇi is 2Pl, followed by a 3Sg noun phrase 'our old woman'. The NP ŋaḷa-bugbug-ŋiga-bayi singles out the most significant member of the group referred to by the 2Pl pronominal, in terms of whom the group is defined. See further 2.1.2.1.18 for this kind of compound reduction). The function of the clause containing ḷaṇi is to serve as adsentential modifier specifying the temporal reference of buy? ñan-wu-ni by describing the circumstances at that time. This meaning is quite intelligible without formal subordination of the clause, just as paratactic structures in English are sometimes used in ways which parallel subordination very closely.

1.1.2.3.6. Headless relative clauses

1.1.2.3.6a. Headless locative relatives

There are many examples of what appear to be relative-like clauses, for which there is no overt evidence of any head noun. Of course, in all such cases there is still a cross-referencing pronominal (even if zero) on the subordinate-marked verb. It seems best in these cases to assume the existence of an 'implicit' head noun which need never be lexically realized (but may be).

Headless relatives are most common in clauses of locative interpretation. Many Maŋarayi toponyms are equivalent to full clauses which describe some dead of the locality's mythological creator, or some characteristic of

the place itself. Toponyms which describe some actual, perceptible feature of place are mostly constructed as independent clauses with present indicative of ṇi- 'be (in a place)' of the form 'X is there', where X is the physiographic feature. Examples of such toponyms are: ḍubun ja-Ø-ṇi 'hollow log is there', and ŋalañbuṇ ja-Ø-ṇi 'black plum *(Vitex glabrata)* is there'. On the other hand, most of the toponyms descriptive of activities of the mythological creators are constructed as headless subordinate clauses. Examples are:

yarayg gal?ma wa-Ø-ṇi-ñ
Aponogeton climb Sub-3Sg-Aux-PP
'*Aponogeton* (a water plant) climbed up'.

gaṛawi yirij wa-Ø-gaḍ-jag
plains kangaroo get out of water Sub-3Sg-Aux-MP PP
'(Male) plains kangaroo got out of water'.

jaraṇḍij jaŋ? wa-Ø-bu-b
cricket shut up Sub-3Sg/3Sg-Aux-PP
'Cricket shut it up/closed it off' (a body of water).

Considering these only as toponyms outside of any syntactic context in which they are used, these might be viewed as subject to interpretation as independent irrealis verb forms, with such meanings as '*Aponogeton* is said to have climbed up'. There is, however, no reason to suspect that any such irrealis interpretation is present to speakers. (Most people who have extensive knowledge of place names and their significance do not question that the described events took place). Hence a syntactic explanation of these toponyms as subordinate structures seems preferable.

These headless clausal toponyms occur very frequently as locative nominal constituents of matrix clauses. In this function they are not overtly case marked:

jibma Ø-ju-yag yarayg gal?ma wa-Ø-ṇi-ñ
descend 3Sg-Aux-MP PP *Aponogeton* climb Sub-3Sg-Aux-PP
'He descended to (the place) where *Aponogeton* climbed up'.

These toponyms are best considered headless relatives with implicit head noun of 'place'. The subordinating prefix tags the toponym as (functionally) a single nominal constituent rather than an independent clause.

Other, very similar examples of headless locative relatives occur where the relative clause is not, in fact, a toponym but is similar in content to culturally recognized toponyms. An example is:

biya ḍuṛur Ø-bu-yag ŋa-gulu wa-Ø-ṇi.
downriver crawl 3Sg-Aux RR MNom-tree sp. Sub-3Sg-sit
'He crawled downriver to (the place) where the *Eucalyptus camaldulensis* sits'.

Sometimes a noun meaning '(its) name' (which may be part of a larger genitive NP expressing as possessor the mythological figure associated with the locality) is functionally an overt head noun of place:

Ø-ṇiŋa-ñ bab Ø-gaḍ-jag bamgan ŋa-guṛuggurug
3Sg-come-PP emerge 3Sg-Aux MP PP this side NMom-devil

ŋa-galg Ø-ṇi-ŋawu yir? (w)a-ŋaḷa-waṛi
MNom-wild Aborigine NAbs-name-his throw Sub-1InPl-Aux PC
'The devil came, he emerged on this side (at the place of the) wild Aborigine's name where we threw' (i.e., where we went fishing).

The head noun is ṇi 'name' in reference to a locality visited by an anthropomorphic creator figure, the 'wild Aborigine'.

Finally, the demonstrative nara 'that' can function as head noun of place, as well as in noun complements (see 1.1.2.2.2a). An example is:

Ø-ṇiṇa-ni nara ṇa-garwag (y)a-Ø-way-(y)ag.
3Sg-come-PC that Nom-ghost gum Sub-3Sg-fall-MP PP
'He came to (the place) where a ghost gum had fallen'.
(See 2.1.1b for the prefixation of neuter garwag 'ghost gum' with ṇa-.)

1.1.2.3.6b. Headless 'actor' relatives

As noted in 1.1.2.3.1, habitual verb forms have the same first-order prefixes as irrealis and subordinate ones. As in the case of locative relatives, a syntactic interpretation is indicated.

See 2.1.3.-IIe for usage of habitual forms. There it is shown that although habitual is sometimes used to simply express customary activities, its most frequent use (in independent as well as subordinate clauses, see below) is to express activity which is intrinsic to or characteristic of an agent. This function enables the habitual to have a special value in the avoidance style (see Appendix for fuller description). The style involves lexical substitution of many nouns by a variety of grammatical means. In the case of many animate nouns, especially those designating animals, a noun is replaced by an entire clause with habitual verb form. An example of an avoidance style substitution of this kind is:

ṇoḷomoro 'nail-tailed wallaby' = Ø-baṛgi guḷ
(*Onychogalea* sp.) NAbs-ground make depression

wa-Ø-bu-ṇḍa-n
Hab-3Sg/3Sg-Aux-Aug-Pres
'always making depression in the ground'

(That is, the nail-tailed wallaby has a nail-like projection on its tail which leaves a characteristic track on the ground.) See especially 2.1.3.-IIIb for the morphology of habitual forms. Such clausal substitutes for nouns are best taken as 'actor' relatives with implicit head 'one' (= person or other animate being). When functioning as nominal constituents within a matrix clause such clauses are never overtly case-marked:

baṛgi guḷ wa-Ø-bu-ṇḍa-n wuḷa-gaḷañ+bu-b.
earth make depression Hab-3Sg/3Sg-Aux-Aug-Pres 3Pl/3Sg-spear-PP
'He speared a nail-tailed wallaby'.

(This sentence contains several markers of avoidance style: first, the clausal substitute for 'nail-tailed wallaby'; second, the avoidance style compound verb 'spear' gaḷañ+bu- which replaces ordinary gaḷg+ma-; third, 3Pl pronominal used by the speaker to refer to a single avoidance category relation.) Here as in headless locative relatives, the subordinate mark tags the entire clause as (capable of functioning as) single nominal constituent. Because of the primary function of habitual verb forms as attributive actor relatives (especially in avoidance style), they have first-order subordinate prefixes even when functioning as the verbs of independent clauses. In other words, the capacity of habitual verb forms to function attributively in the meaning 'one who X-es' appears to be a more central function than their capacity to serve as the verbs of independent clauses.

1.1.2.4. Adverbial clauses

1.1.2.4.1. How are adverbial clauses marked?

The major kind of adsentential ('generalized subordinate') clause was described and illustrated in 1.1.2.3.2.-5. However, there are two formally distinct types of temporal adverbial clauses.

1.1.2.4.2. Types of adverbial clauses

1.1.2.4.2.1. Time

1.1.2.4.2.1a. Sequential temporal clauses

The ablative suffix can be added to desiderative-intentional verb forms (2.1.3.-IId) and to past tense verb forms, to give the meaning: after the time of the event designated by the verb to which it is suffixed. In the first case temporal reference must be to some future time after the speech event, and in the second, to some time after the narrated past event. Examples are:

ya-Ø-yaŋ-gu-wana (w)a-ṇa-ṇaya-wu.
Irr-3Sg-go-DI-Abl Irr-1Sg/3Sg-cook-DI
'After he goes I want to cook it'.

Maḷga jaḍ (y)a-wur-ja-ñ-gana, gana ...
directly return Sub-3Du-Aux-PP-Abl, well ...
'Directly from the time/after they supposedly wanted to return, well ...'

Both causal (1.1.2.2.2c) and temporal clauses with ablative suffix are extremely rare; only four instances of the sequential temporal type were found in approximately 100 pages of text material searched.

See 2.1.3.-IIc for 'evitative/anticipatory' clauses with mode particle baḷaga 'before, lest'.

1.1.2.4.2.1b. Descriptive temporal clauses

A second type of temporal clause is constructed with adjectival predicate as the main constituent, followed by the article-like suffix -wa (see 2.2.1.1e). This suffix usually functions as a specific determiner in one of two ways: either it may be a substitutive device where there is an intended identity of wording between two noun phrases, but not identity of referent (e.g. baḷayi-wa 'a/the big one'); or it may impart a particularizing force. In descriptive temporal clauses, the adjectival constituent is inflected for person in the same way as all predicate nominals (see 2.1.1.2.3.1), i.e., only first and second persons singular are marked with pronominal prefix forms used for intransitive subject, while inflection for all other person and number categories is by means of appropriate nominal prefixes and suffixes, not those used in verbs. The meaning of descriptive temporal clauses is always 'when (person) is/was X', where X is the content of the adjectival predicate. Temporal reference is often past, since the construction is frequently used to establish the time of an event by its relation to the maturity of some person at that time. Examples are:

maṇaya moṇor?mi wuḷa-jiray ṇa-jijga-wa.
perhaps necrophagous flesh 3Pl/3Sg-eat PC MNom-small-Art
'Perhaps they ate necrophagous flesh when he was small'.

(The speaker was trying to estimate the time at which ritual necrophagy was last practised.)

ṇa-baḍa ṇan-ga-ŋiñ buy? ŋiyan-wu-ni ṇa-jijga-wa.
MNom-father 3Sg/1Sg-take-PP teach 3Sg/1ExPl-Aux-PC 1Sg-small-Art
'(My) father took me, he taught us when I was little'.

1.1.2.4.2.2. Manner

Not distinct from generalized subordinate clauses.

1.1.2.4.2.3. Purpose

See 1.1.2.2.2b.

1.1.2.4.2.4. Cause

See 1.1.2.2.2c.

1.1.2.4.2.5. Conditionals

Two formally distinct conditional proposition types can be distinguished, non-past and past. In non-past conditionals, the protasis is a desiderative-intentional verb form (see 2.1.3.-IId), usually with irrealis prefix (but sometimes with zero first-order prefix) and almost invariably followed by the focus clitic -bayi (see 1.12); cf. Haiman 1978. The apodosis may be analysed as either irrealis or subordinate, or both. There is justification for irrealis interpretation in that the apodosis is subject to uncertainty, its realization dependent upon fulfilment of the condition expressed in the protasis. On the other hand, it could be treated as subordinate, since it signals that reference must be made to something else for interpretation, namely to the entire protasis. In conditional propositions, the order of the clauses is not strictly fixed, but the protasis tends to come first. Examples of non-past conditionals are:

ña-yaŋ-gu-bayi wawg wa-ñan-mi biwin-gana
2Sg-go-DI-Foc follow Sub/Irr-1Sg/2Sg-Aux behind-Abl
'If you go, I'll follow (after) you'.

Ø-mar wa-ña-mi-wu wa-ŋan-wu-n ŋan
NAbs-fish Irr-2Sg/3Sg-get-DI Sub/Irr-2Sg/1Sg-give-Pres 1Sg Acc
'If you get fish you'll give me some'.

If the meaning of the first clause is clearly temporal rather than conditional ('when you go'), it is expressed in the same way; but the following clause may be realis (wawg ga-ñan-mi 'I'll follow you etc.'). Occasionally, the second clause is expressed as realis even where the first clearly expresses a condition which may or may not be fulfilled.

In 2.1.3.-IIc the difference between the negative particle ḏayi and the prohibitive negative particle ŋiñjag is described in detail. Briefly, ḏayi expresses simple negation of a positive verb form (of present or past reference); the fundamental feature of meaning expressed by ŋiñjag is future negation. Just as ŋiñjag cannot be used with past reference (ḏayi is the negative particle required to express past negative meaning), so ḏayi cannot be used as the negative particle of clauses with unbounded, future or indefinite reference. Thus ŋiñjag is always used in negative conditional propositions like the following:

ŋiñjag-ba Ø-ṇiŋa-n-gu, Ø-gurajñin-wa ya-wuḷa-bu-yi-n
Prohib-Foc 3Sg-come-Pres-DI NAbs-blood-Art Irr-3Pl-hit-RR-Pres
'If he doesn't come, they may fight seriously' ('blood-one').

The negative condition introduced by ŋiñjag corresponds to all the English meanings 'if he doesn't come', 'if he can't come', 'if he doesn't want to come'.

In past conditional propositions, the protasis contains past negative verb form with desiderative-intentional suffix, while the verb of the apodosis is a past negative verb form. Ordinarily, past negative meaning is expressed by past negative verb form preceded by negative particle ḏayi (2.1.3.-IIh). In past conditionals, however, the past negative form of the verb alone, without the negative particle, expresses past counterfactuality in the apodosis. (Outside of conditional propositions, past negative verb form alone, without ḏayi, expresses an intentional or obligative meaning 'should, should have, meant to', 2.1.3.-IIh). The negative particle ḏayi is used in the apodosis only if the entire apodosis is to express negative past counterfactuality. A negative protasis of a past conditional requires the particle ŋiñjag.

ŋa-yaŋ-ga-m-gu maŋaya ŋa-mi-ŋga-b.
1Sg-go-Aug-PNeg-DI perhaps 1Sg/3Sg-get-Aug-PNeg
'If I'd gone perhaps I would have gotten it'.

ŋa-gaḷa+wu-ṇḍa-m-gu maŋaya ḏayi Ø-mi-ŋga-b
1Sg/3Sg-hang up-Aug-PNeg-DI perhaps Neg 3Sg/3Sg-get-Aug-PNeg

ŋa-muyg.
MNom-dog
'If I'd hung it up perhaps the dog would not have gotten it'.

1.1.2.4.3. Non-finite adverbial clauses

None of the above clause types can be made non-finite. Although it is characteristic of many Australian languages that nominal case affixes can be used in the formation of complement clause types, these possibilities are more limited in Maŋarayi than in some other languages.

1.1.2.5. Sequence of tenses

There is no sequence of tenses in any strict sense. It is nevertheless true that adsentential subordinate clauses, which further specify the event expressed by the main clause, are always in a tense form compatible with their being understood as designating an event which occurs within the time interval expressed by the main clause.

1.2. Structural questions

1.2.1. Internal structure of the sentence

1.2.1.1. Copular sentences

1.2.1.1.1.-2. Copular sentences with noun and adjective (nominal) complement

Copular constructions are described and exemplified more fully in the following sections: predicate nominals (2.1.1.2.3.1), predications of possession (2.1.1.2.3.2), object of comparison (2.1.1.2.6), objects (which in English) are governed by adjectives 'like X' (2.1.1.2.12), object of equation (2.1.1.2.7), copulative resolution 'become' (2.1.1.2.9.4).

Predicate nominal constructions (which may have either certain nouns or an adjective as predicate) usually contain no overt copula verb. Infrequently (especially when the predication has past reference), the verb ṇi- 'to sit, be, exist' is used as overt copula of a predicate nominal construction:

gaṛaṛ-yaḷa ŋiḷa-ṇi
big-Pl Nom 1ExPl-be PC
'We were big' (grown up).

The availability of ṇi- as copula provides one way of expressing the verbal categories (tense etc.) in a predicate nominal construction. Though the only other overt copula, mu-yi- (see 2.1.1.2.9.4) is occasionally used to mean 'be' with a predicate noun or adjective, more frequently it has the meaning 'become'.

If no copula verb is present in a predicate nominal clause, temporal reference is expressed by adverbs:

gurji ga-ḷa-ri-wa yaḷa-jin-gaḷa, baḷaḷaga ḏayi miŋiwa
a (long) time ago they Nom bother-Nom-Pl Nom today Neg already
'Before they were a nuisance, (but) no longer'.

If no adverb occurs, the construction is non-past.

The meaning 'to be/exist in a place, be located' for most referents is expressed by the verb ṇi-:

Ø-mawuj ja-Ø-ṇi biyaŋgin ṇa-boŋ-gan
NAbs-vegetable food 3-3Sg-be inside NLoc-box (English)
'There's food in the box/the food is in the box'.

Note (1.1.2.3.6a) that this verb is frequently used in the construction of toponyms consisting of clauses descriptive of some feature of the place, e.g., Ø-jidbaṛ ja-Ø-ṇi 'ant-mound is there'. However, even though capable of wide usage, ṇi- retains some semantic features relating to 'sitting' (rather than simply 'being' or 'existing') which make it applicable to certain kinds of referents. For example, it cannot be used of a tall tree, or seemingly of any object whose upward extension is more salient than lateral extension. Of a tree it must be said that it 'stands' (with particle+auxiliary construction jir jaygi-). Of a long object on the ground, it must be said that it 'lies' (yu-, also the verb commonly used to mean 'to sleep'). Thus the use of ṇi- is limited by the type and position of the referent of which location is being predicated.

The verb ṇi- is used to mean 'to camp, live in a place' of human referents:

Jembeṛe ga-ŋaḷa-ṇi
place -3-1InPl-live
'We're living at Jembeṛe'.

1.2.1.1.3. Copular sentences with adverbial complement

There are few adverbs which occur in predicate nominal constructions. Exceptions are ḍuḍuḷa 'forever' and yuŋgun 'ahead, in front'. The former, when it occurs in predicate nominal constructions, means 'one who has gone for good', e.g.,

ŋaḷi-na ŋaḷa-ḍuḍuḷa
FNom-Dis FNom-forever
'She's gone for good'.

Yuŋgun is capable of functioning as a noun if prefixed for noun class/case and suffixed with particularizing -wa (2.2.1.1e), as in ṇa-yuŋgun-wa 'the one in the lead'.

1.2.1.1.4. Copular sentences without overt be-copula

As mentioned in 1.2.1.1.1.-2, copular sentences may have overt copula ṇi-; see also 2.1.1.2.9.4 for overt copula 'become'; otherwise adverbs express temporal reference.

1.2.1.1.5. Omission of be-copula by person/number form

The overt copula may be omitted from any person/number form. See 2.1.1.2.3.1 for expression of person and number in predicate nominal constructions.

1.2.1.1.6. Types of copula

The only overt copula types are mentioned in 1.2.1.1.4 above.

1.2.1.2. Verbal sentences

1.2.1.2.1. Expression of subject; constituency of the verb

The intransitive verb obligatorily cross-references the subject of its clause; verbs used transitively obligatorily cross-reference two NPs (subject and direct object in transitive clauses, subject and notional indirect object in ditransitive clauses, see 2.1.1.2.4.1). No additional NPs may be cross-referenced in either intransitive or transitive clauses. Since the transitively-used verb obligatorily contains pronominals cross-referencing subject and one object, there is no reason to describe its constituency — at least at a 'surface' level — as analyzable into a verb

phrase of the traditional type (VP ⟶ V NP). The verbal predicate falls into three morphologically distinct 'verb construction types' (2.1.3a-c).

The usual verbs which might be considered 'impersonal' intransitives show the same marking as for any 3Sg subject. For example, the meaning 'to rain' is ordinarily expressed by the particle+auxiliary construction jilg way-(y)i-, the latter a mediopassive (2.1.3.3.2b) which, used by itself, means 'to fall'. No overt subject NP is ever specified:

jilg ja-Ø-way-(y)i-n
rain 3-3Sg-Aux-MP-Pres
'It's raining'.

On the other hand, the verb wub+ma- 'to blow' occurs with specified subject jab 'wind'. The meaning 'to lighten' is ordinarily expressed by particle+auxiliary mayg ma-, and 'to thunder' by two elements which may either be paired as particle+auxiliary (gululu ma-), or as compounding element and bound auxiliary (gululu+ma-).

1.2.1.2.2. Are there verbs without direct objects?

See remarks on transitivity in 2.1.1.2.2.1 (transitive use of certain verbs which are usually used intransitively), and general remarks on transitivity in 2.1.3.1.2.1 and 2.1.3.1.2.2.

1.2.1.2.3. Is there a distinguishable indirect object category?

See 2.1.1.2.4.1 on ditransitive constructions, and 2.1.1.2.5 on the indirect object category.

1.2.1.2.4.-5. Other arguments of verbs

For types of case frames associated with verbs, see 2.1.1.2.1.1.-2 (subclasses of intransitive verbs), 2.1.1.2.2.1 (verbs of perception and mental process), 2.1.1.2.4.1 (ditransitive case frames), 2.1.1.2.4.2 (verb 'to say'), 2.1.1.2.4.3 (verbs of physical sensation), and 2.1.1.2.5.2 (verbs requiring dative/purposive complement). See also 2.1.1.5 for special uses of locative, allative and ablative cases.

1.2.1.2.6. Order of clausal constituents

Because verbal cross-reference is obligatory and bears much of the burden of establishing and maintaining nominal co-reference, clauses in which obligatorily cross-referenced NPs are not all externally specified are the norm rather than the exception. It would create a false impression to speak of the ordering relation of nominal and verbal constituents as if all of them were ordinarily specified within the same clause. Nevertheless, certain regularities of ordering in relation to the verb can be discerned.

The strictest of these concerns the ordering relations of constituents within the verb construction itself. The verb particle always precedes the inflecting auxiliary. Particles which are obligatory to express certain modal meanings (see Table 2-16) immediately precede the verb.

Generally, a modifying adverb immediately precedes a positive verb construction:

galiya wur-man+bu-b
far 3Du-run-PP
'They ran far'.

If the clause is negative, the adverb usually follows the verb:

ḍayi wur-man+bu-ṇḍa-b galiya
Neg 3Du-run-Aug-PNeg far
'They didn't run far'.

Occasionally, a modifying adverb intervenes between the negative particle and the verb.

There is a slight preference for a specified direct object NP to precede the verb in its clause. A specified intransitive subject likewise precedes the verb more often than it follows. Specified transitive subject tends to follow the verb, particularly if there is a specified direct object NP. The favored order in transitive and intransitive clauses is exemplified in the following:

ŋan-ga-ŋiñ, Ø-jamgaṛ-ŋanju ŋan-bab+ṇamdag ṇa-wirilmayin
3Sg/1Sg-take-PP NAbs-foot-mine 3Sg/1Sg-put PP MNom-goanna
'He took me, the goanna put my foot'.

(The speaker was referring to a foot-print on a rock which she said was left as one of her principal totems brought her to a certain place.)

ṇa-biwa gal?ma Ø-ṇi-ñ
MNom-boy climb 3Sg-Aux-PP
'The boy climbed up'.

However, it must be emphasized that other orderings are found. The following example has specified TO-TS order, in which TS precedes the verb:

Ø-ḍaway ṇa-waŋgij Ø-ḍad+ma-ñ
NAbs-tail MNom-boy 3Sg/3Sg-finish-PP
'The boy finished the tail'.

In the following two-clause sequence, the first TO precedes the verb, the second follows it:

Ø-jaḍbi mod wur-may wur-bu-ni Ø-jigiga
NAbs-tree sp. cut 3Du/3Sg-Aux PP 3Du/3Sg-kill-PC NAbs-little Red

Ø-bologban
NAbs-rainbow
'They cut the bloodwood down, they killed the little rainbow serpents'.

Intransitive subject may follow the verb:

Ø-ḍu-ni nara-bayi ṇa-waŋgij
3Sg-cry-PC that-Foc MNom-boy
'That boy cried'.

1.2.1.3. Adverbials

1.2.1.3.1. Types of adverbials

1.2.1.3.1.1. Adverbs

The principal demonstrative adverbs used to refer to spatial location are described in sections under 2.1.2.5.9; those used to refer to temporal location in 2.1.7.3. Adverbs may be divided into:

1. Simple adverbs, e.g., gaḷaji 'quickly', balbalbi 'slowly', biwi 'behind', buñaŋ 'at night', mulugmulug 'yesterday', wulŋarin 'simply, just (so)'. A few of these may undergo case-suffixation or reduplication to express related meanings, but none has a full or regular paradigm. In this class must be included certain forms which sometimes function simply as adverbs or particles, but sometimes as clausal coordinating conjunctions, e.g. malga 'then, next', mayawa 'now'; see 1.3.1.1.

2. Complex adverbs, which may have constituents which are simple adverbs, but express particular meanings not derivable as a sum of the parts. These are few in number. An example is mun-gaḷama 'in vain', composed of simple mun 'only' with allative case suffix.

1.2.1.3.1.2. Adpositional phrases

There are no adpositions as such in Maŋarayi; however, adverbial meanings are expressed by certain prepositional-like phrases. These consist of a simple adverb followed by a noun appropriately case-marked to complement the combined meaning of the adverb and verb in the clause.

Examples are:

ṇa-baṇam-gan yuŋgun
NLoc-camp ahead
'ahead in camp'

biyaŋgin ṇa-boŋ-gan
inside NLoc-box (English)
'in the box'

malga Ø-baṇam-gaḷama
right up to NAll-camp
'right up to camp'

The usual order is adverb-complement, but this may sometimes be reversed. It would not be accurate to say that adverbs like biyaŋgin 'down, inside' are fully equivalent to prepositions of other languages and 'govern' a particular case. As noted in 2.1.1.5.1, there is a preference for expressing spatial location by the use of adverbs only, without constructing a preposition-like linkage to an NP complement. Where prepositional-like phrases occur, their precise meaning (e.g. biyaŋgin as 'inside' versus 'into') is determined by the predicate of the clause. Only malga (which as adverb means 'immediately', as conjunction 'then, next') consistently has the meaning '(motion) right up to, towards' and is followed by whatever case form is required for the particular NP type in allative meaning (e.g., unmarked for toponyms and cardinal directions, with case suffix for most nouns).

1.2.1.3.1.3. Cases of noun phrases

Not applicable.

1.2.1.3.1.4. Adverbial clauses

See discussion of adsentential clauses in 1.1.2.3.2.-5, also sections under 1.1.2.4.2.

1.2.2. Adjective phrases

1.2.2.1. Operational definition

As described more fully in 1.16.1, nouns and adjectives have the same inflectional possibilities and similar syntagmatic privileges of occurrence, but distinctions may be made between them on the basis of (1) general semantic content; (2) derivational possibilities; (3) inherence of gender in most nouns versus its variability in adjectives depending upon the particular referent and/or modified noun. Also, although the textual frequency of NPs consisting of noun plus adjective is not nearly as high as in English, nevertheless an NP may contain both a noun and a modifying adjective, inflected for class/case and number in agreement with the noun (see 1.16.1). Some nouns as well as adjectives occur as predicates in predicate nominal constructions (see 2.1.1.2.3.1).

1.2.2.2. Adjectives that take arguments

1.2.2.2.1. Adjectives in subjectless sentences

Not applicable; see 2.1.1.2.3.1 on predicate nominals.

1.2.2.2.2. Adjectives with direct objects

Not applicable.

1.2.2.2.3. Adjectives with indirect objects

Another distinction between nouns and adjectives is that the latter serve as head constituents of adjectival phrases with dative/purposive

case-marked complement nouns, as in the following examples:

ṇa-jabu ṇa-maŋi-wu
MNom-ignorant NDat-song
'ignorant of songs'

ṇa-baṇḍarwuyi-wu ṇa-jimgan
NDat-circumcision stone MNom-knowledgeable
'knowledgeable of the stone used for circumcision', i.e. a competent circumciser.

Such adjectival phrases are capable of being embedded in any syntagmatic slots which may be occupied by the adjective alone (e.g., in predicate nominal constructions with adjective predicate). As the examples indicate, the adjective may precede or follow its complement.

1.2.2.3. Adverbials which can modify adjectives

Possibilities are limited, but a few adverbs can modify adjectives; see discussion in 2.1.4.4.-5. The main way of expressing superlative degree for both adjective and adverb is with the suffix -ṇiya 'real(ly)'; see 2.1.4.4.-5 and 2.1.7.1.-2.

1.2.3. Adverbial phrase

1.2.3.1. Operational definition

See 1.16.7 and 2.1.7.

1.2.3.2. Adverbials which can modify adverbials

1.2.3.2.1. Adverb

Some adverbial phrases consist of two adverbs, one more general, the following one a more specific locator: ṇi biya 'there downriver', ṇi gawar 'there upriver'.

1.2.4. Adpositional phrases

See remarks in 1.2.1.3.1.2; also full illustration of adpositional usage of adverbs in 2.1.1.5.1.-2. The usages illustrated there are maximal; i.e., it is shown that adverbs can function as adpositions in a limited way, but that this type of linkage is not highly preferred. Adverbs used as adpositions only occur with one argument. Almost all adverbs so used have NP complement in dative case-form, except maḷga '(right) up to' takes allative complement.

1.2.5. Noun phrase

1.2.5.1. Operational definition

See 1.16.1 for characteristics of the nominal (noun and adjective), including syntactic properties.

1.2.5.2. Types of modifier

Noun phrase types are shown in Table 1-1.

Type 1 consists of a single lexical noun or adjective (= nominal), pronoun or demonstrative, appropriately case-marked for its function within the clause.

In Type 2, the NP constituent is a headless or relative-like clause. These possibilities have been described in 1.1.2.2.2 and sections under 1.1.2.3.

Type 3 shows the coordinate NP. There are no NP-phrasal conjunctions 'and' or 'or'. Conjunction is effected by simple juxtaposition, the NPs so conjoined cumulatively cross-referenced in the verb (if in a major syntactic function, see 2.1) by the appropriate pronominal form-class.

Number cross-reference is not automatically non-singular, however, simply because the NP is coordinate. Rather, cross-reference of number is subject to the general conditions specified in 2.1.1.8.6.8; number-marking of the nominal itself is determined by conditions discussed in 2.1.1.8.6.7 and 2.1.1.10.-11. 'Compound reduction', in which there are two or more referentially specific NPs in coordinate relation, is described in 2.1.2.1.18.

Type 4 shows NP head-attribute structures; there are a number of subtypes. Subtype (a) represents the adjectival phrase described in 1.2.2.2.3. Subtype (b) represents an NP head and a determiner, an adjective or one of the types of modifers described in 2.1.7.1.-2. The adjective must agree in class/case and number-marking with the modified noun. There is a tendency for the modifiers balayi 'big' and jiḻga 'small' to precede the modified, otherwise a general tendency for the modifier to follow, but ordering is not strict and both modifier-modified and the reverse order are found, viz.:

Attrib.-Head ṇa-balayi-yan ṇa-bundal-an
NLoc-big NLoc-billabong
'at the big billabong'

Head-Attrib. waḻima-yaran marambu-yaran
young person-Du Nom runaway-Du Nom
'the two runaway (i.e. adulterous) young people'

Head-Attrib. ḻandi-yara-ŋan jaŋguḻ-yara-ŋan
tree-Du-Acc short-Du-Acc
'two short trees/sticks'

It is also possible for head and attribute to be separated by clausal constituents, as in the following example:

waḏij Ø-ŋayag Ø-jirag Ø-jadba
also NAbs-another 3Sg/3Sg-eat PP NAbs-leg
'He also ate another (the other) leg'.

Where the head is a demonstrative, the order is quite strictly head-attribute (noun or adjective):

garan-gara guḍubar-yaran
3Du Nom-Dis mythological figure
'those two of the Gunabibi legend'

Numerals (2.1.1.8.6.9) may function as nouns or adjectives. Like other adjectival modifiers, they may precede or follow a head noun.

Head-attribute constructions of the type 'we Maŋarayi' or 'we women', in which the head is a pronoun or demonstrative, and the attribute a specifying noun or adjective, are illustrated in 2.1.2.1.17.

Type (c) is intended to abbreviate several types of possessive phrase. The possessor in an NP can be expressed by a possessive suffix (2.1.2.4.1), the phrase consisting of noun-possessive suffix appropriately case-affixed:

ṇa-muyg-ŋanju
MNom-dog-mine
'my dog'

Ø-muyg-ŋanjuŋ-gaḻama
MAll-dog-mine
'towards my dog'

The possessor can be expressed by a genitive-marked noun which does *not* bear further case-marking for the clausal function of the head noun (2.1.1.7):

Ø-baṇam-(ŋayawu) ŋaya-yilambuṛa
NAbs-camp-(hers) FGen-aunt (FZ)
'my aunt's camp'

As described in 2.1.1.2.5.1, one of the most consistent criteria for distinguishing genitive from dative NPs in non-predicative construction types

is the *presence* of a possessive suffix. The order of genitive and head is not strictly fixed; in examples like the above the reverse order is also common.

Occasionally, the possessor in a non-predicative construction is found to be expressed by an independent genitive pronoun instead of possessive suffix; see the example (Ø-waŋgij ŋigaŋgu 'our 1InDu child') in 1.1.1.2.1.1. It is fairly common to find an 'emphatic' use of independent genitive pronoun with a possessed noun:

ŋanjugu ŋaḷa-ṇañi
1Sg Gen FNom-mother
'my mother'

(1Sg propositus (possessor) is frequently, but not invariably, zero.)

ñaganggu ŋaḷa-la-ŋga
2Sg Gen FNom-mother-yours Sg
'your mother'

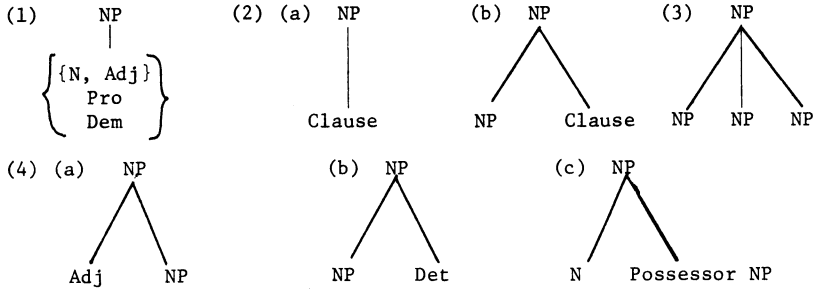
Simple juxtaposition of possessed-possessor, *without* possessive marking on the latter, occurs in a number of construction types. See 2.1.1.4.18 for discussion of the part-whole relation, generally used when the possessed is an integral part (e.g., body part) of the possessor. The possessed is generally marked by a possessive suffix cross-referencing the possessor. However, simple juxtaposition is sometimes found even where the possessed is not in a part-whole relation to the possessor. Consider the example:

jaḷug ŋa-ya-j Ø-ṇi-ṇawu ṇa-muṛimuṛi-wuṇya-bayi
forget 1Sg-Aux-PP NAbs-name-his MNom-FF-theirs Pl-Foc
'I forgot their grandfather's name'.

This could alternatively be expressed with genitive-marked possessor: Ø-ṇi-ṇawu ṇa-muṛimuṛi-wuṇyaŋ-gu-bayi. In a semantic subtype of the part-whole construction, the head is a noun, the attribute a more general noun clarifying the particular aspect under which the more specific term is being used within the immediate context. These have something of the nature of classified-classifier constructions:

Ø-ḍaway Ø-yaḷaṛ ja-wuḷa-yir+ma
NAbs-tail NAbs-meat 3-3Pl/3Sg-strip
'They strip the tail-meat off'.

Table 1-1 NP phrase structures



1.3. Coordination

1.3.1. Clause coordination

1.3.1.1. Clause-level conjunctions

Certain very high-frequency words in Maŋarayi are crucial to understanding the flow of speech. These are the conjunctions, which specify the nature of meaning relations between clauses. They convey how a stretch of speech is to be viewed as connected to immediately preceding or following speech uttered by the same person or by others.

Following Halliday and Hasan (1976:238ff.), several types of conjunctive relation are distinguished here: additive, adversative, temporal and causal. Conjunctions of each type are displayed in Table 1-2. All clausal conjunctions presuppose the presence of some other item expressing content within the text or discourse. The category (additive, adversative etc.) to which a conjunction belongs depends upon the relation it is found to express to that presupposed item.

Many of the conjunctions may express certain kinds of clause-internal meanings, semantically related to the meanings they have as clause-linking conjunctions. For example, several of them function as adverbs. In Table 1-2, the meanings which forms may have clause-internally are also shown.

Halliday and Hasan (1976:241) make an important distinction between 'external' and 'internal' use of conjunctions. 'External' uses express relations between phenomena talked about (hence these connections are 'external' to the speech situation), while 'internal' uses express relations between phenomena (e.g., sequence of participation) within the speech situation itself. This distinction will be applied to several of the Maŋarayi conjunctions below, but the descriptions 'textual' and 'situational' are substituted for 'external' and 'internal', respectively.

1.3.1.1.1. Additive conjunctions

As noted in 1.2.5.2 there are no NP-phrasal conjunctions 'and' or 'or' in Maŋarayi. The purely structural, phrasal conjunction 'and' has as its equivalent in Maŋarayi simply a rising-falling intonation pattern over each coordinate constituent and a brief pause between constituents.

Similarly, there is no purely coordinate clause-linking conjunction. The additive clausal conjunctions express that something more is to follow — hence that what preceded is not isolated — but each expresses some additional meaning.

(a) waḍij: The principal additive conjunction is waḍij 'also, too, in addition to, furthermore'. Within a clause, waḍij may be used as a phrasal conjunction meaning 'also, too, in addition to' some other named item:

Ø-ŋiṛ?min waḍij jadba-ra-ŋan mojon Ø-jirag
NAbs-liver also leg-Du-Acc finish 3Sg/3Sg-eat PP

This may appear similar to 'and', but compared to the zero phrasal conjunction which is really comparable to English 'and', waḍij is not merely additive, but emphatic, more like 'too'.

In its clause-linking function, waḍij can mean 'again', expressing a textual link to a verb which is being repeated:

malga Ø-bamja+wu-b waḍij Ø-bamja+wu-b ṇa-ḷandi-yan
then 3Sg/3Sg-smash-PP again 3Sg/3Sg-smash-PP NLoc-tree
'Then she smashed it and again she smashed it against the tree'.

It may be cohesive (in the sense of Halliday and Hasan 1976) in that it presupposes a link with an NP in a preceding clause. In this use it may mean 'also, too' or 'even, furthermore', the precise nuance depending on the meaning expressed by the rest of the clause:

ŋiñjil ya-wuḷa-yag gadjaḷ?, ŋaya waḍij gadjaḷ? ga-ŋa-yag
Av Irr-3Pl-Aux cross 1Sg Nom too cross -3-1Sg-Aux
'My avoidance kinsperson (e.g., mother-in-law) is crossing, I too will cross'.

ga-ñan-ñal?+ma waḍij Ø-galŋbam-ŋangaŋ-gana
-3-3Sg/2Sg-chase away even MAbl-spouse-yours Sg
'He chases you away even from your husband'.

The first example establishes a link between ŋaya and ŋiñjil in terms of which the additive notion expressed by waḍij has meaning. The second

example presupposes a link to an NP in another clause expressing what else the participant is chased away from. As linking conjunction, waḍij tends to be clause-initial, or to occur within the clause immediately before or after the constituent which presupposes another one elsewhere.

Two other additive conjunctions are used to express comparison of two clauses, in which the terms compared are characterized either as similar, or in sequential relation. These are structurally unusual: the conjunction is initial in the first clause, and cataphoric to both.

(b) guwaguwa: The first is the conjunction guwaguwa, a reduplicative form of guwa 'like', used to express simile (see 2.1.1.2.12). At the beginning of a two-clause sequence, guwaguwa means 'just as X Y's, so Z (Y's)'; the predicate of the second clause is often subject to ellipsis if person and number marking are the same as in the first clause:

guwaguwa ja-Ø-ṇi ṇa-maḷam, ṇa-guṛuggurug
just as 3-3Sg-live MNom-Aborigine MNom-white person
'Just as Aborigines live, so do white people (live)', i.e.,
'White people and Aborigines live alike, in the same way'.

(c) wiriñ: The second conjunction is wiriñ, which as verb particle with auxiliary bu- means 'to turn'. As conjunction, it has within its scope two clauses with identical predicate. Its meaning differs from that of guwaguwa in that instead of expressing similarity, it expresses contrast between compared NPs in their relation to the predicated activity:

wiriñ ḷa-bu-b, ṇa-bu-b ṇaya waḍij
just as/turn 2Pl/3Sg-hit-PP 1Sg/3Sg-hit-PP 1Sg Nom too
'Just as/after you hit him, I hit him too'.

As above, this is often used in adjacent clauses containing different referents who are represented as performing parallel (or identical) activities. (This seems to be paraphrased in the local Pidgin English usage 'X, turnim again, Y' where the lexical verb 'to turn' is also employed to express contrast.)

(d) gaḷayjmingan: For illustration of the meaning expressed by gaḷayjmingan 'in turn, for his/her part, sequentially', see 2.1.2.1.1. The contrastiveness expressed by gaḷayjmingan generally establishes a link between two clauses; gaḷayjmingan may also occur not in the environment of any specified predicate, but in a phrase-type of the following sort:

ṇaya gaḷayjmingan
1Sg Nom turn
'My turn'.

Here its application is situational: it is used in reference to some activity which is clear within the setting of the speech event, rather than in reference to textual events.

1.3.1.1.2. Adversative conjunction

Probably the highest frequency conjunction is gana, which usually has an adversative meaning 'but, contrary to expectation or wish' either in reference to textual or situational events:

ṇa-wu-wa Ø-baḷañ gana ṇa-wuṇ-gu Ø-ḍaymingan
this side NAbs-non-sacred but other side NAbs-sacred/prohibited
'This side is non-sacred, but that side is sacred'.
gana Wuṛ?wuṛgi-wana ḍayi ña-yaṇ-ga-b jina-gawar
but place-Abl Neg 2Sg-go-Aug-PNeg Dir-high up
'But from Wuṛ?wuṛgi you didn't go further up'.

Sometimes the fact that a situation is contrary to expectation is positively charged. This positive sense of gana is best illustrated by the fixed phrase gana ji, literally 'but fat', said emphatically and approvingly whenever an animal or fish is found to be juicy and fatty. It is in fact often said as if this bounty were excessive.

This conjunction is often used in a meaning equivalent to English 'well', signalling that a new bit of thematic content is being introduced:

Wur-ya-j. Gana miṇiwa wu-ḍiwi?ḍiwiṇḍi
3Du-go-PP Well, already 3Du/3Sg-reach Red PC
'They went. Well, they soon reached it/they reached it already'.

In a phrasal use of this sort one finds, e.g., gana ñaṇgi 'What about you?' (Sg). This expression of forward movement of thematic content is sometimes nearly equivalent to 'so', expressing consequence or reason for something. This nuance is produced where the link between two clauses is such that they appear relatable by a logic of *post hoc ergo propter hoc*.

Ø-ṇuṛiñ+ma-ñ gana ḍayi Ø-bab+ṇama-m ṇanaṇganawa
3Sg-get annoyed-PP so Neg 3Sg/3Sg-put-PNeg from there
Ø-mawuṛaybambin
NAbs-plant sp.
'He got annoyed, so he didn't deposit *Brachychiton paradoxum* from there (any further)'.

1.3.1.1.3. or-coordination

There is no overt expression which directly corresponds to 'or', either at the phrase level (see 1.2.5.2) or at the clause level. Consideration of alternatives is often expressed by sequences with maṇaya 'perhaps': 'perhaps this, perhaps this' etc., see 1.4.6.

1.3.1.1.4. Temporal conjunctions

There are six temporal conjunctions, most of which are multifunctional.

(a) malga: Within a prepositional-like phrase (see 1.2.1.3.1.2) malga expresses 'right up to, towards' and may have either spatial or temporal reference:

malga Ø-jadba-ḷama
right up to NAll-river
'(right) up to the river'
malga mulugmuluṇ-gaḷama
right up to afternoon
'(right) up to afternoon'

A further example of malga in this meaning is:

med Ø-mi-ñi malga ṇi biya
rise 3Sg-Aux-PC right up to there downriver
'It (water) rose right up to there downriver'.

In this preposition-like function, malga precedes the NP or adverb.

A second use of malga is to express textual immediacy:

Ø-gilir-ḷama malga Ø-bamja+wu-b
NAll-tree sp. directly 3Sg/3Sg-smash-PP
'Immediately she smashed it against the *Excoecaria parvifolia*'.

Here malga cannot be interpreted as preposition-like, due to the fact that it does not precede a noun.

Malga is used to express (textual and situational) sequence and immediacy: 'then, next, immediately, thereafter':

malga jina-biya a-ṇiḷa-man+bu-b
directly, then Dir-downriver Irr-1ExPl-run-PP
'Then (straightaway) we're supposed to have run downriver'.
malgayir? Ø-waṛag malga moler Ø-waṛi
then throw 3Sg/3Sg-Aux PP directly cry, wail 3Sg-Aux PC
'Then he threw it, and directly he began to wail'.

In this meaning, malga is generally clause-initial. Notice that malga can express an ingressive nuance used in this way.

(b) mayawa: Can be used in a number of ways, the shared element of meaning in all its uses being a notion of simultaneity (in time) or co-presence (in space) in relation to whatever component of text or situation is established as a reference point.

First, mayawa is used as approximate situational equivalent of 'good-bye', but it often has something more of the force of a dismissal than its English counterpart, something like 'that's all', 'that's enough now'.

It is used in a comparable way textually to signal the end of a specific narrated event or sequence of events. Used in this way, it is also a feature of narrative style which allows the speaker to pause and take stock of what he has said, and consider how to proceed.

Balgijaji jigu-wa Ø-yi-ñi, baḷ? Ø-ṇi-ñ naŋganwa mayawa
place road-Per 3Sg-go-PC sit 3Sg-Aux-PP there all right
'He went along to Balgijaji, he sat down there, all right'.

Second, mayawa can simply mean 'now' in reference to a textual or situational moment:

ṇa-baḍa-wuṇya mayawa ṇeḷ? wuyan-wa-b
MNom-father-their Pl now sneak up 3Sg/3Pl-Aux-PP
'Their father now sneaked up on them'.

ṇa-ḍad+ma-ñ mayawa ga-ṇa-yag
1Sg-finish-PP now -3-1Sg-go
'I've finished, I'm going now'.

Third, and related to both preceding usages, mayawa can serve to introduce a segment of narrative or conversation which is intended to be defined as different from, and set off to some extent from the preceding segment. A frequent condition of this use is that it follows an effort on the speaker's part to ascertain that his audience is following him:

Ø-maragwa-ŋga buy? ñanba-wu-na gawar? (response) Mayawa,
NAbs-totem-yours Sg show 3Pl/2Sg-Aux-PP high up Now,
'Did they show you your totem high up? (response) Now, ...'

It is also used following demonstrative adverbs to give to the spatial or temporal reference a greater precision equivalent to English 'right now', 'just today': ṇiwa mayawa 'right there' (see 2.1.2.5.9.7 for further examples).

(c) mamaya: A sequential temporal conjunction meaning 'first'. It can be used textually or situationally:

Yumbuyan mamaya Ø-ya-j
place first 3Sg-go-PP
'First he went to Yumbuyan'.

guja a-ḷa-yag mamaya, a-ḷa-ŋaŋ?+ma ṇa-wuṛir-wu
over there Irr-2Pl-go first Irr-2Pl-ask NPurp-fishing line
'You might go over there first and ask for fishing lines'.

(d) miŋiwa: Means 'already'. Perfectivity with respect to a textual reference point is illustrated in the examples:

Ø-ḍuḍ+ma-ṛi miŋiwa
3Sg-roast-PC already
'It was already roasting'.

gana miŋiwa mim Ø-ṇiŋa-ñ ṇa-jijga ṇa-miyar-awu
but already splash 3Sg-Aux-PP MNom-little MNom-cloud-(its)
'But already a little cloud was coming rain-laden'.

Perfectivity in relation to the moment of speaking is illustrated by the common situational usage of ḍayi miŋiwa 'no longer, not any more' (negative particle ḍayi).

(e) ŋiraŋa: means 'still, yet'. It may express this notion of continuity in relation to a textual reference point:

gana Ø-guryag muḷ Ø-ṇamdi ŋiraŋa
but NAbs-lily hold concealed 3Sg/3Sg-Aux PC still
'But he still held the lily closed in his hand'.

Used in relation to the moment of speaking, this has the force of 'hang on!', 'wait a minute', 'not yet', a request for continuation of a previous state of affairs into the present:

ŋiraŋa, ŋiñjag ña-ḍuḍuḍ+ma
still Prohib 2Sg-hurry
'Wait a minute, you can't/oughtn't to hurry'.

(f) ṇanaŋganawa: See 2.1.2.5.9.1 for more detail on this ablative case-form of naŋganwa 'there'. It may be used textually with spatial reference in the meaning 'from there'. Used to refer to the relation between textual or situational events it can express the meaning 'next', without the nuance of immediacy conveyed by malga:

gabud-mayin mamaya baḷaḷ ña-bu-yi-n, ṇanaŋganawa
black-Qual first rub 2Sg-Aux-RR-Pres next

jiliñ-mayin, ṇanaŋganawa ṇa-baŋja
yellow-Qual next NInst-white ochre
'First you paint yourself (with) black, next yellow, then with white ochre'.

1.3.1.1.5. Causal conjunction

The single causal conjunction is warŋgu 'because', which occurs initially in the clause expressing reason or cause:

gaḷaji ŋa-ṇiŋa-ñ warŋgu wolor ga-ŋa-ma
quickly 1Sg-come-PP because be hungry -3-1Sg-Aux
'I came fast because I'm hungry'.

This conjunction is used infrequently, surprisingly so from an English speaker's point of view. Often causal meaning is to be inferred simply from the sequential organization of discourse rather than from any conjunction.

Table 1-2 Conjunctions

	Clause or phrase-internal	Clause-linking
Additive		
1. waḍij	too, in addition to	again, also, too, even, furthermore
2. guwaguwa	guwa 'like' (used in nominal comparison)	similarity of compared clauses
3. wiriñ	verb particle 'to turn'	contrast between compared clauses
4. gaḷayjmingan	'X's turn'	in turn, sequentially, for X's part
Adversative		
5. gana		but, contrary to expectation or wish, well, so
Temporal		
6. malga	right up to/towards immediately	then, next, immediately thereafter
7. mayawa	good-bye,now, just, precisely	well (sets off a stretch of discourse from preceding)
8. mamaya	first	first
9. miŋiwa	already	already
10. ŋiraŋa	wait a minute! (situational)	still, yet
11. ṇanaŋganawa	adverb 'from there'	from there, next
Causal		
12. warŋgu		because

1.3.1.2.-3. Relation of coordinators to elements coordinated

As noted, there are no phrasal coordinators; see 1.3.1.1 for clausal conjunctions.

1.3.1.4. Coordination and accompaniment

Accompaniment is expressed by the proprietive construction (2.1.1.4.4.-5), also understood in compound reduction (2.1.2.1.18), as well as in the construction in which one NP is singled out as the focal member of a group by suffix -(?)mingan (2.2.1.1b). Only one of these constructions — compound reduction — can be considered a form of coordination of equivalently-ranked NPs.

1.3.2. Ellipsis in coordinate clause structures

See remarks in 1.3.1.1.1 where it is shown that the predicate in the second clause of a two-clause sequence introduced by guwaguwa 'just as' is subject to ellipsis if person and number marking in the second remain the same. See also 2.1.2.1.1 where it is shown that there can be ellipsis of the predicate in a second clause introduced by waḍij 'also' under cross-clause subject identity, and also ellipsis involving the use of gaḷayjmingan 'in turn'. See also use of maŋaya 'perhaps', 1.4.6a, in parallel clauses 'perhaps ... perhaps not'. Finally, use of gana in phrases to mean 'what about X?' may be regarded as semantically related to ellipsis, as in:

Ñaŋgi-ba ga-ña-yag, gana ŋaya?
you Sg-Foc -3-2Sg-go but I Nom
'You're going, and/what about/but me?'

Here, the force of gana derives from the implied contrast between the two NPs (2Sg and 1Sg); activity is predicated of the first, not of the second, making the phrase gana ŋaya understandable as a question about what 'I' am to do.

1.3.3. Phrasal ellipsis

1.3.3.1.-2. Nominal ellipsis

See sections on the substitutive element -baṇa 'one' in 2.2.1.1d, and article-like suffix -wa in 2.2.1.1e.

1.3.3.3. Adverbial ellipsis

See also 2.2.1.1e, where it is shown that the article-like suffix -wa, added to adverbs, gives them a more noun-like character, rather than producing elliptical phrases.

1.4. Negation and other mode particles

1.4.1. Clause-level negation

The negative particle ḍayi expresses simple negation of a present or past positive verb form. It contrasts with the prohibitive negative particle ŋiñjag which expresses nonpast negation (unbounded, extending into the indefinite future, including impossibility and inability (see 2.1.3.4, 2.1.3.-IIc, 2.1.3.-IIh). The particle ḍayi is used with past negative verb forms, ŋiñjag cannot be. The particle ŋiñjag, rather than ḍayi, is used in conditional clauses, which express unrealized or contrary-to-fact meanings (see 1.1.2.4.2.5).

In constructions with certain of the interrogative words, ŋiñjag produces negative indefinite meanings. For example, the nominative form 'who' is ŋiñja; ŋiñjag ŋiñja means 'nobody'. The scope of the negative constituent ranges over the entire clause in these cases, determining appropriate negative marking on the verb (see the examples given in the

discussion of interrogative words, 2.1.2.6.1). With the interrogative jagina 'what', ŋiñjag jagina means 'nothing'; see the example in 2.1.2.6.2.

Finally, ŋiñjag is used to negate what might be classed together as 'identificational' clause types with zero copula, namely, predication of simple identification and of possession. An identifying predication of the kind 'It is I' is formed by using the nominative of the appropriate pronoun. Such a predication is negated by ŋiñjag: ŋiñjag ŋaya 'It is not I'.

Predications of possession (2.1.1.2.3.2) are also negated with ŋiñjag before the genitive case-form of independent pronoun or demonstrative:

ŋiñjag ŋaya-naŋ-gu
Prohib 3SgF Gen
'It is not here'.

Note that such a clause does not negate the existence of the object, but only denies its attribution to a particular possessor.

1.4.2. Constituent negation

Each particle can be used to express constituent negation in ways that are in keeping with the basic features each displays as clausal negative.

The particle ḍayi is used with dative forms of pronouns and demonstratives to give the meaning 'X is/was not there'. In other words, it negates either zero copula or ṇi- 'be, exist in a place' (see 1.2.1.1). Examples are:

ḍayi wuŋya
Neg 3Pl Dat
'They pl. weren't/aren't there'.
ŋa-ya-j, ḍayi ŋaŋga
1Sg-go-PP Neg 2Sg Dat
'I went, you weren't there'.

The particle ḍayi is used to express 'no, not, nothing' in contexts where a present possibility is being negated:

Ø-ŋanan ga-ña-ŋidba? Ḍayi.
NAbs-money -3-2Sg/3Sg-have 'No', 'None'.
'Do you have money?'
Bagana Ø-mawuj? Ḍayi.
any NAbs-vegetable food 'No', 'Nothing'.
'Any food?' 'No'.

The particle ŋiñjag is used to negate nominal constituents, including also those functioning as predicate nominals. It is only one of the means used to negate predicate nominal constructions (see 2.1.1.2.3.1):

ŋiñjag ña-jimgan
Prohib 2Sg-knowledgeable
'You aren't knowledgeable, you don't know (how)'.

Predicate nominals are alternatively negated by means of the privative suffix -wi (2.1.1.4.4a.-5a):

ña-jimgan-wi
2Sg-knowledgeable-Priv
'You aren't knowledgeable, you don't know (how)'.

There is a favored, antonymic construction type with ŋiñjag. To express certain meanings of a generally positive sort such as 'many, much, a lot', and certain other meanings of positive quantity as well (e.g., great distance 'far'), Maŋarayi speakers tend to use antonymic phrases of the sort 'not a few, not one, not a little bit, not close'. The particle ŋiñjag is used in this kind of construction to negate the nominal or adverb expressing a smaller value, producing a meaning of larger value. In this kind of construction the particle's scope extends only over the

negated constituent, not over the clause within which it is located, as can be seen by the fact that the clausal predicate is not negative.

ŋiñjag ŋa-wumbawa wuḷa-ṇi ŋa-bugbugbug
Prohib MNom-one 3Pl-sit, live MNom-old person Red
'Not one old person was camping', i.e., they were many.

ŋiñjag miḷiriwa ja-Ø-ṇi
Prohib close 3-3Sg-be in place
'It is located not close', i.e. it is far.

ŋiñjag guyban ga-ŋa-ṇidba
Prohib little bit -3-1Sg/3Sg-have
'I have not a little bit', i.e. I have a lot.

In the first example, note that cross-reference on the verb is 3Pl. The form guyban has been found only in this construction; ŋiñjag guyban appears to be a set phrase. (There is a comparable Pidgin English phrase 'no more little bit', i.e., 'a lot, greatly', but this seems to be widespread, occuring in areas where languages are spoken that do not use this kind of antonymous construction as extensively as Maŋarayi does.)

1.4.3. Positive/negative polarity

An interesting negative word which functions as a nominal is ŋayagji, which ordinarily means 'none', and with article suffix -wa (ŋayagji-wa, see 2.2.1.1e) means 'nothing'. Its negative force is not of clausal scope; it occurs with positive verb forms in the given meanings. It also occurs in negative clauses:

ḏayi ŋa-mi-ŋga-b ŋayagji-wa
Neg 1Sg/3Sg-get-Aug-PNeg nothing
'I didn't get anything'.

ḏayi ŋa-mi-ŋga-b Ø-ŋayagji Ø-mar
Neg 1Sg/3Sg-get-Aug-PNeg NAbs-none NAbs-fish
'I didn't get any fish'.

An interesting feature of its occurrence in positive clauses is that it often conveys a sense of belittlement of the object talked about. However, as the examples below attempt to illustrate, the belittlement frequently appears as a kind of ploy to disparage the recognized importance of the thing spoken about:

ŋayagji-wa ja-wuḷa-ṇidba Ø-geyegeyeg guwa Ø-ṇanan
nothing 3-3Pl/3Sg-have NAbs-poison/sorcery object like NAbs-stone
'They have a (nothing, unimportant) sorcery object like a stone'.

gurawgurawg ŋayagji-wa Ø-ṇidba-ṛi Ø-maŋi Ø-ḏaymingan
channel-bill cuckoo nothing 3Sg/3Sg-have-PC NAbs-song NAbs-sacred
'Channel-bill cuckoo had nothing (unimportant) sacred songs'.

This false disparagement is a frequent but not invariable condition of use of ŋayagji in clauses with positive predicate.

The combination of the negative word ŋayagji with a negative verb produces a negative polarity (not+nothing = nothing), while combination of ŋayagji with a positive verb form produces a positive polarity (implication of great importance).

1.4.4. Negation of coordinate NPs

The usual method of negating coordinate NPs is by listing them, and negating the verb which cross-references combined person and number values:

ŋaya, ñaŋgi ŋi-girwil ḏayi mir? ŋi-ŋa-n
I Nom you Sg Nom 1InDu-not knowledgeable Neg know 1InDu-Aux-Pres
'You and I, we are not knowledgeable, we do not know'.

ŋaya ŋaḷa-ṇañi ḏayi ŋir-yaŋ-ga-b
I Nom FNom-mother Neg 1ExDu-go-Aug-PNeg
'Mother and I did not go'.

1.4.5. Negation in subordinate clauses

Negation of a verb in a subordinate clause is expressed within the subordinate clause itself, not in a higher clause. See e.g., examples of negative conditionals in 1.1.2.4.2.5.

1.4.6. Other modal particles

In Maŋarayi there are no modal verbs similar to English 'can, ought, should' etc. Certain modal values are expressed by inflectional categories in the verb (see 2.1.3.4), and the rest by modal particles in construction with the verb. Most modal particles have as their scope the entire clause in which they occur (but see remarks in 1.4.2 on use of ŋiñjag to negate particular constituents).

A distinction may be made among three kinds of modal particles. The first type obligatorily occurs with verbs of certain modal categories, and at the same time subcategorizes the verb as being of a certain modal category. Examples are prohibitive negative particle ŋiñjag, which in construction with a verb defines it as having a particular negative modal meaning, and the evitative/anticipatory particle baḷaga 'before, lest'.

A second type of modal particle does not strictly subcategorize the modal category of the verb; however, these particles tend to occur with verb forms of particular modal values. For example, bamburiyi 'better, preferably' tends to occur with present irrealis verb forms, but may also occur with present realis (see 2.1.3.4 and 1.4.6d below).

The third kind of particle is actually a modal predicate. Several of these, used to predicate judgment, are described in 1.4.6c.

1.4.6a. Possibility

Impossibility and inability are both expressed by ŋiñjag (see 2.1.3.-IIc). Possibility can be predicated of an entire clause by use of maŋaya 'perhaps':

maŋaya ja-Ø-ṇiŋa-n maŋaya ḏayi
perhaps 3-3Sg-come-Pres perhaps Neg
'Perhaps he'll come, perhaps not', i.e., 'it's possible that he may or may not come'.

1.4.6b. Evitative/anticipatory baḷaga

For discussion of baḷaga, a modal particle which means either 'before' or 'lest', see 2.1.3.-IIc.

1.4.6c. Modal predicators of judgment and other particles

There is no general lexical verb of judgment like 'to think, suppose, reckon' with which the speaker may frame his own opinion, or attribute an opinion to someone else. Such meanings are expressed by several modal particles.

The particle waṛa may be used as a predicate meaning 'to suppose', but the speaker may express only his own judgment by means of it:

waṛa baḷaḷaga jilg a-Ø-way-(y)i-n-gu
suppose today rain Irr-3Sg-Aux-MP-Pres-DI
'I reckon it will rain today'.

It cannot be used to impute supposition to an agent other than the speaker. Thus the following does not occur:

*ŋa-maḷam waṛa baḷaḷaga jilg a-Ø-way-(y)i-n-gu
MNom-man suppose today rain Irr -3Sg-Aux-MP-Pres-DI
'The man thinks it will rain today'.

Imputation of supposition to someone else can only be overtly expressed by the speaker with ma- 'to do, say' as a form of reported discourse (see

1.1.1.1). Waṛa is also capable of being used as an adverb in the meaning 'uncertainly, wrongly':

waṛa ŋa-ya-j
wrongly 1Sg-go-PP
'I got lost'.

As an adverb, it can modify verbs of which the speaker is not the subject.

The predicate particle jiniyin has the same component of meaning of mental activity as waṛa, but expresses the additional feature 'false supposition':

jiniyin ñaŋgi
suppose 2Sg Nom
'I supposed it was you' (but I was wrong).
barar?ma ŋan-jud+ma-ñ, jiniyin ṇa-maḷam ṇeḷ? Ø-ṇiṇa-ni
frighten 3Sg/1Sg-Aux-PP suppose MNom-man sneak up 3Sg-Aux-PC
'I was startled, I thought a man was sneaking up' (but it wasn't so).

This particle *can* be used to predicate false supposition of someone else:

gana Ø-ḷandi-bayi ŋonjoḍ Ø-bu-b jiniyin Ø-maḷam
well NAbs-stick/wood-Foc stab 3Sg/3Sg-Aux-PP suppose MAcc-man
'Well, she stabbed the piece of wood supposing (falsely) that it was a man'.

There are two non-predicative particles which express uncertainty. They may occur in clauses containing a predicate, and they express a questioning attitude of the speaker towards the content of the utterance. These are ŋaṇḍala and ŋara. There appears to be no great semantic difference between them; both can be translated as 'maybe' or 'perhaps'. Unlike maŋaya, which ocurs clause-initially with some frequency, both tend to occur finally, or at least in non-initial position in the clause:

maŋaya Ø-ŋayaŋ-gana Ø-buñ-gana ḍar?ma wuḷa-waṛi ŋara
perhaps NAbl-other NAbl-bush (English) emerge 3Pl-Aux PC perhaps
'Perhaps they came out from a different (part of the) bush, maybe'.
baḷaḷaga ga-ḷa-yag, ŋaya-ba ga-ŋa-ṇi ŋaṇḍala ŋaya-ŋañi-yan
today -3-2Pl-go 1Sg Nom-Foc -3-1Sg-sit perahps FLoc-mother
'Today you pl. are leaving (going), (as for) me perhaps I'll stay with my mother'.

1.4.6d. bamburiyi 'better, preferably, (it is) good that'

The particle bamburiyi 'better, preferably' may have either clausal or phrasal scope. When its scope is clausal, it tends to co-occur with present irrealis verb forms, but it may also occur with present realis ones:

bamburiyi yuŋgun a-ḷa-yag
better ahead Irr-2Pl-go
'It's better that you pl. go ahead'.

The past meaning 'was better that, should have' is expressed by past negative verb form (see 2.1.3.-IIh).

When the scope of bamburiyi is an NP, it expresses preference or selection, but the compared term may be omitted.

Ø-baḷaŋgan bamburiyi
NAbs-new better
'Better a/the new one'.
Baḷmarag ḍayi, gana jina-biya Wuḷuguguwan bamburiyi
(place) Neg but Dir-downriver (place) better
'Baḷmarag not (elliptical), (but) better Wuḷuguguwan downriver'.

1.5. Anaphora

1.5.1. Expression of anaphora

1.5.1.1.-2. Deletion (where element is marked on the verb)

Deletion is the unmarked means of expressing the maintenance of reference over a stretch of text for NPs within major syntactic case relations to the verb, see 2.1. Since at least one NP, and in transitive clauses subject and object NPs, are obligatorily cross-referenced in the verb, NPs in these functions are typically anaphorized by deletion across clause boundaries, reference being maintained by pronominals until the speaker judges that there is need for clarification of pronominal reference. The following stretch of text is illustrative; it involves two sets of young people, two young men and two young women.

1. ŋabaranwa jarbiñ-garan wara-warguj, Ø-jululu wara-warguj
two young men-Du Nom pick up Red NAbs-belongings pick up Red
wur-ma-ṛi-wa.
3Du-do-PC-Suf

2. Gay? wur-bu-ni-wa gay? wur-bu-ni-wa Ø-ŋanan bulŋuy!
chase 3Du/3Sg-Aux-PC-Suf chase 3Du/3Sg-Aux-PC-Suf NAbs-rock (noise)
ḍaṛ? Ø-ma-ṛi-wa jiṇin ŋa-ḍamayi.
light 3Sg-Aux-PC-Suf altogether NInst-fire

3. Wur-man+bu-ni-wa garan-gara-bayi maḷam-garan, ḍar?ma.
3Du-run-PC-Suf those two-Foc men-Du Nom emerge

4. Gana garan-gara waḷima-yaran wur-wawañji-ni-wa
Well those two young women-Du Nom 3Du-forage MP-PC-Suf
ŋa-ŋamda-wu ŋa-munburŋ-gu, garan-gara-bayi
NPurp-whatchamacallit NPurp-wild 'banana' those two-Foc
waḷima-yaran warwiyan-garan.
young women-Du Nom mythological figures-Du Nom

5. Wur-yi-ñi-wa ŋa-munburŋ-gu.
3Du-go-PC-Suf NPurp-wild 'banana'

6. Ŋaḷi-nara-bayi ŋaḷa-bugbug mir? wuran-ŋa-ni-wa.
FNom-Dis-Foc FNom-old person know 3Sg/3Du-Aux-PC-Suf

7. Wur-yi-ñi-wa ḍuḍu wur-wu-ni-wa waḷima-yaran
3Du-go-PC-Suf coolamon 3Du/3Sg-give-PC-Suf young women-Du Nom
Ø-munburg jaḍ Ø-jud+ma-ṛi-wa-bayi maŋaya
NAbs-wild 'banana' return 3Sg/3Sg-Caus-PC-Suf-Foc perhaps
ŋaya-la-wuraŋ-gaḷama.
FAll-mother-theirs Du

8. Wud-ṇiṛi-wa baḷ? wur-jud+ma-ṛi-wa mayawa.
3Du/3Sg-bring PC-Suf sit 3Du/3Sg-Caus-PC-Suf all right

9. 'Mm! Gari-jaga ŋa-ŋiñjil wuḷa-ṇiṇa-ñ! Guja ṇur-yag
Hey! there-Exp MNom-Av 3Pl-come-PP there 2Du-go Imp
ḷawuyan-yiri+wa-w! Gana ŋa-ŋiñjil wuḷa-ṇiṇa-ni-wa, guja ṇur-yiri+wa-w!'
2Du/3Du-look-Imp Well MNom-Av 3Pl-come-PC-Suf there 2Du-look-Imp

10. Wur-yi-ñi-wa wuyanba-ḍaṛa+wu-ni-wa, garan-gara-bayi maḷam-garan.
3Du-go-PC-Suf 3Du/3Du-sight-PC-Suf those two-Foc men-Du Nom

11. 'Yo! Ṇa-gaṇji-ŋaŋga-wur garan-gara.'
    Yes! MNom-MMBSSS-yours (Sg)-Du Nom those two

12. 'Yowo! Yiriḍ ṇur-yag! Buñaŋ naŋganwa ṇur-gi+wu wuṇyaŋgu-yan,'
    Yes! back 2Du-go Night there 2Du-sleep (Av) 3Pl-Loc

    wuran-ma-ṛi-wa.
    3Sg/3Du-say-PC-Suf

13. 'Ḷa-ṇi-wa buñaŋ'.
    2Pl-sit-Imp Art night

14. Yiriḍ wuran-ga-ni-wa wur-yi-ñi-wa mayawa-bayi, ŋaḷi-nara
    back 3Sg/3Du-take-PC-Suf 3Du-go-PC-Suf now-Foc FNom-Dis

    ŋaḷa-bugbug, naŋganwa-bayi Ø-baṇam-ŋayawu.
    FNom-old person there-Foc NAbs-camp-hers

15. Wur-yi-ñi-wa, wur-yu-y mayawa baḷbaḷ Ø-ḍamayi joḷe?
    3Du-go-PC-Suf 3Du-sleep-PC now further NAbs-fire make fire

    wur-ma-ṛi-wa, wur-wiḍ+ma-ṛi-wa Ø-yulgmiṇ mayawa.
    3Du/3Sg-Aux-PC-Suf 3Du/3Sg-clean-PC-Suf NAbs-sand all right

16. Ṇayaŋ-garan wur-ma-ṛi-wa ŋaḷi-nara ŋaḷa-gaḍugu ŋa-malam-ŋayawuŋ-gu.
    other-Du Nom 3Du-do-PC-Suf FNom-Dis FNom-woman MDat-man-hers

(Free) Translation

1. Two young men picked up, picked up their belongings.
2. They pursued, pursued a rock, bulŋuy! it strongly gave off light from a fire.
3. They went along, those two young men, came out (i.e., into a clearing).
4. Well those two young women were foraging for whatchacallit, for wild 'banana' (family *Asclepiadaceae*), those two young women were mythical figures.
5. They went for wild 'banana'.
6. That old woman knew those two.
7. They went along, loaded up a coolamon, the two young women brought back wild 'banana' to their mother, perhaps.
8. They brought it, set it down, all right.
9. 'Hey! Right over there my "cousins" (i.e., avoidance category relatives = sons-in-law) have arrived. You two go there, go to see them! Well, my "cousins" have come up, you go have a look!'
10. They (du) went, they saw them, those two men.
11. 'Yes! Your two "cousins", those two'.
12. 'Yes! You two go back! At night you sleep there with them!' she said to them (du).
13. 'You (all) camp (together) at night!'
14. She took them (du) back, now they went, the old woman, there, her camp.
15. They (du) went, they slept now, further on they made a fire, they cleared the sand, all right.
16. The other two did (it), that woman for her man.

Sentence 1 introduces two young men, who immediately become topical, cross-referenced by wur- without NP at the end of 1 and in 2. 'Those two men' are again mentioned in 3. The adversative conjunction gana in 4 helps make clear that a new referent is about to be introduced; 'the two young women' becomes topical by 5, where the NP is cross-referenced by wur- without external NP. (Sentence punctuation is given to approximate intonation groups; there was a final rise-fall over warwiyan-garan at the end of 4; see 3.3.4a). The referent of the 3Du object pronominal in 6 is not clear

by itself; however, since it was clear and was stated more explicitly further on that the two young women were daughters of the old woman, it does not seem to make sense to take the referent as the 'two young women'. More likely, the speaker intended to say that the old woman recognized the two young men. In 7, the referent of 3Du wur- is clearly the two young women once again, mentioned explicitly in the second clause of 7; they are also cross-referenced by the 3Du pronominals of 8. In 9, the old woman explicitly points out the arrival of the two young men to the girls, and tells them to go look at the young men. (These young men are potential sons-in-law to the old woman, her gaṇji, referred to twice in 9 by the avoidance category marker ŋiñjil; reference to them by the old woman is always plural, not dual, as in the form wuṇyaŋgu-yan in 12. See the Appendix for this feature of the avoidance style). In 10, the two girls are the subject of both clauses; the young men are mentioned in nominative form garan-gara-bayi malam-garan, even though they are the understood object. This illustrates the often fragmentary structure of the Maŋarayi 'clause', in which some constituents are frequently simply appended to it, their function in it understood not so much by morpho-syntactic marking as in terms of possible textual relations. In 11, one of the girls confirms that the men are indeed the old woman's avoidance-category relations. In 12, the old woman tells the girls to go back; she also tells them to sleep with the men at night; she uses the avoidance style verb gi+wu- 'sleep', and concludes her instructions (13) by telling them to camp (pl) at night (the implication being that they should camp together with the men). In 14, the understood object of wuran-ga-ni-wa appears to be the two young women; the two girls go back, and the remainder of this sentence further illustrates a rather fragmentary kind of structure. In 15, the understood subject is probably the two young women, who go and prepare a camp; alternatively, it could be one of the young women and one of the young men, since by 16 it is clear that the young men and women have paired off, also made clear by the continuation of the text (not given) which says that 'three fires were burning' (one each for the young couples, one for the old woman). There are many examples here of reference-maintenance involving deletion; the passage also illustrates possible ambiguities which could be clarified by recurrent mention of NPs, but in fact are not. Notice also the reference-maintaining function of the (dual) distant demonstrative forms. Finally, compare the frequent repetition of the noun 'banana' in sentences 4, 5 and 7, evidently due to the fact that its first two occurrences are purposive, not in major syntactic functions.

1.5.1.3.-4. Ordinary personal pronouns/reflexive pronouns

Not applicable.

1.5.1.5. Special anaphoric prefix

Only one explicit anaphor occurs with any degree of frequency. This is gi-nara(-bayi), formed with anaphoric prefix gi- and neuter distant demonstrative nara (see 2.1.2.5.2.2). Infrequently, other forms are found to occur with anaphoric prefix gi-; e.g., a few cases were found of gi-ŋamda 'that same whatchamacallit' (see 2.1.2.6.7) and gi-naŋganwa 'there (in that mentioned place)'. The first is a hesitation form and simply indicates that the word for a referent which the speaker wished to anaphorize was temporarily forgotten; the second was found only once and will not be discussed further. The anaphoric prefix was never found with masculine or feminine-marked demonstratives, and attempts to construct such anaphors were rejected.

The anaphor is almost invariably followed by a noun recapitulating the presupposed item to which the anaphor refers. This item was mentioned

earlier in the discourse, but it may not have been mentioned in exactly the same word or words used in the recapitulating anaphoric phrase. The anaphor expresses a link between meanings, not necessarily between identical linguistic forms. For example, in a description of what happens in initiation ceremonies, a speaker said:

ja-Ø-guṛ+wa-n gi-nara Ø-gigmuli
3-Sg/3Sg-circle-Pres Ana-Dis MAcc-boy
'He goes around/circles the boy'.

The word gigmuli 'uncircumcised boy' had not been previously mentioned, but at the beginning of this explanation the word yiwaṇḍala 'initiand' had been, and there had been many prominals and demonstratives which could only be understood as having such a referent. However, the forms linked by anaphoric reference *may* be identical.

The fact that an anaphoric phrase consists of anaphor+recapitulating noun, explains how it is possible for only a single anaphoric form to be commonly used. The anaphor does not function to unequivocally point back to some *particular* nominal expression. It occurs in a phrase which includes a noun, and the anaphor provides the information that the referent of the nominal expression has been mentioned or has figured in some way in the previous discourse, whether or not it has been clearly labelled by the same noun. Thus, an anaphoric phrase recapitulates and clearly applies a label to a referent which may or may not have been clearly labelled up to that point; it either supplies new information ('the presupposed referent is an X') or at least, by summing a series of textual co-reference relations, allows the speaker to assume a clearly presupposed referent.

It is interesting that although the norm is for a specified nominal in direct object function to *precede* the verb in its clause (see 1.2.1.2.6), a much higher percentage of anaphoric phrases in direct object function *follow* the verb rather than precede it. Counts have not yet been made for anaphoric expressions by case function; but it is clear that anaphorized nouns are almost always in major syntactic functions (see 2.1), and the highest proportion of them are direct objects.

Given that the anaphor functions as described above, the important questions are: when is the anaphor used? How complex may reference relations become (e.g., because of the introduction of a multiplicity of participants) before they are clarified? These are points which are difficult — in fact, impossible — to illustrate with brief textual excerpts. It is necessary to see the structure of an entire text in order to work out a measurement of the ratio between presupposed referents that are simply carried forward in narrative without being summed, versus those that are clarified by anaphora. It is clear that anaphoric expressions are introduced not only when there is a variety of participants, but also when narrated events have become complex enough so that either it may not be clear that a previously mentioned participant is still relevant, and/or what his precise role is in continuing events. For example, in one story a boy and his grandmother go hunting goanna, and succeed in capturing one by knocking down the tree in which it is sitting. They succeed in putting a noose around the goanna's neck, using a stick (previously only identified as cut from yaŋar 'ironwood', not by means of the word ļandi 'stick'). Since the speaker had devoted some time to detailing the cutting of the stick and the making of a trap with which to catch the goanna, it was no longer quite clear who (boy or grandmother) was doing what.

1. warguj Ø-may gi-nara-bayi Ø-ļandi ļiñ Ø-bu-b,
pick up 3Sg/3Sg-Aux PP Ana-Dis-Foc NAbs-stick poke 3Sg/3Sg-Aux-PP

marb Ø-ŋamdag Ø-ŋañ-ṇawu. Mayawa-ja! Ø-wirilmayin marb
tie 3Sg/3Sg-Aux PP NAbs-neck-its now-Emph NAbs-goanna tie

Ø-ŋamdag.
3Sg/3Sg-Aux PP

2. Guja-ba Ø-ma!
over there-Foc 2Sg-do Imp

3. Ø-warawara+ma-ñ Ø-ļandi mayawa mid ja-Ø-ḍaya
3Sg/3Sg-shake-PP NAbs-tree now tighten 3-3Sg/3Sg-Aux

Ø-ŋañ-ṇawu-bayi mayawa-ja.
NAbs-neck-its-Foc now-Emph

Yuryuryur Ø-mi yuryur ŋi-mi ŋan?ŋan Ø-ma-ñ gi-nara
pull Red 2Sg-Aux Imp pull 1InDu-Aux together 3Sg-say-PP Ana-Dis

Ø-waŋgij.
NAbs-child (boy)

1. '(He) picked up that stick, poked him, noosed its neck. Now then! (He) noosed the goanna. 2. 'You do over there!' (presumably an instruction by boy to grandmother to help in some unspecified way). 3. (He) shook the tree, now tightens (the noose) around its neck, now then! 'Pull, let's you and I pull together', said the boy.

The final anaphoric phrase clarifies some of the inferred earlier pronominal references by indicating that it is the boy who is directing operations relating to capture of the goanna and felling of the tree.

Note that the cohesion (in the sense of Halliday and Hasan 1976) is here maintained entirely by the anaphoric prefix; no independent principle of lexical cohesion need be adduced.

1.5.1.6. Resumptive neuter distant demonstrative nara-bayi

See 2.1.2.5.1.23 for neuter demonstrative nara-bayi as discourse anaphor; it has an important reference-maintaining function.

1.5.2. Domain of anaphora

The domains over which the various expressions of anaphora operate will be dealt with elsewhere in a separate treatment of text material. It is clear, however, that these domains cannot revealingly be dealt with purely in terms of structural units such as the 'clause'.

1.6. Reflexives

Reflexive is expressed by verbal affixation (there are three, morphologically conditioned allomorphs, -y(i)-, -jiy(i)-, and -ñjiy(i)-). The scope of reflexivity is restricted to the clause. See 2.1.2.2 and 2.1.3.1.2.3 for general discussion of reflexive-reciprocal, 2.1.3.-IVa for distribution of reflexive-reciprocal suffixal allomorphs, and 2.1.3.-IVb for reflexive-reciprocal (also mediopassive and inchoative) paradigms.

The 'mediopassive' verbs (2.1.3.3.2b) contain a suffix -ji-~-yi-. These verbs are almost all intransitive (there are a few irregular forms, e.g., bamaṛ-ji- 'to rob, steal from', see 2.1.3.3.2a) and there is reason to think that the mediopassive suffix was formerly a more widely productive verbaliser (probably used to create intransitive verbs, including inchoatives; see 2.1.3.3.2a). There is probably an historical connection between the (intransitive or intransitivizing) mediopassive suffix and at least the reflexive-reciprocal form -y(i)-, possibly also the other reflexive-reciprocal allomorphs.

1.7. Reciprocals

Reciprocal is formally identical to reflexive for each verb root. See all references in 1.6, and 2.1.2.3.

1.8. Comparison

Grammatical expression of comparison is not highly developed. Many meanings which in English have a place in a paradigmatic 'degree' set, in Maŋarayi are simply distinct lexicalizations (e.g., galiya 'far', baḷbaḷ 'further'). For expression of adjectival degree see 2.1.4.4.-5. Adverbial degree involves some of the same suffixes and other forms; see 2.1.7.1.-2. For object of comparison 'bigger than', see 2.1.1.2.6.

Incidentally, some neighboring languages (e.g., Ŋalakan) have fairly elaborated expression of adjectival and adverbial degree.

1.9. Equatives

See object of equation ('as big as' in 2.1.1.2.7, and expressions of likeness and dissimilarity in 2.1.1.2.12.

1.10. Possession

For predication of possession see 2.1.1.2.3.2; for genitive case function and expression see 2.1.1.2.5.1; for possession and the part-whole relation see 2.1.1.4.6 and sub-sections; for possessive suffixes see 2.1.2.4 and sub-sections. There is a lexical verb ŋidba- 'have'; temporary possession and accompaniment is usually expressed by the proprietive construction (2.1.1.4.4.-5). There is no difference in expression of present and past possession.

1.11. Emphasis

1.11.1. Clausal emphasis

Use of ji? as marker of clausal emphasis was illustrated in 1.1.1.2.1.1.

1.11.2. Constituent emphasis

There are two emphatic clitics -ja and -ḷa which may be attached to any part of speech, but emphasize only that constituent to which they are attached. When they are attached to a predicate, this is equivalent to clausal emphasis. Attached to interrogative words, -ja gives a meaning of extreme wonderment:

ŋiñja-ja ja-Ø-ŋiŋa-n?
who Nom-Emph 3-3Sg-come-Pres
'Who in the world is coming?'
janaŋgari-ja ja-wuḷa-yag?
where-Emph 3-3Pl-go
'Where in the world are they going?'

Other examples are:

wur-galg+ma-ñ-ja
3Du/3Sg-spear-PP-Emph
'Indeed they du. speared her'.
ŋa-maḍu-yan-ja ŋan-bab+ŋamdag ŋaḷa-ŋañi
NLoc-coolamon-Emph 3Sg/1Sg-put PP FNom-mother
'My mother put me into a *coolamon*, fancy that!'
Ø-ḍaymingan-ja nara Ø-ŋugu
NAbs-sacred-Emph that NAbs-water
'That water is *sacred*!'

What difference there may be between ji? used emphatically and -ja attached to a predicate is not entirely clear. The clitic -ja appears to be the most neutral emphatic element; available examples suggest that ji? may express emphasis in response to (overt, implied, or at least anticipated) contradiction.

The clitic -ja may occur on a verb particle in particle+auxiliary verb constructions, since the particle is usually what expresses most of the lexical specificity of the verb:

wolor-ja ga-ŋa-ma
be hungry-Emph -3-1Sg-Aux
'I'm *hungry*!'

The clitic -ḷa has a nuance of emphatic indefiniteness or query which perhaps can often be translated by English 'or something'. It expresses an attitude of emphatic (sometimes frustrated) uncertainty on the part of the speaker:

mir? Ø-ŋa-ni-ḷa
know 3Sg-Aux-PC-Emph
'(Maybe) he knew (it) or something!'
gari-ḷa wuḷa-ya-j
there-Emph 3Pl-go-PP
'They went over there or somewhere!'
ŋamdiri-ḷa
whatchacallit-Emph
'Whatchacallit anyway!'

Because -ḷa expresses emphatic query it is often found suffixed to question elements or hesitation forms (2.1.2.6.7).

As can be seen, use of the emphatic clitics involves no constituent dislocation. The clitics can occur on nominals (both predicative and attributive adjectives), demonstratives, pronouns, interrogative words, verbs, adverbs, verb particles and clause-level particles. As noted in 1.1.1.2.4, a non-committal response to a statement is maŋaya-ja 'perhaps indeed!' The clitics have never been found on more than one constituent within an NP.

1.11.2.1. Emphatic intonation

See discussion of the intonation contour over the emphatic clitics in 3.3.4f.

1.12. Topic (Focus) clitic -bayi

Analysis of the clitic -bayi is potentially contentious. At least two uses of 'topic' are current in Australianist work. Some use the term to refer to constructions like 'The chocolate bars, we didn't eat' where 'the chocolate bars' is said to be 'topicalized'. At least some — perhaps all — such usages imply contrast. On the other hand, Dixon (1972) in speaking of 'topic chains' in Dyirbal uses 'topic' to mean a NP which is absolutive, and occurs in such chains where some underlying NP is co-referential with a NP in another clause.

The clitic -bayi is sometimes used in the first sense of topic, as in the following example:

wuḷa-ma-ṛi wuḷa-yi-ñi ŋa-bugbugbug Yumbuyan Jirgijaji
3Pl-do-PC 3Pl-go-PC MNom-old person Red (place) (place)

Murwale Gulun ŋa-bugbugbug ŋi-yan-yuŋgun, ŋi-ba
(place) (place) MNom-old person Red ancestors 1InDu-Foc

ŋi-girwil
1InDu-not knowledgeable
'They did (like that), the old people went to Yumbuyan, Jirgijaji, Murwale, Gulun, the ancestors, but you and I are not knowledgeable'.

By topicalizing of ŋi a contrast is established between the knowledgeable ancestors versus inexperienced speaker and hearer.

However, other recurrent uses of -bayi do not correspond to either notion of topic. As mentioned in 1.1.1.2.2, the clitic (or its reduced form -ba) is very often attached to interrogative words. It is not plausible to treat these as 'topicalized' in the usual sense ('As for where, are you going?'). The interrogative word, whether cliticized or not, is significant as the explicit question element in the clause; arguably, the clitic gives it even greater salience.

The clitic is frequently attached to the verb in protases of positive conditionals, and to ŋiñjag in protases of negative conditionals (see 1.1.2.4.2.5, also Haiman 1978). It is also almost invariably cliticized to the neuter distant demonstrative in any of its functions; e.g., it is usually found even in anaphoric gi-nara-bayi 'that same one', so that its use does not necessarily require that the constituent to which it is attached express new information.

The clitic may be added to any type of constituent except interjections. It is sometimes used with such frequency that it cannot be said to uniquely give significance to one constituent or phrase within a clause. It is often added to more than one part of speech, and also more than one noun, within the same clause. Each noun or other part of speech to which it is added is at least of relative semantic salience compared with other sentence constituents to which it is not affixed. A text excerpt illustrates the high frequency of -bayi with nouns, inflecting verbs and demonstratives. The text deals with punishment meted out by the rainbow serpent to adulterers and those who run away from their proper spouses.

1. Mayawa Yumbuyan-bayi mayawa.
   all right (place)-Foc now

2. Nara-bayi ŋa-bologban-bayi Ø-mi?mi-ñ ŋawu
   that-Foc MNom-rainbow serpent-Foc 3Sg-look for-PP 3SgMDat

   ŋa-mangir-wu-bayi ŋi-yari.
   MDat-culprit-Foc there-somewhere

3. Ja-wur-yu ŋa-warawi-yan biyaŋgin, ŋa-day jaḍ jaḍ
   3-3Du-sleep NLoc-grass sp. inside NInst-grass shut up shut up

   wur-bu-yag.
   3Du-Aux-RR PP

4. Wuran-jirag malam-gara-ŋan-bayi, wa-wuḷa-ŋamda+ma-ma-n-bayi
   3Sg/3Du-eat PP person-Du-Acc-Foc Hab-3Pl-whats it-do-Aug-Pres-Foc

   ŋa-bologban mayawa wuyan-jirag wuḷa-ma-ñ.
   MNom-rainbow serpent now 3Sg/3Pl-eat PP 3Pl-say-PP

1. 'Yumbuyan now, all right. 2. The rainbow serpent was looking for the culprit there somewhere. 3. The two are sleeping in the grass, they shut themselves up with grass. 4. 'He ate the two people, they are always doing whatchacallit, rainbow now has eaten them,' they (other people) said'.

A form to which it is attached need not be clause-initial, or indeed in any particular position in the clause:

yir? ja-Ø-waṛ Ø-maju-ḷama, ja-Ø-jiŋag+bu-n
throw 3-3Sg/3Sg-Aux NAll-coolaman 3-3Sg/3Sg-clean lily-Pres

Ø-ñiŋilñiŋil-bayi
NAbs-red lily rhizome-Foc
'She throws it into the coolaman, she cleans the red lily rhizome'.

The fact that the clitic may be attached to any constituent within a phrase (and sometimes to more than one) is shown by the following example:

guṛ? Ø-ma-ṛi muyg-bayi ŋan-ŋalima
sool 3Sg/3Sg-Aux-PC dog-Foc FAcc-(name)
'He sooled the dog Ŋalima'.

Showing cliticization of coordinate NPs is the following example:

gaḍugu-bayi malam-bayi waŋgaŋgij-bayi muyg-bayi guḷ? Ø-ma-ṛi
woman-Foc man-Foc child Red-Foc dog-Foc vomit 3Sg-Aux-PC

ŋaḷa-mumuŋa
FNom-mythological figure
'The lady (of the Gunabibi myth) vomited women, men, children, dogs'.

An example of -bayi attached to clause-level modal particle is the following:

malga nara-bayi gaḍugu-yaran jiniyin-bayi ŋa-malam-garan
now that-Foc woman-Du Nom falsely think-Foc MNom-man-Du Nom

ya-wur-yu
Irr-3Du-sleep
'Now the two women *think* the two men are asleep'.

The conclusion must seemingly be that while -bayi is used to 'topicalize' in the first sense described above, it is also used much more widely to give salience or added significance to (one or more) components of the clause. I therefore label it 'focus', to avoid the implication that its function is restricted to topicalization in the first sense. This must, however, also be distinguished from the current use of 'focus' in Austronesian studies.

1.13. Heavy shift

'Heavy shift' is not appropriately applied to any process in Maŋarayi. Like most languages in its area, Maŋarayi has weak clause subordination (no embedding), fairly free word ordering (compared, for example, to English), some degree of freedom in whether the case-marking appropriate to an NP in a particular, understood case function will actually be applied (see examples in text fragment in 1.5.1.1.-2, also 2.1.1b-c). Furthermore, phrase structure (particularly of certain types of constituents, such as the NP) may be described as loose. While the verb particle must precede its auxiliary and generally cannot be separated from it, constituents of the NP (if there is more than one) can be separated from each other, and sometimes simply appended to the clause in caseless (or nominative) form, as mentioned in 1.5.1.1.-2. Often, longer series of NP constituents, even though case-marked for the same function, are slightly set off from each other by pauses, as in this example:

gana miŋiwa wuyanba-ḍaṛa+wu-b-ba ŋabaranwa ŋamda
well already 3Du/3Du-find-PP-Foc two whachacallit

ḷawaḷawar-yara-ŋan, ḷandi-yara-ŋan, jaŋguḷ-yara-ŋan.
hollow log-Du-Acc stick-Du-Acc short-Du-Acc
'Well, already they found two what's-it, hollow logs, two sticks, short ones'.

(Commas indicate brief pauses.) It is probably appropriate to regard these as coordinate NPs understood to have the same referents, rather than as constituents of a single NP.

The frequent placement of -bayi on a first NP constituent (rather than on the last of a sequence, where it would occur if there were phrase-level structure of the whole), is also indicative:

wuyanba-ga-ŋiñ garan-gara-bayi ḷandi-yaran
3Du/3Du-take-PP those two-Foc stick-Du Nom
'They took those two, (the) sticks'.

In short, rather than speaking of heavy shift, it is appropriate to recognize the rather loose phrase structure of at least non-verbal constituents, with the verb the central and integrating constituent of the clause.

1.14. Other movement processes

Not applicable.

1.15. Minor sentence-types

See examples in 1.4.2 of the negative particle ḏayi with dative forms of pronouns and demonstratives, used to mean that the dative NP was/is absent. See also in 2.1.9 usage of dative case forms with the common expression of compassion gaḷugu 'poor thing!', e.g., gaḷugu ŋaŋga 'poor you (sg)!' See also some other common sentences (and phrases) in 2.1.9 ('I don't know', etc.).

1.16. Word classes

The criteria used for distinguishing word classes are:

1. Occurrence within different paradigms appropriate to various inflecting word-classes.
2. The semantic content and/or syntactic possibilities of occurrence of each class.

On these two bases the following classes are distinguished:

1. noun, adjective } nominal
2. pronoun
3. demonstrative
4. indefinite-interrogative forms
5. verb
   (a) inflecting
   (b) verb particle (VP)
6. adverb
7. particle
8. interjection
9. clause-level conjunction

Of these, the last four classes do not inflect. The verb particle also does not inflect, but is capable of being nominalized. Nominals derived from verb particles are textually infrequent.

1.16.1. Nouns and adjectives: nominals

Nouns and adjectives inflect with the same set of prefixes and suffixes, and have similar, if not identical, possibilities of syntactic occurrence. A noun phrase can consist of just a noun, or an adjective alone.

A general distinction can be made between the categories 'noun' and 'adjective' on the basis of semantic content. 'Noun' includes all concrete objects, animals, plants, persons and mythological beings. There is a small number of abstractive nouns such as ḏib 'sickness', and a number of nouns (in addition to derived gerunds, see 2.2.1.2, 2.2.1.6) which denote semantically more verbal notions such as gi 'sleep, sleeping', wiyi 'giving' (not 'gift'), and the like. (A few of the latter are not related by any productive morphological process to the verbs with which they are semantically linked.)

The class 'adjective' includes forms denoting physical properties, and some physiological and mental states and attributes. Quantifiers other than numerals, such as ŋayag 'another', ŋayaŋayag 'some', burgaji 'abundant,

many' and others, are inflected like other adjectives. Numerals (one to three), though they may function as modifiers, do not have exactly the same inflectional possibilities as other nominals, and exhibit special derivative formations. They are treated as a special subclass of nominals (2.1.1.8.6.9).

A noun phrase may consist of adjective and noun, in either order. Both constituents in such instances are inflected for the case function of the head noun:

Ø-balayi-wana Ø-ḷandi-wana
NAbl-big NAbl-tree
'from the big tree'

Maŋarayi tends to be sparing in its use of adjectives; rarely does more than one occur in any noun phrase. Also, the frequency of adjective plus noun is not high; many NPs consist of just one or the other.

An important difference between nouns and adjectives lies in the inherence of gender in the former, versus its variability in the latter. The great majority of masculine and feminine nouns are inherently of one gender or the other (ŋaḷa-gaḏugu 'woman', ŋa-jarbiñ 'young man'). Adjectives, on the other hand, do not display inherent gender, but inflect variably for noun class/case depending upon the particular referent (e.g. ŋaḷa-jurg 'lucky person' feminine, ŋa-jurg 'lucky person' masculine; ŋaḷa-gibi 'generous' feminine, ŋa-gibi masculine, etc.). In an NP containing both adjective and noun, the adjective agrees with the noun in class/case marking. Two further qualifications must be made concerning noun class.

First, many neuter nouns can be re-classified as either masculine or feminine in particular contexts. For example, many mythological characters are designated by nouns which are ordinarily neuter, but in the mythic context are treated as either masculine or feminine — thus gij 'moon' as a mythic figure is masculine.

Second, there are quite a few human status nouns which do not display inherent gender — they inflect variably depending upon the referent. Examples are ŋaḷa-/ŋa-bugbug 'old woman/man', ŋaḷa-/ŋa-jaḏba 'first born', ŋaḷa-/ŋa-waŋgij 'female/male child', many kinship terms and all subsection terms. On the basis of the criterion inherent versus variable gender, these would be considered adjectives. On the basis of semantic content — i.e. the fact that they denote persons, relations and statuses just like certain other nouns of inherent gender — they would be considered nouns. I believe the issue is best resolved in favor of calling them nouns, since they can be modified by adjectives, in which case the adjective agrees with the noun: ŋaḷa-balayi ŋaḷa-waŋgij 'the big girl-child'. It is important to note here that all languages in the area — possibly in Australia — contain a significant number of 'gender-variable' nouns.

Nouns and adjectives do not have identical derivational possibilities. Inchoative verbs cannot be derived from nouns. It is not possible to verbalize a noun like bugbug 'old person' to form 'he is becoming (an) old (man)', as can be freely done, for example, in many Arnhem languages. Such notions must be expressed by a verb phrase 'to get gray', 'to become old, infirm' or the like. By contrast, some adjectives can be verbalized but the resulting meaning is not always precisely the expected inchoative one. From boḏewg 'bad' is formed boḏewŋ-ji- (note stop nasalization before the mediopassive suffix, see 3.4.1.2.2), which usually has the meaning 'to feel bad, be/become downcast'. Some semantically regular inchoative formations are juḷag 'cooked, ripe' ⟶ juḷañ-ji- (with unexpected alternation g~ñ); ḏurigi 'raw, unripe' ⟶ ḏurigi-yi- 'to become/be unripe, raw'. Such derivations are mostly limited to adjectives whose meaning potentially involves some contrast or change between one state and another, as ripe-

unripe. However, it is not possible to derive inchoatives from such adjectives as 'big', 'little' and many others, though some notion of contrast or change potentially exists. These concepts must be expressed in other ways. In conclusion, nouns and adjectives are similar in inflection and syntagmatic privileges of occurrence. They are dissimilar in derivational possibilities, and in inherence versus variability of gender.

1.16.2. Pronouns

Pronouns include first and second person forms. They have subject, object, dative, genitive and local case forms. For most pronouns, the dative case form is identical to that used as possessive suffix. Genitive case is built morphologically on the dative, and local case forms on the genitive.

A few third person forms are more like pronouns than demonstratives, in that they do not code distance categories; see 2.1.2.5.2.1.

1.16.3. Verb

Verb constructions in Maŋarayi fall into three types. The most common consists of free non-inflecting particle plus auxiliary. The contribution to lexical meaning made by the auxiliary is often very slight, or not detectable at all; the auxiliary is primarily a prop for inflectional affixes. An example of the particle and auxiliary construction is buy? wu- 'show, teach'.

The second construction type is 'compound'. It consists of initial (usually unalyzable) compounding element and inseparable auxiliary, as in barañ+bu- 'dream'. Compounding element and auxiliary together constitute the unit to which inflections are applied. The set of inseparable auxiliaries consists of a subset of the separable ones found in particle plus auxiliary constructions.

The third type consists of morphologically simple, semantically full 'main' verbs, such as gunda- 'cut', guña- 'tie', gawa- 'dig, bury'. Within this set of verbs there is an important subclass of high-frequency, mainly CV (but also CVC and CVCV) roots which can function as main verbs, but also occur in the two construction types as separable and inseparable auxiliaries. An example of a CV root is bu-: as main verb it means 'hit, kill'. As (separable or inseparable) auxiliary it occurs mainly in transitive constructions, but also some intransitive ones.

1.16.3.1. Inflecting verb

The set of separable auxiliaries, and compound and main verbs, will sometimes be referred to as 'inflecting' verbs. This is a terminological convenience which permits a distinction between the domain of inflection within verbal constructions, versus the entire construction type consisting of free particle and separable auxiliary.

As noted in 1.16.3, each high frequency CV, CVC and CVCV root tends to participate in either predominantly transitive or intransitive constructions. Within the 'compound' construction type, classes of verbs can be established based upon the inseparable auxiliary.

1.16.3.2. Verb particle

The other main constituent which occurs in some verb constructions is the free particle. Some particles, because of their lexical semantics, normally occur in either transitive or intransitive constructions, but not both. An example is juyub 'strike on the knee', which occurs in transitive constructions. Many particles, however, can occur with more than one auxiliary, the transitivity of the construction determined by the auxiliary. In fact, causatives of particle plus intransitive auxiliary constructions

are generally formed by the combination of the same particle with a different, transitive auxiliary. Thus the causative of jir jaygi- 'stand' is jir jud+ma- 'make stand'.

Compounding elements of compound verbs are comparable to free particles in terms of types and occurring frequencies of phonotactic structures; see 3.1.2.4.2. Also, what normally occur as verb particles are occasionally treated as compounding elements by a process of 'particle incorporation' (2.1.3a.2).

1.16.4. Adjective

See 1.16.1.

1.16.5. Adposition

Not applicable.

1.16.6. Numeral/quantifier

Numerals are considered a type of nominal (see 2.1.1.8.6.9); quantifiers are also nominals, classed with indefinite-interrogative forms (see 2.1.2.6).

1.16.7. Adverb

Adverb is the term applied to verbal modifiers (of time, location, manner, etc.); these either do not inflect, or cannot inflect productively for all cases.

1.16.8. Demonstrative

Demonstratives are subdivided into demonstrative pronouns (third person forms) and demonstrative adverbs (of time and place). The inflectional paradigms of some demonstrative forms are similar to those of pronouns. However, within most of the third person forms there are distance contrasts; this sets them apart from the pronouns.

1.16.9. Indefinite-interrogative forms

Indefinite-interrogative forms which refer to persons ('who', 'nobody' etc.) also share certain paradigmatic similarities with pronouns and demonstratives. For example, they pattern nominative-accusatively, though the morphological expression of particular case functions is not everywhere the same as for pronouns and demonstratives. There are other indefinite-interrogative forms which refer to inanimates ('what' etc.) which do not have distinct subject and object forms. Despite these differences between personal and non-personal forms, indefinite-interrogatives are treated as a class, distinguished by their characteristically indefinite reference.

1.16.10. Particles

Within the class of 'particles' are included forms which express modal distinctions not handled by inflectional apparatus, e.g., baʲaga 'lest', negative particles ḍayi and ŋiñjag (1.4.1.-5), and bamburiẏi 'better, preferable' (1.4.6ḍ).

Also considered particles are a few forms which express comparison (guwa 'like') and some notions expressed in English by prepositions (malga in the meaning 'right up to', see 1.3.1.1.4).

There is a particle ŋiñjiʲ which serves as a lexical marker of avoidance style (see Appendix). It can perhaps be distinguished from interjections in that it normally is the first word of a longer utterance.

1.16.11. Clause-level conjunctions

Fluent speech is heavily larded with conjunctions which make clear the nature of the connection between what is to follow and what has preceded. Examples are gana 'but, well, and', malga 'then', wạḍij 'also, moreover'. Some of these have more than one meaning and function; their particular function in any given stretch of speech is closely correlated with the position (e.g., initial versus other) they occupy in the clause. See the discussion above, 1.3.1.1.

1.16.12. Interjection

Interjections (2.1.9) are normally used in isolation, not as closely cohering parts of longer stretches of speech. They include a variety of emotive exclamations expressing surprise, grief, and the like, as well as a set of forms uttered to parry the swearing or ridiculing of certain categories of kinsmen (5.1.1b).

2. Morphology

Maŋarayi, like the other languages in its genetic subgroup, is characterized by relatively complex inflectional morphology of its nominals (nouns and adjectives), pronouns, demonstratives and inflecting verbs. Morphological structures mark the categories appropriate to each word class (such as nominal gender and number) and at the same time perform most of the functions usually thought of as belonging to the realm of syntax, such as the indication of grammatical relations among sentence constituents. There are almost no syntactic processes by which sentences may be related to each other as transforms; for example, the active-passive relation is entirely lacking. Processes of sentence embedding are minimal. Derivational processes which derive one word class from another (such as nominalization of verbs, or verbalization of nouns and adjectives) are relatively restricted, and even where such processes can correctly be used to produce transforms of other sentence types, textual analysis shows that limited syntactic use is made of them. For example, though it is possible to derive gerunds which express verbal activities, such as 'hitting' or 'stealing' from many verbs, such derived forms do not participate in a wide variety of syntactic constructions, and tend to be rare in texts. There is a tendency for forms nominalized from verbs to function within the range of syntactic possibilities of non-derived nominals, so that a form like ŋuñja-jin from ŋuñjag- 'to mock, copy' is most frequently inflected as a regular nominal and used to mean 'one who mocks, mocker' rather than as the gerund 'mocking'. Morphological derivation within the class of verbs, such as the formation of causatives, is almost non-existent; exceptions to this are the intransitivization of inflecting verbs to form reflexives and reciprocals, and formation of inchoatives. The need for verbal derivatives such as causatives is taken care of by use of different auxiliaries with the same verb particle (see 2.1.3.1.2.1).

Maŋarayi is a highly inflecting language; the principal grammatical processes are prefixation and suffixation. There is some reduplication of nouns, generally to express plurality, but this is not extensive. Reduplication of verbs is occasionally found to express increased intensity or repetition of action, but is not used to distinguish tenses or other paradigmatic forms of the verb as in some neighboring languages (e.g., Ŋalakan).

2.1. Inflection: expression of case functions

Two categories of case function can be distinguished in Maŋarayi: 'syntactic' and 'other'. Syntactic case functions are distinguished by the fact that they must be cross-referenced by pronominals in the verb, whether or not an external, cross-referenced NP (or NPs, in transitive clauses) is present. Syntactic case functions include the clause functions subject of intransitive and transitive verb, and object of transitive verb.

The 'other' case functions can be subdivided into 'peripheral syntactic' and 'local', although this subdivision is not entirely satisfactory. The former includes dative and purposive case functions which, although not cross-referenced in the verb, are intimately bound up with the transitivity and thematic structure (see Halliday 1967) of the clause. 'Peripheral syntactic' also includes instrumental, a case category which applies only to neuter nouns. 'Local' functions expressed by distinct case desinences are locative, allative, ablative and pergressive. This schema leaves out the genitive case function. Genitive case is formally identical to dative for nouns and adjectives, demonstratives, and indefinite-interrogative forms, but distinct from dative in pronouns. Despite this partial formal identity, an adnominal genitive case function (that of the possessor) must

be distinguished on functional grounds from dative (indirect object).

2.1.1. Noun inflection

The noun inflects for noun class, case, and number. Case functions are marked in nouns by combinations of prefixes and suffixes. This is unlike the majority of better-known (mostly Pama-Nyungan) Australian languages in which case functions tend to be marked by suffixes only. The marking of case is formally intertwined with marking for noun class, as described in 2.1.1a.

The description of case-marking is complicated by the fact that all overt number suffixes have distinct case forms. Discussion is limited first to the singular noun; in 2.1.1.8 the number suffixes are introduced.

2.1.1a. Noun classes: syntactic case patterning

There are three noun classes: masculine, feminine and neuter. Masculine and neuter classes are inflectionally similar in a number of ways, including the fact that each class has two prefix forms, each prefix appropriate to a particular set of case functions. (See comments below on a third masculine prefix form.)

In the distribution of forms over syntactic case functions, masculine and feminine nouns pattern nominative-accusatively, while neuter nouns pattern ergative-absolutively. The distribution of forms over clause functions is shown in the following chart (TS = transitive subject function, IS = intransitive subject, TO = transitive object).

	TS	IS	TO
masc. and fem.	Nom	Nom	Acc
neuter	Erg	Abs	Abs

This distribution by noun class is perfectly in keeping with generalizations made in Silverstein (1976). There, it is shown that if there is any split in case patterning by NP type, those types less 'natural' in TS clause function will pattern ergative-absolutively, while relatively more 'natural' agents will pattern nominative-accusatively. Note that in ergative-absolutive patterning the TS clause function is filled by the functionally unpaired (i.e., TS ≠ IS = TO), hence functionally more highly marked, case form (ergative).

An instrumental case function must be distinguished for neuter nouns. The instrumental noun expresses the means by which (also, sometimes the manner in which, see 2.1.1.4.3) an activity is performed. The instrument is put in a case form identical to ergative, but instrumental case function is distinguished syntactically from that of transitive subject. The instrumental NP is never cross-referenced in the verb, while NPs in transitive (and intransitive) subject functions must always be cross-referenced.

Besides the syntactic and instrumental case functions marked by alternations of prefix forms, the other case functions (genitive, dative, purposive and local) are expressed by combinations of appropriate forms of the noun class/case prefixes with case suffixes.

Combinations of prefixes with suffixes can be briefly summarized by noun class. Feminine nouns have nominative ŋaḷa-, accusative ŋan-, and a third prefix form ŋaya- which occurs in all other case functions. Feminine genitive/dative/purposive forms are characterized by zero suffix, but local case meanings require overt suffixes as for the other noun classes.

For masculine nouns nominative is marked by ŋa-, accusative by Ø-. One additional comment must be made regarding marking of masculine direct objects. Though most masculine nouns in direct object function are marked with Ø-, masculine kinship terms in direct object function are often

prefixed with ŋan- (probably created historically by analogy with FAcc ŋan-); see examples in 2.1.1.8.6.4. The prefix form ŋa- occurs in genitive/dative/purposive and locative case functions, Ø- in allative and ablative. Neuter nouns show the same distribution of prefix forms in non-syntactic case functions as masculine nouns. For neuters, ŋa- marks ergative and instrumental, while intransitive subject and direct object are marked by Ø-.

Table 2-1 Noun class/case paradigms

	Feminine 'woman'	Masculine 'man'
nominative (TS, IS)	ŋaḷa-gaḍugu	ŋa-malam
accusative (TO)	ŋan-gaḍugu	Ø-malam
genitive/dative/purposive	ŋaya-gaḍugu	ŋa-malam-gu
locative	ŋaya-gaḍugu-yan	ŋa-malam-gan
allative	ŋaya-gaḍugu-ḷama	Ø-malam-gaḷama
ablative	ŋaya-gaḍugu-wana	Ø-malam-gana
	Neuter 'tree'	
ergative (TS), instrumental	ŋa-ḷandi	
absolutive (IS, TO)	Ø-ḷandi	
genitive/dative/purposive	ŋa-ḷandi-wu	
locative	ŋa-ḷandi-yan	
allative	Ø-ḷandi-ḷama	
ablative	Ø-ḷandi-wana	
pergressive	ḷandi-yiwa	

2.1.1b. Marking of neuter intransitive subject

It must be noted that in non-elicited speech especially, neuter nouns in IS function are sometimes marked with the prefix ŋa-, i.e., with the same prefix form used for neuter nouns in transitive subject function. The 'norm', however, is still clearly formal alignment of IS with TO function for neuter nouns.

2.1.1c. Variation in masculine nouns

Occasionally the prefix ŋa- is omitted from masculine nouns in IS function, and sometimes even from those in transitive subject function. Nevertheless, the statistical norm and ideal is as presented in 2.1.1a.

2.1.1d. Historical note on the feminine noun class

Related languages Alawa and Mara have ergative-absolutive patterning in the feminine noun class. In both languages, the ergative prefix form is the one required in combination with suffixes in the non-syntactic case functions. Thus, Alawa ar-giriya Erg., an-giriya Abs., ar-giriy-ir Loc., ar-giriya-yi Gen. This functional parallel between the Alawa ergative prefix and Maŋarayi (synchronically) genitive/dative/purposive/local prefix — i.e., that occurring in all non-syntactic case functions — provides a clue that historically Maŋarayi ŋaya- was functionally fully equivalent to Alawa ergative prefix ar-. In other words, formal-functional parallels with prefix forms in related languages provide strong hints that the Maŋarayi feminine class historically patterned ergative-absolutively. The correlate of this is that synchronic Maŋarayi prefix ŋaḷa- was *not* historically the marker of transitive subject function. The development of case-marking in the feminine class will be the subject of a separate article.

2.1.1e. Semantics of the noun class categories

Feminine nominals always refer to female human, higher animal and mythological beings. Women's proper names, subsection (i.e. social category), and kinship terms of exclusively feminine reference are always

marked for feminine noun class. Some human nouns, some kinship terms and all subsection terms have a single lexical root; gender distinctions are made by noun class/case prefix forms only, e.g. ŋa-muṛimuṛi 'my FF' versus ŋaḷa-muṛimuṛi 'my FFZ'. (Some kinship terms such as yilambuṛa 'FZ', can only have female referents, while others, such as baḍa 'F', can only have male referents). Some terms referring to higher animals, such as kangaroo and wallaby species, have different lexical roots for male and female of the same species, e.g. ŋaḷa-ŋalijiri 'female plains kangaroo' and ŋa-gaṛawi 'male plains kangaroo'. Female mythological beings include ŋaḷa-Yudjudja-ŋarambaŋaramba, an old lady cannibal, ŋaḷa-gulbiñ 'emu', and ŋaḷa-guḍubar, the old woman of the Gunabibi (myth and ceremony), also known as ŋaḷa-min 'the female stranger'.

Masculine nouns include those of male human reference (human status nouns, proper nouns, subsection and kin terms), higher animals and mythological beings.

Neuter nouns constitute the residual category. All nouns for which sex gender is not distinguished are neuter. This includes inanimate objects and phenomena such as gañwar 'sun', jab 'wind', wuḷuḷu 'running water, current' and some abstract nouns like ḍib 'sickness'. Many biologically animate entities, including all flora, lower fauna and insects, as well as body parts, are neuter. Any neuter noun may belong to either masculine or feminine gender when reference is to a specific mythological figure such as ŋa-garan 'stick insect'.

2.1.1.1. Case suffixation

2.1.1.1a. Lack of case suffixes in syntactic (and instrumental) case functions

The paradigms in 2.1.1a show that nouns in syntactic (and instrumental) functions are never overtly suffixed. Put another way, the suffix for nouns in syntactic and instrumental functions is always zero. Prefix forms within each noun class by themselves specify syntactic case function. Other case functions, however, are expressed by combinations of prefix and suffix, even if the prefix (and in one instance, the suffix, see below) is a paradigmatic zero.

2.1.1.1b. Case suffix forms

Nominal case suffixes are the following:

	functions	suffix form
1.	(a) transitive subject (b) intransitive subject (c) transitive object	unmarked
2.	genitive/dative/purposive	
	(a) masculine and neuter	-w$_1$u~-gu
	(b) feminine (prefix ŋaya-)	-Ø
3.	locative	-y$_1$an~-gan
4.	allative	-ḷama~-gaḷama
5.	ablative	-w$_1$ana~gana
6.	pergressive	-wa, -y$_1$iwa~giwa

Masculine and neuter nouns in genitive, dative or purposive function take suffix -w$_1$u~gu with prefix ŋa-; feminine nouns here have the distinctive combination of the third prefix form, ŋaya-, with zero suffix.

Most of the case suffixes have two allomorphs, one sonorant-initial, the other stop-initial. The latter occur after nasals, both underlying and those derived by a phonological rule which converts stem-final stops to homorganic nasals before any non-zero (case or number) nominal suffix (see 3.4.1.2.1). Sonorant-initial forms occur in all other environments (i.e., following non-nasal sonorants).

The allative post-nasal allomorph -gaḷama shows an intrusive morpheme -ga-, rather than segmental alternation of ḷ with a stop. The same intrusive element is found in certain number suffixes (see 2.1.1.8.6.1).

Pergressive only occurs with inanimate nouns. No overt prefix ever occurs on nouns marked with pergressive suffix. The pergressive has three allomorphs; for their distribution, see 2.1.1.5f.

In examples, suffix positions not filled by overt morphological material are left blank. For example, syntactic case forms will be written ŋa-ḷandi 'stick' Erg., rather than ŋa-ḷandi-Ø; feminine genitive/dative/purposive will be written ŋaya-gaḍugu. Zero prefix forms are written, since the zero is informative. One exception is made to this: pergressive only occurs with inanimate nouns, and there is formal evidence (see 2.1.1.5f) that the pergressive is more clitic-like, not fully integrated phonologically into the inflected form in the same way as other case endings. Given these facts, the prefix opposition is considered to be suspended in pergressive forms, and the prefix position will be simply left unmarked, rather than marked by zero.

In case forms with overt prefix and suffix, a functional case label is given once, under the prefix, but it is to be understood that case-marking is achieved by the combination of prefix and suffix. In morpheme-by-morpheme labelling, a letter indicating noun class (M, F, N) will precede the case label. Thus, labelling will be as in the following examples:

```
ŋa-ḍamayi-yan          ŋan-gaḍugu
NLoc-fire              FAcc-woman
  'in the fire' Loc.   'woman' Acc.
```

2.1.1.2. Expression of clause functions

2.1.1.2.1. Noun subject of intransitive verb

Nominative case marks intransitive subject function for masculine and feminine nouns. Because of ergative-absolutive case patterning in the neuter class, the case label applied to intransitive subject function for that class is *absolutive*. Examples of feminine and masculine nouns in intransitive subject function are:

```
ŋaḷa-gaḍugu Ø-ya-j
FNom-woman  3Sg-go-PP
  'The woman went'.

ŋa-malam Ø-gala+wu-yi-ni ŋa-ḷandi-yan
MNom-man 3Sg-hang-MP-PC  NLoc-tree
  'The man was hanging in the tree'.
```

An example of neuter noun in intransitive subject function is the following:

```
Ø-wumbawa Ø-ḷandi   jir   Ø-jaygi-ni wuburgba ŋa-bundal-an
NAbs-one  NAbs-tree stand 3Sg-Aux-PC halfway  NLoc-billabong
  'One tree was standing in the middle of the billabong'.
```

Occasionally, as noted in 2.1.1b, neuter nouns in IS function are prefixed with ŋa-:

```
ŋa-gañwar wur Ø-ya-j
sun       set 3Sg-Aux-PP
  'The sun set'.
```

The same case forms used in intransitive subject function are those used for nouns in predicate nominal constructions (see 2.1.1.2.3.1).

2.1.1.2.1.1-2. Subclasses of intransitive verbs

The majority of intransitive verbs occur with associated intransitive noun subject in nominative case (if masculine or feminine), or absolutive (if neuter). This includes most verbs of physical sensation:

ṇa-gaḍiriñji bobob ja-Ø-ma
MNom-infant be hot 3-3Sg-Aux
'The boy (infant) is hot'.

ja-Ø-wuy+ma
3-3Sg-be tired
'is tired'.
ja-Ø-mur+ma
3-3Sg-be sick
'is sick'.

However, there are a few verbs which must be considered intransitive (only one NP can be cross-referenced by pronominal prefixes in the verb) but show different case patterning of the associated NP.

There is a tiny class of verbs with which the associated NP must be marked as if it were a direct object. The only known members of this class are guṛij+ma- 'to be meat-hungry', gal+ma- 'to be itchy', and biṇ+bu- 'be difficult (for)'. The NP is cross-referenced in the verb by object pronominal form (see 2.1.3.6.2):

ga-ŋan-guṛij+ma 'I am hungry for meat'.

There are few examples where the associated NP occurs as external noun or pronoun, but enough so it is certain that if present, it must be in the case form appropriate to the NP type in direct object function. There is one common expression in which a noun occurs in apposition to the human subject. Usually said with humorous intent, this is:

Ø-muña-ŋaŋga maŋaya ga-ñan-gal+ma
NAbs-excrement-yours Sg maybe -3-2Sg-itch
'Maybe your excrement is itching (you)'.

This is said to those who show an obvious desire to hurry up, or to leave a gathering at an inappropriate time. Body part nouns with gal+ma- are in absolutive form, e.g.,

Ø-miṇ-ŋanju ga-ŋan-gal+ma 'my knee itches'.

The verb usually used to mean 'to be cold' is particle+aux ḷarg ḍaya-. The auxiliary is the verb 'to bite', which usually occurs in transitive clauses. However, in most occurrences, in the meaning 'to be cold' there is only one associated NP:

ḷarg ga-ŋan-ḍaya
be cold -3-1Sg-Aux
'I'm cold'.

The prefix ŋan- is that used for the transitive combination 3Sg ⟶ 1Sg. If an external NP occurs, it has the case form required for that NP type in transitive object function:

Ø-maḷam ḷarg ja-Ø-ḍaya
MAcc-man be cold 3-3Sg-Aux

One example was found of ergative NP occurring with this verb:

ṇa-ŋugu ḷarg ja-Ø-ḍaya
NErg-water be cold 3-3Sg/3Sg-bite
'The water is making him cold'.

Thus, the verb appears able to occur in both transitive and intransitive clauses. Alternatively, one could analyse 'water' here as instrumental.

There are many other 'sensation' concepts (e.g. to be/feel sick) expressed by constructions involving transitive main verb or auxiliary, in which the entire construction is assimilated to a transitive clause type; see 2.1.1.2.4.3.

2.1.1.2.2. Noun subject of transitive verb

The clause function subject of the transitive verb is filled by masculine and feminine nouns in nominative case, and by neuter nouns in ergative case. Examples of masculine and feminine nouns in TS functions are:

ṇa-baḍa ŋan-ga-ŋiñ
MNom-father 3Sg/1Sg-take-PP
'My father took me'.
ṇa-muyg ŋan-ḍaḷag
MNom-dog 3Sg/1Sg-bite PP
'The dog bit me'.
buy? ñan-wu-na ŋaḷa-bugbug ŋaḷa-X?
show 3Sg/2Sg-Aux-PP FNom-old woman
'Did old woman X (name deleted) show you?'

In both these sentences, the direct object is only expressed by pronominals in the verb, not by external NPs. The transitive subject is also cross-referenced in the verb by the portmanteau prefix combinations expressing 3Sg ⟶ 1Sg, and 3Sg ⟶ 2Sg.

Examples of the TS function filled by neuter noun in ergative case are:

ṇa-gunbur ŋan-gawa-j Ø-jib-ŋanju
NErg-dust 3Sg/1Sg-bury-PP NAbs-eye-mine
'Dust buried (i.e., blew into) my eye'.
ṇa-ŋugu ñim ŋan-ga-ŋiñ
NErg-water submerge 3Sg/1Sg-Aux-PP
'Water covered me/submerged me'.

Maŋarayi has a lexical verb ṇidba- 'have', so that ergative nouns are found in the following kind of construction:

ṇa-ḷandi ja-Ø-ṇidba Ø-maṇ
NErg-tree 3-3Sg/3Sg-have NAbs-gum
'The tree has gum'.

2.1.1.2.2.1. Verbs of perception and mental process

Verbs of perception are mostly simple transitives with the perceiver as subject; these include yiri+wa- 'see, look at', war+ma- 'hear', ṇuma- 'smell', particle+aux ḷag mi- 'try, taste'. For example:

ŋawuyan-yiri+wa-ni jarbiñ-gayanŋan
1Sg/3Pl-see-PC young man-AccPl
'I saw/looked at the young men'.

Many verbs of mental activity may variably occur in transitive or intransitive clauses. Without any expressed object we find:

jaḷug ŋa-ya-j
forget 1Sg-Aux-PP
'I forgot'.
jilwa ŋa-ga-ŋiñ
remember 1Sg-Aux-PP
'I remembered'.

These verbs, however, may have an expressed object, even 'to forget' which has as auxiliary ordinarily intransitive yag- 'to go':

jaḷug wuran-ya-j
forget 3Sg/3Du-Aux-PP
'He forgot them Du.'

(The verb phrase 'to forget' is also used euphemistically to express the meaning 'to die' with the bereaved the direct object, i.e. 'to forget someone', as in the last example.)

The verb 'to think about, recollect someone or something' is transitive, with the thinker as subject:

jimi ŋawuyan-bu-ni
think about 1Sg/3Pl-Aux-PC
'I thought about them'.

There is no single verb of mental activity 'to think'. Particles are used to mean 'to think, reckon, suppose' with sentential complement, and indicate greater or lesser certainty about the truth value of the supposition; see 1.4.6.

There is a transitive compound verb giŋ+mi- 'to fear', with the person or thing feared expressed as direct object:

ga-ŋawuyan-giŋ+mi
-3-1Sg/3Pl-fear
'I fear them'.

However, a more frequently-used verb of this meaning requires dative/purposive complement (see 2.1.1.2.5.2).

Most ordinary verbs of liking and disliking are of usual transitive construction:

ŋa-malam juḷ ga-ŋan-wa-n
MNom-man dislike -3-3Sg/1Sg-Aux-Pres
'The man dislikes me'.

There is a transitive compound verb muñ+ma- 'to be jealous of', in which the object of jealousy is expressed as direct object:

ja-Ø-muñ+ma ŋan-gaḍugu-ṇawu
3-3Sg/3Sg-be jealous of FAcc-woman-his
'He's jealous of his wife'.

Another verb of this meaning takes dative/purposive complement; see 2.1.1.2.5.2.

2.1.1.2.3. Subject of copular construction

2.1.1.2.3.1. Predicate nominals

The copular verb mu-yi- is rare in the meaning 'to be'; more frequently it means 'to become'; see 2.1.1.2.9.4. Occasionally the verb ṇi- 'to sit, exist, be' is used as copula; see 1.2.1.1.

The usual predicate nominal construction has either noun or adjective functioning as predicate. Expression of the subject NP is split by person and number in such a way that 1Sg, 2Sg and 1InDu are formally opposed to all other person and number categories.

When the subject is 1Sg or 2Sg, or 1InDu, it must be specified by the intransitive pronominal prefix on the predicate (ŋa- 1Sg, ña- 2Sg, ŋi- 1InDu, see 2.1.3.6 for complete listing of pronominal prefixes); optionally, an independent pronoun may be apposed:

(ŋaya) ŋa-balayi
1Sg Nom 1Sg-big/important
'I am big/important'.

(ñaŋgi) ña-balayi
2Sg Nom 2Sg-big
'You are big/important'.

(ŋi) ŋi-balayi
1InDu Nom 1InDu-big
'We InDu are big/important'.

(1InDu category patterns like 1Sg and 2Sg in a number of ways; see similarities in object pronominal forms, 2.1.3.6.2.2).

When the subject is third person singular, the predicate nominal is inflected with the noun class/case prefix it would normally have as intransitive subject. A demonstrative and/or noun, or independent pronoun is required to specify the subject NP:

ŋaḷi-na ŋala-gaḍugu ŋaḷa-balayi
FNom-dis FNom-woman FNom-big
'That woman is big/important'.

Categories of nonsingular subject NPs, except for 1InDu, cannot be specified by intransitive pronominal prefixes. First and second nonsingular subjects are expressed by the appropriate nominative form of the independent pronoun, and the predicate nominal is marked with (dual or plural) number suffix in agreement with number of the pronoun. The number suffixes used are those which occur with ordinary nouns (see 2.1.1.8.6.1 for these). Likewise, third person nonsingular (dual or plural) subjects are specified by demonstrative or noun, and the predicate nominal appropriately number-marked. Examples are:

ŋiḷa Maŋarayi-yaḷa
1ExPl Nom -NomPl
'We are Maŋarayi'.

ŋuḷa Maŋarayi-yaḷa
2Pl Nom -NomPl
'You pl. are Maŋarayi'.

Most of the nonsingular nominative pronouns are identical in form to the corresponding intransitive subject pronominal prefixes (e.g., ŋiḷa and ŋiḷa- 1ExPl). The one exception is 2Pl. The 2Pl independent pronoun is ŋuḷa, the intransitive subject prefix ḷa-. From the fact that the predicate nominal construction requires ŋuḷa, we know that nonsingular first and second person predicate nominal subjects are specified by independent pronouns and not by the intransitive prefixes.

Kin terms and subsection terms, as well as other nouns, may function as predicates. Kin terms are suffixed with possessive suffix specifying the relation of the predicate nominal subject to another person; number suffixes used with kin terms (2.1.1.8.6.3) are required if the subject is nonsingular.

(ŋaya) ŋa-miñjari-ŋaŋga
1Sg Nom 1Sg-MBC-yours Sg.
'I am your cross-cousin'.

ŋur miñjari-ŋanju-wur
2Du Nom MBC-mine-Nom-Du
'You du. are my cross-cousins'.

In summary, 1Sg, 2Sg and 1InDu predicate nominal subjects are inflected by intransitive verbal prefix forms. All other subject categories are marked by external NP, and nominal number marking on the predicates.

2.1.1.2.3.2. Predication of possession

Predications of possession are predicate nominal constructions in which the predicate is an independent genitive pronoun or demonstrative. The subject is specified by a noun or demonstrative:

ŋa-biwa ŋanjugu, ŋaḷa-muṛu ŋaya-naŋ-gu
MNom-boy 1Sg Gen FNom-girl 3SgF Gen
'The boy (male one) is mine, the girl (female one) is hers'.

2.1.1.2.4. Direct object

The clause function direct object of the transitive verb is filled by masculine and feminine nouns in accusative case, and neuter nouns in absolutive case. Examples of masculine and feminine nouns are:

Ø-malam ŋa-ḍaṛa+wu-b.
MAcc-man 1Sg/3Sg-find-PP
'I found (sighted) the man'.

ṇan-yaba ga-ṇa-ḏaṇidba
MAcc-brother -3-1Sg/3Sg-await
'I am waiting for my brother'.
ṇan-guḏugu buy? wuḷa-wu-na Ø-ṇani
FAcc-woman show 3Pi/3Sg-Aux-PP NAbs-language
'They taught the woman language'.

Since all direct objects in these examples are singular, all are cross-referenced in the verb by zero. The last example contains an instance of neuter noun in TO function. Further examples of neuter direct objects are:

Ø-ḷandi mod Ø-may ṇa-maḷam
NAbs-tree cut 3Sg/3Sg-Aux PP MNom-man
'The man cut the tree down'.
Ø-ẓir wuḷa-bu-ni-wa mayawa Ø-baṛagur wuḷa-bab+namdi-wa
NAbs 3Pi/3Sg-Aux-PC-Suf now NAbs-paperbark 3Pi/3Sg-put PC-Suf
'They cut a burial platform, then put paperbark'.
maṇaya waḏaḏ Ø-wa-ṛi-wa nara Ø-ji-ṇawu, jaṇgay
perhaps carry 3Sg/3Sg-Aux-PC-Suf that NAbs-fat-its hunter

Ø-wawañji-ni-wa, nara-bayi Ø-wiriḷmayin, Ø-gurwandan-bayi
3Sg-hunt-PC-Suf that-Foc NAbs-goanna NAbs-olive python-Foc

Ø-juṇuj-bayi ṇiñjag galiya Ø-ḏaṛa+wu-b,
NAbs-black-headed python Prohib far 3Sg/3Sg-find-PP

wuḷa-ḏaṛa+wu-ni-wa ḷudbiñ ḷudbiñ Ø-juya
3Pi/3Sg-find-PC-Suf close close NAbs-meat
'Perhaps they carried (the) fat, the hunter went hunting, he found goanna, olive python and black-headed python not at a great distance, they found meat close by'.

(The last example explains the effects produced by carrying small bits of human flesh and fat in a dilly bag on hunting expeditions, related to an earlier practice of ritual necrophagy.)

The last example shows several nouns (ji, wiriḷmayin, gurwandan, juṇuj, juya) in direct object function. The normally masculine noun jaṇgay '(expert) hunter' omits the usual MNom prefix ṇa-, as mentioned in 2.1.1c.

2.1.1.2.4.1. Ditransitive case frames

Verbs with case frames which normally implicate two objects, a direct and an indirect, are often termed 'ditransitive'. Languages differ in treatment of the two objects. In Maṇarayi, their morpho-syntactic treatment is tied to the question of verbal cross-reference, since a maximum of two cross-referencing pronominal slots are available in any clause.

Ditransitive verbs cross-reference the notional indirect object (i.e., that expressed as indirect object in English, almost always animate) in the verb by object forms of the verbal pronominal prefixes; the semantic direct object is not cross-referenced in the verb, but if present as an external NP, is marked as direct object by object forms of the class-case prefixes and/or number suffixes.

The highest-frequency ditransitive is wu- 'to give'. The semantic indirect object (recipient) is cross-referenced as direct object in the verb; the semantic direct object (that which is given) is object-marked (if present) but cannot be cross-referenced:

wuyanba-wu-na Ø-garag Ø-ṇanan
3Pl/3Pl-give-PP NAbs-a lot NAbs-money
'They gave them plenty of money'.

The verb 'to teach, show' is expressed by particle+aux construction buy? wu-; this has the same ditransitive case frame as the main verb wu-.

buy? ṇanba-wu-na Ø-ṇani
teach 3Pl/1Sg-Aux-PP NAbs-language
'They taught me language'.

Other common ditransitives are the compound verb jaṇ+wu- 'to supply/succour with food or drink', particle+aux wuḷ bu- 'to conceal from', and main verb jiwi- 'to take from'. Examples of each are:

ñawuyan-jaṇ+wu-ni Ø-ṇugu
2Sg/3Pl-succour-PC NAbs-water
'You supplied them with water'.
wuḷ wuran-bu-ni Ø-ṇanan-bura
conceal 3Sg/3Du-Aux-PC NAbs-money-their Du
'He hid their du. money from them'.
ṇan-jiwi-j ṇan-gaḏugu-ṇanju
3Sg/1Sg-take away FAcc-woman-mine
'He took my wife from me'.

In short, the (normally animate) semantic indirect object takes morphosyntactic precedence over the semantic direct object (whether animate or inanimate), in terms of privilege of verbal cross-reference.

The verb ṇiṛi-'to bring' is not ditransitive. That which is brought is cross-referenced in the verb by object pronominal, the one to whom something is brought is expressed as dative nominal, demonstrative or pronoun in the clause:

ṇa-ṇiri-j wuṇya Ø-mawuj
1Sg/3Sg-bring-PP 3Pl Dat NAbs-vegetable food
'I brought them vegetable food'.

2.1.1.2.4.2. Verb 'to say'

In many languages of the area, including Maṇarayi, the verb used to mean 'to say' is the same as that used to mean 'to do'. The Maṇarayi verb is ma-; a CV root of the same shape is the most common inseparable auxiliary. In the meaning 'to say', ma- may be variably transitive or intransitive. The person to whom something is said is treated as direct object:

ṇawuyan-ma-ñ
1Sg/3Pl-say-PP
'I told them/said to them'.

If no addressee is specified, the verb is intransitive. Thus, depending on context, ṇa-ma-ñ may be understood as 'I said' or 'I said to him'. The same is true of many -ma compounds, e.g., Ø-jay+ma-ñ may mean 'he refused' or 'he refused him'.

2.1.1.2.4.3. Verbs of physical sensation

Some physical sensations are expressed by the 'objectively inflecting' intransitives described in 2.1.1.2.1.1. In other cases the cause of a physical sensation may be expressed by a nominal or nominalized form (frequently with noun-forming suffix -min, 2.2.1.5f), in combination with bu- 'to hit'. The experiencer of the sensation is treated as direct object. Such constructions have literal meanings 'X hit him'. Examples are:

ṇa-gi ga-ṇan-bu-n
NErg-sleep -3-3Sg/1Sg-hit-Pres
'I am sleepy'.
gaṛ?+min Ø-bu-ni Ø-maḷam
coughing 3Sg/3Sg-hit-PC MAcc-man
'The man was overcome by coughing'.

Note that nouns formed with -min do not inflect in syntactic functions; gaṛ?+min above has no ergative prefix. Other nouns which frequently occur as cause are gaḷ+min 'itching', ḏib 'illness', miṇur 'bad cold, phlegm', waḷarwaḷar+min 'diarrhoea'.

2.1.1.2.5. Indirect object

Genitive case is not formally distinct from either dative or purposive within each noun class. Nevertheless genitive and dative case functions can be distinguished from each other on semantic and syntactic grounds.

Genitive is the case used to express possession, while dative marks a (typically, animate) beneficiary for whom something is done. Unlike many neighboring Arnhem languages (e.g., Jawoñ), Maŋarayi has no benefactive verbal affix. The dative case function cannot be cross-referenced in the verb.

2.1.1.2.5.1. Distinguishing genitive and dative case functions

When a noun serves as predicate of a clause, there are no syntactic grounds for distinguishing genitive from dative:

nara-bayi ŋa-bugbuŋ-gu // ŋaya-bugbug
that-Foc MGen/Dat-old man FGen/Dat-old woman
'That is the old man's/for the old man//old woman's, for the old woman'.

However, when the predicate is a pronoun, a distinction can be made. Genitive independent pronouns express a possessive notion, and free pronominal forms (identical to the possessive suffixes) express a dative notion:

nara-bayi ŋayanaŋgu
that-Foc FGen hers
'That is hers'.

nara-bayi ŋayawu
that-Foc FDat for her
'That is for her'.

Dative pronouns (also used with purposive meaning in some constructions) are used in transitive and intransitive clauses to express the semantic indirect object (dative) or peripheral object. Contrast the use of genitive and dative/purposive pronouns in the following sentences:

wuła-ṇiṛi-j ŋanju
3Pi/3Sg-bring-PP Dat for me
'They brought it for me'.

ŋanjugu wuła-ṇiṛi-j (ŋanju)
Gen mine 3Pi/3Sg-bring-PP Dat for me
'They brought mine (for me)'.

The formal distinction between genitive and dative in the pronouns and third-person 'non-deictic' forms (see 2.1.2.5.2.1) appears to reflect the greater naturalness of first and second persons and animates as possessors and beneficiaries, compared with the lack of any such formal distinction in nouns.

A syntactic criterion for distinguishing genitive from dative nominals in non-predicative constructions is the presence or absence of possessive suffixes. A genitive noun is cross-referenced by a possessive pronominal suffix on a possessed noun:

ŋa-bugbuŋ-gu Ø-baṇam-ṇawu ŋa-wa-b
MGen-old man NAbs-camp-his 1Sg/3Sg-visit-PP
'I visited the old man's camp'.

Where a genitive meaning is intended, such a suffix is always present. Genitive nouns are not declined to agree with the case of the possessed noun:

ŋa-bugbuŋ-gu Ø-baṇam-ṇawuŋ-gaḷama ga-ŋa-yag
MGen-old man NAll-camp-his -3-1Sg-go
'I am going to the old man's camp'.

This may be contrasted with a sentence without cross-referencing possessive suffix, where 'old man' would ordinarily be interpreted as beneficiary:

ŋa-bugbuŋ-gu Ø-baṇam-gaḷama ga-ŋa-yag
MDat-old man NAll-camp -3-1Sg-go
'I am going to camp for the old man'. (i.e. to do something for his sake).

(The last example could also have a purposive interpretation 'I am going to camp for (to get) the old man'.)

There is another means of disambiguating genetive from dative senses, also having to do with the use of possessive forms as suffixes or free pronominals. In the following sentence the presence of a possessive suffix provides the criterion for genitive interpretation:

ŋa-may ŋaya-bugbug$_1$ Ø-wuṛir-ŋayawu$_1$
1Sg/3Sg-get PP FGen-old woman NAbs-fishing line-hers
'I got the old woman's fishing line'.

(As indicated by the subnumerals, the genitive interpretation assumes coreferentiality of 'old woman' and 'hers'. If the possessive suffix does not cross-reference 'old woman', this sentence could have a dative interpretation 'I got the old woman$_1$ her$_2$ fishing line'. Such sentences are always potentially ambiguous because there are no special 'fourth-person' forms, as e.g., in Eskimo.)

Where a dative sense is clearly intended, what is ordinarily a possessive suffix may be used as a free dative pronominal form:

ŋa-may ŋayawu Ø-wuṛir (ŋaya-bugbug)
1Sg/3Sg-get PP for her NAbs-fishing line FDat-old woman
'I got her (the old woman) a fishing line'.

As indicated by the parentheses in this example, the dative noun can be freely omitted where there is some other expression of the beneficiary in the clause.

In interlinear glossing the label genitive is used when cross-referencing pronominal suffixes clearly indicate such an interpretation, otherwise genitive or dative is used depending on the apparent sense intended. It is recognized that in some instances the distinction is not neat.

2.1.1.2.5.2. Verbs requiring dative/purposive complement

Some verbs, e.g., mi?+mi- 'to search for', take dative/purposive complement. (This slashed form is used because, although gen=dat=purp in nouns and most demonstratives, and gen≠dat/purp in pronouns, there is no NP category for which purposive is distinct from dative.) There are other verbs which take a dative/purposive object if any complement is overtly expressed. However, these all have the characteristic that expression of a complement is not obligatory.

An important verb of this kind is (formally mediopassive) yiyi-ji- 'to be afraid (of)':

wuła-yiyi-ji-ni ŋa-ḍamayi-wu
3Pi-be afraid of-MP-PC NDat/Purp-fire
'They were afraid of the rifles'. (literally, 'of fire')

ga-ŋa-yiyi-ji-n ŋayawu
-3-1Sg-fear-MP-Pres FDat her
'I am afraid of her'.

'To be jealous of' can be expressed by particle+aux muñ ma-, the object of jealousy case-marked as dative/purposive NP:

muñ ja-Ø-ma ŋaya-gaḍugu-ŋawu
be jealous of 3-3Sg-Aux FDat/Purp-woman-his
'He is jealous of his wife'.

Note this verb has particle identical to initial element of muñ+ma- 'to be jealous'.

Another verb which requires dative/purposive complement (if any) is muṇ+ma- 'be concerned about, apprehensive for':

ga-ŋa-muṇ+ma ŋaŋga
-3-1Sg-be concerned about 2Sg Dat
'I'm concerned about you'.

Others include yaṛar yag- 'to agree with', bay?+ma- 'think about', bambu-yi- 'be apprehensive of', ñuŋgur ma- 'pity', bamdaj+ma- 'get very angry at', ŋir ma- 'get angry at'.

A small number of compounds with inseparable auxiliary ma may occur either as transitives, or as verbs with dative/purposive complement. An example is galij+ma- 'to report, tell news':

ŋiyan-galij+ma-ñ
3Sg/1ExPl-report-PP
'He reported to us (ExPl).
Ø-galij+ma-ñ ŋiŋya
3Sg-report-PP Dat/Purp 1ExPl
'He reported to us'.

2.1.1.2.6. Object of comparison 'bigger than' etc.

In talking of comparison constructions, we can distinguish (1) an NP which is the standard of comparison, (2) an NP which is the comparand, and (3) the term designating the quality in terms of which the two are to be compared. In the most common way of expressing comparison in Maŋarayi, standard and comparand are in two parallel clauses of the type 'he is big, I am small', where (in many contexts at least) it is clear that comparison is intended. In a less common (but nevertheless spontaneously produced) construction type, the standard is expressed by the case form appropriate to intransitive subject function for any NP type, the qualitative term of comparison is an adjective inflected to agree with the standard, and the comparand is expressed by an NP in dative/purposive case form. Thus:

ŋa-yaba ŋa-balayi ŋanju
MNom-brother MNom-big 1Sg Dat
'My brother is older/bigger than me'.

2.1.1.2.7. 'Object of equation' — 'as big as' etc.

The most common way of expressing comparison where the standard and comparand are equivalent, is to juxtapose two clauses of parallel structure in which (unlike the object of comparison construction) the qualitative term is the *same*:

ŋaya ŋa-balayi, ñaŋgi waḍij ña-balayi
1Sg Nom 1Sg-big 2Sg Nom also 2Sg-big
'I am big, you also are big', i.e. 'we are the same size/of the same importance'.

Where the term of comparison is verbal (e.g., 'to run as fast as', 'to see as far as') Maŋarayi makes use of an adverb ŋan?ŋanwa 'together, equally, even':

ŋi-garañ-ji-ni ŋan?ŋanwa
1InDu-grow-Inch-PC equally
(lit. 'You and I grew equally'.)
ŋan?ŋanwa yirg ŋi-gaḍ-ji-ni
equally get up 1InDu-Aux-MP-PC
'We got up equally'.

The glosses given are as general as possible, because the content of ŋan?ŋanwa may be differently interpreted depending upon the verb of the clause, and the context. For example, the first may mean 'you and I grew up at the same time/same place/ same speed/to the same height' and so forth. Though adjectival comparison is dealt with in 2.1.4.4-5, it is important to mention this construction here because it serves as the functional equivalent for many English adjectival comparisons (e.g., 'to be as tall as').

2.1.1.2.8. Other objects governed by verbs

2.1.1.2.9. Complement of copular construction

2.1.1.2.9.1-3. Definition/identity/role

See discussion of predicate nominals in 2.1.1.2.3.1.

2.1.1.2.9.4. Copular verb 'become'

The notion 'become' is expressed in two main ways. First, inchoativized adjectives express the idea 'to become X'. Inchoatives are predicates of intransitive clauses; the entity undergoing change may or may not be overtly expressed but if so, it is class/case-marked as an ordinary intransitive subject:

ŋa-mululug-ŋayawu Ø-jiḷiñ-jag
MNom-young-hers 3Sg-alive-Inch PP
'Her young one came alive'.

Second, there is a verb mu-yi- 'to be, become, turn into' (formally and invariably mediopassive, there is no transitive verb mu-) which occurs as auxiliary with adjectives and nouns. In such constructions, the nominal remains uninflected; only mu-yi- bears inflection for verbal categories. As is also true of inchoatives (see 2.1.3.3.1), the usage and meaning of past punctual tense form of mu-yi- is not quite the same as for the majority of verbs. Its present tense means 'to be X' or 'to become X', while its past punctual may mean either 'is X' or 'became X'. Thus one finds:

maŋaya ŋirana ḍuṛigi ja-Ø-mu-yi-n Ø-juya
perhaps still raw 3-3Sg-cop-MP-Pres NAbs-meat
'Perhaps the meat is still raw'.
ḍuṛigi Ø-mu-yag
raw 3Sg-cop-MP PP
'It is raw'.

The first example is formally present tense and means 'is raw'; the second is past punctual and here means also 'is raw'. With 'raw' one can scarcely derive the interpretation 'became raw', but with other adjectives whose lexical meaning involves a possibility of change of state or condition, the past punctual can be used to mean 'is X'; also 'became X':

juḷag Ø-mu-yag
ripe/cooked 3Sg-cop-MP PP
'It is cooked/ripe' or 'It got ripe/cooked'.

The capacity of mu-yi- (and many inchoatives) to have past punctual used with reference to the moment of speaking is due to the semantics of change of condition or state: anything which is in a state or condition has previously entered into that state. Thus present and past are capable of (partial) functional overlap.

Second, mu-yi- occurs with noun complement expressing that which something becomes. This noun complement is generally in caseless form, i.e. lacks class/case prefixation:

warwiyan Ø-mu-yag
dreaming 3Sg-cop-MP PP
'He turned into a dreaming' (physical manifestation of a mythological figure).

gaḍugu Ø-mu-yag
woman 3Sg-cop MP PP
'It turned into a woman'.

(Note in the last example we cannot have feminine nominative or accusative marking on the noun complement.) If the entity which undergoes the change is expressed, it is in the case form appropriate to intransitive subject function.

2.1.1.2.10-11. Factitives (subject and object complements)

For some adjectives and a few nouns, factitives are constructed by verbalization with the high-frequency auxiliary ma:

baḷañ 'ordinary, profane, not sacred'
baḷañ+ma- 'make ordinary, desacralize'

jaḷaj 'fine ash'
jaḷaj+ma- 'make fine, refine'

jañgay 'tame, domesticated'
jañgay?+ma- (1) 'make tame, domesticate; (2) 'make cold, cool'

yijar 'good'
yijar?+ma- 'tell someone nicely'

This kind of formation is not productive for all adjectives. With a few (like yijar above), the semantics of the factitive are not entirely predictable. (In the case of yijar?+ma-, the auxiliary appears to give the full lexical sense 'to say, do' rather than to function purely as verbalizer.) Factitives formed in this way have the same case frame as ordinary transitives.

Other factitives can be constructed by the use of an adjectival complement with particle+aux mar? bana- 'to make', with or without direct object.

guḷañi mar? Ø-bandag
long make 3Sg/3Sg-Aux PP
'He/she made it long, elongated it'.

In mythological texts there are frequent constructions meaning 'X made itself into Y', where X is a mythological figure which converted itself into some enduring physical form. This idea is expressed by a reflexivized factitive construction, the reflexive form mar? bani-ñjiyi- of particle+aux mar? bana- 'to make':

ṇanan mar? Ø-bani-ñjiyag ṇa-warwiyan
hill, stone make 3Sg/3Sg-Aux-RR PP MNom-dreaming
'The dreaming made himself into stone'.

The object which something becomes occurs in caseless form.

2.1.1.2.12. 'Objects governed by adjectives' — 'X like Y', 'X unlike Y'

The idea of similarity or identity between two entities is most commonly expressed by a predicate nominal construction 'X and Y (is) one'. For instance, to express the idea of physical resemblance between two people one may say:

ṇa-baḍa ṇa-biṛi-ṇawu Ø-maḷam-bura Ø-wumbawa
MNom-F MNom-man's child-his NAbs-body-3Du NAbs-one
(lit. 'Father, his son their body is one')
'Father and son resemble each other'.

(This is used in the sense 'The son resembles his father'; note then that there is a concept of children resembling their parents.) Using this construction, virtually any two entities may be likened:

Ø-ŋani-wura Ø-wumbawa
NAbs-language-3Du NAbs-one
(lit. 'Their du. language is one')
'They du. speak the same language'.

This construction may be used where the notion of identity is intended by the speaker (the things compared are exactly the same), as well as where the implication is of approximate resemblance.

The particle guwa 'like' is used to express nominal comparison:

ga-ña-ja Ø-maḷam guwa ñaŋgi
-3-2Sg/3Sg-eat NAbs-man like 2Sg Nom
'You eat flesh (humans) like yourself'.

(This is said in a myth to a cannibalistic old woman.) See 1.3.1.1.1 for the use of the reduplicated guwaguwa in verbal ellipsis.)

The idea of difference between two entities is usually expressed by two parallel clauses 'X is different, Y is different':

ṇa-baḍa-ṇawu ṇa-yarba, ṇa-biṛi-ṇawu waḍij
MNom-father-his MNom-different MNom-man's child-his also

ṇa-yarba Ø-maḷam-ṇawu
MNom-different NAbs-body-his
(Lit. 'His father is different, his son also is different in body')
'The son is different from his father'.

2.1.1.2.13. Agent in impersonal constructions

See discussion of indefiniteness in 2.1.1.11.

2.1.1.2.14-5. Topic

See discussion in 1.12.

2.1.1.2.15. Emphasized element

See discussion in 1.11.

2.1.1.3. Expression of syntactic functions with nominalized verb

See discussion of nominalizations in subordinate clauses, 1.1.2.2.2b,c.

2.1.1.4. Nonlocal case functions

2.1.1.4.1. Benefactive

See 2.1.1.2.5-2.1.1.2.5.2.

2.1.1.4.2. Source

See discussion in 2.1.1.5e of ablative case, the means for expressing source. See also 2.2.1.1a for discussion of the noun suffix -ŋuŋuŋ expressing provenience of persons.

2.1.1.4.3. Instrumental

The instrumental NP is not cross-referenced in the verb. NPs in instrumental function occur in both intransitive and transitive clauses. When in transitive clauses, the instrumental NP almost invariably has the character of the inanimate means by which some action is performed:

ṇa-ḷandi ga-ŋuyan-bu-n
NInst-stick -3-1Sg/2Pl-hit-Pres
'I'll hit you with a stick'.

yaṛ? wuḷa-wa-ṛi-wa ṇa-baṛagur
cover 3Pl/3Sg-Aux-PC-Suf NInst-paperbark
'They covered it up with paperbark'.

ŋayaŋayag ŋa-gujbi baḷaḷ Ø-bu-ni-wa, Ø-ḍil+ma-ṛi-wa
some NInst-black paint paint 3Sg-Aux-PC-Suf 3Sg-paint-PC-Suf

ŋa-jumbu ŋa-baŋja
NInst-yellow ochre NInst-white ochre
'They painted some with black paint, they painted with yellow and white ochres'.

(See 2.1.1.11 for remarks on expression of indefinite subject by 3Sg.)

Instrumental NPs in intransitive clauses appear to be employed in a slightly different functional range. First, they may express the inanimate means by which an action is accomplished:

ŋa-gaŋḍina jaraj ja-Ø-jaygi-n
NInst-walking stick cross 3-3Sg-Aux-Pres
'She is crossing over with/by means of a walking stick'.

Sometimes the instrumental nominal in intransitive constructions functions as a kind of adverbial of manner, indicating the way in which something is done:

ŋa-gaḷa yiriḍ ja-Ø-yag
NInst-back backwards 3-3Sg-go
'He is going back-first' (i.e., 'walking backwards' as opposed to 'walking back', which would be expressed by yiriḍ alone).

An instrumental NP may occur in intransitive clauses like the following:

ŋa-gañwar ga-ŋa-ŋa-n
NInst-sun -3-1Sg-burn-Pres
'I am burning in/because of the sun'.

The verb ŋa-'burn' is intransitive, and the instrumental noun 'sun' could be taken as expressing cause, source or even a kind of local notion 'in the sun'. There is no evidence for a passive interpretation of the verb form.

Another adverbial, idiomatic use of instrumental inflection in an intransitive clause is the following:

ŋa-ḍaṛa-ŋanju ga-ŋa-man+bu-n
NInst-stomach-mine -3-1Sg-run-Pres
'I am happy'. (lit. 'I am running by means of my stomach').

2.1.1.4.4.-2.1.1.4.5. Proprietive construction 'having'

Constructions meaning 'having X', where X is a noun, are formed by suffixing -y$_2$i~-ji (see 3.4.1.1) to the noun:

baŋgal-yi
egg-Prop
'having eggs'

banban-yi
woomera-Prop
'having woomera'

Proprietive constructions are often used as adverbs without case inflection:

ŋuguŋugu-yi jaḍ wuḷa-jud+ma-ñ
water-Prop return 3Pl/3Sg-Aux-PP
'They brought it back drenched/in a drenched condition'.

Sometimes, as with zero-inflected neuter nouns, it is difficult to distinguish between adverbial and adjectival functions of a proprietive phrase. In the following, baŋgal-yi 'having eggs' could be interpreted as adjectival or adverbial modifier:

Ø-bandi ŋa-ḍaṛa+wu-b baŋgal-yi
NAbs-snake 1Sg/3Sg-find-PP egg-Prop
'I found/spotted a snake with eggs'.

Proprietive constructions inflect for class/case/number and function as ordinary nominals:

ŋan-gina ŋan-baŋgal-yi mamaya ŋan-wu
FAcc-that Dis FAcc-egg-Prop first 2Sg/1Sg-give Imp
'First give me that one with eggs'.

banban-yi-yaran wud-ṇiŋa-ñ
woomera-Prop-Du Nom 3Du-come-PP
'The two men came up'.

('Having woomera' is a metonym for 'man, male'.)

Proprietives can function as predicates in predicate nominal constructions:

ña-mawuj-(j)i, jijga ŋan-wu
2Sg-food-Prop little 2Sg/1Sg-give Imp
'You've got food, give me a little'.

The noun in proprietive constructions is often found reduplicated to mean 'having several/a lot of X' (see 3.4.5.2 for reduplicative processes). This is commonly done even if the noun is non-count to give a collective plural meaning 'a lot of X'. Reduplicated nouns occur more frequently in proprietive constructions than in any other single kind of syntactic formation. For the important role of reduplicated proprietive constructions in forming avoidance style noun substitutes, see Appendix. Examples of reduplicated proprietive constructions are:

ḍaḍal	'shell, carapace'	ḍaḍaḍal-yi	'creatures with shells'
ḍuḍu	'wing'	ḍuḍuḍu-yi	'winged creatures'
muyg	'dog'	muygjuyg-ji	'having dogs'
malam	'man'	malaḷam-yi	'having husbands'
banban	'woomera'	banbanban-yi	'men, males (having woomeras)'
guryag	'lily'	guryuryag-ji	'having lilies' (as billabong with many lilies)
ŋugu	'water'	ŋuguŋugu-yi	'soaked, very wet'
gamag	'digging stick'	gamamag-ji	'women, females (having digging sticks)'

Notice that the proprietive construction is used to form a number of common metonyms, e.g., from gamag 'digging stick', gamag-ji 'woman', gamamag-ji 'women'.

The proprietive construction functions as a means of expressing accompaniment, in addition to (generally non-characteristic or temporary) possession:

malaḷam-yi ja-wuḷa-ṇiŋa-n gaḍu-gaḷa
man Red-Prop 3-3Pl-come-Pres woman-Nom Pl
'Women are coming up with their husbands/with Aboriginal men'.

It is also the exponent of the dyadic notion with kin terms (2.1a.2).

2.1.1.4.4a-2.1.1.4.5.a. Privative

Constructions meaning 'lacking/without X' are formed by suffixation of -wi to the noun. Privative constructions have the same range of syntactic occurrence as proprietive constructions, i.e., may be used adverbially, be inflected for case/number, and function as predicates. Examples of the privative construction are:

ña-yaw+min-wi
2Sg-shame-Priv
'You have no shame'. (i.e., you are forward, have no manners)

ŋa-mi-wi
1Sg-food-Priv
'I have no food'.

(The stem -mi- 'food' occurs only as bound form, 2.2.1.7.2.

ṇanan-wi ŋan-wa-b
money-Priv 3Sg/1Sg-visit-PP
'He came to see me without money'.

Use of the privative suffix is the most common way of expressing negation in predicate nominal constructions:

ṇa-balayi-wi
1Sg-big-Priv
'I am not big/important'.

(Alternatively, this can be expressed by the negative particle ŋiñjag with predicate nominal, see 1.4). The privative suffix is the normal way of forming antonyms of a few adjectives, e.g., ṇa-yiṛyiṛ 'cowardly fellow', ṇa-yiṛyiṛ-wi 'game fellow, brave'.

See 2.1.1.8.6.6 for some irregularities in number marking in privative constructions.

2.1.1.4.6. Possession

As illustrated in 2.1.1.2.5.1, the genitive construction entails genitive marking on the possessor, and cross-reference of the possessor by a suffix on the possessed noun. The genitive construction can be distinguished from expression of a part-whole relation, in which the 'possessed' is (usually inherently) part of the possessor.

2.1.1.4.6.1.-2. Part-whole relation

The part-whole relation is expressed by juxtaposition of two nouns. Though the ordering may vary, that expressing the 'whole' often comes first, followed by that expressing the part, with appropriate possessive suffix:

(ṇa)wijwij buḍ-ṇawu *or* buḍ-ṇawu wijwij
possum fur-its
'possum fur'
ḷandi jurgjurg-ṇawu
tree leaf-its
'tree-leaves, leaves of a tree'
jadba ḍarara-ṇawu
river creek-its
'tributary'

The entire part-whole phrase may be used with appropriate case-marking on the suffixed noun only:

jadba ḍarara-ṇawuŋ-gan
river creek-its-Loc
'in the tributary'

It is characteristic to use a noun expressing the 'part', suffixed with 3SgM/N possessive -ṇawu, without specifying the 'whole' to which it belongs, as in the following:

ja-wuḷa-mi Ø-jurgjurg-ṇawu
3-3Pl/3Sg-take NAbs-leaf-its
'They get leaves'.

Certain nominal meanings are characteristically expressed in this way, e.g., Ø-miyar-awu 'cloud', an expression containing the noun miyar 'forehead' (see 3.4.4.1, P-10 for the loss of the suffix-initial nasal). Another figurative use of the part-whole construction is in phrases such as the following:

Ø-jadba-ṇawu
NAbs-river-his
'his name' or 'place of conception, totemic affiliation'

Ø-ḍilin-ṇawu
NAbs-limestone-his
(same range of meanings as above)

That is, any locality to which a person is totemically affiliated in some especially salient way, may be described by a part-whole type of construction designating some especially notable feature of the place. The 'whole', or the head NP of such constructions, is understood to be something like baṇam 'locality, named place', but it is never overtly specified. The construction may be used in a range of meanings, including as a metonym meaning 'his/her name' (given the practice of giving some personal names after localities), and/or 'his/her totemic locality' (place of spiritual conception, totemic place of descent, filiation, and so forth; see Merlan 1982).

Expression of body parts is best regarded as one type of part-whole relation. If the possessor of a body part is expressed by an external noun, the body part simply 'agrees' with the possessor, though possessor and body part noun may be separated:

ṇa-malam ja-Ø-mur+ma Ø-ḍaṛa-ṇawu
MNom-man 3-3Sg-ache NAbs-stomach-his
'The man has a stomach-ache'.

When the possessor of a body part functions as TS of a clause, the body part may or may not be inflected with instrumental prefix ṇa- (more often it is not).

a ṇa-ŋadbur-ŋanju
NInst-hand-mine
b Ø-ŋadbur-ŋanju ḷaŋ? ṇa-waṛag
NAbs-hand-mine punch 1Sg/3Sg-Aux PP
'I punched him with my hand'.

Especially when the 'whole' happens to be an animate or animate-like entity, there is some tendency for speakers to express an understood part-whole relation as a normal genitive of possession, with genitive inflection on the possessor:

moŋor?mi maral-wu ḍab-ṇawu ḍama-ṇawu
necrophagous flesh dead person-Gen skin-his bone-his
'Necrophagous flesh (is) dead person's skin and bones'.

(Note prefix ṇa- is omittted from maral, another example of the degree of variability found in neuter and masculine case marking; see 2.1.1b and c.)

2.1.1.4.7. Possessed

See 2.1.1.2.5.1 and preceding section.

2.1.1.4.8.-11. Quantity, material, manner

See 2.1.1.4.4.-5 and 2.1.7 (adverbs).

2.1.1.4.12. Cause

See 2.1.1.5e on ablative case, also causal clauses discussed under subordination, 1.1.2.2.2c.

2.1.1.4.13. Purpose

Within each noun class, purposive is not formally distinct from genitive and dative; in pronouns, where genitive and dative are distinguished, purposive is not distinct from dative. Purposive expresses the (often inanimate) goal of an activity, or sometimes the reason for the activity, translatable as 'on account of X'. Use to express these purposive notions is considered a secondary function of the dative case. That is, purposive is considered here a use of dative case possible within

clauses which express certain kinds of meanings; purposive is not a distinct case category. Examples of this usage are:

ṇa-mar-wu ga-ṇa-yag
NPurp-fish -3-1Sg-go
'I'm going for fish/fishing'.

wur-yi-ñi ṇa-ŋamda-wu ṇa-munburŋ-gu
3Du-go-PC NPurp-whachamacallit NPurp-wild banana
'They went for whachamacallit, "wild banana"'.

ŋaya-Bagurŋiya wur-bu-yi-ni ṇa-bugbuŋ-garan
FPurp-(name) 3Du-hit-RR-PC MNom-old person-Nom Du
'The two old men fought (each other) on account of Bagurŋiya' (woman's name).

Though it is usually not possible to distinguish purposive from dative on formal grounds, there is one instance in which a noun in a generic purposive sense is distinct from its dative form. Gaḍugu 'woman' is ordinarily declined as a feminine noun, but when used in a generic sense as a purposive (rather than with reference to a specific woman) it is inflected like masculine and neuter purposives, rather than like a (specific) feminine purposive:

ṇa-gaḍugu-wu wuḷa-bu-yi-ni
Purp-woman 3Pl-hit-RR-PC
'They were fighting on account of women'.

The ordinary verb meaning 'to search for', mi?+mi-, requires a purposive object:

ṇa-juya-wu ṇur-mi?+mi
NPurp-flesh 2Du-search for Imp
'You du. look for game!'

Other examples of purposive nouns are:

Ø-yiriri+wa-jiyi ṇa-muyŋ-gu
2Sg-look Red-RR Imp MPurp-dog
'Watch out for the dog'.

wargba? ga-ṇa-mi ṇa-juya-wu
look around -3-1Sg-3Sg-Aux NPurp-meat
'I'm looking around for game'.

ŋan-warigwarig+ma-ṛi ṇa-muyŋ-gu
3Sg/1Sg-bet-Aux-PC MPurp-dog
'He made me a bet about the dog'.

See also discussion of purposive nominalized clauses in 1.1.2.2.2b.

2.1.1.4.14. Function

See instrumental in 2.1.1.4.3; a noun expressing function would either be instrumental or purposive.

2.1.1.4.15. Reference

NP 'in reference to which' is a secondary function of allative case; see 2.1.1.5d.

2.1.1.4.16. Essive

See descriptive temporal clauses in 1.1.2.4.

2.1.1.4.17. Translative

See 2.1.1.2.10.-11 on factitives.

2.1.1.4.18. Part-whole expression

See 2.1.1.4.6.1.-2.

2.1.1.4.19. Partitive

See numerals (2.1.1.8.6.9), indefinite-interrogative forms (2.1.2.6), quantifiers (2.1.6).

2.1.1.4.20.-23. Price, value, extent

Not directly applicable.

2.1.1.4.24. Concessive

A common way of expressing a concessive meaning would be with the formal hortative mari-baḍa-n 'let it go, no matter' (see 2.1.3.-V) followed by a clause expressing what will be done in despite, e.g.,

jiig ja-Ø-way-(y)i-n mari-baḍa-n ṇaḷa-yag
rain 3-3Sg-Aux-MP-Pres Hort-miss/be-Pres 1InPl-go
'It's raining, no matter, let's go'.

2.1.1.4.25.-27. Inclusion, exclusion, addition

See discussion of compound reduction in 2.1.2.1.18, also 2.2.1.1b.

2.1.1.4.28. Vocatives

Kin terms and personal names (including English given names and nicknames) are the most widely used vocative forms. Subsection terms are more rarely used by people who know each other well, and their use often implies lesser familiarity than does use of a kin term or personal name. Vocatives of personal names, subsection terms, and kin terms are simple stems without prefixation. There is no vocative inflection. Thus: baḍa 'father!', Bagurŋiya! (woman's personal name).

As emphatic device used especially when calling out loudly to others, vowel-final stems are incremented by -y: baḍa-y! gaŋiḷa-y! ('person of gaŋiḷa subsection!'). The final syllable increases and then falls sharply in loudness and pitch; frequently the final vowel is lengthened and does not remain constant in quality.

There are two forms which belong structurally with nonsingular demonstratives, but which are used only as vocatives. These are:

gaḷa-gaya 'you-all!'
garan-gaya 'you two!'

These are respectively third person plural (ga-ḷa-) and dual (ga-ra-n-), followed by a suffix -gaya. So characteristic are these vocative forms that Maŋarayi speakers in other communities are often referred to as 'people who say gaḷagaya'.

2.1.1.5. Local case functions

2.1.1.5a. Locative case

Locative case -yḷan~-gan expresses static notions translatable as 'in', 'on' or 'at'. It is not generally used to express motion towards (see 2.1.1.5c). Examples of its use are:

ṇa-baṛgi-yan ja-wuḷa-ṇi
NLoc-ground 3-3Pl-sit
'They are sitting on the ground'.

ṇa-ḷandi-yan ja-Ø-gaḷa+wu-yi-n
NLoc-tree 3-3Sg-hang-MP-Pres
'It is suspended in the tree'.

ŋaya-bugbuŋ-gan ja-Ø-yu
FLoc-old person 3-3Sg-sleep
'He is staying (sleeping) at the old woman's (camp)'.

In locative case function, toponyms and cardinal directions are unmarked (see 2.1.2.5.9.9 for paradigms of cardinal direction terms):

Jembere ga-ŋaḷa-ṇi
(toponym) -3-1InPl-sit
'We are sitting down/living at Jembere'.

Many toponyms are composed of an initial element (sometimes analyzable as a nominal denoting a natural feature or zone, or other meaning, sometimes simply an unanalyzable place name) and fused locative case suffix. Examples are Mañjuṇ+gan, a place on the Roper River (mañjuṇ- 'sour, rotten', -gan locative suffix), and ŋa-muriñja-yan, a place near the western headwaters of the Roper (literally, 'at the *Eucalyptus microtheca*'; note the fused prefix of this form). In toponyms like these, the locative case element is not separable, nor is the prefix where one occurs. Like other toponyms, these are not further suffixed in locative case function:

Mañjuṇgan baḷ? wuḷa-ṇi-ñ
(toponym) sit down 3Pl-Aux-PP
'They sat down (made camp) at Mañjuṇgan'.

Toponyms are optionally case-marked in allative meaning (see 2.1.1.5b).

In a special usage, complement of the (formally mediopassive) verb ḷuñgag-ji- 'to lean (against)', if overtly expressed, is put into locative case:

Ø-ḷuñgag-ji-ni ŋa-ḷandi-yan
3Sg-lean-MP-PC NLoc-tree
'He was leaning against a tree'.

2.1.1.5b. Allative

Allative case expresses motion or direction 'into', 'onto' or 'towards':

Ø-baṛgi-ḷama Ø-wayag
NAll-ground 3Sg-fall MP PP
'It fell onto the ground'.
Ø-ŋugu-ḷama yir? ŋa-waṛag
NAll-water throw 1Sg/3Sg-Aux PP
'I threw it into the water'.

Toponyms are optionally suffixed for allative case:

Jembere ~ Jembere-ḷama wuḷa-ya-j
(toponym) 3Pl-go-PP
'They went to/towards Jembere'.

Most verbs of perception have a normal transitive case frame, in which the perceived object is treated as direct object, and the perceiver as subject. The verb yiri+wa- 'to see, look at' is a normal transitive, but to express the meaning 'to look towards' rather than 'to look at', the object 'towards which' the gaze is directed is marked for allative case:

Ø-ḷandi-ḷama Ø-yiri+wa-b
NAll-tree 3Sg/3Sg-look-PP
'He looked towards the tree'.

2.1.1.5c. Contrast between the uses of locative and allative cases

Maŋarayi speakers tend to use locative NPs in preference to allative except where the notion of 'motion towards' is to be emphasized. Even in clauses with verbs that imply or express motion, speakers generally use locative rather than allative case. Examples are:

ŋa-muyg gaḷ? Ø-jud+ma-ñ ŋa-jaŋguḷ-an
MNom-dog climb up 3Sg/3Sg-Aux-PP NLoc-short
'The dog made it climb up into a short one (tree)'.

(The understood object of 'make climb up' here was 'goanna'; for y-deletion in the locative suffix, see 3.4.4.1, P-9.) Here, use of allative case

Ø-jaŋguḷ-ḷama would give the meaning 'towards a short one', so that a more appropriate verb would be particle+aux gay? bu- 'chase'.

wur-bamja+wu-b ŋa-ḷandi-yan
3Du/3Sg-smash-PP NLoc-tree
'They du. smashed it against a tree'.

In sentences like these, the preferred perspective of the local phrase is the stationary one, e.g., that of the tree against which the object is smashed.

2.1.1.5d. Special uses of allative case

Allative case is used to express the peripheral object 'with reference to which' something is said or meant:

Ø-warwiyan-gaḷama ḷij ja-Ø-ṇama
NAll-dreaming bear a name 3-3Sg-Aux
'He bears a name with reference to a/the dreaming' (i.e., a mythological figure).

Verbs of throwing are transitives, in which the object(s) thrown are treated as direct object, and the recipient as allative nominal or pronoun:

yir? wuḷa-wa-ṛi
throw 3Pl/3Sg-Aux-PC
(a) ŋaya-gaḍugu-ḷama
FAll-woman
(b) ŋanjugu-ḷama
1Sg-All

'They threw it (a) to/towards the woman
(b) to/towards me'.

A verb phrase like yir? ŋan-wa-ṛi, with pronominal ŋan- 3Sg ⟶ 1Sg, would mean 'he threw me (down)', and is perfectly good in that meaning.

2.1.1.5e. Ablative

Ablative case expresses the point of departure for some motion, transit or transfer:

Ø-baṇam-buṇyaŋ-gana ŋa-ṇina-ñ
NAbl-camp- their Pl 1Sg-arrive-PP
'I came from their camp'.
ŋaya-ŋayaŋ-gana ŋaya-gaḍugu-wana ŋa-may
FAbl-another FAbl-woman 1Sg/3Sg-get PP
'I got it/received it from another woman'.

Ablative case is also used to express source, including the language in which something is said:

Maraṇbala-wana ja-wuḷa-ḷi?+mi...
Mara-Abl 3-3Pl/3Sg-call
'In Mara they call it...'

However, origin or provenience of persons is expressed by the noun suffix -ŋuŋuŋ (see 2.2.1.1a).

2.1.1.5f. Use of pergressive

Pergressive, meaning 'along' or 'through' and usually implying motion, is not a suffixal 'case' category fully equivalent to the others described in preceding sections.

First, pergressive only facultatively exhibits the phonological alternations characteristic of other semivowel-initial case suffixes. Pergressive has three allomorphs, -wa, and -y$_1$iwa~-giwa. The alternation between the last two is not fully predictable in terms of the preceding root-final segment, as is true for the case suffixes. Sometimes the hardened form -giwa is used following a nasal-grade morph (see 3.4.1.2.1 for the hardening rule, 3.4.1.2.8 for nasal grade).

baṇam-ŋanjuŋ-giwa Ø-yi-ñi
camp-mine-Per 3Sg-go-PC
'He went through/by way of my camp'.

When I checked spontaneously-produced sentences like the above, all instances were corrected to baṇam-ŋanju-yiwa, and so forth. Upon being asked, speakers repeated each sentence both ways, but pronounced only -yiwa 'correct'.

Second, pergressive is commonly used with only a small number of terms denoting topographic zones and natural features. Human nouns generally are not marked for pergressive meaning, but cf. some special usages like the following (this may actually be article suffix -wa, see 2.2.1.1e):

jim-buṇya-wa ŋaḷawuyan-ma
eye-theirs-Per 1InPl/3Pl-say
'We say straight to their faces'.

The distribution of -wa and -y$_1$iwa cannot be stated definitively. Either can occur with some nouns; -wa characteristically occurs with certain nouns and -y$_1$iwa with others. The form -yiwa seems to occur mainly with roots in final vowels and -y, but is also found after nasals; -wa occurs following consonants, but is also characteristic after a small number of vowel-final roots. No clear-cut, phonologically-conditioned distribution can be stated.

Nouns most commonly used in pergressive meaning include:

baṇam-yiwa	'through the camp, locality'
baṛgi-wa	'along the ground'
bundal-yiwa	'along the billabong'
jadba-wa/jadba-yiwa	'along the river'
jumbay-(y)iwa	'along the bank, incline'
jurgjurg-wa	'along the leaf'
ḷandi-yiwa	'along the tree, through a forested area'
ṇanan-yiwa	'along the rock, hill; through a stony area'
ŋajal-yiwa	'along the spring, through spring country'
ŋurgŋurg-wa	'along the river bank'
wuray-(y)iwa	'through black soil country'

With some nouns like jadba 'river', -wa and -yiwa are seemingly in free variation, but this is not so with other nouns. Baṇam-a gives the meaning 'only camp', i.e., depopulated, without people; this -a, may perhaps be related to the article suffix -wa described in 2.2.1.1e, rather than to the pergressive.

2.1.1.5.1. Additional local case meanings

In the following sections (2.1.1.5.2.-2.1.1.5.18) additional ways of expressing local meanings are explored, regardless of the formal means used. Demonstrative adverbs are not presented until 2.1.2.5.9, because of their formal and semantic intersection with the demonstrative pronouns. Cardinal directions are presented in section 2.1.2.5.9.9 with (demonstrative) adverbs.

Many forms expressing a variety of local meanings ('behind', 'in front of' etc.) are primarily adverbs. Most often, they are used without any further specification of location relative to some object. Thus, utterances like the following are very common:

yuŋgun Ø-yag ŋaya biwi ŋa-ṇiŋa-n-gu
ahead 2Sg-go Imp 1Sg Nom behind 1Sg-come-Pres-DI
'Go ahead, I'll come behind'.

There is no overt expression of the person or object in relation to which biwi 'behind' is used. It is possible to specify an object using dative/purposive case form of the noun or other NP type; for all persons,

including third, this form is the same as the possessive suffix for that category (2.1.2.4.1):

biwi ŋaŋga ŋa-ṇiŋa-n
behind 2Sg Dat 1Sg-come-Pres
'I'll come behind you'.

However, for most of the adverbs described in this section, there is a decided preference for avoiding this preposition-like linkage. Therefore, the interpretation of local meanings is an area in which there is an exceedingly strong interaction between linguistic usage, and known and emergent linguistic and extra-linguistic context. Preferred constructions are discussed for each type of local meaning.

Despite the basically adverbial nature of local specifiers, a handful of them can be marked with one or more local case endings, e.g. biwin-gana 'from behind (nasal grade biwin-, see 3.4.1.2.8e). These possibilities are discussed for each form where applicable. Such inflected forms never occur with specified local NP object; that is, forms like biwin-gana ŋanjugu-wana (hypothetical) 'from behind me' were not found.

2.1.1.5.2. Proximate 'near (to)'

A number of forms are used to mean 'near (to)'. The adverb ḷudbiñ 'close' (i.e., not far away) is almost always used without explicit specification of an object. An example of its use is found in the last sentence in 2.1.1.2.4. It is an approximate antonym of galiya 'far'.

The adverb baŋga 'close, near' is likewise almost always used without specification of an object, but as with other adverbs of this kind, an overtly specified dative-marked object can occur.

baŋga Ø-waṛ (ŋanju)
close 2Sg-put Imp 1Sg Dat
'Put it close to me'.

If two objects are close and (remain) equidistant — that is, neither is in motion away from the other — a noun object is not specified. Instead, the verb is appropriately inflected to encode both entities:

baŋga ga-ṇi-ṇi
close -3-InDu-sit
'We're sitting close (to each other)'.

As noted, there is a preference for strict adverbial use of these forms. In the following example, baŋga modifies the transitive verb wa- which ordinarily means 'to pay a visit to, to visit, go to see':

ŋa-muyg baŋga ŋan-wa-b
MNom-dog close 3Sg/1Sg-go to see-PP
'The dog came close to me'.

The adverb miḷiriwa 'close' is approximately synonymous with ḷudbiñ and baŋga and like them, can be used with dative/purposive object. Its most common occurrence is in a preferred kind of antonymous construction (1.4) in the phrase ŋiñjag miḷiriwa (lit. 'not close'), the sense of which is 'far'.

The primary sense of yuŋgun is 'ahead, forward, in front (of)', but it can be used to mean 'close' by an apparent semantic-pragmatic link between the notions of forward motion (perhaps, towards speaker) and proximity in general:

yuŋgun Ø-ṇiŋa-w (ŋanju)
close 2Sg-come-Imp 1Sg Dat
'Come close (to me)'.

yuŋgun Ø-yag
close, forward 2Sg-go Imp
'Go close/near' (to anything).

2.1.1.5.3. Interior 'in(side', 'in(to)'

The adverb biyaŋgin is used to mean 'inside' (e.g., a house), 'at the bottom' of an appropriately shaped space or recepticle, or 'under'. These meanings cannot be distinguished when reference is to a river, where 'at the bottom' and 'under the water' are both expressed by biyaŋgin.

Formally, biyaŋgin appears to be a nasal-grade, frozen form of biya 'downriver' (see 2.1.2.5.9.9), perhaps with frozen irregular locative suffix form -gin. There is a related form biyaŋgin?mara 'right inside, right down' with otherwise unattested suffix -mara.

Though, as usual, biyaŋgin is most frequently used without expressed local object (e.g., biyaŋgin ja-Ø-ṇi 'he is sitting inside'), an overt object is usually marked with locative (more rarely, allative) case:

biyaŋgin, biyaŋgin?mara jilbuṇ ga-ŋa-waṛ ṇa-baṛgi-yan Ø-jib-ṇawu
inside right in inside -3-1Sg/3Sg-Aux NLoc-ground NAbs-seed
'Inside, right in/under in the ground I put the seed'.

The form jilbuṇ exemplified above can variably be considered a verb particle or adverb (see 2.1.3a on the basically adverbial nature of the verb particle). Like biyaŋgin, when used in phrases which emphasize the notion of 'motion towards', it can 'govern' allative case:

ja-Ø-yag jilbuṇ Ø-wam-gaḷama
3-3Sg-go inside NAll-sugarbag
'It (a bee) goes inside to the sugarbag (honey)'.

The verb particle ḷuḷur expresses the notion 'inside, interior'. Used with intransitive auxiliary yag- (the full lexical meaning of which is 'go') it produces the meaning 'go inside'; any specified object is usually in locative case:

ḷuḷur ja-Ø-yag ṇa-ḍuyjbuyin-gan
inside 3-3Sg-go NLoc-house
'He's going into the house'.

Used with the transitive auxiliary ga- (which as main verb means 'take, bring'), it means 'to put inside'; ḷuḷur ga- is often used, for example, to express the meaning 'to load' (a gun, truck, etc.).

2.1.1.5.4. Exterior: 'outside', 'up to'

The adverb yarwal 'outside' appears to connote 'in public, in an exposed place'. There is a factitive-like verb formed from it, yarwal?+ma-, 'to make public', as is the following example:

ga-ña-yarwal?+ma ŋayawu
-3-2Sg-make public 3SgF Dat
'You are making it (something about her) public' or 'You're publicizing something about her'.

The adverb is illustrated by the example:

yarwal wa-ŋaḷa-ṇi, bobob ja-Ø-ma biyaŋgin
outside Hort-InPl-sit hot 3-3Sg-Aux inside
'Let's sit outside, it's hot inside'.

The meaning of transit outwards from an interior space or position is expressed by the adverb ḷun:

ḷun ja-Ø-bab+ŋama ṇa-ŋuy-(y)an ja-Ø-gaḍ+ma
outside 3-3Sg/3Sg-put NLoc-cool (place) 3-3Sg/3Sg-remove

Ø-yawŋ-gaṇa
NAbl-earth oven
'He's putting it outside in a cool place, he's taking it from the earth oven'.

The meaning of motion or direction 'up to' something is expressed by malga plus allative case-form of the NP type:

Malga Jembeṛe wuḷa-ṇiŋa-ñ
up to (toponym) 3Pl-come-PP
'They came (right) up to Jembeṛe'.

As with several other adverbials described below, malga can have spatial or temporal reference:

malga mulugmuluŋgaḷama
up to afternoon
'(right) up till afternoon'

(The adverb mulugmuluŋ-gaḷama contains the allative suffix; for other forms of mulugmulug see expressions of location in time in 2.1.7.3.)

2.1.1.5.5. Anterior: 'in front of', 'ahead'

The principal adverb of spatial and temporal anteriority is yuŋgun. It is rarely used with specified object (though it may be); although ablative-marked case form of the principal posterior adverb (biwin-gana) is in common use, I did not record any instances of ablative case-form of yuŋgun.

Two senses of yuŋgun, (spatial) 'ahead, forward' and 'close', were illustrated in 2.1.1.5.1 and 2.1.1.5.2. Closely linked to the spatial sense is the temporal meaning 'ahead, first':

yuŋgun Ø-ṇiŋa-ñ
first 3Sg-come-PP
'He came first'. (i.e., ahead of others)

The adverb may be suffixed with the article-like, elliptical suffix -wa (2.2.1.1e) which gives the form a more 'concrete' sense, as of reference to person rather than expression of temporal sequence:

yuŋgun-wa jaḍ Ø-ja-j
ahead-Art return 3Sg-Aux-PP
'He got back first', 'He was the first (one) to return'.

2.1.1.5.6. Posterior: 'behind', 'after'

The spatial sense 'behind' of biwi has been illustrated (2.1.1.5.1), as has its ablative form. Like yuŋgun, biwi may also have temporal meaning; in fact, sometimes the difference between spatial and temporal senses can be disambiguated only contextually.

ŋaya biwi baḷ? ŋa-ṇi-ñ ṇawu
1Sg Nom behind sit 1Sg-sit-PP 3MSg Dat
'I sat down behind him' or 'I sat down after him'.

A form biwi-wu is used to mean 'too late':

biwi-wu ŋa-ṇiŋa-ñ, gurji wuḷa-ḍaḍ+ma-ñ Ø-juya
after-Dat/Purp 1Sg-come-PP long time 3Pl/3Sg-finish-PP NAbs-meat
'I came too late, they had finished the meat a long time before'.

The form yiriḍ expresses direction/motion back or backwards. It may variably be considered verb particle or adverb. With the auxiliary yag- it means 'to go back' in the quite concrete sense of physical motion 'to go backwards' (e.g., when reversing a car), or the sense 'to retire, withdraw' (from company, e.g., by returning to one's own camp). With the transitive auxiliary ga-, it is used to mean 'to move something backwards'.

2.1.1.5.7.-8. Superior: 'above, from above'

The meaning 'on (top of)' is expressed simply with locative case:

ṇa-baṛgi-yan yir? Ø-waṛ
NLoc-ground throw 2Sg-throw Imp
'Throw it onto the ground'.

In camp life it is important to have places to hang things (especially food) where they are off the ground, and the meaning 'up' or 'high' is

usually expressed by the adverb warayala. This has ablative form warayala-wana 'from high up, from on top'. The adverb warayala is the one conventionally used to describe men's going 'up' to the ceremony ground (no matter what its precise physical location may be, or the speaker's with respect to it). This form is now used as a noun to refer to 'airplane'.

There are several other ways of expressing the notion 'high up'. A variety of adjectives can be inflected for locative case, e.g. ŋa-wuḍaḍban-gan 'in a high place'.

The notion of 'higher up, upriver' with reference to the Roper River, is one of the cardinal direction points (see 2.1.2.5.9.9).

2.1.1.5.9.-10. Inferior

See 2.1.1.5.3, also 2.1.2.5.9.9 on cardinal directions.

2.1.1.5.11.-12. Lateral

The adverb walaŋgarama '(on) one side' is generally repeated to give the meaning 'on either side, on both sides':

walaŋgarama walaŋgarama ḍoḍoḍoḍ ja-wula-ṇi bam-buṇya-wa
one side one side line up 3-3Pl-sit head-theirs-Art
'On either side they sit, their heads (all in a row)'.

2.1.1.5.13.-14. Citerior: 'this side'

The main forms meaning 'this side' and 'the other side' are discussed with demonstrative adverbs (2.1.2.5.9.4), since they are analyzable into some of the recurrent demonstrative morphs.

2.1.1.5.15.-16. Ulterior: 'on the other side', 'further', 'past'

There is an isolated adverb wuyirab '(on) the other side'. It is uninflected in locative and allative meanings, but takes the ablative suffix, wuyiram-gana 'from the other side'. There is a related medio-passive verb yiram-ji- 'to cross over'.

The adverb baḷbaḷ means 'further':

Ø-ŋayag baḷbaḷ Ø-wa-w
NAbs-other further 2Sg-go to see-Imp
'Have a look at another further on'.

The notion 'to pass (by)' is expressed intransitively by particle+aux yurmi yag- 'to go past', and transitively by related yur+ma- 'to pass someone, something':

ŋan-yur+ma-ñ
3Sg/1Sg-pass-PP
'He passed me'.

Ulteriority is of course part of the lexical meaning of a much greater variety of inflecting verbs and verb particles, including jaraj jaygi- 'to cross', baḷaḷ+ma- 'to wade across', yinbaḷ? yag- 'to pass through, pause briefly in a place and keep going', among others.

2.1.1.5.17.-18. Medial: '(in) between', 'through'

The meaning 'in between' is most often expressed by balayarg, generally without specification of the points it(s gloss) seems to suggest. It scarcely ever is used to refer to a point precisely 'in the middle' between two things. For example, one may say

joːe? wuḷa-ma-ṛi balayarg
make fire 3Pl/3Sg-Aux-PC middle/halfway
'They made a fire "halfway"'.

The place referred to may be almost anywhere between the point of departure and the destination; or, in fact, it may be used without implying any definite destination.

Balayarg may have an NP object, usually locative: balayarg ŋa-bundal-an 'in (the middle of) the billabong'.

The adverb wuburgba also means 'between', (approximately) 'halfway', but again there is scarcely ever specification of end points or a total area in terms of which the gloss 'halfway' has meaning. The usage of both balayarg and wuburgba may be perhaps better compared to the free use of 'middle' in examples like 'I'm in the middle of a big job this morning'.

Three common ways of expressing transit 'through' are adverb ḏinburg, and transitive particle+aux ḷuḷ bu- and compound gaḷañja+wu-. Both verbs can also mean 'pass by', but with dual object they can be used to express transit 'through':

ḷandi-yara-ŋan ŋawuran-gaḷañja+wu-b
tree-Du-Acc 1Sg/3Du-pass-PP
'I passed by/through two trees'.

2.1.1.5.19. Border: circumference 'around', edge 'along'

The adverb ḷuḷiñ means 'around' and may be used to express circuit with respect to some object or obstacle:

ja-wuḷa-yiyi-ji-n ŋanju, ḷuḷiñ ja-wuḷa-yag
3-3Pl-be afraid-MP-Pres 1Sg Dat around 3-3Pl-go
'They're afraid of me, they go around (me)', i.e., avoid me.

To make explicit the spatial meaning 'around and past', however, one of the means in 2.1.1.5.15-16 is used. Frequently also, ḷuḷiñ is used for motion or transit in relation to the location of the speech situation, rather than circuit around some object or obstacle described or understood as part of the narrated subject matter.

The meaning 'along' (a border) can be expressed by pergressive:

jinjin-yiwa ja-Ø-yag
steep-Per 3-3Sg-go
'He's going along a steep place'.

With certain nouns, pergressive can also give the meaning 'through', see 2.1.1.5f.

2.1.1.6. Location in time

Only a few adverbs designating locations in time inflect for case; the few that do cannot inflect productively for all cases. Time-location words are discussed with other adverbs in 2.1.7.3.

2.1.1.7. Double case marking

In some Australian languages (e.g., Dixon 1972:43) the genitive noun is doubly marked for its genitive function within the NP, and then in agreement with the head noun. There is no 'double case-marking' in Maŋarayi. That is, nouns standing in attributive relation to a head noun are case-marked only for their function within the NP, and the head is case-marked to express the external function of the NP within the clause:

ŋa-muyg ŋaya-Bagurŋiya ŋan-ḍaḷag
MNom-dog FGen-(name) 3Sg/1Sg-bite PP
'Bagurŋiya's dog bit me'.

2.1.1.8. Number

2.1.1.8.1. General

Nonsingular number is marked by two processes in the noun: reduplication and suffixation. These may both be employed in the same form, but more commonly, number is marked by one means or the other. In the fully inflected noun, any overt number markers precede case suffixes. Though both number and case can both be marked by overt morphological material in

the same word, various strategies are employed which eliminate the need for explicit number suffixation in many instances. Also, the fact that morphologically singular nouns may be interpreted as plural in many contexts, reduces the incidence of nouns in which number is overtly marked.

Nonsingular number is cross-referenced in the verb with greater or lesser consistency, depending on the case function and noun class of the NP. Inanimate nouns are less frequently explicitly number-marked than animates, and even when so marked, are less frequently cross-referenced as nonsingular in the verb. Sometimes in free speech there are disparities between number-marking on the noun and cross-referencing pronominal in the verb.

There are three number-marking patterns in nouns: one for kin terms, one for subsection terms, and one for other nouns. The sets of number suffixes used overlap. Kin terms and ordinary nouns may be described as having a singular-dual-plural number system, and subsection terms a singular-dual-trial-plural system. All number markers have a full set of case forms; as for nouns themselves, genitive/dative/purposive are formally identical; see 2.1.1.2.5.

The nonsingular number-marked noun tends to lack case class/prefixation, especially in syntactic case functions, but often is prefixed in genitive/dative/purposive and local functions.

2.1.1.8.2.-3. Circumventing explicit nonsingular marking

Suffixation for nonsingular number is rendered unnecessary by a variety of means. Plural number can be expressed by the adjective garag 'many, a lot'. Speakers tend strongly to use NPs in which semantically plural nouns are treated morphologically as singulars or single collections:

Ø-garaŋ-gaḷama Ø-baṇam-gaḷama
NAll-many NAll-camp
'to many camps'
Ø-garaŋ-gana Ø-ḷandi-wana
NAbl-many NAbl-tree
'from many trees'
ṇa-garag ṇa-ḷandi
NInst-many NInst-stick
'with many sticks'

Dual number-marking in inaninamate nouns is avoided by use of indeclinable numeral ŋabaranwa 'two' and treatment of the modified noun as singular:

ŋabaranwa Ø-baṇam-gaḷama
two NAll-camp
'to two camps'

However, even when modified by numeral 'two', animate nouns require a number/case suffix form:

ŋabaranwa maḷam-garan
two man-Du Nom
'two men'

Speakers often use 'two' to modify dual-marked nominals. There is even a tendency to suffix the numeral for dual number/case suffix, e.g., ŋabaranwa-yaran maḷam-garan 'two men'. Here ŋabaranwa is evidently used in the sense 'set (of two)'; the pleonasm is not considered stylistically bad.

But the chief reason why explicitly number-marked nouns are not of very high text frequency, is that singular nouns are very often used where an NP is semantically plural but referentially non-specific. This is not precisely equivalent to our use of 'man' (morphological singular) in the generic sense 'mankind'; the Maŋarayi singular need not be generic in sense, but simply has no unique set of established referents. Examples of this usage are:

Ø-maḷam ŋan-gaḍugu wa-Ø-jiray ṇa-boḷogban
MAcc-man FAcc-woman Irr-3Sg-eat PC MNom-rainbow serpent
'The rainbow serpent is said to have eaten (the) men and women'.
miŋiwa ṇa-mubuḷ-an ja-Ø-yu
already MLoc-single boy 3-3Sg-sleep
'He's already sleeping among (the) bachelors/single boys' (i.e., is already circumcised)

Such meanings *may* be expressed by plural-marked nouns, usually where the referents are contextually specific. Where a generic sense like 'mankind' is intended, a singular is also used.

Reduplication is only a secondary means of plural number expression compared with suffixation. There tends to be a standard set of nouns — especially human status nouns — which frequently occur in reduplicative form, especially in syntactic case functions. Some of these are bugbugbug 'old people', waŋgaŋgij 'children', gababuji 'old blind people', and a few others; other nouns tend not to occur in reduplicated form unless in the proprietive construction (see 2.1.1.4.4.-5). Reduplicated kinship terms occur regularly in plural dyadic formations (2.1a.2) but also in syntactic case functions in other than dyadic formations. Reduplicated plural nouns are sometimes also number-suffixed: bugbugbuŋ-gaḷa 'old people' (Pl Nom). Duality can only be marked by suffixation, not reduplication: bugbuŋ-garan 'two old people'. The use of suffixes in addition to reduplication in plurals may be related to the fact that the number suffixes have case forms, while syntactic case distinctions cannot be explicitly marked in nouns where plurality is expressed only by reduplication.

2.1.1.8.4.-5. Collective and distributive plurals

There are no explicitly collective or distributive formal number categories. With the kin term muṛimuṛi 'FF, FFZ' it is possible to form a collectively used noun meaning 'all those within an agnatic line' (without regard to generation; see 2.1a.2). See 2.1.1.8.6.9 for expression of 'each' based on the numeral stem wumba- 'one'. See collective forms built on demonstrative adverbs in 2.1.2.5.9.8.

2.1.1.8.6. Realization of number marking

2.1.1.8.6.1. 'Ordinary number markers'

Case forms of the dual and plural number suffixes used with most nouns are shown in Table 2-2. These pattern nominative-accusatively; thus, all explicitly number-suffixed nouns conform to nominative-accusative patterning. Genitive/dative/purposive and all local cases are built on the nominative form. There is a non-singular accusative case suffix -ŋan. Dual accusatives suffix this directly to dual number element -ra-, while plurals show an -n- which may be relatable to the object-marking -n- of verbal pronominal prefix forms (2.1.3.6.2.2). An element -ra- can be segmented in all duals, while nominative plural-marker -ḷa alternates with accusative -ya-.

There is in all forms an intrusive morpheme -yɻa-~-ga (see 3.4.1.1). The same intrusive morpheme is found in the post-nasal allomorph, -ga-ḷama of the allative case, the other form of which, notably, is -ḷama, liquid initial like the number element -ḷa.

There is evidence pointing to an explanation of the historical conditions under which this intrusive morpheme became part of the number suffixes. In a few rare instances, ordinary number suffixes can be used

with kin terms as alternatives to the number-markers usually used with kin terms. In some forms where this is possible, dual -ra- and plural -ḷa immediately follow vowel-final stems; the intrusive morpheme is lacking (ŋaḷa-la-ra-n 'his/her two mothers', ŋaḷa-la-ḷa 'his/her mothers Pl.', suppletive stem form -la- of 'mother', see 2.1a.1). This provides a clue that at some stage bare number marker following vowels and perhaps other non-nasal sonorants alternated with post-nasal number markers preceded by -ga-, which broke up clusters of (underlying) stop or nasal followed by morpheme-initial r or ḷ (note in 3.2.2 that such clusters do not occur intermorphemically or intramorphemically). The intrusive element was probably reanalyzed as part of the suffix and a lenited, 'elsewhere' form developed by analogy to other productive alternations of suffix-initial g with y (see 3.4.1.1). That is, I am suggesting that the -ga- form was historically basic as the intrusive morpheme, the -ya- form a later development, though the synchronic priority is reversed. In the allative, evidently a semivowel-initial allomorph was not secondarily formed. In 2.1.2.5.2.3 and 2.1.3.5.2.5 note that dual and plural demonstratives (e.g., ga-ḷa-ri-wa 'they' Pl, ga-ra-n-gara 'those' Du) show word-initial form of this morpheme ga-; none show initial ya-.

2.1.1.8.6.2. Prefixation of ordinary nonsingular nouns

There are no distinct plural prefix forms. Though it is possible to use with nonsingulars the same prefixes as with singulars, prefixation is often absent from nonsingulars. This is true where plural is marked by reduplication, as well as where number is marked by suffixes.

Nonsingular nouns of all classes are often not prefixed in major syntactic functions. The major exception to this is that sometimes feminines (more often than masculines) are prefixed with ŋaḷa- and ŋan-. This occurs especially with 'variable-gender' nouns such as waḷima 'young person', for which sex reference is distinguished by prefixation only. With such nouns, when the nonsingular referent is exhaustively feminine, feminine prefix forms are often used: ŋaḷa-waḷima-yaḷa 'young women' Pl. This is not always done when gender reference is otherwise clear. Masculine and mixed gender nonsingulars in transitive and intransitive subject functions are often unprefixed, but may have ŋa-, in transitive object function the usual zero.

Masculine and neuter genitive/dative/purposive nonsingulars are optionally prefixed with ŋa-. Exhaustively feminine nouns in these functions are prefixed with ŋaya-, as for singulars. Likewise, masculine and neuter locatives may have prefix ŋa-, exhaustively feminine locatives, allatives and ablatives are usually prefixed with ŋaya-. Masculine and neuter nonsingular allatives and ablatives show zero prefix.

Table 2-4 illustrates plural forms of example masculine and feminine nouns. Optionality of prefixation is shown. Zero prefixes are not written. Gaḏugu 'woman', being a noun of exclusively feminine reference, tends to omit prefixes in nominative and accusative forms; prefixation in the other cases is normal with feminine nonsingulars.

2.1.1.8.6.3. Number markers with kin terms

The dual and plural number suffixes used with kin terms are shown in Table 2-3. They are all built on a nonsingular, third person element -w_2u~-bu (possibly relatable to third nonsingular wu- pronominal prefix element, see 2.1.3.6.2.1) to which are affixed dual -r(a) and plural -ḷa~-ya- (nominative-accusative) elements. The plural shows the marker -n- before accusative plural -ŋan, as in the ordinary number marker. The dual has three stem forms, nominative -r, accusative -ra-, elsewhere -ra-n upon which genitive/dative/purposive and local forms are built. These number/

case forms follow possessive markers (if any is present) which are the same ones used with all other nouns (2.1.2.4.1). The only difference in possessive suffixation in kinship versus other nouns is that 1Sg propositus (possessor) of kin terms is almost always unmarked: ŋa-baḏa 'my father', only rarely or for emphasis ŋa-baḏa-ŋanju.

Table 2-2 Number/case suffixes used with ordinary nouns

	Du	Pl
Acc.	-y_1a-ra-ŋan	-y_1-ya-n-ŋan
Nom.	-y_1a-ra-n	-y_1a-ḷa
Gen/dat/purp[1]	-y_1a-ra-n-gu	-y_1a-ḷa-wu
Loc.	-y_1a-ra-n-gan	-y_1a-ḷa-yan
All.	-y_1a-ra-n-gaḷama	-y_1a-ḷa-ḷama
Abl.	-y_1a-ra-n-gana	-y_1a-ḷa-wana

[1]Exhaustively feminine nonsingulars have prefix ŋaya- and nominative number/case suffix forms, e.g., ŋaya-waḷima-yaran 'of/belonging to the two girls'.

Table 2-3 Number/case suffixes used with kin terms

	Du	Pl
Acc.	-w_2u-ra-ŋan	-w_2u-ya-n-ŋan
Nom.	-w_2u-r	-w_2u-ḷa
Gen/dat/purp[1]	-w_2u-ra-ŋ-gu	-w_2u-ḷa-wu
Loc.	-w_2u-ra-ŋ-gan	-w_2u-ḷa-yan
All.	-w_2u-ra-ŋ-gaḷama	-w_2u-ḷa-ḷama
Abl.	-w_2u-ra-ŋ-gana	-w_2u-ḷa-wana

[1]See note 1 above. An example is feminine genitive/dative dual ŋaya-ŋañi-wur 'for my two mothers'.

Table 2-4 Plural ordinary noun paradigms

	Masculine or mixed-gender malam 'man, Aborigine'	Feminine gaḏugu 'woman'[1]
Nom.	(ŋa-)malam-gaḷa	gaḏu-gaḷa
Acc.	malam-gayanŋan	gaḏu-gayanŋan
Gen/dat/purp	(ŋa-)malam-gaḷa-wu	ŋaya-gaḏu-gaḷa
Loc.	(ŋa-)malam-gaḷa-yan	ŋaya-gaḏu-gaḷa-yan
All.	malam-gaḷa-ḷama	ŋaya-gaḏu-gaḷa-ḷama
Abl.	malam-gaḷa-wana	ŋaya-gaḏu-gaḷa-wana

[1]Note the plural form shows elision of the last stem syllable with the first of the plural suffix: gaḏugu-yaḷa ⟶ gaḏu-gaḷa.

A few kin terms commonly are used in reduplicative form as plurals, without further number suffixation. These forms are usually used in major syntactic functions, unless followed by a possessive suffix which can be marked for case. Examples are: from yaba, ŋa-yababa 'my brothers' (female speaker); from biṛi, biṛiṛi-ŋawu 'his children'. Plurals of these terms may of course be formed by use of the number/case suffixes without reduplication.

Examples of kinship number suffixes are:

ŋaya-ŋañi-wuraŋ-gaḷama
FAll-mother-Du
'to my two mothers'

(ŋa-)jabjam-buraŋ-gan
MLoc-MF-Du
'with/at (the camp) of my two mothers' fathers'

(ṇa-)baḍa-wuṇyaŋ-buḷa
MNom-F-theirs
'their fathers' (Pl Nom)

See 2.1a.1 for morphology of the kin terms, and 2.1a.2 for dyadic terms.

2.1.1.8.6.4. Prefixation of kin terms

A difference between prefixation of ordinary nonsingular nouns, and nonsingular kin terms, is that the latter tend to be more consistently prefixed in nominative and accusative cases than are ordinary nonsingular nouns, e.g., ṇa-yaba-wur 'my two brothers' (female speaker).

As noted in 2.1.1a, masculine kin terms in accusative case are often prefixed with ṇan-. This is true of both singulars and nonsingulars:

ŋawuyan-wu-na ṇan-yaba-wuyanŋan
1Sg/3Pl-give-PP MAcc-brother-Pl Acc
'I gave it to my brothers'. (female speaker)

2.1.1.8.6.5. Number markers with subsection terms

Subsections are social categories, membership in which is theoretically determined by (but different from) the category of the mother (i.e., a mother who belongs to a certain subsection has children of a certain other). In fact, the Maŋarayi subsection nomenclature conceals a more fundamental system of patrilineal semimoieties, which have no proper names in Maŋarayi but are referred to by the two subsection terms which comprise a *father*-child pair (e.g., a man of jamijin subsection prescriptively marries a baŋaṛiñ woman, whose children are prescriptively gaŋila. The semimoiety category into which this father-child pair falls is gaŋila-jamijin, which includes many father-child pairs of this type. See Maddock 1972 or Shapiro 1979 for the essentials of such systems of social categorization). Subsection assignment as prescriptively determined by the category of the mother, and the father-child links which correspond to semimoiety groupings, are shown in Table 5-4.

The subsection terms are all 'variable-gender' nouns (see 1.16.1); that is, sex gender of a person in a given subsection is expressed by masculine versus feminine noun class prefixation, not by distinct lexical stems. The subsection terms can be suffixed for dual, trial and plural. Dual number is marked by the ordinary dual suffixes -$y_1$aran etc.; trial is marked by ordinary plural suffix forms -y_1aḷa etc.; and plural number is marked by suffixation of -w_2u~-bu, to which semivowel-initial forms of case-suffixes may be further affixed.

All number suffixes which are underlyingly nasal-final add hardened forms of these number suffixes directly to the stem: ŋarijbalan-garan 'two people of ŋarijbalan subsection'. Where the terms are not underlyingly nasal-final, dual and trial suffixes are added to nasal grade form with ŋ. In the instance of the term burala, occurrence of the nasal grade is optional so one may find burala-yaḷa (trial) or buralaŋ-gaḷa, burala-yaran or buralaŋ-garan. A few terms show modification of the stem in the plural, but not in dual or trial forms. Two of the ñ-final stems, balyariñ and baŋaṛiñ, show ñ —→ ŋ before plural suffix -w_2u; vowel-final terms have nasal-grade plural stems. The plural subsection terms, some of which show modification of the stem, may be compared with normal stem-forms:

Regular stem	Plural form	Regular stem	Plural form
baŋaṛiñ	baŋaṛiŋ-bu	jamijin	jamij-bu
balyariñ	balyariŋ-bu	gamara	gamiraŋ-bu
burala	buralaŋ-bu	ŋarijbalan	ŋarijban-bu
gaŋila	gaŋilaŋ-bu	buḷañ	buḷañ-bu

2.1.1.8.6.6. Number forms in the privative construction

Some irregularities occur in the number suffixes following the privative morpheme: they lack the intrusive morpheme -y_1a- and show assimilation of vowels in the number suffix to i of the privative suffix. Shown with the privative morpheme, nominative and accusative number/case forms are:

	Du	Pl
Nom.	-wi-ri-n	-wi-ḷi
Acc.	-wi-ri-ŋin	-wi-yi-n-ŋin

Other cases are built on the nominative as usual.

2.1.1.8.6.7. Nonsingular number in neuter nouns

Plural-marked neuter nouns are textually infrequent. Many of the entities designated by neuters are non-count, or need not be expressed as referentially specific. Thus, though one may say (ṇa-)ḷandi-yaḷa-yan 'in the trees' loc., such a form would be highly unusual. Dual-marked neuters are more often found, because more occasions arise which demand specification of *just* two inanimates. For example, in a mythological text an old woman wishes to kill two young men, who trick her by putting *two* antbeds in their swags.

2.1.1.8.6.8. Verbal cross-reference of nonsingular number

Nonsingular (especially plural) number marked on nouns is not always cross-referenced by plural pronominals in the verb. The following tendencies can be observed in texts and free speech.

Neuters are less frequently marked for (especially plural) number in all syntactic functions than are masculines and feminines. When number marking is omitted from a neuter noun, semantically nonsingular NPs are nearly always cross-referenced in the verb as singular:

yarbayarba wuḷa-ṇidba-ṛi Ø-yawg
different Red 3Pl/3Sg-have-PC NAbs-earth oven
'They had several/different ground ovens'.
Ø-wirilmayin ŋir-bu-b ŋabaranwa baŋgal-yi
NAbs-goanna 1ExDu/3Sg-kill-PP two egg-Prop
'She and I killed two goannas with eggs'.

Even when number marking is present, neuters may be cross-referenced as singular:

Ø-ḷur?+ma-ñ waḍij ŋabaranwa jadba-ra-ŋan
3Sg/3Sg-butcher-PP also two upper leg-Du-Acc
'He also butchered/cut up the two legs'.

Number-suffixed animates and also reduplicated animates not additionally suffixed for number ordinarily are cross-referenced by the appropriate nonsingular pronominal prefixes in the verb. Cross-referencing for number is most consistent for animates in transitive subject and transitive object functions:

bugbugbug gababuji mojon wuyan-jirag
old people Red blind red finish 3Sg/3Pl-eat PP
'He ate the old people and the blind, infirm (old people) up'.
ŋaḷi-na ŋaḷa-bugbug wuran-jirag malam-gara-ŋan
FNom-Dis FNom-old person 3Sg/3Du-eat PP man-Du-Acc
'That old woman ate the two men'.

There seems to be somewhat more variability in cross-reference of animates in intransitive subject function, though usually they are cross-referenced as plural if marked plural, and almost unfailingly as dual if marked for dual number.

See discussion of the pronominal prefixes (2.1.3.6.2.2) where it is shown that in transitive combinations of third nonsingular subject acting

on third nonsingular object, the difference between dual and plural categories is neutralized. Thus, in some instances number categories which can be explicitly marked on nouns cannot be consistently carried over into verbal cross-reference.

2.1.1.8.6.9. Numerals

The numbers in Maŋarayi are:

(ŋa)wumbawa 'one'
ŋabaranwa 'two'
ŋabaḷawa 'three'

The numerals can modify nouns or occur as sole constituent of an NP. As neuter noun, 'one' is either wumbawa or ŋawumbawa, more commonly the former:

Ø-wumbawa ŋan-wu
NAbs-one 2Sg/1Sg-give Imp
'Give me one'.

As masculine noun it has prefix ŋa-wumbawa, as feminine ŋaḷa-wumbawa, with regular prefix alternations depending on case function. The root -wumba- occurs in derivative formations (see below).

'Two' and 'three' are uninflected for noun class. As mentioned in 2.1.1.8.2.-3, speakers sometimes inflect ŋabaranwa for dual number/case.

Inflected with dative/purposive suffix, the numerals mean 'once, twice, thrice' or 'for one day, two days, three days'.

wumbawa-wu 'once, one day'
ŋabaranwa-wu 'twice, two days'
ŋabaḷawa-wu 'thrice, three days'

The stem -wumba- 'one' functions in predicate nominal formations inflected for person (if 1Sg, 2Sg or 1InDu) or number (if otherwise nonsingular), followed by the proprietive suffix. These forms, exemplified below, mean 'be alone, by oneself':

(ŋaya) ŋa-wumba-yi
1Sg Nom 1Sg-one-Prop
'I am alone, by myself'.
ŋaḷi-na ŋaḷa-wumba-yi
FNom-Dis FNom-one-Prop
'She is alone, by herself'.
maḷam-garan wumba-ran-yi
man-Du Nom one-Du-Prop
'The two men are alone, by themselves'.
maḷam-gaḷa wumba-ḷa-yi
man-Pl Nom one-Pl-Prop
'The men are alone, by themselves'.

Note that the number suffixes -ra- and -ḷa- lack intrusive -y₁a-, as mentioned for a handful of other forms (2.1.1.8.6.1). Forms, with or without proprietive suffix, also may occur in apposition to pronouns or demonstratives, or as substitutes for them:

(ŋaya) ŋa-wumba-yi ŋa-ya-j
1Sg Nom 1Sg-one-Prop 1Sg-go-PP
'I went alone, by myself'.

(1Sg without proprietive suffix must have the full form (ŋaya) ŋa-wumbawa ŋa-ya-j; this and 2Sg ña-wumbawa have more the sense e.g., 'I alone', 'only I went', instead of 'I went alone'.)

maḷam-garan wumba-ran(-yi) wur-ya-j
man-Du Nom one-Du(Prop) 3Du-go-PP
'The two men went by themselves'.
maḷam-gaḷa wumba-ḷa(yi) wuḷa-ya-j
'The three men went by themselves'.

There is a recurrent initial element ŋa- in the numerals, optional in 'one' (usually omitted); 'two' and 'three' have the sequence ŋaba- before the dual/plural markers. The recurrent suffix -wa is probably to be related to the article-like suffix of the same shape (see 2.2.1.1e).

A form meaning 'several, a few' is morgo, often inflected for number as morgo-yaḷa. (This may be related to the numeral murgun 'three', of several neighboring languages.) With reference to inanimate entities, also wumbawa 'one' is used to mean 'a small number, few', as in this example:

yimunduŋiñ, ŋiñjag Ø-ŋani+yug, wumbawa ja-Ø-ŋani+yug
taciturn Prohib 3Sg-talk one 3-3Sg-talk
'Taciturn, (that's someone who) won't talk, he talks one (word)', (i.e., 'few words').

2.1.1.9. Noun classes

See 2.1.1a.

2.1.1.10. Definiteness in the noun

Definiteness in the noun is not marked by any single inflectional category. Possessive suffixes specify the noun as belonging to a recognizable participant, someone or something who will be introduced shortly if he has not been already. Demonstratives (2.1.2.5), whether functioning as modifiers or as sole constituents of the NP, likewise indicate that a person or thing is identifiable in the situation, from the linguistic context, or both. Anaphoric prefix gi- (1.5.1.5) signals that 'the X referred to is the same X referred to in preceding speech', though the noun with which the anaphor occurs may be different from the word, or other means (e.g., pronominal prefix) originally used to establish that participant in the discourse.

There is no element besides the anaphoric prefix that has *only* the function of indicating that some item is specific and identifiable. The noun class/case prefixation system cannot serve this purpose very consistently, because it principally marks grammatical distinctions of a different order. However, there seems to be some interaction between prefixation and specification of identifiability.

It was observed (2.1.1.4.13) that the noun gaḏugu, when used as a generic purposive, is marked with the masculine/neuter prefix form ŋa- and suffix -wu; a specific, feminine class noun would be marked with ŋaya-.

More importantly, it has been noted that nouns explicitly marked for nonsingularity tend not to be prefixed for class/case. One reason for this is that many nonsingulars refer to mixed-gender sets, and thus the masculine-feminine contrast is of more limited applicability. But another reason is that the signalling of definiteness for semantically nonsingular nouns seems to be more closely linked to number-marking than to any other functional system. The fact that a noun *is* number-marked indicates that it is referentially specific, a situation that renders overt noun class marking redundant. It was observed earlier (2.1.1.8.2.-3) that semantically plural but non-specific nouns — that is, those which refer to items not identifiable from either situation or linguistic context — are usually morphologically singular, and are usually also cross-referenced as singular in the verb. On the other hand, identifiability of participants is linked to and partly expressed by more consistent overt number specification of nouns, and corresponding nonsingular cross-reference in the verb. The noun, in fact, often does not serve to establish participants in discourse and narrative. Throughout texts, the cross-referencing pronominals bear most of the burden of maintaining and sometimes, even from the first, of

serving to establish the identity of (especially nonsingular) nouns. The following example may serve to illustrate this point.

Once while I was watching a man sharpening a boomerang, he began to tell me that boomerangs should be made for initiation ceremonies. He then began to tell a story which was introduced as follows:

guyuburu Ø-baḷgan garag-wa — ḷuḷur wur-ya-j, ḍuyu-bayi
long ago NAbs-boomerang a lot-Art inside 3Du-Aux-PP hole-Foc

ḍulma wud-ṇi-ñ mayawa-bayi ḍar?ma wur-wa-ṛi
get ready 3Du-Aux-PP then-Foc come out 3Du-Aux-PC

'Long ago there were plenty of boomerangs (at initiation ceremonies?), they du. went inside, (there was) a hole, they got ready and came out...'

(Note lack of locative case marking on ḍuyu; it can be taken as 'there was a hole there' but preceded by ḷuḷur, one must understand that they went in.) The story went on for several minutes before the two participants cross-referenced constantly in the verb were designated by a noun, gurwandan-garan 'two olive pythons'. Someone familiar with the mythology would perhaps suppose this, but might not be sure. The main point is that the identity of these two participants was built up, mainly by continuous cross-reference, without introducing a noun until well into the story.

Another example illustrates a contrast between use of a singular, non-specific noun and a number-marked, specific one:

1. Bamburiyi ŋaya-ŋamdiri, ŋaḷa-yudjudjaŋarambaŋaramba.
   better FPurp-whachacallim (name)
2. Malam Ø-yi-ñi-wa ḍanji-ŋawu.
   man 3Sg-go-PC-Suf end-his
3. Janaŋgari-ja Ø-ṇiŋa-ni ja-wuḷa-ḷi?+mi.
   where-Emph 3Sg-come-PC 3-3Pl/3Sg-call
4. Ŋaḷi-nara Ø-ḍad+ma-ṛi-wa Ø-malam ṇi-yan-yuŋgun.
   FNom-Dis 3Sg/3Sg-finish-PC-Suf MAcc-man ancestors
5. Ŋaḷa-warwiyan waḷima-yaran wuran-ṛidba-ṛi-wa
   FNom-dreaming young person-Du Nom 3Sg/3Du-have-PC-Suf

   waḷima-yara-ŋan ŋabaranwa.
   young person-Du-Acc two
6. Ŋa-malam Ø-wawañ-ji-ni-wa nara-bayi bamburiyi ŋaya-bugbuŋ-gana.
   MNom-man 3Sg-hunt-MP-PC-Suf that-Foc better FAbl-old person
7. Gulb Ø-ma-ṛi-wa Ø-malam ŋaḷi-nara-bayi bugbug.
   pound 3Sg/3Sg-Aux-PC-Suf MAcc-man FNom-Dis-Foc old person
8. Ŋabaranwa jarbiñ-garan wara-warguj Ø-jululu
   two young man-Du Nom pick up red NAbs-belongings

   wara-warguj ... wur-man+bu-ni-wa garan-gara-bayi malam-garan,
   pick up red 3Du-run-PC-Suf those two-Foc man-Du Nom

   ḍar?ma.
   emerge

1. Better about — what's her name, Yudjudjaŋarambaŋaramba.
2. People were going to their doom.
3. Where were they going to? (what do) they call it?
4. That (woman) was finishing up the ancestors.
5. That woman dreaming, the two young (girls), she had two young girls.
6. People were going hunting, better that one about the old lady.

7. She pounded up people, that old lady.
8. Two young men picked up (their) belongings, picked them up ... they went along, those two men, came out (i.e., into a clearing). (See continuation in 1.5.1.1.-2.)

The speaker had been trying to tell another story but could not remember it very well; hence the remark 'better about — what's her name?', i.e., she decided to tell a different one. In this story, the singular noun malam is used at first in 2, 4, 6 and 7 to refer to people in general, the ancestors, who were always going hunting (and as it later turned out) being eaten by the old woman. In 8, two particular characters are introduced; number marking first on jarbiñ, then on malam, tells the hearer that these are *specific* people who will figure further in the story.

The question of definiteness in the singular noun is more difficult. Frequently, unless it is marked by a determiner, the NP itself contains no mark of definiteness; but the interaction between constituents, the relation to preceding speech and other factors help to indicate whether a specific individual is meant, or not. From the olive python text we can illustrate the introduction into narrative of a new character:

1. Jibma wur-juyag Ajajir wu-diwiṇḍag.
   descend 3Du-Aux PP (place) 3Du/3Sg-reach PP
2. Ḍayi juguḷu? wur-yu-ṛa-b malga wuran-wa-b waŋgij.
   Neg coil up 3Du-Aux-Aug-PNeg then 3Sg/3Du-go to see-PP child
3. Ñaŋgi-ma wur-ma-ñ gi-nara-bayi waŋgij.
   you Sg-Suf 3Du-say-PP Ana-that-Foc child
4. Yowo, Ø-ma-ñ.
   Yes, 3Sg-say-PP

1. They (du.) descended to Ajajir, they reached it.
2. They didn't coil up (i.e., they had not yet coiled themselves up) (when) directly a child came upon them.
3. 'Is it you?' they said to that child.
4. 'Yes,' he said.

(The toponym Ajajir is an Alawa word; phonologically vowel-initial words do not occur in Maŋarayi.) Once introduced, the child is established as a participant to whom anaphoric reference can be made. Note the lack of prefix on waŋgij; preceding and following context, in which much of the pythons' activities have to do with initiation ritual, make it clear that the child is a boy.

Correct usage in Maŋarayi is that proper names and subsection terms are prefixed for noun class except if vocative. Thus the ordinary usage is as for illustrious persons in a language like Italian (il Tintoretto etc.), where each such figure presumably constitutes a class of one member. The Maŋarayi usage, however, appears to have nothing to do with specification of uniqueness or definiteness.

2.1.1.11. Indefiniteness in the noun

It has been shown that a construction with singular noun (or zero cross-reference in the verb) can be interpreted as referentially non-specific 'they, people in general'. A further example of this, which can be contrasted with referentially specific subject, is found in another passage of the olive python text. As the pythons went along, they began at a certain point in their travels to speak Alawa, as they were coming into Alawa country. The speaker remarked:

Mayawa-bayi alawa wur-ŋani+yu-j; ŋananganawa Waḷiburu
now-Foc Alawa 3Du-speak-PP from there Alawa

wa-Ø-ma-ma-n.
Hab-3Sg-talk-Aug-Pres
'Now they spoke/began to speak Alawa; from there (i.e., a certain place) they always talk Alawa' (i.e., that place is associated with Alawa as traditional language of the area).

The verb form wa-Ø-ma-ma-n is a habitual verb form (see 2.1.3.-IIe) giving the meaning 'customarily, traditionally, habitually'. Its 3Sg subject 'they' (Alawa people in general) contrasts with the 3Du pronominal cross-referencing specific participants, the olive pythons. It is important to note, however, that sometimes non-specific 'they' *is* rendered by 3Pl cross-referencing pronominal.

Whenever a noun is overtly number-suffixed, it cannot be interpreted as non-specific within the text (that is, the participants referred to are either known from preceding speech, or are about to figure as specific participants), even if cross-reference in the verb is singular, i.e., happens not to be consistent with the noun (see 2.1.1.8.6.8).

There is an indefinite pronoun ŋayaŋayag 'some' (in the sense of an indefinite plural number). It is a reduplicative form of ŋayag 'another, (a) different (one)'. With ŋayaŋayag, cross-reference in the verb is almost always singular. The following possibilities may now be compared:

ŋa-malam Ø-man+bu-ni Ø-yiram-ji-ni.
MNom-man 3Sg-run-PC 3Sg-cross over-MP-PC
'A/the man ran and crossed over'.
'People/Aborigines ran and crossed over'.

Malam-gaḷa wuḷa-man+bu-ni wuḷa-yiram-ji-ni.
man-Pl Nom 3Pl-run-PC 3Pl-cross over-MP-PC
'The men/people (that we know about) ran and crossed over'.

ŋayaŋayag Ø-man+bu-ni Ø-yiram-ji-ni.
some 3Sg-run-PC 3Sg-cross-MP-PC
'Some ran and crossed over' (we may or may not know about them yet).

The tendency to clearly distinguish an indefinite plural construction with reduplicative ŋayaŋayag and singular verbal cross-reference, though fairly consistent, is not absolute. Indefinite animates cross-referenced as nonsingulars do occur, apparently more frequently in transitive subject and object functions than as intransitive subjects. An example is:

ŋayaŋayag wuyanba-bu-ni-wa
some 3Pl/3Pl-kill-PC-Suf
'They killed some' (people).

Other indefinite expressions ('someone, no-one' and so forth) are discussed in 2.1.2.6.

2.1a. Morphology of kin terms

2.1a.1. Basic stem morphology

No attempt is made here to explain the structure of the relationship system. For a diagram outlining the labelling of kin 'types', and brief remarks on subclass terms, see 5.1. See Appendix on avoidance speech style for a few comments about kin types needed to describe usage of the style.

Table 2.-5 shows forms for each singular kin term with: 1Sg, 2Sg and 3Sg propositi, and the vocative form. Vocative is always equivalent to that of 1Sg propositus without class/case prefixation, e.g., ŋaḷa-ŋañi 'my mother', ŋañi 'mother!'. Plural possessive forms are built on the 3Sg referential stems to which possessive suffixes are added. The term FF/FFZ always shows the full stem with nonsingular propositi, e.g., ŋa-muṛimuṛi-wuŋya 'their (Pl) FF/FFZ'.

The only instance of stem suppletion varying by propositus is found in the term 'mother'. The stem ŋañi- is used only for 1Sg propositus, the stem /ŋaḷa/ for all others. This has two allomorphs, nominative -ḷa- and accusative -ŋaḷa-. The form -ḷa- is used after vowel-final prefixes, thus also after ŋaya- in genitive/dative/purposive and local case forms. A complete paradigm with 3SgF propositus is:

Nom.	ŋaḷa-ḷa-ŋayawu	'her mother'
Acc.	ŋan-ŋaḷa-ŋayawu	
Gen/dat/purp	ŋaya-ḷa-ŋayawu	
Loc.	ŋaya-ḷa-ŋayawuŋ-gan	
All.	ŋaya-ḷa-ŋayawuŋ-gaḷama	
Abl.	ŋaya-ḷa-ŋayawuŋ-gana	

The dyadic terms (see 2.1a.2) are built on the stem ŋaḷa-.

Other categories have a single stem, sometimes showing minor phonological changes. These changes occur when certain possessive suffixes are added, as follows.

The regular 1Sg possessive suffix is -ŋanju, 2Sg -ŋaŋga (see 2.1.2.4.1 for the possessive suffixes and ordering in relation to other suffix categories). Most kin terms with 1Sg propositus omit the possessive suffix; that is, 1Sg propositus is the unmarked category. However, two stems do show a reduced 1Sg possessive suffix-form -nju which is never omitted. These are biṛa-nju 'my child' (male speaker) or 'my brother's child' (female speaker); and mara-nju 'my son's child'. Both forms show change of the stem vowel from i to a.

Most vowel-final stems show a reduced form -ŋga of the 2Sg suffix. These include stems in final a (ŋa-baḍa-ŋga 'your father'), and a few in which the final stem vowel becomes a before the reduced suffix (ŋa-guŋga-ŋga 'your MB'). One term shows change of stem vowel i to a before the 3SgM suffix as well, muṛa-ŋawu 'his FF/FFZ'.

One term, gagag 'MM/MMB', shows haplology with 2Sg and 3Sg propositi.

See 2.1.1.8.6.3 for the number/case suffixes used with kin terms. Number suffixes follow any possessive suffix (e.g., ŋaḷa-yilamburṛa-ŋga-wur 'your two father's sisters'), and case forms of course follow the number suffixes (jabjab-ŋaŋga-wu-ya-n-ŋan 'your (Sg) mother's fathers', Pl Acc). As mentioned in 2.1.1.8.6.3, with the stem form -(ŋa)ḷa- of 'mother', sometimes number/case suffixes used with ordinary nouns are found, but without intrusive morpheme -y_1a-. When the ordinary number suffixes are used, the usual ordering possessive suffix-number suffix is sometimes reversed. Thus one finds the alternatives:

ŋaḷa-ḷa-ŋga-wur 'your (Sg) two mothers'
ŋaḷa-ḷa-ŋga-ran
ŋaḷa-ḷa-ran-ŋaŋga

2.1a.2. Dyadic terms

Like many languages in the area, Maŋarayi has a set of terms which refer to relationships between pairs, or among larger groups, of kinsmen, e.g., 'mother and child', 'FF and SS', and the like. Where terms refer to the relation between a pair of kinsmen they will be called 'dyadic'; where they refer to the relation among larger numbers of people they will be called 'plural dyadic'. They are displayed in Table 5-3.

Only one dyadic term is built on a stem that is morphologically unrelated to any of the usual simple kin terms; this is yirag-ji 'father and child', alternative to baḍa-yi which is built on the usual simple term baḍa 'father'. The term yirag is used in avoidance speech style as a lexical replacement for baḍa. Otherwise, terms are formed by suffixing proprietive -y_2i to a stem to derive dyadic terms, and additionally, reduplication of the stem to derive plural dyadic terms.

Where usage is self-reciprocal, there is no choice as to the selection of the stem for the dyadic forms. Where the terms used for each other by

Table 2-5 Kin terms

Denotata (simplified)	Stem	1Sg	2Sg	3Sg (M)	Vocative
FF/FFZ	muṛimuṛi- muṛi-	muṛimuṛi	muṛimuṛa-ŋga	muṛa-ɲawu / muṛimuṛi-ɲawu	muṛimuṛi
FZ	yilambuṛa-	yilambuṛa	yilambuṛa-ŋga	yilambuṛa-ɲawu	yilambuṛa
F	baḍa-	baḍa	baḍa-ŋga	baḍa-ɲawu	baḍa
Z	baba-	baba	baba-ŋga	baba-ɲawu	baba
B-	yaba-	yaba	yaba-ŋga	yaba-ɲawu	yaba
B+ (see 5.1.1.)	wawa-	wawa	wawa-ŋga	wawa-ɲawu	wawa
C	biṛi-	biṛa-nju	biṛa-ŋga	biṛi-ɲawu	biṛa-nju
SC	mari-	mara-nju	mara-ŋga	mari-ɲawu	mara-nju
MF/MFZ	jabjab-	jabjab	jabjab-ŋaŋga	jabjab-ɲawu	jabjab
M	ɲañi, ŋala-	ɲañi	(ŋa)la-ŋga	(ŋa)la-ɲawu	ɲañi
MB	guŋgu-	guŋgu	guŋga-ŋga	guŋga-ɲawu	guŋgu
MBC	miñjari-	miñjari	miñjari-ŋaŋga	miñjari-ɲawu	miñjari
DD	jamañwa-	jamañwa	jamañwa-ŋaŋga	jamañwa-ɲawu	jamañwa
MM/MMB	gagag-	gagag	gag-ŋaŋga	gag-ɲawu	gagag
MMBC, MMBSSC	gaɲji-	gaɲji	gaɲji-ŋaŋga	gaɲji-ɲawu	gaɲji
ZDC	wambuluga-	wambuluga	wambuluga-ŋga	wambuluga-ɲawu	wambuluga
FM/FMB	mimi-	mimi	mima-ŋga	mimi-ɲawu	mimi
WC	jaya-	jaya	jaya-ŋga	jaya-ɲawu	jaya
W, H	galŋbam-	galŋbam	galŋbam-ŋaŋga	galŋbam-ɲawu	galŋbam
MBSC (man's actual SW, DH)	mayaṛa-	mayaṛa	mayaṛa-ŋga	mayaṛa-ɲawu	(mayaṛa)
(aff.) M/MB	gambuṛa-	gambuṛa	gambuṛa-ŋga	gambuṛa-ɲawu	(gambuṛa)
MMBSC (subclass of gagag)	birwuyin-	birwuyin	birwuyin-ŋaŋga	birwuyin-ɲawu	(birwuyin)

kinsmen in a particular relation are not self-reciprocal, a choice potentially exists between the two simple stems. Where a choice exists between terms designating junior and senior kinsmen, that denoting the senior is the basis of the dyadic term. Where a choice exists between opposite sex siblings (brother and sister), the term designating the female is used.

Thus the simple stem baba which always has a female referent is the one used to form the dyadic term 'brother and sister', as well as 'sister and sister'. The simple stem wawa which only can have male referent, is used to form the dyadic 'brother and brother'.

The dyadic term designating 'FF/FFZ and SS/SD' is built on a reduced form of the stem for FF/FFZ muṛi-, to which is added (probably a kind of collective) suffix -wa. This term can denote 'siblings together' as well as grandparent and granchild; it is used as an alternative to the sibling dyadic terms. However, muṛi-wa-yi is the dyadic term which *must* be used by child for 'parent and parent's sibling', for whom usage of the regular sibling dyadic terms is considered disrespectful. Thus the term FF/FFZ, which as simple stem designates agnatic lineal kin of the second ascending generation, is the basis for dyadic terms designating agnatically related individuals within the same generation.

Dyadic terms may function as regular nouns with the usual case-suffixation, e.g., gagag-ji-wu 'for/of MM and DD', and so forth. As nonsingulars, they are usually not prefixed in the major syntactic functions; prefixation in other case functions is optional, and almost always omitted.

The dyadic terms are used as predicates in predicate nominal constructions, with independent pronoun or demonstrative specifying person and number of the kinsmen designated. Examples are:

ŋiṛ miñjari-yi burgaji-yaran
1ExDuNom MBC-Prop full-Du Nom
'We are full cross-cousins'.

ŋula yiliambuṛa-yi
2Pl Nom FZ Red-Prop
'You are (related as) father's sisters and brother's (man's) children'.

2.1.2. Pronouns

2.1.2.1. Personal pronouns

2.1.2.1.1. Use of free pronouns

Only first and second person forms are discussed under the heading 'personal pronouns'. Most forms which refer to third persons participate in a semantically selective system of distance contrasts. Because none of the first and second person forms do so, the two categories are distinguished as 'personal' versus 'demonstrative' pronouns.

Because the burden of maintaining participant co-reference is borne by the cross-referencing pronominals, independent pronouns tend to be infrequent in most contexts. With reference to such languages, it is sometimes said that the occurrence of pronouns is purely 'emphatic' or 'stylistic'. This is only apt if a fairly large range is given to the general term 'stylistic' — that is, if its meaning is not limited to that of 'optional frills'.

First, for example, in answer to questions of the type 'Who is it?' or the conventional kind of salutation (see 3.3.4) 'Is it you?', the answer is expressed as a nominative pronoun, e.g., ŋaya '(it is) I'.

Second, since participants are obligatorily cross-referenced in the inflecting verb, it would be necessary in parallel clauses of certain kinds to constantly repeat inflecting verbs, if the pronouns were not available

to represent only that part of the second verb where participants contrast with those mentioned in the first clause (see 1.3.2). The availability of the pronouns makes ellipsis possible, as in this example:

wa-ŋa-ŋaṛgŋaṛg+ma-wu, ŋinba-jurañ+bu-n, ñanba-bu-n
Irr-1Sg-sing-Aux-DI 3Pl/1InDu-'sing'-Pres 3Pl/2Sg-kill-Pres

waḍij ŋan.
also 1Sg Acc
'If I sing it, they'll 'sing' (ensorcell) you and me, they'll kill you, and me too'.

Third, certain contrastive meanings are expressed by pronouns. The meaning 'in turn', in the sense of sequential participant order, may involve verbal ellipsis under certain conditions. The kind of construction in which gaḷayjmingan 'in turn' occurs is often 'X Y's, Z Y's in turn'. In this case, the verb may be retained in the second clause since it contains a pronominal cross-referencing the new subject of the verb:

ŋaya miŋiwa ŋa-ya-j, ñaŋgi gaḷayjmingan ga-ña-yag.
1Sg Nom already 1Sg-go-PP 2Sg Nom in turn -3-2Sg-go
'I already went, you are going in turn'.

However, the verb *may* be omitted from such examples as the above, since the meaning is made clear by the presence of the pronoun: ñaŋgi gaḷayjmingan 'your turn'. This should perhaps be regarded as a phrase rather than an elliptical clause, but it has meaning only by virtue of an understood parallelism to the verb of the first clause. Alternatively but perhaps less frequently, the pronoun ñaŋgi may be omitted when the verb is repeated with the new subject cross-referenced. But if the construction is of the kind 'X Y's, Z W's', the verb is present:

ŋaya ŋa-ya-j, ñaŋgi gaḷayjmingan jaḍ ga-ña-jaygi-n.
1Sg Nom 1Sg-go-PP 2Sg Nom in turn return -3-2Sg-Aux-Pres
'I went, you in turn are going back/returning'.

That is, the use of gaḷayjmingan often involves, but does not require, identity of the verb in two parallel clauses of this kind. Note that the contrastiveness of such parallelism is a circumstance under which a pronoun generally occurs in the first clause as well as the second. Though gaḷayjmingan does not presuppose cross-clause identity of the verb, it seems to be appropriate only where the contrasted NPs of the two clauses are *different*. Thus sentences like the following were not found to occur:

ñaŋgi miŋiwa ña-ya-j, gaḷayjmingan jaḍ ga-ña-jaygi-n.
2Sg Nom already 2Sg-go-PP in turn return -3-2Sg-Aux-Pres
'You already went, now are going back in turn'.

In short, gaḷayjmingan expresses contrastiveness between two NPs across clauses and sometimes also a verbal contrast, but not *just* a verbal contrast. The parallelism is of a kind that makes likely the expression of *both* NPs as pronouns, and the contrastiveness is made salient by gaḷayjmingan.

Fourth, independent pronouns are inflected for all non-syntactic case functions; their occurrence in non-syntactic functions is marked only by the pronouns themselves (since these functions cannot be cross-referenced in the verb).

2.1.2.1.2.-4. Person/number/case categories in the personal pronouns

The personal pronouns pattern nominative-accusatively. There is a full set of case forms. Dative forms are the same as those which function as possessive suffixes; genitive forms for the most part are built directly on these, and local forms on the genitive. There is an inclusive/exclusive contrast in first person nonsingular forms, and additionally a trial 'you, I and another'. Second person distinguishes singular-dual-plural. Thus

the complete set of person/number categories is 1Sg, 1InDu, 1ExDu, 1InPl, 1ExPl, 1Trial, 2Sg-Du-Pl. Identical person/number categories occur in cross-referencing intransitive subject pronominals, and the forms used are mostly identical, otherwise similar, to nominative forms of the independent pronouns.

2.1.2.1.5.-6. Distance categories in third person forms

See demonstrative pronouns, 2.1.2.5.

2.1.2.1.7. Anaphoric third person forms

See discussion of anaphora in 1.5.

2.1.2.1.8. Noun class distinctions in pronouns

Noun class distinctions are not expressed in the personal pronouns; see discussion of singular demonstrative pronouns in 2.1.2.5.2.2.

2.1.2.1.9. Pronominal forms indicating social relationships

Not applicable.

2.1.2.1.10. Morphology of the personal pronouns

Forms of the personal pronouns are displayed in Table 2-6. There are segmentable pronominal bases, though in the first person forms it is not clear that an entirely consistent semantic characterization can be given them.

1Sg Nom ŋaya is similar but not identical to the 1Sg intransitive prefix ŋa-. There are two first person nonsingular pronominal bases, ŋa- and ŋi-. On the first are built 1Trial by addition of what is ordinarily dual -r, and 1InPl by addition of ordinarily plural element -ḷa. Thus the system built on ŋa- has the structure (irregular singular)-reduced number-augmented number (rather than the normal association of -r with dual and -ḷa with plural).

However, the full inclusive system is not built on ŋa-; ŋi- is the pronominal base for 1InDu as well as IExDu and 1ExPl. 1InDu has no number element, and is paradigmatically like the singular categories; note its accusative form ŋi-n is parallel to 1Sg Acc ŋa-n and 2Sg ña-n, not to other accusatives with number element -r(a). One obtains structural parallelism only by considering 1InDu formally a part of the singular system 1Sg, 2Sg, 1InDu, and the remaining forms as follows:

	Inclusive	Exclusive
Reduced Number	ŋa-r	ŋi-r
Augmented Number	ŋa-ḷa	ŋi-ḷa

I continue to use labels which refer to the person/number distinctions expressed (e.g., 1InDu), rather than to the formal parallels.

Note that all first person forms have initial ŋ-. This may be the result of historical levelling. Some related languages show what may be similar historical levelling, but in different directions: in Mara, for example, all first and second person forms have initial n except for 1Sg ŋina-ra (Heath 1981).

The 2Sg pronoun ñaŋgi has the corresponding cross-referencing pronominal ña-. Second nonsingular forms have pronominal base ṇu- to which are added dual -r and plural -ḷa.

Accusative singulars are built by addition of object marker -n to pronominal bases. Those pronouns with -r in the nominative have the form -ra- in the accusative to which is affixed nonsingular object marker -ŋan. Plural accusatives have number element -ya- which alternates (as elsewhere) with nominative -ḷa-), followed by what appears to be object marker -n-

and nonsingular object marker -ŋan. Note that, as in the number suffixes, plural accusatives have -n- while those with -ra- do not.

As noted above, the dative/purposive forms are the same as possessive suffixes. They cannot be predicted directly from any other form. The dual or reduced number marker in the dative/purposive has the form -ra, just as in the accusative. The plural or augmented forms are characterized by an element -ŋ̣ya-.

Table 2-6 Independent pronouns: paradigms

	1Sg	2Sg	1InDu
Nom.	ŋaya	ñaŋgi	ŋi
Acc.	ŋa-n	ña-n	ŋi-n
Dat/Purp.	ŋanju	ŋaŋga	ŋiga
Gen.	ŋanju-gu	ñagaŋ-gu	ŋigaŋ-gu
Loc.	ŋanjugu-yan	ñagaŋgu-yan	ŋigaŋgu-yan
All.	ŋanjugu-ḷama	ñagaŋgu-ḷama	ŋigaŋgu-ḷama
Abl.	ŋanjugu-wana	ñagaŋgu-wana	ŋigaŋgu-wana
	1ExDu	1ExPl	
Nom.	ŋi-r	ŋi-ḷa	
Acc.	ŋi-ra-ŋan	ŋi-ya-n-ŋan	
Dat/Purp.	ŋi-ra	ŋi-ŋ̣ya	
Gen.	ŋi-raŋ-gu	ŋi-ŋ̣yaŋ-gu	
Loc.	ŋi-raŋ-gu-yan	ŋi-ŋ̣yaŋ-gu-yan	
All.	ŋi-raŋ-gu-ḷama	ŋi-ŋ̣yaŋ-gu-ḷama	
Abl.	ŋi-raŋ-gu-wana	ŋi-ŋ̣yaŋ-gu-wana	
	1Trial	1InPl	
Nom.	ŋa-r	ŋa-ḷa	
Acc.	ŋa-ra-ŋan	ŋa-ya-n-ŋan	
Dat/Purp.	ŋa-ra	ŋa-ŋ̣ya	
Gen.	ŋa-raŋ-gu	ŋa-ŋ̣yaŋ-gu	
Loc.	ŋa-raŋ-gu-yan	ŋa-ŋ̣yaŋ-gu-yan	
All.	ŋa-raŋ-gu-ḷama	ŋa-ŋ̣yaŋ-gu-ḷama	
Abl.	ŋa-raŋ-gu-wana	ŋa-ŋ̣yaŋ-gu-wana	
	2Du	2Pl	
Nom.	ŋ̣u-r	ŋ̣u-ḷa	
Acc.	ŋ̣u-ra-ŋan	ŋ̣u-ya-n-ŋan	
Dat/Purp.	ŋ̣u-ra	ŋ̣u-ŋ̣ya	
Gen.	ŋ̣u-raŋ-gu	ŋ̣u-ŋ̣yaŋ-gu	
Loc.	ŋ̣u-raŋ-gu-yan	ŋ̣u-ŋ̣yaŋ-gu-yan	
All.	ŋ̣u-raŋ-gu-ḷama	ŋ̣u-ŋ̣yaŋ-gu-ḷama	
Abl.	ŋ̣u-raŋ-gu-wana	ŋ̣u-ŋ̣yaŋ-gu-wana	

Maŋarayi is the only language in its genetic subgroup to have a nonsingular accusative marker. This supports the supposition that within its subgroup, Maŋarayi is innovative in its shift from ergative-absolutive to nominative-accusative patterning in noun classes and the independent pronouns.

Genitive pronouns are built on the dative/purposive set by adding the suffix -w_1u to a nasal grade in -ŋ. Two slight irregularities are 1Sg ŋanju-gu instead of *ŋanjuŋ-gu, and 2Sg ñagaŋ-gu where analogically one expects *ŋaŋgaŋ-gu.

Local forms, built on the genitive, show no irregularities.

2.1.2.1.11. Tense agreement

Not applicable.

2.1.2.1.12. Indexing of social relationships by pronominal form

In the avoidance speech style, direct address to avoidance category relatives is possible but should be accomplished by use of the second person plural pronoun (and verbal cross-reference) to a single avoidance category kinsman. Reference to a single avoidance relation also involves escalation of number category 3Sg ⟶ 3Pl. See Appendix for full exemplification.

2.1.2.1.13. Indefinite pronouns

There are no special nonspecific indefinite pronouns. For the usual indefinite construction, see 2.1.1.11; also indefinite usage of interrogative pronouns in 2.1.2.6.

2.1.2.1.14. Specific indefinite pronouns

Again, see interrogative pronouns in 2.1.2.6.

2.1.2.1.15. Emphatic usage of pronouns

A pronoun in appropriate case form, suffixed with the clitic -bayi (see 1.12) can stand in apposition to a cross-referencing pronominal and expresses that a particular participant is being spoken of as opposed to some other(s).

ŋaya-bayi ga-ŋa-yag
1Sg Nom-Foc -3-1Sg-go
'As for me, I'm going' or 'Me, I'm going'.
buy? ñan-wu-na ñan-bayi
show 3Sg/2Sg-Aux-PP 2Sg Acc-Foc
'He showed *you*' (i.e., you should know, not me).
'You, he showed'.

These might be called 'emphatic' or 'indirectly contrastive', in that the construction establishes a strong link between pronoun and cross-referencing pronominal, thus implying the exclusion of any other participants from the meaning expressed by the verb.

2.1.2.1.16. Complex pronouns

Not applicable.

2.1.2.1.17. Appositive uses of pronouns

Nonsingular pronouns can be used in apposition to correspondingly number-marked nouns to express meanings like 'we two men':

ŋiḷa malam-gaḷa ga-ŋiḷa-ŋi ŋa-waḷayjñin-gan
1ExPl Nom man-Pl Nom 3-1ExPl-sit NLoc-shade
'We men are sitting in the shade'.

Pronouns of collective plural meaning can be formed on nonsingular nominatives by suffixation of a collective number element -yan (see also 2.1.2.5.9.8). These form 'selective' collectives; e.g., the form based on 1InDu, ŋi-yan, means 'you and I and our group, you and I and others'. Such collective-marked pronouns can stand in apposition to nouns inflected like predicate nominals, together serving to specify an NP:

ŋi-yan ŋi-gaḍugu ŋi-ya-j
1InDu-Coll 1InDu-woman 1InDu-go-PP
'We women (you and I and others) went'.

The notion 'several (of us/you' etc.) can be expressed by apposition of morgo-yaḷa 'several, a few' to a verb cross-referenced for the appropriate nonsingular category:

ŋuḷa morgo-yaḷa ga-ḷa-ŋi balayarg
2Pl Nom several 3-2Pl-sit in between/middle
'You few/several of you are sitting in between/in the middle'.

The use of forms of the number 'one' in various kinds of appositive and predicative constructions was illustrated in 2.1.1.8.6.9.

2.1.2.1.18. Compound reduction

Maŋarayi permits 'compound reduction' (Hale 1966:321), in which a pronoun and a possessed kin term, where pronoun and propositus of the kin term are co-referential, are cross-referenced in the verb by a pronominal representing combined person and number of the compound expression. In the first example below, 'I' and 'my father' are cross-referenced by 1ExDu prefix ŋir-, in the second 'I' and 'my fathers' by 1ExPl ŋiḷa-.

ŋaya ŋa-baḍa ŋir-ya-j
1Sg Nom MNom-father 1ExDu-go-PP
'My father and I went'.

ŋaya ŋa-baḍa-wuḷa ŋiḷa-ya-j
1Sg Nom MNom-father-Pl Nom 1ExPl-go-PP
'My fathers and I went'.

This sort of reduction is also found with regular nouns, where the pronominal prefix expresses person and number of an entire group in which the referent of the noun is included:

buy? ñan-wu-ni ḷa-ṇi ŋaḷa-bugbug-ŋiga
show 3Sg/2Sg-Aux-PC 2Pl-sit PC FNom-old person-ours (InDu)
Yumbuyan?
(place)
'Did our old woman show you when you-all (including old woman) were camping out at Yumbuyan?'

The referent of 'old woman' is included within the group of people cross-referenced by ḷa- 'you (pl)'. In such compound reduction, there is selective emphasis of the participant singled out for expression by an external noun. For other means of expressing selection of this sort, see 2.2.1.1b.

2.1.2.1.19. Secondary pronoun system

See preceding section.

2.1.2.1.20. Case distinctions in pronouns

See 2.1.2.1.2.-4. Use of nominative pronouns has been illustrated in preceding sections. Brief remarks on uses of other case forms follow.

Dative/purposive pronouns are used to mark the beneficiary or other indirect object types of transitive and intransitive verbs, including the goal of a verb expressing purposive activity. Some examples of dative/purposive pronouns are:

ŋa-mi?+mi-ñ ŋaŋga
1Sg-look for-PP 2Sg
'I looked for you'.

ŋanba-ŋaŋ?+ma-ñ ŋaŋga
3Pl/1Sg-ask-PP 2Sg
'They asked me about/for you'.

ja-Ø-yiyi-ji-n ŋaṇya
3-3Sg-be afraid-MP-Pres 1InPl
'He is afraid of us'.

Genitive pronouns function as nominals meaning 'mine', 'yours' and so on. As adjectives, they may be used in apposition to genitive NPs to further specify the possessive relation.

ŋanjugu ṇa-baḍa-(ŋanju) ŋan-ma-ṛi
1Sg Gen MNom-father-(mine) 3Sg/1Sg-say-PC
'My father told me'.

ṇuṇyaŋgu ṇa-muyg-ṇuṇya ŋan-ḍaḷag
2Pl Gen MNom-dog-yours(Pl) 3Sg/1Sg-bite PP
'Your(Pl) dog bit me'.

When functioning as nouns, genitive pronouns in transitive and intransitive subject functions are sometimes prefixed for noun class/case of the (deleted) noun which they represent, but prefixation is more commonly omitted in all major syntactic and local functions.

(ŋa-)ṇuṇyaŋgu ŋan-ḍaḷag
(MNom) 2Pl Gen 3Sg/1Sg-bite PP
'Yours bit me'.

Genitive pronouns may function as predicates in predicate nominal constructions:

(ŋaya) ŋa-ṇuṇyaŋgu
1Sg Nom 1Sg-2Pl Gen
'I am yours(Pl)'.

Local independent pronouns have the same semantic range as nouns marked for those case functions. Examples are:

ṇuṇyaŋgu-yan baḷ? wuḷa-ṇi-ñ
2Pl-Loc sit 3Pl-Aux-PP
'They sat down/camped with you(Pl)/at your place'.

ŋanjugu-ḷama ja-wuḷa-ṇiŋa-n
1Sg-All 3-3Pl-come-Pres
'They are coming towards me/mine' or ' my camp/place'.

ŋanjugu-wana wuḷa-may
1Sg-Abl 3Pl/3Sg-take PP
'They took (it) from me/mine'.

2.1.2.2. Reflexive

There are no special reflexive pronouns. Reflexive is marked by a verbal suffix (2.1.3.1.2.3), the NP cross-referenced by intransitive pronominals, and may also be specified by independent nominative pronoun. The reflexive category is only used in Maŋarayi where subject and object are co-referential. Corresponding to instances in English where the reflexive is in other than direct object function (e.g., indirect object 'I bought it for myself'), Maŋarayi can use either independent dative or genitive pronoun:

ŋa-may ŋanju-gu
1Sg/3Sg-get PP 1Sg Gen
'I got mine', i.e. 'I got it for myself'.

2.1.2.3. Reciprocal

There are no special reciprocal pronouns; reciprocal is marked by the same verbal suffix forms as reflexive, and the reciprocally-acting NPs are cross-referenced by appropriate nonsingular subject pronominals. The adverb ṇan?ṇanwa means 'together, evenly, at the same pace' and can be used to emphasize the reciprocal nature of an action:

wuḷa-bu-yi-ni ṇan?ṇanwa
3Pl-hit-Recip-PC equally
'They hit each other equally/back and forth'.

2.1.2.4. Possessive pronouns

Uses of genitive pronouns were illustrated in 2.1.2.1.20. Genitive pronouns are capable of functioning as independent nominals.

2.1.2.4.1. Possessive suffixes

The possessive suffixes are listed in Table 2-7. In first and second persons, the forms are the same as dative/purposive independent

pronouns. In the third person, masculine and feminine forms are distinguished in the singular; dual and plural constitute the nonsingular. In 2.1.2.5.2.1 it is shown that 3SgM ŋawu and 3SgF ŋayawu are part of a 'non-deictic' third person system. That is, the forms ŋawu and ŋayawu are not semantically selective for distance; they are equivalent to English 'his' and 'hers'. 3Du and 3Pl -$w_2$ura and -w_2uŋya respectively also conform to the pattern of other pronominal dual and plural dative/purposive forms, built on a third person base -w_2u- by addition of -ra and -ŋya.

2.1.2.4.2.-5. Uses of the possessive suffixes

These suffixes are used to express possession of all categories of nouns, including body parts and relationship terms. Their use with relationship terms is limited only by the fact (mentioned in 2.1a.1) that 1Sg is almost always an unmarked propositus. However, there is a reduced 1Sg form -ŋju (also reduced 2Sg -ŋga) which is indispensable in 1Sg propositus forms of some terms (see as above). The suffixes are also used to mark the part in part-whole expressions such as wijwij buḍ-ŋawu 'possum fur' (see 2.1.1.4.6.1.-2).

Table 2-7 Possessive suffixes

1Sg	-ŋanju
2Sg	-ŋaŋga
1InDu	-ŋiga
1ExDu	-ŋira
1ExPl	-ŋiŋya
1Tr	-ŋara
1InPl	-ŋaŋya
2Du	-ŋura
2Pl	-ŋuŋya
3SgM	-ŋawu
3SgF	-ŋayawu
3Du	-$w_2$ura
3Pl	-w_2uŋya

Nouns modified by possessive suffixes can of course occur in all case functions. In nouns inflected with non-zero number/case elements, the order of constituents within the word is:

noun stem-possessive suffix-number/case

Before most non-zero suffixes, except kin number suffixes (see 2.1.1.8.6.3), the possessive elements occur in nasal grade with -ŋ (3.4.1.2.8). Following a nasal, 'hardened' or stop-initial allomorphs of number or case suffixes occur. It must be noted that the frequency of forms maximally inflected as per the above schema is not high, given the preference (discussed in 2.1.1.8.2.-3) for circumventing the expression of number by suffixes when other means are available. Nevertheless full forms occur. Examples of noun inflection containing possessive suffix forms are:

ŋan-gaḍugu-ŋawu wur-jiwi-j
FAcc-woman-his 3Du/3Sg-take away-PP
'They (Du) took his wife from him'.

Ø-yaba-wana jaḍ ŋa-jaygi-ni Ø-baŋam-ŋawuŋ-gana
MAbl-brother return 1Sg-return-PC NAbl-camp-his
'I returned from my brother's camp'. (female speaker or male speaker younger than referent)

ŋaya-la-ŋayawu ŋa-baḍa-ŋayawuŋ-gu Ø-ŋiṛi wura
FDat-mother-hers MDat-father-hers 3Sg/3Sg-bring PC 3Du Dat
'She brought (it) for her mother and father'.

yaṛ? ja-Ø-waṛ ŋa-gaya-ŋayawu ŋa-balayi
cover 3-3Sg/3Sg-Aux NErg-hair-hers NErg-big
'She is covering it up with her big (mop of) hair'.

ŋa-baŋam-ŋanjuŋ-gan ja-wuḷa-ŋi
NLoc-camp-mine 3-3Pl-sit Pres
'They are sitting at my camp'.

2.1.2.4.3. Possessive forms

See Table 2-7.

2.1.2.4.4. Case marking in possessive suffixes

Case function of the possessive-marked noun is expressed by the usual prefix and suffix combinations (2.1.1).

2.1.2.5. Demonstratives: General

The demonstratives constitute the most complicated and, in some ways, most irregular part of nominal morphology. The existing forms suggest a major division into two categories: demonstrative pronouns and demonstrative adverbs. The demonstrative pronouns comprise a system for locating referents on a scale of proximity. As we shall see, the basic distance contrast within this set is probably best described as 'distant' versus 'not distant'. The demonstrative adverbs refer to location in space and time. Certain adverbs of spatial location may also be used as demonstrative pronouns, and some demonstrative pronoun forms can be built on adverbial bases. Thus the distinction between 'pronoun' and 'adverb' is not categorical.

The demonstrative pronouns encode the following distinctions:

1. Distance: 'distant' versus 'not distant' and 'neutral'.
2. Number: singular-dual-trial-plural.
3. Nominal class (singulars only): masculine-feminine-neuter.
4. Head of NP versus modifier within nominal group.

It will be seen that there are some forms which are not semantically selective for expression of a distance contrast. Like the 3Sg possessive suffixes -ŋawu and -ŋayawu discussed in 2.1.2.4.1, they may be considered 'non-deictic' or 'neutral' in this respect. However, within the overall system of demonstratives, there are forms that positively express a value 'distant', and in contrast to these, a set of forms which has a specifiable value 'not distant'. As is frequently the case in demonstrative systems, the fact that referents can be located within text or discourse as well as context makes it necessary to clarify the extent to which 'distance' can be viewed as a spatial category, and the extent to which it must be viewed as a category relative to both spatial location and the development of discourse.

2.1.2.5.1.-22. Semantics of the distance categories

The distant category is used to locate referents fairly distant from both speaker and addressee. The referents need not be invisible, but they may be. Thus the distant has a positive characterization 'away from speaker and addressee'. However, the distant and (especially) non-distant masculine and feminine demonstratives are not of high textual occurrence, nominative case probably being of highest frequency. This is due to two factors. First, where a referent is known or has been previously identified, deixis is not of great importance, and the verbal cross-referencing system can do the work of keeping track of referents in syntactic case functions. Second, for non-syntactic case functions there exists the

system of 'non-deictic' third person forms, which are much more common than any of the distant or non-distant singulars except nominative and accusative forms, which are first and second most frequent, respectively. The only commonly-used anaphoric demonstrative form is gi-nara(-bayi) (see 1.5.1.5).

These factors, especially the existence of non-deictics for all but nominative forms, give the distant/non-distant contrast a special character. Non-distant demonstratives can be used to cover the area in the vicinity of speaker, but their use is also extended to the vicinity of the addressee. In normal speech the category is often enlarged spatially to encompass a fairly large area relatively near speaker and adressee but perhaps equidistant from both. In this way, the non-distant often seems to extend into the area for which we would normally use 'that'. The reason for this seems to be that the category can be used for referents which have become situationally clear to speaker and adressee, even if they are at some distance. Thus it is possible to say ŋiñja-ba ṇa-ri-wa 'Who is it?' (M) of someone who is distant from both, but still generally visible. If the referent is not visible but only mentioned in speech, then the distant category seems to be more frequently used, but there is some variation here between distant and non-distant. This does not seem remarkable when the range of difference in English demonstrative usage, for example, is considered.

2.1.2.5.1.23. Functions of neuter nara-bayi: discourse reference

The neuter form nara-bayi is of extremely high text frequency. Though as noted above it may be used for both masculine and neuter referents, very often it serves as discourse anaphor, where the referent may be (1) a particular nominal; (2) the content of a more extended stretch of preceding speech; (3) a witnessed event or interaction, and sometimes even (4) an idea which the speaker has not yet uttered, but is about to, i.e., its reference may be cataphoric. The fact that a demonstrative pronoun is used for this range of functions, and that nara-bayi is primarily a neuter form, makes the situation rather parallel to that of English 'it' and the 'that' of textual as well as situational reference. The demonstrative nara-bayi is frequently proposition-initial, since it serves to bring forward a topic in terms of its relation to one of the kinds of referents mentioned above. Following are some examples of nara-bayi:

1. Waḷur ṇa-ŋayag-bayi ṇa-ŋirmu ŋawumbawa junbura Ø-ṇiṇa-ñ
   turn off MNom-other-Foc MNom-wallaby one straight 3Sg-come-PP

   Ø-ḍiwiṇḍag.
   3Sg/3Sg-reach PP

2. Wuḍanji-wana Ø-ṇiṇa-ñ.
   place-Abl 3Sg-come-PP

3. Nara-bayi miṛiṛib ḍalala ja-Ø-ṇi.
   that-Foc palm sp. line 3-3Sg-sit

   1. Another wallaby turned off, one came straight on and reached it.
   2. He arrived from Wuḍanji.
   3. That's (where) tall palms are standing in a line.

Here the referent is Wuḍanji. Note that nara-bayi is caseless no matter what the function of its referent in a preceding clause, or its own function within the clause.

It is sometimes difficult to tell, perhaps indeterminate, whether the referent of nara-bayi is a nominal only or a concept encoded in a more extended stretch of speech, up to and including the level of an entire clause. The following example illustrates how the referent of nara-bayi

may be difficult to establish, and that what is connoted by the anaphoric usage may be wide-ranging:

1. Gurawgurawg ŋayagjiwa Ø-ṇidba-ṛi Ø-maŋi
   channel-bill cuckoo nothing/merely 3Sg/3Sg-have-PC NAbs-song

   Ø-ḍaymingan.
   NAbs-song

2. Nara-bayi ḍaymingan, ṇa-juŋguwan-gan wuṛay ḍarʔma ja-Ø-waṛ.
   that-Foc sacred NLoc-ceremony after emerge 3-3Sg-Aux

3. Gana ṇa-ḍargmin-gu-bayi ga-ṇuyan-ma.
   but NPurp-brolga-Foc -3-1Sg/2Pl-tell

4. Nara-bayi ŋaniŋani-yi, gujiga-bayi wawg ja-Ø-mi.
   that-Foc language red-Prop initiation songs-Foc follow 3-3Sg/3Sg-Aux

   1. Channel-bill cuckoo merely had sacred songs.
   2. That is sacred, it (the song) will come out later in ceremony (i.e., will be performed later).
   3. But I'll tell you-all about brolga.
   4. That's (only) with language, it follows the initiation songs.

(For use of the deprecatory ŋayagjiwa, see 1.4.3). The first occurrence of nara-bayi in 2 may have as referent either 'song', or the entire sacred repertoire associated with channel-bill cuckoo. The second occurrence in 4 could either have 'brolga' or the repertoire associated with this mythic figure as referent, described as consisting of language (only?); alternatively, it could refer to the very act of telling about brolga which speaker is about to begin, i.e., be situationally cataphoric. In this sense it would mean 'I'm going to tell about it only in words', in contrast to the remark about channel-bill cuckoo, with whom sacred songs have been associated.

See 1.5.1.5 for discussion of the neuter demonstrative as nominal anaphor.

2.1.2.5.2. Demonstrative pronoun forms

2.1.2.5.2.1. Non-deictic forms

It is simplest to begin with the 'non-deictic' forms, shown in Table 2-8. These may be viewed as the extension of the paradigm of which dative/purposive ṇawu and ŋayawu are a part, in that they embody number and class distinctions but are not semantically selective for distance. They are equivalent to English 'his', 'hers' and 'theirs' Du/Pl in various case forms. They are similar to the personal pronouns in that local case forms are built on the genitive. The genitive forms function as nominals:

ṇa-naŋ-gu ŋan-wu-na, Ø-wuṛir-ŋanju Ø-wayag
his 3Sg/1Sg-give PP NAbs-fishing line-mine 3Sg-fall MP PP

ṇa-ŋugu-yan
NLoc-water

'He gave me his, my fishing line fell in the water'.

Du and Pl forms are built on third nonsingular base /w$_2$u/ by the addition of dual -ṛa and plural -ṇya, just as in dative/purposive forms of personal pronouns. The genitive is built on the dative, and local forms on the genitive. In the singulars, however, genitive is not built on the corresponding dative/purposive forms ṇawu and ŋayawu. Their prefixes and suffixes are familiar, but -na(ŋ)- is a demonstrative base which occurs in certain *distant* demonstratives. (See 3.2.1.2.2 for identification of this as one of the few morphemes with underlying initial alveolar nasal.)

2.1.2.5.2.2. Singular demonstrative pronouns

The singular demonstrative pronouns are shown in Table 2-9. There is no distinctively neuter 'non-distant' form; the neuter distant paradigm is deficient. It contains only one 'caseless' form, nara- (bayi), approximately 'that', which mostly is found with focus clitic -bayi. In fact the entire form is sometimes suffixed in purposive meaning, nara-bayi-wu 'for that', but *nara-wu is not found. This form is the most frequently used demonstrative in Maŋarayi and occurs in any syntactic function as either modifier or head:

jagina-ba nara Ø-ḷandi
what-Foc that NAbs-tree
'What is that tree/what kind of tree is that?'

Table 2-8 Third person 'non-deictic' forms

	3SgM	3SgF
Dat/Purp.	ṇa-wu	ŋaya-wu
Gen.	ṇa-naŋ-gu	ŋaya-naŋ-gu
Loc.	ṇa-naŋ-gu-yan	ŋaya-naŋ-gu-yan
All.	ṇa-naŋ-gu-ḷama	ŋaya-naŋ-gu-ḷama
Abl.	ṇa-naŋ-gu-wana	ŋaya-naŋ-gu-wana
	3Du	3Pl
Dat/Purp.	wu-ra	wu-ṇya
Gen.	wu-raŋ-gu	wu-ṇyaŋ-gu
Loc.	wu-raŋ-gu-yan	wu-ṇyaŋ-gu-yan
All.	wu-raŋ-gu-ḷama	wu-ṇyaŋ-gu-ḷama
Abl.	wu-raŋ-gu-wana	wu-ṇyaŋ-gu-wana

Table 2-9 Singular demonstrative pronouns

Non-distant

	M, (N)	F
Nom.	ṇa-ri-wa	ŋaḷi-wa
Acc.	ṇi-ŋgi(-wa)	ŋan-gi(-wa)
Gen/Dat/Purp.	ṇa-wu-wa	ŋaya-wu-wa
Loc.	ṇa-wu-wa-yan	ŋaya-wu-wa-yan
All.	ṇa-wu-wa-ḷama	ŋaya-wu-wa-ḷama
Abl.	ṇa-wu-wa-wana	ŋaya-wu-wa-wana

Distant

	M, (N)	F	N
Nom.	ṇi-na	ŋaḷi-na ŋaḷi-nara	nara(-bayi)
Acc.	ṇi-ŋgi-na ṇi-ŋgi-nara	ŋan-gi-na ŋan-gi-nara	nara(-bayi)
Gen/Dat/Purp.	ṇa-naŋ-gara	ŋaya-naŋ-gara	same as M
Loc.	ṇa-naŋ-gara-yan	ŋaya-naŋ-gara-yan	"
All.	ṇa-naŋ-gara-ḷama	ŋaya-naŋ-gara-ḷama	"
Abl.	ṇa-naŋ-gara-wana	ŋaya-naŋ-gara-wana	"

Neuter NPs, however, may also be represented by the forms listed as masculine. Thus it must be understood that there is not an absolutely clear-cut distinction between neuter and masculine demonstratives (since nara-bayi is also sometimes used for masculine referents, or better, without regard for the masculine-neuter gender distinction). Throughout the nominal system masculine and neuter show less difference from each other formally than either does from feminine, and this is even more true of demonstrative forms and their usage. An example of a 'masculine' demonstrative used for neuter referent is:

ḍaḷ ja-wuḷa-ṇama ṇiŋgi Ø-jigu
hold/guard 3-3Pl/3Sg-Aux M/NAcc NAbs-road
'They are holding the/this road'.

An example from a story in which surrounding text serves better to contextualize the demonstrative is:

ŋa-ja-wu ŋan-wu garag-wa Ø-ma-ñ.
1Sg/3Sg-eat-DI 2Sg/1Sg-give Imp a lot-Art 3Sg-say-PP

Joy Ø-wu-na Ø-jirag Ø-jadba Ø-ḍad+ma-ñ.
give 3Sg/3Sg-give PP 3Sg/3Sg-eat PP NAbs-leg 3Sg-finish-PP

Ṇiŋgi-wa Ø-ḍaway ga-ṇi-ga-n, Ø-ma-ñ.
M/NAcc-Art NAbs-tail -3-1InDu/3Sg-take-Pres 3Sg-say-PP
'"I want to eat (it), give me a lot!" he said. She gave it to him, he ate and finished the leg. "You and I'll take this tail," he said.'

Another example of 'masculine' demonstrative used for masculine and neuter referents is:

ŋiña-ba ṇa-ri-wa?
who-Foc MNom-this
'Who is this?'
Jagina-ba ṇa-ri-wa?
what-Foc MNom-this
'What is this?'

When 'masculine' forms are used indifferently for masculine and neuter referents, neuters are handled by a nominative-accusatively patterning system.

Contrasting genitive forms are:

ŋaya-naŋ-gu ŋa-ṇiṛi-j
hers (non-deictic) 1Sg/3Sg-bring-PP

ŋaya-wu-wa ŋa-ṇiṛi-j
hers (NonDis) 1Sg/3Sg-bring-PP

ŋaya-naŋ-gara ŋa-ṇiṛi-j
hers (Dis) 1Sg/3Sg-bring-PP
'I brought hers'.

The last two forms are much rarer than the first.

In the masculine/neuter paradigm we can identify two prefix forms, ṇa- and ṇi-. Accusative is only marked by ṇi-, but ṇi- does not occur only in the accusative; it is also found in the distant nominative.

Masculine nominative non-distant shows a demonstrative base -ri- which occurs also in 3Pl forms (see Table 2-10). The feminine nominatives have a prefix ŋaḷi- different from pre-nominal ŋaḷa-; it may be that this represents the historical fusion of -ri- with an original feminine pre-demonstrative prefix which can no longer be clearly segmented.

The masculine accusatives contain the base -ŋgi-, the feminines -gi-. It is probably correct to regard these as the same morpheme, the -ŋgi- a post-vocalic variant, but the historical source of the cluster is not presently clear. It is important to mention here two further rarely attested object forms, gi-wa 'this' (M and N), and gi-yan-wa 'these' (see 2.1.2.5.9.8 for collectives with -yan-). There may be a relation between this gi-, and the anaphoric prefix gi- (1.5.1.5).

Note in 3SgM non-deictic, distant and non-distant, that ŋa- occurs in all local case forms, unlike in noun paradigms (see Table 2-1). In all other forms, the non-distant contains a base -wu- which also occurs in certain demonstrative adverbs. Note the similarity to dative/purposive non-deictics ŋawu and ŋayawu. The distant forms are characterized in

nominative and accusative by an element -na or -nara. This may be relatable to neuter nara-bayi, and/or to the word-internal base -na(ŋ)-. All other distant case forms, however, require the base -naŋ- followed by -gara. Forms of this morpheme show up also in dual distant demonstratives, and all are undoubtedly related to adverbial gari 'there' (see 2.1.2.5.9.2). The suffix -wa in non-distant categories is facultative in the accusative, and may be relatable to article suffix -wa (2.2.1.1e). In some forms -wa- belongs to an internal layer to which inflections are added; it cannot be omitted from these forms. The synchronic relation, at least, of -wa- to the article suffix is doubtful.

2.1.2.5.2.3. Dual demonstratives

The duals all show the allomorphs accusative gara- alternating with nominative and elsewhere garan-, exactly like the ordinary dual number suffix -yaran. In the non-distant, genitive/dative/purposive garan-gu- serves as the stem upon which all local forms are built. The distant, on the other hand, shows an interesting variation in the sequence of morphs. Distance-marking allomorphs -gara- and -gari- both may occur in the accusative; in genitive/dative/purposive, the morph -wa- (which may be identified with the -wa- of singular non-distant forms) precedes the case ending but in local forms the stem shows the order garan-gari-wu-wa-.

2.1.2.5.2.4. Third person trial demonstratives

There are trial forms (Table 2-11) in which a distinction is made between distant and non-distant in most case categories, but informants were unable to produce a distinction in the nominative. The accusative forms are identical to the plural (see Table 2-12) for that category. Genitive/dative/purposive shows an interesting contrast between non-distant pronominal base -wu- and distant -wuŋ-. This contrast is also found in the adverbs na-wu-wa 'this side' and ŋa-wuŋ-gu 'that side' (see 2.1.2.5.9.4). All local cases are built on genitive/dative/purposive for each distance category. The trial marker -ḷa-~-ya- is that normally associated with plural.

2.1.2.5.2.5. Plural demonstratives

The plural has only one full paradigm, corresponding morphologically to the non-distant. Nominative ga-ḷa-ri-wa has the demonstrative base -ri- preceded by nominative number marker -ḷa- in opposition to -ya- of the accusative, as in first and second person pronouns. Accusative ga-ya-n-ŋan has no deictic element, and is identical to ordinary 3Pl accusative number marker. Distance in the accusative only is marked by -gara or -gari-wa.

The local forms of 3Pl demonstratives are built on the nominative, not on a distinct genitive as in the personal pronouns. Dative has final suffix form -wu but in the local forms the order of elements is reversed (see e.g. dual distant in Table 2-10) so that -wu- immediately follows the demonstrative base -ri-.

2.1.2.5.3. Iconicity of demonstrative pronouns

Phonological shapes of the demonstrative categories are not iconic of degree of distance.

2.1.2.5.4. Number

Three nonsingular numbers are distinguished in the demonstratives. The trial forms (as is the case in trial number markers used with subsection terms) are composed of morphs which ordinarily mark plural. The trial and plural paradigms are not distinct in all forms. Also, the

distance contrast is neutralized in most of the plural paradigms, in favor of morphologically 'not distant' forms.

2.1.2.5.5. Class

Noun class distinctions are neutralized in nonsingular demonstratives. In the singular the basic contrast is between feminine versus non-feminine. That is, there are distinctively feminine forms, while those used for masculine and neuter referents are not everywhere distinct. The neuter paradigm contains only one distinctive 'caseless' form, the others being the same as for masculine. This one distinctive form has an important function as discourse anaphor, and since it occurs so frequently in this function, it may scarcely be said to pattern like the other demonstratives. The pre-demonstrative class markers are not all the same as the pre-nominal ones.

2.1.2.5.6. Case

See Tables 2-8 to 2-12.

2.1.2.5.7.8. Syntactic function of demonstratives

The demonstratives can function syntactically either as NP head or modifier, though the latter function is common only for singular and dual forms. Thus we may find:

```
ŋaḷi-na  ŋaḷa-gaḍugu ŋan-wa-b
FNom-Dis FNom-woman  3Sg/1Sg-visit-PP
ŋaḷi-na  ŋan-wa-b
FNom-Dis 3Sg/1Sg-visit-PP
  'That woman/she (distant) came to see me'.
garan-gara malam-garan wu-diwiṇḍag      Ø-baṇam-bura
Du Nom-Dis man-Du Nom  3Du/3Sg-reach PP NAbs-camp-theirs Du

garan-gara wu-diwiṇḍag      Ø-baṇam-bura
Du Nom-Dis 3Du/3Sg-reach PP NAbs-camp-theirs Du
  'Those two men/those two reached their camp'.
```

Table 2-10 Third person dual demonstratives

Non-distant		
	Nom	garan-wa 'these two'
	Acc	gara-ŋan
	Gen/Dat/Purp	garan-gu(-wa)
	Loc	garan-gu-wa-yan
	All	garan-gu-wa-ḷama
	Abl	garan-gu-wa-wana
Distant		
	Nom	garan-gara 'those two'
	Acc	gara-ŋan-gara, gara-ŋan-gari-wa
	Gen/Dat/Purp	garan-gari-wa-wu
	Loc	garan-gari-wu-wa-yan
	All	garan-gari-wu-wa-ḷama
	Abl	garan-gari-wu-wa-wana

Table 2-11 Trial demonstratives

	Non-distant	Distant
Nom	ga-ḷa(-wa) 'these three'	ga-ḷa(-wa) 'those three'
Acc	ga-ya-n-ŋan	ga-ya-n-ŋan-gari-wa
Gen/Dat/Purp	ga-ḷa-wu(-wa)	ga-ḷa-wuŋ-gu
Loc	ga-ḷa-wu-wa-yan	ga-ḷa-wuŋ-gu-yan
All	ga-ḷa-wu-wa-ḷama	ga-ḷa-wuŋ-gu-ḷama
Abl	ga-ḷa-wu-wa-wana	ga-ḷa-wuŋ-gu-wana

Table 2-12 Third person plural demonstratives

	Non-distant	Distant
Nom	ga-ḷa-ri-wa 'they'	
Acc	ga-ya-n-ŋan	ga-ya-n-ŋan-gari-wa
Gen/Dat/Purp	ga-ḷa-ri-wa-wu	
Loc	ga-ḷa-ri-wu-wa-yan	
All	ga-ḷa-ri-wu-wa-ḷama	
Abl	ga-ḷa-ri-wu-wa-wana	

2.1.2.5.9. Demonstrative adverbs

In this section, the principal spatial adverbs are presented. Some of these can be the basis for secondary building of demonstrative pronouns; also, demonstrative pronouns with collective suffix -yan- (2.1.2.5.9.8) can variably be built on certain demonstrative pronouns and adverbs. One of the spatial demonstrative adverbs has secondary temporal sense, and this is mentioned here; but discussion of words otherwise used to express location in time (day, night etc.) is reserved for the section on adverbs (2.1.7.3). This section deals with spatial/temporal adverbs which form subsystems partially intersecting with the demonstrative pronouns.

2.1.2.5.9.1. 'Here' and 'there'

The adverbs 'here' and 'there' have the following locative and ablative forms:

	'here'	'there'
Loc	ṇan-wa	naŋ-gan-wa
Abl	ṇana-wa	ṇa-naŋ-gana-wa

'Here' usually refers to an area near the speaker and addressee, 'there' to something distant or out of sight. Ablative ṇa-naŋ-gana-wa is also used to mean 'next', mainly in the sense of the sequential temporal relation between two narrated events. Depending on context, sometimes a difference between temporal and spatial senses is difficult to detect, or indeterminate:

Ø-ḏuyu-bayi Ø-balayi Wurwala, Ø-ḏuyu-bayi.
NAbs-hole-Foc NAbs-big place NAbs-hole-Foc

Na-naŋ-gana-wa ḏaḷ wur-ja-j.
from there/next return 3Du-Aux-PP
'(There was a) big hole at Wurwala, a hole. From there/next they du. went back'.

The ablative ṇana-wa 'from here' does not contain the usual ablative suffix; this formal expression of the opposition between locative and ablative is limited to 'here'. The locative 'there', however, appears to contain regular locative suffix -gan; and ablative 'from there' contains ablative suffix -gana following what appears to be the demonstrative base -naŋ- found in some of the demonstrative pronouns (ṇa-naŋ-gu 'his' genitive etc.). Just as the anaphoric prefix gi- was found to occur only with nara-bayi of the demonstrative pronouns, so it was found only in the adverbial expression gi-naŋganwa 'there' (in that previously mentioned place). Since the initial apical is alveolar when preceded by gi-, the morpheme -naŋ- is possibly relatable to that of the demonstrative pronouns. Its relation to ṇan-wa is obscure. The initial nasal in 'here' is written as retroflex because there is no information to the contrary (see 3.2.1.2.2).

2.1.2.5.9.2. 'there'

Other adverbs used to express 'there' (stationary) are ṇi and ṇan. The former occurs frequently with the experiential specifier -jaga (2.1.2.5.9.5):

ṇi-jaga ga-ŋa-yag
there-Exp -3-1Sg-go
'I'm going there' (to the place you know about).

The adverb ṇi 'there' may be the basis for a demonstrative which functions variably as adverb or pronoun. This is ṇi-wa, primary spatial reference of which appears to be distant 'there'. However, even when used for a distant referent it generally has the connotation 'known to the addressee', so it does not convey a sense of complete spatial remove of referent from speaker-addressee. Though the sense of such a form is difficult to grasp outside of context, the following examples may convey some of its flavor:

jaraj Ø-ja-j Ø-ŋajaḷ, wuyan-wa-b
cross 3Sg-Aux-PP NAbs-spring 3Sg/3Pl-come on-PP

gilyiringilyirin-bayi wuyan-war+ma-ñ, moler
(mythological women)-Foc 3Sg/3Pl-hear-PP cry out

ja-wuḷa-waṛ, ṇi-wa-bayi gaḏugu ŋa-wa-b Ø-ma-ñ.
3-3Pl-Aux there-Foc woman 1Sg/3Sg-come upon-PP 3Sg-say-PP
'He crossed a spring, and came upon the Gilyiringilyirin, he heard them, "They're crying out, here/there I've come upon women," he said.'

ŋa-jab ṇi-wa mayawa Ŋuriñ Ø-bab+ṇamdag Ø-gaḷayar
NErg-wind there right place 3Sg/3Sg-put PP NAbs-tree sp.
'The wind put *Melaleuca leucadendron* right there at Ŋuriñ'.

In the last example, ṇi-wa points to the location of a referent rather than specifying the referent itself. Because it may specify a referent via its location, ṇi-wa may be used with reference to persons or things of any noun class, e.g., ŋiñja-ba ṇi-wa 'who is (that) there?'

Built on ṇi- are two demonstrative pronouns:

	Nom	Acc	
3Du	ṇi-yaran	ṇi-yara-ŋan	'those two'
3Pl	ṇi-yaḷa	ṇi-ya-ya-n-ŋan	'those'

The second form, ṇan 'there' conveys more a sense of remove from the speech situation:

Ø-mawuj maŋaya ṇan ja-Ø-ṇi
NAbs-vegetable food perhaps there 3-3Sg-sit
'Perhaps there's vegetable food there'.

The referent specified by ṇan is usually out of sight. Perhaps this adverb is etymologically related to 'here', but if so, the semantic connection is obscure.

The forms gari and gangari both mean 'over there', at some remove from the speech situation. The former is more common, often occurring with -jaga (see 2.1.2.5.9.5).

2.1.2.5.9.3. 'that way/in that direction', 'this way/in this direction'

There are several adverbs meaning 'that way' and implying motion away from the speech situation. One is guja, as in guja ga-ŋa-yag 'I'm going that way', often accompanied by a gesture. Another is jinaŋgu 'that way', which when repeated is often used to mean 'this way and that, any which way' (both spatially and figuratively):

jinaŋgu jinaŋgu jiḷwa ja-Ø-ga-n
that way that way think/remember 3-3Sg-Aux-Pres
'He is of too many minds, has too many (contradictory) ideas'.

The form contains a morpheme jina- which is used as a directional prefix with cardinal directionals gayara 'upriver', gawar 'high up, on top', biya 'lowdown, downriver' (see 2.1.2.5.9.9), and a few other forms. The prefix

gives the sense 'in the direction of', so that while e.g., biya means 'downriver' and may be used as locative or allative, jina-biya means 'in the direction of downriver' and connotes motion. Rarely, jina is used as a free adverb meaning 'that way'. The form jinaŋgu is evidently a nasal grade of jina- with dative/purposive suffix.

The forms meaning 'that way' contrast with several meaning 'this way, in this direction' (towards speaker). By itself, the adverb bamgan means 'on this side, near here' and is used locatively:

bamgan ja-Ø-ṇi
near, close 3-3Sg-sit
'It's close by'.

A prefixed form jina-bamgan means 'towards here'. Also ṇiwa-bamgan means 'on this side' as well as 'towards here', and perhaps is able to function in this way because of the particular sense of ṇiwa (see 2.1.2.5.9.2). Two other forms meaning 'to here' are ŋaḷamawa and ŋaḷamaŋgara; there appears to be little or no semantic difference between them.

2.1.2.5.9.4. 'this side, that side'

The adverbs meaning 'on this side' and 'on that side' (of river, hill or other feature) have the following forms:

	'this side'	'that side'
Loc	ṇa-wu-wa	ṇa-wuŋ-gu
Abl	ṇa-wu-wa-wana	ṇa-wuŋ-gu-wana

Note the alternation -wu-~-wuŋ-, found also in the contrast between non-distant and distant forms of the trial demonstrative pronouns (2.1.2.5.2.4).

2.1.2.5.9.5. Experiential jaga

The 'experiential' clitic -jaga is added to both demonstrative pronouns and adverbs to give the meaning 'referent known to speaker and addressee by virtue of common experience'. The form jaga contrasts with anaphoric gi- (see 1.5.1.5) in that its use does *not* suggest that the referent can be identified from preceding speech. The referent is simply contextually clear because speaker and addressee share knowledge of it through some unspecified, previous common experience or understanding. An example is:

gari-jaga a-ṇi-yag
there-Exp Hort-1InDu-go
'Let's go there' (to that place we know about).

It has been found suffixed only to the non-distant demonstrative pronouns, not the distant ones:

ŋaḷi-wa-jaga wuṛay ya-Ø-ṇiŋan-n
she-Art-Exp later Irr-3Sg-come-Pres
'She (the one we know) later may come'.

(The clitic -jaga has the Pidgin English equivalent 'again', as in 'there again', with the same experiential sense, 'the place you know'.)

The same form is also used as a verbal index meaning 'like that/this', i.e., in the way you are being shown. It is often accompanied by a gesture or demonstration of how something is done, which is the referent of the index:

ḷa-ma jaga
2Pl-do-Imp like so
'Do it this way!'

2.1.2.5.9.6. Clitic -yari

The clitic -yari is added mainly to demonstrative adverbs, giving the meaning 'imprecisely specified, somewhere or other'. Examples of its use are:

gari-yari '(over there) somewhere or other'
ṇi-yari 'there somewhere'
ṇana-yari 'from somewhere'

The last may be related to the adverb 'here'. It is used in the following way:

ṇaṇa-yari wuḷa-ṇiŋa-ñ
from somewhere 3Pl-come-PP
'They came from somewhere or other'.

Use of the clitic -yari does not necessarily indicate that the speaker does not know the location of something; it may simply be used when the speaker chooses not to specify precise location. Hence one finds combinations like ṇi-yari-jaga 'there somewhere' implying 'somewhere you know about'.

Rarely, -yari is cliticized to demonstrative pronouns, e.g., garan-yari 'those two whoever/wherever they are'.

2.1.2.5.9.7. Use of mayawa with demonstrative adverbs

With demonstrative adverbs, mayawa (see further 1.3.1.1.4) contrasts with -yari in its use to mean 'precisely, right (here/now)'. Examples are:

ṇan-wa mayawa ga-ŋa-ṇi
here right -3-1Sg-sit
'I'm going to sit right here'.

naŋ-gan-wa mayawa baḷ? Ø-ṇi-ñ
there right sit 3Sg-sit-PP
'He sat right there'.

2.1.2.5.9.8. Collective plural demonstratives

A few collective plural forms can be built by suffixation of -yan to demonstrative stems. The known forms are: ṇa-ri-yan-wa 'they/these', built on singular demonstrative pronoun ṇa-ri-wa; gari-yan-wa 'those' built on adverb gari; and jina-yan(-wa) 'those over there' built on the directional (prefix) jina-. Such collectives are invariable in nominative and accusative case functions. One of the words for 'ancestors', ṇi-yan-yuŋgun is composed of adverb ṇi 'there', collective -yan-, and adverb yuŋgun 'ahead, in the lead'.

2.1.2.5.9.9. Cardinal directions

Case forms of the cardinal directions are shown in Table 2-13. The cardinal points are gayara 'upriver, west, (direction of) sunset', gayañja 'east, sunrise', ŋaṛiman 'south' and bujba 'north'. These are glossed as if they were equivalent to the English directions, but this may not have been so (though they are now used as equivalents). Although gayara is used to mean 'upriver' with reference fixed in terms of the west-to-east flow of the Roper River, as well as 'west' in general, gayañja is used to mean 'east' in general but cannot have the sense 'downriver' other than in contexts where its reference is to the Roper. The meaning 'downriver' is expressed by biya. There is an adverb gaya-wiya 'high up along the river bank' which seems to contain a lenited form of biya, though the semantic connection is obscure.

'High up, on top', is expressed by gawar, and this can also have the (apparently secondary) sense 'upriver'. It seems also to be used with reference to certain kinds of focal points whether or not on high ground. For example, any main road may be referred to as ṇa-gawar-gan, as in this example:

ɟuɟu ja-Ø-man+bu-n ṇa-gawar-gan
motorcar 3-3Sg-run-Pres Loc-high up
'The car is running on the highway'.

(Ḍuḍu has the senses 'womb', hence metaphorically 'mother', also 'wing', as well as being the form adapted to refer to motor vehicles.)

There are two other terms which connote cardinal directions, but the primary senses seem to relate to points of ritual significance towards which spirits are directed in funerary rites. The term ḍiñjalin connotes gayara ('west' or 'sunrise') and is the direction in which spirits are first sent by appropriate songs. (This point is associated with red ochre.) The term mawur connotes gayañja ('east' or 'sunrise') and is the direction in which spirits were sent away for good. (It seems that mawur is associated with both black and white ochres.) These associations give rise to the following expression for dying:

mawur-wa Ø-wa-b
-Art 3Sg-visit/go to (see)-PP
'He went mawur', i.e., 'he died'.

Gayara, biya and gawar occur with directional prefix jina- (see 2.1.2.5.9.3); none of the other direction terms do so. Note that the ablative form of gayara is suppletive, and that of gayañja shows apocope. The term gawar shows some irregularities — it has hardened locative case form -gan instead of expected *ṇa-gawar-an; it shows unexpected nasal grade ablative form. The cardinal directions are not case-suffixed in locative (except for gawar) or allative meanings.

Table 2-13 Cardinal directions

	'north'	'south'	'east'
Loc, All	bujba	ṇaṛiman	gayañja
Abl	bujbaŋ-gana	ṇaṛiman-gana	gañjaŋ-gana
	'west, upriver'	**'downriver'**	**'high up'**
Loc			ṇa-gawar-gan
Loc/All	gayara	biya	gawar
Dir All	jina-gayara	jina-biya	jina-gawar
Abl	jaŋan-gana	biyaŋ-gana	gawarŋ-gana

2.1.2.5.9.10. Indefinite adverbs

There are two important indefinite adverbs, maṇarawa 'elsewhere, somewhere else' and guḍarba 'anywhere, everywhere'. The first is used to mean 'elsewhere' in situations where the speaker has a definite alternative location in mind, as well as where he does not:

ṇuñbaŋ-gaḷa ṇan-wa, maṇarawa ga-ŋa-yag 'Stingy people here, I'm
stingy-PlNom here elsewhere -3-1Sg-go going elsewhere'.

Examples of guḍarba are:

ja-wuyaṇ-wu-n guḍarba Ø-maḷam
3-3Sg/3Pl-give-Pres anywhere MAcc-people
'He gives things to anybody, he's generous in all directions'.
boḍewg, guḍarba ja-Ø-ŋaṛgŋaṛg+ma
bad anywhere 3-3Sg-sing
'No good, he sings anywhere', i.e., he sings off-key.

2.1.2.6. Interrogative-indefinite pronouns

The major interrogative pronouns are ŋiñja 'who', jagina 'what', jana 'where, which', janaŋgari 'where', and jananaŋgu 'when'. There are some additional minor forms. As in many Australian languages, forms of 'who' can be used in constructions of indefinite meaning, 'nobody, anybody'.

2.1.2.6.1. ŋiñja 'who'

The full paradigm of 'who' is shown in Table 2-14. It has singular-dual-plural number, and in syntactic functions is usually not prefixed for noun class. However, there are textual examples of feminine accusative ŋiñja-ŋangina. The interrogative can be prefixed for feminine noun class in genitive/dative/purposive and local case functions. Its paradigm shows the ordinary number suffixes without the intrusive morpheme -y$_1$a-. In the accusative singular it shows a nasal grade ŋiñjaŋ- followed by an object-marker -gi- which may be relatable to -(ŋ)gi- of the singular demonstrative pronouns (2.1.2.5.2.2) and/or to morphs found in interrogative jagina 'what' (2.1.2.6.2). In all numbers, the local cases are built on genitive/dative/purposive stems, singular ŋiñja-wu-, dual ŋiñja-ran-gu-, plural ŋiñja-ḷa-wu-.

Table 2-14 Interrogative/indefinite 'who'

		Sg	Du	Pl
Nom		ŋiñja	ŋiñja-ran	ŋiñja-ḷa
Acc		ŋiñjaŋ-gi-na	ŋiñja-ra-ŋan	ŋiñja-ya-n-ŋan
	F	ŋiñja-ŋan-gi-na		
Gen/Dat		ŋiñja-wu	ŋiñja-ran-gu	ŋiñja-ḷa-wu
	F	ŋaya-ŋiñja-wu		
Loc		ŋiñja-wu-yan	ŋiñja-ran-gu-yan	ŋiñja-ḷa-wu-yan
	F	ŋaya-ŋiñja-wu-yan		
All		ŋiñja-wu-ḷama	ŋiñja-ran-gu-ḷama	ŋiñja-ḷa-wu-ḷama
	F	ŋaya-ŋiñja-wu-ḷama		
Abl		ŋiñja-wu-wana	ŋiñja-ran-gu-wana	ŋiñja-ḷa-wu-wana
	F	ŋaya-ŋiñja-wu-wana		

The forms of ŋiñja are used as interrogative modifiers of human nouns equivalent to 'which'. Where the head noun is present, it is appropriately inflected for noun class/case.

ŋiñjaŋ-gi-na ŋaṇ-gaḍugu ña-wu-na
Acc whom FAcc-woman 2Sg/3Sg-give-PP
'To whom (to which woman) did you give it?'
ŋiñja-wu-wana (Ø-maḷam-gana) ña-may
Abl whom MAbl-man 2Sg/3Sg-take-PP
'From whom (which man) did you take it?'
ŋaya-ŋiñja-wu-ḷama (ŋaya-gaḍugu-ḷama) ña-ya-j
FAll-whom FAll-women 2Sg-go-PP
'To whom (which woman) did you go?'
ŋiñja (ŋaḷa-gaḍugu) wuyan-bu-b
Nom who FNom-woman 3Sg/3Pl-hit+PP
'Who (which woman) hit them?'

The negative prohibitive particle ŋiñjag (1.4.1) is used in constructions of indefinite meaning, 'nobody, anybody'. Indefinite forms can only be morphologically singular and are cross-referenced in the verb by singular prefixes.

ŋiñjag ŋiñja Ø-ṇiŋa-m
Prohib Nom who 3Sg-arrive-PNeg
'Nobody arrived'.
Ø-guṇḍiṇḍin ŋiñjag ŋiñja-wu
NAbs-ibis Prohib Gen/Dat who
'Ibis belongs to nobody' (is nobody's totem).
ŋiñjag ŋiñjaŋ-gi-na ŋa-yiri+wa-ya-b
Prohib Acc who 1Sg/3Sg-see-Aug-PNeg
'I didn't see anybody'.

Notice that the past verb form in such constructions must be past negative; so that the whole clause is within the scope of the negative indefinite.

2.1.2.6.2. jagina 'what'

The interrogative jagina 'what' is used in nominative and accusative functions:

jagina-ba Ø-ḍab-ṇawu
what-Foc NAbs-skin-his
'What is his subsection?'
jagina-ba ŋan-ḍar+ma-ñ
what-Foc 3Sg/1Sg-brush against-PP
'What brushed against me?'

Jagina, like interrogatives meaning 'where' and 'when', has an initial syllable ja- characteristic of interrogatives of other than human reference. A presumed morpheme -gi- may be relatable to the -gi- found in ŋiñjaŋ-gi-na 'whom' and singular demonstratives; -na may be relatable to the final morpheme of ŋiñjan-gi-na, hence a tentative segmentation ja-gi-na.

Table 2-15 Summary of time/place interrogatives

1.	jagina	'what'
	jaginaŋ-gu	'why'
2.	jana	'where'
	janaŋgari	'where'
	janaŋgari-wu	'where for', Purp.
	janaŋ-gu	'to/for which'
	janaŋ-gan	'in which' Loc.
	janaŋ-gaḷama	'to/towards which' All.
	janaŋ-gana	'where from, from which' Abl.
3.	jananaŋgu	'when'
4.	bagana	'any, anything'

Suffixation of dative/purposive ending to a nasal grade gives the form meaning 'why', jaginaŋ-gu.

Jagina is also used to mean 'what kind, what sort':

jagina Ø-ḷandi nara-bayi
what NAbs-tree that-Foc
'What kind of tree is that?'

Jagina is also sometimes used as interrogative modifier 'which' with masculine human nouns, instead of ŋiñja 'who'. When so used, the form is usually prefixed with ṇa-.

ṇa-jagina ṇa-maḷam Ø-ṇiŋa-ñ
MNom-which MNom-man 3Sg-arrive-PP
'Which man came?'

A genitive/dative/purposive prefixed form with masculine human nouns is also used:

ṇa-jaginaŋ-gu (ṇa-maḷam-gu) ña-ṇiṛi-j
MDat-which MDat-man 2Sg/3Sg-bring-PP
'For which (man) did you bring it?'

A neuter indefinite meaning 'nothing' is given by use of ŋiñjag with jagina:

ŋiñjag jagina Ø-ṇu-ṛa-b
Prohib what 3Sg-sit-Aug-PNeg
'Nothing was there'.

A reduplicated form jagina-gina means 'everything, a lot of things' and is used in lists enumerating things:

ŋanba-jaŋ+wu-ni Ø-mawuj Ø-juya jagina-gina
3Pl/1Sg-supply-PC NAbs-tucker NAbs-beef what
'They supplied me with food, beef, what next, sugar, what next, tea leaf ...'

This is also found as jagina-gina-ri, where -ri may possibly be a shortened form of -yari (2.1.2.5.9.6).

2.1.2.6.3. jana, janaŋgari 'where'

The forms meaning 'where' are jana and janaŋgari, the latter being more common. There seems also to be some semantic difference between them, reflected in their usage. Janaŋgari is always used with questions requiring an answer with allative goal, e.g., 'Where are you going?' Janaŋgari, however, may also be used with questions requiring a locative answer. Jana does not seem to be used in the allative sense, only the locative sense. Even in that usage it occurs less frequently than janaŋ-gari.

The existence of jana indicates a segmentation jana(ŋ)-gari, though the meaning of the final morpheme is not apparent. It may even be morphologically related to -yari (2.1.2.5.9.6) which elsewhere occurs as a clitic.

Janaŋgari has a dative/purposive form which means 'where to/for, where for what reason'.

ja-wuḷa-gaḷaji-yi-n janaŋgari-wu-ja
3-3Pl-hurry-MP-Pres where-Purp-Emph
'They're hurrying, wherever in the world (are they making) for?'

Case forms built on a nasal grade janaŋ- are used either as heads, or as modifiers of non-human nominals to mean 'in which, in where' and so forth. These forms are:

Gen/Dat/Purp	janaŋ-gu
Loc	janaŋ-gan
All	janaŋ-gaḷama
Abl	janaŋ-gana

Examples of their use are:

janaŋ-gana ja-wuḷa-ṇiŋa-n
where-Abl 3-3Pl-come-Pres
'Where/which are they coming from?'
janaŋ-gana Ø-baṇam-gana ja-wuḷa-ṇiŋa-n
where-Abl NAbl-camp 3-3Pl-come-Pres
'Which camp are they coming from?'
janaŋ-gan ṇa-ḷandi-yan ja-Ø-gala+wu-yi-n
where-Loc NLoc-tree 3-3sg-hang-MP-Pres
'Which tree is it suspended in?'

Genitive/dative/purposive and local case forms are also sometimes used with human nouns (instead of a case form of ŋiñja 'who'), so that the referent is asked about in terms of location:

janaŋ-gu ṇa-maḷam-gu ña-ṇiṛi-j
where-Dat MDat-man 2Sg/3Sg-bring-PP
'For which man did you bring it?'
janaŋ-gana Ø-maḷam-gana ña-may
where-Abl NAbl-man 2Sg/3Sg-take PP
'From which man did you take it?'

2.1.2.6.4. jananaŋgu 'when'

The segmentation of jananaŋgu 'when' is not entirely clear. Like other interrogatives, it has an initial syllable ja-, and final dative/purposive suffix. It may be related etymologically to jana 'where'.

2.1.2.6.5. 'any', 'how many'

For human referents, 'how many?' is expressed by plural forms of ŋiñja 'who':

ŋiñja-ḷa wuḷa-ṇiŋa-ni
who-Nom Pl 3Pl-arrive-PC
'Who (pl) came', 'How many came?'

For inanimate referents, a question may be framed using a quantifier:

Ø-garag Ø-mar ña-may
NAbs- a lot NAbs-fish 2Sg/3Sg-get PP
'Did you get a lot of fish?'

More commonly, however, an interrogative bagana 'any, anything' is used. In other words, the usual sort of question asks 'Are there any?', 'Did you get any?' not 'How many are there/did you get?'

bagana?
Anything?
baŋana mar
any fish
'Any fish?'
bagana Ø-mar ña-may
any NAbs-fish 2Sg/3Sg-get PP
'Did you get any fish?'

Especially when used alone, bagana is usually phonetically [bagana?] with final glottal stop.

2.1.2.6.6. Focusing of interrogatives

Interrogative forms are usually clause-initial, but they need not be. Clause-initial interrogative words generally occur with the focus clitic -bayi (1.12), which is frequently reduced to -ba:

janaŋgari-ba ga-ña-yag?
where-Foc -3-2Sg-go
'Where are you going?'

In clauses where the interrogative word is final, it usually does not have the focus clitic:

ŋaḷi-na janaŋgari
FNom-Dis where
'Where is she?'

Indefinite forms such as ŋiñjag ŋiñja 'nobody' are not cliticized with -bayi.

2.1.2.6.7. Hesitation forms: 'What-do-you-call-it?'

There are two forms which are used by speakers to ask themselves 'What's it?, What do you call it?', when a word has escaped them. These are ŋamda and ŋamdiri. No clear semantic difference exists between them except that ŋamdiri seems to be used somewhat more frequently than ŋamda when a place-name or other location word has been forgotten. Neither is inflected for case.

bolyoŋ wuḷa-ya-j ŋamdiri Waḷyarawan
camp 3Pl-Aux-PP what's it?... (place)
'They went camping to what's it ... Waḷyarawan'.

Only ŋamda is used as the compounding element of compound verbs with auxiliary -ma, 'to do what-do-you-call-it' when the verb sought has been temporarily forgotten:

ja-wuḷa-ŋamda+ma ... ja-wuḷa-muŋgaḷŋ+bu-n
3-3Pl-what-Pres 3-3Pl-make boat shaped-Pres
'They what-do-you-call-it ... they shape it like a boat' (i.e., fold the ends of a coolamon to make a boat-shape).

2.1.2.7. Relative pronouns

Maŋarayi has no relative pronouns. See discussion of subordination in 1.1.2.

2.1.3. Verb morphology

This section introduces the overall structure of the verb complex, and the verbal inflectional categories, before the latter are described in some detail.

In 1.16.3 the three types of verb complex were briefly described; two of them account for expression of a much higher percentage of verbal meanings than does the third. Most verbal meanings are expressed by pairing a non-finite verbal element with an auxiliary. This pairing occurs in two different ways: one, in particle+auxiliary constructions, with the non-finite element as associated, uninflected particle preceding the inflecting verb; or two, in compound constructions, with non-finite element within the inflecting verb as initial compounding element preceding a bound auxiliary. The third construction type is one in which the inflecting verb is monomorphemic. There are only 36 known monomorphemic roots which can function as clausal verb without additional derivational suffixes; these tend to be of very high frequency, disproportionate to their small number. A handful of other monomorphemic roots exist, but these can function as clausal predicates only with (what is otherwise) a derivational suffix. Such verbs are discussed separately from the three major construction types. Many of the monomorphemic roots also occur as auxiliaries in the other two construction types. For example, ma- as main verb means 'to do, say'. The same root also occurs as free or separable auxiliary in numerous particle+aux pairings, and as bound auxiliary in many compound verbs. Thus many monomorphemic roots occur in all three construction types. They have full lexical meaning when employed as main verbs. Their contribution to meaning as separable or inseparable auxiliaries is often negligible; at any rate, the full meaning they have as independent verbs often cannot be attributed to them as auxiliaries.

It is useful to briefly note terms which will be used in describing the structure of the verb. The three main types of clausal verb just described are *verb construction types*. The general term *verb* is used to refer to any predicative unit within the clause which inflects for the verbal categories described below, no matter what its constituency (whether composed of particle+aux, etc.). At times it is useful to refer to the *inflecting verb* (see 1.16.3.1), distinct from the verb. The smallest identifiable units within the verb which have inflectional paradigms for verbal categories (tense, mood, aspect etc.) are *roots*. *Stems* are roots to which certain inflectional and/or derivational affixes have been added to form new units which may be further inflected, or are root-forms peculiar to certain inflectional categories. Finally, both particle+auxiliary and compound verb constructions have *auxiliary* verbs. In particle+auxiliary constructions the auxiliary chiefly serves as prop for inflectional material; in addition, many auxiliaries have a characteristic transitivity value which is directly related to the verb's integration into the clause. Most auxiliaries of compound constructions also have characteristic transitivity values, though some auxiliaries occur in both transitive and intransitive clauses. The auxiliary of particle+auxiliary constructions will be referred to as *free* or *separable*, and that of compounds as *bound* or *inseparable*. A boundary symbol + sets off the bound auxiliary from the initial compounding element.

Inflectionally, the Maŋarayi verb is the most complex part of speech. Inflectional prefixes or suffixes, and usually both, are required in every verb form. Prefixes mark categories of mood, person, number, subordination and also, in conjunction with suffixes, distinguish certain tense categories. Infelctional suffixes mark tense, aspect, negation and the modal desiderative-intentional category. Prefixes and suffixes interact in the expression

of many verbal categories. Also, certain verbal categories are marked by sequences of suffixes. It will be convenient to distinguish prefix and suffix order classes in order to describe possible prefix-suffix interactions. Derivational suffix categories mark the few diathetic (voice) contrasts which can be expressed by affixation. Pronominal prefixes mark person and number for a maximum of two clausal NPs.

The boundary of the inflecting verb differs depending on the verb construction type. Indicating the boundaries of the inflecting verb with curly brackets, and including a derivational order class, the position of inflectional and derivational units in relation to the verb may be summarized as follows:

Particle+aux: Particle {First order prefixes-Pronominals-Aux-(Derivational Suffix)-Tense/aspect and other suffixes}

Compou : {First order prefixes-Pronominals-Compounding element-Aux-(Deriv. Suffix)-Suffixes}

Monomorphemic: {First order prefixes-Pronominals-Root-(Deriv. Suffix)-Suffixes}

No inflectional affixes ever occur to the left of the particle, and there is no phonological interaction at the particle-inflecting verb boundary (with the exception of the occurrence of glottal stop, as per 3.1.2.4.2). The particle always precedes the inflecting verb and nothing may intervene between them, so that there is considerable fixity to particle-auxiliary pairings within the clause. Clausal negative and other modal particles always immediately precede the verb particle, so that particle and auxiliary are further established as a unit with respect to other sentential elements. Content of the order classes shown in the above schemata is described in subsequent sections.

Additional comments follow on each of the construction types.

2.1.3a. Particle+auxiliary constructions

The particle+auxiliary construction type is common in languages of Maŋarayi's genetic subgroup and in languages formerly spoken to the west (Yaŋman, etc.), as well as over a wide east-west belt across northern Australia. It is extremely limited, however, in neighboring languages of the Arnhem fringe such as Jawoñ, where the compound type of construction predominates.

In this construction type, the particle contributes most of the lexical meaning. In general, verb particles constitute a word class quite distinct from others. Unlike clausal mode particles (1.4), verb particles can undergo derivation to produce nominalized forms. Verb particles cannot be modified by adjectives and so are unlike nouns in this respect. Except in a few cases, they cannot occur in the same syntagmatic environments as nouns. An example of an exception is the particle ḏad (usually paired with auxiliary bu-) which in that combination means 'miss, fail to hit'. This particle can be used with possessive suffixes to mean 'nothing, nobody there', the possessive suffix expressing the missing person(s) or thing(s), e.g., ḏad-wura 'nothing of them' du., i.e. they were not there. An etymologically related compound is ḏad+ma- 'finish'.

Though particles are distinct from nouns, it is difficult to draw an absolute distinction between them and adverbs. Adverbs modify verbs, and often are restricted to occurrence with verbs whose semantic features are compatible with their own. Most particles have a complex lexical meaning which does not merely qualify or modify the meaning of the inflecting verb; the particles express most the lexical meaning of the verb construction. The following lexical set exemplifies how full or specific the meaning of

particles can be. All occur normally with auxiliary bu-; all express hitting some part of the body. None of the particles is the same as, or morphologically related to, the noun which expresses the same body part. A few of the particles may have a wider sense, and this is indicated; the rest occur only in the given meaning.

Verb particles of striking body parts

Particle	Body part to which applicable
1. murb	nose, cheek, shoulder blade
2. ḏabaŋ	flat of shoulder, rump/hip
3. ḏuyub	knee
4. biḷ?	upper leg
5. ḏaŋ?	foot
6. mob	lower leg, hand, back(bone); with aux ṇama-, this particle has wider sense 'to break, fracture'
7. ḏuŋgur	forehead, head; with aux bana-, this particle has wider sense 'to crush'
8. ḏum	top of head; with same aux, has wider sense 'to split'
9. ḏawg	eye; with aux ma-, has wider sense 'to burst'

Certain adverbs such as ḻuḷiñ 'around', or ḏinburg 'through' (see 2.1.1.5) are similar to particles in that (1) they frequently occupy a pre-verbal position in the clause; (2) they specify the meaning of a verb more fully, and (3) they tend to be less closely associated with the nominal group than are the forms expressing similar meanings in other languages. But we may distinguish verb particles from many adverbs in Maŋarayi by noting that many verb particles have a degree of lexical specificity that determines their occurrence with only one or a handful of auxiliaries. Semantic restrictions on cooccurrence between adverbs and inflecting verbs tend to hold at a higher level of generality, so that most adverbs can occur with a larger range of verbs than can particles.

In some pairings, auxiliaries retain some of the lexical meaning they have as main verbs. This meaning constitutes a semantic nucleus which is modified and further specified by particles expressing meanings which are generally related to, often more specific than, that of the auxiliary. For example, the root waṛ- as main verb means 'to throw'. In particle+aux pairings it mainly occurs with particles expressing meanings having to do with manual manipulation, such as ḏuluḷ? 'to send', gabugabug 'throw dirt or stones in water to attract fish', ḻermbuj 'knock over', waḍ (or waḍaḍ) 'carry on the shoulder', ḏaramala 'hang up'. With some other particles the relation between the semantics of particle and auxiliary could be described as less direct or obscure, e.g. wiḷig 'swallow'. The roots ṇaya- 'to cook' (transitive) and ḏaya- 'bite' as auxiliaries preserve much of their lexical meaning. With ṇaya- are found such particles as ṇal 'burn', wuṛ? 'blow up fire', and with ḏaya- such particles as gurg 'snap at', ḏeṛ 'grab, seize', and also figurative meanings such as ḻarg 'be cold' (of animates). Further, many of the particles occurring with auxiliary yag- 'go' specify a mode of locomotion: bedeŋ?bedeŋ 'walk splay-footed', bijbij 'run away', baḻawa 'go along bumping into things', gabada? 'stagger', bulbul 'float' and others less closely linked to the central meaning of the auxiliary. In all these cases and others, the relation of particle to auxiliary is that of modifier to nucleus.

Each auxiliary characteristically occurs mainly either in transitive or intransitive clauses. Thus ṇama- 'hold, grasp' (as main verb) may be

paired with a variety of particles. Many of these pairings have meanings relating to activities with the hands, but almost all may be used transitively. The particles with which ŋama- is paired include ḍaḷ 'occupy, hold territory', geŋ? 'strangle', marb 'tie up', biḍiwg 'squeeze', baḷagiṇ 'remove insides' (e.g., of turtle), ḍodod 'tail-and-end vegetable foods', muḷ 'lead with eyes covered' (as initiand), and others. For each auxiliary there may be a few pairings or more which do not conform to the majority transitivity value. The auxiliaries which most often occur in transitive clauses are bu-, mi-, waṛ, ŋama, wa-, ga-, ŋaya- ḍaya-; intransitive ones, yag-, ṇiŋa-, yu-, jaygi-, ṇi-, man+bu-, and mediopassives (2.1.3.3.2b such as way-(y)i- 'fall' and gaḍ-ji- 'get up'. The only auxiliary which occurs with great frequency in both transitive and intransitive constructions is ma-. Differences in meaning normally thought of as voice distinctions are mainly expressed by pairing the same particle with different auxiliaries (2.1.3.1.2.1).

In addition to occurring with monomorphemic auxiliaries, some particles can occur with compound verbs whose meaning is, in general, already somewhat more specific than that of the typical monomorphemic auxiliary. Pairing with a particle produces an even more specific meaning. Examples of such pairings are ḍubur with galg+ma- 'to spear' producing the meaning 'to strike with sharp instrument, poke, jab'; bolgej with galg+ma- meaning 'hit the bullseye, strike on target'; ḍijma with yiri+wa-'see, look at', giving the meaning 'get a good look at, look hard at'; and yow?mi with jaŋ+ga- 'to hunt', giving 'to hunt with fire'.

2.1.3a.1. Particle shapes

Maŋarayi is the only language in its genetic subgroup known to have phonemic glottal stop (see 3.1.2.4.2 for the distribution of glottal stop). Phonetic glottal stop occurs in Warndarang but its phonological status is not firmly established. Heath (1980:9) says that although phonemic glottal may occur in a handful of words, glottal stops heard word-finally are not phonemic. Glottal stop is clearly phonemic in Maŋarayi, viz. such contrasts as yirg 'get up', versus yir? 'throw', versus jir 'to stand'. (No particle yir was recorded.) The restricted distribution of glottal stop in Maŋarayi (one of its principal environments being finally after vowels and other sonorants in verb particles) suggests that it may either (1) have originated from an historically phonetic, boundary-marking device of some kind, or (2) in some instances at least, continue original stops.

In all Arnhem-area languages in which glottal occurs, it is restricted to syllable-final position. The glottal in Maŋarayi is even more restricted distributionally than the glottal in neighboring languages like Ŋalakan: in the latter, glottal occurs following (and more rarely, within) roots of all word classes, and at suffix margins (preceding and following). A few comparative notes are offered here with regard to the second hypothesis, that the Maŋarayi glottal may continue stops.

A sample of 486 particles was examined (this total represents phonological shapes, not meanings; some forms like jaḍ which, depending on the auxiliary with which it is paired, may mean 'return' or 'shut', count only once). Occurring shapes were tabulated, and the categories divided as finely as appeared useful. The following frequencies were recorded:

CV(?)	4	CVSC	47	
CVC	52	CVCV	59	
CVS	82	$CVC_0^2VC_0^2$	189	
CVS?	47	Misc.	6	(exceptionally long)
		Total:	486	

A few comments are needed to explain the categories.

The symbol S=nonvocalic sonorant. The shape CV(?) is rare; examples of CV? were bi? 'track with dog', we? 'bark', ye? 'play'. The only CV shape was ḍi 'dry out', which was checked to test the possibility that it might be phonologically /ḍiyi/ or /ḍiwi/ (see 3.2.1.1), but neither was found to be the case. However, there is a small number of CV noun roots (e.g. gi 'sleep', ḍa 'meat, beef') so the existence of CV particle is exceptional but not unique over all word classes.

The category CVC includes particles which end in any stop. The category CVCV includes particles in which at least the first two syllables are open. However, those of two or more syllables closed by glottal are also placed in this category (e.g. joḷe? 'make fire'), as are those of more than two syllables closed by final S or C including glottal (e.g. morowor 'stand under restraint, drawn up' (as animal). This is a fairly heterogeneous category but no insights seem to derive from dividing it more finely.

The category $CVC_0^2VC_0^2$... includes all particles with closed first or second syllable, excluding CVCV? mentioned above. This category takes in a large number of particles of the shape CVCVC (here C is a cover symbol for stop *or* sonorant), such as boroṇ 'sleep soundly' or bobob 'be hot').

Frozen, reduplicative particles were included in the category to which one reduplicative segment would be assigned, e.g. mormor 'be dark, moldy' is CVS.

A few particles optionally or obligatorily have a final suffix -ma (see 3.1.2.4.2). Where this suffix is optional, the particle is placed in the category it would come under were -ma omitted; thus jaḍ(-ma) 'return' is CVC.

Constraints on final clusters in the CVSC category are strong but are the same as for other word classes (see 3.2.2.2.2). One main constraint is that if S is a lateral or rhotic, the final segment can only be peripheral b, g or ŋ. There is only one instance of final Sj, in ḍuyj 'build'. Alawa also permits only peripheral stops following laterals or rhotics in particles (Sharpe 1972:22), but these constraints in Maŋarayi and Alawa are severer than in related languages. Though they are evidently of low frequency in both Warndarang and Mara, these languages permit particle-final sequences at least of rhotic+j: Warndarang waṛj 'urinate, urine', warj 'pick up', garj 'scratch' (English loan?), wiṛj 'scrape'; Mara gaṛj 'became clean'. The existence of final sonorant-nonperipheral stop clusters in Mara and Warndarang suggests that they may have been eliminated from Maŋarayi and Alawa and possibly, in some instances, may be continued by glottal stop in Maŋarayi but not Alawa. However, these cluster types are of low frequency in languages which permit them, and may not have been historically more common.

But in order for this speculation to even deserve further examination, it must be possible to show some evidence of loss of final stops from verb particles. If this can be done, it becomes more reasonable to suppose that cluster constraints became strongest against sonorant-nonperipheral stop final clusters so that these have been eliminated completely in Maŋarayi and Alawa, while permitted clusters were only randomly affected. This is not easy to demonstrate, because only a few cognate particles are shared among Maŋarayi and other languages in the family; the cognate count is much higher between Mara and Warndarang, for instance. In the short listing of Alawa particles in Sharpe 1976:720-8, only five cognates with Maŋarayi were found:

Alawa	Maŋarayi		Alawa	Maŋarayi	
ŋawur	same	'drown'	ŋal	same	'burn'
bib	same	'fill with water'	jil	jilg	'rain'
jir	same	'stand'			

The particle jil 'rain' shows loss of -g in Alawa; but the sequence -lg is of high frequency in both languages.

More cognate particles are found between Maŋarayi and Warndarang, but unfortunately the majority are of unproblematic shapes (like CVC) which shed no light on the problem of final glottal stop. A handful do so, however. Compare:

	Warndarang	Maŋarayi	
1.	baw	baw?	'stick head out, emerge'
2.	ḏira	ḏira?	'tie up'
3.	ḏar	ḏar?ma, ḏar?	'come out, arrive'
4.	ŋiṛ	ŋiṛ?+mi-	'breathe'
5.	baṛa	baṛab+ma-	'look back'
6.	bu	bub+ma-	'set fire to'

Two kinds of correspondence are shown. In the first, Wa S=Maŋ S? (1-4). The meaning 'breathe' in Wa is expressed by particle ŋiṛ but in Maŋarayi by compound verb ŋiṛ?+mi- (the Maŋarayi word 'liver' is ŋiṛ?min with noun suffix -min; there is probably thought to be a link between the organ and breath). Example 5 shows the second kind of correspondence, where a stop in Maŋarayi corresponds to zero in Wa. In both 5 and 6, what may have been historically particles are compound verbs with auxiliary in Maŋarayi. Examples 1-4 indicate that in a large number of cases, glottal stop in Maŋarayi may represent the phonemicization of what was originally simply a phonetic boundary-marking mechanism. Examples 5 and 6 provide minimal evidence that there has been final loss of stops from particles in some of these languages; but the absolute numbers of forms which could be compared is too small to make firm conclusions possible.

2.1.3a.2. Particle incorporation

Most verbal meanings in Maŋarayi are expressed either by particle plus auxiliary or compound construction; generally the same pairings cannot enter into either construction type. Examples of this are:

muñ ma-	*or* muñ+ma-	'be jealous of'
wurg bu-	*or* wurg+bu-	'wash'
mamiñ bu-	*or* mamiñ+bu-	'roll up' (particle plus auxiliary more common)

Paired with different auxiliaries in each construction type, there are examples like baṛabma yiri+wa- (particle plus compound verb) versus baṛab+ma- 'look back'.

There is a small number of cases in which the difference between construction types is accompanied by slight differences in meaning. For example, ḏuguḏug+ma- as compound means 'hurry' (intransitive), while the pairing ḏuguḏug ma- means 'pant, heave, puff'.

There is one case in which the difference is accompanied by a syntactic difference. The particle+aux pairing muñ ma- 'be jealous of' has a case frame in which the person towards whom jealousy is directed is put in dative case, while the compound verb muñ+ma- occurs in fully transitive case frame. (See examplification in 2.1.1.2.5.2.)

Most particles and initial compounding elements can only enter into one construction type or the other but not both, as noted. Nevertheless, examples like those above show that there is a synchronic and probably also diachronic relation between the two construction types. It is impossible to be certain whether one is gaining in frequency at the expense of the other. But there is one consideration which suggests that, over time, perhaps more particle plus auxiliary constructions are being reanalysed as compounds than the reverse. A greater number of auxiliaries are employed in particle plus auxiliary constructions than in compounds. There

are only three high-frequency bound auxiliaries (ma-, bu-, mi-). This may indicate that there has been a regularization or placing into only a limited number of auxiliary classes of new compounds. This is only speculation, however, and it must be admitted that few cases have been found in which a particular form occurs with a particular separable auxiliary but different inseparable auxiliary. Most known cases are of the kind exemplified above, in which forms occur with the same auxiliary in both construction types. At any rate, it seems quite certain that any definitive transition of a verb from one construction type to the other is preceded by a period in which the pairing may enter into both construction types. General considerations relating to structural change as it can be reconstructed by the historical-comparative method would suggest the direction of reanalysis from particle plus auxiliary to compound rather than the reverse, in keeping with the general principle that units into which complex forms can be decomposed synchronically may reflect historically prior, more analytic structures. (See pp.615-768 in Dixon (ed.) 1976, a collection of papers treating 'simple' and 'compound' verb constructions in a variety of Australian languages.)

Some English forms are taken over as particles to express meanings which have become relevant in the modern context but for which there is felt to be no suitable Maŋarayi equivalent, such as wurg ma- 'work'. In other cases where it is necessary to express a concept that results from European contact, a Maŋarayi verb has been extended to cover the meaning, but an English form is still often used or preferred. An example is guṛibir yag- 'be/act crazy, mad' which has been extended to cover the meaning 'be drunk'; but the more common construction used is ḏrʌŋk ma-. (Note that the particle violates Maŋarayi cluster constraints and also is pronounced with a vowel quality which does not occur in Maŋarayi.)

Transitivity in English loans is expressed by attachment of the Pidgin English transitivizing suffix -im~-it~-t to forms functioning as particles or compounding elements. Generally glottal stop is also inserted following the suffix, e.g. bayndim? ma- 'find', or elbim? ma- 'help'. Most English-loan particles are paired with ma-. The adoption of English forms as particles, rather than in compounds, is more common.

2.1.3b. Compound verbs

From a corpus of 270 compound verbs, verb classes defined by the presence of a particular auxiliary root occurred in the following frequencies:

ma-	190
bu-	50
mi-	17
yug- (/jug/)	3
waṛ-	3
wa-	3
ga-	1
ḏaya-	1
ṇama-	1
ṇa-	1
Total:	270

The auxiliaries can be considered the 'same' roots as main verbs of identical shape because the roots, as auxiliaries and main verbs, have the same suffixal tense/aspect paradigms with a few minor differences in reflexive-reciprocal allomorphs. Since the suffixal paradigms are quite unpredictable for each root, an important generalization would be lost were each phonological shape to be considered different as inseparable auxiliary and

main verb. The single exception is mi-. The inseparable auxiliary mi- has different paradigmatic forms from those of the independent verb mi- 'get'. A root mi- also functions as separable auxiliary in some particle+aux pairings; this separable auxiliary is paradigmatically the same as main verb mi-.

Two of the inseparable auxiliaries show phonological alternations not found in the comparable main verbs. Initial stop of bu- lenites to w following vowels (3.4.1.2.4), e.g. in bamja+wu- 'smash', ḍaṛa+wu- 'find', gala+wu- 'hang up' and others. The semivowel w in ditransitive jaŋ+wu- 'succour, supply with food and drink' is not due to the operation of any regular rule; the form is exceptional but has the same paradigm as other bu- compounds. Two other verbs contain the auxiliary bu-but show irregularities. The avoidance style verb gilgilg+u- 'leave' does not show final g ⟶ ŋ before bu- as expected (see 3.4.1.2.2). Instead, initial b of the auxiliary is dropped. In the second verb, ḍirag+u- 'to start, begin' (often used of ceremony) the same situation is found.

The main verb which corresponds to inseparable auxiliary yug- is jug- 'to swear at'. All compounds with yug refer to speech acts. In all of them, the auxiliary follows a vowel (e.g. gulu+yug- 'call out (to)'), so that jug- lenites to yug- (see 3.4.1.2.4).

Inseparable auxiliaries tend to occur in the same kinds of case frames as main verbs of the same shape. Compounds with ma- show the most variation, some usually occurring in transitive clause structures (e.g. galg+ma- 'spear'), and some only intransitive ones (ḍuḍ+ma- 'to roast, simmer'). Two ma- verbs have a single, objectively-inflecting associated NP, i.e. marked by object pronominals in the verb (2.1.1.2.1.1.-2). Finally, some ma- verbs normally occur with dative complement (gulur+ma- 'be sorry for, compassionate towards'). The range of transitivity values exhibited by auxiliary ma- is consistent with the variation it also shows in this respect as main verb.

Other inseparable auxiliaries occur more consistently in either transitive or intransitive clauses, but not both. Of the 50 bu- verbs, 40 normally occur in transitive clauses. Of these, only one occurs in ditransitive case frame, jaŋ+wu- 'succour, supply with food or drink' (see 2.1.1.2.4.1 for examplification). One is 'objectively inflecting' biṇ+bu- 'be difficult for' (see 2.1.1.2.1.1.-2). One, ḷur+bu- 'be eager (for)', may occur with dative complement. Others occur in ordinary intransitive clauses, e.g. man+bu- 'to run', wal+bu- 'to sprout, come up'.

Of 17 mi- verbs, 11 may occur in transitive clause structures. Intransitives include e.g. jigij+mi- 'to jump', jirij+mi- 'to sneeze'.

Of the three yug- verbs, two are normally intransitive, and the other may occur in transitive clauses. The latter is gulu+yug- 'call out (to)' which need not occur with direct object but may do so.

Two waṛ- verbs normally occur in transitive clauses, wuywuy+waṛ- 'to straighten' and ḍi+waṛ- 'to prise off'. The third occurs in intransitive clauses but may be decomposed into lexical elements which have an internal transitive syntax: jaṇur+waṛ- 'have breakfast, the first meal' is literally jaṇur 'saliva' and auxiliary waṛ- 'to throw'.

All three wa- verbs usually occur in transitive clauses: yiri+wa- 'to see, look at', guṛ+wa- 'to circle, go around', and ḍuwa+wa- 'to cry for'. The last may be historically ḍu- 'to cry' with reduplicated auxiliary.

The single compound found with auxiliary ḍaya- is giṇur+ḍaya- 'to anger someone'. It contains noun root giṇur 'anger, argument' and jaya- which as main verb means 'to bite'. The sole verb found with auxiliary ṇama- has two forms which occur in free variation, bab+ṇama- and baḍ+ṇama- 'to put, place'. The sole ga- verb is jaŋ+ga- 'to hunt'. The verb ḍay+ṇa- 'to watch' usually defines a transitive clause.

There are very few cases in which the initial compounding element occurs elsewhere (outside verb complexes) either as bound or free form; most only occur in compound verbs. There are, however, a few verbs in which the initial element is identifiable as a noun. These may be called instances of 'incorporated nouns', but there is no productive process of noun incorporation. They include giṇur+ḍaya- 'anger someone' (cited above), ŋani+yug- 'speak, talk' where ŋani as independent noun means 'language, word, speech'; jaṇur+waṛ- 'have breakfast' (cited above); and muŋgaiŋ+bu- 'to fold pliable material into boat-shape' (e.g. in making coolamon) with noun stem muŋgaig 'boat'.

In one instance, ḍayi+yu-jiyi- 'to refuse, say no', negative particle ḍayi is verbalised with auxiliary yug- and one of the reflexive-reciprocal allomorphs.

In a few verbs, initial elements appear to be complex NPs, e.g. bamgaṛaṛ?+ma- 'to be in error' may be analysed as bab 'head' (presumably b ⟶ m by a rule akin to P-1, see 3.4.1.2.1), and gaṛaṛ 'big' with inserted glottal. This analysis is likely but not certain.

2.1.3c. Monomorphemic/main verbs

Altogether 36 monomorphemic roots have been recorded to date, 15 of them monosyllabic, 19 bisyllabic, and 3 trisyllabic. These are listed in Table 2-17 with their paradigmatic forms. The inseparable auxiliary mi- constitutes an additional form. One of the roots, jiṛa- 'to chase, hunt up' adds an auxiliary wu (lenited form of bu) in its imperative form, but is monomorphemic in others.

Roots which occur as inseparable auxiliaries are a subset of the 36 monomorphemic roots. Except for a few compound verbs (e.g. jud+ma-, causative) and mediopassives (e.g. way-(y)i- 'to fall'), the separable auxiliaries are also a subset of these monomorphemic verbs.

The lexical meanings shown are those which the roots have when functioning as main verbs. This must be qualified in two cases. In fact, two of the monomorphemic roots never have been found to occur without particles; they cannot function as clausal verbs by themselves. One is jaygi- which occurs frequently with particle jir in the meaning 'to stand'; the other is bana-, the commonest pairing of which is with particle maṛ? in the meaning 'to make, build'.

2.1.3d. Overview of inflectional categories

In 2.1.3, schemata showing order classes in the inflecting verb identified a class of 'first-order prefixes'. The distribution of these is described in 2.1.3.-I following presentation of tense/mood/aspect categories. One set of first order prefixes, wa-~ya-, occurs in several morphological and syntactic construction types: they mark irrealis mood, habitual, and also subordination.

Pronominal prefixes are described in 2.1.3.6. They relate to overt first order prefixes in that the latter are sensitive to the category of the intransitive subject in intransitive clauses, and to the relation between the categories represented by transitive prefix combinations in transitive clauses.

Paradigms of auxiliaries and main verbs are presented in Table 2-17.

Derivational suffixes must be divided into three order positions. The first is occupied by stem augments which only some roots require in past negative and habitual forms. The second is occupied by mutually exclusive reflexive-reciprocal, mediopassive, or inchoative suffixes (the latter applies only to verbs derived from adjectives). The third position is occupied by an additional augment, -ma- or -mi-, which only some verbs require in habitual form.

Final suffix categories (showing their relation to derivational suffix positions) are the following:

Order class	1	2	3	4	5
	augment a; found in addition to or instead of augment b (-ŋḍa-, ñja-,) (-ŋga-, -ya-) stem augment required for some roots	reflexive-reciprocal mediopassive inchoative	augment b, -ma- or -mi- for some verbs, mutually exclusive with augment a with few exceptions	tense/aspect suffix categories: non-past past punctual past continuous past negative imperative	final suffix category: may occur with DI may occur with DI

Stem augment a occurs only in some verbs, in some forms. For those verbs which augment their stems, augment a *only* is added in the past negative, and usually also in habitual forms only augment a is added, but a few verbs have both augments in the habitual. The majority of verbs have only augment b in the habitual. The non-past suffix category occurs in the following tense/mood/aspect forms: present positive, present negative, present irrealis, and desiderative-intentional, which is formed by adding the desiderative-intentional suffix -wɻu~-gu to the non-past form. Both non-past and past negative suffix categories may be followed by the desiderative-intentional suffix, the sole representative of the fifth order class. However, this final suffix contributes quite different meanings depending on which category (non-past or past negative) it occurs with.

2.1.3.1. Voice

2.1.3.1.1. Passive

There is no passive in Maŋarayi or any neighboring non-Pama-Nyungan languages.

2.1.2.3.2. Decreasing valency of the verb

2.1.3.1.2.1. Causative formation and other transitive/intransitive contrasts

Many particles can be paired with more than one auxiliary. In some cases this results in lexical modulations which alter the meaning of the verb, but do not alter its transitivity in the strict sense. Examples of such alternative pairings are:

Ø-warba jaɻuɻuma ja-Ø-yag ṇa-ŋugu-yan
NAbs-catfish flit 3-3Sg-go NLoc-water
'A catfish is flitting past in the water'.

jaɻuɻuma Ø-ṇiŋa-ni ŋanjugu-ɻama
streak/flit 3Sg-Aux-PC 1Sg-All
'He came streaking towards me'.

bab Ø-yu-y
covered 3Sg-Aux-PC
'He slept covered up'. (perhaps use of bab 'head' as particle)

bab Ø-gaḍ-jag Ø-jululu-ŋawuŋ-gana
emerge (from cover) 3Sg-Aux-MP PP NAbl-swag-his
'He came out from his bed/swag'.

In a few instances it is unclear whether we have the same particle with different auxiliaries, or different, homophonous particles, e.g.

jaḍ Ø-ja-j
return 3Sg-Aux-PP
'he returned'

jaḍ Ø-bu-b
shut 3Sg/3Sg-Aux-PP
'he shut it' (as door)

These should probably be treated as having the same particle.

Syntactically, the most important thing about alternative pairings is that they constitute the means of expressing distinctions between transitive and intransitive uses of the same verb particle. The main diathetic distinction which can be expressed by alternative pairings is between a verb which functions intransitively, and a causative or other transitive counterpart.

The principal causative-forming auxiliary is jud+ma-, which rarely occurs as an independent clausal verb. When it does, it means 'to put'. It usually occurs with particle specifying the activity being made to occur. Such causatives contrast with intransitive pairings involving the same particle. As usual in causativization, the subject of the intransitive construction (IS) becomes the direct object (TO) of the causative construction. Intransitive/causative pairs with causative-forming jud+ma- are:

baɻ? ṇi-	'to sit'
baɻ? jud+ma-	'to set down'
jir jaygi-	'to stand'
jir jud+ma-	'to make stand, erect'
jaḍ jaygi-	'to return'
jaḍ jud+ma-	'to put back, make return'
barar?ma jaygi-	'to be frightened'
barar?ma jud+ma-	'to startle'

For textual examples of usage see sentences 7 and 8 in 1.5.1.1.-2.

Other auxiliaries which normally define transitive clauses also serve as causativizing auxiliaries. It cannot be predicted which auxiliary will occur with any particular particle; this is a fact which must be learned, although some creativity within the system is possible, based on the 'full' meaning of roots as main verbs. The following pairings exemplify other causativizing auxiliaries:

maŋgalyaṛ yag-	'to be ashamed'
maŋgalyaṛ ga-	'to shame, make ashamed'
ŋawur yag-	'to be submerged, drown'
ŋawur ga-	'to drown, submerge (something/someone)'
ñim yag-	'to duck under, submerge'
ñim ga-	'to make submerge'
ṇoḍ ṇi-	'to be in a heap/pile'
ṇoḍ waṛ-	'to heap up, make a pile'
ɻoɻoj yag-	'to go in, enter'
ɻoɻoj waṛ-	'to put in, make enter'
ɻuɻur yag-	'to go in, enter'
ɻuɻur ga-	'to make go in, load, fill up with'
juguɻu? yu-	'to be coiled up'
juguɻu? waṛ-	'to coil up'
mududu ṇi-	'to kneel, be in kneeling position'
mududu waṛ-	'to make kneel'

baṛig ŋa-	'to dry out'
baṛig waṛ-	'to make dry, (hang or spread out) to dry'
burb way-(y)i-	'to drop, fall down'
burb waṛ-	'to make fall'
ḍawg ma-	'to burst'
ḍawg bu-	'to make burst'
jinbuy yag-	'to be prepared, ready'
jinbuy ṇama-	'to make ready'
ŋal ŋa-	'to burn'
ŋal ŋaya-	'to make burn'
mob ma-	'to break, fracture'
mob ŋama-	'to break, fracture something'

Other alternative pairings create intransitive/transitive contrasts in which IS is not always equated with TO; sometimes IS is equatable with TS of the transitive construction. Examples are:

ḍagba ŋi-	'to wait'
ḍagba wa-	'to await'
gadjaḷ? yag-	'to pass by, go past'
gadjaḷ? yum+bu-	'to pass by something, leave behind'
goḷoḷ way-(y)i-	'to get bogged, stuck'
goḷoḷ jaygi-	'to be on top of, superimposed on'
goḷoḷ baḍ+ŋama-	'to superimpose on'

A few verb particles are inherently causative, such as ŋereŋ 'cause to cry', which occurs paired with either ma- or waṛ-.

There are no mechanisms below the clause level for causativizing transitive verbs. A meaning like 'I made the man hit the woman' can be expressed in two clauses, the first containing ma- ('I said/did to the man'), the second expressing the reported discourse ('you hit her'), see 1.1.1.1.

Some particles are capable of modulation by alternative pairing in such a way that a transitive or intransitive particle+aux pairing contrasts with a pairing of the same particle with auxiliary ma-, where the past punctual form of the latter may either be interpreted as a dynamic form equivalent to 'it broke', or in some contexts, as an equivalent of a perfect passive particle 'it is broken'. Such pairings with ma- share aspectual modulations with inchoatives, and are discussed in 2.1.3.3.1.

2.1.3.1.2.2. Transitivity/intransitivity

In several places (e.g. 2.1.1.2.2.1) it has been mentioned that many verbs are capable of occurring in transitive or intransitive structures, depending on the number of arguments (both overtly present and understood from preceding speech) which occur in the clause. At the same time, it has been noted that certain roots tend to occur in transitive structures with greater frequency than other roots, the root most variable in this respect being ma-, both as main verb and as auxiliary. These tendencies can be specified more precisely.

Intransitivity can be defined over a clause containing a verb otherwise also capable of transitive use, providing a direct object is not specified (or understood to be cross-referenced by zero 3Sg pronominal) within the clause:

ja-Ø-ja ja-Ø-ja
3-3Sg-eat 3-3Sg-eat
'He's eating and eating', *or* 'He's drinking and drinking'.

ja-Ø-ja Ø-ŋugu
3-3Sg/3Sg/drink NAbs-water
'He's drinking water/liquor'.
buñaŋ ga-ŋa-yag, Ø-ma-ñ
tonight -3-1Sg-go 3Sg-say-PP
'Tonight I'm going', he said.
buñaŋ ga-ŋa-yag, ŋan-ma-ñ
tonight -3-1Sg-go 3Sg/1Sg-say-PP
'Tonight I'm going', he told me.

Thus transitivity must be viewed as a property of the clause, not as a lexical property of verb roots. There are a few verbs normally found in ditransitive case frames — like wu- 'to give' — which can fail to have specified direct object (outside the verb), or can fail to have specified recipient, but are interpreted as transitive structures with understood or unspecified object of either kind:

garag-wa wuḷa-wu-na
a lot-Art 3Pl-give-PP
'They gave a lot (away)'. (unspecified recipient)
gamamur ga-ŋan-wu-n
in a few days -3-3Sg/1Sg-give-Pres
'He'll give me in a few days'.

The last example has unspecified but understood notional direct object. Today, the unmarked, understood object of such utterances is 'money'.

Otherwise, alternation of particle+auxiliary pairing as described in 2.1.3.1.2.1 is the means of expressing transitivity contrasts for those meanings which can be constructed with particle+auxiliary.

2.1.3.1.2.3. Reflexive-reciprocal

Reflexive and reciprocal are considered derivational rather than inflectional categories here, because the conditions of their use are such that they always determine intransitive structuring of the clause (in terms of case-forms of associated NPs, etc.). Thus reflexive-reciprocal is to be considered a voice option which the speaker may choose to use.

In fact, reciprocal structures are highly preferred when describing mutually-affecting actions in which a number of people are engaged. Many of these meanings could be coded in transitive clauses ('X is Zing Y'), but there is a preference for reciprocal clauses like:

ja-wuḷa-ju-yi-n ja-wuḷa-bu-yi-n, Ø-giŋur Ø-balayi
3-3Pl-swear-RR-Pres 3-3Pl-hit-RR-Pres NAbs-argument NAbs-big
'They're swearing and fighting, (there's a) big argument'.
jaginaŋ-gu-ba ga-ŋur-ju-yi-n
why-Foc -3-2Du-swear-RR-Pres
'Why are you du. swearing (at each other)?'
baŋbayi ja-wuḷa-wu-yi-n
tease 3-3Pl-Aux-Pres
'They're teasing, joking around with each other'.

Reflexive usage can be defined over clauses where the subject is represented as acting upon itself:

wadbadbi naŋganwa, ŋiñjag ŋa-yag ŋa-mi-yag
big row there Prohib 1Sg-go 1Sg-say-RR PP
'Big row there, I can't/won't go (there), I said to myself'.
jaḷŋaṛ Ø-bu-yi-ni ŋa-ḷandi
hard 3Sg-hit-RR-PC NInst-stick
'He hit himself hard with a stick'.

Reflexive and reciprocal forms are the same (identical to each other) for each inflecting verb; there are minor differences between some roots as

main verbs or separable auxiliaries, versus the root of the same shape as inseparable auxiliary. The reflexive-reciprocal has three allomorphs, -y(i)-, -jiy(i)- and -ñjiy(i)-. Their distribution with particular roots is not predictable on phonological grounds, and is discussed with allomorphy and realization of categories in 2.1.3.-IVa.

There are a few verbs which occur with a suffix identical to one of the reflexive-reciprocal forms, but are not reflexive or reciprocal in meaning. These have no transitive counterparts. They include:

jaṇbu-jiyi- 'shed skin' (as snake)
baṛubaṛu-ñjiyi- 'starve' (cf. baṛubaṛu 'starving (person)')
bunu-ñjiyi- 'linger'
wawu-jiyi- 'die' (somewhat euphemistic, like 'pass away')

In a few cases, reflexive-reciprocal allomorphs are used to form (usually intransitive) counterparts of transitive verbs, the meaning of which however deviates somewhat from the ordinary reflexive and reciprocal meanings. From transitive jiṛa-'to hunt up, chase up' is formed jiṛa+wu-jiyi- 'ambush, encircle animals from both sides'. From the ditransitively-used mi+wu- 'to sneak away from' (where the person abandoned is cross-referenced as direct object), is formed mi+wu-jiyi- which also means 'sneak away' but the person abandoned, if expressed, is put into dative case. Thus the 'valency' of the verb is decreased, but the reflexive-reciprocal is not used productively in this way with other ditransitives. The verb guṛ+wa- means 'to encircle, circle around (something)', while guṛ+wa-jiyi- meaning 'circle around'(intransitive), is often used to describe e.g. the idle flight of birds.

One verb ḏayi+yu-jiyi- 'refuse, say no' is a unique 'middle' use of the reflexive-reciprocal with negative particle ḏayi and auxiliary /jug/ to form a delocutive verb. Other verbs with similar meaning are capable of transitive use, e.g. jay+ma- 'to refuse (someone/something)'.

2.1.3.1.3. Increasing valency of the verb

2.1.3.1.3.1. Causatives

See 2.1.3.1.2.1.

2.1.3.2. Tense

2.1.3.2.1. Tense categories

The principal contrast within the tense system is past versus non-past. Various verbal forms constructed with different prefix and suffix combinations fall under each major tense division. For example, forms in the 'non-past' division all contain present tense suffix, but depending on the precise combination of first order prefix with present and perhaps an additional suffix, and/or depending on the presence of a clausal negative or other particle before the verb, a variety of different meanings can be produced.

The simplest method of setting out the tense/aspect/mood forms is to range them within a scheme which takes the past-nonpast tense division as primary. In Table 2-16, under nonpast are listed all those categories formed with present tense endings on the verb. To the left are shown clausal mode particles only where their presence may be considered definitional of a certain category; e.g. clauses expressing evitative and anticipatory action are distinguished from other negative categories by the mode particle baḷaga 'lest, before'. In the next column are shown the first-order prefixes characteristic of the verbal category; no verb form has more than one. The desiderative-intentional category belongs to the mood system. It primarily expresses volition or intention, and is thus not a purely temporal category. There is no future tense.

In the 'past' division, the principal distinction between past punctual and past continuous is aspectual, as the labels suggest. The punctual-continuous contrast is neutralized in the past negative. The latter form, without negative mode particle ḏayi, expresses an obligative meaning 'should, should have' in which any clear distinction between past and nonpast is neutralized. The addition of the desiderative-intentional suffix to the past negative produces the past desiderative meaning 'wanted to'.

Usage of all categories is further described and illustrated in 2.1.3.-II.

Table 2-16 Verb forms within the major tense divisions

	Clausal mode particle	First order prefix	Label/constituency of verb form
		ga-~ja-	present (positive) realis
		wa-~ya-	present irrealis
			present negative
Nonpast	ḏayi	Ø-	1. simple negative
Nonpast	ŋiñjag	Ø-	2. prohibitive
Nonpast	baḷaga	Ø-	3. evitative/anticipatory
Nonpast		wa-~ya- or Ø	present suffix + DI desiderative-intentional
Nonpast		wa-~ya-	root+(augment)+(ma)+present suffix habitual
Past		Ø-	past punctual (positive)
Past		Ø-	past continuous (positive)
Past	ḏayi	Ø-	past negative
Past	--	Ø	past negative+Ø 'meant to, should/should have'
Past	--	Ø	past negative+DI past desiderative 'wanted to, should have'
Past		wa-~ya-	past punctual irrealis (same as positive except for mood)
Past		wa-~ya-	past continuous irrealis
		mari-	third person hortative (requires present suffix)
		Ø-	imperative (suffix distinct from present, either -Ø or -w)

2.1.3.3. Aspect

The principal aspect contrasts in the verb system are, first, between present (positive) realis and past continuous (non-habitual) on the one hand, versus habitual on the other; and second, within the 'past' division, between past punctual and past continuous. Further discussion of each contrast is reserved for sections dealing with their usage in 2.1.3.-II.

There is no distinct verb form for situations that began in the past and are of continuing relevance (e.g. 'have you ever been to London'?). Such meanings are expressed by using the 'shifter' adverb gurji 'a (long) time ago', or the adverb miŋiwa 'already', with past verb form. Any verbal meaning to be qualified as 'nearly' completed is modified with adverb wabij 'nearly':

wabij jaŋ? ŋa-ma-ñ
nearly die 1Sg-Aux-PP
'I nearly died'.

Similarly, there is no distinct verb form for the expression of present relevance of a past, perfected event, similar to English 'I have seen'.

Again, such meanings are constructed with adverbs and past verb forms, or sometimes with adverb and present verb form. The latter is often selected for the expression of the meaning 'just now, within the very recent past', with adverb baḷaḷaga:

ḍayi ŋa-ẏiri+wa-ya-b gurji, baḷaḷaga
Neg 1Sg/3Sg-see-Aug-PNeg long ago/before today

ga-ŋa-wa-n
-3-1Sg/3Sg-go to see-Pres
'I didn't see it before, today I'm going to see it', or
'I hadn't seen it before, today I'm seeing it' (for the first time).

The adverb baḷaḷaga is often cited by informants as a translation equivalent for 'today', but its range of usage is not limited to the reference of English 'today'. Like 'today', it is a shifter, but it means 'right now', and therefore can be used to refer to 'today' in contrast to gamurana 'next day, tomorrow' and other adverbs of location in time (see 2.1.7.3). (In fact, in Pidgin English informants use the word 'today' or 'today today' to mean 'now' as well as 'today' in the Standard English sense). There are no distinct forms for either terminative or ingressive aspect. Both may be expressed by use of the past punctual, depending upon the verb and surrounding context, or they may be expressed lexically by such verbs as ḍad+ma- 'to finish', ḍirag+u- 'to begin, start' and the like. Completion of verbal activity may be expressed by the particle mojon, as in mojon Ø-jirag 'he finished eating it'. This particle is also used to mean 'that's all'.

2.1.3.3.1. Past tense of present relevance

There is a minor aspectual contrast involving the past punctual of inchoative verbs and 'descriptive' or nondynamic forms of verbs with auxiliary ma-. In 2.1.1.2.9.4, it was shown that the past punctual of the verb of copulative resolution, mu-yi- 'to become, turn into', as well as that of many inchoatives, can be variably interpreted as 'became X' (as the form suggests) or 'is X' (equivalent to, and otherwise expressed as, present tense). This same 'displacement' of tense/aspect forms holds true of certain intransitive verbs with bound or free auxiliary ma-. Note the following transitive/intransitive contrasts between (a) and (b), and then the tense/aspect contrasts between intransitive forms (b) and (c):

(a) ḍuŋgur ja-Ø-bana 'he is crushing it' (also transitive with auxiliary ma-).
crush 3-3Sg/3Sg-Aux

(b) ḍuŋgur ja-Ø-ma 'it is crushed, it's becoming crushed'
(c) ḍuŋgur Ø-ma-ñ 'it became crushed', 'it is crushed'

(a) mob ja-Ø-ŋama 'he's breaking it'
break 3-3Sg/3Sg-Aux

(b) mob ja-Ø-ma 'it's breaking'
(c) mob Ø-ma-ñ 'it broke', 'it is broken'

The (c) form can be used to describe a past occurrence, or a present condition. Verbs which are capable of both interpretations in the past punctual all entail that entities of which the past form can be predicated can also be presently characterized in terms of the continuing relevance of that property or condition. Thus, the past punctual may have the value of a present descriptive form. The same is true of inchoatives: something described as having become a certain way, may also be described as presently being that way. Examples of other verbs of this sort are:

Ø-juḷ?+ma-ñ 'it is raw' (also ja-Ø-juḷ?+ma)
beŋ Ø-ma-ñ 'it broke, snapped', 'it is snapped'

baw Ø-ma-ñ 'it went flat', 'it is deflated'
ḍabaj Ø-ma-ñ 'it spilled/melted/dissolved/came apart', 'it is spilt/melted etc.'
jaŋ? Ø-ma-ñ 'he died', 'he is dead'

2.1.3.3.2. Aspect as expression of duration of the narrated event

Past and present verb forms can be reduplicated to express repeated action, or to emphasize the continuity of action. The formal conditions of such reduplications, and some examples, are given in 3.4.5.2.

See also discussion of usage of some verb forms, especially the habitual in 2.1.3.-IIe and the past punctual/continuous contrast in 2.1.3.-IIf.

2.1.3.3.2a. Inchoative

Adjectives are inchoativized by means of the suffix -ji-~-yi-, the same suffix as that found in mediopassive verbs. The distribution of suffixal allomorphs in productive inchoativizations is phonologically conditioned: -yi- occurs after vowels, -ji- elsewhere. Before the suffix, underlying stops become homorganic nasals (see 3.4.1.2.2). The distribution is entirely predictable (unlike that of the suffix in mediopassives), but the allomorphy does not occur under the same conditions as most other morphophonemic alternations in suffixes (for most of which, stops and nasals form a class opposed to 'non-nasal sonorants', see 3.4.1.2). Examples of inchoatives are:

Adjective		Inchoative	
ḍuṛigi-	'raw'	ḍuṛigi-yi-	'to become raw'
wurbaṛ-	'be well'	wurbaṛ-ji-	'to become well, convalesce'
jimgan-	'be knowledgeable'	jimgan-ji-	'to become knowledgeable'
mamayaŋgan-	'old, used'	mamayaŋgan-ji-	'to become old, tatty'
maṇḍay-	'ripe, sweet'	maṇḍay-ji-	'to become ripe/overripe'
ŋadnar-	'sour, rotten'	ŋadnar-ji-	'to become sour'
boḍewg	'bad'	boḍewŋ-ji-	'to become downcast, feel bad'
juḷag-	'cooked'	juḷañ-ji-	'to become cooked'
jiḷiig-	'alive'	jiḷiñ-ji-	'to come alive'
garag	'a lot, many'	garañ-ji-	'to grow'

In most morphophonemic alternations where stops become nasals, /g/ ⟶ homorganic ŋ. However, three of the common inchoatives with root-final g show unexpected assimilation of the nasal to the position of initial palatal segment of the suffix: garañ-ji-, juḷañ-ji-, jiḷiñ-ji-. Of the examples here, only boḍewg shows the usual /g/ ⟶ ŋ; see 3.4.1.2.2.

Most inchoatives mean 'to become X', or deviate only slightly from it. A few inchoative forms show greater divergence from this meaning. For example, from miḷam 'liar' is formed miḷam-ji- 'to tell lies'.

There is one example of a formally inchoative (or mediopassive) verb which normally occurs in ditransitive case frame. This is bamaṛ-ji- 'steal from', related to the adjectival root bamaṛ 'thief':

ŋan-bamaṛ-jag Ø-ŋanan-ŋanju
3Sg/1Sg-steal MP PP NAbs-money-mine
'He stole my money from me'.

This also occurs with compounding auxiliary -mi, bamaṛ+mi-.

2.1.3.3.2b. Mediopassives

There is a small number of verbs which are inflectionally like inchoatives, but are not inchoative in meaning. All of them contain a suffix -ji- or -yi- identical to the productive inchoativizing suffix. However, in contrast to productively formed inchoatives, the roots of these verbs cannot occur without the suffix. Such verbs are referred to in this grammar as 'mediopassives' (MP), a term used to highlight their anomalous formal

status. Most are formally intransitive by virtue of the presence of the suffix. They cannot undergo derivational processes of any kind; the suffix is constant. Most of them express 'middle' meanings in which the event described takes place entirely within the sphere of the subject. Yet a handful do not conform to this description and normally occur in other than simple intransitive clauses. Because the suffix is obligatory in these forms, the roots found in these verbs are not included among the monomorphemic roots (Table 2-17) which can function as main verbs.

The mediopassives can be divided into several subgroups based on the type of meaning they express:

(a) bodily motion

way-(y)i-	'to fall'
way?way-(y)i-	'to dance' (Red 'fall')
*gaḍ-ji-	'to get up'
*ju-yi-	'to descend'
yiram-ji-	'to cross'
wawañ-ji-	'to forage'

(b) bodily position

ḻuḍ-ji-	'to lie on belly'
ḻuñgag-ji	'to lean (against/on)'
baṇi-ji-	'sit with legs extended'

(c) transition or spontaneous manifestation

ḍiñi-yi-	'to go out, extinguish itself'
ḍan-ji-	'to finish, terminate, come to an end'
mu-yi-	'to turn into, change'
ḻaḻa-yi-	'to dry out'

(d) mental and physical condition, bodily process

yiyi-ji-	'to be afraid of'
galwa-yi-	'to be tired'
muṛi-yi-	'to keep silence'
jay-(y)i-	'to defecate'

The starred verbs actually never occur in the given meaning without paired particle. The inflecting verb gaḍ-ji- is commonly paired with yirg, which together mean 'to get up, arise'; ju-yi- is commonly paired with jibma 'to descend'. Thus these mediopassives function as complex auxiliaries in particle+aux constructions. The verb yiram-ji- 'to cross' is obviously related to the adverb wuyirab 'on the other side'. The verb muṛi-yi- 'to keep silence' (used often in the sense of conventionalized sanction, as for a widow during mourning) is the only one which has an unusual transitive counterpart muṛi-ya+wu- 'to stop someone, prevent someone from doing something'. According to its suffixal paradigm, the bound auxiliary is the lenited form of bu-; but the element -ya- is unique. The verb jay-(y)i- 'to defecate' has two past forms, regular past continuous jay-(y)i-ni and another, jayingi-ni which also appears to be formally past continuous. If there were a regular past punctual form, it would be Ø-jay-(y)ag (3Sg), homophonous with 3Sg present positive ja-Ø-yag 'he goes'.

Several of these verbs may occur in transitive clauses: yiram-ji- 'to cross (something)', jibma ju-yi- 'to descend (something)', ḍan-ji- 'to terminate (something)'. The verb mu-yi- always occurs with noun or adjective complement (see 2.1.1.2,9,4); ḻuñgag-ji- 'to lean (against/on)' takes locative complement if any is present; and wawañ-ji- 'to forage' and yiyi-ji- 'to be afraid of' regularly take dative/purposive complement.

There are several irregularities and relic forms which point to the nature of this group of verb as the frozen residue of a formerly more productive process of verbalization (intransitivization?) with the suffix -ji~-yi. However, root-final stops in productive inchoatives become (usually homorganic) nasals before the 'hardened' suffix form (3.4.1.2); mediopassive ḻuñgag-ji- 'to lean' and ḻuḍ-ji- 'to lie on belly' are exceptions to this. The verb ḍan-ji- 'to finish' has a compound counterpart ḍad+ma- 'to finish'

(usually occurring in transitive clauses; but sometimes intransitive ones). The mediopassive verb shows change of the stop d ⟶ n before the suffix, as in productive inchoativization. But the alternate pairing of ḍad- with compounding auxiliary ma- and -ji- is a now almost isolated example of what may have been formerly a more productive means of creating transitive/intransitive contrasts. The only other example of this kind is the relation between gaḍ-ji- which always occurs with yirg in the meaning 'get up', and gaḍ+ma- 'remove'.

2.1.3.4. Mood

2.1.3.4.1.-2. Mood contrasts

Major mood contrasts are realis versus irrealis, versus negative. Realis forms encode the narrated event as a simple declarative utterance. Irrealis forms express conventionalized attitudes of the speaker towards what he is saying including nuances of possibility, uncertainty and/or counterfactuality. The common feature which can be analyzed out of the use of irrealis forms is speaker-imputed non-assertability of his utterance. The realis and irrealis verb forms within the past and nonpast tense divisions are:

	Realis	Irrealis
nonpast	present	present irrealis desiderative-intentional
past	past punctual past continuous	past punctual irrealis past continuous irrealis

Note that the habitual is omitted, despite the fact that it requires what are otherwise irrealis and subordinate prefixes wa-~ya-. The habitual is, in fact, a semantically realis category; see 1.1.2.3.6b, where it is shown that the first-order prefixation of the habitual forms is due to their being headless adnominal relative-like clauses, not to their being irrealis forms.

In the past category, there are two possible irrealis forms, past punctual and past continuous irrealis. As noted, the fundamental condition upon which the use of irrealis forms is based is speaker imputation of the non-assertability of what he is saying. In the past, non-assertability is interpreted more narrowly as being due to speaker's lack of ability to vouch for the truth of his utterance. Thus past irrealis categories are usually best glossed as 'X reportedly Yed, is said to have Yed':

ŋaḻa-warwiyan ŋan-wa jir wa-Ø-jaygi-ni
FNom-dreaming here stand Irr-3Sg-Aux-PC
'The dreaming is said to have stood here'.

The irrealis and realis forms contrast with the other major mood category, negation. All negative forms have zero first order prefix; most of them are characterized by a particular clausal mode particle. In the nonpast, negative forms are the three subtypes of present negative: simple negation of a present positive, prohibitive, and evitative/anticipatory. In the past, the past negative may express obligative-intentional and past desiderative meanings, in addition to past negation with particle ḍayi; see 2.1.3.-IIh. (See also discussion of negative and other modal particles in 1.4.)

2.1.3.4.3. Imperative

Imperatives are commands to second persons. Imperatives take the usual intransitive and transitive pronominal prefix forms, except that 2Sg is always zero in intransitive and transitive imperatives with 3Sg object.

ḏagba ŋan-wa-w
wait 2Sg/1Sg-Aux-Imp
'Wait for me'.
gaḷaji ḷa-man+bu
quickly 2Pl-run Imp
'Run quickly!'
Ø-balayi Ø-ṉanan ŋanba-wu.
NAbs-big NAbs-money 2Pl/1Sg-give Imp
'Give me a lot of money!'

Negative imperatives are constructed with the mode particle modga:

modga Ø-bu wuṛay ŋin-guj+ma
Neg Imp 2Sg-hit Imp later 3Sg/1DuIn-make trouble
'Don't hit him, later he'll make trouble for you and me'.

This particle is unusual, because the vowel o does not otherwise appear in modal particles or other grammatical morphemes. Its occurrence is otherwise limited to lexical roots. Phonetically, the particle shows the usual range of variation as o, sometimes raised nearly to u. However, its variation is more consistently within the range of o than of u.

Imperative is a zero suffix category for the majority of roots, but a few have overt suffix, distinct from any other inflectional ending.

2.1.3.4.4. Optative

Not applicable.

2.1.3.4.5.-6. Intentional and obligative

See descriptions of category usage in 2.1.3.-IId (desiderative-intentional) and 2.1.3.-IIh (past negative). Intention and obligation are expressed in nonpast by suffixation of -w$_1$u, and desire, intention and obligation in the past by forms of the past negative.

2.1.3.4.7. Potential

There is no form expressing potential or ability to do something (corresponding to one use of English 'can') distinct from expression of possibility by irrealis forms. In negative forms, the particle ŋiñjag expresses inability/impossibility for any reason — physical inability, social constraint or other. The negative conditions are interpreted as being in force in the time interval which includes the moment of speaking and extends into the unbounded future. Thus in the prohibitive are conflated (from the cross-linguistic perspective of possible distinctions) event-oriented negation ('he doesn't talk'), and imputation of inability/impossibility ('he can't/is unable to/will not talk'). See uses of present negative in 2.1.3.-IIc.

2.1.3.4.8.-9. Degree of uncertainty and authority for assertion

See discussion of irrealis usage in 2.1.3.-IIb and 2.1.3.-IIg. Irrealis does not situate the narrated event directly in a semantic dimension of the 'unreal'; rather, it expresses modal and evitative nuances having to do with possibility/relative uncertainty of the narrated event, and in the past, the evidential basis upon which the narrated event rests.

2.1.3.4.10. Hortatives

Hortatives may be thought of as commands to second persons (expressed as if) intended for transmission to third persons, best glossed 'let him/them X'. Included under this label are also first person exhortations, usually formally identical to present irrealis, or to present form with first order zero prefix. This passage from a story about stockmen and their families being given a holiday illustrates both first person forms:

ḏuḷuḷ? wuyan-waṛag, a-ŋaḷa-yag a-ŋaḷa-ba?+ma
send 3Sg/3Pl-Aux PP Irr-1InPl-go Irr-1InPl-bathe
Ø-mawuj ŋaḷa-wa-n.
NAbs-vegetable food 1InPl-visit-Pres
'He sent them (away), 'let's go, let's bathe and go to vegetable (places)', (i.e. places where vegetable foods are plenty).

Third person hortatives have a first order prefix distinct from any other, mari-, followed by the appropriate pronominals expressing third person subject (and object, if transitive). Combinations with non-third pronominal person do not occur in hortative constructions of this type.

mari-wuḷa-yag
Hort-3Pl-go 'Let them pl. go!'

mari-Ø-ga-n
Hort-3Sg/3Sg-take-Pres 'Let him take it'.

mari-wuran-ga-n
Hort-3Sg/3Du-take-Pres 'Let him take them du.'

2.1.3.4.11. Monitory

See discussion of present negative (evitative-anticipatory) category in 2.1.3.-IIc.

2.1.3.4.12. Narrative

Maŋarayi has a suffix which is probably best called 'narrative'. The suffix -wa occurs only in connected narrative of (usually, fairly remote) past events, attached to past continuous verb forms. Its use is distinctive of narrative, but it does not necessarily occur on all past continuous verbs within a narrative. An example is:

janaŋ-gana-ja waḷaḷima ja-Ø-ba?+ma Ø-ma-ñ
where-Abl-Emph young people Red 3-3Sg-bathe-Aux 3Sg-say-PP
waḷaḷima-yaḷa wuḷa-ba?+ma-ṛi-wa
young people-Pl Nom 3Pl-bathe-Aux-PC-Suf
'"Where from indeed are these young girls (who are) bathing", he said; the young girls were bathing.'

(Note that ja-Ø-ba?+ma, irregularly, has 3Sg cross-referencing pronominal.) This is simply 'Suf' in interlinear glosses.

2.1.3.4.13. Consecutive

See discussion of clause-level conjunctions in 1.3.1.1.

2.1.3.4.14. Contingent

See use of maŋaya 'perhaps' as clausal mode particle, 1.4.6a.

2.1.3.-I. First-order prefixes

Now that the basic tense/aspect/mood contrasts have been set out, it is easy to systematize the three-way contrast in first-order prefixes, ga-~ja- versus wa-~ya- versus Ø-. The pair ga-~ja- occurs only in present positive. The second pair, wa-~ya-, occurs in all irrealis forms as well as in the habitual; these are also, as noted, the markers of subordination. The irrealis prefixes also usually occur in first person hortatives, though these sometimes have Ø-. Zero prefixes occur in the past positive and all negative categories, and in the imperative.

The first member of each non-zero prefix pair ga-~ja- and wa-~ya- contrasts with the second as 'nonthird' versus 'third'. For example, in the present positive, ga- is used with all non-third intransitive subject categories, and for all transitive combinations where both categories entering into the transitive combination are not third. The prefix ja- is

used for all third person intransitive subjects, and for any transitive combination where both categories entering into the combination are third person.

The formal distinction is not maintained as carefully for the pair wa-~ya-. Here, the nonthird versus third distribution of the forms is sometimes found, but wa- can be used for all categories. No speaker preserves a distinction between wa- and ya- all the time. In addition, the irrealis prefixes are often reduced phonetically to a-. Perhaps an original, more strictly maintained contrast is collapsing, with the original 'nonthird' category occurring in freer distribution than formerly.

2.1.3.-I. Uses of the tense/aspect/mood categories

Many sections above relate to the semantic and use features of tense/aspect/mood categories, and contain references to following sections. Discussion of usage of verb forms has been reserved for treatment in one place, below 2.1.3.-IIa through h.

2.1.3.-IIa. Present realis

Present (positive) realis can be used in a wide range of functions, as can comparable tense forms in many languages. One of its main functions is to express that an event is in progress, or imperfect, at the time of speaking. The speaker may be observing the event or otherwise sensing it, and thus know it to be in progress; or he may just assume that it is in progress. Examples are:

jaginaŋ-gu ga-ña-ḍu-n?
why -3-2Sg-cry-Pres
'Why are you crying?'

jilwa ga-ŋawuyan-ga-n bugbugbug
remember/think about -3-1Sg/3Pl-Aux-Pres old person Red
'I'm thinking about the old people'.

ṇa-ŋajgan-gan ja-wuḷa-ṇi
NLoc-scrub 3Pl-sit
'They're sitting in the scrub'.

jilg ja-Ø-way-(y)i-n
rain 3-3Sg-Aux-MP-Pres
'It's raining'.

Uses such as these denote specific events in time and space. The present positive is also used to talk about time-free events, without specific temporal or spatial referents. These include activities or characteristics which are customary or timeless.

Ø-muḍuṛa-ṇawu ja-Ø-ṇidba guwa Ø-ŋo?min
NAbs-crest-its 3-3Sg/3Sg-have like NAbs-goose
'It (a bird sp.) has a crest like a goose'.

Ø-wangar ja-wuḷa-bu-n, Ø-miṛiṛib
NAbs-water pandanus 3-3Pl/3Sg-hit-Pres NAbs-palm sp.

ja-wuḷa-bu-n, malga Ø-gurubaba yirg
3-3Pl/3Sg-hit-Pres directly NAbs-flying fox get up

ja-Ø-gaḍ-ji-n garag-wa.
3-3Sg-Aux-MP-Pres a lot-Art
'They hit the pandanus, they hit the palms, (and) directly a lot of flying foxes rise up'.

This range of usage sometimes comes close to that covered by the habitual; in fact, in explanations of timeless events and characteristics of entities, present positive and habitual are sometimes found within the same stretch of text:

ja-Ø-jigij+mi, ḍim wa-Ø-yaŋ-ga-n
3-3Sg-jump take off Hab-3Sg-Aux-Aug-Pres
'It jumps, (then) it always takes off'.

A subtype of time-free usage is the employment of present positive in giving explanations of processes, e.g. methods of making or cooking things, such as in the following extract about cooking flying foxes:

Ø-ḍuḍu-ṇawu mob ja-wuḷa-ma ja-wuḷa-jud+ma ṇoḍṇoḍ.
NAbs-wing-its break 3-3Pl/3Sg-Aux 3-3Pl/3Sg-Aux heap Red

Gana ṇa-yawg ja-Ø-ṇa-n ja-wuḷa-buḷ?+ma Ø-buḍ-ṇawu.
well NInst-oven 3-3Sg-burn-Pres 3-3Pl/3Sg-singe NAbs-fur-its

Ø-baṛagur ja-wuḷa-mi, ja-wuḷa-ŋarij+ma; ja-wuḷa-mi
NAbs-paperbark 3-3Pl/3Sg-take 3-3Pl/3Sg-strip 3-3Pl/3Sg-put

Ø-jurgjurg-ṇawu; ja-wuḷa-baḷbaḷ+ma ja-wuḷa-bab+ṇama ṇa-yawŋ-gan.
NAbs-leaf-its 3-3Pl/3Sg-make bed 3-3Pl/3Sg-put NLoc-oven
'They break their wings and heap them up. Well, the ground oven is burning, they singe its fur. They take paperbark and strip it; they take leaves; they make a bed (of leaves) and put it in the ground oven'.

Present positive is sometimes used with future temporal reference, when the speaker chooses to represent the future occurrence of the event as fairly certain. See e.g. the last example in 2.1.3.1.2.2 'He'll give me (money) in a few days'.

Present positive is sometimes used in narration of past (including mythic) events, the time frame having been established earlier in the narrative. In such cases, the present gives the same immediacy that such uses have in English, as in this extract about traditional burial practices:

mayawa-bayi jibma Ø-jud+ma-ṛi-wa Ø-ḷorgon. Buy?
now-Foc descend 3Sg/3Sg-Caus-PC-Suf NAbs-burial log show

Ø-wu-ni-wa gaḍugu, ṇa-gaḍugu Ø-ḍu+wa-ni-wa,
3Sg/3Sg-Aux-PC-Suf woman Nom-woman 3Sg/3Sg-cry-PC-Suf

Ø-galg+mi-ñji-ni-wa Ø-bab-ŋayawu. Ṇa-malam
3Sg/3Sg-spear-RR-PC-Suf NAbs-head-hers MNom-man

Ø-galg+mi-ñji-ni-wa, Ø-ma-ṛi-wa... mulugmuluŋgaḷama
3Sg/3Sg-spear-RR-PC-Suf 3Sg-do-PC-Suf afternoon

wingij Ø-yi-ñi, buñaŋ ḍa?ma ja-wuḷa-mi, ḍaramala
rain lightly and stop 3Sg-Aux-PC evening lift 3-3Pl-Aux put up

Ø-ḷandi-ḷama.
NAll-tree
'Now they lowered the burial log. They showed it to the women, the women mourned (over it), they lacerated their heads. The men speared/lacerated themselves, they did (like that) ... in the afternoon it rained lightly (and stopped), in the evening they lift it up, put it up in a tree'.

(Note the use of masculine prefixation with ṇa-gaḍugu, which as mentioned in 2.1.1.4.13 sometimes occurs in generic uses.) 'Lift' is present.

2.1.3.-IIb. Present irrealis

Present irrealis is principally used to encode a hypothetical event which is anticipated or being considered at the moment of speaking. Nuances of a hypothetical nature which the verb form can express include 'might', 'should' and something approaching 'will' or 'shall' where there is indecision as to the course of action to be taken. Often the irrealis nuance

is made precise by a mode particle, or reinforced by an adverb:

ñaŋgi-ba bamburiyi a-ña-ŋaŋ?+ma nara-bayi Ø-jiligari.
2Sg Nom-Foc better Irr-2Sg/3Sg-ask that-Foc MAcc-boss
'You, it'd be better if you asked the boss'.

wuṛay a-ŋa-ŋaŋ?+ma
later Irr-1Sg/3Sg-ask
'Later I'll (I might) ask him'.

The following longer passage was an attempt to muster support from myself and others for a trip to a certain lagoon where the speaker wanted to fish. The present irrealis is used throughout to propose hypothetical events:

maṛ? ya-wuḷa-bana Ø-waṇbiribiri, a-ŋiyan-ga-n
make Irr-3Pl/3Sg-Aux NAbs-paperbark float Irr-2Sg/1ExPl-take-Pres

a-ŋir-yu?yu+ma ŋaḷa-X malga Biraran, gi-nara Ø-bundal
Irr-1ExDu-swim FNom-(name) up to (place) Ana-that NAbs-billabong

a-ña-yiri+wa-n, ya-wuḷa-guray+ma ...
Irr-2Sg/3Sg-see-Pres Irr-3Pl-paddle
'They might make a paperbark float, you might take us, X and I will swim right up to Biraran, you could look at that same billabong (mentioned before), they could paddle ...'

Information questions are frequently constructed as present irrealis, though they may also be present realis:

janaŋgari-ba a-ña-yag?
where-Foc Irr-2Sg-go
'Where are you going?'

janaŋaŋgu-ba jaḍ a-ña-jaygi-n
when-Foc return Irr-2Sg-Aux-Pres
'When are you coming back/when might you be coming back?'

Like the present realis, present irrealis is used within direct quotations:

jaḍ ya-Ø-bu-n-bayi Ø-gañwar Ø-ma-ñ
shut up/obscure Irr-3Sg/3Sg-Aux-Pres-Foc NAbs-sun 3Sg-say-PP

ṇa-gag-ŋaŋga.
MNom-MMB-yours
'It might obscure the sun', said your mother's mother's brother.

(This is from a story about dangers encountered during a rainmaking ceremony. Note the favorite rhetorical device of referring, here to the rainmaker, in terms of addressee's kin relation to him, not the speaker's relation to him).

2.1.3.-IIc. Present negative

There are three present negative categories, the simple negation of a present positive, prohibitive, and evitative/anticipatory. The inflected verb forms are identical for all, but simple present negative requires the negative mode particle ḍayi; the prohibitive, ŋiñjag; and evitative-anticipatory, baḷaga.

The simple category is the direct negation of the present positive sense of event-in-progress, observable or otherwise known to be going on at the moment of speaking:

ḍayi Ø-ḍu-n
Neg 3Sg-cry-Pres
'He is not crying'.

ḍayi wuḷa-ŋani+yug
Neg 3Pl-talk
'They are not talking'.

Prohibitive expresses inability due to physical incapacity or any other constraint, including social ones ('cannot because not allowed').

However, it seems possible to attribute a more fundamental meaning to this category. Particle ḍayi is used with past negative forms, ŋiñjag cannot be. With present verb forms, ŋiñjag can express future as well as present inability; that is, a negative force which is unbounded, extending into the indefinite future. Thus ŋiñjag ŋa-yag would be used for all of the English meanings 'I cannot go', 'I will not go' (the negation of the desiderative-intentional category), as well as 'I will not be able to go'. The most general features of meaning of the prohibitive are (1) nonpast negation and (2) inability for any reason. When ŋiñjag is used with a verb form in a context such that the negative force cannot be interpreted as referring to inability with respect to some immediate situation, reference is understood as projected into the unbounded future. Examples of its use are:

ŋiñjag ŋa-yiri+wa-n galiya
Prohib 1Sg-see-Pres far
'I can't see far', i.e. 'my eyesight is poor'.

This does *not* mean 'I don't see far (now)', but given appropriate circumstances (such as your obstructing my line of vision) it could mean 'I can't see far (now)'.

ŋiñjag ŋaḷa-bu-n Ø-guṛuggguṛug-bayi, wuṛay ḍo?
Prohib 1InPl-kill-Pres MAcc-white people-Foc later shoot

a-ŋayan-ma
Irr-3Sg/1InPl-Aux
'We can't kill white people (i.e. we are constrained from doing so), later on they might shoot us'.

(See 1.4.2 for a favorite antonymous construction type involving use of the particle ŋiñjag with NP-phrasal, rather than clausal, scope.)

Evitative/anticipatory is used to express two closely related (sometimes indistinguishable) notions: what ought to be done before some event (often assumed to have potentially undesirable results) happens, or what ought to be done to avoid some imminent undesirable event. In the first case the best translation is usually 'before'; in the second, 'lest'. Note the relation of the evitative/anticipatory mode particle baḷaga to the reduplicative adverb baḷaḷaga 'right now, today'; the common semantic feature is that of immediacy.

gaḷaji Ø-ŋaŋ?+ma baḷaga Ø-yag
quickly 2Sg-ask Imp before 3Sg-go
'Ask him quick before he goes'.

bargji Ø-ṇama baḷaga ña-way-(y)i-n
hard 2Sg-hold Imp lest 2Sg-fall-MP-Pres
'Hold on tight lest you fall!'

a-ŋaḷa-yag baḷaga Ø-miḷiḷ+ma
Hort-1InPl-go before 3Sg-sunset
'Let's go before the sun sets!'

2.1.3.-IId. Desiderative-intentional

Desiderative-intentional expresses the desire or intention of the agent of the verb to carry out whatever is expressed by the verb. It is important to distinguish this form from present irrealis: the latter expresses speaker attitude of certain kinds, while desiderative-intentional expresses the wish or desire of the agent of the verb (who may incidentally be the speaker).

Ø-wab ŋa-ḍaṛa+wu-b, mod a-ŋa-mi-wu.
NAbs-sugarbag 1Sg/3Sg-find-PP cut Irr-1Sg/3Sg-Aux-DI
'I spotted/found wild honey, I want to cut it (from the tree)'.

Ø-balayi ŋa-may Ø-mar, a-ŋa-ŋaya-wu
NAbs-big 1Sg/3Sg-get PP NAbs-fish Irr-1Sg/3Sg-cook-DI

a-ŋa-ja-wu.
Irr-1Sg/3Sg-eat-DI
'I got a big fish, I'm going to cook and eat it'.
Ø-burbaburba mar? ya-wuḷa-bana-wu.
NAbs-windbreak make Irr-3Pl/3Sg-Aux-DI
'They want to build a windbreak'.

(See Dixon 1980:310, 381 for a suffix of identical shape and overlapping function in Pama-Nyungan.)

2.1.3.-IIe. Habitual

The habitual is sometimes merely used to express habitual activities:

Ø-magerg wa-Ø-ḏay-ŋa-ma-n Ø-muyg
NAbs-louse Hab-3Sg/3Sg-bite-Aug-Aug-Pres MAcc-dog
'Lice always bite dogs'.

(Note 'louse' is, unexpectedly, absolutive.)

However, habitual is more frequently used to express inherent activity, or activity characteristic of the agent:

ṇa-ḏirag Ø-mar wa-Ø-jiñja-n
NErg-saltwater crocodile NAbs-fish Hab-3Sg/3Sg-eat Aug-Pres
'The saltwater crocodile feeds on fish'.

Another example is the following description of a bird:

ja-Ø-jigij+mi malga ḏim wa-Ø-yaŋ-ga-n
3-3Sg-hop-Aux then take off Hab-3Sg-Aux-Aug-Pres
'It hops, then takes off'.

(The present is capable of being paired with habitual in this way by virtue of its use to express timeless events.) The use of habitual to express activities characteristic of animate beings accounts for its special value in the avoidance style, where it is used to create descriptive clauses which function as nouns (see 1.1.2.3.6b). The habitual activity or tendency predicated of an NP is used metonymically as a characterization of it, taking the form of an adnominal headless relative 'one who habitually does X', and sometimes implicating additional arguments. Thus the habitual, in avoidance style and elsewhere, is used predicatively of animate and other entities capable of activity and manifestation of tendencies. The avoidance style, clausal substitute for jambirina 'bustard' functions as dative/purposive constituent in the following example:

Ø-maṇ wa-Ø-jiñja-n wuḷa-ya-j.
NAbs-gum Hab-3Sg-eat Aug-Pres 3Pl-go-PP
'They went for that which is always eating gum', i.e. wild bustard.

Note the habitual clause, as constituent within a larger clause, is not case-marked.

2.1.3.-IIf. Past punctual and past continuous realis

The two past positive categories are best discussed together since their uses contrast in some ways and are complementary in others. Both refer to events perfected in the past. The labels of the two categories suggest a difference in meaning between them which is not rigorously exemplified in every usage, but captures the contrast between them when the two are directly opposed. Of the two, past continuous is the unmarked category: its text frequency overall is greater than that of past punctual (see text fragment in 1.5.1.1.-2), and past continuous is the category used when punctuality (perfection at a specific moment in past time) is not explicitly expressed; elsewhere, the past continuous positively expresses continuity of the verbal meaning in past time, particularly imperfectivity at a moment identified as reference point of narrated past events. In contrast to past continuous, past punctual is used to denote a single

perfected action, not continuous in the past. In narrative the past continuous is often used to represent the framework of events within which other actions occur, the latter either punctual or extended over time. Examples in which past continuous sets the stage are:

Ø-yi-ñi Ø-jigu Ø-ma-ñ, ṇa-waŋgij ṇa-jab baḷ?
3Sg-go-PC NAbs-road 3Sg-do-PP MNom-boy MNom-wind sit

wud-ṇi-ñ, Ø-ṇiŋa-ni jibma Ø-ju-yag.
3Du-Aux-PP 3Sg-come-PC descend 3Sg-Aux-MP PP
'He went along, he travelled, the boy and the wind sat down. He was coming along, he descended'.

Nara-bayi Ø-gaṛ?gaṛ+ma-ñ, Ø-yum+bu-b, Ø-warwiyan Ø-bab+ṇamdag
that-Foc 3Sg-cough-PP 3Sg-leave-PP NAbs dreaming 3Sg/3Sg-put PP

Ø-yum+bu-b garag-wa, Ø-ṇiṛ?min-ṇawu-bayi Ø-ḏulu-ṇawu-bayi
3Sg/3Sg-leave-PP a lot-Art NAbs-liver-3Sg-Foc NAbs-heart-3Sg-Foc

Ø-yum+bu-ni-bayi Ø-warwiyan.
3Sg/3Sg-leave-PC-Foc NAbs-dreaming
'That (one) coughed and left (things), he put dreamings, he left a lot, his liver, heart, he left dreamings' (i.e., physical manifestations).

Another exemplary passage describes the killing of a Chinese man and the stealing of his belongings at a place on Elsey Station in the early 1900s. The killing itself is mainly encoded as a continuous process by past continuous forms, while subsidiary activities are represented mainly as punctual events within that framework. The passage illustrates the difficulty of making an absolute distinction between the uses of the two categories.

ṇi-yaran-wa-bayi ḏayi wur-bu-ṇḏa-b, ṇa-Muḷuḷurun-bayi
there-Du Nom-Art-Foc Neg 3Du/3Sg-kill-Aug-PNeg MNom-(name)-Foc

ḏuḏuḷa Ø-bu-ni, Ø-jiwi-j Ø-jululu-ṇawu,
forever 3Sg/3Sg-hit-PC 3Sg/3Sg-take from-PP NAbs-swag-his

berber wuḷa-ga-ni wuḷa-bu-ni jaḷṇaṛ, Ø-bu-b
take away 3Pl/3Sg-Aux-PC 3Pl/3Sg-hit-PC hard 3Sg/3Sg-hit-PP

ṇa-Muḷuḷurun, malga Ø-munduy?+ma-ñ Ø-mawuj Ø-yulgmiṇ
MNom-(name) then 3Sg/3Sg-load-PP NAbs-tucker NAbs-sugar

ŋamda Ø-jurgjurg, Ø-bega Ø-mi-ñi-bayi
whachacallit NAbs-tealeaf NAbs-tobacco 3Sg/3Sg-take-PC-Foc

calico-ṇawu jargjarg Ø-ṇamdi.
(Eng.)-his tear Red 3Sg/3Sg-Aux PC
'Those (other) two didn't hit him, Muḷuḷurun kept on hitting him, he took his swag away, they ran off with it, they hit him hard, Muḷuḷurun hit him, then he loaded (on his shoulder) his food, sugar and whachacallit tealeaf, he took his tobacco, he tore up his calico'.

Descriptions of past customary usage or habit are almost invariably past continuous, as in this extract describing how mosquitoes were combated in the days when people had no permanent bedding:

ḏeḏ Ø-mi-ñi wuḷa-baḷbaḷ+ma-ṛi ḷuḷiñ ḷuḷiñ, Ø-ḏamayi
strip 3Sg/3Sg-Aux-PC 3Pl/3Sg-make bed-PC around Red NAbs-fire

Ø-balayi joḷe? wuḷa-ma-ṛi-wa; wuyan-ḏaḷi ṇa-ḷiwu-bayi.
NAbs-big make fire 3Pl/3Sg-Aux-PC-Suf 3Sg/3Pl-bite PC NErg-mosquito-Foc
'They stripped it (a tree), they made beds right around, they made a big fire; mosquitoes used to bite them'.

Past continuous allomorphs are all vowel or semivowel final. In narration, past continuous verb forms are often suffixed with -wa, exemplified in the passage above; see 2.1.3.4.12.

2.1.3.-IIg. Past irrealis (punctual and continuous)

By using irrealis in the past, the speaker indicates that he cannot vouch for the truth of what is expressed by the verb because he does not have direct knowledge of it; he has not seen it or otherwise become certain about it. Lack of direct knowledge leaves the speaker unable to certify that the event has taken place. The past irrealis categories are best glossed as reportative 'supposedly, allegedly, is said to have' and the like. Examples are:

ŋa-jiŋ-gana ḍo? a-wuḷa-ma-ṛi malga Gumja.
place-Abl shoot Irr-3Pl-Aux-PC up to Gumja
'They (white people) supposedly shot from Najig right up to Gumja'.

In recounting the story of a massacre, the speaker signals by using irrealis forms that she only knows of the event second-hand, and there may be doubts about the certainty of the allegation.

ŋa-Ḍamba ḍaŋgaw? wa-Ø-bu-b nara-bayi wa-Ø-ḍuy?+ma-ṛi
MNom-(name) dive in Irr-3Sg-Aux-PP that-Foc Irr-3Sg/3Sg-punch-PC

ŋaya-mimi.
FDat-FM
'Damba is supposed to have dived in, he's supposed to have punched him on account of my father's mother'.

2.1.3.-IIh. Past negative

The punctual-continuous distinction is neutralized in the past negative verb form. When used as simple negation of a past positive, the verb form is preceded by the particle ḍayi:

ḍayi buy? ñanbur-wu-ya-b.
Neg show 3Du/2Sg-Aux-Aug-PNeg
'They (du.) didn't show you (sg.)'.

ḍayi ŋiḷa-ṇu-ṛa-b-(b)a balayarg ŋa-ŋajgan-gan ŋiḷa-ṇi-wa
Neg 1ExPl-sit-Aug-PNeg-Foc in between NLoc-scrub 1ExPl-sit-Suf

Guṇguṇa
place
'We didn't camp along the way, we camped in the scrub at Guṇguṇa'.

(Speaker here was emphasizing that a group of Aborigines being pursued by the station manager did not stop in their flight, they went right out into the bush.)

The past negative verb form without mode particle ḍayi is used to express the obligative meanings 'should, should have', or an intentional meaning 'meant to'. For example, a person who mis-speaks himself may say:

'yulgmiŋ' ŋa-ma-m.
'sugar' 1Sg-say-PNeg
'I should say/should have said, meant to say "sugar"'.

gamurana ŋa-yaŋ-ga-b gana ḍayi ŋa-ṇidba Ø-ṇanan.
tomorrow 1Sg-go-Aug-PNeg but Neg 1Sg/3Sg-have NAbs-money
'I should go tomorrow but I don't have money'.

With the addition of desiderative-intentional suffix -w$_1$u~-gu to the past negative, a form is created which expresses past intention, desire and sometimes also a nuance of past obligative meaning. Examples are:

ṇel? Ø-wa-ni Ø-jiwi-m-gu ŋan-gaḍugu-ŋawu.
sneak 3Sg/3Sg-Aux-PC 3Sg/3Sg-take away-PNeg-DI FAcc-woman-his
'He sneaked up on him, he wanted to steal his wife from him'.

note that use of the form does not necessarily imply anything about the success or failure of the desired outcome.

wuḷa-ḍi-ñji-m-gu ŋa-ḍamayi-yan
3Pl-warm-Aug-PNeg-DI NLoc-fire
'They wanted to/should have warmed themselves by the fire'.

2.1.3.-III. Stem forms

Two major topics must be discussed regarding stem formation in the various tense/aspect/mood categories. One is alternation in stem forms, and the other, the augment system which plays a part in the formation of past negative and habitual forms. The reader will want to refer to the verb paradigms displayed in Table 2-17.

2.1.3.-IIIa. Alternation in stem shapes

The roots ŋaya- 'eat' and ḍaya- 'bite' show the following stem alternations:

Caya-	Present, imperative
Cay-ŋa-	Past negative and habitual (stem augment -ŋa-)
Caḷi	Past continuous
Caḷag	Past punctual
Caḷŋ-	Reflexive-reciprocal

Past continuous and past punctual forms are unsegmented because of the uncertainty of the morpheme cut. (Note that there is an ḷ~y morphophonemic alternation in a number of grammatical morphemes; see 3.4.1.2.6.) The fact that no (other) morphemes are vowel-initial suggests that the past punctual, at least, might be segmented as Caḷa-g, rather than Caḷ-ag. But note that waṛ- 'to throw' has past punctual waṛag and past continuous waṛi, and does not have a second stem vowel a in any forms other than past punctual. This suggests that historically at least, one of the past punctual allomorphs may have been of the form -Cag, with C very likely a non-nasal sonorant which assimilated to C of the stem. The past punctual form jirag of ja- 'to eat, drink' also lends some support to this hypothesis, as do past punctual suffixal forms of the inchoative, mediopassive and reflexive-reciprocal markers. The stem form Caḷŋ- is found in nominalized forms of these roots (see 2.2.1.2.1).

A number of disyllabic roots of the shape C$_1$VC$_2$V, where C$_2$is either n or m, show a single pattern of stem alternations. These are bana- 'make', ŋama- 'hold', juma- 'mention', ḍuma- 'cut hair', and ŋuma- 'smell'. (A small subclass shows minor differences from these, see below.) Using N as cover symbol for n and m, these roots have the following stem shapes:

CVNV-	Present, past negative, habitual, imperative
CVNdag	Past punctual
CVNdi	Past continuous
CVN-	Reflexive-reciprocal

Like Caya- verbs, no morpheme divisions are indicated in past punctual and past continuous. However, the hypothesis was suggested above that past punctual historically may have had an allomorph -Cag. These forms add further support and indicate that the C was hardened to a stop following stem shapes CVN-.

There are two roots similar in shape to the above, except that both have C$_2$=ñ, and both show clusters of ŋḍ in past punctual and continuous. These roots are guña- 'tie' and ḍiwiña 'reach, attain':

	past punctual	past continuous
'cut'	guṇḍag	guṇḍi
'reach'	ḍiwiṇḍag	ḍiwiṇḍi

The only roots which are not vowel-final are waṛ- 'throw', and a handful which end in -g: ŋuñjag- 'mock, copy', yag- 'go', jug- 'swear' (and compounds of the latter with lenited form -yug). All these drop the g in the categories past punctual and continuous (except that no past punctual could be elicited for ŋuñjag-); ŋuñjag- and jug- also drop the g in reflexive-reciprocal and imperative forms, but yag- retains it in the imperative. Note that this set of verbs with final g in some forms, is almost coextensive with the set of verbs showing past continuous allomorph -ñi. The fact that mi- 'get' is the only other root with this past continuous suffix form leads to the suspicion that it, too, has g in some paradigmatic forms. There is evidence of this g in augmented past negative and habitual forms, which show e.g. mi-ŋga-b (PNeg) instead of *mi-ya-b as do the majority of vowel-final roots.

The past punctual may of mi- 'get' shows an irregularity not paralleled in any other root, and may be historically suppletive from another paradigm.

A few roots show changes in vocalism in one or more paradigmatic forms. The root yag- 'go' has past continuous stem yi-, where the root vowel presumably has assimilated to that of the suffix -ñi. The root ṇi- 'sit' has stem ṇu- in past negative and habitual, so that it is parallel to yu- 'sleep', the only other root besides ṇi to have stem augment -ṛa-. The following show assimilation of final root vowel a to i in reflexive-reciprocal forms: ja- 'eat', bana- 'make', ṇidba- 'have', and ḍaṇidba- 'wait for'.

The root ja- 'consume' has a highly irregular paradigm; segmentation is not indicated in past punctual and continuous forms.

The root jaygi- 'stand' has irregular monosyllabic stem form in the past punctual, ja-.

The two roots waṛ- 'throw' and jiṛa- 'hunt up' show the addition of auxiliaries (-mi- and -wu- respectively) in reflexive-reciprocal forms, and jiṛa- also in the imperative.

Otherwise, there are only two roots which have irregular 2Sg imperative stems or suffixes, it is not certain which. These are ṇi- 'sit' and jaygi- 'stand'; other imperative forms of both are regular. The 2Sg and 2Pl imperative forms of each may be compared:

2Sg Ø-ṇig Ø-jaji
2Pl ḷa-ṇi ḷa-jaygi

2.1.3.-IIIb. Stem augments

Most roots require an augment -ma- or -mi- in the habitual before the present suffix. This augment was shown in final suffix position 3 in 2.1.3d. Some verbs also have another augment in the habitual (e.g. ṇay-ŋa-ma-n habitual stem of ṇaya- 'cook'), but the majority of roots have *either* one augment *or* the other in the habitual, not both. Thus, position 1 and 3 augments are in complementary distribution for most roots. The habitual stem of yag- 'go' may facultatively contain both, or just augment 1, either -yaŋ-ga-ma-n or -yaŋ-ga-n. There are no habitual stems which fail to have one augment (-ma- or -mi- for the majority, as noted), but there are past negative stems which have no augment, and add past negative allomorphs to a stem equivalent to the root, e.g. ḍiwiña-m 'did not reach', ma-m 'did not say, do'.

Some roots show a position 1 augment in the past negative. For those that do, this augment must also occur in the habitual, whether or not this is followed by -ma-/-mi-. Those roots that do not add a position 1 augment in the past negative, also lack it in the habitual. Thus past negative and habitual have a common stem, the habitual in some cases requiring an additional mark. (Space does not permit comparative comments on verb systems within Maŋarayi's subgroup, needed to begin to account for the morphological relatedness between past negative and habitual. Suffice it to say that the tense/aspect/mood categories of Maŋarayi, in comparison with languages of its subgroup, appear to have been restructured quite dramatically. In earlier stages the augment appears to have been part of a continuous aspect system opposed to a non-continuous (punctual) one, the historical antecedents of past negative and habitual having belonged to the former system.)

The roots which require augment 1 are:

bu-	'hit'	bu-ṇḍa-
wu-	'give'	wu-ya-
wa-	'visit, see'	wa-ya-
ṇa-	'burn' (intr.)	ṇa-ya-
ḍu-	'cry'	ḍu-ya-
ḡunda-	'cut'	ḡunda-ya-
yala-	'bother'	yala-ya-
waṛ-	'throw'	waṛ-ŋa-
ḍaya-	'bite'	ḍay-ŋa-
ṇaya-	'cook'	ṇay-ŋa-
yu-	'sleep'	yu-ṛa-
ṇi-	'sit, be'	ṇu-ṛa-
ga-	'take'	ga-ñja-
ḍi-	'warm oneself'	ḍi-ñji-
ṇiyiŋgi-	'look up'	ṇiyiŋgi-ñji-
mi-	'get'	mi-ŋga-
jug-	'swear'	juŋ-ga-
yag-	'go'	yaŋ-ga-
ŋuñjag-	'copy'	ŋuñjaŋ-ga-

The simplest augment shapes are -ya-, -ṛa- and -ŋa-. All the others are sequences of nasal, homorganic stop plus vowel, -ṇḍa-, -ñjV-, and -ŋ-ga-; in the last, the -ŋ- is identifiable synchronically as the morphophonemic alternant of the root-final consonant -g- in most cases. It is notable, in fact, that except for problematic mi- 'get', -ŋ-ga- occurs only in roots which are synchronically g-final in most paradigmatic forms. Thus, synchronically the cluster -ŋ-ga- can be described in terms of the productive phonological processes which turn stops into the homorganic nasals and harden suffix-initial semivowels (see 3.4.1.2), converting underlying $g+y_1 \longrightarrow ŋg$. Despite the fact that the cluster ŋg of the augment can be explained in terms of productive processes, it is parallel to ṇḍ and ñj which occur after vowel-final roots. This suggests that final g of roots like yag (which are the only stop-final ones in the language, and nearly the only ones which are not vowel-final) may have been historically analyzed as part of the root by a process of analogical resegmentation, which restructured the underlying form of the root by reversing the effect of the productive phonological rule. That is, since at boundaries ŋ-g frequently represents underlying $g\text{-}y_1$, the originally indivisible cluster of the augment -ŋga- was reanalyzed as $g\text{-}y_1$, with g as part of the root. This hypothesis may provide an explanation for the unusual g-final roots, but needs to be studied comparatively. If this explanation is correct, the presence of nasal-stop clusters in the augments must pre-date the re-analysis of the roots, probably by a considerable period. There is good evidence, in fact, that the augment system is very archaic in languages of Maŋarayi's subgroup. (An interesting question for future research is to reconstruct fully historical levels in the tense/aspect/mood system in which the augments functioned, and then, from the continent-wide perspective, to assess

the functional and/or possible genetic relation between the augment systems in some non-Pama-Nyungan languages, and the 'conjugation markers' of some Pama-Nyungan languages, see Dixon 1980:382ff).

The position 3 habitual augment -ma- shows vowel assimilation to -mi- in several stems containing i as the only root vowel, e.g. the habitual stem ŋiṛi-mi-n of 'to bring', jiwi-mi-n of 'take away from', and a handful of others. Compound verbs with inseparable -mi- also show assimilation of position 3 augment to -mi-, e.g. ŋiṛ?+mi-mi-n, habitual of 'breathe'.

Roots which normally take position 1 augments are not augmented in reflexive-reciprocal, habitual and past negative forms such as 'did not hit myself'. Instead, in the habitual the reflexive-reciprocal suffix appropriate to the particular root is added directly to it, and the position 3 augment added to that, thus:

bu-yi-ma-n (i.e. not bu-ŋda-yi-ma-n)
hit-RR-Aug-Pres habitual 'always hitting oneself'

ŋuñja-jiyi-ma-n
copy-RR-Aug-Pres 'always mocking oneself'

Thus morphemes of positions 1 and 2 are mutually exclusive.

In the past negative, reflexive-reciprocal forms of roots which ordinarily require position 1 augments likewise do not add them; the verb forms inflect according to the suffixal paradigm of the reflexive-reciprocal category, e.g. bu-yi-b 'did not hit oneself' (hit-RR-PNeg). See 2.1.3.-IVb.

2.1.3.-IV. Allomorphy and realization of suffixal categories

2.1.3.-IVa. Reflexive-reciprocal allomorphs

The reflexive-reciprocal (see 2.1.3.1.2.3) has three allomorphs, -yi-, -jiyi- and -ñjiyi-. Only five verbs take -yi-:

Root		Reflexive-reciprocal
bu-	'hit'	bu-yi-
wu-	'give'	wu-yi-
ma-	'say, do'	mi-yi-
jug-	'swear'	ju-yi-
yala-	'bother'	yala-yi-

The root vowel of ma- shows assimilation to that of the suffix. This change in vocalism is found even in the past punctual, where the suffix does not contain i, mi-yag.

Roots which take -ñjiyi- include:

mi-	'get'	mi-ñjiyi-
ga-	'take'	ga-ñjiyi-
wa-	'visit'	wa-ñjiyi-
ja-	'eat'	ji-ñjiyi-
ṇa-	'burn' etc.	ṇa-ñjiyi- (also as aux in e.g. mir? ṇa- 'to know')
bana-	'make'	bani-ñjiyi-
gunda-	'cut'	gunda-ñjiyi-
ḍaṇidba-	'wait for'	ḍaṇidbi-ñjiyi-
waṛ-	'throw'	waṛ+mi-ñjiyi-

Roots which take -jiyi- include:

ḍaya-	'bite'	ḍalŋ-jiyi-
ṇaya-	'cook'	ṇalŋ-jiyi-
ṇuma-	'smell'	ṇum-jiyi-
juma-	'mention'	jum-jiyi-
ḍuma-	'cut hair'	ḍum-jiyi-
gawa-	'bury'	gawa-jiyi-
ŋuñjag-	'copy'	ŋuñja-jiyi-
ḍiwiña-	'reach'	ḍiwiñ-jijiyi-

The reflexive-reciprocal of ḍiwiña- shows reduplication of the first syllable of the suffix. Most of the roots which take -jiyi- have nasal-final stems, but some vowel-final ones occur. Reflexive-reciprocal allomorphy is not predictable on phonological grounds.

Some roots have the same reflexive-reciprocal forms as bound auxiliaries and as main verbs or free auxiliaries: ma-, mi-, ga-, ṇama-. (The reflexive-reciprocal form and the present are the only ones which main verb/free auxiliary mi- and bound auxiliary mi- have in common.) Some roots, however, take a different reflexive-reciprocal allomorph as bound auxiliary than they do as main verbs or free auxiliaries. These are:

Root	Free aux, main verb	Bound aux	
bu-	bu-yi-	ŋuj+bu-ñjiyi-	'deceive oneself, another'
jug-	ju-yi-	ŋani+yu-jiyi-	'talk to oneself'
wa-	wa-ñjiyi-	yiri+wa-jiyi-	'look at oneself'

Compounds with bu- show further variation, in that a few have allomorph -jiyi-, different from the majority of compounds (e.g. ḍaṛa+wu-jiyi- 'to find/see oneself, each other').

2.1.3.-IVb. Reflexive-reciprocal, inchoative and mediopassive paradigms

Roots inflected as reflexive-reciprocal, inchoatives and the mediopassive verbs (2.1.3.3.2b) have identical suffixal paradigms. Only the final syllable -yi- of the longer reflexive-reciprocal allomorphs participates in the paradigmatic alternations. Paradigmatic forms are:

Pres	((ñ)ji)-yi-n
PP	((ñ)ji)-yag
PC	((ñ)ji)-yi-ni
PNeg	((ñ)ji)-yi-b
Hab	((ñ)ji)-yi-ma-n
Imp	((ñ)ji)-yi-Ø

Note the form -yag adds support to the speculation (2.1.3.-IIIa) that one past punctual allomorph may have been -Cag historically, with subsequent assimilation of C. The a vocalism of this form can be accounted for only under the assumption of historical fusion of morphs.

2.1.3.-IVc. Present suffixes

There are two present allomorphs, -Ø and -n. Of the 36 monomorphemic roots plus bound auxiliary -mi, 12 take -n and 25 take -Ø. Of those that take -n, 7 are monosyllabic, 5 bisyllabic. Of those that take -Ø, 13 are bisyllables, 3 trisyllables and the other 9 monosyllables.

In the nonpast division, all verbs inflected as reflexive-reciprocal, inchoative or mediopassive take -n, as do all habitual forms.

The desiderative-intentional suffix is added to the present suffix, and has hardened form -gu after -n, -wu following vowels: bu-n-gu 'want to hit', ma-wu 'want to say'.

2.1.3.-IVd. Past punctual allomorphs

The past punctual suffix of the form -Cag, possibly better represented synchronically as -g, has been discussed in 2.1.3.-IIIa. Past punctual may of main verb and free auxiliary mi is unique.

The five easily segmentable past punctual allomorphs are -na, -b, -ñ, -j and -ŋiñ, distributed over roots as follows:

-na	-b	-ñ	-j	-ŋiñ
wu-	bu-	ma-	jug- (ju-j)	ga-
ṇa-	wa-	mi- (bound aux)	yu-	
		ṇi-	yag- (ya-j)	

-na	-b	-ñ	-j	-ŋiñ
		ṇiŋa-	ṇiṛi-	
			gawa-	
			jiwi-	
			jaygi-(ja-j)	

The same allomorphs occur when the roots function as bound auxiliaries, e.g. yiri+wa-b 'saw'. Note that roots which suffix -ñ have only nasal consonants, while no roots which suffix -j have nasals as the final consonant of the stem. The distribution of -ñ and -j thus appears to be phonologically conditioned and complementary.

2.1.3.-IVe. Past continuous allomorphs

There are nine roots which have only a single past positive form. For all, the single form is morphologically equivalent to past continuous. These are ḍi-, ṇidba-, ŋuñjag-, gunda-, yala-, jiṛa-, ḍaṇidba-, ŋiyiŋgi-, ḍu-. In other respects ŋuñjag- 'mock, copy' has the same paradigm as yag 'go'.

There are six easily segmented past continuous allomorphs, distributed as follows:

-ni: bu-, ga-, wa-, ṇa-, ḍu-, wu-, gunda-, yala-, jiṛa-, ṇiŋa-, jaygi-, ŋiyiŋgi-, all reflexive-reciprocal, inchoative and mediopassive verbs
-ṛi: ma-, waṛ-, gawa-, ṇidba-, jiwi-, ḍaṇidba-, mi- (as bound aux)
-ñi: mi- (main verb, free aux), jug-; yag-; ŋuñjag-
-Ø : ṇi-, ṇiṛi-
-y : yu-
-ṇi: ḍi-

Synchronically unsegmentable past continuous forms are mentioned in 2.1.3.-IIIa.

2.1.3.-IVf. Past negative allomorphs

There are two past negative allomorphs, -b and -m. These follow augments in roots which require them (e.g. bu-ŋḍa-b), otherwise are added to a stem identical to the root (ma-m). There are 24 roots which take allomorph -b; 17 require augments, the rest add -b directly. There are 12 roots which take -m; 3 of these require augment -ŋa-. The two allomorphs are distributed over roots as follows:

b-	(Aug)		-m	(Aug)
bu-	-ŋḍa-		waṛ-	-ŋa-
wu-	-ya-		ḍaya-	-ŋa-
mi-	-ŋga-	(main verb, free aux)	ṇaya-	-ŋa-
ga-	-ñja-		ma-	Ø
wa-	-ya-		ṇama-	"
ja-(ji)	-ñja-		bana-	"
jug-	-(ŋ)ga-		juma-	"
yu-	-ṛa-		ḍuma-	"
ṇi-(ṇu)	-ṛa-		ṇuma-	"
ṇa-	-ya-		guña-	"
ḍu-	-ya-		ḍiwiña-	
yag-	-(ŋ)ga-		ṇiŋa-	
ḍi-	-ñji-		mi- (bound aux)	
ŋuñjag-	-(ŋ)ga-			
gunda-	-ya-			
yala-	-ya-			
ŋiyiŋgi-	-ñji-			
ṇiṛi-	-Ø-			

b-	(Aug)	-m	(Aug)
gawa-	Ø		
ṇidba-	"		
jiwi-	"		
jiṛa-	"		
jaygi-	"		
ḍaṇidba-	"		

All reflexive-reciprocal, inchoative and mediopassive verbs take -b (see 2.1.3.-IVb).

All roots which take past negative allomorph -m have a nasal as the final stem consonant. The nasal is either part of the root (e.g. guña-m), or part of the augment -ŋa- (e.g. waṛ-ŋa-m). (However, none of the stems with augment containing nasal-stop cluster take -m.) The distribution of past negative allomorphs appears to be phonologically conditioned, the determining factor the presence of a single nasal segment as the final stem consonant.

2.1.3.-IVg. Imperative allomorphs

There are two segmentable imperative allomorphs, -Ø and -w. The majority of verbs take -Ø. The following add -w: ga- 'take, carry', wa- 'visit', ṇa- (as auxiliary, e.g. baṛ? ṇa-w 'open your eyes'), gunda- 'cut', ṇiŋa- 'come up, arrive', and any compound or particle+aux constructions involving these roots.

The few irregularities in imperative formation are mentioned in 2.1.3.-IIIa.

2.1.3.-V. Defective root baḍa-

There is a root baḍa- which is defective. Only two forms of it were found to be currently in use: mari-baḍa-n 'let it go! no matter! leave it!', formally a third person hortative; and ŋabaḍaṇiñ, which functions as an exclamation 'Woops! Missed it!' The latter looks like 1Sg subject, past punctual verb form ŋa-baḍa-ŋiñ ('I missed it'), with past punctual allomorph -ŋiñ which otherwise occurs only in the ga-'to take, carry' and its compound jaŋ+ga-'hunt'. The root appears to have a meaning like 'to let slip by, miss'.

2.1.3.6. Person and number: pronominal prefixes

2.1.3.6.1. Clause functions cross-referenced by pronominal prefixes

The pronominal prefixes are shown in Table 2-18.

A maximum of two clausal NPs may be cross-referenced in the verb by pronominal prefixes. In intransitive clauses a single NP is cross-referenced; in transitive clauses, both subject and object are cross-referenced. In ditransitive clauses, subject and notional indirect object are cross-referenced.

There are two form-classes of pronominals, subject and object. Subject forms normally are used to cross-reference the subject in intransitive and (with some modification explained below) in transitive clauses, and object forms the object of transitive clauses. However, a few intransitive verbs have associated 'inverse' case frame, in which the single NP is cross-referenced by object pronominals (see 2.1.1.2.1.1.-2 for examples, and Silverstein 1976 for this use of 'inverse').

2.1.3.6.2. Pronominal prefix forms

2.1.3.6.2.1. Intransitive prefixes

There are two nonsingular first person bases, ŋa- and ŋi-. The same problem is encountered in attempting to assign consistent semantic

Table 2-17 Verb paradigms

Root	bu- 'hit'	wu- 'give'	mi- 'get'	ga- 'take, carry'
Pres	bu-n	wu-n	mi-Ø	ga-n
PP	bu-b	wu-na	may	ga-ŋiñ
PC	bu-ni	wu-ni	mi-ñi	ga-ni
PNeg	bu-ɳḍa-b	wu-ya-b	mi-ŋga-b	ga-ñja-b
Hab	bu-ɳḍa-n	wu-ya-n	mi-ŋga-n	ga-ñja-n
Imp	bu-Ø	wu-Ø	mi-Ø	ga-w
RR	bu-yi-	wu-yi-	mi-ñjiyi-	ga-ñjiyi-
Root	ma- 'do, say'	wa- 'visit, see'	waṛ- 'throw'	ja- 'eat, drink'
Pres	ma-Ø	wa-n	waṛ-Ø	ja-Ø
PP	ma-ñ	wa-b	waṛag	jirag
PC	ma-ṛi	wa-ni	waṛi	jiray
PNeg	ma-m	wa-ya-b	waṛ-ŋa-m	ji-ñja-b
Hab	ma-ma-n	wa-ya-n	waṛ-ŋa-ma-n	ji-ñja-n
Imp	ma-Ø	wa-w	waṛ-Ø	ja-Ø
RR	mi-yi-	wa-ñjiyi-	waṛ+mi-ñjiyi-	ji-ñjiyi-
Root	jug- 'swear'	yu- 'sleep'	ŋa- 'burn' (intr), aux	ḍu- 'cry'
Pres	jug-Ø	yu-Ø	ŋa-n	ḍu-n
PP	ju-j	yu-j	ŋa-na	
PC	ju-ñi	yu-ñi	ŋa-ni	ḍu-ni
PNeg	juŋ-ga-b	yu-ṛa-b	ŋa-ya-b	ḍu-ya-b
Hab	juŋ-ga-n	yu-ṛa-n	ŋa-ya-n	ḍu-ya-ma-n
Imp	jug-Ø	yu-Ø	ŋa-w	ḍu-Ø
RR	ju-yi-		ŋa-ñjiyi-	
Root	yag- 'go'	ṇi- 'sit'	ḍi- 'warm oneself'	ḍaya- 'bite'
Pres	yag-Ø	ṇi-Ø	ḍi-n	ḍaya-Ø
PP	ya-j	ṇi-ñ	ḍi-ṇi	ḍaḷag
PC	yi-ñi	ṇi-Ø		ḍaḷi
PNeg	yaŋ-ga-b	ṇu-ṛa-b	ḍi-ñji-b	ḍay-ŋa-m
Hab	yaŋ-ga-ma-n/ yaŋ-ga-n	ṇu-ṛa-n	ḍi-ñji-mi-n	ḍay-ŋa-ma-n
Imp	yag-Ø	ṇig 2Sg / ṇi	ḍi-Ø	ḍaya-Ø
RR				ḍaḷŋ-jiyi-

Table 2-17 continued

Root	ŋaya- 'cook'	ŋama- 'hold'	bana- 'make'	juma- 'mention'	ŋuma- 'smell' (tr)
Pres	ŋaya-Ø	ŋama-Ø	bana-Ø	juma-Ø	ŋuma-Ø
PP	ŋaḷag	ŋamdag	bandag	jumdag	ŋumdag
PC	ŋaḷi	ŋamdi	bandi	jumdi	ŋumdi
PNeg	ŋay-ŋa-m	ŋama-m	bana-m	juma-m	ŋuma-m
Hab	ŋay-ŋa-ma-n	ŋama-ma-n	bana-ma-n	juma-ma-n	ŋuma-ma-n
Imp	ŋaya-Ø	ŋama-Ø	bana-Ø	juma-Ø	ŋuma-Ø
RR	ŋaḷŋ-jiyi-	ŋam-jiyi-	bani-ñjiyi-	jum-jiyi-	ŋum-jiyi-
Root	ḍuma- 'cut hair'	ŋiṛi- 'bring'	gawa- 'bury'	ŋidba- 'have'	
Pres	ḍuma-Ø	ŋiṛi-Ø	gawa-Ø	ŋidba-Ø	
PP	ḍumdag	ŋiṛi-j	gawa-j	ŋidba-ṛi	
PC	ḍumdi	ŋiṛi-Ø	gawa-ṛi		
PNeg	ḍuma-m	ŋiṛi-b	gawa-b	ŋidba-b	
Hab	ḍuma-ma-n	ŋiṛi-mi-n	gawa-ma-n	ŋidba-ma-n	
Imp	ḍuma-Ø	ŋiṛi-Ø	gawa-Ø	ŋidba-Ø	
RR	ḍum-jiyi-		gawa-jiyi-	ŋidbi-ñjiyi-	
Root	ŋuñjag- 'imitate'	gunda- 'cut'	yala- 'bother'	guña- 'tie'	ḍiwiña- 'reach'
Pres	ŋuñjag-Ø	gunda-n	yala-n	guña-Ø	ḍiwiña-Ø
PP	ŋuñja-ñi	gunda-ni	yala-ni	guṇḍag	ḍiwiṇḍag
PC				guṇḍi	ḍiwiṇḍi
PNeg	ŋuñjaŋ-ga-b	gunda-ya-b	yala-ya-b	guña-m	ḍiwiña-m
Hab	ŋuñja-ŋga-n	gunda-ya-n	yala-ya-n	guña-ma-n	ḍiwiña-ma-n
Imp	ŋuñjag-Ø	gunda-w	yala-Ø	guña-Ø	ḍiwiña-Ø
RR	ŋuñja-jiyi-	gunda-ñjiyi-	yala-yi-	guñ-jiyi-	ḍiwiñ-jijiyi-
Root	jiwi- 'take away'	jiṛa- 'hunt up'	ŋiŋa- 'arrive'	jaygi- 'stand'	
Pres	jiwi-Ø	jiṛa-n	ŋiŋa-n	jaygi-n	
PP	jiwi-j	jiṛa-ni	ŋiŋa-ñ	ja-j	
PC	jiwi-ṛi		ŋiŋa-ni	jaygi-ni	
PNeg	jiwi-b	jiṛa-b	ŋiŋa-m	jaygi-b	
Hab	jiwi-mi-n	jiṛa-ma-n	ŋiŋa-ma-n	jaygi-ma-n	
Imp	jiwi-Ø	jiṛa+wu	ŋiŋa-w	jaji 2Sg / jaygi	
RR		jiṛa+wu-jiyi			

Table 2-17 continued

Root	ḏaṇidba- 'wait for'	ŋiyiŋgi- 'look up'	bound aux -mi
Pres	ḏaṇidba-∅	ŋiyiŋgi-n	-mi-∅
PP	{ḏaṇidba-ṛi	ŋiyiŋgi-ni	-mi-ñ
PC			-mi-ṛi
PNeg	ḏaṇidba-b	ŋiyiŋgi-ñji-b	-mi-m
Hab	ḏaṇidba-ma-n	ŋiyiŋgi-ñji-mi-n	-mi-mi-n
Imp	ḏaṇidba-∅	ŋiyiŋgi-∅	-mi-∅
RR	ḏaṇidbi-ñjiyi-		-mi-ñjiyi-

Table 2-18 Pronominal prefixes

Intransitive pronominal prefixes

1Sg	ŋa-
2Sg	ña-
3Sg	∅-
1InDu	ŋi-

	1ExDu
1ExDu	ŋi-ṛ-
1Trial	ŋa-ṛ-
2Du	ṇu-ṛ-
3Du	wu-ṛ-

	1ExPl	ŋi-ḷa-
	1InPl	ŋa-ḷa-
	2Pl	ḷa-
	3Pl	wu-ḷa-

Transitive pronominal prefixes

Subject ⟶ / Object ⟶

	1Sg	2Sg	3Sg	1InDu	3Du	3Pl	1ExDu	1ExPl	1InPl	1Tr	2Du	2Pl
1Sg	RR	ñan	ŋa-	--	ŋawuran-	ŋawuyan-	--	--	--	--	ṇuran-	ṇuyan-
2Sg	ŋan-	RR	ña-	--	ñawuran-	ñawuyan-	ŋiran-	ŋiyan-	--	--	--	--
3Sg	ŋan-	ñan-	RR, ∅	ŋin-	wuran-	wuyan-	ŋiran-	ŋiyan-	ŋayan-	ŋaran-	ṇuran-	ṇuyan-
1InDu	--	--	ŋi-	RR	ŋiwuran-	ŋiwuyan-	--	--	--	--	--	--
3Du	ŋanbur-	ñanbur-	wur-	ŋinbur-	RR, {wuyanba-}	wuyanba-	ŋiranbur-	ŋiyanbur-	ŋayanbur-	ŋaranbur-	ṇuranbur-	ṇuyanbur-
3Pl	ŋanba-	ñanba-	wuḷa-	ŋinba-	wuyanba-	RR, {wuyanba-}	ŋiranba-	ŋiyanba-	ŋayanba-	ŋaranba-	ṇuranba-	ṇuyanba-
1ExDu	--	--	ŋir-	--	ŋirwuran-	ŋirwuyan-	RR	--	--	--	ṇuran-	ṇuyan-
1ExPl	--	--	ŋiḷa-	--	ŋiḷawuran-	ŋiḷawuyan-		RR	--	--	ṇuran-	ṇuyan-
1InPl	--	--	ŋaḷa-	--	ŋaḷawuran-	ŋaḷawuyan-	--	--	RR	--	--	--
1Tr	--	--	ŋar-	--	ŋarwuran-	ŋarwuyan-	--	--	--	RR	--	--
2Du	ŋanbur-	--	ṇur-	--	ḷawuyan-	ḷawuyan-	ŋiranbur-	ŋiyanbur-	--	--	RR	--
2Pl	ŋanba-	--	ḷa-	--	ḷawuyan-	ḷawuyan-	ŋiranba-	ŋiyanba-	--	--	--	RR

descriptions to these as in the independent pronouns; see 2.1.2.1.10. Except for 1InDu, ŋi- occurs in non-inclusive categories; with suffix -r it forms dual exclusive, with -ḷa-, plural exclusive. The base ŋa- occurs in inclusive categories; with -r, it marks trial, which designates speaker plus addressee plus one other.

2Sg ña- is morphologically similar to the independent nominative pronoun ñaŋgi. 2Du contains the second person nonsingular person element ṇu- (found also in the independent pronouns), plus -r. 2Pl, however, is marked by only the plural number element -ḷa-, and thus has zero person marker (unlike the corresponding independent pronoun ṇu-ḷa). In many languages, *third* person (especially singular) is a morphological zero category. Distinctiveness is maintained in Maŋarayi between 2Pl and 3Pl because the third nonsingular forms have non-zero person element wu-.

2.1.3.6.2.2. Transitive prefixes

Pronominals used to mark transitive subject are largely identical to intransitive subject forms. There are some distinctive object markers, but most of the object pronominals also are related to intransitive subject forms.

However, transitive prefixes are not in all cases straightforward combinations of subject and object markers. Complicating factors are that in some combinations, only one person category is expressed (providing the basis for saying that in their respective functions in that combination the realized category outranks the other); and that, where both subject and object are overtly marked (making it relevant to talk about the order of the prefixes) they do not always occur in the order subject-object. The mode of presenting the prefixes will be to explain how particular combinations of subject and object categories are realized, pointing out any deviations from how, ceteris paribus, each combination might expectably be realized.

Third person object forms. All combinations of first or second person subject acting on third person object are constructed in the following way: the subject prefix is the same as the intransitive prefix form for that category; 3Sg object is zero, 3Du -wuran-, and 3Pl -wuyan-. Subject precedes object. All third subject forms acting on 3Sg object are the same as intransitive subject forms; 3Sg/3Du and 3Sg/3Pl show zero subject with objects wuran- and wuyan- as expected. However, in combinations with third nonsingular subject acting on third nonsingular object, the difference between dual and plural categories is neutralized; all combinations are wuyanba-, where wuyan- is the normal 3Pl object form, -ba the 3Pl subject form with every but 3Sg object, where 3Pl/3Sg is wu-ḷa-.

First and second person object forms. Combinations with first or second person objects are divisible into two subcategories: forms with third person subjects, and forms with non-third subjects. In forms with first or second object and 3Sg subject, the prefix consists of an objective form marking the first or second category. For the first or second categories with intransitive subject prefixes of shape CV-, their object forms are CV-n, e.g. 1Sg ŋa-, 3Sg/1Sg ŋa-n with object-marker -n. Those categories which as intransitive subject end in the number suffix -r (e.g. ṇu-r-), as objects have number suffix form -ra- followed by object-marker -n (ṇu-ra-n-). Categories which as intransitive subject have plural element -ḷa- (e.g. 3Pl wu-ḷa-), as object show regular alternation of this element with -ya-, followed by -n (wu-ya-n-). Note that though 2Pl as subject is ḷa- without person marker, as object it is ṇu-ya-n-, showing the characteristic second nonsingular person element ṇu-. Where the subject is 3Du, prefix forms marking first or second object remain the same as with 3Sg subject and 3Du subject is marked by element -bur, e.g. 3Du/2Du ṇuranbur-; 3Pl subject is marked by -ba, 3Pl/2Pl ṇuyanba-.

In first on second person combinations, 1Sg subject acting on any second person category is the same as 3Sg subject. In combinations of first person exclusive subject acting on 2Sg, the prefix marks only the first person category, ŋir- or ŋiḷa-; the second person is morphologically zero. In first person exclusive acting on 2Du or 2Pl, the prefix consists only of the respective second person prefixes, and first person is zero, e.g. 1ExDu/2Du ŋuran-.

In combinations of third person acting on first, where the subject is 3Sg the prefix consists only of the appropriate object form; where the subject is 3Du these object forms are followed by -bur; and where the subject is 3Pl, they are followed by -ba.

2Sg subject acting on any first person is the same as 3Sg acting on those categories. Combinations of 2Du acting on 1Sg and first person exclusive categories are realized by the same forms as 3Du acting on those categories; likewise 2Pl acting on any possible first person category is the same as 3Pl acting on that category. Thus with first person object there is a neutralization of the difference between second and third person subjects.

Any form where subject and object are coreferential (reflexive) or reciprocal is marked by the appropriate intransitive prefix expressing the reflexive category or reciprocal (nonsingular) category.

Some blanks in the transitive matrix cannot be filled because of logical and pragmatic incongruities in the subject-object relation, e.g. 1Sg/1InDu, 2Sg/1InDu and the reverse relations, where the subject is properly included in the object or vice versa. Of course, it is possible to express other types of relations (e.g. benefactive) between such categories by using the system of independent pronouns to express the indirect object relation.

Discussion of the prefixes has shown that there are some neutralizations, i.e. certain combinations are realized in the same way as others of different underlying categorial descriptions. Such neutralizations may be disambiguated by use of independent pronouns or demonstratives. A summary of deviations from expected prefix combinations follows.

(a) 3Du (subject or object) is realized as 3Pl in any combination where the other category is 2 or 3Du or Pl. This accounts for the difference between the following expected and actual forms:

	expected	actual
3Du/3Du	wuranbur-	wuyanba-
3Du/3Pl	wuyanbur-	wuyanba-
3Pl/3Du	wuranba-	wuyanba-
	expected	**actual**
2Du/3Du	ŋur-wuran-	ḷa-wuyan-
2Du/3Pl	ŋur-wuyan-	ḷa-wuyan-
2Pl/3Du	ḷa-wuran-	ḷa-wuyan-

(b) 2Du subject (expected ŋur-) is realized as 2Pl (ḷa-) in any combination with third nonsingular object; see the examples in (a).

(c) In combinations of 1Sg subject acting on any second person, the forms are identical to 3Sg subject acting on second person. Thus note the neutralizations:

1Sg/2Sg or 3Sg/2Sg	ñan-
1Sg/2Du or 3Sg/2Du	ŋuran-
1Sg/2Pl or 3Sg/2Pl	ŋuyan-

(d) In combinations with first nonsingular subject acting on second person object, only the subject prefix occurs where the object is singular; only the appropriate object prefixes occur where the object is nonsingular. Exemplifying the first case is 1ExPl/2Sg ŋiḷa-; exemplifying the second case is 1ExPl/2Du ŋuran-. Thus in first on second forms only one prefix position is filled. The principle determining which category will be marked is: nonsingular subject outranks singular object, but nonsingular object outranks nonsingular subject.

(e) The combinations of 2Sg acting on any first person are constructed on the same principles as 1Sg acting on any second person; that is, they are also equivalent to 3Sg acting on the second person category. Thus:

2Sg/1Sg or 3Sg/1Sg	ŋan-
2Sg/1ExDu or 3Sg/1ExDu	ŋiran-
2Sg/1ExPl or 3Sg/1ExPl	ŋiyan-

(f) Second person nonsingular acting on any first person category is equivalent to third person nonsingular subject acting on that first person category. Thus 2Pl/1Sg or 3Pl/1Sg is ŋanba-.

We see that 1Sg and 2Sg *as subjects* are equivalently ranked in this system, as shown by (c) and (e): when acting on singular or nonsingular members of the other person category, either is formally indistinguishable from the corresponding form with 3Sg subject. First nonsingular subject, however, outranks second nonsingular subject as shown by the fact that in first nonsingular on 2Sg combinations, first nonsingular is realized, while in second nonsingular on 1Sg and any other first person category, the formal distinction between second nonsingular and third nonsingular subjects is neutralized, and both are realized by -bur. Second nonsingular *object*, however, outranks first nonsingular subject, since in first nonsingular on second nonsingular combinations, only the object is expressed.

The following identifications of morpheme function can be made:

ŋa-	1Sg subject with third object
ña-	2Sg subject with third object
ŋa-n-	1Sg object with second or third subject
ña-n-	2Sg object with first or third subject
Ø-	3Sg object and subject
-bur-	(presumed -$w_2$ur-); 3Du subject with 3Sg object and any first person object; 2Du subject with first person object
-wu-ra-n	3Du object with any first or second subject, or 3Sg subject
wu-ḷa-	3Pl subject with 3Sg object
-ba	3Pl subject with any nonsingular object
-wu-ya-n	3Pl object with any subject
ŋi-r-	1ExDu subject with any third person object and 2Sg object
ŋi-ra-n	1ExDu object
ŋi-ḷa-	1ExPl subject with third person object and 2Sg object
ŋi-ya-n-	1ExPl object
ŋa-r-	1Trial subject
ŋa-ra-n-	1Trial object
ŋi-	1InDu subject
ŋi-n-	1InDu object
ŋa-ḷa-	1InPl subject
ŋa-ya-n	1InPl object
ŋu-r-	2Du subject with 3Sg object
ŋu-ra-n-	2Du object
ḷa-	2Pl subject with 3Sg object; 2Du or Pl subject with third Du or Pl object
ŋu-ya-n	2Pl object

In all combinations where there is overt expression of both person categories, ordering relations can be summarized as follows:

1, 2 subject ⟶ 3 object	subject-object
3Du or Pl subject ⟶ any object	object-subject
2Du or Pl subject ⟶ 1 object	object-subject

Of course, second nonsingular subject on first person object forms are identical to the corresponding third nonsingular subject on first object combinations by virtue of the neutralization described in (f) above.

In this grammar, interlinear morpheme-by-morpheme glossing of transitive prefix combinations is indicated in subject-object order regardless of the actual order of morphemes representing the two functions:

ŋanbur-
3Du/1Sg or
2Du/1Sg

2.1.3.6.3. Conditioning factors in coding

The number and syntactic functions of NPs coded in the verb in each clause is fixed; see 2.1.3.6.1.

2.1.3.6.4.-6. Features of NPs coded

The features of NPs coded in the verb are person, number and syntactic function (the latter limited to two functions in transitive clauses). For discussion of the consistency of number coding, see 2.1.1.8.6.7.-8. Cross-reference remains the same in all tense/aspect/mood categories.

2.1.3.6.7. Same-different subject

There is no explicit same/different subject marking.

2.1.3.7. Verb chaining and nonfinite verb forms

Sequences of verbs cross-referencing the same NPs are usually fully inflected for all categories without any loss of features normally marked on the verb. In a story of a hunting trip we find, for example:

wuḷa-yi-ñi-wa ṇa-juya-wu Ø-gulbiñ wuḷa-ḏaṛa+wu-ni-wa gay?
3Pi-go-PC-Suf NPurp-meat NAbs-emu 3Pi/3Sg-find-PC-Suf chase

wuḷa-bu-ni-wa wuḷa-galg+ma-ṛi-wa ...
3Pi/3Sg-Aux-PC-Suf 3Pi/3Sg-spear-PC-Suf
'They went for meat, they spotted an emu, chased and speared it ...'

There are however several kinds of verbal ellipsis or substitution found in everyday speech and narrative. The verb ma- 'say, do' can be used to express 'do X' or 'keep on doing X' when the verbal meaning to be recovered is clear from preceding speech:

wur-wawañ-ji-ni-wa wuyan-jiray-wa, ṇa-juya-wu ṇaḷi-nara
3Du-forage-MP-PC-Suf 3Sg/3Pl-eat PC-Suf NPurp-meat FNom-Dis

Ø-jiray-wa Ø-malam. Malga Ø-ma-ṛi-wa Ø-ma-ṛi-wa
3Sg/3Sg-eat PC-Suf MAcc-man then 3Sg-do-PC-Suf 3Sg-do-PC-Suf

Ø-ma-ṛi-wa. Ḏayi miŋiwa.
3Sg-do-PC-Suf Neg already
'The two went foraging, she ate them (pl.); for meat, that (woman) ate people. She did it and did it and did it. Pretty soon — nothing (left)' (i.e. no people left).

The following example shows that ma- can be used as a general auxiliary in particle+aux constructions, substituting for more specific auxiliaries. The particle warguj 'to pick up' is usually paired with auxiliary mi-. Paired in this example with ma-, it has a narrative flavor something like 'pick it up, they did':

ŋabaranwa jarbiñ-garan wara-warguj Ø-jululu wara-warguj
two young men-Du Nom pick up Red NAbs-swag pick up Red

wur-ma-ṛi-wa
3Du-do-PC-Suf
'The two young men picked it up, picked it up, they did'.

When the specific meaning of a particle+aux construction can be recovered from context, the particle can be omitted. This usually involves repetition of the following sort:

Ø-jamja Ø-mi-ñi-wa Ø-gurumulu mamiñ
NAbs-*Acacia difficilis* 3Sg/3Sg-take-PC-Suf NAbs-grass sp. roll up

Ø-bu-ni-wa Ø-wab-bayi, Ø-bu-ni-wa
3Sg/3Sg-Aux-PC-Suf NAbs-sugarbag-Foc 3Sg/3Sg-Aux-PC-Suf

Ø-jiray-wa.
3Sg/3Sg-eat PC-Suf
'He got *Acacia difficilis* and rolled up the wild honey (with) grass, rolled it up and ate it'.

Here the inflected auxiliary Ø-bu-ni-wa is first paired with mamiñ, then repeated without particle. If it were to occur by itself in another context, it would mean 'he hit it'. Nothing that is structurally necessary is left out, but a certain narrative effect is achieved by this kind of repetition.

It is very common in a sequence of topically closely-linked clauses, for the second to be manifested only by a verb particle expressing the lexical meaning of the verb. Since only the particle occurs, person, number and verbal categories expressed in the inflecting verb are to be deduced from preceding thematic content. Thus, in a story where two men are collecting wood is the passage

malga wur-ga-ŋiñ beb
then 3Du/3Sg-take-PP toss
'They (du) took it and tossed it down (a log)'.

From what precedes, the meaning 'they tossed it down' can be deduced, not 'they were tossed down' or the like. The two men attempt to kill another person who has ambushed them:

ṇa-ŋayag yir? Ø-waṛag din! Ṇa-ŋayag waḏij ṇana-wa
MNom-other throw 3Sg/3Sg-Aux PP bang MNom-other also here-Abl

yir? Ø-waṛag din! Malga Ø-jigij+mi-ñ malga ḏel.
throw 3Sg/3Sg-Aux PP bang! then 3Sg-jump-PP then hit
'One threw, bang! The other also threw from here, bang! Straightaway he jumped (but) immediately (they) hit (him).'

The content of the narrative makes it clear that the full clause which ḏel abbreviates has the ambusher as direct object and the two men as transitive subject, not the reverse. Were the reverse to be expressed, an inflected verb form would be needed to clarify the new subject-object relations. Thus the use of particles in lieu of full clauses is not sensitive to grammatical relations of certain sorts in the abstract, but continues the thematic structure of participant relations as these have been developed up to that point.

2.1.4. Adjectives

2.1.4.1.-3. Predicate adjectives

See discussion of predicate nominals in 2.1.1.2.3.1; expression of the subject of predicate nominal constructions is discussed there.

See 1.2.5.2 for discussion of attribute-head constructions; there it is shown that attributive adjectives agree in class/case and number marking with the modified noun.

2.1.4.4.-5. Expression of adjectival degree

There is no highly structured system for the expression of adjectival degree similar to English tall-taller-tallest, nor is there any way of formally distinguishing large measure (very tall) from superabundance (too tall). The notion of small degree is expressed by the (adjectival or adverbial) modifier guwamaṇej:

ṇi-wa Ø-baṛgi guwamaṇej Ø-biḷbu
there-Art NAbs-ground somewhat, little bit NAbs-strong
'That ground is a little bit strong', i.e. not boggy.

The form guwamaṇej may also be used nominally in the meaning 'a small amount, a bit'. It is composed of the comparative particle guwa 'like, similar (to)' plus adjective maṇej 'same', and thus appears to be in origin an indexical form 'the same amount' (as shown, known from previous experience, or the like).

(The adjective maṇej was not discussed as a means of expressing comparison 'like X' in 2.1.1.2.12, because it tends to be used in the sense 'experientially same'. For example, a person may say ṇa-maṇeñ-gan a-ṇi-yag 'let's you and I go to the same place' implying: that we went to before, already know about, etc. Thus it is most often used to express, not specifically similarity between two things, but experiential identity.)

The superlative notion 'very' can be expressed by complete or partial reduplication for some adjectives, e.g. guḷañi 'long', guḷuḷañi 'very long'. To nouns, adjectives and a few adverbs may be added the suffix -ṇiya 'real(ly), proper(ly)', as in:

ṇi-jaga Ø-baṛgi Ø-biḷbu-ṇiya
there-Exp NAbs-ground NAbs-strong-really
'There (where you know) the ground is really strong'.

(See 2.2.1.1g for use of -ṇiya with nouns.)

Cardinal numerals are discussed in 2.1.1.8.6.9. No ordinal forms are built on them. The notion 'first' is always expressed by adverb yuŋgun (exemplified in 2.1.1.5.5). The notion 'in between, in the middle' is expressed by balayarg (2.1.1.5.17.-18) and 'last' by the adverb biwi 'behind, after' (2.1.1.5.6).

Notions of degree and sequence are lexicalized in regard to certain concepts. Birth order is lexicalized by the following: jaḍba 'first-born', balayarg 'middle' (neither first nor last), and biwiṇiya 'cadet' (composed of biwi 'behind' and -ṇiya 'properly'). Terms exist for distinguishing certain types and qualities of 'kin' relations. Father's wife (= 'younger mother') is called ŋaḷa-jidga (perhaps a variant, specialized form of adjective jijga 'small'), or ŋaḷa-jaraŋalañ; senior wife (= 'older mother') is referred to as ŋaḷa-balayi 'big'. The adjective burgaji can be used to express a 'real' kin relation: ṇa-baḍa ṇa-burgaji 'my full father'. However, such a designation is not exclusively applied to genealogical relations; it is often used in asserting social relationships to people who are not actual genealogical relatives.

2.1.5. Adpositions

Maŋarayi has no adpositions as such. A few forms which chiefly function as other parts of speech (e.g. conjunction malga, see 2.1.1.5.4, and adverbs such as yuŋgun 'ahead' or biwi 'behind') can occur with complement, functioning like prepositional NPs; see 1.2.1.3.1.2.

2.1.6. Numerals/quantifiers

For discussion of numerals and related formations, see 2.1.1.8.6.9; see also 2.1.4.4.-5 for some ordinal concepts. The form ŋayag 'other, another, different (one)' is used in reduplicated form ŋayaŋayag as

indefinite pronoun 'some'; see 2.1.1.11. For use of number-marked numeral ŋabaranwa 'two' in the meaning 'set of two, both' see 2.1.1.8.2.-3. A few forms such as ḍawuruŋgu function nominally, meaning 'all, the whole lot'. For 'who, somebody, nobody' see discussion of indefinite-interrogative forms in 2.1.2.6.1; for 'which' see 2.1.2.6.2.-3; for 'any, anything' see 2.1.2.6.5. For negative forms meaning 'nothing, none' see discussion of negative particles and related forms in 1.4.

2.1.7. Adverbs

Adverbs, in comparison with other word classes, are negatively defined. With minor exceptions (see 2.1.7.3) they do not inflect; and even the few that have isolated case endings do not have full inflectional paradigms. Unlike interjections, adverbs do not occur in isolation. Although it has been shown that verb particles share certain characteristics with adverbs (2.1.3a), it was concluded that restrictions on cooccurrence between adverbs and verbs generally operate at a higher level of generality than those between particles and inflecting verbs. In keeping with this is the fact that adverbs may modify entire particle+aux constructions:

jaḷŋaṛ ḍuŋgur Ø-bandag
hard crush 3Sg/3Sg-Aux PP
'He crushed it hard'.

Mode particles are distinguished from adverbs by the fact that each occurs with only certain inflectional categories of the verb. However, the distributional relation is not transitive. Some mode particles determine modal categories in the sense that the verb form, by itself, may not be positively defined as being in a particular mode. This is true of particles like ŋiñjag which define the modality of the clause as prohibitive (see 2.1.3.-IIc), while by itself the verb form with zero first order prefix is modally indeterminate.

2.1.7.1.-2. Adverbial comparison

For adverbial comparison see remarks in 2.1.1.2.7. As for many adjectives (see 2.1.4) the notion of large degree can be expressed by complete or partial reduplication, or by the suffix -ṇiya 'real(ly)':

gaḷaji gaḷaji Ø-man+bu-ni
fast fast 3Sg-run-PC
'He ran very fast'.
balbalbi-ṇiya Ø-yi-ñi
slowly-really 3Sg-go-PC
'He went very slowly'.

The notion 'fully, entirely' predicated of a verb is expressed either by junjun or junbura:

junjun ja-Ø-ŋani+yug Ø-ŋani-wuṇya
fully 3-3Sg-talk NAbs-language-theirs (Pl)
'He talks their language excellently, completely'.

Besides being used to mean 'entirely', the adverb junbura has a primary spatial sense 'straight ahead'.

2.1.7.3. Location in time

Some of the adverbs and other forms discussed in 2.1.1.5 also can have temporal reference (e.g. biwi 'after'). This section concludes discussion of adverbs by presenting the forms exclusively used for location in time. These are perhaps best divided into those forms used to refer to locations in time within the span of a day; those used for periods of one or more days (e.g. used on one day with reference to another); and general temporal locators which designate spans of time, or moments in time, which cannot be as precisely located from any given moment of speaking.

Adverbs used as locators within any twenty-four hour span are the following:

ḏarmin-gaḷama	'towards dawn, not yet light'
meḏban	'early morning' (may extend from before daylight into the early forenoon)
ḏalgan	'full day, noon' (may extend from forenoon into the early afternoon)
mulugmuluŋ-gaḷama	'later afternoon'
mulugmuluŋ-gan	'last night'
buñaŋ	'evening, nighttime' (may extend from late afternoon or dusk into the night)
ḏawar	'at night' (reduplicative ḏawadawar 'all night')

There are of course ways of referring to many other natural phenomena which may serve as locators, such as setting of the sun; but the above are adverbs (as opposed to verbs or other parts of speech) which designate locations in time during the day.

The form ḏarmin-gaḷama 'towards dawn' contains allative suffix, the initial part probably related to the verb particle ḏar?ma 'to emerge, come out'; lack of the glottal in the adverb is unusual. The form mulugmuluŋ-gaḷama also has allative suffix and is related to an adverb meaning 'yesterday' (see below). The adverb buñaŋ has reduplicative form which means 'tomorrow' (see below).

Adverbs used to refer to periods of a day or more, from the vantage point of the same or different day, are:

baḷaḷaga	'today', also 'now'
mulugmulug	'yesterday'
buñaŋ?buñaŋ	'tomorrow'
gamurana	'next day, tomorrow'
gamamur	'in a few days', 'next week'
gaŋuwagwa	'a few days ago', 'last week'

Note the relation among all the forms containing mulugmulug; mulugmuluŋ-gaḷama appears to reflect a perspective which views the late afternoon as towards the close of day, hence related etymologically to 'yesterday'. (However, mulugmuluŋ-gaḷama is actually used of 'afternoon' from any perspective during the day.) The glosses 'next week' and 'last week' illustrate how those forms are used in relation to the introduced notion of 'week'.

General temporal locators are:

ŋaŋgañi	'next time'
wuṛay	'later on, by-and-by'
ŋara?ŋara	'all the time, constantly'
ḏuḏuḷa	'forever, for a long time', also 'continually'
baḷaḷaŋgañi	'this time, recent or modern period' (opposed to the next form; no doubt etymologically related to baḷaŋgan 'new')
guyuburu	'a long time ago'
gurji	'already, a (long) time ago'

The adverb ḏuḏuḷa may be used with verbs which can be interpreted iteratively to mean 'over and over, continually'; with verbs whose meaning can be interpreted as terminative it is used to mean 'for good, forever'. This is one of the few adverbs which may function as predicate nominal in the meaning 'one who has gone for good':

ŋaḷa-ḏuḏuḷa Ø-ya-j
FNom-forever 3Sg-go-PP
'She's gone for good'.

The adverb baḷaḷaŋgañi is used to refer to recent or modern times, as opposed to older times, but its precise reference may of course vary. The adverb guyuburu is used to refer to the remote past (e.g. before European contact); while the form gurji may be used to refer to something over a relatively shorter span preceding the moment of speaking. For example, if someone asks 'Did you light the fire?' for supper, his interlocutor may respond 'Gurji', '(I did it) already, a (long) while ago'.

The following terms are used to refer to seasons:

milgmilg	'cold weather' (focal period around July-August)
gaṇan	'rain' (may be used in general for rain, or for wet season)
garañilñiliŋa	'heavy rainy season, middle of the wet' (focal period around December-January-February)
ŋa-gañwar-wu	'hot weather', period between end of wet and beginning of colder weather (gañwar = 'sun')

2.1.8. Clitics

Clitics include the focusing and topicalizing -bayi (1.12) and emphatic clitics -ja and -ḷa (1.11).

2.1.9. Interjections

The common interjections are:

geré	oops! (as when one has mis-spoken oneself, then corrects)
gogó:	hurrah!
goyó:	hey! look out! (also goyógoyó:)
yigí	(disgust)
ya	True? Is that so? That's right! (depends on pitch)
yagáy	(pain)
gadjiŋa, also gaḏjiŋa	(surprise, amazement; very common expletive like 'gosh', 'golly')

Other set expressions are:

yumúgin	'I don't know' (also used as adverb 'on the sly, secretly')
yanája	'dunno'
ga-ŋa-yug+bu-n	'I don't know' (compound yug+bu-)

The word for 'no' is ḏayi, 'yes' is yowó.

The interjection gaḷugu means 'poor thing! poor fellow!' (plural gaḷaḷugu) and as in most Aboriginal languages, is very frequently used. A referent towards whom compassion is being expressed is specified by dative pronoun or demonstrative: gaḷugu ŋanju 'poor fellow me!' For plural referents, the interjection is often partially reduplicated: gaḷaḷugu wuŋya 'poor things (pl)'.

The expression baḷa with dative referent is used when one is bumped or jarred, not really as an expression of pain, but rather more like our 'oh my goodness!' In Maŋarayi and some other languages in the area, baḷa is used to refer to subincision, and so the expression seems to reflect the notion that that operation is the paradigm case in relation to which bumping and jarring are to be avoided. Jokingly, one may use this kind

of expression in relation to someone other than oneself, e.g. baḷa ŋaŋga 'goodness you!' (2Sg dative pronoun ŋaŋga). Its most common use is in reference to oneself, baḷa ŋanju 'goodness me!'

2.2. Derivational morphology

2.2.1. Nominal derivation

This section on nominal derivation is divided into four sub-parts. In 2.2.1.1 productive lexico-derivational suffixes are discussed, most of which function to derive nouns from other nouns by the addition of a specific feature of meaning or 'particularizing' force. In 2.2.1.2 are described two productive processes of gerund formation, first from inflecting verbs and second from verb particles. In 2.2.1.5 several semi-productive and relic noun-forming suffixes are discussed. Finally, a number of high-frequency verbs have associated nominal forms not derived by any productive process. These 'irregular' nominals, often morphologically unrelated to the verb with which they are associated, are listed in 2.2.1.6.

The most common nominal derivational suffixes are proprietive and privative; see 2.1.1.4.4.-5.

2.2.1.1. Lexico-derivational suffixes

2.2.1.1a. Provenience -ŋuŋuŋ

The suffix -ŋuŋuŋ is added to toponyms, language names and nouns of topographic zone to create nouns meaning 'person who originates from X':

Jembeṛe-ŋuŋuŋ 'person who originates from Jembeṛe'
Bamyili-ŋuŋuŋ 'person who originates from Bamyili'
Guwiñjilen-ŋuŋuŋ 'person from Queensland' (English)

It is difficult to know how this suffix was used in the pre-contact period as an identifier of persons. Today it is most commonly suffixed to names of states within Australia, and of larger settlements.

2.2.1.1b. Focal member of group -?mingan

The suffix -?mingan (see 3.1.2.4.2 for glottal stop before the suffix) is added to proper names to single out the named individual as the focal member of a group. The nominal so formed regularly inflects for noun class/case:

ŋaḷa-Jilimbirŋa-?mingan wuḷa-ya-j ŋa-yarayŋ-gu
FNom-name-focal 3Pl-go-PP NPurp-*Aponogeton*
'Jilimbirŋa's group went for *Aponogeton*' (a water plant).

ŋaya-Jilimbirŋa-?mingan ŋa-ṇiri
FDat-J.-focal 1Sg/3Sg-bring PC
'I brought it for J's. group'.

ŋaya-Jilimbirŋa-?mingan-gan ŋa-ṇi
FLoc-J.-focal 1Sg-sit PC
'I was sitting with J.'s group'.

(In Pidgin English of the Roper area this suffix has an equivalent, 'mob' drawn from pastoral terminology, as in 'Rita-mob'.) It is unclear whether this suffix is historically related to that discussed in 2.2.1.5g.

2.2.1.1c. Necronymic -w$_2$uyi

The suffix -w$_2$uyi is added to a toponym designating the place of death of one of a person's same-sex second ascending generation agnates (FF for men, FFZ for women). A toponym suffixed in this way constitutes one kind of designator of persons, usually used in reference rather than direct address. For example, a woman whose FFZ died at Gaṇbaran could be referred to as ŋaḷa-Gaṇbaran-buyi; or a man whose FF died at Jembeṛe, as

ṇa-Jembeṛe-wuyi. See Merlan 1982 for an account of the determination of the particular grandparent upon whose death-place the name is based, and the significance of such a link between an individual and the grandparent. Today necronymic designators are used infrequently, probably because they have become less distinctive as death occurs increasingly in the hospital.

The necronymic suffix precedes focal -?mingan if both occur in the same noun:

ŋaya-Gaṇbaran-buyi-?mingan-gaḷama a-ŋa-yaŋ-gu
FAll-place-Nec-Focal Irr-1Sg-go-DI
'I want to go to the group of her whose FFZ died at Gaṇbaran'.

2.2.1.1d. Substitutive -baṇa 'one'

The suffix -baṇa, a substitutive element, is head of the NP in which it occurs. It presupposes that some noun can be retrieved, usually from preceding speech, for which -baṇa substitutes, but with which the nominal group containing -baṇa contrasts in some way. It is comparable to substitutive English 'one' (see Halliday and Hasan 1976:92ff):

A: ŋaya-naŋgu ŋa-muyg wuran-ḍaḷag
FGen hers MNom-dog 3Sg/3Du-bite PP
'Her dog bit them (du)'.

B: Gana ŋanjugu-baṇa ŋa-yijar, ḍayi Ø-ḍay-ŋa-m
but 1Sg Gen-one MNom-good Neg 3Sg-bite-Aug-PNeg
'But my one (mine) is docile, he didn't bite'.

Here -baṇa substitutes for muyg ('dog'). A contrast is made between '*her* dog' and '*my* one'. It is the function of -baṇa to relate to the earlier NP head, and of other elements in its nominal group (usually an adjective, sometimes a pronoun or demonstrative) to make precise the contrast between the first NP and the second which relates to it.

Occasionally the substituted element is to be understood from non-verbal context:

Ø-jijga-m-baṇa ŋan-wu
NAbs-little-one 2Sg/1Sg give Imp
'Give me a little one' (something seen).

See 3.4.4.2 for facultative insertion of homorganic nasal before -baṇa.

2.2.1.1e. Article suffix -wa

The suffix -wa functions as a specific determiner. It is suffixed to nouns, adjectives and adverbs to give a concretizing or particularizing force. It imparts a more noun-like character to adverbs, and when suffixed to nouns or adjectives, indicates that a specific member of a class is being referred to.

balayi-wa ŋa-may (Ø-mar).
big-Art 1Sg/3Sg-get PP NAbs-fish
'I got a big one/big fish'.

yuŋgun-wa jaḍ Ø-ja-j
ahead-Art return 3Sg-Aux-PP
'He came back ahead', 'he came back the leader'.

ŋiñjag balayarg-wa ña-yag
Prohib middle-Art 2Sg-go Pres
'You can't go in between/the middle way'.

There appear to be several nouns with which this determiner is used in a formally and semantically specialized way. In several it produces the meaning 'only X', where X is the noun. The suffix is reduced to -a in each case. Examples are:

ŋadbur-a jaḍ Ø-ja-j
hand-Art return 3Sg-Aux-PP
'He returned empty-handed' (i.e. 'only with hands, nothing in them').
baṇam-a ŋa-wa-b
camp-Art 1Sg/3Sg-visit/come upon-PP
'I came upon just (the) camp' (i.e. its occupants had gone).

The form malam-a from malam 'body' is used as noun or adjective meaning 'strong of body':

ŋaḷa-malam-a ja-Ø-garañ-ji-n
FNom-body-Art 3-3Sg-big-Inch-Pres
'She is growing strong of body, healthy'.

There is however also a form malam-wa meaning 'a big bunch, a lot' (of people or other entities) in which the suffix is never reduced.

It is possible that this suffix may be etymologically identifiable with the pergressive; see 2.1.1.5f for the latter. See also 1.1.2.4.2.1b for the use of this article in forming temporal, weakly subordinated clauses.

2.2.1.1f. Suffix -yirag 'unique'

The suffix -yirag is added to nouns and gives the meaning 'unique, class of one member'. Unlike adjectives, it cannot function by itself as head of a nominal group and cannot be independently case-marked. Examples are:

ña-baraj-yirag
2Sg-mother's totemic property-unique
'You are peerless mother's totemic property' (e.g. addressed to ritual paraphernalia).
baṇam-yirag
locality-unique
'unique locality'

The latter noun phrase is used as metonym to refer to mythological figures who created one locality only, instead of many as did the major totemic creators.

2.2.1.1g. Suffix -ṇiya 'real'

The suffix -ṇiya has already been mentioned (2.1.4) as one way of expressing superlative adjectival or adverbial degree. It is also suffixed to nouns to express 'real' or 'genuine', frequently in respect to a more general class potentially designated by the noun:

Ø-ŋugu-ṇiya ŋan-wu
NAbs-water-real 2Sg/1Sg-give Imp
'Give me real water' (ŋugu is also used to refer to 'liquor').

This suffix follows proprietive and privative suffixes:

ŋa-mawuj-wi-ṇiya
1Sg-food-Priv-really
'I'm really without food'.

2.2.1.2. Nouns derived from verbs

2.2.1.2.1. Derivation from inflecting verbs

The suffix -min used to derive gerunds from ma- compounds is discussed in 2.2.1.5f. The suffix -yin~-jin~-njin is added to the stems of inflecting verbs other than ma- compounds to create nominal forms which for some verbs are gerundial only, and for a few may also be used as agentive nominals. The gerundial meaning is possible for all derivatives.

The stem to which the suffix is added is usually the same for each root as that found in the reflexive-reciprocal (see Table 2-17), except in the few cases where the nominal is morphologically unrelated to the verb

root (see 2.2.1.6). Those verbs which take reflexive-reciprocal allomorphs -ñjiyi- add the nominalizing allomorph -njin (ṇidbi-ñjiyi- 'have' RR ⟶ ṇidbi-njin 'having, possession', ŋuj+bu-ñjiyi- 'deceive' RR ⟶ ŋuj+bu-njin 'deception, deceiver'). Generally, those verbs which take reflexive-reciprocal allomorph -yi- take nominalizing form -yin, and those which take reflexive-reciprocal -jiyi-, -jin. As with reflexive-reciprocal allomorphs, it is thus not possible to predict which suffixal allomorph a verb requires on the basis of its phonological shape. Examples of nominalizations of inflecting verbs are:

Root	RR Stem	Nominal	Gloss
jug-	ju-yi-	ju-yin	swearing; also agentive e.g. ŋaḷa-juyin 'one who swears'
bu-	bu-yi-	bu-yin	'hitting, fighting'
ṇaya-	ṇaḷŋ-jiyi-	ṇaḷŋ-jin	'cooking'
ḍaya-	ḍaḷŋ-jiyi-	ḍaḷŋ-jin	'biting'
ṇuma	ṇum-jiyi-	ṇum-jin	'smelling'
bab+ṇama-	bab+ṇam-jiyi-	bab+ṇami-njin	'putting, placing'
yiri+wa-	yiri+wa-jiyi-	yiri+wa-jin	'seeing'
gawa-	gawa-jiyi-	gawa-jin	'burying'
gulu+yug-	gulu+yu-jiyi-	gulu+yu-jin	'calling out'
gunda-	gunda-jiyi-	gunda-jin	'cutting'
ŋuñjag-	ŋuñja-jiyi-	ŋuñja-jin	'mocking'; 'mocker'
way?way-(y)i-		way?way-(y)i-jin	'dancing'
wawañ-ji-		wawañ-jin	'foraging'
ḍaṛa+wu-	ḍaṛa+wu-jiyi-	ḍaṛa+wu-jin	'finding, sighting'
yala-	yala-yi-	yala-jin	'annoying/annoyance'; 'one who annoys'

Note that mediopassives can form nominals, though they have no reflexive-reciprocal forms. As shown by the forms of yala- 'annoy', there are a few exceptions to the generalization that reflexive-reciprocal marker and nominal suffix will have the same first segment.

Irregular nominals, but ones which as still morphologically related to verbs with which they are semantically linked are:

Root		Nominal	
ja-	'to consume'	jiñjiñ	'eating, drinking'
jaŋ+ga-	'to hunt'	jaŋgay	'hunting'; 'hunter'
bamaṛ-ji-		bamaṛ	'thief'
bamaṛ+mi-	'to steal'		

In the last form, the verbs are no doubt historically derived from the nominal, not the reverse.

Recall that certain inflecting verbs such as bana- never occur by themselves but are always paired with one particle or another. In such cases, the pairing is treated as a derivational unit: the nominalizing suffix is added to the auxiliary, and any case affixation is as in the following example:

mar?-bani-njin 'making, building'
(ṇa-)mar?-bani-njin-gu 'for building, making'

See 1.1.2.2.2b for the syntax of purposive clauses containing nominalizations of all kinds described in this chapter.

2.2.1.2.2. Nominalization of verb particles

Gerunds are derived from verb particles by a fully productive and regular process of suffixation of -wañjin to the particle. Examples are:

Particle	Usual aux	Nominal	
jow	ma-	jow-wañjin	'roaring' (as of water)
marb	ŋama-	marb-wañjin	'tying'
jir	jaygi-	jir-wañjin	'standing'
jiliilig	ga-	jiliilig-wañjin	'pushing, shoving'
yir?	waṛ-	yir?-wañjin	'throwing'
mir?	ŋa-	mir?-wañjin	'knowing'

Note that although particles in independent clauses are always paired with auxiliaries (unless in abbreviated clauses such as described in 2.1.3.7), the auxiliary is never part of their gerundial derivatives, e.g.:

ŋa-mir?-wañjin-gu ja-Ø-ṇiŋa-n
Purp-knowing-Nom 3-3Sg-come-Pres
'He's coming to find out'.

2.2.1.3.-4. Nouns derived from adverbs/adjectives

Not applicable.

2.2.1.5. Semi-productive and relic noun-forming suffixes

2.2.1.5a. Qualitative suffix -mayin

The suffix -mayin is semi-productively added to some nouns, verb particles and adjectives to create forms expressing quality. The suffix cannot be considered truly productive first, because it can be added only to a fairly small number of roots; second, there is not always a predictable meaning relation between base and derived form; and third, there are almost as many forms for which -mayin is an inseparable part of the noun root as there are forms which can be productively derived by means of the suffix. Examples of productive derivations involving -mayin are:

Base			Derived	
mormor	VP	'be dark'	mormor-mayin	'dark, black'
bobob	VP	'be hot'	bobob-mayin	'warm, hot'
jalug	VP	'be cool, freeze'	jalug-mayin	'cool, cold'
geṛeŋ	VP	'shine, be shiny'	geṛeŋ-mayin	'shiny'
jomoŋ	VP	'sit in camp'	jomoŋ-mayin	'stay-at-home'
ḍoḍoñ	Adj	'crooked'	ḍoḍoñ?-mayin	'crooked'
maṛaŋ	N	'tree gum'	maṛaŋ-mayin	'person who refuses to quit, lingers at doing something (e.g. fishing)'

Examples of forms where -mayin is synchronically part of the root include:

buḍubmayin	'Chinese'
guḍuwilmayin	'crooked'
gegegmayin	'lily flower'
waḷmayin	'greedy (person)'
buymayin	'green, unripe'
ñarmayin	'small'

Note there are a few forms, basically expressing qualities, which may occur in the same meaning with or without the suffix, cf. ḍoḍoñ 'crooked' above. Another example of this kind is belyeŋ or belyeŋ-mayin 'red'.

2.2.1.5b. Noun-forming suffix -mi

The suffix -mi semi-productively derives mainly human nouns from compound verbs with auxiliary ma-. The derived nouns express 'one who is/does X'; most of them are agentive. Examples of productive derivations are:

Base		Derived	
moḷg+ma-	'be quiet, silent'	moḷg+mi	'one who is silent'
ŋaraḍ+ma-	'make noise'	ŋaraḍ+mi	'one who makes noise'
ŋaŋ?+ma-	'ask'	ŋaŋ?+mi	'one who asks, a beggar'

Base		Derived	
ñag+ma-	'scold, argue'	ñag+mi	'one who argues, a cranky person'
ḍij+ma-	'stare at hard'	ḍij+mi	'one who just stares, stands looking at'
yaryar+ma-	'be lazy'	yaryar+mi	'one who is lazy'

At least one form with this suffix is derived from an adjective, ḍumbuṛ?+mi 'round (object), pregnant (person)' from ḍumbuṛ 'round'. Forms which contain the suffix but for which the expected base verbs are not attested include bor?mi 'deaf (person), deafness' (attested is only bor?+mi-yi- 'to go deaf'), and moŋor?mi 'human flesh consumed in necrophagous rites'.

2.2.1.5c. Suffix -miñi (-min-yi?)

Two nominals contain what may either be a simple noun-forming suffix -miñi, or a complex one composed of -min (see 2.2.1.5f) and proprietive suffix -yi. These are ñi?miñi 'slowpoke' and ḍulmiñi 'sated (person)'. The only attested form probably related to the latter is the verb particle ḍulma 'to be lying down, prostrate'.

2.2.1.5d. Suspected suffix -ñin

A suspected relic noun-forming suffix is -ñin, attested in four forms, wulijñin 'charcoal', waḷayjñin 'shadow', balwalñin 'boggy place', and gurajñin 'blood'.

2.2.1.5e. Suffix -$y_1$ayi

A relic noun-forming suffix is attested in baḍayin-gayi 'liar' and ŋawi-yayi 'cry-baby'. The root ŋawi is a nominal semantically but not morphologically related to the monomorphemic verb root ḍu- 'cry'. From these two attested forms, it is fairly certain that the suffix underwent the alternation y_1~g in the expected environments (see 3.4.1.1).

2.2.1.5f. Suffix -min

The noun-forming suffix -min is productive in deriving abstractive nouns and gerunds from ma- compounds. Examples are:

Base		Derived	
yaw+ma-	'be shy, ashamed'	yaw+min	'shame'
gal+ma-	'itch'	gal+min	'itch, itching'
galg+ma-	'spear'	galg+min	'spearing'
ḷawg+maṛ-	'dig'	ḷawg+min	'digging'
war+ma-	'hear'	war+min	'hearing'
ŋaṛgŋaṛg+ma-	'sing'	ŋaṛgŋaṛg+min	'singing'

The derivatives function as ordinary nominals; they are not prefixed in major syntactic functions. Inflected as dative/purposive constituents, they are used in the construction of purpose complements (see 1.1.2.2.2b).

gal+min ga-ŋan-bu-n
itching -3-3Sg/1Sg-hit-Pres
'I'm itchy, afflicted by itching'.

ga-ŋa-wuy+ma ḷawg+min-gana
-3-1Sg/tired digging-Abl
'I'm tired from digging'.

wur-yiri+wa-ni ŋan-gina ŋan-bugbug galg+min-gu
3Du/3Sg-see-PC FAcc-Dis FAcc-old person spearing-Dat/Purp
'They looked at that old woman in order to spear her'.

There are many forms not derived from verbs which contain an identical suffix but for which no productive derivational process can be described.

It is found in many bird and insect names in which the first part is onomatopoetic (e.g. ḍuwow?min 'koel', ŋiriṇirimin 'cicada'; see 3.1.2.4.2 for more extensive listing). It is found in ŋiṛ?min 'liver' related to the compound ŋiṛ?+mi- 'breathe'. It occurs in many other nouns which cannot be given a unitary semantic description and for which there are no known related forms, e.g. meḷmeḷmin 'pimple stick' (i.e. small flat stick like nail file used for digging out skin mites), gabu?min 'swollen eye', possibly also buwamin 'news'.

2.2.1.5g. Suffix -mingan

The almost completely unproductive suffix -mingan is found with some adjectival nominals, but with a number of other forms that defy unitary classification:

buḷ?mingan	'blunt'
ḍaymingan	'sacred, prohibited' (related to negative particle ḍayi)
jaŋ?mingan	'lean, having no stomach' (probably related to VP jaŋ? 'to die')
ḷaḍmaḍmingan	'scorpion', also 'police tracker'
gaḷayjmingan	'in turn, successively'

2.2.1.6. Irregular nominals

Root		Nominal	
wu-	'give'	wiyi	'giving'
ḍu-	'cry'	ŋawi	'crying'
yu	'sleep'	gi	'sleep, sleeping'

Though unrelated to yu-, the nominal 'sleep, sleeping' is related to the avoidance style verb gi+wu- 'sleep', used in directly addressing and referring to this activity in relation to avoidance category relatives. The nominal wiyi is commonly used as a personal noun in a derived privative form: ŋa-/ŋaḷa-wiyi-wi 'one who does not give, stingy person'. As mentioned in 2.2.1.5e, ŋawi is found in ŋa-/ŋaḷa-ŋawi-yayi 'cry-baby'.

2.2.1.7. Specialized noun forms

2.2.1.7.1. Complex nominals

Other morphologically complex nominals not derived by any productive process include: baŋaŋamgan 'campsitter, one who sits in camp all the time' (from baŋam 'camp' with locative suffix); ŋañmaŋuru '(one) without food or water' (ŋañ 'throat' with unknown second element); giŋurgiŋuran 'argumentative person' (from giŋur 'row, argument' and locative suffix), and jaŋgaḍeḍeḍ 'expert hunter' (related to jaŋ+ga- 'hunt'). The formal relation between adverb and conjunction mamaya 'first (of all)' and adjective mamayaŋgan 'old, used' is the only example of its kind.

2.2.1.7.2. Bound noun stems

There are two noun stems which occur only as bound forms, either with a determiner such as a possessive suffix or within a complex nominal construction of some kind. One is -mi- 'vegetable food' which occurs, for example, in the predicate nominal construction

ŋa-mi-wi
1Sg-vegetable food-Priv
'I have no vegetable food'.

It has the same meaning as the free form mawuj, which may also occur in the predicate nominal construction. The second noun stem is -ḍa- 'meat, flesh' which was always found to occur with a possessive suffix, e.g. Ø-ḍa-ŋaŋya 'our meat' (1InPl). 1Sg possessor with this stem is expressed

by the abbreviated form -nju (Ø-ḍa-nju 'my flesh') also found with some kin terms (see 2.1.2.4.1). This stem is often used with a positive desiring affect, as when one sees an edible animal and would like to capture it.

2.2.2. Verb derivation

Means of deriving verbs have been discussed in earlier sections. The formation of factitives like ña[ḷ]?ña[ḷ]+ma- 'make smooth' from ña[ḷ]?ña[ḷ] 'smooth' is described in 2.1.1.2.10.-11 and 3.1.2.4.2. The formation of causatives from intransitive particle+aux constructions by alternative pairing of particles with different auxiliaries is described in 2.1.3.1.2.1; derivation of inchoative verbs from adjectives in 2.1.3.3.2a and the formation of reflexive-reciprocal verb forms in 2.1.3.1.2.3.

The most important means of deriving verbs is alternative pairing of auxiliaries with the same verb particle. The formation of causatives is not different in kind from this more general process. Also, causative formation is not a formally unitary process always involving the same auxiliary; a number of auxiliaries can function as causativizers depending on the particle with which they are paired.

3. Phonology

3.1. Phonological units (segmental)

3.1.1. Phonemes

The distinctive segments of Maŋarayi are shown in Table 3-1.

Table 3-1 Phonemes

	bilabial	apico-alveolar	apico-domal (retroflex)	lamino-palatal	velar	glottal
Consonants						
Stops	b	d	ḍ	j	g	?
Nasals	m	n	ṇ	ñ	ŋ	
Laterals		l	ḷ			
Rhotics		r	ṛ			
Semivowels	w			y		
Vowels						
high	i		u			
mid	e		o			
low		a				

The inventory is typical of Australia in lacking fricatives and affricates. It is also typical of some languages of the Roper area in having five corresponding stop-nasal positions (lacking an interdental series), and in distinguishing only two laterals and two rhotics. Some neighbouring languages (e.g., Yaŋman) also distinguish lamino-palatal l^{y}, found in such words (used as loans by Maŋarayi speakers) as verb particle wil^{y} 'be laden' (branches with fruit). Glottal stop is not a distinctive segment in many languages (including Yaŋman, Alawa, and others). Its status in Waṇḍaraŋ is not entirely clear (see Heath 1980), but it is a phoneme of some neighbouring Arnhem-area languages (Ŋalakan, Ngandi). Glottal stop in Maŋarayi has a morphologically restricted distribution: with few exceptions, it occurs only at the boundary between initial element and auxiliary within the compound verb, and finally in verb particles (see 3.1.2.4.2). Since however its occurrence in those environments is not entirely predictable, it must be recognized as a phonemic segment.

Maŋarayi differs from some neighbouring Arnhem languages (Ŋalakan, Ngandi) in that there is no significant fortis-lenis stop contrast. Voiced stop symbols are used in this description for the single stop series.

The vowels a, i and u can occur in inflectional and derivational morphemes and words of all classes; the vowels e and o are more restricted in distribution (see 3.1.2.4.1). Because a, i and u are not restricted in their distribution, evidence is given only of the status of e and o, and the sequences ayi (≠e) and awu (≠o) in the following near-minimal pairs:

a/e	jalaj	'fine ash, plug of tobacco and ash'
	jeler	'tommyhawk, axe'
	ŋelŋel	'competent fisherman'
	ŋal	'burn' (VP)
o/u	joŋog	'carry, go with load on head' (VP)
	juŋuj	'black-headed python' *(Aspidites melanocephalus)*
	go?+ma-	'to take a good look at, inspect'
	gu?+ma-	'to cook'

e/i	med	'rise' (of water, VP)
	mid	'tighten' (VP)
	jelgjelg	'ghost of dead person'
	jilg	'rain' (VP)
ayi/e	balayi	'big'
	maḷe	'stick for carrying fish'
awu/o	ṇawu	'his, its'
	ḍoṛo	'to seize' (VP)

Some languages of the western Northern Territory do not distinguish two apical series (i.e., have only an alveolar series). The following pairs show the contrast between apico-alveolar and retroflex series intervocalically within words. This contrast is almost entirely neutralized morpheme-initially (see 3.2.1.2.2).

d/ḍ	wadamuru	'ceremonial headdress'
	maḍabula	*'Terminalia platyphylla'* (tree sp.)
n/ṇ	bana-	'to make' (requires VP)
	baṇam	'camp, named locality'
l/ḷ	malam	'Aborigine, man'
	maḷa	'tripe, intestine'
r/ṛ	jaraṛ	'root'
	jaṛab	'mouth'

The following phonological features will be used for major classes of segments which require characterization in particular phonological processes:

stops	[-son, +cons, -nas]
nasals	[+son, +cons, +nas]
liquids, rhotics, semivowels	[+son, +cons, -nas]

In Maŋarayi and some neighbouring languages, it is desirable to have a way of classing together all apical segments (apico-alveolar and apico-domal, or retroflex) and opposing them to other 'places' of stop production, in particular the lamino-palatals. I do this by means of a feature [± apical]; but it is further necessary to distinguish alveolars (d) from retroflex (ḍ). This cannot be done by means of the traditional feature [± coronal], because this characterizes tongue-blade position, which is raised from neutral for both classes. I use the feature [± anterior] to divide up places of articulation in such a way that labials and alveolars are [+ant], and retroflex, palatal and velar consonants are [-ant]. A final problem is then to distinguish retroflex from palatal segments, both of which are [-ant]. Using [± high] as a tongue-body feature in the usual fashion, we may specify redundancies [+ apical] ⟶ [- high], and also [+ high] ⟶ [- apical, - anterior]. The places of articulation may then be characterized as follows:

labial	[+ant, -apical]
apico-alveolar	[+ant, +apical]
apico-domal	[-ant, +apical]
lamino-palatal	[+high, -back]
velar	[+high, +back]

Glottal is that segment which is negatively characterized for all major class features: [-son, -cons, -nas].

3.1.2. Segmental realization

3.1.2.1. Monosyllabics

3.1.2.1.1. Plosives

Stops tend to be lax except syllable-finally, where the norm is slightly tenser. Lax allophones tend to be more voiced. Stops are unaspirated everywhere, and are either weakly released, or sometimes unreleased finally.

Glottal stop involves only moderate stricture, hence is less easily perceptible than in neighbouring languages like Ngalakan.

Apico-domal or retroflex articulation involves contact of the apex with the forward part of the hard palate. The tongue is not sufficiently curled back for the underside to make contact with the palate. In lamino-palatal articulation, the tongue is widely spread, the tip contacting the upper back of the lower teeth.

3.1.2.1.2. Fricatives

Not applicable.

3.1.2.1.3. Nasals

Points of articulation are as for stops.

Word-initially before i, the velar /ŋ/ tends to have a slight palatal off-glide which makes it approximate ñ impressionistically: /ŋir/ 'we' (1ExDu) is often realized approximating [ñir]. The two remain distinct nevertheless, because palatal /ñ/ is even further fronted.

3.1.2.1.4. Liquids

The segments l and ḷ are voiced bilateral approximants produced without audible friction. In the environment of front vowels, both are quite clear; in the environment of back vowels, they take on a slight 'dark' coloration, but are never as dark as word final English l. Between front and back vowels (or vice versa) it appears to be the following vowel which has the greatest effect on realization of the liquid.

3.1.2.1.5. Glides/semivowels

The rhotic ṛ is a retroflex glide, pronounced with the tongue curled back, similar to the continuant of some American dialects. The tongue is never brought close enough to the palate to produce friction.

The segment /ɯ/ is a voiced, bilabial glide which involves noticeable rounding before /o/ and /u/, elsewhere less. The segment /y/ is a voiced lamino-palatal glide. Both are easily perceptible word-initially before /u/ and /i/ as well as other vowels (different from some neighbouring languages, e.g., Yaŋman, where initial ɯu and yi tend to be reduced to u and i respectively).

3.1.2.1.6. Others

The rhotic /r/ is an apico-alveolar tap; it is never trilled.

3.1.2.2. Syllabics

3.1.2.2.1. Vowels

This section describes the allophonic variants of vowels and their conditioning.

The 'elsewhere' realizations of the high vowels /i/ and /u/ are not maximally high and tense. They are somewhat lower and laxer than the high, tense vowels of some languages. But since each has an allophone which is even lower, laxer and more centred, I use [i] and [u] for the major allophones of each.

/i/ The segment /i/ is realized as [ɪ], slightly lower and laxer than the major allophone, before /n/, /d/, /l/ and /ŋ/ anywhere in the word, before /g/ syllable-finally, and before all retroflex consonants. Examples are: /jambirina/ [jambirɪna] 'turkey', /jamijin/ [jamijɪn] (subsection term); /jidbaṛ/ [jɪdbaṛ] 'ant-bed'; /jiligari/ [jɪligari] 'boss'; /jiŋ+ma/ [jɪŋ+ma] 'to suckle'; /jiḷig/ [jɪḷɪg] 'alive'; /ḷigba/ [ḷɪgba] 'be allied with' (VP); /jiḍ/ [jɪḍ] 'maggot'; /jiṇin/ [jɪṇɪn] 'altogether, entirely'.

[i] close front rounded vowel, slightly lower than cardinal [i], occurs elsewhere: /jirg/ [jirg] 'small woomera', /jibma/ [jibma] 'descend' (VP); /jiwij/ [jiwij] 'rump', /jimbaŋu/ [jimbaŋu] 'type of hooked spear', /jiriñjiriñ/ [jiriñjiriñ] 'red ant' *(Iridiomyrmex)*.

/u/ [u], a close back vowel, occurs in open syllables: /juluŋ/ [juluŋ] 'smoke' (VP), /maḍu/ [maḍu] 'deep coolamon'.

[ʊ] slightly lower and laxer than [u], occurs in closed syllables: /jumburguda/ [jumbʊrguda] 'small rainbow'.

/e/ [e] slightly higher and tenser than the major allophone, approximately cardinal e, occurs word-finally and before semivowels: /maḷe/ [maḷe] 'stick for carrying fish', /ḷey/ [ḷey] 'rustle' (VP).

[ɛ] major allophone, occurs elsewhere, slightly lower and laxer than [e]: /med/ [mɛd] 'rise' (of water, VP), /we?/ [wɛ?] 'bark' (VP); /meḍban/ [mɛḍban] 'early', /ḷededmañ/ [ḷɛdɛdmañ] 'shark'.

/o/ [oˇ] major allophone, mid-to-low back rounded vowel somewhere between cardinal [o] and [ɔ]: /jomoŋ/ [joˇmoˇŋ] 'sit in camp, be a stay-at-home' (VP).

[o] somewhat higher, tenser and more rounded than the major allophone, occurs before w: /ḷow?/ [ḷow?] 'strip paperbark from tree' (VP).

/a/ [a] shows little variation, almost always realized as low central vowel: /malam/ [malam] 'man, person, Aborigine'; occasionally slightly raised and fronted before /r/.

All vowels tend to take on slight anticipatory retroflex coloring before retroflex consonants.

3.1.2.3. Loanwords

See comments on loans in 3.4.6.

3.1.2.4. Restrictions on occurrence of segments by word class

3.1.2.4.1. Restrictions on vowels

Vowels /e/ and /o/ do not occur in inflectional and derivational morphemes, personal pronouns, demonstratives, interrogative-indefinite pronouns, nor in the set of high-frequency CV, CVC and CVCV (monomorphemic) verb roots. They do occur in nominal roots, verb particles, the initial elements of compound verbs (see 2.1.3b), and a few particles and interjections.

3.1.2.4.2. Glottal stop

Glottal stop has a rather problematic distribution. Though it occurs with great frequency at specifiable morpheme boundaries, it is not entirely predictable at those boundaries. It also occurs medially in a handful of words where no boundary can be identified, and in a few at what may be old boundaries. Environments in which it occurs are as follows:

1. Glottal stop often occurs finally in interjections gana? 'well, but', bagana? 'anything', ji? question tag 'isn't that so' and some others. These also sometimes occur without the glottal, which is therefore not considered part of the phonological shape of these words.

2. Glottal stop is not phonemic word-finally after any part of speech except verb particles. However, it also occurs in the two nouns /ḏeḏey?/ 'agile wallaby and other wallaby spp.' and /ŋaḷamu?/ 'mother-in-law, avoidance category kinsman', both only used in the avoidance speech style (Appendix). The latter has also been recorded without the glottal. These may be loan-words, though their source is unknown.

3. Glottal stop occurs medially in a small number of words which appear to be morphologically simple, and in a few which may be morphologically complex but cannot be analysed synchronically. An example of the first is /beḷ?war/ 'ground sugar bag' (wild honey); an example of the second kind is /buḷ?mingan/ 'blunt', where -mingan may be an old derivational suffix (cf. ḏaymingan 'sacred, dangerous, prohibited', ḷaḏmaḏmingan 'scorpion, police tracker', 2.2.1.5g) which is no longer productive.

4. Glottal stop occurs frequently at certain derivational boundaries in nominals, but not invariably.

(a) It is always inserted after sonorants before the derivational suffix -mingan, added to proper names to single out one person as the focal member of a group, e.g. ŋaḷa-Wawuḷ-?mingan 'Wawul and her mob'. See 2.2.1.1b for this suffix, possibly historically relatable to the suspected derivational morpheme found in /buḷ?mingan/ 'blunt'.

(b) Glottal stop often occurs after sonorants before the (often agentive) nominal suffix -min, 2.2.1.5f. Many words with this suffix are onomatopoetic bird names and insect names, but other examples exist. Some which have the glottal are:

ḏiñ?min	'honeyeater'
biñ?min	'finch'
ŋiḷ?min	'double bar finch'
ḏuwow?min	'koel'
gorboḷo?min	'butcher bird'
ḏiḷiḷ?min	*'Dolichandrone heterophylla'* (small bush)
gabu?min	'swollen eye' ('bung eye')
jirbiḷi?min	'mussel sp.'
ŋiṛ?min	'liver' (cf. compound verb /ŋiṛ?+mi/ 'to breathe'

A smaller number of words lack glottal before -min:

ŋiriṇiri+min	'cicada'
meḷmeḷ+min	'pimple stick'
momomin	'fly sp.'
jiḷyirmin	'sweat'

It may be significant that all but the last are frozen reduplicative forms.

(c) Glottal stop usually occurs after sonorants before the noun-forming suffix -mi (2.2.1.5b). Examples are bor?mi 'deaf person', ḏumbuṛ?mi 'round object, pregnant', and moŋor?mi 'human flesh eaten in necrophagous rites'. This suffix is only marginally productive in deriving substantival nominals. In some instances a corresponding adjectival nominal without the suffix exists, as ḏumbuṛ 'round', or a verb root exists from which a nominal form is derived by means of the suffix. In other instances there is no form of the same or another word class without the suffix. There are environments in which it is occasionally not found; for example, it is not found in the frozen reduplicative form /yaryar+mi/ 'lazy person' (nor in the verb root /yaryar+ma/ 'to be lazy'.

(d) Another rare nominal suffix before which glottal usually occurs is -miñi (2.2.1.5e), e.g. ñi?miñi 'slow-poke'; but ḏuḷ+miñi 'one who is full, sated' from the verb particle /ḏuḷ/ 'to be sated'.

(e) Glottal is occasionally found after sonorants before the qualitative derivational suffix -mayin (2.2.1.5a), e.g., from /ḏoḏoñ/ 'crooked' is derived /ḏoḏoñ?+mayin/ 'crooked'. (Many forms always have this suffix, including most color terms.) Glottal stop is not invariably found at this boundary either, viz. /buy+mayin/ 'shiny greenish color, unripe'.

5. Glottal stop occurs medially after sonorants between R_1 and R_2 of many partially or completely reduplicative forms of various word classes. These are mainly frozen reduplications which cannot occur in unreduplicated form:

bayi?bayiri	'strangers' (collective plural)
ḏiñ?ḏiñ	'grasshopper'
buñaŋ?buñaŋ	'tomorrow' (cf. buñaŋ 'late in the day, tonight')
jiḷir?jiḷir	'to scatter ashes' (VP)
yu?yu+ma-	'to swim'
gaṛ?gaṛ+ma-	'to cough'

Not all reduplicative forms have the glottal medially after sonorants: ñoboñobo 'to be a nuisance' (VP), yaryar+ma- 'to be lazy' and many others.

6. Glottal stop usually occurs in the environment after sonorant-final initial elements of compound verb roots with inseparable auxiliaries /ma/ and /mi/. Since the ma-class is the largest compound verb class in the language, glottal stop is of rather high frequency. A few examples are ŋaḷ?+ma- 'to sing out to, call to', ŋaŋ?+ma- 'to ask', baday?+ma- 'to squirm'.

No word contains more than one glottal stop, except where entire verbs including inseparable auxiliary are reduplicated (3.4.5.2). When the initial element before the inseparable auxiliary in complex verbs is frozen reduplicative and contains a glottal, a second glottal cannot occur before the auxiliary. For example, a second glottal cannot occur before the auxiliary in gaṛ?gaṛ+ma- 'to cough' because a glottal is present between R_1 and R_2.

Occurrence of glottal stop before the inseparable auxiliary, though the norm, is not entirely predictable. Some verbs contrast only by presence or absence of the glottal. Some contrasting forms which are identical or nearly so except for the glottal are:

war?+ma-	'to spread out'	war+ma-	'to hear'
		waṛ+ma-	'to flow'
		yaṛ+ma-	'to remove'
ḏuy?+ma-	'to punch, belt up'	ḏuy+ma-	'to steam, smoke'
jaṛŋ?+ma-	'to kiss'	jaṛŋ+ma-	'to straighten'
ŋiṛ?+mi-	'to breathe'	yiṛ+mi-	'to crawl on'
bujubuju?+ma-	'to make fine, non-coarse; refine'	mulumulu+ma-	'to roll in one's hands'

Note that in all except the last pair the compounding element ends in a non-vocalic sonorant before the glottal. Where the sonorant is a vowel, the glottal is almost invariably found before the inseparable auxiliary. Exceptions like mulumulu+ma- 'to roll in one's hands' are rare. Additional examples with vowel are:

yara?+ma-	'to do one last time, do one time'
ba?+ma-	'to bathe'

li?+mi- 'to name'
gu?+ma- 'to cook'
go?+ma- 'to have a good look at'

Some adjectival nominal roots can be verbalised by means of the inseparable auxiliary /ma/. Where the nominal root is sonorant-final, a glottal is always inserted before the auxiliary. Examples are:

ḍaŋiñ	'clean'	ḍaŋiñ?+ma-	'to make clean'
ẏijar	'good'	ẏijar?+ma-	'to tell nicely, do well'
jañgay	'tame'	jañgay?+ma-	'to tame'

I write the glottal as part of the initial element of complex verb roots before the boundary + because of the similarity between the occurrence of glottal in that environment, and its occurrence word-finally in verb particles, discussed below. Where boundaries are indicated in nominal forms, glottal is written as part of the derivational suffix.

6. Glottal stop occurs medially in verb particles and finally after verb particles.

(a) Some verb particles have a final syllable -ma or -mi. A few verb particles are used both with and without the final syllable, as gal? or gal?ma 'to climb' (VP), ḍar? or ḍar?ma 'to emerge' (VP). In most, the final syllable cannot be omitted. Note that -ma are -mi are exactly the same shape as the inseparable auxiliaries before which the glottal commonly occurs; the addition of -ma or -mi to a form used as a free particle, and subsequently direct inflection of the form, may be a process by which formation of compound verb roots has occurred historically (see 2.1.3a.2). In most cases forms with final -ma or -mi cannot also be inflected, but a few forms can function either as particle or inflecting verb.

The glottal occurs after sonorants before -ma or -mi in most verb particles. Examples are:

ḍar?ma 'to emerge'
buy?ma 'to turn one's back to'
wa?ma 'to crouch'
ḍa?ma 'to lift'
jaw?ma 'to grab'
yow?mi 'to hunt with fire'

Examples of particles where glottal does not occur are yoyma 'to sleep half awake', yurmi 'to pass by', and ḍulma 'to lie down'.

(b) Glottal stop occurs with great frequency following sonorants as the final segment of verb particles, but again its occurrence is not entirely predictable. The following sets show contrasts of verb particles with final sonorant, and the same sonorant followed by glottal stop.

a/a?

jilwa	'to remember'	yalya?	'to accuse'
warara	'to drag'	gabada?	'to stagger'
jaŋa	'to ask'	wargba?	'to look around'

e? (no examples of particles with final e)

		we?	'to bark'
		ye?	'to play'
		joḷe?	'to light a fire'

i/i?

ḍi	'to dry out'	bi?	'to track with dogs'
jimi	'to think about'		

u/u?

yururu	'to tip, spill'	jugulu?	'to be coiled up'
bijulu	'to unhook, unfasten'	wuṛu?	'to break the law'

o/o?

ḍoṛo	'to seize, pick up'	ḍo?	'to shoot'
ḍororo	'to slither'	boḷoḷo?	'to dive in'

ḷ/ḷ?

ŋaḷ	'to burn'	gaḷ?~gaḷ?ma	'to climb up'
buḷ	'to sprout, come out'	ḍiḷ	'to come out, emerge'

ḷ/ḷ?

juḷ	'to dislike'	juḷ?	'to be raw'
ḍuḷ	'to load up'	ḍuḷ?	'to burn off'
goḷoḷ	'to superimpose'	gadjaḷ?	'to cross'

r/r?

guṛibir	'to be crazy, drunk'	ḍijbir?	'to stop'
mur	'to tell, make request of'	mar?	'to make'

ṛ/ṛ?

jaṛ	'to slip'	juṛ?	'to list, call out'
ṇuṛ	'to buzz'	ñuluṛ?	'to chatter'

m/m?

ñim	'to drown, submerge'	ñim?	'to wink'
ḍim	'to take off' (in flight)	jaŋam?	'to smack one's lips'

n? (no examples of n)

		maŋañ?	'to move about'
		jan?	'to twirl firedrill'

ŋ/ŋ?

ḷagiŋ	'to crack shell'	ŋalawaŋ?	'to swear at'
		joŋ?	'to drip, leak'

ñ/ñ?

mamiñ	'to roll up'	wiḍiñ?	'to wave, undulate'

ŋ/ŋ?

yarŋ	'to pelt down'	jaŋ?	'to die'
guñuŋ	'to double, fold'	muñuŋ?	'to beckon to'

y/y?

buy	'to have blurry vision'	buy?	'to show, teach'
jey	'to have itchy feet, want to go'	jey?	'to cook in paperbark'

w/w?

yaw	'to rest'	yaw?	'to throw water on'
baw	'to deflate, go flat'	baw?	'to come out'
jiw	'to extinguish'	wow?	'to be allied with'

A common particle shape is CVSC, where S is non-vocalic sonorant, C a final consonant other than glottal (stop or ŋ). Some of these particles may be contrasted with CVS? or CVS.

mar?	'to make'	marb	'to tie'
ḷar?	'to release'	ḷarg	'to be cold'
ẏir?	'to throw'	ẏirg	'to stand up'
yaw?	'to throw water on'	wawg	'to follow'
bur	'to grab'	burb	'to drop'
wur	'to set' (sun)	wurg	'to wash'
yaw	'to rest'	wawg	'to follow'

Constraints on final liquid-stop clusters in Maŋarayi prevent the occurrence of Ld or Lj (L = liquid or rhotic), though many particles end in d̲, d and j̲. Permissible final liquid-stop clusters can only have b̲ or g̲ as the second element, so while we may contrast mar? and marb and in theory also with *marg (though this form does not actually exist), there is never any contrast with *mard or *marj. Many languages in the area have constraints against clusters of liquid or rhotic and apical stop, but the strict constraint against liquid or rhotic plus j̲ word-finally is somewhat more unusual. Note that the cluster wg occurs word-finally (and in a few instances, morpheme-finally before a derivational suffix, as in joḏowg+min 'friar bird') but word-final clusters wb, wd and wj do not occur.

In short, in most instances only a two-way contrast is attested between CVS? and CVSC; sometimes a contrast between these and CVS is also found. It is possible that in some instances glottal continues stops finally, but the particular stop may have differed for different particles. In some particles glottal may continue *j̲, in others *g̲ or *b̲. (Which it was does not much matter, provided that contrastiveness was maintained with particles of the shape CVS.) In those instances in which a form may function both as free particle and as initial element in compound verb roots, it always has the glottal if it has the glottal as free particle, and lacks the glottal if it lacks it as a free particle. An example in which glottal does not occur in the particle form nor in the same element in a complex verb root is ḏuḷuḷ 'to push' (VP) and ḏuḷuḷ+ma- 'to push'.

3.2 Phonotactics

3.2.1. Occurrence of single segments

3.2.1.1. Word-final consonants

Some Australian languages limit possible word-final consonants to sonorants. In Maŋarayi, any segment can be word-final. Examples of final stops are:

b	bab	'head'
d	jid	'give in marriage' (VP)
ḏ	balmaḏ	'arm cicatrice'
j̲	muj	'honey bee'
g	muyg	'dog'

For restrictions on final glottal stop by word class, see 3.1.2.4.2.

Word-finally, glides y̲ and w̲ contrast with homorganic glide-vowel sequences yi and wu:

wuṛay	'later'	versus	Maŋarayi	'Maŋarayi'
ḻiw	'dive in' (VP)	"	ḻiwu	'mosquito'

Word-final vowel-glide-vowel sequences are sometimes reduced phonetically to V̲: (long vowel). This occurs only where the two vowels of the sequence are identical; the glide may be either y̲ or w̲. Careful pronunciation reveals the glide. Examples are:

/ḏuyu/	'hole', often [du:]
/bamburiyi/	'better, preferably', often [bamburi:]

3.2.1.2. Initial consonants

3.2.1.2.1. Rhotics

Neither rhotic is initial in native Maŋarayi words, though the glide occurs word-initially in a few loanwords and personal names adopted from other areas (e.g. ṛuŋgay *'Aponogeton'*, a water plant, possibly a loan from Rembarŋa; the native Maŋarayi word is yarayg). Only one morpheme, augmented (dual/trial) element -r(a), has the initial tap; this can never be word-initial.

3.2.1.2.2. Restrictions on apical consonants

The apical (alveolar vs. retroflex) contrast is neutralised following consonants both within morphemes and across morpheme boundaries within the word. There are thus no contrasts n̤ḏ vs. n̤d vs. nḏ. In transcriptions of apical clusters within morphemes the second element is written as retroflex if the first is (n̤ḏ), and alveolar if the first is (nd).

After consonants across morpheme boundaries within words the contrast is also neutralised, e.g., [bab+nama] 'put', not [bab+ṇama]. The apical contrast is also neutralised after consonants in reduplicative forms like [ḏabdab] 'tracks', but retroflexion is plainly heard in reduplicative segments after vowels, [n̤iriṇirimin] 'cicada'.

There is no phonemic apical contrast word-initially. The context-free phonetic norm word-initially is retroflex. Retroflexion is especially clearly heard when a word beginning in an apical is preceded by another ending in a vowel.

The apical contrast is also almost entirely neutralised morpheme-initially. Most morpheme-initial apicals are realised as retroflex when preceded by a vowel-final inflectional prefix, and as alveolar when preceded by a consonant-final prefix (compare [ŋaḷa-ṇañi] and [ŋan-nañi], nominative and accusative forms of 'mother'). A few morpheme-initial consonants are best identified as underlyingly alveolar, due to the fact that they are never realised as retroflex even in post-vocalic environments. These are:

(a) PC suffix -ni has alveolar nasal. In neighbouring languages (Ŋalakan, Jawoñ), prefixes are included within the retroflex morpheme-initial realisation norm, but suffixes are alveolar-initial.

(b) Masculine and feminine third singular genitive independent pronouns and some third person demonstrative forms contain a pronoun root -na(ŋ)-. The apical nasal never occurs word-initially in these forms; following vowel-final prefixes within words, it is always alveolar (ŋa-naŋ-gu 'his', ŋaya-naŋ-gu 'hers'). It is unclear whether the same root is to be identified in ablative and locative forms [n̤a-naŋ-gana-(wa)] 'from there' and [n̤aŋ-gan-wa] 'there'. Note that in the latter form the element in question occurs word-initially and seems to exhibit the normal degree of word-initial retroflexion.

(c) The initial nasal of the neuter distant demonstrative [n̤ara-(bayi)] word-initially shows approximately the same degree of retroflexion as other apicals. However, following the anaphoric prefix gi- the nasal is alveolar: [gi-nara-(bayi)] 'that same one'. This is the only regularly anaphorized demonstrative; see 1.5. Some distant forms of masculine and feminine demonstratives contain the same morpheme, always with alveolar nasal: [ŋan-gi-na] or [ŋan-gi-nara] 'that one', FAcc. Here the form is positionally a suffix, and so presumably would not be retroflex. The nasal of the neuter demonstrative is taken to be underlyingly apico-alveolar, /na(ra)/; this form is considered distinct from the masculine and neuter pre-nominal prefix /n̤a-/ which never occurs word-internally.

Excluding forms in (a)-(c), morpheme-initial apicals could be treated phonologically in one of two ways. They could either be regarded as underlyingly neutral, their occurrence as retroflex or alveolar specified by environment-specific realisation rules; or they could be treated as underlyingly retroflex, with a rule neutralising the apical contrast in favor of alveolar realisation in post-consonantal environments. Both formulations are plausible, but I choose to regard the majority of morpheme-initial apicals as underlyingly retroflex. This distinguishes them from the few problematic cases mentioned in (b) and (c), and also makes it possible to align word- and morpheme-initial phonological

representation with the context free (i.e., preceded by silence) phonetic norm by using the retroflex series as the orthographic norm. For orthographic consistency, I write apicals after consonants across word-internal (reduplicative and other) boundaries as retroflex where the phonological form of the root is considered to contain a retroflex consonant; thus ḍabḍab 'tracks' rather than ḍabdab, and bab+ṇama- 'put' rather than bab+nama-.

3.2.2. Consonant clusters

3.2.2.1. Consonant clusters positionally within the word

3.2.2.1.1. Word-initial clusters

Word-initial clusters do not occur.

3.2.2.1.2. Word-final clusters

Word-final clusters are a sub-set of the possible medial intramorphemic clusters. Intramorphemic final and medial clusters are described in 3.2.2.2.2 and 3.2.2.3. Clusters which can occur intramorphemically can also occur across morpheme boundaries. However, additional cluster types occur across morpheme boundaries, and these are presented in 3.2.2.4.

3.2.2.2. Possible clusters

3.2.2.2.1. Word-initial consonant clusters

Not applicable.

3.2.2.2.2. Intramorphemic final clusters

Each morpheme which can be word-initial, and each lexical word, minimally has the shape CV. Because glottal stop occurs word-finally only in verb particles (note the exceptions mentioned in 3.1.2.4.2 verb particles have a different set of possible final clusters than other word classes. Attested final clusters of non-vocalic sonorant plus glottal in verb particles include all possibilities. No monomorphemic verb roots end in a consonant cluster. Hence examples of final clusters within morphologically simple words may be divided into two classes: those in verb particles where the final consonant of the cluster is glottal stop, and those in nominal roots and verb particles where the final cluster does not contain glottal stop. Attested word-final clusters of the second type conform to the description SC, where S is a non-nasal sonorant and C a nonapical stop (b, g, j) or nasal ŋ. Attested final clusters are:

lb	galb	'to mate, join' (VP)
l̤b	bol̤b	'to be used to' (VP)
rb	burb	'to drop' (VP)
r̤b	l̤urbl̤urb	'to have a headache' (VP)
lg	jilg	'to rain' (VP)
l̤g	miŋul̤g	'tears'
rg	balayarg	'middle'
r̤g	gador̤g	'boil'
lŋ	(no word-final example, assumed accidental gap)	
l̤ŋ	wal̤ŋ	'to open' (VP)
rŋ	yarŋ	'to pelt down' (VP)
r̤ŋ	gur̤gur̤ŋ	'to walk like a possum, stooped over'
yb	juybjuyb	'to be burnt to a crisp' (VP)
yj	ḍuyj	'house, humpy'
yg	gawayg	'urine'
wg	wawg	'to follow' (VP)

In addition, the unique example of final wl is found in the word gurawlgurawl 'bird' (probably heron sp.).

3.2.2.3. Intramorphemic medial clusters

3.2.2.3.1. Intramorphemic medial double clusters

All of the double clusters which occur word-finally also occur intramorphemically in medial position. In addition, many others occur. These are shown in the following Tables, with examples listed below each. Frozen reduplications are given as examples only where no non-reduplicative words were found with the medial cluster.

In some of the following charts, 'liquid' is used as cover term for liquids and rhotics. Where necessary these are distinguished.

Liquid-Stop

Second element \ First element	l	l̤	r	r̤
b	lb	l̤b	rb	r̤b
d	ld	--	--	--
ḍ	--	l̤ḍ	--	--
j	lj	l̤j	rj	--
g	lg	l̤g	rg	r̤g

Examples:

lb	gulbiñ	'emu'
l̤b	bal̤al̤bab	'bulrush sp.'
rb	warba	'catfish'
r̤b	bur̤bur̤?	'to insert, plant' (VP)
ld	ḍalḍal	'to get lost' (VP) (phonetically [ḍal̤dal])
l̤ḍ	ḍel̤ḍel̤	'to be wrinkled' (VP)
lj	jaṇbaljaṇbal	'whimbrel'
l̤j	jal̤jal̤	'grinding stone'
rj	gurji	'long time (ago)'
lg	galguṇḍi	'goanna hole'
l̤g	bal̤gan	'boomerang'
rg	bargiṇḍi	'women's pubic covering'
r̤g	bar̤gi	'ground, earth'

Liquid-Semivowel

Second element \ First element	l	l̤	r	r̤
y	ly	l̤y	ry	r̤y
w	lw	l̤w	rw	r̤w

Examples:

ly	balyagbalyag	'smooth'
l̤y	gal̤yag	'Gal̤yag' (place-name)
ry	buryib	'to hide' (VP)
r̤y	yir̤yir̤	'coward, timorous person'
lw	jilwa	'to remember' (VP)
l̤w	jol̤wana	'female *Petrogale* sp.'
rw	baṇḍarwuyi	'circumcising stone, nail-tailed wallaby' *Onychogalea* sp.
r̤w	war̤wa	'light' (not heavy)

Liquid-Nasal

Second element \ First element	l	l̤	r	r̤
m	lm	l̤m	rm	r̤m
n	--	--	--	--
ṇ	--	--	--	--
ñ	lñ	l̤ñ	rñ	--
ŋ	lŋ	l̤ŋ	rŋ	r̤ŋ

Examples:

lm	balmaḍ	'cicatrice'
ḷm	baḷmur	'log'
rm	ŋirmu	'male *Petrogale* sp.'
ṛm	waṛma	'catfish sp.'
lñ	balwalñin	'boggy place'
ḷñ	ḍaḷñin	'property of MM/MMB semimoiety'
rñ	ñurñur	'to be jealous' (VP)
lŋ	galŋuda	'star'
ḷŋ	giḷŋan	'native cat'
rŋ	jirŋul	'wet, moist'
ṛŋ		rare finally; its absence medially may be accidental gap

Nasal Stop

Second element \ First element	m	n	ṇ	ñ	ŋ
b	mb	nb	ṇb	ñb	ŋb
d	md	nd	--	ñd	--
ḍ	--	--	ṇḍ	--	--
j	mj	nj	ṇj	ñj	--
g	mg	ng	ṇg	ñg	ŋg

Examples:

mb	bambiḷa	*Atalaya hemiglauca*
nb	ḍinbir	'narrow'
ṇb	baṇbayi	'to joke, have fun, tease' (VP)
ñb	ḍañbayi	'bulrush'
ŋb	waŋbol	'poison, rubbish'
md	bamdaj+ma-	'to be very angry, go wild'
nd	bandi	'snake'
ñd	muladaṇḍañgu	'male guinea fowl, rooster' ([muladañdañgu])
mj	bamja+wu-	'to smash'
nj	baḷanji	'shallow'
ṇj	baṇja	'white ochre'
ñj	buñjag	'sugar leaf'
mg	gumgub	'lily sp.' *(Nelumbo nucifer)*
ng	ḍingil	'neck'
ṇg	baṇga	'close to'
ñg	guṛañgu	'waddy, stick for knocking flying foxes out of trees'
ŋg	baḷaŋgan	'new'

Note that combinations md, ṇḍ, ṇd and ñḍ are precluded because the retroflex-alveolar contrast is neutralised after consonants.

All the Nasal-Stop clusters exemplified above are underlying; the change of stops to homorganic nasal across certain morpheme boundaries (see 3.4.1.2.1) accounts for many more occurrences of surface Nasal-Stop combinations.

Nasal-Nasal

Second element \ First element	m	n	ṇ	ñ	ŋ
m	--	nm	ṇm	ñm	ŋm
n	--	--	--	--	--
ṇ	--	--	--	--	--
ñ	--	--	--	--	--
ŋ	--	nn	ṇm	ñŋ	--

Examples:

nm	jabanmani	'tree fork'
ṇm	waṇmara	'childless person'
ñm	gariñmal	'lily sp.'
ŋm	moŋmoŋ	'spangled perch'
nŋ	ḍinŋanaŋgar	'Burdekin duck'
ṇŋ	maṇŋa+ma-	'to strip bark'
ñŋ	wiñŋuru	'striped'

Stop-Stop

Second element \ First element	b	d	ḍ	j	g
b	--	db	ḍb	jb	gb
d	bd	--	--	--	gd
ḍ	--	--	--	--	--
j	bj	dj	ḍj	--	--
g	--	dg	ḍg	jg	gg

Examples:

db	budbin	'jealous person'
ḍb	baḍbaḍa	'butterfly'
jb	bajbara	'basket'
gb	bologban	'Rainbow Serpent'
bd	ḍabdab	'tracks' (phonologically /ḍabḍab/)
gd	ḍaḷugdaḷug	*Amyema miquelii* (phonologically /ḍaḷugḍaḷug/)
bj	jabjab	'MF/MFZ'
dj	garadji	'spinifex wax'
ḍj	baḍjar	'water goanna'
dg	jidga	'junior wife, youngest mother'
ḍg	gaḍgaḍ	'to hold rope at arm's length (in dancing, VP)
jg	bijgun	'water monitor'
gg	guṛuggurug	'white man, devil'

The only instance of homorganic stop cluster within a word is frozen reduplicative guṛuggurug 'white man, devil'.

Stop-Nasal

Second element \ First element	b	d	ḍ	j	g
m	bm	dm	ḍm	jm	gm
n	--	dn	--	--	--
ṇ	--	--	ḍṇ	--	--
ñ	--	--	ḍñ	jñ	--
ŋ	--	--	ḍŋ	--	--

Examples:

bm	bibma	'to carry under arm' (VP)
dm	gedmañ	*Terminalia grandiflora*
ḍm	ḷaḍmaḍmingan	'scorpion, police tracker'
jm	woḷojmermer	'pretty, colored'
gm	gigmuli	'young boy'
dn	ṇadnar	'sour'
ḍṇ	ṇuḍṇuḍ	'sound made by old lady of Gunabibi'
jñ	gurajñin	'blood'
ḍŋ	ŋaḍŋaḍ	'to run away' (VP, also Pidgin English)

The example ŋaḍŋaḍ 'to run away' was the only instance of ḍŋ. This may actually be a Pidgin English word seemingly derived from some other Aboriginal language.

Semivowel-Consonant

First element	w	y
b	--	yb
d	--	--
ḍ	--	--
j	wj	yj
g	wg	yg

Examples:

yb	guyban	'small amount'
wj	jawjaw	'to fill'
yj	baṛayj+ma-	'to count, enumerate'
wg	boḍewg	'bad'
	joḍowg+min	'friar bird'
yg	jaygi-	'to stand'

Consonant-Semivowel

First element	b	d	ḍ	j	g
w	bw	dw	ḍw	jw	gw
y	--	--	--	--	--

Examples:

bw	wubwub	'to fall into the fire'
dw	balawadwad	*Grevillea mimosoides*
ḍw	weḍweḍ	'ground sugar bag' (wild honey)
jw	jijwirij	'Leichhardt tree' *(Nauclea coadunata)*
gw	maragwa	'semimoiety totem'

Nasal-Semivowel

First element	m	n	ṇ	ñ	ŋ
w	mw	nw	ṇw	ñw	--
y	--	--	ṇy	--	--

Examples:

mw	bamwuriyi	'cold'
nw	ḍinwi	'one who gets nothing in hunting, fishing, gathering'
ṇw	weṇweṇ	*Ficus virens*
ñw	gañwar	'sun'
ṇy	ŋiṇya	'ours' ExPl

Semivowel-Semivowel

First element	w	y
w	--	yw
y	--	--

Example:

yw	jayway	'rainmaker'

Stop-Liquid

The only medial combination of Stop-Liquid is gḷ ([gl]), found only in frozen reduplications, e.g. ḷigḷigmin 'paperbark' (avoidance style), ḷirigḷirig 'pebble'.

3.2.2.3.2. Intramorphemic triple clusters

Triple clusters within morphologically simple words (excluding frozen reduplications) are of the following descriptions.

Liquid-Nasal-Stop

lmb	bilmbig	'to give away' (VP)
rmb	ḷermbuj	'to knock over' (VP)
lŋb	galŋbam	'spouse'

Liquid-Stop-Stop

rgb	wuburgba	'halfway'
rgj	bargji	'forcefully, hard'

Liquid-Stop-Nasal

lgm	yulgmiṇ	'sand, sugar'

Semivowel-Stop-Nasal

yjñ	waḷayjñin	'shadow' (may be old derivational boundary, see 2.2.1.5d)
yjm	gaḷayjmingan	'in turn' (may be old derivational boundary -mingan, see 2.2.1.5g)

Semivowel-Nasal-Stop

ymb	waymbay	'prob. *Commelina lanceolata*'

Allowing frozen reduplications, we find other triple clusters of the above and some other descriptions.

Liquid-Nasal-Stop

ḷŋb	boḷŋboḷŋ	'to have sores' (VP)

Liquid-Stop-Stop

rbg	gorbgorbmin	'shovel spear'
rgj	jargjarg	'to tear' (VP)
lgj	jelgjelg	'dead man, ghost'

Liquid-Stop-Nasal

ḷbm	maḷbmaḷb	'to walk around, wander about' (VP)
ṛgn	ṇeṇergṇeṇerg+mayin	'striped'
ṛgn	ŋaṛgŋaṛg+ma-	'to sing'
rjŋ	ŋerjŋerjmin	'white cockatoo'

Semivowel-Stop-Nasal

ygm	muygmuyŋgan	'puppup' (water insect; < muyg 'dog', frozen Locative suffix -gan)

Semivowel-Nasal-Stop

yŋg	same example as above	

Liquid-Stop-Liquid

ṛbḷ	ḷuṛbḷuṛb+ma-	'to have a headache' ([ḷuṛbluṛb+ma-])

Liquid-Stop-Semivowel

ḷgw	wuḷgwuḷg	'to walk stealthily'
ṛgw	waṛgwaṛg+min	'crow'

3.2.2.4. Intermorphemic clusters

3.2.2.4.1. Double intermorphemic clusters

Across morpheme boundaries several clusters of two consonant segments occur which are not found intramorphemically. These are:

Liquid-Stop

ṛj	bamaṛ-ji-	'to steal' (mediopassive)

Liquid-Liquid (including rhotic-liquid)

These occur at the boundary of a liquid or rhotic-final nominal root and the allative suffix -ḷama, e.g. Ø-ŋajal-ḷama ([ŋajal-lama]) 'to the spring' All.

Liquid or Rhotic and ŋ

See P-10 in 3.4.4.1.

Nasal-Stop

The cluster ŋj, unattested intramorphemically, results across the boundary between some g-final nominal roots and inchoative -ji-; see 3.4.1.2.2.

Nasal-Nasal

Across morpheme boundaries additional nasal clusters nn, ṇṇ (see 3.4.4.1) and nñ are found, e.g. [wuyan-numdag] 'he smelled them Pl' PP

(/ṇuma/ 'to smell'); maṇ-ṇawu 'its (tree) gum'; ŋan-ñi?miñi 'slow-poke' FAcc.

Stop-Stop

The cluster gj occurs across boundaries: ŋayag-ji 'nothing' (presumably /ŋayag/ 'other, another'), and proprietive suffix /y$_2$i/ (2.1.1.4.4-5). The focus clitic -bayi, when suffixed to b-final nominal roots, results in the surface cluster bb: jab-bayi 'wind' Foc (but see also P-11 in 3.4.4.1).

Stop-Nasal

Across the boundary of nominal root and possessive suffix the following additional Stop-Nasal clusters are found:

bṇ	bab-ṇawu	'his head' ([bn] also found across other boundaries)
ḍṇ	jalboḍ-ṇawu	'his pastoral station' [ḍn]
jṇ	murij-ṇawu	'his elbow' [jn]
gṇ	gig-ṇawu	'his breast' [gn]
bŋ	bab-ŋaŋga	'your Sg head'
dŋ	barigud-ŋaŋga	'your billy can'
jŋ	murij-ŋaŋga	'your elbow'
gŋ	gig-ŋaŋga	'your breast'

Nasal-Semivowel

Across morpheme boundaries the additional Nasal-Semivowel clusters are found:

my	baṇam-yirag	'unique place' (-yirag 'unique')
ny	ṇi-yan-yuŋgun	'ancestors' (-yan- see 2.1.2.5.9.8; yuŋgun 'ahead, before')
ŋy	miliŋ-yi	'having light' (-yi 'having')

The cluster ñy which results from the combination of ñ-final nominal root with -yi 'having' is reduced phonetically to ñ: gedmañ-i 'having *Terminalia grandiflora*'.

Semivowel-Semivowel

The surface cluster ww results from the combination of w-final particle followed by nominal derivational suffix -wañjin (2.2.1.2.2): jow-wañjin 'roaring' from jow 'to roar' (VP). Across boundaries the cluster yy is usually reduced to y (see P-9 in 3.4.4.1).

3.2.2.4.2. Triple intermorphemic clusters

Across analysable morpheme boundaries one finds any of the possible final double clusters except yb and yj, and m or w. There are also a few other triple clusters across morpheme boundaries: lŋj in ḍaliŋ-jin 'biting' (for nominalizing -jin, see 2.2.1.2.1), and ydj and yjb exemplified in ḍuyjḍuyj+buyin 'netting' (avoidance style).

Every possible triple cluster consisting of non-vocalic sonorant, glottal stop and m occur across the boundary where m is the initial segment of the inseparable auxiliaries /ma/ or /mi/.

In addition, many types of triple cluster occur in reduplicative forms involving the final consonant of R_1, glottal stop, and the initial consonant of R_2. Examples are:

wiḍiw?wiḍiw	'to whip' (VP)
way?way-(y)i-	'to dance' (mediopassive)
giñ?giñ	'gecko sp.'

3.2.3. Restrictions on vowels

The principal restriction on vowels is that on the distribution of e and o, described in 3.1.2.4.1.

3.2.3.1. Word-final vowels

All vowels occur word-finally.

3.2.3.2. Word-initial vowels

No morpheme is vowel-initial; the minimal structure of a morpheme is C(V). (See 3.2.4 for those consisting only of C.) Phonetically, the allomorphs of the irrealis prefix, wa- and ya-, are often reduced to a-.

3.2.3.3. Vowel sequences

Since no morphemes are vowel-initial, no sequences of vowels occur across morpheme boundaries, nor do they occur within morphemes.

3.2.4. Structure of verb roots and inflectional morphemes

Monosyllabic verb roots conform to the formula CV(C), where final C is g in two roots, y in one, and r in one. The monosyllabic verb roots are: /bu/ 'hit', /wu/ 'give', /ga/ 'take', /ma/ 'say, do', /mi/ 'get' /wa/ 'visit, see', /ṇa/ 'burn' (intransitive), /ṇi/ 'sit', /ḍu/ 'cry', /yu/ 'sleep', /ja/ 'eat, drink', /ḍi/ 'warm oneself', /yag/ 'go', /jug/ 'swear at', /waṛ/ 'throw', /way/ 'fall' (always mediopassive way-(y)i-, cf. reduplicative mediopassive way?way-(y)i- 'dance').

A few verb particles have the shape CV(?). Numerous monosyllabic nominal roots and other parts of speech occur, conforming to the formula CVC(C). The final consonant may not be glottal stop, which occurs only in verb particles of the shape CVS?.

Almost all bisyllabic verb roots are of the form CVCV; e.g., /ṇama/ 'hold, grasp', /ṇuma/ 'smell' (transitive), /ḍaya/ 'bite'. A few bisyllabic roots are CVCCV: /jaygi/ 'stand', /gunḍa/ 'cut'. Exceptions to the generalisation that bisyllabic roots are vowel-final are /ŋuñjag/ 'to imitate, mock', and some roots of mediopassive verbs; see 2.1.3.3.2b). The structure of non-verbal roots is not treated here, but is subsumed under the discussions of consonant clusters (3.2.2) and reduplication (3.4.5). Only 3 monomorphemic trisyllabic verb roots were found: /ḍiwiña/ 'to reach, attain', /ḍaṇidba/ 'to wait for', /ṇiyiŋgi/ 'to look up'. All other verb roots of more than two syllables are complex, consisting of initial element and one of the CV, CVC, or CVCV inseparable auxiliaries.

Only a few morphemes (none of which can be word-initial) begin with consonant clusters. These include some stem-augments which occur in past negative and habitual forms of some verbs (2.1.3-IIIb), and one allomorph of the reflexive-reciprocal morpheme (2.1.3-IVa). In all of these, the clusters consist of nasal and homorganic stop. The stem augments are -ŋḍa-, -nda-, -ñja- and -ŋga-; the cluster of the reflexive-reciprocal allomorph is -ñjV-. Plural dative pronouns are characterized by -ŋya following the pronominal base. See also the discussion of consonant clusters in some demonstrative forms (2.1.2.5.2) where morpheme division is obscure.

Several inflectional morphemes consist only of a single consonant segment. These are: nominative augmented (dual/trial) number affix -r (~-ra-) object-marking prefix -n- in verbal pronominal prefix combinations and pre-nominal prefixes, past punctual allomorphs -b and -j, past continuous allomorph -y, past negative allomorphs -m and -b, present tense allomorph -n, and imperative allomorphs -w and -g.

No derivational suffixes exceed two syllables. Two-syllable suffixes are maximally of the form CVC(C)V(C).

3.2.5. Syllable structure

3.2.5.1. Assignment of medial clusters to syllables

In medial double clusters of all kinds, the first segment is assigned to one syllable, the second segment to the following syllable:

gul-biñ 'emu'
Gaḷ-yag (toponym)
waṇ-mara 'childless person'
jay-way 'rainmaker'

The only instance of homorganic stop cluster within a word is reduplicative guṛug-guṛug, with syllable break as indicated in careful speech. The first stop remains unreleased in rapid speech, but the cluster is perceptibly longer than simple g.

In all clusters of three segments which do not contain glottal stop, syllable break is made so that the first two segments belong to one syllable, and the third serves as margin of the following syllable. Thus:

bilm-big 'give away' (VP)
yulg-miṇ 'sand, sugar'
waḷayj-ñiṇ 'shadow'

Where two non-vocalic sonorants of a triple cluster are separated by glottal stop, the glottal is the boundary between two syllables:

way?-way-(y)i- 'to dance' (MP)

For deletion processes across morpheme boundaries, see P-8-11 in 3.4.4.1. All of these affect syllable structure, but do not reduce the number of syllables.

3.2.5.2. Canonical syllable type

Possible syllable types are CV, CVC (where C = any consonant, or glottal), CVCC (including CVSC, where the final SC is any possible intramorphemic final cluster, see 3.2.2.2.2; CVS?; or the first two segments in any of the possible intramorphemic triple clusters described in 3.2.2.3.2). There is a syllable type V which results from the reduction of irrealis prefix forms wa- and ya- to a- (see 2.1.3-I).

3.2.6. Segmental harmony

3.2.6.1.-3. Word/syllable initial/final units

Not applicable

3.2.6.4. Vowel assimilation

Progressive vowel assimilation affects two morphemes. The conditioning factor in each case is a preceding morpheme containing the vowel i, which produces a change in the quality of the vowel in a following morpheme. First, the vowel of the habitual augment -ma- (see 2.1.3-IIIb) becomes i following the compounding auxiliary mi-, and also after the root ṇiṛi- 'bring', producing habitual forms ḷi?+mi-mi- 'name, call' and ṇiṛi-mi- 'bring'. Second, the vowel of the plural marker -ḷa assimilates to the vowel of the preceding privative morpheme -wi, thus mawuj-wi-ḷi 'poor things', plural.

Both as compounding auxiliary and as independent verb, the reflexive-reciprocal stem-form of the verb root /ma/ shows the effects of regressive assimilation from the following (present form of the) reflexive-reciprocal suffix: mi-yi- 'say to each other, oneself'. The stem-form used in reflexive-reciprocal constructions remains mi even where paradigmatic suffix forms of the reflexive-reciprocal do not contain the vowel i, as in past punctual Ø-mi-yag 'he said to himself'. (See 2.1.3-IVb for the reflexive-reciprocal paradigm).

The assimilations described affect particular morphemes and are not general phonological processes.

3.2.6.5. Consonant harmony

See relation between forms of past punctual and past negative allomorphs and stem shapes in 2.1.3-IVd and 2.1.3-IVf.

3.2.6.6. Other restrictions.

Not applicable.

3.2.6.7. Phonotactic patterns by word class

See the discussion of verb particle shapes in 3.1.2.4.2, and that of verb roots in 3.2.4.

3.3. Suprasegmentals

3.3.1. Length

Length is not a contrastive feature of any segment type in Maŋarayi. Vowel length is used as an expressive feature indicating great distance in space or extent in time (see 3.3.4d).

3.3.2. Stress

3.3.2.1. Distinctiveness of stress

Stress is not distinctive in the sense that two otherwise identical forms are distinguished only by differential stress. Maŋarayi is a highly inflecting language, and stress placement within words in relation to lexical roots varies depending upon the number and identity of inflectional and derivational affixes.

There is a tendency for most prominent word-stress to fall on the penultimate syllable. However, there are certain suffixes which do not count as part of the word for purposes of determining stress, and some which cannot be stressed though they may occur in penultimate position. This produces exceptions to the norm of penultimate stress. (Some examples are given in 3.3.2.4.)

Any full treatment of Maŋarayi stress, syllable structure and dynamic qualities would have to distinguish at least two domains of stress placement, the word and the phrase. Most of the remarks here are limited to word-stress.

3.3.2.2. Rhythm and phonetic correlates of stress

In terms of the broad distinction between *stress-timed* versus *syllable-timed* languages, Maŋarayi falls within the latter category. In Maŋarayi, syllables tend to be equal in length (unless the normal rhythm of speech is interrupted for some special, expressive effect).

Stress as syllable-producing movement appears to be fairly constant, while the phonetic correlates of what are heard as reinforced syllables, are heightened intensity and pitch. Against a background of fairly constant syllable production there is, in some words at least, a certain amount of permissible variation in the distribution of raised intensity and pitch. Thus in following sections and in 3.5.1.3 it is observed that certain words (in citation form) have more than one 'stress' pattern.

Comments follow on norms of stress placement in roots by word class and phonotactic structure (number and structure of syllables).

3.3.2.3. Levels of stress

In this description three levels of stress are recognized, primary ´, secondary `, and tertiary or unstressed.

3.3.2.4. Penultimate stress norm

Almost all bisyllabic words in Maŋarayi are stressed on the penultimate syllable, no matter what their constituency. The exceptions are a few exclamations which have markedly raised pitch and stress on the final syllable: [goyó:] 'look out!', [geré] 'oops!', [gaḍí] 'oh-oh', and a few others. Besides these, no word-final syllable is stressed.

3.3.2.5. Stress in polysyllabic nominal roots

Stress in trisyllabic unreduplicated nominal roots is predominantly on the penultimate syllable, expecially if this syllable is closed. However, there are many trisyllabic roots in which word stress is on the first syllable, and a few in which stress may variably occur on the first or the penultimate syllable. Those in which stress usually occurs on the first syllable generally have open penultimate syllable, but exceptions to this are found. Examples of the two patterns, first and penultimate syllable stress, are:

Penultimate Syllable		First Syllable	
waḷáyjñin	'shade, shadow'	wáŋulu	'good-for-nothing'
baṛágur	'paperbark'	gádugu	'woman'
bunjáyi	'black bream'	wí̱ura	'mussel sp.'
buyála	'dew'	gábuji	'old person'
ḍamáyi	'fire'	gámara	subsection term
garíñmal	'lily sp.'	báragaḷ	'bamboo spear'
gaṛáwi	'male plains kangaroo'	bámbi!a	*Atalaya hemiglauca*
bológban	'Rainbow Serpent'	múruŋguṇ	*Antidesma ghaesembilla*
gurájñin	'blood'	wáḷima	'young person'

Examples of trisyllabic nominal roots which variably have stressed first or penultimate syllables are:

gáŋila or gaŋíla	subsection term
gúdaṛu or gudáṛu	'horn'
wárwiyan or warwíyan	'dreaming, ancestral totemic being'
búlula or bulúla	'bulrush swamp'

Quadrisyllabic unreduplicative nominal roots also show two major stress patterns. In the first, primary and secondary stresses fall on penultimate and first syllables:

wáriḍìla	'hooked boomerang'
wúrumùmu	'hornet'
gálijùru	'crab'
wáŋuḍùwa	'women's ceremonial ground'
wàriñjálan	*Exocarpos latifolius*

(In all of these, with non-zero suffix the primary stress is on the penult, e.g. wàŋuḍúwa-yan loc.) In the second pattern, major stress falls on the antepenultimate syllable, with decay of intensity in the following two syllables:

wambúluga	'woman's DC, man's ZDC'
yilámbuṛa	'FZ, aunt'
yiriṇiwun	'hard tree wax'
wadámuru	'ceremonial headdress'

In nominal roots of more than four syllables a secondary stress falls on the penultimate syllable:

yiñjínjimàni 'goanna tail'

Frozen quadrisyllabic nominal roots, where the root consists of a partially or completely reduplicated bisyllabic segment R_1 and a segment R_2, conform to the first pattern of other quadrisyllables:

báragbàrag	'diver duck'
jàguyágu	'left-handed'
ḍáguḍàgun	'small *Aponogeton*'

A few other nominals where the root is more than four syllables, but the reduplicative segments R_1 and R_2 are quadrisyllabic, show the same pattern of stresses on first syllables of R_1 and R_2:

ḍùguḍúguyi	'small catfish sp.'
ṇìriṇírimin	'cicada'
yibíḍjibìḍji	'eyebrow'
waṇbíribìri	'paperbark float'

An exception is wàḷarwaḷármin 'diarrhoea', with penultimate stress on a closed syllable (nominal suffix -min; see 3.5.1.2 for comments on stress placement in derived nominals).

Frozen reduplicative nominals in which the word is tri- or quadrisyllabic but the two segments R_1 and R_2 are of the structure CVC have the stress on R_1:

ganbírbir	'plant sp.', possibly *Merremia dissecta*
ḍirimínmin	'tree fork'

Roots which are more than quadrisyllabic and show partial reduplication have a major stress on the penultimate syllable:

gùrurumújun 'swamphen'

In 3.4.5.2 several types of productive reduplication of nominal roots are discussed. The first type of (complete) reduplication yields quadrisyllables, e.g., márijmàrij 'girls'. In all other types of reduplication major word stress is generally on the penultimate syllable in reduplicated forms when these are not further inflected. Examples are:

Type 2	búgbug	bugbúgbug	'old people'
Type 3	ḍádaḷ	ḍadádaḷ	'carapaces, shells'
Type 4	wáḷima	waḷaḷíma	'young people' (also waḷáḷima)
Type 5	wáŋgij	waŋgáŋgij	'children'

3.3.2.6. Stress in verb particles

Most trisyllabic verb particles receive a stress on the penultimate syllable, except for those of the shape CVCVCV(C), where (C) is usually glottal stop. Most of these, partly reduplicative, receive stress on the first syllable:

bíjulu	'to unhook, unfasten'
bí!i!i	'to slither, trickle (of water)'
bóḷoḷo?	'to duck, dive'
ḍáḷaḷa	'to sit/be in a line'
gábada?	'to stagger'
wíjijij	'to confuse, mix up'
but ḍoḍóḍoḍ	'to line up, be in a line'

A few other trisyllabic particles which do not conform to the description cited are also stressed on the first syllable.

3.3.2.7. Further remarks on stress

For remarks on stress placement in inflected nominals and verb forms, see 3.5.1.

3.3.3. Pitch

3.3.3.1. Distinctiveness of pitch

No forms in Maŋarayi are distinguished only by differences in pitch. See 3.3.2.4 for interjections which have markedly rising pitch on the final syllable, and 3.3.4 for intonation patterns.

3.3.4. Some major intonation patterns

3.3.4a. Statement

An utterance which is to be taken as a statement, and which does not seek to elicit response from the hearer, nor (necessarily) to commit the speaker to further utterance, is marked by a rising-falling pitch pattern at the end of the statement intonation contour. This pattern is illustrated twice in the parallel clauses of the following:

guŋgu ga-ŋa-wuyan-ma, jaya ga-ŋanba-ma
MB -3-1Sg/3Pl-say WC -3-3Pl/1Sg-say
'I call them "uncle", they call me "sister's child"'.

Such an utterance may be followed by the particle mayawa 'OK, all right, that's it' (see 1.3 for other functions of mayawa, normally a conjunction).

A second pattern, very common in narrative as well as everyday speech, is that of 'non-final' statement. The pattern signals that an utterance, though it is to be interpreted as a statement, is non-final, usually because it is to be immediately followed by another phrase or sentence the meaning of which is to be interpreted in relation to the first. In narrative especially, the relation between two such closely correlated utterances often consists in the fact that the second phrase or sentence tells the outcome of events mentioned in the first.

The non-final statement is marked by heightening of pitch (but often decrease in intensity) over the last few syllables of the utterance. If a second, related phrase or sentence immediately follows, it is generally uttered at lowered to greatly lowered pitch and intensity. An example is:

yirg Ø-gaḍjag Ø-jarŋ+mi-ñjiyag
get up 3Sg-Aux MP PP 3Sg-stretch-Aux-RR PP

jina-bamgan yir? Ø-waṛag
dir-this side throw 3Sg/3Sg-Aux PP
'He got up, stretched; threw it towards this side'.

Note here that two clauses ('He got up, he stretched') are part of a single intonation contour, followed by a closely-related utterance which tells the final action in a series. Often a non-final pattern can be followed by one or more additional ones, until a dénouement is reached in a normal final statement contour:

nara-bayi baḷŋa Ø-ṇiŋa-ñ
that-Foc across country 3Sg-Aux-PP

nara-bayi wariḍila yir? a-Ø-waṛag
that-Foc hooked boomerang throw sub-3Sg/3Sg-Aux PP

baḷŋa Ø-ṇiŋa-ñ malga Meñeri
across country 3Sg-Aux-PP then Hodgson Downs
'He went across (open) country, that's the one where he threw a hooked boomerang, came across (open) country, then (arrived at) Hodgson Downs'.

3.3.4b. Questions

The intonation patterns of questions vary with question type. With the tag question marker ji? 'isn't that so? is that right?' the speaker is asking for comment on the correctness of what he has just said. When the tag is used, the intonation pattern of the preceding phrase can be as for a statement, with falling pitch over the final syllable(s).

ŋaḷa-jaya Ø-ṇiŋa-ñ baḷaḷaga ji ?
daughter arrived today is that right
'My daughter came today, is that right?'

Sometimes pitch on the question tag is maintained at the same level as on the immediately preceding syllable, sometimes it may rise.

A question sometimes, but not always, contains an interrogative word. When it contains an interrogative word, it is an information question. Stress is usually on the first syllable of the interrogative word (ŋíñja(ba) 'who', jágina(ba) 'what', jána(ba) 'where', or on the first and penultimate if quadrisyllabic (jànaŋgári(ba) 'where', ŋìñjaŋgína 'whom', jànanáŋgu(ba) 'when'), with more than usually heightened pitch and intensity fairly constant over the interrogative word. An even higher pitch tone tends to be placed on some syllable of the next word (typically, a verb), on a syllable which may otherwise receive heightened pitch and intensity. (See 3.5.1.3 for some restrictions on stress placement imposed by the constituency of verb forms). In other words, in questions, constraints on stress placement on the inflected verb do not change from norms found in other utterance types, but there is almost certain to be heightened pitch and intensity placed on an otherwise permitted syllable. From that reinforced syllable to the end of the question, there are two common patterns. First, either pitch and intensity may decay over the last few syllables, or second, pitch may continue to rise to its highest level over the final syllable. This last pattern is often expressive of exasperation, or may be used when the interlocutors are at great enough distance from each other to make hearing difficult. These two patterns are illustrated with what is probably the most frequently heard question.

1. janaŋgariba ga ña yag
   where are you (Sg) going

2. janaŋgariba ga ña yag

When there is no interrogative word, intent to formulate a yes-no question is signalled by a constantly rising pitch:

mir? ga-ña-ṇa-n ŋan-gaṇji-ŋaŋga
know -3-2Sg-Aux-Pres FAcc-MMBD-yours Sg
'Do you know your "cousin"?'

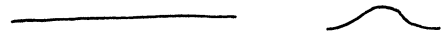
3.3.4c. Reported speech, thought

The principal method in normal speech and narrative for conveying what someone else said is by direct quotation. That is, all reported speech is case in the framework of direct quotation (see 1.1.1.1). The fact that something is quoted may be indicated by imitation of voice dynamics, and/or also by the insertion of framing verbs which indicate the boundaries of the quotation. Such framing verbs are usually spoken at somewhat to greatly reduced pitch and intensity. A narrative example concerns a mythical kangaroo who emitted a certain noise. Heightened intensity is indicated by upper case:

GO: Ø-ma-ñ waḍij GO:
(noise) 3Sg-say-PP again (noise)
'GO:', he said, again 'GO:'.

Here, mañ and waḍij are spoken at low intensity. Where the character being quoted takes the floor, other material needed to keep the narrative flowing is backgrounded.

There is a pattern which appears to be characteristic of reported thoughts, very commonly expressed by a single word which sums up the thought or judgment of a character in narrative. There is a rise-fall over the word, as in the example:

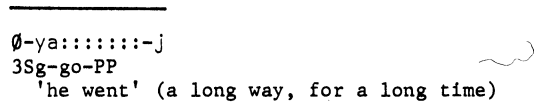


Wamaḷir Ø-yiri+wa-b ṇa-gañwar
(place) 3Sg/3Sg-see-Aux-PP ?-sun
'He saw Wamaḷir: sun(ny)'.

Here the character sees a certain place, and in his opinion the place is sunny (probably, too hot or sunburnt). It is not clear whether the prefix ṇa- should be regarded as ergative/instrumental, or as the mentioned use (see 2.1.1b) with neuter nouns. The preceding clause tends to have level intonation, lacking the final rise-fall pattern.

3.3.4d. Continuity/extent in time/space

An extremely common narrative device, used everywhere in the Roper/Katherine area, is that of holding the pitch on a vowel high and constant over several seconds to express continuity of action and/or great distance. Intensity may dwindle towards the end, and the quality of the vowel may be varied somewhat over the several seconds:



Ø-ya:::::::-j
3Sg-go-PP
'he went' (a long way, for a long time)

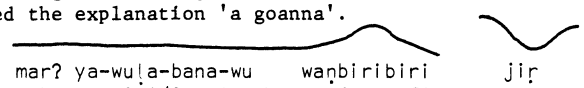
Sometimes when the immediately following utterance expresses an outcome or conclusion to the narrated event, it is uttered at greatly lowered pitch.

3.3.4e. Explanatory contour

There is a characteristic explanatory (including glossing) intonation pattern. This is a complex falling-rising pattern uttered over a single word which is thus presented as the gloss or explanation of a preceding stretch of speech. The final pitch rise never quite reaches the original pitch level.

ṇaḷa-ṇalima-bayi juya wirilmayin
F Nom-name-Foc meat/animal goanna

Here the speaker was about to continue (note the non-final statement rise over juya) by describing an action of a mythical animal (juya), but realizing that it might be unclear what *kind* of animal was being spoken of, added the explanation 'a goanna'.



mar? ya-wuḷa-bana-wu waṇbiribiri jiṛ
make Irr-3Pl/3Sg-Aux-DI pandanus float nest
'They ought to make a paperbark float, (that is) a nest'.

Here the speaker used a word waṇbiribiri 'paperbark float' which is now part of a more specialized vocabulary, since these devices (formerly used as fishing rafts) are no longer frequently made or used. The speaker therefore added an approximate description (= 'nest') to make clear what kind of item was being spoken of.

3.3.4f. Emphasis

There are two emphatic clitics described in 1.11; -ja is merely emphatic, while -ḷa usually expresses some degree of frustration when a word cannot be found or some other kind of query cannot be answered. There is a typically great heightening of pitch and intensity over the syllable immediately preceding either clitic, followed by a drop over the clitic, e.g.,

ṇa-ŋirmu-ja ṇa-ŋamda-ḷa
MNom-rock wallaby-Emph MNom-whatchacallit-Emph

Here, in response to a question the speaker was emphasizing that a mythical kangaroo was indeed the one who had performed certain acts, but then was frustrated in the attempt to add some further bit of information which was on the tip of the tongue.

3.3.4g. Greeting, farewell

There are formulae of greeting and leave-taking which often (not invariably) have distinctive pitch patterns.

The traditional greeting to known persons seems to have been ñaŋgi-ma, best interpreted 'So it's you?' or 'Is that you?' It consists of 2Sg pronoun ñaŋgi followed by an otherwise unattested suffix -ma. This is usually said with quite distinctively heightened pitch on the penultimate syllable:

ñ a ŋ g i m a

This greeting is little used today. It seems to be losing ground in favor of Australian English greetings. However, I heard it used a number of times among older people.

A traditional expression of farewell, mayawa, is still in use. (For a description of its various functions, see 1.3.1.1.4). This may have stress on the first syllable, máyawa, but when used in farewell it sometimes has the same melodic pattern as the greeting:

m a y a w a

3.4. Phonological processes: General

Phonological processes in Maŋarayi are few in number and relatively simple. The general character of morphophonemic processes is that they apply only in specific morphological environments, not anywhere a particular phonological description is met. Productive morphophonemic alternations affect a relatively small number of grammatical morphemes which can only occur in certain positions in the word. Alternations in nouns occur stem-finally, involving interaction between stem and case, number and proprietive suffixes. Some minor alternations in verbs affect the initial segment of the root, others the final segment before certain derivational suffixes.

3.4.1. Alternations

3.4.1.1. Morphophonemes

Five morphophonemes must be recognized:

Morphophoneme	Surface alternants
w_1	w, g
w_2	w, b
y_1	y, g
j	y, j
y_2	y, j

There are two w's found in alternating morphemes, one which alternates with g, the other with b. (Other instances of w in lexical morphemes do not occur in alternating environments.) There are three surface y's; two morphophonemes have y and j as surface alternants, but the environments for each alternation differ.

The morphophonemes occur in the following grammatical morphemes:

w_1~g -wu~-gu	dative-purposive case, desiderative-intentional verb suffix
-wana~-gana	ablative case
y_1~g -yan~-gan	locative case
-yaran~-garan	dual number suffix
-yaḷa~-gaḷa	plural number suffix
-ya-~-ga-	past negative augment
-yiwa~-giwa	pergressive suffix
-yayi~-gayi	noun-forming suffix
w_2~b -wu~-bu	plural suffix (subsection terms)
-wur~-bur	dual suffix (kin terms)
-wuḷa-buḷa	plural suffix (kin terms)
-wura~-bura	3Du possessive suffix
-wuṇya~-buṇya	3Pl possessive suffix
-wuyi~-buyi	necronymic suffix
j~y -ji-~-yi-	inchoative suffix
y_2~j -yi~-ji	proprietive suffix

The environments for each alternation are described in greater detail in 3.4.1.2. Some additional comments are in order here regarding identification of the grammatical morphemes in which the alternations occur.

In Maṇarayi, as in many Australian languages (see Blake 1976:423) the purposive verbal suffix is identical to the dative-purposive case suffix.

The morphophoneme w_2 occurs in a third person nonsingular element /w_2u/ found in the plural marker used with subsection terms, dual and plural suffixes used with kin germs (/$w_2$ur/ and its case forms, and /w_2uḷa/ and its case forms), and in 3Du and 3Pl possessive suffixes -$w_2$ura and -w_2uṇya.

The morphophoneme y_1 occurs in the locative suffix, which is not segmentable. However, the number suffixes used with ordinary nouns, dual /$y_1$aran/ and plural /y_1aḷa/ and their case forms, as well as the allomorph -gaḷama of the allative, appear to contain an historically intrusive initial element -ya-~-ga- (see 2.1.1.1b).

Another morpheme which shows the y_1~g alternation is an augment -y_1a- which occurs in past negative and habitual stem-forms of some roots.

Pergressive is marked either by -wa or -yiwa depending on the noun; some nouns may occur with either. The form -yiwa varies between showing the same degree of phonological integration into the word as other case endings, and remaining more clitic-like, relatively unintegrated into the word. It sometimes occurs as -giwa following a nasal grade (3.4.1.2.8) of a possessive suffix, or as -yiwa following zero grade. See the examples in 2.1.1.5f.

Morphophonemic alternation of j and y occurs in the inchoative suffix. As described further in 3.4.1.2, because the stop-, rather than semivowel-initial form of this suffix is found following the wider range of segment

types, /ji/ is taken as the basic form of the morpheme, -yi- as secondary. Hardened forms of morphemes containing w_1, w_2 and y_1 occur only after (underlying and derived) nasals. The inchoative allomorph -ji-, by contrast, occurs following all non-vocalic sonorants, -yi- after vowels. See examples in 2.1.3.3.2a.

Other evidence relating to this morpheme is found in the small set of mediopassive (mainly intransitive) verbs, which obligatorily contain a formative of shapes -yi- or -ji-, evidently relatable historically to the inchoative. Indication is that this morpheme functioned historically as a more general verbalizer, rather than strictly as inchoativizer (viz. a few pairs such as bamaṛ 'thief', bamaṛ-ji- 'steal from, rob'; miḷam 'liar' and miḷam-ji- 'tell a lie'). In the mediopassive verbs, -ji- tends to occur following stops and nasals, but is post-vocalic in a few instances (baṇi-ji- 'sit with legs extended', yiyi-ji- 'fear'). The form -yi- occurs mainly after vowels, but also following y in three verbs (see examples in 2.1.3.3.2b). In most mediopassives, -ji- does not provide an environment for nasalization of a preceding stop (gaḍ-ji- 'arise', luñgag-ji- 'lean on'), but in others it does (ḏan-ji- 'finish, terminate, come to an end', cf. ḏad+ma- 'finish'; also yiram-ji- 'to cross', cf. wuyirab 'on the other side'). The irregularity in these verbs does not provide clear-cut evidence bearing on the phonological form of the inchoativizer, but here (as in productive inchoativizations) -ji- occurs in a greater range of environments than -yi-, suggesting that the latter is to be treated as the conditioned variant.

Proprietive suffix form -ji- occurs following stops, which do not become homorganic nasals as happens before w_1, w_2 and y_1 in an entirely regular fashion.

3.4.1.2. Morphophonemic processes

3.4.1.2.1. Stop Nasalization I (P-I) and Hardening I (P-2)

The two most pervasive phonological rules are part of a single phonological process. The rules operate at certain boundaries, each affecting one segment on either side of the boundary, together converting sequences impermissible across these boundaries into permissible ones. The first rule (Stop Nasalization, P-1) changes stops into homorganic nasals; the second (Hardening, P-2) hardens initial semivowels of certain nominal and verbal suffixes to stops following nasals, both original and those derived by P-1. In nominals these processes occur at the boundary between the stem and number or case suffixes; in verbs, at the boundary between stem and certain verbal suffixes; they may occur more than once in the same noun or verb form. The two rules together change sequences of stop+semivowel, or nasal+semivowel, to nasal+stop. Note in the charts of permissible intramorphemic consonant clusters (3.2.2.2) that certain combinations of stop+semivowel are permitted within morphemes (though most of these occur only in frozen reduplicative forms), as are some combinations of nasal+semivowel. All of the cluster types created across morpheme boundaries by P-1 and P-2 are also permitted intramorphemically. The boundaries at which these phonological rules take effect will be described in detail.

Final stops of nominal roots become the homorganic nasals before any non-zero number or case suffixes. Since major syntactic case functions are expressed in the singular noun exclusively by different noun class/case prefix forms, the singular noun in citation form or in any major syntactic function shows a stem form equivalent to the underlying form. Stop nasalization before any non-zero suffix has the effect of converting this into a nasal-final stem:

underlying stem form	before non-zero-suffix	
wab	wam-	'wild honey'
jirinḍiḍ	jirinḍiṇ-	'quail sp.'
murij	muriñ-	'elbow'
muyg	muyŋ-	'dog'

Since all nouns undergo stop nasalization when followed by non-zero suffix, there is neutralization of the difference in this environment between stems which are underlyingly nasal-final (e.g., maḷam- 'man') and those which become so by stop nasalization.

After nasals, initial semivowels of number and case suffixes harden to stops according to the morphophonemic alternations for each shown in 3.4.1.1. The phonological hardening process applies directly to all case suffixes except allative. Allative has the post-nasal allomorph -gaḷama, showing an intrusive element -ga- assumed to be the stem as that found in number suffixes -$y_1$aran, y_1aḷa. In environments where allative case is realized as -ḷama, the number suffixes show semivowel initial forms -yaran etc. Because allative -ḷama lacks a direct counterpart of the intrusive element, the allomorph -gaḷama cannot be seen as resulting directly from application of the phonological hardening rule, but as the insertion of -ga- by a morphological process.

Since stop nasalization always occurs before w_1, w_2 and y_1, the rule may be written with the morphophonemes as conditioning environment.

P-1 Stop nasalization

$$\begin{bmatrix}-\text{son}\\+\text{cons}\end{bmatrix} \longrightarrow [+\text{Nas}] \quad / \quad \text{---} + \begin{bmatrix}w_1\\w_2\\y_1\end{bmatrix}$$

The hardening process which occurs on the other side of this boundary is called Hardening I, to distinguish it from the process which applies to y_2.

P-2 Hardening I

$$\left[\begin{array}{ll}\{w_1, y_1\} & \longrightarrow \{g\}\\ w_2 & \longrightarrow b\end{array}\right] / \text{ Nasal+ ---}$$

Morphophonemes with surface alternants w or y will only be specified by subscript when the unconditioned form of a morpheme is cited (e.g., /$w_1$ana/); no subscript is written when the morpheme occurs in an environment (e.g., Ø-ḷandi-wana 'from the tree').

In P-1 and P-2 two assumptions are made which need to be explicitly stated. The first is that synchronically, semivowel-initial forms of suffixes containing w_1, w_2 and y_1 are basic by virtue of their being environmentally less restricted than stop-initial ones: hardened allomorphs occur only following nasals, semivowel-initial ones elsewhere. The second is that P-1 and P-2 may be considered to apply in that order where both are applicable, P-1 creating post-nasal environments for the application of P-2. If the rule ordering were reversed, the environment for P-2 would have to include both stops and nasals; as stated, P-1 feeds P-2.

Hardened forms of w_1, w_2 and y_1 occur only after nasals (underlying, derived by P-1, or contained in nasal grade forms of certain morphemes; see 3.4.1.2.8). But stop-initial inchoative allomorph -ji- is attested in productive formations following all non-vocalic sonorants (see 2.1.3.3.2a). This, and irregularities of suffixal form in mediopassive verbs (see 3.4.1.1) suggest two things. First, though there is without much doubt an historical relation between them, the productive inchoativizer can no longer be identified in a clear-cut way with the mediopassive suffix. Second, because of the range of segments following which stop-initial inchoative -ji- occurs, this form must be taken as basic and -yi- as

conditioned. Therefore alternations in the inchoative morpheme cannot be treated as part of P-2; see P-3 below. Discussion of environments in which P-1 and P-2 apply will be concluded first.

P-1 and P-2 may operate at more than one boundary, within the verb or noun. In the noun, both number and case suffixes may be present, creating environments for rule application between stem and number suffix, and again between number and case suffixes. Compare derivations below of ablative dual and plural forms:

	'from the girls Du.'	'from the girls Pl.'
	/ŋaya-marij-$y_1$aran-$w_1$ana/	/ŋaya-marij-y_1aḷa-$w_1$ana/
P-1	ŋaya-mariñ-$y_1$aran-$w_1$ana	ŋaya-mariñ-y_1aḷa-$w_1$ana
P-2	ŋaya-mariñ-garan-gana	ŋaya-mariñ-gaḷa-wana

The noun stem marij undergoes P-1 before both dual and plural suffixes, which undergo P-2. Following the nasal-grade dual suffix form -garan, P-2 also applies to the ablative suffix. The plural marker has no nasal grade. (Sequences of number marker and case ending, though they do occur, are not very common. Usages which circumvent explicit suffixal number-marking are described in 2.1.1.8.2-3).

Within the fully inflected verb, P-1 and P-2 may occur at the boundary between stem and desiderative-intentional suffix /w_1u/, the latter added to the non-past or past negative inflectional forms. In roots with zero non-past inflection, desiderative-intentional is realized as -wu post-vocalically (e.g., wa-ŋa-ma-wu 'I will/would like to say/do'). In roots with -n non-past inflection, the suffix undergoes hardening (e.g., wa-ŋa-bu-n-gu 'I will/would like to hit it'). In the few verbs with stop-final root, derivation involves both P-1 and P-2 at the stem-suffix boundary:

	/wa-ŋa-jug-w_1u/	'I will/would like to swear at him/her/it'.
P-1	wa-ŋa-juŋ-w_1u	
P-2	wa-ŋa-juŋ-gu	

Both P-1 and P-2 occur at the boundary between root and past negative augment-suffix sequence -y_1a-b under certain conditions. After vowel-final roots the augment occurs with initial semi-vowel (e.g., -wu-ya-b 'did not give'). Stop-final roots have derivations as follows:

	/ŋani+jug-y_1a-b/	'did not talk'
P-1	ŋani+juŋ-y_1a-b	
P-2	ŋani+juŋ-ga-b	
P-6	ŋani+yun-ga-b (see below)	

Irregularity is found in the past negative form miŋ-ga-b of mi- 'get', in that not all paradigmatic forms attest to a CVC root shape. There is some indication that the past continuous form of this root historically contained g or ŋ (see 2.1.3-IIIa).

The verbal suffix /w_1u/ is also suffixed to past negative stems (see 2.1.3-IVf). Since past negative is minimally marked by -m or -b, the boundary between this suffix and /w_1u/ constitutes an environment for rule application, as in the following derivations.

	/ma-m-w_1u/		/ŋani+jug-y_1a-b-w_1u/	
P-1	not applicable	'wanted to	ŋani+juŋ-y_1a-m-w_1u	'wanted
P-2	ma-m-gu	do/say'	ŋani+juŋ-ga-m-gu	to say'
			ŋani+yuŋ-ga-m-gu	

3.4.1.2.2. Lenition I, Stop Nasalization II (P-3 and P-4)

As described above, the stop-initial inchoative allomorph -ji- occurs after non-vocalic sonorants, -yi- following vowels. The form -ji- is taken as basic, occurring in the most diverse environments; therefore -yi- is derived by a lenition rule post-vocalically.

P-3 Lenition I (inchoative)

/j/ ⟶ y/V+___

Taking -ji- as basic appears to create some complications; but these turn out to be minor complexities which really exist in the data. Stops nasalize before the suffix in productive inchoativizations, generally becoming the homorganic nasals. It might therefore be thought desirable to write rules so that stop nasalization here could be handled by P-1. The environment for P-1 is stated as occurrence before w_1, w_2 and y_1. Treatment of inchoative /ji/ as underlying instead of /yi/ would seem to require either writing disjunct environments for P-1 (where the inchoative would contain the only conditioning stop), or writing a separate rule to account for stop nasalization. But it seems that the latter may be warranted, because stops of several g-final roots undergo nasalization and assimilation to the palatal of the inchoative morpheme. Stops which nasalize by P-1 never assimilate to the place of the following segment. Examples showing assimilation before the inchoative suffix are:

nominal root		inchoative	
juḷag	'ripe'	juḷañ-ji-	'become ripe, cooked'
jiḷig	'alive'	jiḷiñ-ji-	'become alive'
garag	'a lot'	garañ-ji-	'grow'

One inchoativized nominal shows the expected homorganic nasal, boḍewg 'bad'⟶ boḍewŋ-ji- 'become downcast, feel bad'.

These irregularities suggest that stop nasalization before the inchoative may be regarded as a process distinct from P-1.

P-4 Stop nasalization II

$$\begin{bmatrix}-\text{son}\\+\text{cons}\end{bmatrix} \longrightarrow [+\text{nas}] / \_\_\_ +/ji/$$

*Variably where place is velar.

One isolated example shows that nasalization of stem-final stops occurs at other boundaries within the verb. The stem muŋgalg 'boat' is found in the compound stem muŋgalŋ+bu-, meaning to fold the ends of a coolamon or other flexible container into a boat-like shape. Other examples of this kind were not found, since initial elements within compound verbs are generally either sonorant- or glottal-final. The type of noun incorporation shown by muŋgalŋ+bu- is not productive.

3.4.1.2.3. Hardening II (proprietive suffix)

The proprietive suffix is realized as -ji- following stops; after all sonorants including nasals it has the form -yi-. Stops preceding this morpheme do not become nasals. Examples are muyg-ji 'having dog', jib-ji 'having eye, seed', malam-yi 'having husband', ḍadal-yi 'having shell, carapace', ŋugu-yi'having/filled with water'. Rules could be written and ordered so that the proprietive suffix would undergo hardening by P-2, and fail to condition stop nasalization by P-1. On the other hand, the morpheme-specific nature of particular alternations is characteristic, so that hardening affecting the proprietive suffix could also be written as a separate rule, P-5.

P-5 Hardening II (proprietive suffix)

$$y_2 \longrightarrow j / \begin{bmatrix}-\text{son}\\+\text{cons}\end{bmatrix} + \_\_\_$$

3.4.1.2.4. Lenition II

Following vowel-final compounding elements, initial stops of compounding auxiliaries bu- and jug- lenite, becoming w and y respectively: /ḍaṛa+bu/ ⟶ ḍaṛa+wu- 'find, see'; /ŋani+jug/ ⟶ ŋani+yug- 'talk'; /gulu+jug/ ⟶ gulu+yug- 'call out to'. Both bu- and jug- occur as independent verbs. The identification of bound auxiliaries -wu- and -yug- with

them is established by paradigmatic comparison: there are minor differences between members of each pair only in reflexive-reciprocal forms. The other stop-initial bound auxiliary, -ga-, has not been found after vowel-final compounding element. The rule expressing this lenition is:

P-6 Lenition II

$$\begin{bmatrix} b \longrightarrow w \\ j \longrightarrow y \end{bmatrix} / \ _{V}[V+\_\_\_]_{V}$$

3.4.1.2.5. r-stopping

Final -r of dual and trial subject prefixes is hardened to ḍ before verb roots beginning in ṇ- (not before other nasals);

/wur-ṇi-ñ/	[wudniñ]	'they du. sat'
/ŋar-ṇi-ñ/	[ŋadniñ]	'we tr. sat'
/ja-wur-ṇi-Ø/	[jawudni]	'they du. are sitting'

p-7 /r/ ⟶ ḍ $_{V}[\_\_+ṇ]_{V}$

Underlying initial retroflex consonant of the verb root is realized as alveolar: see P-12.

3.4.1.2.6. Morphologically conditioned alternations y~ḷ

Morphologically conditioned alternations y~ḷ are found in certain pronouns, feminine pronominal prefixes, and between non-past and past forms of two verbs.

The plural number marker has subject form -ḷa, object form -ya:

subject	object	
ŋa-ḷa	ŋa-ya-n-ŋan	1InPl pronoun
-ya-ḷa	-ya-ya-n-ŋan	number suffix

The same alternation is found in the feminine prefix forms, between nominative ŋaḷa- and that used in dative-purposive and all local case functions, ŋaya-.

Two verbs show an alternation between non-past ḍaya- 'bite' and ŋaya- 'cook' versus past continuous and past punctual ḍaḷi, ḍaḷag and ŋaḷi, ŋaḷag, respectively.

3.4.1.2.7. Morphologically conditioned allomorphy of reflexive-reciprocal suffixes

Three allomorphs of the reflexive-reciprocal marker, -yi-, -jiyi- and -ñjiyi-, occur with different verb roots in a distribution that cannot be predicted from the shapes of the roots themselves (see 2.1.3-IVa). The allomorphy resembles different degrees of strengthening (though it is not clear what may have conditioned this historically). While both -yi- and -jiyi- occur with stem forms of underlying vowel- and stop-final roots, the form -ñjiyi- only occurs with underlying vowel-final roots.

3.4.1.2.8. Nasal grade of morphemes

Some pronouns, interrogative-indefinite forms, nominals and directionals exhibit nasal grades before some or all suffixes. Occurrence of nasal grades of morphs creates environments for the application of P-2. The forms in question have zero grades which may be word-final, and nasal grades which can be word-final for some, but for all occur before some non-zero suffixes. Statement of the allomorphy in terms of grade alternations appears most satisfactory; the alternative would be to postulate nasal insertion where necessary. However, since not all morphemes which could show a contrast between zero and nasal-grade forms actually do so, it seems preferable to represent the alternation between them as a morphological fact about those that do, rather than as a phonological rule of nasal

insertion. The examples in (a)-(f) below show zero versus nasal-grade alternations.

(a) Possessive suffixes and independent genitive pronouns

See the list of possessive suffixes in 2.1.2.4.1. These may be suffixed for dative-purposive and local cases. With any non-zero case ending, the nasal grade of the suffixes is required. Compare:

baṇam-ŋanju	'my camp'
baṇam-ŋanjuŋ-gan	Loc.
baṇam-ŋanjuŋ-gana	Abl.
baṇam-ŋanjuŋ-gaḷama	All.

Most of the independent genitive pronouns (see 2.1.2.1.10) are built by suffixation of case ending /w_1u/ to the nasal grade of possessive suffixes, with concomitant hardening of the suffix to -gu; e.g., 1ExDu possessive suffix -ŋira, genitive pronoun ŋiraŋ-gu. Exceptions to this pattern are: 1Sg genitive pronoun is ŋanju-gu rather than expected *ŋanjuŋ-gu; 2Sg genitive ñagaŋ-gu shows nasal grade but is not built directly on the possessive suffix -ŋaŋga; the third singular genitive pronouns are ŋa-naŋ-gu 'his' and ŋaya-naŋ-gu 'hers', both showing a nasal grade of demonstrative base -na(ŋ)- (see (b), below), but neither is built directly on the possessive suffixes -ŋawu and -ŋayawu, respectively. The independent genitive pronouns take case suffixes but do not themselves show a secondary nasal grade; e.g., allative ŋanjugu-ḷama 'to me, mine', not *ŋanjuguŋ-gaḷama.

The nasal grade of possessive suffixes is also required before most number suffixes, but not before those used with kinship terms (2.1.1.8.6.3). Compare ŋaḷa-miñjari-ŋaŋga-wur 'your two cross-cousins' (F) versus muyg-ŋaŋgaŋ-garan 'your two dogs'.

(b) Third person demonstrative -na-, -naŋ-

The third person distant demonstrative base -na-~naŋ- occurs in zero grade when not followed by an overt suffix: ŋaḷi-na 'she, that one', ṇi-na 'he, that one'. With addition of any suffix this stem occurs in nasal grade, as illustrated above in (a) by the genitive independent pronoun ŋaya-naŋ-gu.

It also seems that the prefix ṇi- of ṇi-na 'he, that one' may be identified as occurring in nasal grade in the object form ṇiŋ-gi. (Compare FAcc ŋan-gi-na, which provides evidence for segmentation of -gi-). See 2.1.2.5.2.2 for further discussion.

(c) Interrogative-indefinite pronouns

The interrogative-indefinite ŋiñja 'who' has nasal grade only in the third person singular object form ŋiñjaŋ-gina 'whom'. The genitive-dative form ŋiñja-wu shows zero grade, and all local case forms are built on this, e.g. ŋiñja-wu-yan 'at whose', Loc.

Interrogative-indefinite jagina 'what' has nasal-grade in dative-purposive jaginaŋ-gu 'why'.

The pronoun jana 'where' shows nasal grade before all non-zero suffixes: janaŋ-gan 'in which' Loc., janaŋ-gana 'from which' Abl., and so on. Though jana is often used in the meaning 'where' (asking about location or movement towards which), the more common interrogative is janaŋ-gari (see 2.1.2.6.3 for -gari).

(d) Number-suffixes

In forms cited in (a)-(c), the nasal grade of morphs is formed with -ŋ-. Ordinary dual number suffixes show nasal grades differently distributed and formed with n, while dual suffixes used with kin terms have ŋ. Dual number suffixes used with kin terms and those used with all other nouns differ from each other in their subject case forms. That used with kinship terms is -$w_2$ur, where the dual element is only -r, and that used elsewhere is -$y_1$aran, where the dual element is -ra- in nasal grade form of the morph. Both show dual element -ra- and zero grade before the non-

singular object marker -ŋan, and nasal grade before all other case endings. See Tables 2-2 and 2-3.

The plural number suffixes have no nasal grade.

(e) Cardinal directions, other adverbs

The cardinal directions take no case endings in locative or allative meanings, but are inflected for ablative with the usual case ending. Two of the direction terms show nasal grades formed directly on the zero grade:

bujba	'north'	bujbaŋ-gana	'from the north'
ŋayañja	'east'	gañjaŋ-gana	'from the east'

(The nasal grade of 'east' is contracted.) The direction term gayara 'west' has the suppletive ablative form janaŋ-gana; and the term ŋaṛiman 'south' adds the ablative ending directly to this stem, ŋaṛiman-gana.

Directionals biya 'downriver' and gawar 'upriver' both show nasal grades in their only non-zero case forms, ablative biyaŋ-gana and gawarŋ-gana.

The allative adverb jinaŋ-gu 'that way, in that direction' is a nasal grade form of the directional prefix jina- (see 2.1.2.5.9.3).

The adverb biwi 'after, behind' has a nasal grade form in the ablative, but this is formed with -n-, biwin-gana 'from behind'.

One adverb meaning 'other side' (e.g., of river), ŋawuŋ-gu, appears to be a nasal grade form of a morpheme which occurs in zero grade in ŋawu-wa 'this side'.

(f) Subsection terms

Vowel-final subsection roots usually occur in nasal grade form before suffixes marking dual, trial and plural number. For example, burala is the term for a certain subsection, and (with appropriate prefix) for a single member of it; the dual nominative form is buralaŋ-garan, trial buralaŋ-gaḷa, and plural buralaŋ-bu. Some alternative dual and trial forms in zero grade occur, e.g., trial burala-yaḷa. Before the plural number marker -w_2u used with subsection terms, two subsection terms show change of root-final -ñ to -ŋ; thus baŋaṛiŋ-bu 'people of baŋaṛiñ subsection', balyariŋ-bu 'people of balyariñ'. Only the term buḷañ retains the original palatal nasal before the plural marker, buḷañ-bu. Because plural /w_2u/ always precedes nasal grade forms, it invariably has the form -bu. See listing of forms of subsection terms in 2.1.1.8.6.5.

3.4.2. Metathesis

Not applicable.

3.4.3. Coalescence-split

Not applicable.

3.4.4. Deletion

3.4.4.1. Minor rules P-8-P-12

Before root-initial ṇ-, -r of subject pronominal prefixes becomes ḍ by P-7. Before other apicals, it is deleted. Initial apical of the root is realized as alveolar, not as retroflex as it would be if the preceding prefix were underlyingly vowel-final. For example, in ŋa-ḍaṛa+wu-b 'I found/saw it' (PP), the retroflex quality of ḍ- is clearly heard following the vowel. But where the prefix has final -r, the stop is realized as alveolar, e.g., wu-daṛa+wu-b 'they Du. found/saw it'.

P-8 r-deletion

$$r \longrightarrow \emptyset \;/\; V\left[\_\_\_ + \begin{bmatrix}+\text{apical}\\ -\text{ant}\end{bmatrix}\right]_V$$

P-8 should be ordered to follow P-7, which removes some instances of r which would otherwise be eligible to undergo P-8.

Combinations of y-y which arise across morpheme boundaries may be simplified to y, except in very careful pronunciation, e.g., /ŋa-wuray-yan/ ⟶ ŋa-wuray-an 'black soil' Loc. A single y always occurs in a handful of verbs with frozen mediopassive suffix form -yi- following y; e.g., way(i)- 'fall' is analysed as underlying /way-y(i)-/. This cannot be taken to represent synchronic reduction, since the suffix is frozen in these verbs. After liquids and rhotics the semivowel of locative -yan is deleted; e.g., /ŋa-gaḷayar-yan/ ⟶ ŋa-gaḷayar-an *'Melaleuca leucadendron'* Loc., /ŋa-ḍaḍal-yan/ ⟶ ŋa-ḍaḍal-an 'shell, carapace', Loc. The environments in which y is deleted are summarized as P-9:

P-9 y-deletion

$$y \longrightarrow \emptyset / \begin{bmatrix} +son \\ +cons \\ -nas \end{bmatrix} + \_\_\_$$

Following any final liquid or rhotic of a nominal root, initial nasal of the 3Sg M/N possessive suffix -ŋawu is usually deleted. After final -ŋ, the cluster ŋŋ is optionally but often reduced to ŋ:

/maṛar-ŋawu/	maṛar-awu	'its brisket'
/ḍaḍal-ŋawu/	ḍaḍal-awu	'its carapace'
/maŋ-ŋawu/	maŋ-awu	'its gum'

This deletion is expressed as P-10.

P-10 ŋ-deletion (optional)

$$ŋ \longrightarrow \emptyset / \begin{bmatrix} +son \\ +cons \\ +apical \end{bmatrix} + \_\_\_$$

The clitic -bayi (which also has reduced form -ba), cliticized to a form with final -b, results in a cluster bb. This is simplified to b in all but the most careful speech, and is always degeminated when the clitic form is reduced -ba, e.g., ŋu-ṛa-b-a 'did not sit' (PNeg). When the full clitic form is retained, the phonetic sequence bb may occur at this boundary, as in jab-bayi 'wind'.

P-11 Cluster simplification

$$b \longrightarrow \emptyset / b + \_\_\_$$

Morpheme-initial retroflex consonants are realized as alveolar following non-retroflex consonants within words, and also to a considerable extent following non-retroflex consonants across word boundaries. The rule of phonetic realization which neutralises the retroflex-alveolar distinction applies before P-8 (which deletes the -r constituting the environment for realization of an underlying retroflex consonant as alveolar). P-12 is stated without regard to the difference between word-internal and external boundaries, since some degree of neutralisation generally occurs following non-retroflex consonants across word boundaries.

P-12 Apical neutralisation

$$\begin{bmatrix} C \\ +apical \end{bmatrix} \longrightarrow [+ant] \; / \begin{bmatrix} C \\ +apical \\ +ant \end{bmatrix} + \begin{matrix} \\ \\ \# \end{matrix} \_\_\_$$

3.4.4.2. Nasal insertion

Facultative insertion of -m- before the article suffix -baṇa (2.2.1.1d) accounts for alternatives jijga-m-baṇa, jijga-baṇa 'little one'.

3.4.5. Reduplication

3.4.5.1. Frozen reduplicative forms

Productive processes described in 3.4.5.2 derive reduplicated forms from underlying unreduplicated roots, mainly in nouns and inflecting verbs. However, in these and other parts of speech (especially verb particles) there are many frozen reduplicative forms, not derivable by synchronic application of reduplicative processes. No attempt is made to formulate rules to deal with such cases, but a few of the types of frozen reduplications are described.

Glottal occurs between R_1 and R_2 of some partial and complete frozen reduplicative forms, e.g., noun jaliwaŋ?jaliwaŋ 'milk gut', inflecting verb yu?yu+ma- 'swim', verb particle yiri?yiriri 'jump in', adverb ŋan?ŋanwa 'together, even, at the same pace'. In a few instances the reduplicative form is related to unreduplicated words of different meaning, as buñaŋ?-buñaŋ 'tomorrow' to buñaŋ 'night, late in the day, but this is too rare to make the formulation of rules worthwhile.

In some frozen noun and adverb forms the reduplicative process, perhaps productive at one time, seems to have involved complete stem reduplication with subsequent deletion of the consonant immediately preceding R_2. There is some reason to think this process may have been productive in adverbs at least, since most of the meanings have to do with intensification, distribution in space and the like. Examples are ḍawadawar 'all night long', and ḍambadambar 'in all directions', in which medial apico-alveolar, instead of retroflex *ḍawaḍawar, points to a reduplication ḍawar-ḍawar and subsequent deletion of r to eliminate the impermissible cluster rd. The productive adverbial form gawagawar 'high up' from gawar 'up, on top, upriver' also shows deletion of the r before R_2 though medial rg is a permissible cluster. This kind of reduplicated form seems more generally to occur in roots where retention of the entire segment (1) would result in combinations with r final in R_1 followed by an initial stop of R_2; (2) would result in geminate clusters; or (3) would result in impermissible word-medial clusters like gn (e.g. ŋayaŋayag 'some' from ŋayag 'another, different'). With such forms compare others like ḍaguḍagun 'small *Aponogeton*' with plainly-heard medial retroflexion, indicating this is derived from ḍagu-ḍagun, not *ḍagun-ḍagun. Forms such as this are like frozen reduplications where the reduplicative segment is vowel-final, such as ŋiriŋirimin 'cicada'.

3.4.5.2. Productive reduplications

Productive reduplication of verbs and verb particles is more restricted than in nominals. Though reduplication is not an extremely important means of indicating aspectual notions, it is sometimes used to indicate iterative or durative action, depending on the meaning of the verb. (By contrast, obligatory reduplication in e.g. Ŋalakan in certain verb categories is an important part of verbal paradigms, especially in past punctual forms of many verbs.)

An inflecting verb form must minimally consist of two syllables after the pronominal prefix(es) (i.e., must have at least bisyllabic stem-plus-suffix) in order for reduplication to operate. The reduplicated segment itself is not always bisyllabic, though it usually is. For example, from Ø-war+ma-ñ 'he heard' (PP) there is reduplicative Ø-war-war+ma-ñ 'he listened and listened', where the reduplicated portion is monosyllabic; but the reduplication can operate only upon forms which contain at least two syllables after the pronominal prefixes. Generally, as noted, the reduplicated segment is also bisyllabic, its constituency one of the following types.

Any verb stem of two syllables can be reduplicated with glottal inserted between R_1 and R_2 if sonorant-final, e.g., ja-Ø-ḍaya?ḍaya 'he keeps on biting', from ja-Ø-ḍaya 'he is biting'. In many verbs with bound auxiliary, the two reduplicated syllables are made up of the initial compounding element and the auxiliary, e.g., ga-ŋan-ŋuj+bu?ŋuj+bu-n 'he deceives me and deceives me, keeps on tricking me'. Where the inseparable auxiliary is -ma or -mi already preceded by glottal stop, a second glottal is not inserted between R_1 and R_2; thus wuḷa-ba?+ma-ba?+ma-ṛi 'they were bathing', not *wuḷa-ba?+ma?ba?+ma-ṛi. Where there is a suffix which together with stem constitutes two syllables, reduplication is of the stem and tense suffix, as in Ø-ga-ni?ga-ni 'he kept on taking it' (PC), wuḷa-ma-ṛi?ma-ṛi 'they kept on saying', wuyan-ḍaḷi?ḍaḷi 'he kept on biting them' (all forms are past continuous). It is mostly past continuous forms which are reduplicated; if past punctual iterative action is to be expressed, this is usually done by repetition of a fully inflected verb form, such as wuḷa-ma-ñ, wuḷa-ma-ñ 'they said and they said'. This may be partly because with the common CV roots, the past punctual suffix consists only of final consonant, and person prefixes can never be subdivided or used to constitute one of the reduplicating syllables, hence a bisyllabic reduplicative segment cannot be formed with these. One does, however, find reduplicative past punctual forms such as ŋan-ḍaḷa?ḍaḷag 'he bit and bit me', where a bisyllabic reduplicative segment is available (see 2.1.3-IVd for past punctual allomorphs).

Inflected forms in which the stem (plus suffix) is monosyllabic repeat the full verb form, e.g., ja-Ø-ga-n, ja-Ø-ga-n 'he keeps on taking/carrying it'.

A few trisyllabic verb stems, where the stem consists of bisyllabic initial element and CV compounding root, reduplicate by copying the two syllables of the initial element: Ø-ŋani?ŋani+yu-ñi 'he kept on talking' (PC), gulu?gulu+yu-ñi 'he kept on calling out'. Though ŋani- exists as independent noun 'language', the same is not true of gulu- which has no meaning in this context. The constraint that the reduplicative segment be bisyllabic is evidently independent to a great extent of meaning and more dependent on the grammatical identity of elements, e.g., suffixes can form one of the reduplicative syllables, prefixes cannot and initial elements can whether independently meaningful or not.

Particles of $C_1VC_2(VC_3)$ shape where C_2 is a stop, can always be completely repeated to give iterative or intensive meanings such as jaḍjaḍ 'go back further and further' from jaḍ 'go back'. If the final stop of R_1 is identical to the first stop of R_2, the geminate cluster is reduced to a single consonant: gabug 'throw dirt or stones in the water' (to attract fish) has reduplicated gabugabug 'throw a lot of dirt or stones in the water, keep on throwing'. Verb particles which end in glottal stop can be completely reduplicated except that the glottal is not repeated after R_2: ḍira? 'tie up' gives ḍira?ḍira 'tie up thoroughly, tangle up'. This is in keeping with the fact that there can be no more than one glottal stop within the same phonological word, unless the word is a reduplicative form of a verb stem which already contains glottal stop before compounding auxiliary -ma or -mi, such as ŋa-ḷi?+mi-ḷi?+mi-ṛi 'I called and called'(PC). Instances in which the glottal is repeated as part of a particle in series like gal? gal? gal? 'climb up' are word repetitions for emphasis and may occur four or five times or more.

A few particles of CVC shape reduplicate the initial CV: ñim 'drown, submerge' gives ñimñiñim 'keep on going down in the water'; a few other multisyllabic particles with initial closed syllable reduplicate the first CVC, as jedjedborg 'keep diving in' from jedborg. Many other reduplicative

particles are frozen, their reduplicative form often consonant with some feature of their meaning, as with the distributive notion in jiliṛ?jiliṛ 'scatter ash'. These do not occur in unreduplicated form. Other particles conform to reduplicative processes which are mainly productive with nouns (see below).

Reduplication is used productively in nouns to form plurals, especially with human status nouns like 'child', 'old person'. These human status nouns may be used in reduplicated form in any of the syntactic and local case functions, though they occur most often in major syntactic, rather than local, functions. They often are marked for plural number by suffixes as well as being reduplicated. Other nouns, particularly inanimate ones, tend to be used in reduplicated form only in the 'having' construction (with derivational suffix -y_2i, see 2.1.1.4.4-5) expressing a collective plural meaning 'having a lot of X'. Animate and human nouns also occur reduplicated in 'having' constructions, and are frequently reduplicated and number-marked in other constructions as well. Inanimate nouns, however, are infrequently suffixed for nonsingular number, unless specifically marked as dual where meaning demands. Kinship terms tend to be reduplicated when used in dyadic kin constructions, requiring proprietive suffix -y_2i and denoting the relation between two or more kinsmen (see 2.1a.2). Several reduplicative formulae can be distinguished which apply mainly to nominals.

(1) Complete reduplication of the root occurs in some nouns of shape CVCV(C), i.e. consisting of one open syllable followed by open or closed syllable:

ŋugu	'water'	ŋuguŋugu-yi	'soaked, having water'
marij	'young girl'	marijmarij	'young girls'
ŋala	'mother'	ŋalaŋala-yi	'mother(s) and child(ren)'

(2) Nouns of shape CVCCVC where the two closed syllables are identical, reduplicate by further repetition of one closed syllable:

bugbug	'old person'	bugbugbug	'old people'
jabjab	MF	jabjabjab	MFs
banban	'woomera'	banbanban-yi	'having woomeras' (metonym for 'men')

A few nouns e.g., galŋbam 'spouse' have unpredictable reduplicative plurals like galŋbambam-yi 'spouses' (plural dyadic term) with reduplication of a CVC syllable only.

(3) Some nouns consisting minimally of shape $C_1V_1C_2V_2(C)$, i.e. of at least open syllable (but there can be more than one), with last syllable open or closed, reduplicate the C_2V_2, according to the formula

$$C_1V_1C_2V_2\ldots \longrightarrow C_1V_1\text{-}C_2V_2\text{-}C_2V_2\ldots$$

gamag	'digging stick'	ga-ma-mag-ji	'having digging sticks' (metonym for 'women')
ḍaḍal	'shell, carapace'	ḍa-ḍa-ḍal-yi	'having shells, turtles'
ḍuḍu	'wing'	ḍu-ḍu-ḍu-yi	'having wings'
maḷam	'man, Aborigine'	ma-ḷa-ḷam-yi	'men, Aborigines'
baḍa	'father'	ba-ḍa-ḍa-yi	'father(s) and child(ren)'
muṛimuṛi	'FF, FFZ'	mu-ṛi-ṛi-wə-yi	'FFs and SSs'
baraŋali	'father-in-law'	bara-ra-ŋali-yi	'in-laws'

(4) Some other nouns of the same description as (3) (at least one open syllable, or more, with last syllable open or closed), show reduplicative segment consisting of consonant of the second syllable and vowel of the first:

$$C_1V_1C_2V_2\ldots \longrightarrow C_1V_1C_2V_1\text{-}C_2V_2\ldots$$

waḷima	'young person'	wa-ḷa-ḷima	'young people'
gaḷugu	'poor thing'	ga-ḷa-ḷugu	'poor things'
yirag	'father'	yi-ri-rag-ji	'father(s) and child(ren)'
gabuji	'old person'	ga-ba-buji	'old people'
gurajñin-yi	'dirty' (of water, lit. 'having blood')	gu-ru-rajñin-yi	'very dirty, cloudy water'

(5) Nouns minimally of the shape CVCCV..., where the first syllable at least is closed, and the second syllable not identical to the first, reduplicate by the formula:

$$C_1V_1C_2C_3V_2\ldots \longrightarrow C_1V_1C_2\text{-}C_3V_1C_2\text{-}C_3V_2\ldots$$

The reduplicative segment consists of the first consonant after the initial closed syllable, and the vowel and final consonant of the first syllable. Examples are:

waŋgij	'child'	waŋ-gaŋ-gij	'children'
jimgan	'knowledgeable person'	jim-gim-gan	pl.
jalwayi	'mud'	jal-wal-wayi	'very muddy'
guryag	'lily'	gur-yur-yag-ji	'having a lot of lilies'
gaṇji	MMBC, MMBSSC	gaṇ-jaṇ-ji-yi	pl. (dyadic)
gamburra	classificatory MB/ZC	gam-bam-burra-yi	pl. (dyadic)
guŋgu	MB	guŋ-guŋ-gu-yi	pl. (dyadic)
baŋgal	'egg'	baŋ-gaŋ-gal-yi	'having a lot of eggs'

Some verb particles of the same description productively reduplicate according to this formula. These are particles where C_2 is a stop (but not glottal stop) and C_3V_2 is the final syllable -ma (see 3.1.2.4.2). This final syllable is optional with a number of particles, e.g. 'return' may be jaḍ or jaḍma. If the second particle form is used the condition for reduplication is met, giving jaḍ-maḍ-ma 'keep returning, go right back'.

A number of frozen reduplications correspond to the same formula, e.g., nominal wadbadbi 'big fight, row'; laḍmaḍmingan 'scorpion, police tracker'; and the frozen reduplicative verb particle ḍudmudma 'be crowded in, not have any room'.

The kin term miñjari 'MBC', though it corresponds to the description for reduplication according to (5), actually has reduplicative form miñji-miñjari-yi 'cross-cousins' (plural dyadic term), instead of expected *miñ-jiñ-jari-yi.

The proprietive meaning 'with a dog, having a dog' is muyg-ji. The reduplicative 'having' form in the plural is muyg-juyg-ji 'having a lot of dogs'. Here the cluster yg is treated as single C_2, and the consonant of the 'having' suffix as C_3. A similar example is mar-yar-yi 'full of/having a lot of fish'. These examples in which a derivational affix participates in nominal reduplication, show that a bisyllabic base is minimally required upon which reduplication can operate. This requirement is like that found in verbal reduplication, where tense suffixes can constitute the second required syllable.

3.4.6. Application of phonological rules to loans

Many English nouns are used in daily speech, sometimes as substitutes for existing Maŋarayi words, sometimes as terms for which there is no precise equivalent in Maŋarayi. The two rules P-1 and P-2, Stop Nasalization and Hardening I, are regularly applied to English loans which meet the descriptions for rule application. The treatment of English loans

cannot be exhaustively dealt with here, for this would require description of segmental equivalences between Standard English and Kriol (e.g., root final -s usually corresponds to -j). It must suffice to say that final stops in English loans undergo nasalization as in the examples below:

/bred-w$_1$u/ ⟶ bren-gu 'for bread'
/ṛod-y$_1$an/ ⟶ ṛon-gan 'in the road'
/auj-y$_1$an/ ⟶ auñ-gan 'in the house'

3.5. Morphophonology: suprasegmental

3.5.1. Stress assignment

Word stress shifts depending upon the constituency (inflection or derivation and hence syllable structure) of particular forms. The general tendency, as noted in 3.3.2.4, is for stress to fall on the penultimate word syllable. In 3.5.1.1, stress in some inflected nominal forms is described. In examples given there, stress falls on the penultimate syllable in citation forms of (bisyllabic) nouns. The addition of case and number suffixes causes stress assignment to shift, generally to the new penultimate word syllable, unless other factors (presence of polysyllabic case suffix) alter this. In 3.5.1.2 stress shift in some derived nominals is described. In 3.5.1.3, stress assignment in inflected verb forms is discussed, and conditions are described which produce exceptions to the norm of penultimate stress.

3.5.1.1. Word stress in some inflected nominal forms

The only case suffix of more than two syllables is the allative allomorph -gáḷama, always stressed as shown. All inflectional (and derivational) bisyllabic suffixes receive a stress on the first syllable of the suffix, e.g. -gána ablative allomorph.

Several nominal inflectional suffixes are monosyllabic, or have monosyllabic allomorphs, and before these (except for pergressive -wa), bisyllabic nominals which are nasal-final (either underlying nasal or the result of application of P-1) receive stress on the syllable preceding the monosyllabic suffix, i.e. on the penultimate syllable of the word. An example of how this affects placement of stress in a nasal-final bisyllabic root is shown by the inflectional paradigm of baṇam 'camp'.

Abs	Ø-báṇam
Dat/Purp	ṇa-baṇám-gu
Loc	ṇa-baṇám-gan
All	Ø-bàṇam-gáḷama
Abl	Ø-bàṇam-gána
Per	Ø-báṇam-wa

However, before monosyllabic case inflections, stress in bisyllabic nominals with final non-nasal consonant or final vowel tends to remain on the penultimate root syllable:

Loc	ṇa-ḷándi-yan	'in the tree' (also ṇa-ḷandí-yan)
Loc	ṇa-júmbay-(y)an	'on the river bank'

A major stress falls on the final syllable of the nominal root in trisyllables before monosyllabic inflectional suffixes, i.e. on the penultimate syllable of the word. In some where root stress is penultimate, however, major stress may alternatively remain on the penultimate root syllable.

Nom	ṇaḷa-gáḍugu	'woman'
Loc	ṇaya-gaḍugú-yan	'on, at, near the woman'
Loc	ṇa-waḷayjñín-gan	'in the shade' (also ṇa-waḷáyjñin-gan)

Several of the number suffixes are monosyllabic or have monosyllabic allomorphs. Stress in bisyllabic nasal-final nominals also shifts to the

final root syllable (penultimate word-syllable) before these, but remains on the penultimate root-syllable otherwise:

Nom	ŋa-jábjab	'MF'
Nom Du	ŋa-jabjám-bur	'two MF'
Nom Du	ŋa-gúŋgu-wur	'two MB'

A stress falls on the first syllable of all possessive suffixes (2.1.2.4.1). All are bisyllabic except -ŋáyawu 'hers' and the reduced form -ŋga of -ŋaŋga 'yours Sg'. These may be followed by case suffixes; where the case ending is monosyllabic, a stress within the suffix complex falls on the syllable preceding the case ending, i.e. on the penultimate word-syllable:

Loc	Ø-baṇam-ŋayawúŋ-gan	'in her camp'
	Ø-baṇam-ŋanjúŋ-gan	'in my camp'

Where the suffix is bi- or trisyllabic, a major stress falls on the first syllable of the suffix, and secondary stress at intervals of two syllables from the major stress:

Abl	Ø-bàṇam-ŋànjuŋ-gána	
All	Ø-bàṇam-ŋànjuŋ-gáḷama	

3.5.1.2. Stress placement in derived nominals

In 2.2.1.5, noun-forming suffixes are described; others are proprietive and privative (2.1.1.4.4-5). Most of these are not fully productive, with the exception of proprietive -y_2i and privative -wi. A few of the others, such as -mayin (expressing quality) are marginally productive, but also occur as an integral part of a large percentage of the total vocabulary with which they may occur overall. Of the 9 suffixes, 4 are bisyllabic (-mayin, -mingan, -miñi, -$y_1$ayi); primary stress always falls on the first syllable of the suffix, hence on the penultimate word syllable. Examples of forms with -mayin are:

bóbob	'be hot' (VP)	bòbob-máyin	'hot, warm'
ḍóḍoñ	'crooked'	ḍòḍoñ?-máyin	'crooked'
wìrilmáyin	'goanna' *(V. gouldii)*		

With monosyllabic noun-forming suffixes, primary word stress falls on the penultimate syllable, hence on that immediately preceding the suffix. This means there is a shift in stress placement in relation to the lexical root from its position in citation forms (whether penultimate or not), to the new penult. Illustrating this are examples with proprietive and privative suffixes.

ṇánan	'money, stone'
(ŋa-)ṇanán-yi	'(one) having money'
(ŋa-)ṇanán-wi	'(one) lacking money'
ŋa-gúŋgu	'MB'
guŋgú-yi	'MB+ZC'
ŋaḷa-yilámbuṛa	'FZ'
yilàmbuṛá-yi	'FZ+BC'
ŋúgu	'water'
ŋugú-wi	'lacking water'

3.5.1.3. Stress assignment in inflected verb forms

A first approximation to stress assignment in inflected verb forms is that primary word stress is penultimate. There is some variation from this 'ideal' pattern, however, depending on the constituency of forms. Inflected trisyllabic forms of monosyllabic roots exhibit two patterns, Í 2 3 and 1 Ź 3. The pattern 1 Ź 3 always occurs when the penultimate syllable is the root; but it also occurs in some forms where the penult is a pronominal prefix. Likewise it can be shown that quadrisyllabic forms of monosyllabic roots show the pattern Í 2 3̀ 4 and Ì 2 3́ 4.

Inflected forms of monosyllabic roots pattern like the paradigms of yag- 'go' and ṇi- 'sit'.

gá-ŋa-yag	ŋá-ya-j (PP)	ŋa-yí-ñi (PC)	gá-ŋa-ṇi	ŋá-ṇi-ñ (PP)
gá-ña-yag	ñá-ya-j	ña-yí-ñi	gá-ña-ṇi	ñá-ṇi-ñ
já-Ø-yag	Ø-yá-j	Ø-yí-ñi	já-Ø-ṇi	Ø-ṇí-ñ
gá-ŋi-yag	ŋí-ya-j	ŋi-yí-ñi	gá-ŋi-ṇi	ŋí-ṇi-ñ
ga-ŋír-yag	ŋír-ya-j	ŋir-yí-ñi	ga-ŋíḍ-ṇi	ŋíḍ-ṇi-ñ
ga-ŋár-yag	ŋár-ya-j	ŋar-yí-ñi	ga-ŋáḍ-ṇi	ŋáḍ-ṇi-ñ
gá-ŋiḷà-yag	ŋíḷa-ya-j	ŋìḷa-yí-ñi	gà-ŋiḷá-ṇi	ŋiḷá-ṇi-ñ
gá-ŋaḷà-yag	ŋáḷa-ya-j	ŋàḷa-yí-ñi	gà-ŋaḷá-ṇi	ŋaḷá-ṇi-ñ
já-wuḷà-yag	wúḷa-ya-j	wùḷa-yí-ñi	jà-wuḷá-ṇi	wúḷa-ṇi-ñ

In some trisyllabic inflected forms of monosyllabic roots, heightened intensity and pitch vary between, e.g., gá-ŋa-ṇi and ga-ŋá-ṇi; gá-ŋa-bu-n and ga-ŋá-bu-n; gá-ŋa-mi and ga-ŋá-mi. The pattern Í 2 3 appears somewhat more common for 1Sg, 2Sg and 1InDu forms of most monosyllabic roots, but 1 Ź 3 for 1ExDu and 1Tr. The pattern 1 Ź 3 is typical of 1Sg and 2Sg forms of some roots, however, e.g., ga-ŋá-ja 'I am eating' and not *gá-ŋa-ja.

In quadrisyllabic forms of monosyllabic roots there is variation between gá-ŋaḷà-yag and gà-ŋaḷá-yag. Either pattern occurs with some verbs, but each is seemingly more typical of particular verbs (e.g., já-wuḷà-yag is characteristic, jà-wuḷá-yag less so; gà-ŋaḷá-ṇi is characteristic, gá-ŋaḷà-ṇi less so).

Most bisyllabic roots have a major stress on the penultimate word syllable, which frequently coincides with the first root syllable: ga-ŋa-ḍáya 'I am biting it', ja-wuḷa-ḍáya 3Pl, ŋa-ḍáḷag 1Sg PP, ŋa-ḍáḷi 1Sg PC. Third singular forms of bisyllabic roots in the non-past show variation between patterns Í 2 3 and 1 Ź 3, e.g., já-Ø-ṇiŋa-n 'he is arriving', já-Ø-gawa 'he is digging it', já-Ø-ŋama 'he is holding it' versus ja-Ø-ṇídba 'he has it', ja-Ø-ŋáya 'he is cooking it', ja-Ø-jáygi-n 'he is standing' and others.

Most trisyllabic compound stems take major stress on the first syllable of the stem (ga-ŋa-yíri+wa-n 'I see it', ga-ŋa-ḍáṛa+wu-n 'I find it', ga-ŋa-yíyi-ji-n 'I am afraid' (MP), ga-ŋa-ŋáni+yug 'I am taking', ga-ŋa-járij+ma 'I am missing/failing to get it'), unless the stem is made quadrisyllabic by addition of an augment (in which case major stress is usually on the word penult, ŋa-yiri+wá-ya-b 'I did not see', but see exceptions below), or is followed by a past continuous suffix. In most verb forms major stress falls on the syllable preceding the past continuous suffix, i.e. on the word penult (ŋa-yíri+wá-ni 'I saw it', ŋa-gùlu+yú-ñi 'I called out', ŋa-yiyi-jí-ni 'I was afraid' (MP) etc.). In the trisyllabic non-compound stem ḍiwiña- 'reach, attain', major stress falls on the root penult in most inflecting forms, ga-ŋa-ḍiwíña, ŋa-ḍiwíṇḍag (PP), ŋa-ḍiwíña-m (PNeg), ŋa-ḍiwiña-ma-n (hab).

However, some trisyllabic compound stems receive major stress on the penultimate word syllable where the inflectional suffix is zero or subsyllabic:

ga-ŋa-jigíj+mi	'I am jumping'
ŋa-jigíj+mi-ñ	'I jumped' PP

Stress fails to occur on the penultimate syllable of an inflected verb form, whether this be a syllable of the root or an augment, in the following case. Many verbs in the habitual require an augment -ma- added to the verb root. In a few verbs, the habitual augment -ma- follows another stem augment, and in mediopassive and reflexive-reciprocal verb forms also follows these suffixes, but in no instance in habitual verb forms may verb

augment, mediopassive or reflexive-reciprocal element receive major stress. Major stress falls on the vowel of monosyllabic roots, on the first vowel of bisyllabic roots; and the root penult of trisyllabic simple roots:

wa-ŋa-ḏáy-ŋa-ma-n 'I habitually bite it' (stem-form ḏay- 'bite', stem augment -ŋa- and habitual augment -ma-)
wa-ŋa-gáwa-ma-n 'I habitually bury it' (augment -ma-)
wa-ŋa-jáygi-ma-n 'I habitually stand' (augment -ma-)
wa-ŋa-diwiña-ma-n 'I habitually reach it' (augment -ma-)

However, those verbs with stem-augment -ŋa- have the augment in past negative forms also, always followed by past negative suffixal allomorph -m. To create past counterfactual verb forms meaning 'wanted to, should have, would have' the past negative is further suffixed with desiderative-intentional-allomorph -gu following nasals. In such forms, major stress falls on the stem-augment -ŋa-, conforming to the proposed ideal penultimate stress pattern on inflected verb forms:

ŋa-ḏay-ŋá-m-gu 'I wanted to bite it'

The reflexive-reciprocal morpheme has several forms; one is monosyllabic -y(i)-, and two are bisyllabic, -jiy(i)- and -ñjiy(i)-. Though the monosyllabic suffix may constitute the penultimate syllable of an inflected verb, it does not receive stress. The monosyllabic form of the reflexive-reciprocal morpheme occurs only with a handful of CV, CVC and one CVCV root; major stress falls on the only or final root vowel:

jà-wuḷa-bú-yi-n 'they pl. are hitting each other'
wù̀ḷa-bú-yi-ni 'they pl. were hitting each other' PC
jà-wuḷa-jú-yi-n 'they are swearing at each other'
wù̀ḷa-jú-yi-ni 'they pl. swore at each other' PC

A stress falls on the first syllable of bisyllabic reflexive-reciprocal forms:

ja-wuḷa-ŋàni+yu-jíyi-n 'they pl. are talking to each other'
wuḷa-ŋàni+yu-jíyi-ni 'they pl. spoke to each other' PC

4. Ideophones and interjections

4.1. Ideophones

Maŋarayi appears not to make any highly patterned use of ideophones.

4.2. Interjections

See 2.1.9.

5. Lexicon

5.1. Structured semantic fields

5.1.1. Kinship terms

For introductory information on Australian kin terminologies, see Elkin 1938.

The Maŋarayi kinship terminology, of the Aranda type, distinguishes four lines of descent, each line within a different semimoiety, and Ego within the same semimoiety (and same subsection) as FF and FFZ.

Table 5-1 shows terminological labels by kin type. Since distinctions are made within the sibling terms by sex of speaker and relative age, the sibling terms are shown separately as Table 5-2. An explanatory note regarding Table 5-1: as usual, it fails to show the degree of collaterality minimally acceptable between marriage partners; actual MMBDD and ZSC are not marriageable, hence actual MMBD≠actual mother-in-law, and so forth.

In addition to terms shown in Table 5-1, there are several others which are difficult to display on the same diagram, since they represent special terminological uses and/or subclasses of types of the diagram. These additional terms are:

baraŋali specifically affinal term for 'father-in-law' (= man's WF and siblings, woman's HF and siblings); usage is reciprocal (see FMBS = WF in Table 5-1).

birwuyin term applied to person of the gagag class (MMBSC) who is actually married to one's cross-cousin.

gambuṛa from female Ego's perspective, brother's children's spouses can be terminologically identified with M and MB, but actual or potential persons of this type may be designated by the subclass term gambuṛa. In the senior generation, gambuṛa may be applied to FW and her siblings.

mayaṛa In Table 5-1, MBSC are identified as guŋgu 'MB' and ŋaṇi 'M', but individuals who are male Ego's children's actual or potential spouses may be distinguished from actual MBSC by being called mayaṛa.

Table 5-1 shows the child term biṛanju. That term is used by male Ego for his own children, and by female Ego for her brother's children. Female Ego uses the term jaya for her own children, as does a man for his sister's children.

Dyadic terms are listed in Table 5-3 (refer to 2.1a.2 for the meaning of dyadic terms).

5.1.1a. Social category terms

Table 5-4 shows the subsection terms arranged to display patrilineal semimoieties in (a), and the matricycle of subsection assignment in (b).

Persons are referred to by subsection terms; gender of the referent is distinguished by noun class/case prefixes, e.g. ŋa-gaŋila 'man of gaŋila subsection', ŋaḷa-gaŋila 'woman of gaŋila subsection'.

The subsection terms take number suffixes which differ both from those used with kin terms, and from those used with all other nouns. See 2.1.1.8.6.5.

5.1.1b. Exclamations used in relation to kin types

The Maŋarayi have a set of exclamations which are used in relation to kinsmen of certain types. A frequent circumstance in which they would be used is when some third person is swearing at, or also joking with, a person who stands in a certain relation to an 'audience'. The 'audience', observing what is going on, utters the appropriate exclamation. The Maŋarayi conceive of this as an attempt (whether in earnest or in jest) to stop the person who is swearing, joking or otherwise disturbing the

Table 5-1 Maŋarayi kin terms (vocative)

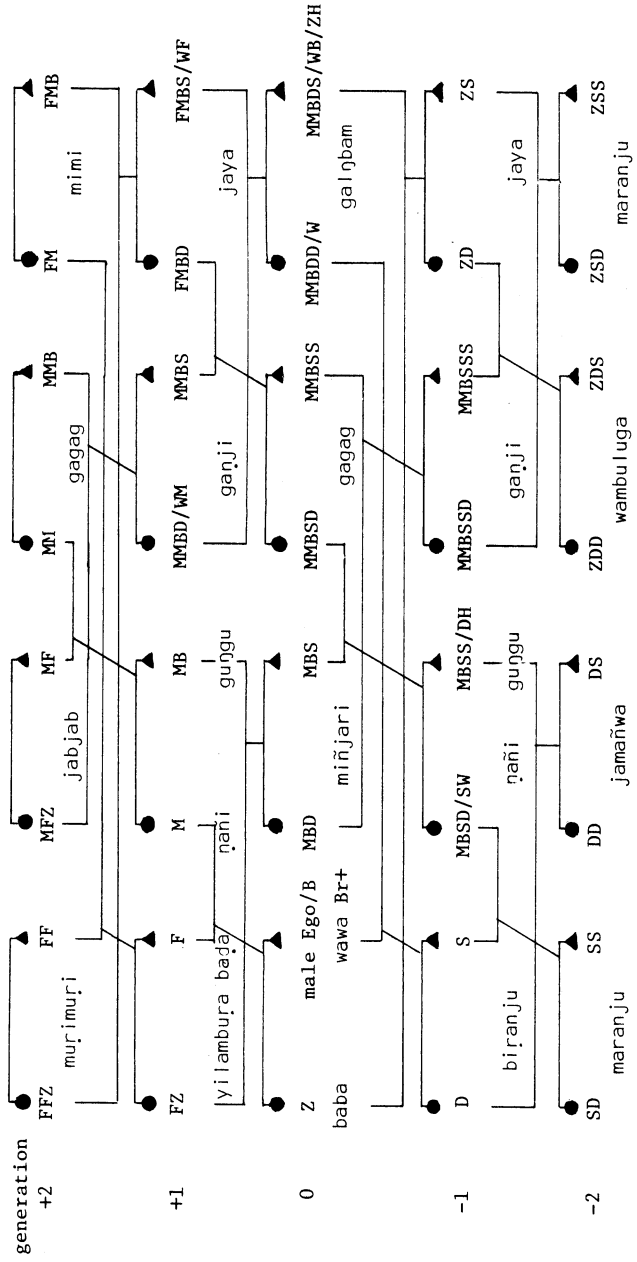
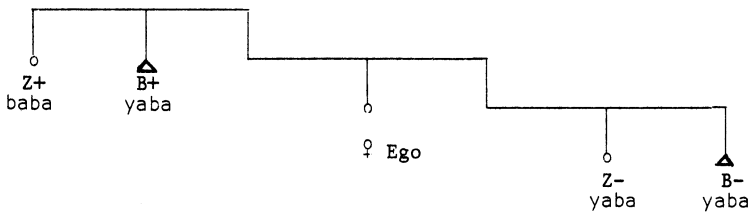
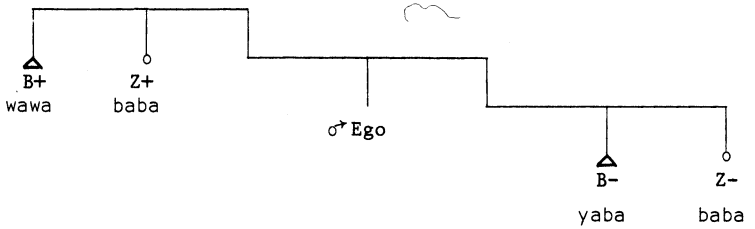


Table 5-2 Sibling terms

a. Female Ego



b. Male Ego



Note: As shown, there is no distinction between elder and younger sibling of opposite sex to Ego.

Table 5-3 Dyadic terms

Gloss	Dyadic form	Plural dyadic form
F and C (ordinary)	baḍa-yi	baḍaḍa-yi
F and C (avoidance)	yirag-ji	yiriṛag-ji
FF(Z) and SC	muṛi-wa-yi	muṛiṛi-wa-yi
FZ and BC	yilamburṛa-yi	yililamburṛa-yi
M and C	ŋala-yi	ŋalala-yi or ŋalaŋala-yi
MF(Z) and (B)DC	jabjab-ji	jabjabjab-ji
MB and ZC	guŋgu-yi	guŋguŋgu-yi
MM(B) and (Z)DC	gagag-ji	gagagag-ji
cross-cousins	miñjari-yi	miñjimiñjari-yi
B and B	wawa-yi	wawawa-yi
Z and B/Z	baba-yi	bababa-yi
father-in-law and children-in-law	baraŋali-yi	bararaŋali-yi
H and W	galŋbam-yi	galŋbambam-yi
see 5.1.1	mayaṛa-yi	mayaṛaṛa-yi
see 5.1.1	gamburṛa-yi	gambamburṛa-yi
MMBC and FZDC	gaŋji-yi	gaŋjaŋji-yi

Note: Dyadic (and other) forms of the stems mayaṛa and gamburṛa are used infrequently. For non-self-reciprocal relations involving generational differences, the stems used in the dyadic forms above are regularly those representing the senior member.

equilibrium of the person to whom his attentions are directed. The exclamations, in other words, constitute a form of parrying or defence, usually on behalf of another. These parrying exclamations are more highly 'classificatory' than the kin terms themselves; that is, a single term is used for parrying approaches to a much wider range of kin types than is covered by any single kin term (see Fig. 5-1). The exclamations and the kin types for which they are appropriately used are:

go:?	F, FZ
gabaṛani	M, MB, MBC, FZC, MF, MFZ, FM, FMB, own C, SC, male's DC, female's BDC
wari, wariwari	Z, B, MM, MMB, FF, FFZ, female's DC, male's ZDC, self
ŋaguñ?	spouse category

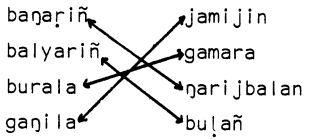
maŋgalyaṛ ga-ŋa-yag 'I am ashamed'
maŋgalyaṛ ga-ŋan-ba-ga-n 'they shame me'
(Used in relation to kin types called gaŋji, avoidance category.)

Note that swearing or jesting directed towards oneself can be parried by the same exclamation used for parallel grandkin in the second ascending generation. Many aspects of kinship usage express a structural identity between Ego and his agnatic ascending grandkin (FF, FFZ); here, MM and MMB are lumped with those types.

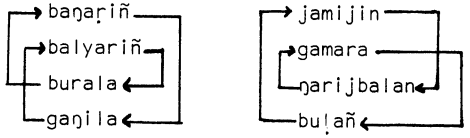
There is no exclamation appropriate for parrying approaches to one's avoidance category relations (MMBD 'mother-in-law', also MMBSSC). One simply expresses shame at being made to hear or witness jesting or swearing directed towards one's avoidance category kinsmen.

Table 5-4 Subsection categories

(a) showing semimoieties (father-child couples)



(b) showing mother-child couples



5.1.2. Color terminology

There are only three terms which appear to be used with reference to the color of objects, rather than with reference to some interaction of 'color' with other qualities. These three 'color' terms are belyeŋmayin 'red/yellow', ḍewomayin 'white', and gabudmayin 'green/blue/black'. The last is also sometimes used to refer to black people when they are being identified by skin color (i.e. in opposition to people of other skin types). But ḍewomayin is not used to refer to white people; the term guṛugguṛug, which originally referred to a type of spectre or 'devil-devil' (associated with Gunabibi ceremony), is always used for white people.

All other terms are used with reference to some combination of properties, of which the features which go to make up our perception of 'color' are not central. Additional terms, with an example of their use, are:

buymayin	usually glossed as 'green', but seems to be used with reference to the shininess of an object, usually fruit such as manaḷiñ *(Ficus racemosa)*. It is approximately opposed to the next term.
buḍibuḍimayin	sometimes glossed as 'red', but appears to be always used with reference to fruits which have lost lustre as they have ripened. Because of the similiarity to the English word 'pretty' (Kriol approximately budi) I took care to establish that this is not a loan.
jiliñ, or jiliñmayin	appears always to be used in reference to things which are deeply saturated in the red-yellow area of the spectrum. It is used, for example, to describe a deep sunset, or a cluster of dark flying foxes nestling in a tree.
waḷagmayin	gleaming, shiny. This term is used, for example, in reference to the underbelly of a fish.
gamurugmurug	dark, obscure. Can be used to describe the night; the reference seems to be to lack of light.
jalala	green, unripe. Primary reference of this word is to green, new sprouts or buds.
mormor, mormormayin	dark and lustreless. Can be used to refer to obscurity at night; also to dark moldy spots on food.

There are many other words the lexical meanings of which must be formulated with reference to color (e.g. jumbu 'yellow ochre'; or the verb particle ŋarg 'to become gray, white-haired'), but those listed above refer primarily to qualities, not to the object which embodies them. The first two, however, only were used with reference to parts of plants.

5.1.3. Body parts and secretions

1. bab 'head'
2. baḍjaḍjurag 'armpit'
3. baṇdorg 'loins'
4. balal 'cheek'
5. bibib 'kneecap'
6. ḍab 'skin', also 'subsection'
7. ḍama 'bone'
8. ḍaṛa 'stomach'
9. ḍir 'tooth'
10. ḍingil 'neck'
11. ḍulu 'heart'
12. gabab 'vagina' (inside)
13. gadgad 'clitoris'
14. galṇoṛgṇoṛg 'brains'
15. gaya 'hair'
16. gayma 'arm'
17. garbun 'guts, intestine' (also of animal)
18. gaḷa 'back, backbone'
19. ganda 'hip'
20. gawayg 'urine'
21. gig 'breast, milk'
22. giñin 'semen'
23. gulu 'genitals' (male and female)
24. gurajñin 'blood'
25. gurgura 'whiskers'
26. guṛa 'afterbirth'
27. jabiman 'second finger'
28. jadba 'upper leg'

29. jaḷu 'ear'
30. jamgaṛ 'foot'
31. jaṇur 'saliva'
32. jaragay 'ring finger'
33. jaṛab 'mouth'
34. jawaŋgin 'index finger'
35. jawi 'tongue'
36. jayiwar 'whiskers, beard'
37. jib 'eye'
38. jilyirmin 'sweat'
39. jiwij 'hip, rump'
40. juryur 'navel, umbilical cord'
41. ḻañ 'lower leg'
42. ḻiran 'nails'
43. mabog 'rump, buttocks'
44. madmu 'ankle'
45. maḷa 'large intestine, tripe' (also of animal)
46. maṛawar 'brisket', 'chest'
47. miliñ 'nose'
48. milirgura 'eyelash'
49. miḻiyan 'shoulder'
50. miṇ 'knee'
51. miyar 'forehead'
52. mududu 'pinky finger'
53. murij 'elbow'
54. muña 'excrement'
55. mulu?mululug 'toes' (also 'young, small')
56. muliriñ 'large arm and leg bones, skeleton'
57. miŋuḻg 'tears'
58. ŋadbur 'hand'
59. ŋadudur 'windpipe'
60. ŋalalan 'ribs'
61. ŋaḷag 'testicles'
62. ŋaḻimur 'collarbone'
63. ŋanjug 'sinew', also 'blood vessel'
64. ŋañ 'throat' (also 'voice')
65. ŋele 'thumb'
66. ŋiṛ?min 'liver'
67. waŋḍiñ 'kidney'
68. wiḍa 'nape of neck'
69. yalarag 'radius and ulna (small arm bones)'
70. yaya 'lungs'
71. yibidjibidji 'eyebrow'

Body parts figure in many constructions having to do with expression of perception, emotion and attitude. The following are illustrative.

ja-Ø-waṛag-waṛag+ma Ø-bab-ŋawu, ŋa-giŋur Ø-ḍaḷag
3-3Sg-toss(Red)-Aux NAbs-head his NErg-anger 3Sg/3Sg-bite PP
'He's tossing his head, he's angry' (lit. 'anger has bitten him').

The verb waṛag+ma- 'toss' with bab 'head' is used to express that someone is angry; in the second clause above, an explanation of the meaning of the expression was being given.

Ø-ḍama-ŋayawu Ø-biḻbu, ŋaḷa-wiyi-wi
NAbs-bone-hers NAbs-strong FNom-giving-Priv
Lit. 'She has strong bones, she doesn't give (anything)'.

The expression 'strong bone' is used to mean 'stingy'; the expression now is carried over into Kriol.

The stomach figures in many expressions as the seat of emotions of like and dislike, also happiness and unhappiness. The following are typical:

ṇa-ḍaṛa-ŋanju ga-ŋa-wa-n
NInst-stomach-mine -3-1Sg/3Sg-visit/see-Pres
'I like him'.

ṇa-ḍaṛa-ŋanju ga-ŋa-man+bu-n
NInst-stomach-mine -3-1Sg-run-Pres
'I'm pleased, happy'.

As is typical of many Australian languages, the 'ear' is treated as the main instrument of apprehension and intellection, as in:

Ø-jaḷu-ŋanju Ø-boḍewg
NAbs-ear-mine NAbs-bad
'My memory is bad'.

ṇa-jaḷu-ŋayawuŋ-gan baḷ? ña-ṇi
NLoc-ear-hers sit 2Sg-sit PC
'You tempted her, tried to persuade her' (lit. 'you sat in her ear').

The 'eye' figures as an organ of apprehension, though it does not appear to be intimately linked with the notion of understanding in the way 'ear' is:

jim-buṇya-wa ŋaḷawuyan-ma
eye-theirs (Pl)-Art/Per 1InPl/3Pl-say
'Let's tell them to their faces' (lit. 'to their eyes').

'Excrement' appears to be associated with a notion of personal power (that is, capacity beyond natural or usual endowment):

Ø-muña-ṇawu Ø-biḷbu
NAbs-excrement-his NAbs-strong
'His excrement is strong'.

This does not refer (just) to physical strength, usually more to spiritual power and endowment.

The term ŋani 'word, language' is often used in contexts in which it has the sense of English 'mind':

wirŋiñ Ø-bu-b Ø-ŋani
turn 3Sg/3Sg-Aux-PP NAbs-word
'He changed his mind' (lit. 'he turned/changed his word').

Ø-ŋani-ṇawu jinaŋgu jinaŋgu ja-Ø-ŋani+yug
NAbs-word-his that way that way 3-3Sg-talk
'He talks this way and that' (i.e., is indecisive).

ḍayi wumbawa Ø-war+ma
Neg one 3Sg/3Sg-hear
'He's of too many minds, has too many different opinions' (lit. 'he doesn't hear one (word)').

The last example illustrates a link between the notion of ear as the main organ of intellectual apprehension, and the 'word' as that which is formulated as a result. It was mentioned in 1.1.1.1c that the distinction between reported speech and thought is not as salient in Maŋarayi narrative as in English. The above uses of ŋani further illustrate treatment of the 'word' or external expression as equivalent to mental process.

5.1.4. Cooking terminology

Basic cooking terminology collected is not elaborate. Before European contact there were no receptacles in which to boil foods over a flame, though there were shaped wooden and bark containers used to carry food and water. The main verbs designating cooking are transitive ṇaya- and intransitive ṇa- (the latter commonly used in senses best glossed by English 'be hot, warm', also sometimes 'burn'). 'Cook directly on the fire' is expressed either by ṇaya-, or by particle+aux wub waṛ-. Of foods which are burnt by this method the particle juybjuyb is used:

juybjuyb Ø-ṇa-na
burn to crisp 3Sg-cook-PP
'It burnt to a crisp'.

Also bub+ma- means 'to set alight', as well as 'overcook, burn'.

The typical Australian method of cooking in the ground is practised; this involves digging a pit, singeing (buḷ?+ma-) the animal to be cooked over a fire if it has fur or feathers (i.e. is not fish, or the like), heating and putting stones in the pit lined and sealed with layers of paperbark and foliage, and heaping sand over the top to keep the heat in. The pit, or 'ground oven', is called yawg; the same term may be applied to the stones used to supply heat, but another term, guḷŋadu, is also used. The verb 'cook (wrapped) in paperbark' is particle+aux jey? ma-; also ḍuḍ+ma- 'roast' (intransitive) can be applied to this way of cooking. (But ḍuḍ+ma- means 'simmer' more generally, e.g. can be used to talk about mussels lodged in mud which is being warmed by the sun.) 'To steam, smoke' (intransitive) is ḍuy+ma-; this may describe the escaping of steam from a cooking pit, or the rising of smoke from a fire.

The pre-contact technology of leaching yams and various kinds of nuts is now almost never practised. Anything which requires this treatment is described as either ḷarganda or miñwi 'bitter'. The common verb 'soak, leach' is particle+aux ḍuwu waṛ-.

The usual word meaning 'raw' is ḍuṛigi; this may be applied to vegetable foods which are unripe, as well as to meats which are uncooked or only partly cooked. The most common verb for 'cook, ripen' is juḷañ-ji-, an inchoative form related to adjective juḷag 'cooked, ripe' (cf. Jawoñ joḷaŋ of the same meaning).

5.1.5. Other semantic fields

There is probably no lexical domain which may not be said to be structured in some way; see for example the verbs of striking body parts in 2.1.3a. Another example is the broad division into juya 'animals' (including birds, goannas, turtles, mussels, snakes, kangaroos and wallabies, and today also, cattle and horses), mar 'fish', and mawuj 'vegetable foods' (today including sugar, flour, etc.). (The term juya is also used to refer to menses, menstrual blood.) Of interest would be the various classifications within these domains, but since a dictionary is in preparation separately, I will not give listings here. As an example of degree of lexical specificity, there follows a listing of identifications of botanical specimens collected within the broad categories ḷandi 'tree', and lily species. Unfortunately, a good number of grasses collected (generic ḍay) could not be identified, and there were a number of subterranean edible structures which were not successfully identified.

Positive identifications were made by C. Dunlop (Berrimah Farm, Darwin), whose help I gratefully acknowledge. Identifications were usually made on the basis of one or two specimens (including fruit, bark, leaves) for each term. Though this is useful, it provides no guarantee that the scientific term is co-extensive referentially with the Maŋarayi term. Descriptions of relationships among named types of trees which I recorded indicate that there is a loose internal taxonomy to be found, seemingly limited to fairly low taxonomic levels. Much more extensive work, however, would be required in order to determine the relationship between botanical and native floral taxonomies.

Flora (not exhaustive)

babiḍa unid. root structure; balawadwad *Grevillea mimosoides*; baḷaḷbab bulrush sp.; bambiḷa *Atalaya hemiglauca*; baṇar *Owenia vernicosa*; baṇgayi *Petalostigma pubescens*; baraṇa edible stalk of lily; barwaia 'smoke tree' *E. pruinosa*; baṛagur paperbark (generic); bawa unid. underground structure; bayariṇa large river palm; bidara *Oryza rufipogon*; biḷiwiḷi *Acacia holosericea*; biṇḍiḷṇirin *Hakea arborescens*; biwarg *Cochlospermum fraseri*; bojolg soft inside of *Pandanus aquaticus* (used for torch); bulugun ripe cucumber-like structure (unripe gaṇbaṛwa); bunbunba (unnamed) *Acacia* sp.; bunja tangle of water weeds; bunjur grass sp.; buwaṇan *Triglochin procera*; ḍaḷugḍaḷug 'mistletoe' sp., *Amyema miqueli*; ḍambaḷma *Ipomoea velutina*; ḍagudagun small *Aponogeton*; ḍañbayi bulrush sp.; ḍawam *Capparis umbonata*; ḍay grass (generic); ḍayiriyiri *Erythroxylum ellipticum*; ḍija prob. *Dodonaea platyptera*; ḍilay *Brachychiton diversifolium*; ḍilil?min *Dolichandrone heterophylla*; ḍirawan *Buchanania obovata* 'green plum'; gabal *Denhamia obscura*; gabulya *Brachychiton paradoxum*; galalijoṇ edible part of *Pandanus aquaticus*; gaḷayar *Melaleuca leucadendron*; gambula *Terminalia canescens*; gamulumulu *Lysiphyllum cunninghamii*; ganaburaburа *Croton arnhemicus*; gaṇbaṛwa ripe cucumber-like structure (see bulugun above); ganbirbir *Merremia dissecta?*; gaṇaṇara lily with uncleaned skin; gaṇbaj type of palm; gaṇbar *Melaleuca* sp. (*magnifica?*); gaṇḍuy plant sp. no specimen; garanba *Ficus opposita*; gariñmal lily sp.; gaṇulgaṇul *Nymphoides*; garwag 'ghost gum' *E. papuana*; gilir *Excoecaria parvifolia*; giṇgiṇir *Terminalia erythrocarpa*; giwu *Grewia retusifolia*; gedmañ *Terminalia grandiflora*; gegegmayin lily flower; giñjili cheeky yam sp.; goṇḍoṇo native sorghum sp.; gulu *E. camaldulensis*; guḷag *Melaleuca alsophila*; guḷbub no specimen; guḷuḷuru *Flaveria australasica*; guluḍuḍun *E. bigalerita*; guḷguḷ *Gardenia megasperma*; gumgub *Nelumbo nucifer*; gunar *E. tectifica*; gunjiḍ *E. terminalis*; gunjuḷ *Cordia subcordata?* (uncertain); guṇja *Strychnos lucida*; guñiṇgin tree creeper (generic); guṇguru *E. miniata*; gurumulu unid. grass sp.; guryag *Nymphea gigantea*; guybambin underground structure; jadabul lily sp.; jalamaṛi *Amyema* 'mistletoe' sp.; jalbar lily pad; jalg spinifex; jaliñji *Ficus opposita* (see also garanba); jalmbalmbuj *Cathormion umbellatum*; jamanbara *Melaleuca viridiflora*; jambuḷ *Dioscorea* sp. 'long yam' (syn. = yumdirag); jamja *Acacia difficilis*; jamog *Pandanus spiralis*; jaṛul unid.; jawul *Terminalia platyphylla*; jeregelen cleaned lily root; jijwirij 'Leichhardt tree' *Nauclea coadunata*; jilibijilibi sweet cane grass sp.; jindiwilg *Erythrina variegata*; jiñbaṇayi 'conkerberry' *Carissa lanceolata*; joroy 'bush tea' *Ocimum sanctum*; juñjuñ *Melaleuca nervosa*; juruwug 'firestick' *Premna acuminata*; ḷaḷamuri *Opilia amentacea*; ḷarajal lily sp.; ḷarbaḷarba 'milk bush' (introduced); ḷerga 'cabbage palm'; ḷinbi *Terminalia volucris*; ṭur *Heteropogon contortus*; maḍabula *Terminalia platyphylla*; magum unid.; malaṛa *E. miniata*; manaḷiñ *Ficus racemosa*; manba *Flagellarica indica*; mañal *Barringtonia acutangula*; mawajawaja *Cassytha filiformis*; mawuṛaybambin *Brachychiton* prob. *paradoxum*; miḷimun 'lancewood' *Acacia shirleyi*; miṇiya *Timonius timon*; miñjawur bitter yam sp.; moḷag *Tarenna dallachiana*; miṛiṛib river palm (tall, 60-70'); muḍiḍi *Calytrix exstipulata*; muḷudumani small lily, just sprouting; muṇgululu unid., used for coolamons; murañmurañ *Abrus precatorius*; muriñja *E. microtheca*; muruṇguṇ *Antidesma ghaesembilla*; munburg 'wild banana', family *Asclepiadaceae*; ṇiṇgij *Persoonia falcata*; ṇalañbuṇ 'black plum' *Vitex glabrata*; ṇarañṇarañ *Crinum* sp.; wangar *Pandanus aquaticus*; waṇḍag said to be like *Ficus racemosa*, no specimen; wariñjalan *Exocarpus latifolius*; waṛaṛayan *E. ferruginea*; waṛay *Melaleuca dealbata*, also *nervosa*; waṛmi *Equisetofolia*; waymbay uncertain, *Commelina* sp.?; weṇweṇ *Ficus virens*; wigu *Grevillea refracta*; wiliñwiliñ *E. foelscheana*; wiḷida *Grewia* sp.; wiṇgir 'milk tree'; woman *Dolichandrone filiformis*; wubam

E. confertiflora; wuṛar *Melaleuca* poss. *stenostachys*; yaṇar 'ironwood' *Erythrophleum chlorostachys*; yaraḍja *Terminalia platyptera*; yarayg *Aponogeton*; yawal *E. miniata* said to be same as malaṛa; yigigulan no specimen; yilbiriñma lily sp.; yiwag no specimen; yulun unid.; yulyul unid.; yumbug *Acacia pachyphloia*; yumdirag *Dioscorea* sp. syn. jambuḷ; yumuḷun *Diospyros ferrea* var. *humilis*; yurulañan *Securinega melanthesoides*; yuruṇguj underground structure size of pea, unid.

5.2. Basic vocabulary

1. 'all' garag, garagwa ('many'); ḍawuruṇgu 'the whole lot, all, everything, everyone'
2. 'and' no NP conjunction; gana as clausal conjunction is equivalent to some uses of 'and' (see 1.3.1.1.1).
3. 'animal' juya
4. 'ashes' julbu
5. 'at' locative case -yiaṇ~gaṇ (see 2.1.1.5a)
6. 'back' gaḷa (body part); biwi 'behind, after, in back of' with dative pronoun, e.g. biwi ṇanju 'behind me' (see 2.1.1.5.6)
7. 'bad' boḍewg
8. 'bark' ḍab (same as 'skin')
9. 'because' warṇgu (see 1.3.1.1.5)
10. 'belly' ḍaṛa
11. 'big' balayi
12. 'bird' juya
13. 'bite' ḍaya-
14. 'black' gabudmayin (see 5.1.2)
15. 'blood' gurajñin
16. 'blow' wub+ma- (of wind); wuṛ? ṇaya- 'to blow up fire'
17. 'bone' ḍama
18. 'breast' gig
19. 'breathe' ṇiṛ?+mi- (cf. ṇiṛ?+min 'liver')
20. 'burn' ṇa- (intrans.), ṇaya- (trans.)
21. 'child' waṇgij
22. 'claw' ṇadbur 'hand'
23. 'cloud' miyar-awu (same as 'forehead' but requires 3Sg possessive (-ṇ)awu
24. 'cold' ḷarg (VP 'to be cold', of animate being); jalugmayin 'cold, damp' Adj
25. 'come' ṇiṇa-
26. 'count' buṛayj+ma-
27. 'cut' gunda-; mod mi- (VP+Aux)
28. 'day' no direct equivalent; 'today' = baḷaḷaga (see 2.1.7.3)
29. 'die' jaṇ? ma- (VP+Aux)
30. 'dig' ḷawg+ma-
31. 'dirty' baṛgaṛgi (cf. baṛgi 'ground')
32. 'dog' muyg
33. 'drink' ja- (same as 'eat')
34. 'dry' buṛuṛ (of ground); buṛuṛu-ji 'dry out' (MP); baṛig waṛ-'to dry' (trans.)
35. 'dull' bul?mingan (knife etc.); see also 5.1.2 on colors
36. 'dust' gunbur
37. 'ear' jaḷu
38. 'earth' baṛgi
39. 'eat' ja- (see 5.2.33)
40. 'egg' baṇgal
41. 'eye' jib
42. 'fall' way-(y)i- (MP)

43. 'far' galiya
44. 'fat' ji
45. 'father' baḍa, yirag (see 2.1a)
46. 'fear' giŋ+mi- (trans.); yiyi-ji- (MP)
47. 'feather' gululun
48. 'few' ŋayaŋayag 'a few, some'
49. 'fight' bu-yi- (RR); jaḷ?+mi-ñjiyi- (especially of siblings and close relatives)
50. 'fire' ḍamayi
51. 'fish' mar
52. 'five' no direct equivalent
53. 'float' bulbul gaḍ-ji- (MP) or yag-
54. 'flow' waṛ+ma-
55. 'flower' ŋala
56. 'fly' momomin 'blowfly'; baḷajma way-(y)i- 'to take off, fly away'
57. 'fog' buyala (also 'dew')
58. 'foot' jamgaṛ
59. 'four' no direct equivalent; ŋabaranwa ŋabaranwa 'two two'
60. 'freeze' jalug ma- (VP+Aux) 'be cold'
61. 'fruit' mawuj 'vegetable food'
62. 'full' burgaji 'full' in sense of 'real, genuine' as 'full father'; jawjaw bu- 'to fill up'
63. 'give' wu-
64. 'good' yijar
65. 'grass' ḍay (generic)
66. 'green' ḍuṛigi 'unripe, raw'; see also 5.1.2
67. 'guts' maḷa
68. 'hair' gaya
69. 'hand' ŋadbur
70. 'he' ŋariwa, ŋina (distant)
71. 'head' bab
72. 'hear' war+ma-
73. 'heart' ḍulu
74. 'heavy' gudjuṛu
75. 'here' ŋanwa
76. 'hit' bu-
77. 'hold/take' ŋama- (also ga- 'take')
78. 'horn' gudaṛu
79. 'how' no direct equivalent; jagina 'what' (see 1.1.1.2.2.1)
80. 'hunt' jaŋ+ga-; yow?mi jaŋ+ga- 'hunt with fire'; bi?ma- 'track with dog'
81. 'husband' galŋbam ('spouse') (see 2.1a)
82. 'I' ŋaya Nom., ŋan Acc.
83. 'ice' no direct equivalent
84. 'if' irrealis prefix, desiderative-intentional suffix plus clitic -bayi (see 1.1.2.4.2.5)
85. 'in' locative case (see 2.1.1.5a)
86. 'kill' bu-
87. 'knee' miŋ
88. 'know' miṛ? ŋa- (VP+Aux)
89. 'lake' bundal 'billabong'
90. 'laugh' ŋeṛ? ma-
91. 'leaf' jurgjurg
92. 'left side' jaguyagu
93. 'leg' jadba (upper); ḷañ (lower)
94. 'lie' yu- 'sleep, lie'; baŋi-ji- 'lie with one leg crossed over the other'; luḍ-ji- 'lie on belly' (MP)

95. 'live' ŋi- 'sit, exist, camp, be'; jiḷig 'alive'
96. 'liver' ŋiṛ?min
97. 'long' guḷañi
98. 'louse' magerg
99. 'man' malam 'man, person, Aborigine'; biwa 'boy' or 'male' (of any species)
100. 'many' garag
101. 'meat' juya, yalaṛ
102. 'moon' gij
103. 'mother' ŋañi, ŋala (suppletive) (see 2.1a)
104. 'mountain' ŋanan 'stone, hill'
105. 'mouth' jaṛab
106. 'name' ŋi
107. 'narrow' dinbir
108. 'near' miḷiriwa
109. 'neck' wiḍa (nape); ŋañ 'throat'
110. 'new' baḷaŋgan
111. 'night' buñaŋ
112. 'nose' miliñ
113. 'not' ḍayi, ŋiñjag (see 1.4)
114. 'old' mamayaŋgan (of inanimate things); bugbug 'old person'
115. 'one' wumbawa
116. 'other' ŋayag
117. 'person' malam (see 5.2.(99))
118. 'play' ye? ma- (VP+Aux)
119. 'pull' yur? mi-, yururu mi- (VP+Aux)
120. 'push' ḍuluḷ+ma-
121. 'rain' jiig way-(y)i- (VP+Aux); gaŋan (N)
122. 'red' belyeŋmayin (see 5.1.2)
123. 'right' yijar 'good'; mangir 'right, suitable person, the one needed, culprit'
124. 'right side' miwi
125. 'river' jadba
126. 'road' jigu
127. 'root' jaraṛ
128. 'rope' wiḷa
129. 'rotten' ŋadnar
130. 'round' ḍumbuṛ
131. 'rub' baḷaḷ bu- (VP+Aux) also means 'paint'
132. 'salt' no direct equivalent
133. 'sand' yulgmiŋ
134. 'say' ma- (also 'do'; see 1.1.1.1 on direct and indirect discourse)
135. 'scratch' larij+mi-ñjiyi- (as where one itches)
136. 'sea' guruŋaran ('salt water')
137. 'see' yiri+wa-
138. 'seed' jib-ŋawu (same as 'eye')
139. 'sew' ḷid+bu-
140. 'sharp' gamag
141. 'short' jaŋguḷ, ŋunduḍ
142. 'sing' ŋaṛgŋaṛg+ma-
143. 'sit' ŋi-
144. 'skin' ḍab
145. 'sky' gaḷawa (also used for 'uncharted country, open expanse of unknown country')
146. 'sleep' yu-
147. 'small' jijga
148. 'smell' ŋuma- (trans.); ḍiḍba bu- (VP+Aux, trans.)

149. 'smoke' jabul+ma- (tobacco); gunbur N; ḍuy+ma- 'give off steam/ smoke'
150. 'smooth' balyagbalyag
151. 'snake' bandi
152. 'snow' no direct equivalent
153. 'some' ŋayaŋayag (see 2.1.1.11)
154. 'spit' jug ma- (VP+Aux); jaṇur 'saliva'
155. 'split' ḍum bu- (VP+Aux)
156. 'squeeze' biḍiwg ṇama- (VP+Aux)
157. 'stab' ŋonjoḍ bu- (VP+Aux)
158. 'stand' jaygi-
159. 'star' galŋuda
160. 'stick' ḷandi; bargu 'nulla nulla'
161. 'stone' ṇanan
162. 'straight' junbura (as in 'straight ahead')
163. 'suck' wilg+ma-, jiŋ+ma-
164. 'sun' gañwar
165. 'swell' gal?ma ṇi- (VP+Aux)
166. 'swim' yu?yu+ma-
167. 'tail' ḍaway
168. 'that' ṇara-bayi (neuter; see 2.1.2.5 for other demonstrative forms)
169. 'there' naŋganwa (see 2.1.2.5.9.1.-2)
170. 'they' gaḷariwa (see 2.1.2.5)
171. 'thick' bundubundu (fat, of person)
172. 'thin' maḍban (of person)
173. 'think' jimi bu- 'think about' (VP+Aux); jilwa ga- 'remember'
174. 'this' (see 2.1.2.5)
175. 'then' ñaŋgi
176. 'three' ŋabaḷawa
177. 'throw' yir? waṛ- (VP+Aux)
178. 'tie' marb ŋama- (VP+Aux)
179. 'tongue' jawi
180. 'tooth' ḍir
181. 'tree' ḷandi
182. 'turn' gaḷayjmingan (as in 'my turn'); guṛ+wa-jiyi- 'turn, revolve'
183. 'two' ŋabaranwa (see 2.1.1.8.6.9)
184. 'vomit' guḷ?+ma-
185. 'walk' gaḍu yag- 'go walkabout' (VP+Aux)
186. 'warm' bobob, bobobmayin (of animates and inanimates, also bobob ma- 'be hot' of weather)
187. 'wash' wurg bu-
188. 'water' ŋugu
189. 'we' ŋi 1InDu, ŋir 1ExDu, ŋiḷa 1ExPl, ŋaḷa 1InPl, ŋar 1Tr (subject forms; see 2.1.2.1)
190. 'wet' jirŋul, jalugmayin
191. 'what' jagina (see 2.1.2.6.2)
192. 'when' jananaŋgu (see 2.1.2.6.4)
193. 'where' jana, janaŋgari (see 2.1.2.6.3)
194. 'white' ḍewomayin (see 5.1.2)
195. 'who' ŋiñja (see 2.1.2.6.1)
196. 'wide' balayi, gaṛaṛ 'broad, wide'
197. 'wife' galŋbam (see 2.1a)
198. 'wind' jab
199. 'wing' ḍuḍu
200. 'wipe' wiḍ+ma-
201. 'with' no direct equivalent; cf. 'having' suffix, 2.1.1.4.4.-5
202. 'woman' gaḍugu

203. 'wood' ŋajgan ('scrub')
204. 'worm' ŋulun 'witchetty'
205. 'ye' ŋuḷa (2Pl Subject; see 2.1.2.1)
206. 'year' no direct equivalent; see 2.1.7.3
207. 'yellow' belyeŋmayin; see 5.1.2

Appendix

As mentioned in several places in the grammar, Maŋarayi has an 'avoidance speech style', the use of which was and is prescribed in speaking with, in reference to, and also in the presence of, certain categories of kin with whom constraint and some degree of avoidance must be practised. Some peoples to the west, east, and north of the Maŋarayi also have avoidance styles (Waḍaman, Jawoñ, Ṇalakan); I did not find out whether the Alawa have such a style, but it is at least highly likely that they do, given their proximity to others who do. For early European accounts of avoidance behavior, see Gunn 1908/1954, who records instances of Aboriginal people around Elsey Station who sought not to encounter each other, and averted their gaze from each other when they did.

The principal avoidance relatives are those who label each other gaṇji, i.e., for any Ego, spouse's mother and her siblings (MMBC in Table 5-1), and also in the generation of one's children, a woman's children's spouses and a man's sister's children's spouses. Deference was and is also practised between father-in-law and children-in-law, and avoidance style can be used to him as well as in reference to him, often in a somewhat modified form (e.g. involving less lexical substitution than normal).

In the past, a betrothal was marked on a man's part by gifts from him (and perhaps his brothers or other relatives) to his intended mother-in-law, and on a woman's part by a ceremony which supposedly lasted all night, in which she danced before her mother-in-law and at the conclusion was given a stick by her future mother-in-law, the symbolism of which seems fairly obvious.

From people's accounts, it appears that a greater degree of absolute avoidance may have been practiced where a potential apouse-giving/receiving relationship had not yet been actualized. It is certainly the case today that sons- and daughters-in-law often live for periods of time in close proximity to their mothers-in-law and siblings, sometimes on one side of a shared house or camp. It seems clear also that in the past as well as today, avoidance category relatives had every expectation of continued association under the terms imposed by the avoidance relationship.

The Maŋarayi use body part terms as metonyms for kin types, again (as with swear-parrying expletives, see 5.1.1) lumping together some classes which are distinguished in the kin terminology. The associations made are the following:

Body part	Gloss	Kin type	Given explanation
jiwij	rump	spouse	refers to sharing of bed
jaṛab	mouth	child	refers to kissing and nuzzling child
ŋadbur	hand/arm	child	refers to holding child in arms
jadba	upper leg	M, MB	refers to sitting in lap
miḷiyan	shoulder	F, FZ	refers to being carried
ḷaṅ̈	lower leg	siblings	refers to concept of 'following after' both literally and figuratively, hence is also used for FF/FFZ, whom one 'follows' in agnatic descent
balal	cheek	grandchildren	refers to being fondled and kissed by them
miṇ	knee	MM, MMB	MMB holds down initiate during circumcision

Body part	Gloss	Kin types	Given explanation
maṛawar	chest	FF(Z), MBC, FM(B), MF(Z)	refers to scarification of chest by these relatives when one is initiated
ŋargma	hip	father-in-law and siblings	sharing camp, facing away
miyar	forehead	mother-in-law and siblings	aversion of gaze

There is a symbolic association of women with the lefthand side, men with the right, so that e.g., F is associated with the right shoulder, FZ with the left, and so forth. Notice that 'father-in-law' (FMBS in Table 5-1) is ŋargma 'hip' in reference to the fact that he and his wife (one's mother-in-law) might live in the same camping area and around the same hearth as Ego, but oriented in the opposite direction. Mother-in-law and her siblings are miyar 'forehead' in reference to the fact that one had to turn aside the head when encountering them, and could not face them head-on.

Nonverbal aspects of avoidance behavior include the aversion of gaze, and other signs of indirect orientation, also on many occasions some maintenance of spatial distance, and limitation of direct (hand-to-hand) transfer of items except by prescribed methods, either by simply leaving them on the ground, or by handing the things with the extended left hand clasped at the wrist in the right hand.

Abusive behavior or improper talk directed towards, or in the presence of, one's avoidance relatives, are socially considered sufficient reason for one to engage in wild and berserk behavior, usually towards the offender. This shows respect for the avoidance kinsmen by the attempt to defend their sensibilities and their person. See appropriate remarks in 5.1.1.

Synonyms for avoidance category relatives included maḷbuŋ, ŋaḷamu(?) (which in the avoidance style is used as substitute for ŋadbur 'hand', presumably in reference to the greater use of hand-signs in their presence), and ŋiñjil (see text fragment in 1.5.1.1.-2). The latter also serves as a particle which commonly introduces avoidance style speech, or occurs sporadically throughout to mark speech as avoidance style.

Other formal linguistic features of the style are the raising of pronominal number, a moderate amount of lexical substitution, and greater use of irrealis verb forms. A single avoidance category relative is referred to as 3Pl ('they'), and if spoken to directly, must be marked as 2Pl (in verbal cross-reference, by pronouns, etc.); greater numbers of such relatives are also treated linguistically as plural. Raising of pronominal number has implications for first person forms. If one wishes to say that one is going somewhere with one's avoidance category relative, 1ExPl forms (rather than 1ExDu) must be used to mean 'he/she and I'. Similarly, in talking inclusively to an avoidance category relative, 1InPl rather than 1InDu forms must be used.

Lexical substitution, unlike that reported for Dyirbal (Dixon 1972: 32) in north Queensland, is only partial. Much of it can be described as straightforward substitution of one item for another within the same word class (noun for noun, verb for verb, etc.). Examples are:

EV(eryday) nouns	AV(oidance) nouns	
juya	jaryaṛ	'flesh food, animal'
ŋugu	buyala	'water' ('dew' in ordinary language)
mawuj	mirŋun	'vegetable food'
baṛagur	ḷigḷigmin	'paperbark'
garab, jeler etc.	bombom	'axe'

EV(eryday) nouns	AV(oidance) nouns	
ŋadbur	ŋaḷamu?	'hand'
jamgaṛ	madjaṇḍa	'foot'
ḍirag (marine) / warbiyan (freshwater)	golomomo	'crocodile'
baḷgij, ŋirmu etc.	ḍeḍey?	'small wallaby spp.'
gaṛawi (male) / ŋalijiri (female)	gunbaḍij	'antelopine kangaroo'
mundulbiri	gaṛambayan / burburbmayin ('hairy')	'echidna'

EV verbs	AV verbs	
bu-	mamaj+ma-	'hit'
wu-	maḷ+ma-	'give'
yum+bu-	giḷgiḷg+u-	'leave, abandon'
ja-	jamañmañ+bu-	'eat, drink; consume'
gaḷg+ma-	gaḷañ+bu-	'spear'
yu-	gi+wu-	'sleep'
jaŋ? ma-	yum+bu-jiyi- / bab+ŋami-ñjiyi- / wawu-jiyi-	'die'
jug-	jañja+wu-	'swear at male'
	ŋalawaŋ? waṛ-	'swear at female'
bu-yi-	jaḷ?+mi-ñjiyi-	'fight'

Note here as in most avoidance styles there is, for some vocabulary, a many-to-one relation of substitution between ordinary and avoidance style words (i.e., a single avoidance word does the duty normally performed by a number of ordinary words). However, there is also mild proliferation of vocabulary, e.g., the sex-specific substitutes for 'swear' and a number of words meaning 'to die'. Not all of the latter are exclusive to the avoidance style per se. Note the reflexive-reciprocal yum+bu-jiyi- (lit. 'leave oneself'); the verb yum+bu- is also used in speaking of the death of relatives towards whom one prescriptively has a respectful attitude (especially, of parents) with the bereaved as direct object (ŋa-baḍa ŋan-yum+bu-b 'my father left me', i.e. 'died'). See also another euphemistic way of speaking of death with particle+aux jaḷug yag- 'forget' in 2.1.1.2.2.1). Also the verb jaḷ?+mi-ñjiyi- for 'fight' is the reflexive-reciprocal of ordinary jaḷ?+ma- 'jar, knock into/over' and is frequently used to refer to violence among siblings. Thus by taking a verb which connotes a lesser degree of violence, one minimizes the expression of violence between those whose relation ought to be harmonious.

Some other substitutions are effected by using ordinary words more broadly. For example, ordinary ḷandi 'tree, stick' is used as avoidance for ordinary bargu 'nulla nulla', as well as for tree. The effect is to refer to nulla nullas as if they were simply a type of tree or wooden implement, the expression denying recognition of their specific function as fighting implements. However, the opposite mechanism also accounts for some substitutions, i.e. an ordinary word which is semantically fairly *restricted* within a lexical domain can be used more broadly. For example, note that ordinary buyala 'dew' is used as avoidance substitute for 'water'. The effect produced by taking over the specialized term for the more general reference is that of stylistic elevation of the avoidance vocabulary. The effect depends on knowledge of distribution of items in both ordinary and avoidance styles.

Some other substitutions are by replacement within the same word class, but with grammatical derivation. Some metonymic (especially

synecdochic) forms are derived with proprietive suffix added to a noun designating a part. Thus the many ordinary words for turtle species are replaced by ḍadaḷ-yi 'having carapace' (pl. ḍaḍaḍaḷ-yi), ordinary words for birds or flying foxes by ḍuḍu-yi (pl. ḍuḍuḍu-yi); ordinary malam 'man' is banban-yi 'having woomera'; gaḍugu 'woman' is gamag-ji 'having digging stick'. Some metonymy is by simple substitution not involving derivation, e.g. gunbur 'smoke' for tobacco.

Finally, some synecdoche involves the use of multi-constituent NPs (instead of just single nouns), e.g., the various ordinary catfish terms are replaced by miyarawu gaṛaṛ (miyar- 'forehead', -ŋawu 'its', gaṛaṛ 'broad').

Another method of nominal substitution is by the headless 'actor' relatives described in 1.1.2.3.6b, and sometimes by other, non-subordinate clauses. Such clauses as these are quite conventionalized, their meaning understood by all without guesswork.

The effect of substitution overall is such that, while reference is understood and preserved in context, sense relations are quite altered in comparison with the ordinary style.

Use of irrealis mood is greater than in the ordinary style, and is especially frequent in requests and questions to an avoidance style kinsman, suggesting tentativeness:

Ø-garijindin a-ŋanba-maḷ+ma-wu bagana?
NAbs-billy-can Irr-2Pl/1Sg-give-DI any
'Would you/might you give me a billy-can?'

Much of the content of avoidance style speech is quite distinctive; there is much expression of solicitude, much commentary upon the presence and activities of avoidance category persons (often given as reasons for doing or not doing something, etc.). A separate, comparative article on avoidance style usage is in preparation.

As the verbal substitutes for 'die' above show, there is increased usage of the reflexive-reciprocal category compared to the ordinary style, so that avoidance category persons are linguistically represented as acting only upon themselves and at their own pleasure:

wuḷa-gar?min+mi-ñji-ni ḍaṛa-wuŋya
3Pl-do properly-RR-PC stomach-theirs (Pl)
'He/she (avoidance category person) did properly (facing away)'.

The above is the kind of comment that might be made by a person about his avoidance category relative, remarking on the propriety of facing away (ordinary gar?min+ma- 'do properly').

Many avoidance expressions are stylistically somewhat récherché, and show a stylized use of grammatical categories:

yaw+min-gaḷama ga-ŋanba-wu-n
shame-All -3-3Pl/1Sg-give-Pres
'I am embarrassed' (lit. '(avoidance category person) gives me to shame').

(See 5.1.1 for other expressions.)

buy? ŋanba-wu-na ŋanjugu ŋa-waḷiŋ-ŋanju
show 3Pl/1Sg-Aux-PP mine M-sweetheart-mine
'She showed/revealed to me my "sweetheart"'.

This could be said in order to point out that a person present or visible is one's mother-in-law, i.e. it has the force 'she is my mother-in-law'. The noun waḷiŋ is also used for 'initiand'; avoidance category relatives tend to refer to those upon whom their mutual affinal relation is based (i.e., spouse or own child, as the case may be) in terms of the *other's* relation to them. That is, mother-in-law speaking to child-in-law tends to refer euphemistically to child-in-law's spouse (her own child) as 'your

sweetheart', and child-in-law tends to refer to own spouse as jiligarl-ṇuṇya 'your (pl.) guardian/protector'.

As in many parts of Australia, the avoidance style is now rarely used by younger people. This is not hard to explain when one considers that use of the Aboriginal languages generally among younger people in smaller speech communities is very much on the decline; as illustrated above, the avoidance style depends for its effect upon its relation to the ordinary style. Most Aboriginal-language, avoidance style usage in Maṇarayi is now one-sidedly from older to younger persons, although many aspects of non-verbal avoidance usage continue to be observed symmetrically.

The brother-sister avoidance relation, strong among Arnhem peoples to the north such as Jawoñ, is observed in a milder form by the Maṇarayi.

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