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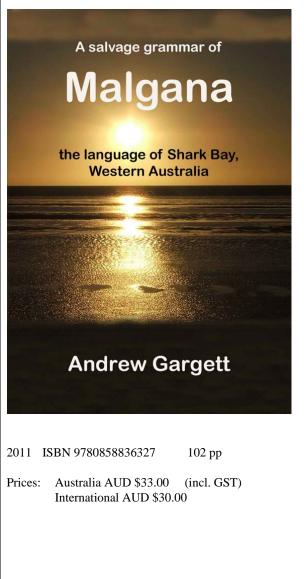
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# 624 A salvage grammar of Malgana, the language of Shark Bay, Western Australia

# Andrew Gargett

There are no longer any speakers of the West Australian Aboriginal language Malgana who have any degree of fluency, and the series of analyses in this report are based on data from audio tapes made in the middle of the last decade of the 20<sup>th</sup> century, as well as various written materials produced over more than 150 years. This grammar is therefore an attempt to salvage from the scarce material available as complete a description of Malgana as possible.

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# **Pacific Linguistics 624**

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Andrew Gargett



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The cover photo is of Denham Lookout at Sunset, located 5 km from Denham Town centre. It was taken by Kymberley Oakley, who is a Malgana person. Kymberley's great grandmother is Minnie O'Dene, one of the original Malgana consultants for the material collected by Doug Marmion and Doreen Mackman.

Copyedited by Sandra Davenport Typeset by Jeanette Coombes Cover design by Julie Manley Printed and bound by Addcolour Digital Pty Ltd, Fyshwick, Canberra Dedicated to the afternoons Topsy, Minnie, Doug and Doreen spent sitting on Topsy's porch in Denham, within walking distance of the ocean, talking about Malgana.

I often wished I could have been there too.

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# Preface

There are no longer any speakers of the West Australian Aboriginal language Malgana who have any degree of fluency, and the series of analyses in this report are based on data from audio tapes made in the middle of the last decade of the 20<sup>th</sup> century, as well as various written materials produced over more than 150 years. This grammar is therefore an attempt to salvage from the scarce material available as complete a description of Malgana as possible.

Nevertheless, the character of Malgana shines through what remains. For example, typical of Pama-Nyungan languages in general, Malgana exhibits split-ergative nominal marking, and of Aboriginal languages of the central West of Australia in particular, Malgana displays a full contrastive laminal series of stops in its phonology. A conscious effort has been made to provide in this grammar as many resources as possible for the researcher interested in comparative study of the surrounding languages. To this end, a (Malgana-based) comparative wordlist has been constructed for the languages of the region centring on the Murchison River: Malgana, Nhanda, Badimaya, Wajarri, and (Southern and Northern) Yingkarta.

Thanks first of all to the Yamaji Language Centre in Geraldton, Western Australia, for hiring me to complete the project that led to this grammar. And special thanks to Doreen Mackman of Yamaji, my first contact on the project, who has provided a great deal of support and guidance. Doreen very kindly ferried me to the heart of Malgana country, and to the town of Denham, on a trip which provided the initial stages of my research with a solid reference point. During this trip I met many members of the Malgana community. Heartfelt thanks are due to the various members of the community and to the Yatjula Club for their assistance during this trip. My hope is to have represented something of the essence of the Malgana language, and to have put it in a form that can be widely accessed.

I would like to make a special acknowledgment of the help of my teacher Dr Alan Dench, of the Linguistics Department at the University of Western Australia, who provided very generous and helpful comments on an earlier draft of this grammar (especially the problematic section on verb morphology).

I would also like to thank Dr Alexis Palmer of Saarbruecken University, Germany, for some very thorough proof-reading of the manuscript.

Finally, many thanks to the team at Pacific Linguistics for their support and patience. In particular, thanks to an anonymous Pacific Linguistics reviewer, whose comments have been of enormous help in drafting the final version.

# Abbreviations and conventions

## **Conventions**

[]	surround phonetic representation
'	primary stress
"	secondary stress
V	vowel
С	consonant
-	morpheme boundary
NP	noun phrase
-Ø	null form

# Nominal abbreviations

ERG	ergative
ABL	ablative
ABS	absolutive
LOC	locative
COM	comitative
ALL	allative
INSTR	instrumental
DAT	dative
INCH	inchoative

# Verbal abbreviations

PST	past tense
PRES	present tense
FUT	future tense
IMP	imperative mood

# **Other abbreviations**

	· c
sp.	species of
MAL	Malgana
NHA	Nhanda
WAJ	Wajarri
YN	Northern Yingkarta
YS	Southern Yingkarta
BAD	Badimaya
РК	Proto Kartu
NYU	Nyungar

# **Pronoun** abbreviations

NOM	nominative
ACC	accusative
POSS	possessive
1,2,3	first, second, third person
SG	singular
PL	plural
DU	dual

#### 1.1 Linguistic type

Malgana is typical of the Pama-Nyungan type of Australian languages. Malgana phonology involves six points of articulation for consonants, including a laminal contrast, and a three vowel system with some evidence of phonemic vowel lengthening.

Further in common with languages of the Pama-Nyungan type, Malgana has an agglutinative, suffixing morphology. The remnants of a split ergative/accusative case system for nominals versus pronouns was found. The set of pronouns which has been determined for Malgana is consistent with other pronoun sets from the region. Malgana verbs inflect for tense and mood, and these inflectional categories are realised by inflectional markers which are unique amongst surrounding languages. In addition, there is some evidence of a purposive construction, and the possibility of various nominalised forms.

Syntactically, Malgana has a relatively free word order. Apart from some evidence for non-verbal and basic verbal clauses, as well as for simple polar and content question structures, there is no detailed information regarding more complex syntactic patterns for Malgana.

#### 1.2 Dialects, territory and neighbouring languages

The name given to the language by its speakers is Malgana ["mal.ga.'na],<sup>1</sup> with some slight variations,<sup>2</sup> and this is also the name by which the language is known in surrounding areas. In this section I will consider the area over which Malgana was spoken, and the relationships between Malgana and surrounding languages. However, much of what will be presented here is limited by the paucity of available information. A great deal of detailed information is required to conclusively determine relationships between languages, and amassing such detail for Malgana is simply not possible. However, in the

For details on stress, see \$2.4.

Variations in the literature include: Madjana (attributed to von Brandenstein 1966), Majanna (Barlee 1886), Maldjana (Capell 1963), Malgana (von Brandenstein 1966; Tindale 1974; Douglas 1981), Malyana (unknown). Tindale (1940) in fact used the spelling Maldjana, although Tindale (1974) describes this as an 'incorrect interpretation of g symbol in [the] first edition' adding that this was 'copied in [the] AIAS list' (Australian Institue for Aboriginal Studies). For a list of alternative names, see the following link published by Nicholas Thieberger: http://coombs.anu.edu.au/WWWVLPages/ AborigPages/ LANG/WA/4\_3\_8.htm

sections which follow, I will examine comparative linguistic evidence where this is useful for revealing aspects of Malgana.

Malgana was spoken in and around the Shark Bay (Gathaagudu) peninsula, at Carrarang, Tamala (Thaamarli) and Nanga Stations, and possibly even as far south as Gie Gie Outcamp (Blevins 2001:5), to the Murchison River area near Ajana,<sup>3</sup> and from Wooramel River south to Hamelin Pool. Tindale (1974) suggests that the main Malgana territory was the inland plateau, but it is likely the Malgana people lived at different periods across the entire area of Shark Bay, especially Thaamarli and Nanga. Cooper (1997) and Edwards (1999) are histories written about the area which include information about the Malgana presence in Shark Bay.

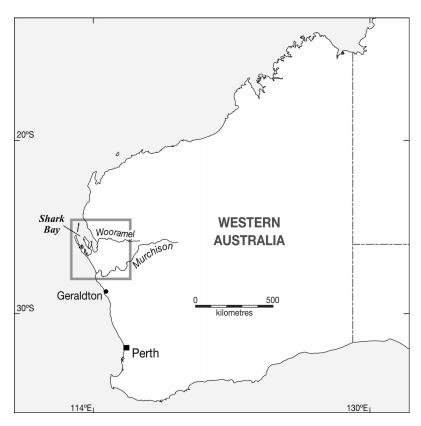


Figure 1: Outline map of Western Australia, showing the approximate location of Malgana

Various sources list the names of other languages reportedly neighbouring Malgana to the south, these being Targuda (or Daguda), Buluguda, Damala and Watjanti. In particular, O'Grady, Voegelin and Voegelin (1966:37) list these neighbours as having dialectal relationships to Malgana (established by more than 71% lexical similarity). And they refer to Malgana, Targuda, Buluguda, Damala and Watjanti as 'communalects' (O'Grady, Voegelin and Voegelin 1966:23–25). Tindale (1974), however, lists Daguda (i.e. Targuda) as the alternative name for a group of Nhanda speakers, and Buluguda, Damala and Watjanti as being both alternative names for Nhanda speakers as well as place names. A number of explanations are possible here. For example, one of the major settlements south

 $<sup>\</sup>frac{1}{3}$  60 kms east of Kalbarri.

of Shark Bay is Tamala Station, known as Thaamarli in Malgana, and the term used by O'Grady et al. (1966) and Tindale (1974) may have referred to the place rather than a distinct group of people. In addition, the names Daguda/Targuda and Buluguda both apparently use a variant of the Malgana placename suffix *-guda* (Blevins 2001:2).<sup>4</sup> It is thus possible that Daguda/Targuda and Buluguda, as well as Tamala and Damala, were indeed groups of Malgana, although more evidence would be needed to substantiate this.

Surrounding languages include: Yingkarta to the north (Dench 1998), Nhanda to the south (Blevins 2001), Wajarri to the east (Douglas 1981), and Badimaya to the south-east (Dunn 1988). Various analyses of the relationships between languages of this area have been presented, for example Blevins and Marmion (1994), Dench (1998:9–12), Blevins (2001:5–7). Until now, Malgana has not been lexically compared to surrounding languages, and any conclusive comparison of this kind is impossible considering the limited lexical information available (approximately 330 words). Such a comparison, however, would be suggestive, even if only because it throws light on other issues. I have put together a comparative wordlist,<sup>5</sup> and from this list the following percentages of lexical similarity between Malgana and surrounding languages were obtained.<sup>6</sup>

	Nhanda	Wajarri	Yingkarta	Badimaya
Malgana	46%	58%	46%	43%

Note that the higher figure for a comparison of Wajarri and Malgana may well be due to the fact that the data being used for this list is relatively more recent than that being used for the other languages.<sup>7</sup> Also, Blevins (2001:6) reports a great deal of intermarriage between Malgana and Nhanda, with an attendant high rate of bilingualism. Combined with this, the steep rates of decline experienced by both languages for many decades before the main consultants were recorded would likely have enhanced any lexical resemblance between languages already in close contact. And the nature of the language material which was collected may have been affected by dramatic language attrition. For example, a number of important semantic fields were missing from the Malgana lexicon, so that many more words for parts of the body were recorded than words to do with interpersonal communication, material culture or traditional knowledge. Such factors may well have combined to produce a high cognate density for Malgana and Nhanda.

# **1.3** Sociolinguistic information

Information about the social context of Malgana is especially scarce. What sociolinguistic information is available for the region is centred on other languages such as Yingkarta (see Dench 1998) or Nhanda (see Blevins 2001). And unfortunately, all that can

<sup>&</sup>lt;sup>4</sup> Although as Alan Dench (pers. comm.) has pointed out, such an analysis for *Daguda/Targuda* presupposes a CV root, perhaps something like *thaa*-.

<sup>&</sup>lt;sup>5</sup> Starting from the 151 item wordlist suggested for lexicostatistical comparison of Australian languages by Alpher and Nash (1999), only 125 items were found for comparison. Note that 125 items would be considered relatively few words for the purposes of lexicostatistical comparison (where the usual range is 100 to 200).

<sup>&</sup>lt;sup>6</sup> The raw scores for each language compared to Malgana are: Nhanda = 58/125, Wajarri = 72/125, Yingkarta = 57/125, and Badimaya = 54/125.

<sup>&</sup>lt;sup>7</sup> The more recent data includes up to 20 additional items that correspond to Malgana items.

be known about the past sociolinguistic context of Malgana has to be largely inferred from secondary information sources about surrounding groups.

The Malgana probably interacted extensively with surrounding groups. Dench (1998:7) notes that Yingkarta traded pearl shells with Wajarri. The Malgana probably also traded such items as shells with other groups, perhaps with Yingkarta to the north, and perhaps with whom they also intermarried. However, Dench (1998:7) reports that the relationship between the Wajarri and Yingkarta was atypical, and the Wajarri were not generally on such good terms with coastal groups, and this may have included the Malgana. Blevins (2001:6) reports intermarrying between Malgana and Nhanda, and there was also likely other extensive interaction, such as trade between these groups.<sup>8</sup> According to Radcliffe-Brown (1931), both the Yingkarta and Nhanda also lived, like the Malgana, west of the circumcision line, and Tindale (1974) also notes the Malgana were non-circumcising. However, the Wajarri practised circumcision, and as Dench (1998:7) notes, this may have meant they had more limited contact with other non-circumcising groups, such as the Malgana, in ritual matters.

Consideration of contact between language groups may shed some light on comparisons between the languages of these groups. For example, it is possible that greater contact with the Yingkarta, and especially the Nhanda, had some influence on the nature of the Malgana lexicon. In the case of Nhanda, it was suggested above that the high cognate density for these languages is at least partly to do with contact between these language groups. However, as noted in the following sections, there is a reasonably high degree of morphosyntactic similarity between Malgana and Wajarri, and yet, as mentioned in the previous paragraph, it is likely there was relatively less contact between these language groups. This perhaps suggests that the morphosyntactic similarity between Malgana and Wajarri is a matter of linguistic inheritance rather than borrowing.

# 1.4 Past investigations

Various researchers have collected a range of items from Malgana over more than a century.<sup>9</sup> This begins with Hooley's 1865 wordlist (73 items),<sup>10</sup> continues with the publication of Barlee's 1886 wordlist (109 items). In 1960, O'Grady compiled a wordlist (90 items), and von Brandenstein recorded a language consultant in 1966. In 1991 and 1992 some material was collected by Florey. Finally, the most linguistically significant

<sup>8</sup> And the following notes by Tindale (1966) on the Malgana classification system have been provided by the Yamaji Language Centre:

(Notes: Western Australia, 1966): 'Had another session with Bob Williams. The class system of the Malgana is as follows:

Paltjari	marries	Purungu	children	Panaka
Purungu		Paltjari		Karimara
Panaka		Karimara		Paltjari
Karimarra		Panaka		Purungu'

However, I am uncertain as to whether the term 'Karimarra' in this table should in fact be spelled 'Karimara', or vice-versa.

<sup>9</sup> The best collection of these is held by the Yamaji Language Centre, Geraldton, Western Australia.

<sup>10</sup> Notes accompanying the copy of the wordlist supplied by the Yamaji Language Centre: 'This listing was collected by T. Hooley while in the Shark Bay area in 1865. It was copied from Hooley's original fieldbook by researchers from DOLA (Dept of Lands Administraton). The original is held at the Battye Library in Perth, WA, in the Lands and Survey section, red number 302.'

material was collected by Doug Marmion of the Yamaji Language Centre in 1995. Each of these sources has provided lexical material, however, Florey and Marmion have also provided grammatical material, with Marmion's data being almost the only source of material used to produce the morphosyntactic results provided in this grammar.<sup>11</sup>

During the 1990s, Doug Marmion initiated a sketch grammar which drew on material he and others had collected from the few remaining Malgana speakers.<sup>12</sup> Marmion's notes were a starting point for the present grammar. Aside from this, there has been no other grammatical research carried out for Malgana.

# 1.5 Sources

Regarding the material mentioned in §1.4, the consultants for the Hooley, Barlee and O'Grady wordlists remain unknown. O'Grady recorded the material for his wordlist in mid-March 1960 at Ajana.<sup>13</sup> Carl G. von Brandenstein, recording material for the Australian Institute of Australian Studies, interviewed Ben Karlo on 21 September 1966, probably at Tamala Station, and gathered a range of Malgana language material, including both lexical material and grammatical information, which has been incorporated in the present study.<sup>14</sup> Margaret Florey interviewed Janie Winder in Carnarvon in March 1991 and August 1992 and collected a range of lexical and grammatical material.<sup>15</sup> Another source of information comes from an interview conducted by Doreen Mackman of the Yamaji Language Centre in November 2000, with Ben Plewright, who had learned aspects of Malgana from a fluent speaker.<sup>16</sup> This interview yielded a description for one important item of grammar (see example (7) in §3.2.1).

However, the major lexico-grammatical results in this grammar are based on the data collected by Doug Marmion from Topsy Cross and Minnie O'Dene in Denham, Shark Bay, on four separate occasions in February, March, April and July 1995.<sup>17</sup> This material largely consists of taped elicitation sessions with the consultants, in which lexical data was elicited along with example sentences. Some information regarding flora and fauna was also collected. Both consultants for these sessions were effectively the last speakers of Malgana. Malgana had probably been in decline for many decades before these elicitation sessions, and English is of course the dominant language in the local speech community. It is likely that neither of the consultants had had the opportunity to fully interact in a viable Malgana speech community for some decades. Such circumstances are not conducive to the retention of detailed grammatical knowledge. In addition, their knowledge of Malgana was likely influenced by their English grammatical knowledge, and this is reflected in the recorded data. However, I am confident that enough stable lexicogrammatical patterns

<sup>&</sup>lt;sup>11</sup> Available transcriptions of Florey's material were difficult to reconcile with Marmion's material, and I was unable to obtain the sound recordings for Florey's data. Fortunately, transcriptions of most of Florey's material had been rechecked by Marmion during elicitation sessions with the main consultants, and I had sound recordings of these sessions.

<sup>&</sup>lt;sup>12</sup> This sketch grammar consists of four pages, mostly notes dealing with nominal morphology (casemarking) and some dealing with verbal morphology.

<sup>&</sup>lt;sup>13</sup> I did not have access to this recording.

<sup>&</sup>lt;sup>14</sup> I had access to this recording. This was more in the way of an interview with some Malgana being elicited, rather than a focused elicitation session.

<sup>&</sup>lt;sup>15</sup> I did not have access to this recording.

<sup>&</sup>lt;sup>16</sup> I had access to this recording. This was a focused elicitation session, recorded in Perth, Western Australia.

<sup>&</sup>lt;sup>17</sup> I had access to these four recordings. These were all focused elicitation sessions.

were recorded to have provided a wealth of information, especially considering the relative size of the corpus. And yet, in what follows I will frequently have reason to point out that many of the results which follow are inevitably, and enduringly, tentative.

# 1.6 Linguistic classification

As mentioned above, for the purposes of accurate and conclusive linguistic analysis, the available data is crucially incomplete, and, as a consequence, few conclusions can be made about issues relevant to linguistic classification using this data. Fortunately, some work has already been done for the languages of this area.

Early advocacy of a so-called Kardu sub-group was presented in O'Grady et al. (1966: 114–129). The basis for this was lexicostatistical evidence. Both Blevins and Marmion (1994) and Blevins (2001) assume the existence of a 'Kartu' sub-group, and both provide detailed arguments about the nature of this sub-group, as well as extensive historical characterisations of its members.<sup>18</sup> Dench (1998:9–12) presents a detailed consideration of the question of sub-grouping for this set of languages, and finds that the available evidence does not justify classifying these languages as descendants of a putative ancestor, such as Proto Kartu. Of course, such evidence may be forthcoming; although it is obvious that these languages are closely related, more needs to be done to conclusively demonstrate a distinct sub-group.

Since the evidence and analysis presented in this grammar can have little significant impact on the question of the classification of these languages, I will make no claim about the reality of a Kardu sub-group. However, for convenience I will use the term Kardu as an areal rather than genetic label, and refer at times to the Kardu languages, meaning the collection of languages composed of Badimaya, Malgana, Nhanda, Wajarri and Yingkarta.

<sup>&</sup>lt;sup>18</sup> However, Blevins and Marmion (1994:195) also concede that such Proto Kartu reconstructions are preliminary in nature, and may well turn out to 'reflect a higher order subgrouping of Proto Pama-Nyungan'. And Blevins (2001) suggests evidence against Nhanda being part of any 'Kartu' subgroup.

# 2 Phonology

#### 2.1 Phoneme inventory

#### 2.1.1 Consonants

As with many languages along the central coast of Western Australia, the consonant inventory of Malgana contains both an apical and a laminal contrast. The following table is a complete inventory of the consonants of Malgana, which are represented using the orthography devised for this grammar.

	bilabial	apico- alveolar	apico-post- alveolar	lamino- dental	lamino- palatal	velar
stop	b	d	rd	th	j	g
nasal	m	n	rn	nh	ny	ng
lateral		1	rl	lh	ly	
rhotic		r	rr			
glide	W				у	

 Table 2.1:
 Consonant inventory

Deviations from this orthography which will be used in this grammar are a voiceless variant of d represented as t, a voiceless variant of j represented as c, and a voiceless variant of g represented as k. These alternative symbols are used in the lexicon for just five words, and this is discussed in §2.1.1.1 below. In addition, a consonant cluster of alveolar nasal followed by a velar stop will be represented using nk, e.g. nk for wanka 'raw', rnk for marnkurru 'three' (on consonant clusters, see §2.2).

Stops are typically voiced in word-initial, word-medial and word-final positions. Although they often surface as voiceless word-initially, for example *gardabudanu* 'cut' was recorded as [kadabudanu], there is no apparent rule governing the co-patterning of voiced and voiceless stops in word-initial position. Furthermore, from recordings of elicitation sessions it is clear that consultants had no objection to word-initial, -medial or - final stops being pronounced as either voiced or unvoiced (exceptions are discussed in §2.1.1.1). All of this suggests that stops are not contrastively voiced in Malgana. However, Blevins (2001) has shown conclusively that Nhanda to the south of Malgana has a voicing

contrast for stops.<sup>1</sup> A detailed consideration of such a contrast in Malgana involves examining some interesting phonological data, and I will come back to this in §2.1.1.1.

Both apical and laminal contrasts are evidenced in the available data. The following table of minimal and subminimal pairs demonstrates the apical contrast:

	apico-alveolar	apico-post-alveolar
stops	balhada 'goanna'	ardu 'spouse'
nasals	nuunu 'yellowtail'	jurni 'carpet snake'
laterals	balu 'many'	<i>barlu</i> 'hill'

Table 2.2: Apical contrast

Some variation occurs between apico-alveolar and apico-post-alveolar consonants. For example, the alternation between *bularnu* ~ *bulanu* 'enough' is unpredictable, and demonstrates some variation between the apicals. However, the apical contrast is reasonably well established in Malgana.

The following table of minimal and subminimal pairs demonstrates the laminal contrast:

Table 2.3: Laminal contrast

	lamino-dental	lamino-palatal
stops	thali 'away'	<i>jali</i> 'kookaburra'
nasals	nhurra 'you (PL)'	nyuju 'elbow'
laterals	mulha 'nose'	bulyarru 'hungry'

Note also, that *th* is typically unvoiced, even intervocalically, while *j* is typically voiced everywhere.

For a number of reasons, it appears that the laminal contrast is perhaps not as strongly marked as the apical. First, there are more than twice the number of lamino-palatals than lamino-dentals,<sup>2</sup> although such results may well be an artefact of the limited available data. Second, there is some evidence for the fortition of the lamino-dental lateral. For example, the

<sup>1</sup> Although she (Blevins 2001:29) points out that 'the voicing contrast in Nhanda might be viewed as a length contrast.'

<sup>2</sup> The following tables with details of laminal consonant numbers demonstrate this more precisely (based on a count of dictionary items):

Total numbers of laminal consonants			
	stop	nasal	lateral
lamino-dental	41	5	5
lamino-palatal	45	34	15

Numbers of laminal	consonants in	specific	vocalic contexts
Trumbers of fammar	consonants m	specific	

	th	j	nh	ny	lh	ly
i_	2	6	0	5	1	7
_i	4	18	0	8	0	2
u_	7	2	0	3	3	4
_u	10	8	2	7	1	4
a_	6	15	3	7	1	4
_a	27	19	3	2	4	6

form *mulha* 'nose' was recorded by Doug Marmion in the 1990s, while Geoffrey O'Grady recorded the form *mutha* 'nose' in the 1960s.<sup>3</sup> Third, some variation between lamino-dental and lamino-palatal consonants is apparent in the corpus. For example, separate recordings of the first person singular pronoun demonstrate an alternation between laminal stops *th* and *j* as follows: *ngatha* ~ *ngaja*. However, both *ngatha* and *ngaja* are found in languages further afield, although not in languages immediately surrounding Malgana. The Northern Ngayarta languages Nyamal and Ngarla, as well as the Mantharta languages Jiwarli and Tharrkari just north of Yingkarta, have the form *ngatha* (Dench 1994a). And examples of variation between laminal nasals were found in the data, thus: *nhuna* ~ *nyuna* 'black snake'. So while the laminal contrast is apparently not as stable as the apical contrast, there is not enough data to be able to characterise this situation in more detail.

The distinction between apico-alveolar approximant r and tap rr is exemplified with the following subminimal pairs:

Table 2.4:	r versus rr
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apico-alveolar	apico-post-alveolar
wudura 'heart'	ngurra 'camp'

There is also some evidence that the distinction between r and rr is not clear-cut. For example, the following variation was recorded in the second person plural pronoun: *nhurra* ~ *nhura*. The tap rr is also subject to stopping, as the following example illustrates:

yalibirri ~ yalibidi 'emu'

Dench (1998:12) notes some stopping for rr in Yingkarta.

Finally, the contrast between the tap and alveolar stop is interesting. The contrast is apparently well-established in Malgana, although no minimal pairs are available. Dench (1998:14) notes that the intervocalic occurrence of the stop is rare for languages of the region, and that this occurrence of the stop is not included in reconstructions of the phonology for protolanguages across the region. The following is a comparison of the intervocalic distribution for d and rr in Malgana.

	d	rr
iCi	2	13
iCu	0	2
iCa	0	4
uCi	0	2
uCu	9	7
uCa	6	8
aCi	4	14
aCu	0	3
aCa	6	13
TOTAL:	27	66

<b>Table 2.5:</b>	d versus rr
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<sup>3</sup> However, note that *-mutha* is reasonably common; for example, it is found in Nhanda, as well as several Pilbara languages. This allows for borrowing, and weakens the suggestion about a language-internal tendency toward stopping lamino-dental laterals.

In addition, note that while rr does not occur in word-initial position, d occurs in initial position of only three words. The comparative distributions of these phonemes shows that while rr has a reasonably widespread intervocalic distribution and is apparently well-established, d has a comparatively reduced frequency of occurrence as well as a lesser range of intervocalic contexts in which it occurs.

# 2.1.1.1 A voicing distinction in Malgana?

As mentioned above, Blevins (2001) shows that Nhanda consonants have a voicing contrast. Malgana and Nhanda share a number of grammatical features, although their grammars remain quite distinct as will become apparent below. Thus the question arises as to whether Malgana perhaps also had a voicing distinction. There are no extensive sets of minimal pairs demonstrating a voicing distinction for Malgana, and due to the paucity of primary data, and the impossibility of collecting any further data, a conclusive answer is unlikely. But it will be revealing to nevertheless consider possible evidence bearing on this question.

Blevins (2001:29) presents the following 'default' rules for voicing in Nhanda:

- i. If -sonorant is geminate, then it is -voiced
- ii. If -sonorant is word-initial, then it is -voiced
- iii. Elsewhere, a -sonorant is +voiced

She further claims that voiced word-initial consonants in Nhanda are likely due to borrowing, from English, Wajarri, or Nyunga (Blevins 2001:14–15). There is no evidence that Malgana has geminate stops, and as mentioned above, the voicing of word-initial stops freely varies between +*voiced* and -*voiced*, while elsewhere stops surface as +*voiced*. Malgana likely had no word-final obstruents, and so it might be asked whether intervocalic stops ever consistently surface as -*voiced*.

There are only five words which consistently have intervocalic voiceless stops, listed as follows ('c', and 't' represent unvoiced palatal and alveolar stops respectively).

buci	[buci]	'cat'
thaaka	[thaːka]	'shark'
nguutu	[ngu:tu]	'horse'
icithayiniyan	[icidayiniyan]	'become upset'
gutiya	[gutiya]	'one'

Several points can be made about these words. First, [buci] is an obvious borrowing from English *pussy(cat)*, and the intervocalic consonant likely surfaces as a voiceless palatal stop [c] to match the voiceless intervocalic alveolar fricative /s/ of the English source. Also, the final voiceless velar stop [k] in English *shark* likely accounts for the same voiceless velar stop in a corresponding position for [tha:ka]. However, it should be noted that evidence from other Australian languages would seem to suggest that voiced stops typically follow long vowels (e.g. Evans 1995:730–731; Austin 1988; Dixon 1980:215). Thus, the fact that [k] surfaces even though it follows a long vowel, perhaps suggests that the presence of this unvoiced stop is a lexical matter.

Second, the voiceless stop in [ngu:tu] also follows a long vowel, which, as already noted, is unusual for Australian languages. There are forms which are similar to *nguutu* in various surrounding languages, all with the meaning 'horse': Nhanda *nguutu*, Badimaya

*ngud*, Yingkarta *nguurru*, Wajarri *ngurru*, Nyunga *ngurt*. This word is a likely regional neologism, and was quite possibly borrowed into Malgana from one of these surrounding languages, such as Nhanda.

Third, since vowel-initial words are apparently very rare in Malgana, comprising only 2% of the available lexicon, then the lack of an initial consonant in [icidayiniyan] makes it a phonologically unusual Malgana word. Indeed, Nhanda has *icici-* 'pain, hurt', thus suggesting a borrowing from Nhanda, then some process of reduction such as *icici- ici-*, and finally the addition of the Malgana *-thayi* inchoative suffix.<sup>4</sup> Note also that the source of the stem may be some kind of interjection, which could well have been subject to unusual phonological constraints (perhaps sound symbolism and the like). It should also be noted that on one occasion this word was realised as [ijidayiniyan], i.e. with a voiced intervocalic [j]. So this form is not particularly strong evidence for the presence of vowel-initial words in Malgana. Some possible cognates are: Nhanda *icici-*, Badimaya *dyidyida* 'to tease', Wajarri *tjirrtjirr/tjitji* 'shy, ashamed, embarrassed'.

Fourth, [gutiya] has cognates Nhanda *kutiya*, Yingkarta *kurriga*, Wajarri *kutiya*/ *kurriya*, Badimaya *gurriya*. The context of elicitation was very slow speech, which may have impeded the more usual voicing of intervocalic stops in Malgana. In addition, slower speech also demonstrates that the phoneme in question is a stop rather than a rhotic tap as it is in Yingkarta, Wajarri and Badimaya. This example is more problematic than the others, since numbers are typically considered to be 'core' vocabulary, and less likely to have been borrowed. However, given the likelihood that there has been much borrowing between Nhanda and Malgana, and also the fact that Nhanda already has the form *kutiya*, where such devoiced intervocalic stops are expected, then this at least suggests one possible source in surrounding languages from which this item could have been borrowed.

I conclude from these four points that the above examples of voiceless intervocalic obstruents in these Malgana words do not conclusively point to a significant presence of unvoiced stops in Malgana, and there is no compelling evidence for a voicing distinction for stops. However, since Malgana stops typically surface as voiced, I will use the series b, rd, d, j, g to represent the single stop series in Malgana. I will also use the alternative consonant symbols c and t mentioned earlier for the five words discussed in this section.

# 2.1.2 Vowels

The vowel system of Malgana consists of three members, as follows:

	front		back
high	i		u
low		а	

Table 2.6: Vowel inventory

The high, front vowel i is unrounded, while the high, back vowel u is rounded. Note that the low vowel a is not especially front, back or rounded.

<sup>&</sup>lt;sup>4</sup> Indeed, *-thayi* is a highly productive derivational suffix, used for deriving fully inflecting finite verb forms. And one consultant even suggested it could be attached to an already fully inflected finite verb. For more on this, see §3.2.2.

There is evidence to suggest that all three vowels are lengthened in the initial, and perhaps even non-initial, syllables, and, as I discuss later in this section, even some evidence that this may have been contrastive. Three examples of length contrast were recorded for u, two in the initial syllable and one non-initial, while six were recorded for a, three in the initial syllable and three in the second syllable. The full list of recorded examples is as follows:

Long vowels	Examples	
uu (first syllable)	nguutu 'horse', nuunu 'yellowtail, ato fish'	
uu (second syllable)	wuthuuga 'spear'	
aa (first syllable)	thaaka 'shark', Thaamarli 'Tamala Station', yaana 'silly'	
aa (second syllable)	Gathaagudu 'Shark Bay', wilyaa 'seagull',	
	<pre>thalaaba(?) 'ashes (cold)'</pre>	

Table 2.7: Long vowels

Unfortunately, the audio recording for *thalaaba* was unavailable, and it remains unverified. In addition, a variant recorded for *Gathaagudu* was *Gatharrgudu*, which perhaps suggests that this lengthening of the vowel is a consequence of the loss of the *rr* phoneme, rather than the occurrence of an original long vowel.<sup>5</sup> I will come back to this alternation between *aa* and *arr* immediately below. And note that *wilyaa* has the consistent variant *wilya* without the lengthened vowel. And see §2.4 below for a discussion of the possible relationship between stress pattern and vowel length.

It appears there is even a minimal pair in the data which involves vowel lengthening:

wilyaa 'seagull' wilya 'shell'

Since the forms of these distinct words are distinguished only on the basis of the difference in vowel length, then this perhaps suggests that vowel length is a phonemic distinction in Malgana, and that *aa* is a phoneme in Malgana. However, the consultant was not presented with both these words in the same elicitation session for comparison. And there are perhaps other explanations for the lengthened vowel in this example. For example, as with *Gathaagudu* ~ *Gatharrgudu*, it might well be the case that *wilyaa* has lost a word-final *rr*, and that originally it was closer to \*wilyarr. In addition, Southern Yingkarta has the form *wilyara* 'seagull' (Austin 1992d), and Malgana may have had the same form *wilyara*, which then lost the *r* from the final syllable, with the result that the penultimate and ultimate vowels collapsed together, forming a lengthened vowel, and the form became *wilyaa*. This additional evidence at least casts doubt on the above minimal pair for vowel length.

However, another apparent minimal pair for vowel length was recorded:

*wuthuuga* 'spear' *wuthuga* 'dugong'

<sup>&</sup>lt;sup>5</sup> This suggestion of course involves arguing further that the timing slot for the deleted rr survives, and the vowel lengthens to fill in this 'spare' slot.

But note that the form *wuthuuga* was only recorded once, and there was some confusion as to whether the vowel is actually lengthened here, and there are apparently no cognate forms in surrounding languages. In summary, there is no conclusive evidence that vowel length was contrastive in Malgana.

## 2.2 Phonotactics

The Malgana minimal word is disyllabic. No monosyllabic words were recorded in the data. As exemplified by the name of the language, Malgana syllables generally have the profile CV(C), for example, [mal.ga.na]. Although Malgana words typically begin with consonants, the following is a list of all words which are vowel-initial:

ajugawa	'yam'
ardu	'spouse'
icithayi-	'become upset'
irra	'mouth'
irrabuga	'dolphin'
irrumarri	'bream'
udbi	'skin'

Since these vowel-initial forms make up around 2% of the lexicon, then perhaps some other explanation might be found for their presence in the language other than suggesting some language-internal process involving the dropping of word-initial consonants. It might be that they are in fact borrowed into the language as vowel-initial words. For example, the following table gives the list of these Malgana words together with some suggested source words from surrounding languages (NHA = Nhanda, WAJ = Wajarri):

ajugawa	NHA <i>ajuga</i> ('bush yam')
ardu	NHA ardu
icithayi-	NHA <i>icici</i> - ('pain, hurt')
irra	NHA idaji, WAJ ira
irrabuga	n/a
irrumarri	n/a
udbi	NHA wurtpi, urtpi

From this table, it can be seen that only *irrabuga* and *irrumarri* do not have equivalent forms in surrounding languages, while all the other items are significantly similar to their Nhanda or Wajarri equivalents and may have been borrowed. Note that optional omission of word-initial *y* is an areal feature, which surfaces, for example, in the language name *Yingkarta* sometimes being realised as *Inggarda* (Dench 1998:5, 14). It is entirely possible that vowel-initial forms such as *irrabuga* and *irrumarri* are similarly the consequence of a process which was widespread in Malgana, with the apparent uniqueness of these two forms being the result of limited available data. And note that the same argument could be made for forms such as *udbi*, which may have been the result of an optional omission of word-initial *w* (e.g. Blevins 2001:19).

Interestingly, Blevins and Marmion (1994:204) reconstruct a 'Proto Kartu' form \*kurlpi, which only emerges in Nhanda as *wurtpi*, *urtpi*. Additionally they suggest that a

Proto Kartu form \*kurlka 'ear' emerges as Nhanda *wurtka*, *urtka*, but as Malgana *kulka*<sup>6</sup>. In other words, regular correspondences such as these suggest that the Malgana form for 'skin' should be something closer to \*kulpi. Assuming that this is correct, then it seems that at some point *urtpi*, and perhaps also *wurtpi*, were borrowed from Nhanda and replaced the original Malgana form.<sup>7</sup> But note that the Nhanda source for Malgana *udbi* could have been either *wurtpi* or *urtpi*. Indeed, both Barlee (1886) and O'Grady (1960s) claim that Malgana has the consonant-initial variant, *wurdbi*.<sup>8</sup> Thus, it is entirely possible that *udbi* has emerged in Malgana from a previous form *wurdbi*. Together with the lack of sources for the borrowing of *irrabuga* and *irrumarri*, such evidence suggests that Malgana has indeed undergone a language-internal process of dropping initial consonants.

However, the major obstacle to this suggestion is the extreme rarity of vowel-initial words in the Malgana lexicon. Leaving aside the possibility that this rarity may be an artefact of a limited corpus, there just do not seem to be the correspondences to sustain the claim that the Malgana lexicon has been subject to a consistent language-internal process involving the dropping of initial consonants. The same observation is made by Blevins and Marmion (1994:206, n16). It is just as possible that both *wurtpi* and *urtpi* were borrowed into Malgana, and even that *irrabuga* and *irrumarri* were also borrowed, perhaps from Nhanda, and that the original sources of these words have been lost through language attrition. Therefore, although there are some vowel-initial words in the Malgana lexicon, they are likely to have been borrowed, and there is no conclusive evidence that the dropping of word-initial consonants was a feature of Malgana.

The following consonants occur in stem-initial position (total numbers of occurrences are given in brackets).

b(68)	d(3)	th(16)	j(15)	g(37)
m(45)	n(7)	nh(3)	ny(6)	ng(34)
w(62)			y(27)	

 Table 2.8:
 Stem-initial consonants

However, note that both the initial apicals d and n, as well as the laminal nasals nh and ny are particularly rare in initial position, and together they make up barely 6% of the total vocabulary which has been recorded.<sup>9</sup> As can also be seen from this table that the apical

<sup>8</sup> The fact that these wordlists are separated by almost a century perhaps rules out error.

<sup>&</sup>lt;sup>6</sup> Although the variant *gurlga* was also recorded in the data which informs the current grammar. Also note the difference between Blevins and Marmion's (1994) orthography and that used in this grammar.

<sup>&</sup>lt;sup>7</sup> Based on the same evidence regarding correspondence, another example of possible borrowing from Nhanda into Malgana is: MAL *wuduru*, with Proto Kartu \*kurturtu, and NHA *wurturru*, *wurdudu*. In other words, the Malgana cognate should have descended as something like \*kurturtu.

<sup>&</sup>lt;sup>9</sup> Blevins (2001:43–44) notes that initial apicals, such as *d* and *n*, are not found in native Nhanda vocabulary, and nor have they been reconstructed for Proto Kartu. Regarding other languages neighbouring Malgana, Douglas (1981) lists various Wajarri words with initial apicals, Dunn (1988:43–46) lists no occurrences of initial apicals for Badimaya, and Dench (1998:14–15) similarly demonstrates an absence of initial apicals in Yingkarta. There are various consequences of this. While, nasal laminals are represented to varying degrees in all these languages, actual figures are difficult to track down. However, Dunn (1988:44) explicitly notes that, out of a total of 123 words analysed, eleven palatal nasals occur, while only one dental nasal occurs.

contrast noted for Malgana in §2.1.1 does not occur word-initially.<sup>10</sup> And laterals and rhotics never occur word-initially.

Determining which consonants are able to occur in word-final or stem-final position is somewhat more involved. There is some slight evidence that nasal stops are tolerated in word-final position, although apparently none that they occur in stem-final position. Numerous verb forms have been recorded with final *-n*, for example, *yarran* 'growl'. An example of the velar nasal stop *ng* occurring in word-final position is the word *birlirung* 'everlastings'. A likely cognate in Nhanda is *pirluru* 'everlasting flower'. And due to its being unusual with respect to Malgana phonotactics, *birlirung* may well have been borrowed, although I have not been able to track down a suitable source language. No occurrences of word-final *-m* were recorded.

The occurrence of word-final nasal stops was also noted in two wordlists completed in the nineteenth century, one by T.H. Hooley in 1865 and the other by F. Barlee in 1886. There are examples from both Hooley's and Barlee's lists involving verbs with word-final nasal stops, and I will suggest below that such patterns are explained by the presence of verbal suffixes. However, Barlee also has several examples involving nominals. For example, Barlee's list contains a single instance of a word final *ng* in *koobang* 'camp'.<sup>11</sup> More recent Malgana speakers did not confirm the existence of this word in the language. And more curious still, Barlee reports a number of nominals as having a range of word-final obstruents. I have listed them here with modern equivalents where these are available.

Barlee (1886)	Modern equivalents
kaliat 'emu'	garlaya
koobang 'camp'	n/a
<i>japaltuk</i> 'native companion'	n/a
nerbat 'mosquito'	n/a
ngaluk 'woman'	nyarlu
gallan 'grass'	jalyanu
wiongan 'ghosts'	n/a
youjan 'yesterday'	yuganga

Table 2.9: Evidence for word-final stops

Note that the modern equivalents to items in Barlee's list do not demonstrate the possibility of word-final *t*, *k*, *n* or *ng*. However, Blevins (2001:23) notes that vowels may be dropped from word-final position in southern varieties of Nhanda, and such a process may also have occurred in Malgana. This would perhaps account for possible alternations in the table immediately above, such as *jalyanu* ~ *jalyan*. Therefore, in summary, from the available data, Malgana apparently tolerated stem-final and word-final alveolar and velar nasals.

A conclusive morphological explanation of the occurrence of word-final nasal stops is difficult to find for Malgana. The occurrence of word-final nasal stops could be explained

<sup>&</sup>lt;sup>10</sup> However, as the previous footnote points out, initial apicals cannot be reconstructed for Proto Kartu. Thus, this is either an interesting innovation occurring in Malgana, or it may be accounted for by borrowing. Of course, it clearly is not widespread (recall, it affects only 6% of the lexicon), so that, due to limited data, this result is not especially conclusive.

<sup>&</sup>lt;sup>11</sup> Note that there are some differences between Barlee's orthography and the one being used in this grammar.

as arising from either the presence of suffixes with final nasal stops, or a tendency for dropping word-final vowels. This latter may in part be supported by the tendency for final syllables to lack prominence (noted in §2.4), which would in turn allow for diminished word-final syllables and a consequent loss of vowels filling the nuclei of such syllables.

As illustrated by the accompanying wordlists, all homorganic consonant clusters occur, i.e. *lyj, mb, nd, rnd, ngg, nth, nyj.* However, Malgana apparently has no word-initial or -final consonant clusters. The following table exhibits the set of heterorganic intramorphemic consonant clusters<sup>12</sup> (the total number of lexical exponents of each cluster is shown in brackets).

	<b>C2</b>			
<b>C1</b>	b	Examples	g	Examples
d	db (1)	<i>udbi</i> 'skin'	dg (1)	wudgagarri 'tailor (fish sp.)'
rd	rdb (1)	wurdbi 'skin'		
n			nk (2)	wanka 'raw'
m			rnk (3)	marnkurru 'three'
1	lb (3)	walbaju 'eagle'	lg (8)	galga 'thigh', Malgana
rl	rlb (1)	barlbinyu 'ato tree'	rlg (6)	garlgunyina 'wait for'
ly	lyb (3)	gulyba 'sick'		
rr	rrb (1)	warrbathu 'quickly'	rrg (1)	barrgudu 'bread'

<b>Table 2.10:</b>	Heterorganic consonant clusters	
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As noted above, *udbi* and *wurdbi* were probably borrowed from Nhanda. Blevins (2001:12–14) notes that *barrgudu* was likely borrowed into Nhanda from the English *very* good (a term for 'bread', for explanation see Blevins 2001:13), which is probably the source for the Malgana equivalent. However, I was unable to find a source language for *warrbathu*, so it may have been the case that heterorganic clusters with *rr* as the first member was a feature of Malgana, although such examples have been lost from the lexicon.

An interesting problem is presented by *wudgagarri*, since it is the only example of a *dg* cluster and is probably borrowed. Without evidence of further exponents of this obstruent-obstruent cluster, it is possible that words exhibiting this were simply borrowed into Malgana. However, finding a source for this word is problematic, as none of the surrounding languages have apparent equivalents. In order to clarify this, I will need to examine further comparative information for Malgana and Nhanda.

A variant of *wudgagarri* listed in the available data is *wulgagarri*. According to Blevins and Marmion (1994:206), Proto Kartu (PK) lateral clusters underwent fortition when they descended in Nhanda lexical items, but Malgana items demonstrate no such fortition. For example, PK \*kurlka 'ear' is reconstructed from, among others, NHA *wurtka*, *wutka* and MAL *kulka*<sup>13</sup> (Blevins and Marmion 1994:206). Such correspondences suggest the possibility that while *wulgagarri* was the original Malgana word, and descended from a putative ancestor form, e.g. PK \*wulgagarri, *wudgagarri* is more likely a Nhanda word

<sup>&</sup>lt;sup>12</sup> Note that the sequences  $\frac{n}{g}$  and  $\frac{rn}{g}$  are represented as *nk* and *rnk* respectively in the orthography.

<sup>&</sup>lt;sup>13</sup> Note that both *gurlga* and *gulga* were recorded in the data being used for this grammar.

which has been borrowed into Malgana.<sup>14</sup> At the very least, this evidence indicates that the status of *wudgagarri* as an original Malgana word is doubtful, and allows for the strong possibility that it is borrowed from Nhanda.

Another intriguing piece of evidence is the presence in Barlee's (1886) Malgana wordlist of the word gutga 'ears'. Blevins and Marmion (1994:206) claim that a Proto Kartu form \*kurlka 'ear' emerges in Nhanda as wurtka, wutka, i.e. involving both lenition k > w and fortition rl > rt. The difficulty gutga presents is that, according to the analyses presented so far, it has characteristics of both Malgana and Nhanda words. In other words, it has both an initial g, a typical Malgana feature, and an obstruent-obstruent cluster tk, a typical Nhanda feature. Interestingly, the form recorded in the more recent data used for this grammar is *gurlga* (with variant *gulga*).<sup>15</sup> Since the origin of *gutga* is unclear, then this situation differs from Malgana having two forms wudgagarri and wulgagarri, where the former is a likely borrowing from Nhanda. Perhaps gutga is a much more ancient form, which was borrowed into Malgana from an earlier form of some neighbouring language (e.g. a form of Pre-Nhanda), where it existed alongside its Malgana cognate. However, in the data used for this grammar gutga was not verified as belonging to the lexicon of recent Malgana, and so I will not consider it any further. And in summary, the various analyses of examples provided in the last few paragraphs demonstrate that it is unlikely that heterorganic obstruent-obstruent clusters were a feature of Malgana.

Note that the number of consonants involved in these heterorganic intramorphemic clusters is far fewer than the total consonant inventory, and in general no nasal consonants occur as C2 (see discussion of *nm* immediately below). Indeed, sonorants (i.e. nasals, laterals, rhotics) in general are entirely absent in the onset of syllables following an immediately preceding heavy syllable in the same word, although, as noted immediately below, nasal-nasal clusters may be an exception. However, nasals occur stem-initially, while laterals and rhotics occur in syllable codas but never stem-initially.

It is possible that a heterorganic nasal-nasal cluster *nm* occurs in future tense verbal forms, for example:

#### gambanmanha 'will cook'

It is likely this cluster occurs at an initial edge of a morpheme rather than across morpheme boundaries, i.e. the morphemic analysis of the above example should be *gamba-nmanha*, rather than *gamban-manha*. In other words, such forms are evidence that the consonant cluster *nm* occurs suffix-initially, rather than (nasal) stops occurring stem-finally in Malgana.

# 2.3 Morphophonemics

#### i. Nominals

Alternation in nominal morphophonology is rare in the data available for Malgana. However, such alternation, typically involving complex morphophonemic processes, is common in Australian languages. This is the case for ergative, locative and dative morphology in languages surrounding Malgana, such as Nhanda (Blevins 2001:47–48), Wajarri (Douglas 1981:207–208), Badimaya (Dunn 1988) and Yingkarta (Dench 1998:15–

This analysis assumes that Nhanda retains initial PK \*w (Blevins and Marmion 1994:197).

<sup>&</sup>lt;sup>15</sup> As noted previously, this more recent data was recorded in the 1990s.

17). From the available evidence, Malgana either has few such alternations, or (more likely) they went unrecorded.

However, there is some evidence that alternations common in surrounding languages were in use in Malgana. For example, the following two forms were elicited for the nominal locative suffix.

maru-nga	ngurra-la
dark-LOC	camp-LOC
'at night'	'at home'
i.e. 'tonight'	

Of course, this is not phonological allomorphy of the locative suffix marker. Dunn (1988:68) notes instances in Badimaya where allomorphs of the locative are used with identical forms of the same word, and there doesn't appear to be any grammatical motivation for choosing one over the other. However, there are a number of problems with the Malgana case. First, examples of this distinction between *-nga* and *-la* were restricted to just these two items, which were each recorded only once on separate occasions, and so this evidence is not particularly conclusive. Second, whereas Dunn's example involves allomorphy involving the same stem, in the Malgana case we have apparent allomorphy involving two separate stems, although the allomorphy is apparently just as unmotivated. Thus, it cannot be conclusively determined whether a morphophonemic process is behind the distribution of these suffixes.

# ii. Verbs

Alternation in verbal morphophonology is perhaps more common in Malgana. A rule for raising stem-final a to i or fronting stem-final u to i is apparent, and can be represented as follows (where ']' indicates a stem-final boundary):

RULE FOR RAISING AND FRONTING STEM-FINAL VOWELS  $V \rightarrow i ] / y$ , where  $V = \{a, u\}$ 

Examples include *nyini-yan* and *bungi-yanu*. The only exceptions to this rule are apparently the forms *ngangguyanu* 'hear' and *garlguyayi* 'wait', where perhaps the presence of a preceding velar g interferes with the fronting of u (although it is not clear that in the latter form u occurs immediately before a stem-final boundary). This exception is plausible, since the [+back] characteristic of g may reinforce the backness of u.

Note also that the presence of the form *binja* 'hit-PRES' suggests a further rule:

RULE FOR FRONTING STEM FINAL VOWEL  $u] \rightarrow i] / \_nj$ 

In other words, *u* is fronted under the influence of a following alveolar-nasal/laminalstop cluster. There are some interesting distributional facts in the Malgana data which support this rule. On the one hand, only forms followed by either a laminal stop or a nasal/laminal cluster have the sequence *bi*-, such as *bintharru* 'saltbush' and *binyathayinyina* 'fight'. On the other hand, only forms followed by either a nasal or a nasal/apical cluster sequence have the sequence *bu*-, such as *buna*, *bundi*, *bundilyjirri*, *bundu*. Such distribution apparently suggests a phonological rule operating both within and across morpheme boundaries, as follows:

 $u \rightarrow i / \{\text{NJH, NY}\}, \text{ where JH} = \{th, j\}$ 

## 2.4 Stress

Primary stress in Malgana is typically assigned to the initial syllable of words, regardless of the numbers of syllables of individual items. Secondary stress is assigned to syllables alternating to the right, away from the primary stressed syllable. For example (primary stressed syllables are preceded by ', secondary stressed are preceded by "):

['na.ngi."ya.nu] 'eat-YANU'

Variation from the above pattern is found in a number of words where long vowels in non-initial syllables apparently attract primary stress away from the initial syllable. For example:

["ga.'thaa."gu.du] 'Shark Bay' ["nga.'thaa.nu] 'drink-PST' ["ya.'naa.ngu] 'go-PST'

For each of these words, the second syllable attracts primary stress, while for the trisyllabic examples, the initial syllable is sometimes reduced in prominence to the point where the vowel filling its nucleus is reduced to schwa. However, where an antepenultimate syllable with a lengthened vowel as nucleus receives primary stress, as with *gathaagudu*, then secondary stress occurs on the penultimate syllable, thereby producing an exception to the alternating stress pattern and avoiding the prominence of a word-final syllable. And note that in the case of *gathaagudu*, the initial syllable is typically also prominent. Now, avoiding prominent word-final syllables appears to be a significant phonological characteristic of Malgana, and I will come back to this below. And where a penultimate syllable with a lengthened vowel as nucleus receives primary stress, then more often than not the antepenult receives secondary stress, as with for example ["nga.'thaa.nu].

In addition, variants for the second and third of these examples were frequently elicited, where the vowel of the second syllable is not lengthened, and the initial syllable consequently receives primary stress, i.e. ['nga.tha."nu] and ['ya.na."ngu]. In most cases, trisyllabic words have final syllables with secondary stress, perhaps demonstrating that where long vowels are not present to complicate the matter, then alternating prominence emerges. The sound recording of another word reported to have lengthened non-initial vowel, *thalaaba* 'cold ashes', was unfortunately not made available and so the stress pattern cannot be assessed.

An interesting exception to this co-patterning of stress and vowel-lengthening is the following word having a long vowel in its second syllable, but retaining primary stress on the initial syllable:

['wu.thuu.ga] 'spear'

However, note that this example was only recorded once and not re-elicited, so it is not a satisfactory counter-example to the above evidence regarding the alignment between primary stress and vowel-lengthening.

However, the data also includes a disyllabic word with lengthened vowel in the noninitial syllable, but which retains stress on the initial syllable:

['wi.lyaa] 'seagull'

This word had the variant ['wi.lya]. This example suggests that the relationship between vowel lengthening and stress placement is further complicated by prosodic features such as

the number of syllables in a word. The data here may be explained by the presence of a constraint against word-final syllables receiving primary stress. Indeed, recordings demonstrate that word-final syllables often lack prominence, sometimes to the point where word-final vowels are dropped entirely (see §2.2). The following rules for deriving stress patterns accord with the facts presented so far:

- i. assign primary stress to the word-initial syllable, and
- ii. assign secondary stress to syllables alternating to the right of the initial syllable, unless
- iii. a long vowel occurs in a non-initial syllable (excluding the word-final syllable), in which case assign this syllable primary stress, and
- iv. if a long vowel occurs in a penultimate syllable, then assign antepenultimate syllable secondary stress

An example derivation is as follows:

- i. 'ga.thaa.gu.du
- ii. 'ga.thaa."gu.du
- iii. ga.'thaa."gu.du
- iv. "ga.'thaa."gu.du

Another example is:

- i. 'wi.lyaa
- ii. n/a
- iii. 'wi.lyaa
- iv. n/a

As already mentioned, Malgana morphology is typically Pama-Nyungan, that is agglutinative and suffixing, and much of its morphology, such as nominal case-marking and pronoun paradigms, is fairly similar to that of surrounding languages. However, various suffixes were recorded whose function is difficult to determine because of the lack of detailed data. The following sections outline the more conclusive items, and suggest likely interpretations of some of the less conclusive items. However, what follows must remain to a large degree inconclusive, since much of the data is far too incomplete to properly describe a number of apparent morphemes.

## 3.1 Parts of speech

The Malgana lexicon can be classified into the following parts:

- i. Nominals (open class; inflecting for case (ergative pattern); no apparent distinction between nouns and adjectives)
- ii. Pronouns (closed class; inflecting for case (accusative pattern), number and person)
- iii. Demonstratives (closed class; inflecting for number, distance, and (possibly) case)
- iv. Verbs (open class; inflecting for tense/aspect/mood; much irregularity across paradigms)
- v. Adverbs (closed class; noninflecting; verbal modifiers)
- vi. Particles (closed class; noninflecting; discourse functions)

#### 3.2 Nominal morphology

Malgana nominals exhibit an ergative/absolutive case-marking pattern, while pronouns have a nominative/accusative pattern. Other languages surrounding Malgana also exhibit a split-ergative system, such as Nhanda (Blevins 2001:46–47), where nominals follow an ergative pattern and pronouns generally follow an accusative pattern. The evidence for many patterns found in the data for nominal morphology is inconclusive, and I will discuss such problems below.

# 3.2.1 Nominal suffixes

# (a) Ergative -ngu

The ergative suffix marks the subject of a sentence containing a transitive verb. For example:

- (1) *duthu-ngu nyinda-nha baja-nmanha* dog-ERG 2SG-ACC bite-FUT 'The dog will bite you'
- (2) *garla-ngu ngatha-nha gambani-ya* fire-ERG 1SG-ACC burn-YA 'The fire burned me'

The same suffix is used for proper names, for example:

(3) *Topsy-ngu yarra-nu ngatha-nha* Topsy-ERG growl-PST 1SG-ACC 'Topsy's growling at me'

Note that this form of the ergative marker is rather unusual in the languages of the area. For example, the ergative marker is  $-(ng)gu \sim -lu$  in Nhanda (Blevins 2001:48),  $-ngku \sim -lu$  in Yingkarta (Dench 1998:19) and  $nggu \sim -lu$  in Badimaya (Dunn 1988:48).<sup>1</sup> However, according to Douglas (1981:214), in Watjarri the ergative marker allomorphs -ngku and -ngu vary dialectically.

The following examples are evidence of an ergative/absolutive system for marking nominals, where the absolutive is the zero marking of objects of transitive clauses (4) or subjects of intransitive clauses (5).

- (4) *nyinda nha-nganha yamba-nugu-Ø maru-nga* 2SG.NOM see-NGANHA child-PL-ABS dark-LOC 'You'll see your kids tonight'
- (5) *nyarlu-Ø yana-nganha duthu-gurru* woman-ABS go-NGANHA dog-COM 'The woman went along with a dog'

Case-marking is discussed further in §4.2.3.

# (b) Genitive

No strategies for marking nominal possession were clearly recorded. This is problematic not only from a descriptive linguistic perspective, but also from a languagelearning perspective, as the genitive case typically has a high degree of utility. However, a number of examples of genitive marking for pronouns were recorded (see §3.3 below), and it could reasonably be expected that Malgana also had such a category for nominals, although it was not recorded. It might then be suggested that it is perhaps reasonable to extrapolate from the data for pronouns to suggest a nominal strategy for marking possession. And some evidence for this might well be drawn from surrounding languages.

<sup>&</sup>lt;sup>1</sup> Note that the *-lu* alternatives are allomorphs, selected in Nhanda for larger than bimoraic stems, in Yingkarta for larger than disyllabic stems, and in Badimaya for proper names and kin terms. There is no evidence that Malgana had such allomorphy.

However, many languages make distinctions between pronominal and nominal casemarking strategies. For example, although genitive case-marking for English pronouns and nominals both involve core inflectional case-marking strategies, they have quite different inflectional forms (and the regularity of the nominal strategy contrasts with the irregularity of the pronominal strategy). And the languages surrounding Malgana do not demonstrate a consistent strategy for pronominal and nominal case-marking. Moreover, there are different strategies for genitive nominal case-marking depending on the relationship being encoded. For example, Douglas (1981:218) reports that the Wajarri common/proper noun genitive suffix *-ku* differs sharply from the analytic strategy of marking inalienable possession with the sequence  $_{NP}[POSSESSOR \land POSSESSEE]^2$ . All of the foregoing then suggests that no extrapolation can be made from pronominal genitive case-marking to such marking in nominals.

However, another option would be to look at case-marking strategies used for third person pronominal forms, which often exhibit morphology distinct from other pronominals and more similar to nominals.<sup>3</sup> Unfortunately, no genitive case-marked third person pronominals were recorded. And any future language-learning programme for Malgana might get around this unfortunate state of affairs by simply borrowing a genitive case-marking strategy from a nearby language (or any language for that matter). Amery (2000) suggests various approaches to such forms of language reclamation.

# (c) Locative -la

The use of *-la* to mark locative function for nominals is common throughout the area, for example, in Yingkarta (Dench 1998:20–21), Watjarri (Douglas 1981:219), Badimaya (Dunn 1988:50), Panyjima (Dench 1991:140). The following demonstrates the use of the nominal locative suffix in Malgana:

 (6) marugudu ngatha ngurra-la nyina-manha tomorrow 1SG home-LOC sit-FUT 'Tomorrow I'll sit at home'

However, the following example was also recorded on one occasion:

<sup>2</sup> Indeed, there was an example in the Malgana data of what may be an instance of inalienable possession:

*ngaya udbi-gura* wattle.tree skin-GURA

'the bark of the wattle tree'

i.e. 'the wattle tree bark'

or: 'the wattle tree's bark'

This example apparently involves a quite specific partitive meaning, i.e. the bark being part of the tree. However, without further examples, there is no way of determining whether this is indeed a genitive case-marking strategy. The form *udbigura* is perhaps some form of stem marking, and could have the function of associating the two nominals in some fashion, rather than being an explicit genitive marking strategy. This stem marking may well be related to genitive marking of nominals in Malgana, although there is not enough evidence to label it as such. A stem marking strategy involving a genitive marker encoding some associative relationship between nominals, but not marking simple possessive function, has also been noted for Panyjima (Dench 1991:144–145).

<sup>3</sup> Thanks to Alan Dench for suggesting this possibility.

(7) *ngurra-ng nyina-ngayi* home-LOC sit-NGAYI 'sitting at home'

As pointed out in §3.2.3 below, it is unclear how to analyse the form *ngurrang* in example (7). For example, it is inconclusive whether *ngurrang* demonstrates the use of a locative nominal suffix. It may be that *-ng* has a stem forming function here, whereby *ngurrang* is distinguished in some manner from the bare stem form *ngurra*. However, without further evidence any analysis of a nominal suffix for this example remains speculative.<sup>4</sup>

#### (d) Instrumental -ru

The use of the instrumental case is shown in the following example.

(8) *wirrangu-ru ngarri-Ø* gidgee-INSTR stab-IMP 'Stab (it) with a gidgee!'

Note that this suffix is often missing from instrumental nominals. In some surrounding languages, alternation of this suffix is triggered by prosodic characteristics of the stem. For example, in Nhanda a bimoraic nominal stem takes the locative suffix -(ng)gu, while all other stems take -lu (Blevins 2001:50). No examples of prosodically conditioned alternation were found in Malgana. Also note the similarity between this form of the instrumental, and specific morphemic alternatives in surrounding languages:

Yingkarta	-lu
Badimaya	-lu
Nhanda	-lu
Wajarri	-lu

From these comparisons, it is likely that some proto-form \*-lu emerges as -ru in Malgana. The instrumental suffix is identical to one form of the ergative suffix in surrounding languages, although this is not the case with Malgana. This suggests the possibility that items from the Malgana morphemic inventory, such as variant ergative/ instrumental case suffixes, have either been recently lost from the language or were simply not recorded in the data. However, note that Kanyara and Mantharta languages to the north of Malgana, such as Payungu (Kanyara) and Jiwarli (Mantharta) also do not collapse together the forms for ergative and instrumental (data from Austin 1992a, b, c, d), where the Payungu and Jiwarli ergative forms are both -Cu, their instrumental forms are, respectively, -lpaja and -lparri, -puka. Thus, in these languages the ergative and instrumental do not have formal similarity. It is perhaps just as likely that Malgana lost the ergative forms which were similar to the form of the locative, they were unrecorded, or that such items were never present.

<sup>&</sup>lt;sup>4</sup> Dench (1998:146–147) describes such stem-modifying strategies for other Western Australian languages.

## (e) Ablative -guji

A possible ablative was recorded from a native English speaking consultant who, although he had not acquired fluency in Malgana, had shown a high degree of aptitude for language learning, and had learned Malgana from a fluent speaker.<sup>5</sup> He provided the following examples:

(9)	wanda-guji	nyinda	?yanu-ni
	where-ABL	2SG.NOM	come-NI
	'where did y	ou come fr	om?'

(10) ngatha ?yana-ni ngurra-guji 1SG.NOM come-NI home-ABL 'I came from home'

Note that the first example was not given a translation, and that the putative verb forms *?yanu-* and *?yana-* should probably be *yanangu* 'walked'. However, these examples do suggest an ablative suffix *-guji*, although the available data is questionable. Also note that Badimaya has the dative-allative suffix *-gudi* (Dunn 1988:50), similar in form and meaning to the proposed Malgana ablative.

# (f) Comitative -gurra

The following example illustrates the use of the comitative suffix:

(11) *nyarlu yana-nganha duthu-gurru* woman going-NGANHA dog-COM 'The woman went along with a dog'

Another example is:

(12) *nyarlu-gurra* woman-COM 'with a woman' i.e. 'has a girlfriend'

## (g) Plural -nugu ~ nuga ~ -nu, -mutha

Two apparent plural suffixes were recorded, *-nugu* and *-mutha*. The suffix *-nugu*  $\sim$  *-nuga* pluralises the nominal as follows:

(13) *yamba-nugu* child-PL 'children'

The following is a possible example of the alternation  $-nugu \sim -nu$  for the plural suffix:

(14) yamba-nu? child-PL 'Got any yambas?' [yambas = children]

<sup>&</sup>lt;sup>5</sup> Mentioned in§1.5.

This was the only example of the apparent shortening of this plural suffix. As can be seen from the example, this single word functioned as a polar question (rising intonation), and was followed up with the apparent translation 'Got any yambas?'.

The plural suffix was also used with the following number nominal:

(15) *marnkurru-nugu* three-PL 'three'

However, this use of the plural suffix was not elicited in longer strings, and so detail about its role in larger constructions is not available. In addition, no similar forms were found for surrounding languages.

The suffixes *-mutha* and *-muthu* were less frequently elicited, with examples as follows:<sup>6</sup>

- (16) *duthu-muthu* dog-PL 'plenty of dogs'
  (17) *ngatha wigi-mutha man*
- (17) ngatha wigi-mutha manda-nu
   1SG.NOM froth-PL get-PST
   'I got a beer'

Note that in the second of these examples, suffixing *wigi* 'froth, bubbles' with *-mutha* results in the form *wigimutha* meaning 'beer'.

It appears that *-mutha* is not as productive as *-nugu*, and the latter is apparently the preferred pluralising strategy. And also note that while *-nugu* is restricted to indicating more than one human, *-muthu* is perhaps restricted to indicating multitudes of non-human objects. Thus, *-nugu* is perhaps used to mark nominals referring to objects which can be counted, while *-mutha* perhaps attaches to nominals referring to objects which are mass rather than count items.<sup>7</sup>

## (h) Placename suffix -gudu

A possible suffix restricted to place names was recorded in the data. Examples include:

Gathaagudu	'Shark Bay'		
Duthugudu	'Broadhurst Bight'		

Blevins (2001:12) suggests that there is also a Malgana comitative suffix *-gurdu* which is used as a placename marker. The comitative suffix presented immediately above was not found suffixed to placenames.

## 3.2.2 Verbalising suffix: inchoative -thayi

This suffix derives an intransitive verb from a nominal. The resulting verb has the meaning 'to become or be x' where 'x' is the nominal root. The new verbal stem takes a set of typical Malgana inflectional verbal suffixes. Examples include:

 $<sup>\</sup>frac{6}{7}$  As notes by an anonymous reviewer, these morphemes might alternatively be analysed as collectivisers.

<sup>&</sup>lt;sup>7</sup> Thanks to Alan Dench for this suggestion.

mardiji 'partner'	mardijithayimanha 'will get married'
gulyba 'sick'	gulybathayinyina 'get sick'
wambu 'bad'	wambuthayinyina 'become bad'
<i>bundu</i> 'rain'	bunduthayimanha 'will rain'

This verbalising strategy is highly productive, and apparently novel derivations, such as *bunduthayimanha* 'will rain', were accepted immediately by the consultants. Indeed, words already recognised as verbs were readily suffixed with *-thayi*. For example, *thamanu* 'cover' was extended to *thamanuthayinyinan*, although the meaning of the result remained unclear.

Another interesting example is the following:

(18) *mimithayi-nyina* getting.sore-PRES 'is getting sore'

The consultants recognised the word and glossed it without difficulty, although no gloss was obtained for the possible stem \*mimi- (i.e. *mimi-thayi-*). The resulting form was suggested as being the speech of young children. And note that \*mimi- is apparently not isolable from *mimithayi-*, and so cannot be analysed as a distinct stem with its own meaning. Further, *mimi* 'sick' is recorded for some varieties in the Western Desert. The following example involves the apparent 'adult' version of this expression:

(19) ngatha marrithayi-niyan 1SG.NOM get.sore-NIYAN 'I'm sore'

Although no separate form \*marri was recorded, the adjective *marrigudu* 'sore' was elicited.<sup>8</sup> Perhaps the word \*marri existed at one time, although unrecorded.

Note also that, although the verbs derived using this strategy are intransitive, the following example demonstrates case-marking strategies for representing additional participants in a situation:

(20) ngatha wayunguthayi-nyina nyindangu
 1SG.NOM frightened-PRES 2SG.DAT
 'I'm frightened of you'
 i.e. 'You frighten me'

So although *wayunguthayinyina* is intransitive, the use of the dative form of the second person pronoun (§3.3) allows both the participant who is frightened and the participant causing the fright to be represented. Presumably this could have been done for a variety of such derived verbs, although the scarcity of detail about the morphology of oblique arguments would not allow this to be done now.

This inchoative verbalising suffix has apparently related forms in surrounding languages. For example, Badimaya has the verbalising suffix *-dha* (Dunn 1988:76), and Pilbara languages such as Payungu (Austin 1992b) and Thalanyji (Austin 1992c) employ an inchoative verbalising suffix *-tharri*.

<sup>&</sup>lt;sup>8</sup> Note that this adjective could be analysed as *marri-gudu*, with components *marri* '(a) sore' and a comitative suffix *-gudu*. This suffix form is similar to Blevins' (2001:12) suggestion of a Malgana comitative suffix form *-gurdu*.

## 3.2.3 Nominal suffix -nga

A number of sentence examples in the data apparently involve the use of another suffix -nga which is used to mark nominal constituents. However, the data is inconclusive, and it is unclear what functions are involved. To illustrate this, the following examples apparently demonstrate nominals marked with the -nga suffix exhibiting a locative function.

The following is an example of -nga apparently used to produce locative meaning.

(21)	nyinda	nha-nganha	yamba-nugu-Ø	maru-nga
	2SG.NOM	see-NGANHA	child-PL-ABS	dark-LOC
	'You'll se	e your kids ton	ight'	

Another example is:

(22) *ngurra-ng nyina-ngayi* home-LOC sit-NGAYI 'sitting at home'

Note that the form *ngurrang* was the consultant's correction of the linguist's initial suggestion *ngurranga*. However, the word was not elicited again, so there is no way of checking the suffix form, and I will simply treat it as a questionable variant of *ngurranga*. Again, these forms are rare in the data, and no conclusive analysis of their function can be made.

A further example of the use of *-nga* is unclear as to its function:

(23) *ngatha wayunguthayi-nyina maru-nga* 1SG.NOM frightened-PRES dark-LOC 'I'm frightened of the dark' Or: 'I'm frightened in the dark'

The consultant only offered *marunga* once, although it was not specifically elicited for, and it was not re-checked. The form *marunga* apparently indicates a complement of a psychological state verb. It may be that this is the same locative marker used for this purpose.<sup>9</sup>

In addition, comparative evidence regarding surrounding languages casts doubt on the status of *-nga* as a marker of oblique case. The nominal suffix *-ngga* occurs in languages surrounding Malgana. For example, Yingkarta has locative *-ngka* (Dench 1998:20), Watjarri has locative *-ngka*, and absolutive *-nga* for consonant-final proper nouns (Douglas 1981:219). Nhanda also apparently exhibits a lexicalised locative form, which Blevins (2001:53) analyses as *-ngga*. Thus, there is little evidence of the use of *-nga* for expressing oblique case such as locative and dative in the area, while *-ngga* (or *-ngka*) is a typical oblique suffix form. Conclusive evidence would need to be presented to argue for the presence of such anomalous forms in Malgana. However, this is simply not available.

## 3.3 Pronouns

## 3.3.1 Personal pronouns

A range of free pronoun forms were recorded. These include an almost complete paradigm for first and second person forms, with singular, dual and plural forms for first

<sup>&</sup>lt;sup>9</sup> However, Dench (1998:22) notes the Yingkarta nominal dative suffix -ku/-wu has this function.

person, as well as three third person forms. Subsections discussing the use of these pronominal forms, and various anomalies, are presented after the following tables (bold forms means they are questionable, due to lack of detailed data; shading indicates gaps in the paradigm).

	NOM	ACC	DAT	POSS
1SG	ngatha	ngathanha, ngana	ngathangu	ngathangura
1DU	ngali	ngalinha		
1 PL	nganharra, <b>nganuralu</b>			
2SG	nyinda	nyindanha	nyindangu	nyindangu
2PL	nhu(r)ra			

**Table 3.1:** First and second person pronouns

The three third-person forms which were recorded are:

 Table 3.2:
 Third person pronouns

	NOM	ACC
3SG	bulanu	
3pl	thana	thayanha

The following subsections discuss pronominal subjects, objects, indirect objects and possessives. However, there are various problems with some of the forms elicited for the Malgana pronouns, and I will briefly consider these problems before proceeding.

From the table immediately above, a possible third person singular pronoun was apparently elicited, although there are a number of problems with this form. First, the apparent evidence for this form is inconclusive. To begin with, attempts to access copies of the original recording for this form were unsuccessful.<sup>10</sup> The following sentence was elicited in a session which involved checking a transcript of the original recording:<sup>11</sup>

(24) *bulanu yana-nganha* 3SG(?) going-NGANHA 'He's leaving'

The second consideration regarding *bulanu* is that it is likely that either this form, or something like it, is used in surrounding languages as a third person pronominal form, although there are apparently no examples in surrounding languages of this form realising third person singular (see Dench 1994a). For example, Martuthunira (Central Ngayarta) has a third person plural form *pularnu* (Dench 1994b). Interestingly, the Martuthunira third person plural form is composed of an older third person dual form *pula* and a plural suffix *-rnu*, although the most recent state of the language had no third person singular or dual forms (Dench 1994b). However, the form *bula* (or *pula*) is a typical third person dual in many surrounding languages, such as in Yingkarta (e.g. Dench 1998:31) and Wajarri (e.g.

<sup>&</sup>lt;sup>10</sup> This sentence is drawn from transcriptions of Florey's recordings, mentioned in §1.4 above.

<sup>&</sup>lt;sup>11</sup> The checking of Florey's original material was carried out in Denham, Shark Bay, on 2 February 1995 by Doug Marmion of the Yamaji Language Centre, and the Malgana speakers consulted were Topsy Cross and Minie O'Dene. Unfortunately, no audio recording of this session is available.

Douglas 1981:223), as well as in Payungu and Thalanyji further to the north (Dench 1994a:182).

The third point about *bulanu* is that examples of more common third person singular forms in surrounding languages are *palu*, e.g. Wajarri (Douglas 1981:223), and *pala*, e.g. Thalanyji (Dench 1994a:173). And on one occasion, a Malgana consultant, after being asked to provide a word for 'plenty of people', suggested the word *balu* 'many, plenty'. However, this was never recorded in a larger syntactic context, and without evidence to the contrary, it will be assigned the elicited meaning 'many, plenty'. Such inconsistencies in external comparisons with surrounding languages, as well as the inconclusiveness of language-internal evidence, mean that the above claim that *bulanu* is a pronoun in Malgana remains tentative.

Note further that several example sentences were elicited where third person pronouns were apparently absent. For example:

(25) *nagarn binyathayiniya* look fight-YA 'Look! (They're) fighting'

So, third person pronouns seem to be optional, and in this way distinct from the obligatory first and second person forms.<sup>12</sup>

Some intriguing inconsistencies occur in the data involving the first person plural nominative form *nganuralu*, the first person singular accusative form *ngana* and the third person plural accusative form *thayanha*, which I will discuss in what follows.

#### (a) Subject pronouns

The usual first-person subject pronoun is exemplified by the following:

(26) ngatha bungi-yanu nyindanha 1SG.NOM hit-YANU 2SG.ACC 'I hit you'

The alternative first-person plural pronoun *nganuralu* has no obvious cognates, despite a search of languages from the surrounding area. An example demonstrating its use is as follows:<sup>13</sup>

- (27) *nganuralu babarna wurilinyja* 1PL.NOM water 'swallow'(-LINYJA) 'We're drinking water'(?)
- (28) *nganuralu nha-nja thayanha* 1PL.NOM see-PRES 3PL.ACC 'We see them'

 $<sup>\</sup>frac{12}{12}$  These latter were never ellipsed in the data that was collected.

<sup>&</sup>lt;sup>13</sup> This form was apparently recorded during one of Florey's interviews with Janie Winder, and I have not been able to access these recordings in order to verify such forms. Consequently, I have been unable to check the forms of other items involved in the examples, some of which are inconsistent with aspects of this grammar. These forms were apparently checked by Doug Marmion during the 2 February 1995 session, consulting with Topsy Cross and Minnie O'Dene, although no audio recording of this session is available.

There appears to be no inclusive/exclusive distinction for first person plural pronominal forms, despite this being common in the area (Dench 1994a). However, the examples immediately above suggest that *nganuralu* could perhaps be analysed as a transitive subject form, based on formal similarity with transitive subject forms occurring in surrounding languages.<sup>14</sup> For example, non-singular second and third person transitive subject forms in Ngarla have forms ending with an apparent ergative suffix *-lu* (Dench 1994a:168). However, without the means to verify these forms, and without more detailed data, the available evidence for this form remains interesting but inconclusive.

#### (b) Object pronouns

Two problems are apparent for object pronouns. First, there is a contracted form *ngana* for the first person singular accusative. The following pair of examples exhibit the alternative forms of the first person accusative pronoun:

(29)	ngayiwu(nga)	nyinda	bungi-ya-n	ngathanha
	why	2SG.NOM	hit-YA-N	1SG.ACC
	'Why did you	hit me?'		
(30)	ngayiwu(nga)	nyinda	bungi-ya-n	ngana
	why	2SG.NOM	hit-YA-N	1SG.ACC
	'Why did you I	hit me?'		

This alternation is widely exemplified in the corpus. Note that accusative pronouns are typically formed by suffixing *-nha* to the nominative stem. There is some precedence for this form in languages of the area, and the northern Ngayarta language Ngarla has a first person singular accusative form *nganya* (Dench 1994a:169), and it is possible that a common ancestor is the origin of both these and the Malgana forms. Note that it is fairly unlikely that the Malgana form *ngana* is the result of a language-internal process contracting *ngathanha* to *ngana*, that is, loss of the final syllable and shift from lamino-dental stop to alveolar nasal.

The second problem involves the unexpected third person plural accusative form *thayanha*. The expected form is \*thananha, which is well exemplified in surrounding languages. However, I have been unable to find cognates of *thayanha* in languages of this area. An example of the use of this form is:

(31) *nganuralu nha-nja thayanha* 1PL.NOM see-PRES 3PL.ACC 'We see them'

Note that this example sentence is the same as was used to demonstrate the form nganuralu in subsection (a) above.<sup>15</sup>

#### (c) Indirect object pronouns

The use of indirect object pronouns is relatively straightforward, with examples as follows:

<sup>&</sup>lt;sup>14</sup> Note that while the evidence here is unverified, it consists of two successive instances of *nganuralu* which were completely consistent with one another.

<sup>&</sup>lt;sup>15</sup> One other instance of *thayanha* was recorded, but this was part of Florey's material, and was not verifiable.

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- (32) *nyinda garlgu-nyina ngathangu* 2SG.NOM wait-PRES 1SG.DAT 'You're waiting for me'
- (33) ngatha garlgu-nu nyindangu 1SG.NOM wait-PST 2SG.DAT 'I waited for you'

#### (d) Possessive pronouns

Only first and second person pronominal forms were found in the data. Examples of the use of each of these possessive pronouns are as follows:

- (34) *ngathangura warla ngurra-la* 1SG.POSS wife home-LOC 'My wife is at home'
- (35) *nyindangu warlu* 2SG.POSS wife 'your wife'

#### 3.3.2 Reflexive pronoun

There was a possible reflexive pronoun *bali* recorded, as follows:

- (36) *thamanu bali* 'cover' (??) self 'cover yourself'
- (37) *nagarnu bali* 'look' (??) self 'look at yourself'

Only two clear examples of the use of this apparent reflexive pronoun were recorded.

## 3.4 Demonstratives, interrogatives

Two demonstratives were recorded, *nhanganha* 'this' and n(h)aga 'that'. Examples are as follows:

- (38) *nhanganha buci* this cat 'This is a cat'
- (39) *nayi naga-nu* what that-PL 'What are those?'

The case-marking for demonstratives is apparently in accordance with the normal pattern for Malgana nominals using suffixes, although this is unclear. Consider the following examples suggesting patterns for n(h)aga.

- (40) *yarra-n nagan duthu-Ø* growl-N that dog-ABS 'Growl at that dog!'
- (41) *naganha gutharra yugarri-nyina* that two stand-PRES 'These(?) two are standing up'
- (42) *ngana nhaganha yana-nganha-ni* who that come-NGANHA-NI 'Who's that coming?'

Note the inconsistency in meaning for n(h)aga, which is likely due to simple error in the translation for (41). There are two possible analyses here. On the one hand, abstracting over these examples suggests that demonstratives occurring as transitive objects and intransitive subjects are identically marked (with some possible free variation). In other words, they suggest an ergative marking scheme, which is the scheme employed by nominals. And *nhanganha* shows similar patterns to this one. On the other hand, distinguishing between *nagan* and n(h)aganha suggests that transitive objects are marked differently to intransitive objects. This would then favour a three-way marking of demonstratives in Malgana, rather than ergative marking. A further implication would be that nouns, pronouns and demonstrative forms being recorded for transitive subjects (perhaps due to attrition), interfere with choosing between these analyses. Without further evidence, any suggestion of case-marking for demonstratives remains speculative.

The following set of interrogatives were identified:

**Table 3.3:** Interrogative pronouns

n(g)ayi	'what?'
n(g)ayiwu(nga)	'what for?', 'why?'
ngana	'who?'
wantha(la)	'where?'

These forms have apparent cognates in surrounding languages, for example, Nhanda has *ngana* 'who' and *wandha* 'where' (Blevins 2001:72–74), Watjarri *ngana* 'who' (Douglas 1981:235), Yingkarta *ngana* 'who.ACC' and *wantha/wanthawu* 'where' (Dench 1998:39), Badimaya *ngana* 'who' and *wandi* 'where' (Dunn 1988:55). Note that it is also possible to suggest case-marking for interrogatives. For example, *nayiwu* 'why?, what for?', may well be a dative form of *nayi* 'what?'. Case-marking of interrogatives is common throughout the area, for example in Yingkarta (Dench 1998:39), Badimaya (Dunn 1988:55), and Nhanda (Blevins 2001:72–74). Furthermore, the Badimaya interrogative forms *nha* 'what.ABS' and *nhawu* 'why' (Dunn 1988:55) are particularly similar to the Malgana paradigm.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> Dixon (2002:153–155) suggests a hierarchy for nominals that allows for distinct marking for nouns, demonstratives, pronouns, etc.

<sup>&</sup>lt;sup>17</sup> Of course, many of these forms are also found throughout the wider Australian language area (Dixon 2002).

Examples of the use of Malgana interrogatives are as follows.

- (43) *nayi nhaga* what that 'What's that?'
- (44) *nayiwu nyinda mandarri-nyina* why 2SG.NOM laugh-PRES 'Why are you laughing?'
- (45) *ngana thana yugarri-nyina* who 3PL.NOM stand-PRES 'Who's that standing up?'
- (46) *wanthala duthu* where dog 'Where's the dog?'

The following examples demonstrate that the strategy for pluralising *ngana* is the same as that for nominal forms.

(47) *ngana-nugu nyina-ngayi* who-PL sit-NGAYI 'Who are those mob sitting down?'

There was also a possible example of the use of an interrogative as an indefinite.<sup>18</sup>

(48) *nganabuka nyinda nanyja-gura* whoever 2SG look-GURA 'Who are you looking for?'

No further examples of this form were found. The Pilbara language Panyjima (Central Ngayarta) also has an interrogative *ngana* 'who' with an indefinite form *nganapukul(pa)* 'whoever' (Dench 1991:164), which is reasonably similar to Malgana *nganabuka*.<sup>19</sup>

# **3.5** Verbal morphology<sup>20</sup>

When coming to examine Malgana verbal morphology, we are presented with a complex situation made all the more difficult by the relative incompleteness of the data. Typically, analysing verbs into paradigms for inflectional morphology involves organising forms into sets based on the identification of tense, aspect and mood (TAM) categories. Such identification of categories typically involves a combination of morphosyntactic and semantic information. A similar procedure is employed for the derivational morphology of verbs.

 $<sup>\</sup>frac{18}{10}$  Thanks to Alan Dench for pointing this out.

 <sup>&</sup>lt;sup>19</sup> Note also the similarity here with the final two syllables *-buka* of *nganabuka*, and the suffix -BUGA discussed in §3.5.3(e). It is unclear what links there might be between these forms.
 <sup>20</sup> Therefore to Also Derive the formation are stated as a fit of the surgery of the

<sup>&</sup>lt;sup>20</sup> Thanks to Alan Dench for suggesting major aspects of the approach to verbal morphology employed in this section.

However, much of the elicitation of Malgana verb forms was still in the early stages when the data gathering ceased, and the information obtained was complicated by various sociolinguistic factors.<sup>21</sup> As a consequence, the data is problematic for a variety of reasons:

- very few verbs were recorded
- the paradigms for recorded verbs are largely incomplete
- the information regarding verb categories (tense and mood) is drawn solely from the consultants' suggested translations.
- the English prompt verbs may themselves be somewhat vague/ambiguous.<sup>22</sup>

For these reasons, standard analyses drawing only on the available evidence for Malgana verbal morphology produce inconclusive results at best, and unresolved inconsistencies at worst. After looking at the data afresh, a method was established for attempting to determine the most conclusive description of the patterns, with the following results for the main inflectional categories (additional categories are given in the Appendices).

Imperative	Past	Present	Future	Gloss
			bajanmanha	'bite'
	batharnu			'shoot'
		bathunyina		'blow'
bumba, bungu	bumbanu	binja	bumanha	'hit'
	gambanu	gambanyina	gambanmanha	'cook', 'burn'
			ganmanha	'take'
	gardabudanu			'cut'
	garlgunu	garlgunyina		'wait'
	mandarrinu		mandarrimanha	'laugh'
		murinyina		'blow'
n(h)aga		nhanja		'see', 'look'
		ngabirrinyina		'swim'
ngarri	ngarrinu		ngarrinmanha	'stab', 'sew(?)'
	ngathaanu	ngarnija	ngarnmanha	'drink', 'eat'
	ngathinu	ngathinyina	ngathimanha	'cry'
		ngundanyina	ngundamanha	'sleep'
	nyinanu		nyinamanha	'sit'
		wandinyina		'climb up'
	wangganu	wangganyina	wanggamanha	'talk'
	wanthanu			'leave'
			wayamanha	'chase'
	yana(a)ngu	yaninyina	yanmanha	'go, come'
	yarranu		yarranmanha	'growl'
yugarri	yugarrinu	yugarrinyina	yugarrimanha	'stand'
	yungganu			'give'

 Table 3.4:
 Malgana verb paradigms

greyed = N conjugation. Bold = inconclusive.

<sup>&</sup>lt;sup>21</sup> Recall that the two main consultants, Topsy Cross and Minnie O'Dene, were the last remaining Malgana speakers with any degree of fluency. They had not been part of a thriving Malgana speaking community for many years. Such a situation would promote rather than forestall the attrition of verb paradigms.

<sup>&</sup>lt;sup>22</sup> Thanks to an anonymous reviewer for pointing this out.

As will become clearer below, this analysis presumes two conjugations, N and Ø. Further, there is a good deal of variation in form within individual categories, in particular within the imperative, but also within the past and present categories. Note further that four of the elicited verbs, *bajalinyja* 'smoke', *barndiyanu* 'smell', *ngangguyanu* 'hear' and *wurilinyja* 'swallow', do not realise these categories and so do not appear in the above table (although they do realise other categories, and occur in tables in the Appendices).

Some space will now be taken to explain how this description was arrived at. The main task for the description involved clarifying the pairing of form and category for elicited verbs. The basic analytical strategy was to first broaden the set of categories to a maximum number, to capture all of the formal variation, and then to narrow these categories through subsequent closer analysis of the patterns within and across groupings for individual verbs. The complete set of Malgana verbs is set out in Appendix A, and an example attempt to form paradigms for the recorded verbs using standard analyses based solely on the consultants' translations is presented in Appendix B. The paradigms set out in Appendix B are largely characterised by inconsistencies within suffix groupings, as well as similarities between suffixes across these groupings. In other words, Appendix B is fairly obviously inadequate as an analysis of Malgana verb patterns. In order to reconsider these patterns, we need to take a step back, and more carefully examine Malgana verbal morphology.

To begin with, the basic generalisations giving rise to the suffix groupings in Appendix B need to be reconsidered. Temporarily setting aside information based solely on the consultants' suggestions, we are left with a maximal inventory of suffix patterns, but one which lacks any generalisation. Appendix C lists the paradigms for the complete set of verbs which result when formal distinctions are (almost) maximised.<sup>23</sup>

The next task is to re-introduce some generality into the groupings of verb suffixes, with the aim of minimising superfluous detail, and thereby reducing the total number of groups. It is then useful to consider postulating a basic distinction between these groupings, to facilitate generalisation. Dixon (1980) provides evidence from the tense, aspect, mood (TAM) systems in the verbs of Australian Aboriginal languages that such distinctions are fairly typical across Australia. Briefly, he suggests that, while some Australian languages make a basic distinction between past and non-past, others distinguish between future and non-future. Of course, in the case of Malgana, the available information is not detailed enough to clearly decide whether verbs encode either a past/non-past distinction, or a future/non-future distinction, or some other kind of distinction in inflectional categories.

However, there is one interesting feature of the data that suggests a likely grouping of verb forms. Appendix B shows that of all the forms which have been provided with glosses according to the consultant's intuitions, only the forms for the so-called 'future' have an almost completely consistent match between form and meaning. These forms were labelled as future since they were all glossed with the English 'will' by consultants. In contrast, the forms labelled as 'past' and 'present' in Appendix B all have apparent inconsistencies. The simplest explanation for this variation in consistency of glossing across verbs is that Malgana employs the following distinction for the inflectional forms of verbs.

FUTURE versus NON-FUTURE

<sup>&</sup>lt;sup>23</sup> Almost, but not quite maximised, since there is still a degree of inconsistency in group 1. This will be discussed further below.

The apparent effect of this is that while future is a basic distinction, past and present are not, which presumably makes them more likely to be inconsistently reported. There may also be some complexity in Malgana tense categories introduced by aspectual distinctions, and this will be discussed further below. In addition, Malgana also apparently employs the following distinction for the inflectional forms of verbs.

#### IMPERATIVE versus DECLARATIVE

However, from Appendix B, it would seem the imperative form has been inconsistently reported.

On the basis of these suggestions, the following table of verbal categories can be constructed from Appendix B.

Ι	II	III	Future	Other
-yanu	-nyina	-niyanu	-nmanha	-linyja
-yan	-nja	-niyan	-manha	-gura
-rnu	-ja	-niya		-nganha
-rn	-nu	-yanu		-nha
- <i>nu</i>	-yanu	-nu		
- <i>n</i>	-niyan			
-Ø	-niya			
-giya				
-yayi				
-ngayi				

 Table 3.5:
 Verb paradigm, preliminary analysis 1

Note that the group in the above table labelled 'Other' likely includes derivational morphology, and will be discussed in the relevant section below. The sets of non-future forms I to III correspond to the imperative, present and past groupings, respectively, from Appendix B. It should be noted that  $-\emptyset$  is the group I form most frequently used in surrounding languages to encode imperative, and is a strong contender for the Malgana imperative form. Since *-yanu*, *-nu*, etc., also occur in both groups II and III, thereby making them less conclusive candidates for the imperative than the  $-\emptyset$  form, I will separate them from group I. Indeed, it will prove useful to provide *-rnu*, *-nu*, etc., with an entirely separate grouping (group V below). The suffix *-giya* has more in common with forms in groups II and III, and will also be removed. The forms *garlguyayi* and *nhinangayi* are the only remaining non  $-\emptyset$  forms, with the former being inconclusive, and these will be considered in a separate section along with other inconclusive verbal suffixes. The table above can now be redrawn as follows.

Imperative	II	III	Future	V	Other
-Ø	-nyina	-niyanu	-nmanha	-rnu	-linyja
	-nja	-niyan	-manha	-rn	-gura
	-ja	-niya		-nu	-nganha
	-yanu	-yanu		- <i>n</i>	-nha
	-niyan	-giya			-yayi
	-niya				-ngayi

Table 3.6: Verb paradigm, preliminary analysis 2

This updated version of the table demonstrates that it will be more difficult to separate groups II and III. Forms from these groups were variously glossed as past or present, and there seem

to be no clear criteria in the data for distinguishing one from the other. For example, it is unclear whether group II and III forms can be distinguished on grounds other than tense, such as aspectual categories. However, note that *-nyina* and *-(n)ja* are unique to group II, and appear to be in complementary distribution. Thus it is likely they are alternative strategies for realising the same category for different verbs. Note also that *-nyina* and *-(n)ja* consistently realise present tense, as reported by the consultants. In addition, the group  $\vee$  forms are almost identical to a common suffix for realising past tense in surrounding languages (Dench 1996). Finally, a number of forms end in *-n* or *-rn*, which presumably includes *-niyan*, with possible analysis *-niya-n*. Unfortunately, no information regarding the meaning of forms ending in final *-n* was recorded, and such examples will be discussed in a later section on inconclusive verbal suffixes.

Granting these points, a reasonable reorganisation of the table of verb categories based on the analysis up to this point would be as follows.

Imperative	Past	Present	Future	OTHER1	OTHER2
-Ø	-rnu	-nyina	-nmanha, -manha	-niyanu	-linyja
	-nu	-nja, -ja		-yanu	-gura
				-niya	-nganha, -nha
				-giya	-yayi, -ngayi
					-rn, -n

Table 3.7: Verb paradigm, final analysis

This table represents what is apparently the most conclusive analysis that can be offered of the Malgana verb paradigm, and the full set of verbs under this analysis is provided by Appendix D. The label 'OTHER1' groups a set of suffixes which are likely inflectional verbal suffixes, while 'OTHER2' refers to a set which may be either inflectional or derivational. These 'OTHER' suffixes will be examined further in subsequent sections.

The above table suggests that, at least for the more conclusive inflectional categories, Malgana verbs can be classified into two conjugations, as follows:

<b>Table 3.8:</b>	Verbal	l conjugations
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	Ø-conjugation	N-conjugation
Imperative	-Ø	-Ø
Past	-rnu ~ -nu	-nu
Present	-nyina, -nja	-ja
Future	-manha	-nmanha

The future tense determines selection of conjugation. Due to the incompleteness of the attested forms for each verb, no further significant pattern can be deduced from the distribution of forms across conjugations.

Another important source of variation in Malgana verbs is that between regular and irregular verbs. In addition to stem variation, a number of apparently unique verb suffixing patterns are in evidence for the irregular verbs. The following table of irregular verbs

attempts to systematise such irregularities, and thereby reduce the total number of resulting categories (notes follow the table).

Imperative	Past	Present	Future	OTHER1	OTHER2	Gloss
$bu$ -mba- $\emptyset$ , <sup>1</sup> $bu$ -ngu- $\emptyset$ <sup>1</sup>	bu-mba-nu	bi-nja <sup>2</sup>	bu-manha	bu-ngi-yanu <sup>3</sup>		'hit'
			ga-nmanha	ga-nyi-giya		'take'
	nga-thaa-nu	nga-rni-ja	nga-rn- manha	nga-rni-yanu		'drink, eat'
nha-ga <sup>7</sup>		nha-nja		na-ngi-yanu	naga-rn, <sup>8</sup> nha-nganha, <sup>9</sup> na-nyja-gura	'see'
	nyi-na-nu		nyi-na- manha	nyi-ni-yan <sup>4</sup>	nyi-na-ngayi	'sit'
	ya-naa-ngu	ya-ni-nyina	ya-nmanha	ya-na/i-giya <sup>5</sup>	ya-na-nganha	ʻgo, come'
	yu-ngga-nu <sup>6</sup>					'give'

 Table 3.9:
 Irregular verbs

1. The morphemic analyses of these forms is inferred from other forms for 'hit', such as *bumbanu* and *bungiyajnu* (see note 7 below).

- 2. The morphemic analyses for this stem suggest the following regressive assimilation rule is apparent:  $u \rightarrow i / C1C2$ , where C1 is alveolar (see note 3 immediately below).
- 3. The underlying stem form is likely *bungu* with an alternative stem form *bungi*-, i.e. suggesting an underlying stem suffix *-ngu*. The alternative is apparently produced by applying the following regressive assimilation rule:  $u \rightarrow i / y$ .
- 4. If final *-n* is discarded as a separate non-inflectional suffix, i.e. this form is analysed as *nyi-ni-ya-n*, then the above form is actually *nyiniya*, which is closer to *-ya* final forms of other irregular verbs in this set.
- 5. The variation between stem forms yana- and yani- is apparently free.
- 6. This is the only form for 'give' in the data, and as such it has been included here as an irregular verb only because it commonly occurs as irregular in surrounding languages.
- 7. *-ga* occurs as an imperative suffix in surrounding languages, and Dixon (1980) reconstructs \*-ga as the 'Proto Australian' imperative suffix.
- 8. This form was consistently recorded with a word-final retroflex consonant -rn.
- 9. Where it might be the case that the initial syllable of *-manha* has been dropped to give the suffix *-nha*, and this form can then be analysed as *nha-nga-nha*.

The morphemic analyses suggested for each verb form in the above table are inspired by Dixon's (e.g. 2002:215–237) account of the development of conjugations in Australian Aboriginal languages.<sup>24</sup> Dixon (2002:231) notes the likelihood of widespread reanalysis of inflectional verb forms as stems in Australian languages. As will be seen in §3.5.1.1, the form of 'OTHER1' verbs may be explained by such reanalysis.

<sup>&</sup>lt;sup>24</sup> It is interesting to note that almost two-thirds of the total set of verbs remaining in Malgana are apparently represented in Dixon's (2002:117–124) list of verbs widely attested across the whole of Australia. This is of course likely to be an artefact of general language attrition leading to the remaining items being 'core' vocabulary.

The irregular verbs are of course so-named due to their variation in stems. However, a casual comparison between the regular and irregular verbs will show that irregular verbs also have a greater variety of suffixes. While regular verbs have around five or so different suffixes, irregular verbs have perhaps twice as many distinct suffixes. It is unlikely that each of these suffixes realise distinct inflectional categories, and as assumed in the organisation of the above table, this discrepancy can be reasonably reduced by combining various distinct forms together as realising the same category. For example, this has already been done by combining *-ja*, *-nja* and *-nyina* as distinct realisations of the Malgana present tense. And the numerous examples like this one which have been presented so far demonstrate that this variety in verb suffixes can be accounted for.

However, the variation exhibited by the irregular verbs has an important role to play in deciding on the processes underlying the OTHER1 suffixes, which will be discussed in detail below in §3.5.1.1. At this point it can be noted that the above table suggests that there is a variation in several of the irregular verb stems (e.g. *bu*- 'hit', *nha*- 'see'). This is significant because it provides a possible basis for explanations about how the variation underlying the OTHER1 suffixes arose (see §3.5.1.1 below).

## 3.5.1 Inflectional verbal morphology

Examples of the conclusive inflectional categories are as follows:

## (i) Imperative

- (49) *yugarri-Ø* stand-IMP 'Stand up!'
- (50) gurra bumba-Ø ngana don't hit-IMP 1SG.ACC 'Don't hit me!'

The use of *gurra* here as a clause-level negation strategy are apparently restricted to imperatives in the recorded data.

## (ii) Past

- (51) *ngatha garlgu-nu nyindangu* 1SG.NOM wait-PST 2SG.DAT 'I waited for you'
- (52) *ngatha mardiji-thayi-nu* 1SG.NOM married-INCH-PST 'I got married'

## (iii) Present

(53) *ngatha mardiji-thayi-nyina* 1SG.NOM married-INCH-PRES 'I'm getting married' (54) *ngana thana yugarri-nyina* who 3PL.NOM stand-PRES 'Who's that standing up?'

#### (iv) Future

(55)	ngatha	mardiji-thayi-manha	marugudu
	1SG.NOM	married-INCH-FUT	tomorrow
	'I'm gettir	ng married tomorrow'	

(56) *nyinda gulyba-thayi-manha* 2SG.NOM sick-INCH-FUT 'You might get sick'

Note that this last example apparently indicates that the future tense can also encode a degree of uncertainty about an event's occurrence.

#### 3.5.1.1 OTHER1 suffixes

Recall that the suffixes referred to here are: *-niyanu*, *-yanu*, *-niya*, *-giya*. As already noted, these suffixes are inconclusive. However, translations that were provided by the consultants suggesting inflectional meanings (i.e. tense), as well as their sheer frequency of occurrence, provide fairly good reasons to suspect that they are inflectional.

Note that *-niya* and *-niyanu* both occur on only one verb: *baja-* 'bite', as *bajaniya* and *bajaniyanu*. However, given the size of the corpus, this is enough to suggest that these are independent suffixes, realising distinct inflectional categories. Indeed, as was shown above with respect to irregular verbs, it would seem that 'OTHER1' suffixes attach to at least two, and perhaps three, distinct verb stems. On the basis of the formal similarity of these suffixes, the four OTHER1 forms can be separated into, on the one hand, forms suffixed with *-ni-ya* and *-gi-ya*, and, on the other, forms suffixed with *-ni-yanu* and *-Ø-yanu*.

However, the following procedure provides an alternative way to view this analysis:

- i. the bare stems are first augmented by one of three distinct intermediate suffixes -nV, -gV, or  $-\emptyset$ , where  $V = \{u, a\}$
- ii. either of -ya or -yanu are attached to realise the appropriate category
- iii. finally, the rules for raising stem-final a or fronting stem-final u discussed in §2.3 are applied to these augmented stems.

This alternative analysis has been adopted here, and the labels -YA and -YANU have been employed for interlinear glossing. The advantages of this alternative are, first, that it reduces the number of distinct suffix forms that are being dealt with, and, second, it apparently has the support of comparative evidence from surrounding languages. As Dench (1996) notes, languages across the Pilbara often reanalyse forms realising a particular inflectional category as stems for other inflectional categories. In particular, Wajarri employs an 'imperfective stem' for this purpose, while Yingkarta employs a 'past stem'. From the above set of possible stem augmenting suffixes, -nV may well be the past suffix -nu, -gV may well be either an older purposive \*-gu or imperative \*-ga (Dixon 1980:381–382), while - $\emptyset$  is possibly the familiar Malgana imperative.

This analysis is far from certain, due mainly to the fact that there is no substantial account of the function of the suffixes at issue. There may be various comparable verbal

suffixes in surrounding languages. For example, *-rniyangu* realises 'passive lest' in Martuthunira (Dench 1994b:141). An interesting similarity with a language closer to Malgana is the use in Badimaya of the present suffix *-ya* (N-conjugation), which produces in one verb the following form *gani-ya* 'kick-PRES'. The final two syllables here are of course identical to Malgana *-ni-ya*. Badimaya also has a past IMPERFective suffix form *-ya-n* (NG-conjugation), for example, *wula-ya-n* 'cry-IMPERF-PST', which is, of course, reasonably similar to Malgana *-yanu*. Appendix E updates the verb paradigm of Appendix D with the results from this section.

# 3.5.2 Suffix for motion verbs -ni

Several examples involving the verb *yana-* 'go, come' include the use of the suffix *-ni*. For example:

(57) *ngana nhaganha yana-nganha-ni* who that go-NGANHA-NI 'Who's that coming?'

The suffix *-ni* occurs only with the verb *yana-*. Dench (1998:48) suggests a formally similar post-verbal clitic *-rni* for Yingkarta which 'indicates motion or orientation towards the speaker'. It is likely that Malgana *-ni* is also a marker for motion verbs. However, *yana-* is the only Malgana motion verb elicited in any detail in the data, and so there is no way to further substantiate this claim, nor is the data conclusive enough to determine the meaning of this suffix.

## 3.5.3 OTHER2 suffixes

These suffixes are not conclusively inflectional or derivational, due to the fact that there is no clear evidence of their functional significance.

## (a) Final *-n*

As noted in §2.2, final -n is apparently a stable feature of Malgana, and it is therefore unfortunate that the data fails to provide adequate insight into its function. The simplest explanation for this is that the area of grammar dealt with by -n is fairly low-level, and its analysis would have required a great deal of detailed information. For example, this suffix may be related to a second person singular nominative pronominal enclitic -n which occurs in the Western Desert.<sup>25</sup>

The following pairs of sentences having identical meaning are examples of its usage

(58) 'The swallow is talking'

(i)	<i>bundilyjirri wangga-nyina</i> swallow talk-PRES	(ii)	<i>bundilyjirri</i> swallow	<i>wangga-nyina-n</i> talk-PRES-N
(59)	'(you) Laugh!'			
(i)	<i>nyinda mandarri-ya</i> 2SG.NOM laugh-IMP	(ii)	<i>mandarri-ya</i> laugh-IMP-N	

<sup>&</sup>lt;sup>25</sup> Thanks to an anonymous reviewer for pointing this out.

So from these examples it would appear that -N adds no meaning to the sentences. This would apparently suggest that, at least in the final stages of modern Malgana, it had no functional significance. And consequently it would appear that no conclusive morphological explanation for the presence of the word-final *n* in the alternative forms can be made. However, examples such as the variant form *-niyan* of the OTHER1 suffix *-niya* occur very frequently in the data. As noted in §2.2, at the very least such evidence suggests that Malgana apparently tolerate stem-final and word-final alveolar and velar nasals.

#### (b) -(NGA)NHA

The verbal suffix *-nha* forms verbs which are typically translated by English *-ing* participle forms. For example:

- (60) *nyinda yugarri-nha* 2SG.NOM stand-NHA 'You're standing'
- (61) *ngatha yana-nganha baba-la* 1SG.NOM go-NGANHA water-LOC 'I'm going to the water' i.e. 'I'm getting water'

The apparent alternative suffix *-nganha* in the last example occurs for just one other stem, *nha-* 'see', i.e. *nha-nganha*. Given its phonological shape and capacity to attach to verbs, the Malgana suffix *-nha* is perhaps related to the Wajarri nominalising suffix *-njtja*  $\sim$  *-rnta*  $\sim$  *-nta*, used to derive verb forms which head subordinate clauses (Douglas 1981:239). Note also that there are non-future tense suffixes of similar shape in the wider language area of north western Australia (e.g. Nyangumarta *-nha*, Sharp 2004:167–168).

Note once again that, as for -n in §3.5.3(a) immediately above, a fairly simple explanation is that -nha perhaps involves a low-level area of grammar (requiring far more information than was actually obtained). In line with this, a further possibility for -nha is that it may be a bound pronominal, related to other such forms found elsewhere, such as the first person singular nominative pronominal suffix -nha from Nhanda (see Blevins 2001:79).

(c) -LINYJA

The suffix *-linyja* apparently derives a participle which provides some additional information regarding the situation expressed in the main clause. For example:

(62) *naganha yugarri-nyina baja-linyja* that stand-PRES smoke-LINYJA 'This one is standing up, smoking.'

The derived form in (62) presents the subject of the finite verb as carrying out another (simultaneous) activity. As such it could be used to further restrict identification of the subject, or perhaps to simply encode simultaneity of events. However, there is no indication of any morphological strategies for marking co-reference between the subject and *bajalinyja*, and nor is there any evidence that the derived form is the predicate of an additional clause.

Verbs elicited with the suffix *-linyja* are consistently translated using the English *-ing* participle form, and another example is:

```
(63) yarra-linyja
growl-LINYJA
'growling'
```

The suffix *-linyja* is similar in form and function to the Wajarri nominalising suffix *-njtja*  $\sim$  *-rnta*  $\sim$  *-nta* mentioned immediately above.

## (d) -GURA

The suffix -gura was recorded once, in the following example:

 (64) nganabuga nyinda nanyja-gura whoever 2SG look-GURA 'Who are you looking for?'

Surrounding languages have purposive verb suffixes which are reasonably similar in form to *-gura*. Thus, Yingkarta has purposive verb suffix forms *-wura* and *-lkura* (Dench 1998:41), Badimaya has the purposive suffix *-lgu* (Dunn 1988), while Wajarri has a variety of purposive forms, including *-ku* ~ *-kurlu*, *-ku* ~ *-kulu*, and *-ku* ~ *-wu* (Douglas 1981:230–231). In addition, Nhanda has a possible purposive *-gu* (Blevins 2001:114). However, given the lack of data, it is impossible to say whether *-gura* actually realises purposive in Malgana.

## (e) -BUGA

There is also one particularly intriguing example of derivational verbal morphology which occurs just once in the data.<sup>26</sup> This is the use of the apparent nominalising suffix - *buga* which derives an instrumental noun from a transitive verb, exemplified as follows:

(65) *bajal-buga* smoke-BUGA 'cigarette'

The verb *bajal*- apparently can mean either 'bite' or 'smoke'. And there is a possible cognate for this suffix in the Pilbara language Jiwarli (Mantharta), which has a similar verbal suffix *-buga* with the same function as the Malgana form presented here (Austin 1992a). And apart from a non-finite form of the verb *bajalinyja* 'smoking' (cited at the beginning of this section), no other forms of this verb were recorded in the data.

## (f) -YAYI, -NGAYI

Perhaps most elusive of all, the suffixes *-yayi* and *-ngayi* occur relatively infrequently in the data, and have no obvious relation to the verbal morphology of surrounding languages, e.g. *garlguyayi*, *nyingagayi* (see example (7) above). Dench (1996) notes various present tense suffix forms which resemble these suffixes, for example, Purduna *-yi* (Ø-conjugation), Payungu *-yi* (Ø-conjugation) and *-nmayi* (L-conjugation), and Yankunytjatjara *-nganyi* (NG-conjugation).

<sup>&</sup>lt;sup>26</sup> Thanks to Alan Dench for suggesting the analysis of this form.

#### 3.6 Adverbs

Temporal and manner adverbial items were recorded. For example, *marugudu* 'tomorrow' and *gayirri* 'far':

- (66) *marugudu ngatha ngurra-la nyina-manha* tomorrow 1SG.NOM home-LOC sit-FUT 'Tomorrow, I'll be at home'
- (67) gayirri ya-nmanha far go-FUT
  '(He) will go/travel a long way'

Other apparent adverbs include: barrangga 'later', thirriyi 'long ago', thali 'away'.

#### 3.7 Particles

A particle used for negating verbal meaning was also recorded, and occurs only with imperative forms. For example:

(68) gurra bumba-Ø nganha don't hit-IMP 1SG.ACC 'Don't hit me!'

Since there are no examples in which this item occurs with verb forms other than imperatives, it would be highly speculative to suggest that this word functions to negate verbal meaning more generally.

#### 3.8 Reduplication

Various examples of apparent reduplication were recorded, although no elicitation sessions were devoted to examining reduplication patterns. Typically, reduplication modifies the meaning of the stem in some fashion, for example, where *maru* means 'dark; night', *marumaru* means 'afternoon'. Such reduplication processes are common amongst Australian Aboriginal languages. The reader may consult the wordlist for further examples.

#### 4.1 Noun phrases

Noun phrases can minimally consist of a common noun or pronoun (including demonstrative or interrogative nominals). However, various noun phrases were recorded of more than one word, including the use of possessive pronouns followed by possessed noun.

(69) *ngatha-ngura warla ngurra-la* 1SG.POSS wife home-LOC 'My wife is at home'

The following examples involve demonstratives and personal pronouns followed by number nominals (from §3.4):

(70) *naganha gutharra yugarri-nyina* that two stand-PRES 'These two are standing up'

The examples which were recorded demonstrate only pre-nominal modification by adjectives or possessive pronouns, and no post-nominal modifiers were recorded.

Numerals apparently follow nominal items. For example:

(71) *nyarlu gutharra* woman two 'two women'

Note that only examples involving numerals as post-modifiers were recorded.

Another interesting example is the use of specific common noun nominals as a modifier (with e.g. ascriptive function). For example:

(72) *nyarlu marlu* woman kangaroo 'female kangaroo'

This phrase was suggested to the consultants, who readily accepted it, although they did not offer further examples of the same strategy of modifying nominals. Specific details about the nature of such modification (e.g. ascriptive) are thus not available. Since nominals are apparently readily accepted as having a possible modifying function, then this example also serves as evidence for a weak distinction between common nouns and nominal modifiers (perhaps adjectival terms).

#### 4.2 Basic clauses

#### 4.2.1 Constituent order in clauses

Malgana is typical of other Australian languages in having free word order, and there seems to be no preferred ordering of major constituents in clauses. No information was recorded about any special emphasis, such as focus, which constituents receive by being in one position rather than another.

## 4.2.2 Non-verbal clauses

Typically, the recorded non-verbal clauses consist of two nouns, or a noun and adjective, where a noun is subject and an adjective or the remaining noun is predicate. The following string of nominals was recorded as expressing a proposition, and is thus analysed as a clause.

(73) *ngathangura warlu ngurra-la* 1SG.POSS spouse home-LOC 'My spouse is at home'

Note that the subject is in fact a multiple word noun phrase, discussed in §4.1 above. Another example involves a subject nominal preceded by an attributive term:<sup>1</sup>

(74) gumbarra nyinda clever 2SG.NOM 'You're solid'

This example differs in constituent order from the previous one, where the subject precedes the predicate. Of course, the available data is not detailed enough to determine whether this change in order is significant, for example, whether it has something to do with the focussing of information, etc.

## 4.2.3 Verbal clauses, case-marking

The data consists only of basic verbal clauses, and there were no conclusive examples of subordination. Case-marking follows a standard split-ergative pattern, and no consistent deviations from this pattern were found. This is set out as follows:

	TRANSITIVE SUBJECTS	INTRANSITIVE SUBJECTS	OBJECTS
NOMINALS	-ngu	-Ø	-Ø
	(ergative)	(absolutive)	(absolutive)
PRONOUNS	-Ø	-Ø	-nha
	(nominative)	(nominative)	accusative

Table 4.1: Case-marking patterns

The mismatch between a literal translation of the attributive *gumbarra* as 'clever' and second person pronominal form as 'You're clever', and the free translation as 'You're solid', suggests that 'solid' in the Aboriginal English dialect used in Shark Bay means 'clever'. Note that the term 'solid' is found more widely in Aboriginal English, as a highly positive attributive term, such as 'great', 'fantastic', etc.

Examples demonstrating the full range of recorded nominal and pronominal casemarking are as follows:

#### 1. Basic transitive clauses

- (75) *duthu-ngu nyinda-nha baja-nmanha* dog-ERG 2SG-ACC bite-FUT 'The dog will bite you'
- (76) *ngatha buci bungu-Ø* 1SG.NOM cat-ABS hit-IMP 'I hit the cat'<sup>2</sup>

## 2. Basic intransitive clauses

- (77) *nyarlu-Ø gutharra yugarri-nyin* woman-ABS two stand-PRES 'Two women are standing up'
- (78) ngatha yani-nyina 1S.NOMG go-PRES 'I'm going'

And note also longer sequences of simple verbal clauses are constructed by simply placing them one after the other, for example:

(79) *nyinda yanagi-ya-ni ngaatha-nu guga* 2SGNOM come-YA-NI eat-PST meat 'You came and ate the meat'

Presumably, it would be understood from the context that the subject is the same across both clauses. Blevins (2001:130–131) notes a similar use of simple apposition to link clauses, which are also highly contextualised.

## 4.3 Questions

Both WH- and polar (i.e. yes/no) questions were recorded. WH- questions are characterised by a WH- element and rising intonation, and can be non-verbal or verbal clauses. Several examples of WH- questions have been provided in §3.4. Polar questions are characterised by rising intonation, and can be verbal or non-verbal. For example, the following non-verbal polar question form was elicited.

(80) nyinta-ngu nyarlu
 2SG-POSS woman
 'Have you got a woman?'

To which the reply was *e'e* 'yes'. Also consider the following example of a non-verbal question, possibly involving number agreement between the pronoun and the predicate *ngugurnu*:

<sup>&</sup>lt;sup>2</sup> Note that the tense of the translation apparently does not to match the imperative verb form which has been elicited here. Unfortunately, not enough information is available to explain this inconsistency.

(81) *nhurra ngugurnu-nugu*2PL.NOM good-PL
'Are you mob good?'

A variant of this last example, but without the apparent number agreement, is:

(82) nyinda gutharra ngugurnu
2SG.NOM two well
'Are you two well?'

# Appendix A: List of recorded Malgana verb forms

#### smoke

bajalinyja

bite bajaniya bajaniyan(u) bajanmanha

**smell** barndiyanu

**shoot** batharnu

**blow** bathunyina

hit

binja bumanha bumba bumbanu bungiyanu bungu

cook; burn

gambalinyja gambaniya gambanmanha gambanu gambanyina

**take** ganyigiya ganmanha

**cut** gardabudanu wait for garlgulinyja garlgunu garlgunyina garlguyayi

laugh mandarrimanha mandarriniya mandarrinu

blow murinyina

swim ngabirrinyina

hear nganggulinyja ngangguyanu

drink, eat ngathaanu ngarnija ngarniyanu ngarnmanha

#### stab

ngarri ngarriniyan ngarrinmanha ngarrinu

**cry** ngathimanha ngathiniya ngathinu ngathinyina sleep ngundamanha ngundaniya ngundanyina

see, look n(h)aga nagarn nangiyanu nhanja nhanganha nanyjagura

#### sit

nyinamanha nyinangayi nyinanu nyiniyan

climb up wandinyina

## talk

wanggamanha wangganu wangganyina wangganiyanu

**leave** *wanthanu* 

**chase** wayaman wayamanha

**swallow** *wurilinyja* 

# go, come

yanigiya yanagiya yaninyina yana(a)ngu yanmanha

#### growl

yarralinyja

yarran yarraniya(n) yarranmanha yarranu

# stand

yugarri yugarrimanha yugarrinha yugarriniya yugarrinu yugarrinyina give yungganu

# Appendix B: Malgana verb paradigm constructed from standard analyses

Imperative	Present	Past	Future	Other	Gloss
				bajalinyja	smoke
		bajaniya, bajaniyan(u)	bajanmanha		bite
barndiyanu					smell
batharnu					shoot
	bathunyina				blow
bumba, bumbanu	binja	bungu, bungiyanu	bumanha		hit
	gambaniya, gambanyina	gambanu	gambanmanha	gambalinyja	cook; burn
ganyigiya			ganmanha		take
		gardabudanu			cut
garlguyayi	garlgunyina	garlgunu		garlgulinyja	wait for
	mandarrinu	mandarriniya	mandarrimanha		laugh
	murinyina				blow
n(h)aga, nagarn	nangiyanu <b>nhanja</b>		nhanganha	nanyjagura	see, look
	ngabirrinyina				swim
		ngangguyanu		nganggulinyja	hear
ngarri	ngarriniyan	ngarrinu	ngarrinmanha		stab
ngathaanu	ngarnija	ngarniyanu, ngathaanu	ngarnmanha		drink, eat
	ngathiniya, ngathinyina	ngathinu	ngathimanha		сгу
	ngundaniya, ngundanyina		ngundamanha		sleep

Imperative	Present	Past	Future	Other	Gloss
nyiniyan	nyinangayi	nyinanu	nyinamanha		sit
	wandinyina				climb up
	wangganyina	wangganu, <b>wangganiyanu</b>	wanggamanha		talk
wanthanu					leave
			wayamanha	wayaman	chase
				wurilinyja	swallow
yanigiya, yanagiya	yaninyina	yana(a)ngu	yanmanha	yananganha	go, come
yarran	yarranu	yarraniya(n)	yarranmanha	yarralinyja	growl
yugarri	yugarriniya, yugarrinyina	yugarrinu	yugarrimanha	yugarrinha	stand
yungganu					give

Bold examples are inconclusive.

Appendix C: Malgana verb paradigms, maximal analysis

Gloss	smoke	bite	smell	shoot	blow	t	cook; burn	take	ıt	wait for	laugh	blow	see,	look
10	SD	pi	SD	sh	pl	hit	ত দ্র	ta	cut	M.	la	pl	nanyjagura se	lo
6													nhanganha na	
8	bajalinyja						gambalinyja			garlgulinyja			<u>lu</u>	
7	$\left  p \right $	bajanmanha				bumanha	gambanmanha g	ganmanha		00	mandarrimanha			
9				batharnu		bumbanu	gambanu	~	gardabudanu	garlgunu	mandarrinu			
5		bajaniyanu	barndiyanu			bungiyanu							nangiyanu	
4		bajaniya, bajaniyan	_				gambaniya				mandarriniya			
3					bathunyina		gambanyina			garlgunyina		murinyina		
2						binja							nhanja	
1						bumba, bungu		ganyigiya		garlguyayi			n(h)aga,	naga(rn)

1	2	ω	4	5	9	7	8	6	10	Gloss
		ngabirrinyina								swim
				ngangguyanu			nganggulinyja			hear
ngarri			ngarriniyan		ngarrinu	ngarrinmanha				stab,
										sew (?)
	ngarnija			ngarniyanu	ngathaanu	ngarnmanha				drink,
										eat
		ngathinyina	ngathiniya		ngathinu	ngathimanha				cry
		ngundanyina	ngundaniya			ngundamanha				sleep
nyinangayi			nyiniyan		nyinanu	nyinamanha				sit
		wandinyina								climb up
		wangganyina		wangganiyanu	wangganu	wanggamanha				talk
					wanthanu					leave
wayama(n)						wayamanha				chase
							wurilinyja			swallow
yana/igiya		yaninyina			yana(a)ngu	yanmanha		yananganha		go, come
yarra(n)			yarraniya(n)		yarranu	yarranmanha	yarralinyja			growl
yugarri		yugarrinyina	yugarriniya		yugarrinu	yugarrimanha		yugarrinha		stand
					yungganu					give

Grey area = N conjugation. Bold = inconclusive.

Appendix D: Malgana verb paradigms, minimised

Imperative	Past	Present	Future	OTHER1	OTHER2	Gloss
					bajalinyja	smoke
			bajanmanha	bajaniya,		bite
				bajaniyanu		
				barndiyanu		smell
	batharnu					shoot
		bathunyina				blow
bumba, hunou	bumbanu	binja	bumanha	bungiyanu		hit
	gambanu	gambanyina	gambanmanha	gambaniya	gambalinyja	cook; burn
			ganmanha	ganyigiya		take
	gardabudanu					cut
	garlgunu	garlgunyina			garlgulinyja, <b>garlguyayi</b>	wait for
	mandarrinu		mandarrimanha	mandarriniya		laugh
		murinyina				blow

OTHER2 Gloss	nhanganha, see, look	nanyjagura,	nagarn	swim	nganggulinyja hear	stab	drink, eat	cry	sleep	nyinangayi sit	climb up	 talk			wurilinyja	wurilinyja yananganha	wurilinyja yananganha yarralinyja	wurilinyja yananganha yarralinyja yugarrinha
OTHER1	nangiyanu				ngangguyanu	ngarriniya(n)	ngarniyanu	ngathiniya	ngundaniya	nyiniyan		wangganiyanu	wangganiyanu	wangganiyanu	wangganiyanu	wangganiyanu yana/igiya	wangganiyanu yana/igiya yarraniya(n)	wangganiyanu yana/igiya yaraniya(n) yugarriniya
Future						ngarrinmanha	ngarnmanha	ngathimanha	ngundamanha	nyinamanha		wanggamanha	wanggamanha	wanggamanha wayamanha	wanggamanha wayamanha	wanggamanha wayamanha yanmanha	wanggamanha wayamanha yanmanha yarranmanha	wanggamanha wayamanha yanmanha yugarrimanha
Present	nhanja			ngabirrinyina			ngarnija	ngathinyina	ngundanyina		wandinyina	wangganyina	wangganyina	wangganyina	wangganyina	wangganyina yaninyina	wangganyina yaninyina	wangganyina yaninyina yugarrinyina
Past		_				ngarrinu	ngathaanu	ngathinu		nyinanu		wangganu	wangganu wanthanu	wangganu wanthanu wayaman	wangganu wanthanu wayaman	wangganu w <b>anthanu</b> wayaman yana(a)ngu	wangganu wanthanu wayaman yana(a)ngu yarranu	wangganu wanthanu wayaman yana(a)ngu yarranu yugarrinu
Imperative	n(h)aga					ngarri											yarra(n)	y <mark>arra(n)</mark> yugarri

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Greyed = N conjugation. Bold examples = inconclusive.

Appendix E: Malgana verb paradigms, suggested analysis

Imperative	Past	Present	Future	OTHER1a	OTHER1b	OTHER2	Gloss
						bajalinyja	smoke
			bajanmanha	bajaniya	bajaniyanu		bite
					barndiyanu		smell
	batharnu						shoot
		bathunyina					blow
bumba, bungu	bumbanu	binja	bumanha		bungiyanu		hit
	gambanu	gambanyina	gambanmanha	gambaniya		gambalinyja	cook; burn
			ganmanha	ganyigiya			take
	gardabudanu						cut
	garlgunu	garlgunyina				garlgulinyja, <b>garlguyayi</b>	wait for
	mandarrinu		mandarrimanha	mandarriniya			laugh
		murinyina					blow

Imperative	Past	Present	Future	OTHER1a	OTHER1b	OTHER2	Gloss
n(h)aga		nhanja			nangiyanu	nanyjagura,	see, look
						nhanganha,	
						nagarn	
		ngabirrinyina					swim
					ngangguyanu	nganggulinyja	hear
ngarri	ngarrinu		ngarrinmanha	ngarriniya(n)			stab
	ngathaanu	ngarnija	ngarnmanha		ngarniyanu		drink, eat
	ngathinu	ngathinyina	ngathimanha	ngathiniya			cry
		ngundanyina	ngundamanha	ngundaniya			sleep
	nyinanu		nyinamanha	nyiniya(n)		nyinangayi	sit
		wandinyina					climb up
	wangganu	wangganyina	wanggamanha		wangganiyanu		talk
	wanthanu						leave
			wayamanha			wayaman	chase
						wurilinyja	swallow
	yana(a)ngu	yaninyina	yanmanha	yana/igiya		yananganha, <b>yarran</b>	go, come
	yarranu		yarranmanha	yarraniya(n)		yarralinyja	growl
yugarri	yugarrinu	yugarrinyina	yugarrimanha	yugarriniya		yugarrinha	stand
	yungganu						give
		9	Greyed = N conjugation. Bold examples = inconclusive.	$h$ . Bold examples = $\frac{1}{2}$	inconclusive.		

### Appendix F: Comparative wordlist for Malgana and neighbouring languages

Note that this wordlist is Malgana-based, and correspondences between languages other than Malgana, e.g. between Yingkarta and Nhanda, have not been extensively researched. Of course, such comparison may well occur as an artefact of comparing Malgana with, for example, both Yingkarta and Nhanda. However, even where there may not be any straightforward comparison with the Malgana form, an attempt has been made to list available forms in the other languages. The intention in these latter cases is that these additional forms may help throw light on the relationship between these neighbouring languages.

Where the meanings of words in surrounding languages differ from the Malgana word they are listed separately; 'n/a' means a form is not available or was not found; '?' or '(?)' denote uncertain comparison (depending on formatting for item/s in question); 'YN' and 'YS' denote Northern and Southern Yingkarta respectively; interesting but uncertain comparisons are presented using 'but <...>', while interesting items involving additional information are presented using 'and <...>'.

The orthographies of the original sources have been retained. For additional information about these orthographies, these sources can be consulted: Dench (1998) for Yingkarta, Blevins (2001) for Nhanda, Douglas (1981) for Wajarri, Dunn (1988) for Badimaya. Two additional lists for Wajarri and Badimaya were also compiled by Doreen Mackman (2000) from unpublished material available at the Yamaji Language Centre. Note that these lists are more recent than either Dunn (1988) or Douglas (1982). Items from these additional lists are introduced with 'add. <...>', and are also presented in their original orthographies.

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
ajugawu (sp. yam)	n/a	aguda, ajuga	(add. <yajuga>)</yajuga>	n/a
ardu (lover, boyfriend, girlfriend, husband, wife, spouse)	YN YS mardungu	ardu	martungu	mardungu
baba (rain)	YN yungu YS kunyjalyka	pundu	(add. <baba>)</baba>	gabidyi (add. <gabi>)</gabi>

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
baba (water)	kunda YN kayulu, YS paba	apa	papa, kapi (add. <baba>)</baba>	gabi
bajani (bite)	wundirri-lanyi, jardi-lanyi (eat), YN paja-lanyi (eat) (and <ys pajalanyi<br="">(drink)&gt;)</ys>	aja-	patjanmanja (add. <baja->)</baja->	badyalgu
balhada (goanna, bobtail)	palarra (bobtail)	palharda (shingleback, bobtail, or blue- tongued skink, lizard)	(add. <balharda>)</balharda>	galadi (add. <bidyaru>)</bidyaru>
balunuga, balu (many, several)	parlura (full) (?)	pulha (many, a lot, mobs)	palu (third person pro) (?) (add. <yalyba (many)="">)</yalyba>	balu (third person pro) (?) (add. <yalyba (many)="">)</yalyba>
barda, bardanga (later, by and by, after)	n/a	warlu (later)	wurta (later, by and by) (add. <urda, wurda&gt;)</urda, 	yurda (later)
bardalyi, baralyi, barldalyi (stone, rock)	parlu	n/a (but <wur'a>)</wur'a>	marta (rock, stone, breakaway), yapu (rock, stone, breakaway)	marda (stone, hill, rock, money)
barndiyanu (smell something)	YS parndi-	arndi-	parnti- (and <parntilku (savoury<br="">smell)&gt;) (add. &lt; barndin-&gt;)</parntilku>	bandi-
barnka, bangka (goanna; longtail racehorse lizard)	YS punka	parnnga (long- tailed yellow goanna)	parnka (add. <ban.ga>)</ban.ga>	barnga (racehorse goanna)
barrangga, barranja (by and by, soon, later)	n/a	thunu, urdaa (soon), warlu (later)	urta, wurta (by and by, later) (add. <guwardi>)</guwardi>	yurda (later)
bibi (breast)	n/a	ibi	mimi, titi, pipi (breast, nipple)	mimi
bilada (spear)	n/a	bilhida (fighting spear)	pilara (many barbed spear) (add. <bilarra>)</bilarra>	n/a
bilu (boomerang)	n/a	pirlu	n/a	n/a
bintharru, bintharri (sp. tree, saltbush)	n/a	n/a	wirnta (tree) (?) (add. <wirnda (tree,<br="">wood, stick)&gt;)</wirnda>	n/a (but <winda (tree, wood)&gt;?)</winda 

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
bira (moon)	n/a (but <wilarra (moon)&gt;?)</wilarra 	n/a	n/a (but <wilara, wulaya (moon)&gt;?)</wilara, 	n/a (but <wilaya (moon)&gt;?)</wilaya 
bithanu (liver)	YS pitharn	n/a	pitjarn (add. <bitharn, marirri,<br="">bithany&gt;)</bitharn,>	(add. <dharru>)</dharru>
buthurru, buthu (sand)	YS yalha	pilurda, uthudu	n/a (but <njatja>) (add. <nyaja, barna,<br="">budiri (lump of sand in the ground), bila&gt;)</nyaja,></njatja>	n/a
buga (short)	n/a	n/a	n/a (but <purlka (big)&gt;?) (add. <bunthu>)</bunthu></purlka 	(add. <bulamarda>)</bulamarda>
bulyarru (hungry)	n/a	n/a	(add. <nyarun, nyanyura&gt;)</nyarun, 	(add. <gulydyirr>)</gulydyirr>
bumbarnu, buma- (hit with open hand; crush (seed))	YN pumarra-	n/a	puma- (hit)	bungu- (hit)
bundi (skin, peel, bark)	n/a	n/a	kantja, warntu (add. < ganja, miri>)	mindyu
bundu, bunda (rain)	n/a (but <yn yungu (rain)&gt;?)</yn 	pundu	(add. <bulyu-bulyu (light rain)&gt;)</bulyu-bulyu 	n/a
burda (star)	YN puurnkara YS pundara	indiya	purntara (add. <bundara>)</bundara>	(add. <bundara>)</bundara>
duthu (dog, tame)	thuthu	uthu	tjutju (add. <duthu>)</duthu>	dudhu
gagara (hip)	YS kagara (thigh)	n/a	(add. <gaga, yanggarl&gt;)</gaga, 	(add. <yanggarl>)</yanggarl>
gagarrala (east)	n/a	n/a	kakararra	(add. <garang- gardi (sun-side)&gt;)</garang- 
gajirri (far, long way)	n/a	n/a	(add. <warda>)</warda>	(add. <warda>)</warda>
galga (thigh)	YS kagara (thigh)	n/a	n/a	n/a
gambinyina, gamba- (cook, burn)	kamba-	artpa-	kampu (cooked) (add. < bawu- (cook), gambu- (cooked, ripe)>)	n/a (but <bawuwa>) (add. <gambal (burn)="">)</gambal></bawuwa>
ganmanha (take, taking)	YN ka- (carry) YS kanyji- (hold)	n/a	kangka- (take away)	(add. <ma- (to take)&gt;)</ma- 
gardabudanu (to cut)	YS kardaburra-	arda-	kartapayanmanja	gardabaya
garla (fire)	karla	wajanu	karla, watjan	wadyan

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
guga (fish, meat, animal)	YN kuga	thudu	kuka	dhuru
gugu, guugu (good, yes, okay)	n/a	ku'arlu	parnti (add. <guwa (yes)&gt;)</guwa 	buranyu (add. <ugul (well, good)&gt;)</ugul 
gulyba (sick)	n/a	n/a	(add. <biga>)</biga>	galadya, (add. <biga>)</biga>
gunda (shit, faeces)	n/a (but <kunda (water)&gt;?)</kunda 	wuna	(add. <gurna>)</gurna>	guna (backside, faeces)
gurlga, gulga (ear, ears)	YN kurlgarri- (hear, listen to)	wurtka	kurlka	gurlga (add. <gulga>)</gulga>
gurri (smoke)	jugurdu	yugurdu	jurtu (add. <yurla>)</yurla>	(add. <dyudu>)</dyudu>
guru (eyes)	kuru	n/a ( <milu (eye)&gt;)</milu 	kuru	n/a
gutharra (two)	kutharra	wuthada	kutjarra (add. <gutharra>)</gutharra>	gudhara
gutiya (one)	kurriga	kutiya	kurriya, kutiya	gurriya(?)
irra, yirra (mouth)	n/a	idaji (mouth, tooth)	ira, yira (add. <irra>)</irra>	irra(?) (add. <yira>)</yira>
jalyanu (grass)	n/a	thayalu (grass tree)	(add. <jalyga (seeds)&gt;)</jalyga 	n/a
jina (foot)	jina	yina	tjina (add. <jina>)</jina>	dyina
jurruna (pelican)	n/a	n/a (but <thugunyu (parrot)&gt;?)</thugunyu 	n/a	n/a
maga (head)	maga	n/a (but <kagurli (head<br="">of animal)&gt;?)</kagurli>	maka	maga
malawarra (clouds; cloudy)	marndarda	mardala	n/a (but <marntuta>?) (add. <mandarda>)</mandarda></marntuta>	(add. <mandarda (cloud)&gt;)</mandarda 
malu (shade)	malu	malu (shade, shadow)	(add. <magurna>)</magurna>	(add. <maru (nightime)&gt;)</maru 
mambu (bone)	YS mambu	mambu (bone)	mampu (lower leg)	mambu (lower leg)
mandanu (take, get)	ma-	matka-	man-(?) (pick up, get) (add. <gangga->)</gangga->	ma- (take)
mandarrinyina (laughing, to laugh)	n/a (but <thurni->)</thurni->	n/a	n/a (but <tjurnimanja>) (add. <juni->)</juni-></tjurnimanja>	n/a (but <ganggala>) (add. <dyindyil>)</dyindyil></ganggala>

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
mara (hand; smaller, top grinding stone)	mara	mara	mara	mara
marnkurru, manggutha (three)	mankurr	marnngurdu	marnkurr (add. <man.gurr>)</man.gurr>	marnkurr
marugudu, maruguda (tomorrow)	maruburra	n/a	mungal	marugundi
matharra, mathara (black; black cockatoo)	n/a	n/a	n/a (but <mawurtu, marurtu (black)&gt;?)</mawurtu, 	n/a (but <mawurda (black)&gt;?)</mawurda 
mulha, mutha (nose)	mulha	mutha	mulja (add. <mulya>)</mulya>	mulya
murla (die)	YS murla (dead, spirit)	n/a	murla, mula (dead)	murla (dead)
namanu (mouth)	n/a	ngarnmanu	n/a	n/a
nhanja (see)	nha-	nha-	nja- (add. <nhanga-, nyi-&gt;)</nhanga-, 	nhaguwa
nayi, ngayi (what)	nhaa (nom/acc)	nhaa	nja	nhaa
ngabu (fat)	YS nhaba	ngabu	napa (add. <nhaba>)</nhaba>	n/a (but <ganu (fat)&gt;, <garnu (kidney fat)&gt;?)</garnu </ganu 
ngana (who)	ngana (nom/acc)	ngana	ngana	ngana
ngangga (chin)	YN ngarnngarn YS ngankurr	n/a	ngarnngarn (add. <ngarn-ngarn>)</ngarn-ngarn>	nankan (add. <ngarn-ngarn>)</ngarn-ngarn>
nganggulinja (hear)	YS nganggu-	n/a	ngangkunmanja (listen, hear)	n/a (but <guwanda (listen,<br="">hear, feel)&gt;)</guwanda>
nganka (tree)	n/a	yanga(?) (tree (generic))	n/a	n/a
nganyimarra (cloud)	n/a	n/a	n/a (but <marrarn (cumulus cloud)&gt;)</marrarn 	n/a
ngardinga (down (vertical))	n/a	athalu, ididinggada, inda-	ngartiyarra (beneath, underneath, inside, under) (add. <ngarri (lying down)&gt;)</ngarri 	(add. <ngarriya (lying down)&gt;)</ngarriya 
ngarnija (drink; eat)	n/a (but YN <paja-, jardi-<br="">(eat)&gt;, <wula- (drink)&gt;, YS <paja- (drink),<br=""><jardi- (eat)="">)</jardi-></paja-></wula- </paja-,>	ngala-	nganmanja (add. <nganmanha>)</nganmanha>	ngalguwa, ngarnguwa

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
ngathinyina (cry)	YS ngathi-	n/a	n/a (but <ngulamanja (cry)&gt;) (add. <ngulamanha>)</ngulamanha></ngulamanja 	wulaya
ngawu (egg)	n/a (but <ys kaburru (egg), wirrin (emu egg)&gt;)</ys 	n/a (but <warla>)</warla>	n/a (but <warla, kapurtu&gt;) (add. <ngundil, ngawu<br="">(malee-fowl)&gt;)</ngundil,></warla, 	ngawu
nguba (blood)	n/a	nguba	(add. <nguba (clot,<br="">thick, coagulated blood), yarlgu (blood)&gt;)</nguba>	nguba
ngugurnu, ngugunu (good)	n/a	ku'arlu	parnti (add. <yurnanggu (really<br="">good, terrific), nharnuwarra (good)&gt;)</yurnanggu>	buranyu (add. <burany>)</burany>
ngunyu (hair of head)	n/a	ngunyu	(add. <yundu, manggalya&gt;)</yundu, 	ngunya (skin, hair)
ngurndi (tail)	nyurndi	nhurndi	njurnti	nyundi, nhundi
nhanganha (this, this one)	thi- (this)	inya (this)	njanja (that which is near, this person/thing) (add. <nhanha>)</nhanha>	nhinha (this), nhantinha (this one) (add. <nhandhinha>)</nhandhinha>
nyarlu (woman; female animal)	YN nyanyjil YS nyarlu	nyarlu	njarlu (add. <nyarlu>)</nyarlu>	n/a
nyinangayi (sit)	nyina-	inyja-, nyina-	njinamanja	nyii (add. <nyi->)</nyi->
nyuju (elbow)	n/a (but <ngurnku>)</ngurnku>	nyuju	ngurnku	nyuran
thalaaba (ashes (cold))	n/a	n/a	(add. <guba, jirdi<br="">(ash from an old fire)&gt;)</guba,>	n/a
thalanyu (tongue)	thalany	thalanyu	tjarlinj, tjalanj (add. <thalany>)</thalany>	dyalang, dyalany
tharda (knee)	n/a	tharda	(add. <garlbarda, burru, murdi&gt;)</garlbarda, 	dyarda
thayirri, thayadi (snake)	n/a	thayidi (snake (generic))	(add. <thiga, jiga="">)</thiga,>	(add. <dyiga (snake)&gt;)</dyiga 
wabarnu (sun)	n/a	n/a	(add. <burna (the<br="">hot sand around a fire), garangu (sun)&gt;)</burna>	walba (hot)

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
walgabuda (feather, wing)	n/a (but <murruwandu (feather, tail)&gt;)</murruwandu 	n/a (but <nyimi (wing)&gt;)</nyimi 	(add. <wamulu (feather)&gt;)</wamulu 	n/a (but <inda, ngarlbu&gt;)</inda, 
wambu (bad)	n/a (but <yn puga&gt;, <ys puga,<br="">walhi&gt;)</ys></yn 	n/a (but <caalu, war'a&gt;)</caalu, 	n/a (but <waljtij (not right), yurna (rotten, smelly)&gt;) (add. <walhi (not<br="">right), tharra (bad)&gt;)</walhi></waljtij 	n/a (but <dhadha (bad)&gt;)</dhadha 
wantha(la), warnda(la), warnda, wandoo (Barlee) (where)	wanthala	wandha (where, somewhere)	(add. <thala (where), wanthala, <wandan- (to<br="">track)&gt;)</wandan-></thala 	wandi, wandhi
wanthanu (leaving it, to leave it)	n/a	n/a	(add. <junamanha>)</junamanha>	n/a
wandinyina (climb up)	n/a	n/a (but <inda- (climb<br="">down)&gt;?)</inda->	n/a	n/a
wangga (language, talk, speech, word)	wangga- (say, speak, talk)	wangganhaa (language, speech, talk)	wangga (language, speech)	wangga (talk, say, speak)
wangga- (speak, talking)	n/a	wangganhaa (language, speech, talk)	wangga (language, speech)	(add. <wangga>)</wangga>
warabadi (big)	n/a (but <ys mardi&gt;)</ys 	n/a (but <indaacu, inda&gt;)</indaacu, 	n/a (but <yarnta, purlka&gt;)</yarnta, 	n/a (but <inda, yinda, yagu&gt;)</inda, 
waranyu (sp. yam)	n/a (but <ys parrgudu, thugurda (vegetable food)&gt;)</ys 	n/a (but <agurdu, ajuga<br="">(yam)&gt;)</agurdu,>	warinj, wayinj (vegetable food) (add. <warany (vegetable food)&gt;)</warany 	n/a (but <wama (vegetable food)&gt;)</wama 
warawara (small)	n/a (but <ys yaju&gt;)</ys 	n/a (but <pudi>)</pudi>	n/a (but <tjuntja(marta)>) (add. <thunthamarda (Ngunuru dialect), jinjamara&gt;)</thunthamarda </tjuntja(marta)>	n/a (but <guluny>)</guluny>
wardandu (west)	n/a	wacu	(add. <wilunyu, wilura&gt;)</wilunyu, 	(add. <wirlugardi (sea-side&gt;)</wirlugardi 
wardu (neck; throat, front part of neck)	n/a (but <ys jardugurla (back of neck)&gt;?)</ys 	warndu (throat, neck)	(add. <jardu (back<br="">of neck)&gt;)</jardu>	(add. <undhu (front of neck)&gt;)</undhu 

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
warla (egg)	n/a (but <ys kaburru (egg), wirrin (emu egg)&gt;)</ys 	warla	warla	n/a (but <ngawu>)</ngawu>
warnigi, warniyanu (fall)	warni-	n/a (but <urnnga-, uku-<br="">(fall)&gt;?)</urnnga-,>	warni-	n/a (but <warangguwa, warrarngguwa (fall)&gt;) (add. <wara->)</wara-></warangguwa, 
warrari (fly, housefly)	YS warrari	wadayi	warayi (add. <warrayi>)</warrayi>	warayi
wigi (spit, sputum, froth, bubbles)	wigi	wigi	(add. <wirrgi, wilgi,<br="">wilygi&gt;)</wirrgi,>	wilgi (add. <dyalybi>)</dyalybi>
winthu, wirndu (wind)	YS winthu	uudinu	winjtju (add. <winthu>)</winthu>	windu, windhu
winja (old man)	winyja	winyja (old person)	wintja (old man) (add. <winja>)</winja>	windya (old person) (add. <dyudya>)</dyudya>
wirda (shin)	YS widara	n/a	n/a	n/a
wirlgu, wilygu (belly, stomach (internal))	YS wilgu	wiku, witku	n/a (but <warri>)</warri>	n/a (but <wari, warri&gt;)</wari, 
wirrangu (fishing spear, a gidgee)	YS wirrangu (spear)	widaa (spear)	wirrangu, wiyartu (single barbed spear)	n/a (but <wala- (to spear)&gt;?)</wala- 
wuduru, wudura (heart)	YS kurdudu	wurdudu	kurturtu (add. <gudurdu>)</gudurdu>	gurdurdu
wulada (long, tall)	n/a	wadula (tall)	n/a (but <wara (tall)&gt;?) (add. <widara, wirda="">)</widara,></wara 	n/a (but <warda (ADVERB, far away)&gt;?) (add. <wanarra (long),<br="">wan'guru (tall)&gt;)</wanarra></warda 
wurdbi, udbi (skin, lip, bark)	YS kulgil	wurtpi, urtpi	kulpaka (scars (cicatrice)) (add. <urlbaga, gulbarga<br="">(cicatrice)&gt;)</urlbaga,>	wulbaga (scar) (add. <nyinbi=lip>)</nyinbi=lip>
wurlawurla, wurla, wulawula, guragayiri (near, close by)	n/a	n/a (but <atilu>)</atilu>	kula (close, near)	gulawu (back, return, not far, close by)

Malgana	Yingkarta	Nhanda	Wajarri	Badimaya
wurnta (shield)	YN wurnda	wurnda	kurnta, wurnta (add. <urnda, gurnda,<br="">wurnda, underdu ((Byro dialect), kangaroo skin blanket, i.e. shield against the weather)&gt;)</urnda,>	wunda
yaburru (north)	YS yaburru	idalu	yapurtu (add. <yaburru>)</yaburru>	yabaru (north, people to the north)
yajiyanu (dig)	yaji-	n/a (but <i'a->?)</i'a->	(add. <baya->)</baya->	n/a (but <baya->)</baya->
yalgari (tree (generic))	n/a	n/a	(add. <yarlu, yarlgu (gum)&gt;)</yarlu, 	n/a
yamaji (person, aboriginal)	n/a	n/a	yamatji (add. <yamaji>)</yamaji>	n/a
yaninyina (walk, go)	уа-	yatka-	yan-	yanggu-
yanyigiya (throw)	YS yaga-	wanyja-	n/a (but <warnitja- (throw away)?&gt;) (add. <warnija->)</warnija-></warnitja- 	wani-
yiranga, irrangu (up (vertical))	n/a	ida	n/a	n/a
yirra (tooth)	yirra	idaji (mouth, tooth)	yira, ira	yira (mouth, teeth) (add. <irra>)</irra>
yiyindi (forehead)	n/a	n/a	n/a	n/a
yugarrinyina (stand)	yugarri-	igada-	(add. <garri->)</garri->	yuga
yunda,unda (thigh)	YS jundu- (kick)	yurnda	tjunta (add. <junda, jurnda&gt;)</junda, 	dyunda
yungganu, junga- (give)	yu-	inga-	yunga-	yunggu- (add. <yungu->)</yungu->
yuraku (spearthrower)	n/a	uraga	n/a	n/a
yurla (male bobtail goanna)	n/a	n/a	n/a (but <kuwiyarl>?) (add. <yurla (male)="">)</yurla></kuwiyarl>	n/a (but <guwiyarl>?) (add. <bidyara (bobtail)&gt;)</bidyara </guwiyarl>
yurta (possum)	n/a	n/a	wayurta (add. <wayurda (sp.<br="">kangaroo&gt;)</wayurda>	(add. <gumal>)</gumal>

### Appendix G: Malgana–English wordlist

The following wordlists in this Appendix and in Appendix H are a compilation of all the recorded words which can confidently be claimed to be part of the Malgana Lexicon. The sources range in size, reliability and verifiability, as well as dates. The smallest list has twelve members, the longest well over one hundred. The earliest list dates from 1886, the latest from 2000. There are two wordlists: the first is Malgana to English (Appendix G), and the second is English to Malgana (Appendix H).

I have presented items in these lists on the basis of a few principles:

- i. Entries are ordered alphabetically in all cases, although cross-references may help in locating related words which do not occur near each other.
- ii. Nominals are listed in the form in which they are provided, which tends to be without any overt case-marking.
- iii. The full range of pronoun forms are listed (including subjects, objects, etc.).
- iv. Verbs are listed in present tense if available, otherwise past, followed by future, followed by imperative, followed by non-finite (depending on which is higher in the hierarchy and available). Note that where verbs are constructed using the INCH verbaliser *-thayi*, the present tense form (suffix *-nyina*) is used as the citation form, even where this was not actually recorded.

Entries for the Malgana to English wordlist have the following structure:

[headword], [possible variant/s] [part of speech] – [gloss] [Examples] [Additional notes, including grammatical points, cultural information, etc.] [Cross-reference to synonyms and other related entries].

The symbol '=' separates a Malgana example and its translation. The abbreviation 'sp.' means 'species of'. Placename headwords are capitalised. A simple variant is here defined as a form which could reasonably be expected to result from straightforward variation of particular sounds (e.g. rr and r), and the order in which these are presented for any entry is strictly alphabetical. However, forms with variation significant enough to be considered as possible alternative forms, e.g. perhaps exhibiting dialectal variation, receive separate entries, and are cross-referenced.

Note that the entries for the English to Malgana wordlist are much simpler, and only contain an English word followed by its Malgana equivalent.

**ajugawu** (nominal) – sp. yam. [*Dioscorea hastifolia*?] Note that there is a similar word in Nhanda, *ajuga* meaning 'bush yam'. Synonyms: waranyu.

**ardu** (nominal) – lover, boyfriend, girlfriend, husband, wife, spouse. Examples: warlugura = my lover. Note that there is a similar word in Nhanda, *ardu* meaning 'spouse, sweetheart, lover'. Synonyms: warlu.

**baba** (nominal) – rain. See also: baba (water).

**baba** (nominal) – water. See also: baba (rain).

**babalybabaly** (nominal) – sp. plant with red flowers which often contains nectar. [*Eremophila glabra*]

**bajalbuga** (nominal) – cigarette. This word is related to the verb *bajalinyja* meaning 'smoking'. Both are probably related to the verb *bajaniyanu* meaning 'bite'. See also: bajalinyja, bajanmanha.

**bajalinyja** (verb) – smoking. Examples: naganha yugarrinyina, bajalinyja = this one (person) is standing up, smoking. See also: bajalbuga, bajanmanha.

bajanmanha (verb) – bite.
Examples: duthungu nyindanha bajanmanha = the dog will bite you.
nyindanha bajaniyan = (he) bit you.
The forms recorded for this verb are: bajanmanha (future tense), bajaniyan(u).
See also: bajalbuga, bajalinyja.

**bajirri yana** (verb) – run. See also: bayirri.

**balhada** (nominal) – goanna, bobtail. These were a source of food.

**bali** (nominal, pronoun) – self, oneself. Examples: nagarnu bali = look at yourself.

balu, balunugu (nominal) - many, plenty.

banaji (nominal) - sp. duck.

**banda** (nominal) – tired. See also: bandathayinyina, barndagudu.

**bandithayinyina** (verb) – tire (i.e. get tired). Examples: bandithayinyina = (I) am tired. Only the present tense form *bandithayinyina* of this verb was recorded. See also: banda.

banduga (nominal) – mollyhawk, Royal albatross, Wandering albatross.

**bangga** (nominal) – goanna; longtail, racehorse lizard. See also: barnka.

baraji (nominal) – diver, sp. bird.

**barda**, **bardanga** (nominal) – later, by and by, after. See also: barrangga.

**bardajigurra** (nominal) – policeman. This word literally means 'stone/metal having'. See also: bardalyi, bardalyigurra.

**bardalyi**, **barldalyi**, **baralyi** (nominal) – stone, rock; chain; money. See also: bardajigurra.

**bardalyigurra** (nominal) – policeman. This word literally means 'stone/metal having'. See also: bardalyi, bardajigurra.

**bardiyalu** (nominal) – no, nothing, not. Examples: mulgarda bardiyalu = no mullet. There is a similar word in Nhanda, ya'u meaning 'none'.

barduda, bardura (nominal) – bush turkey, bustard.

**barlbinyu** (nominal) – sp. tree, silver in colour with edible beans. [Acacia sp.?]

barlga (nominal) - vegetable food; food.

barlu (nominal) - hill.

**barndagudu** (verb) – tire (i.e. make tired). This word might be a compound of *barnta* meaning 'tired' and *-gudu* as a possible causative prefix (cf. comitative suffix *-gudu*). See also: banda.

**barndi** (nominal) – smell. Examples: nayi barndi? = what's wrong? See also: barndiyanu.

**barndiyanu** (verb) – smell something. Examples: barndiyanu nhaganha = smell that. Only the form *barndiyanu* was recorded for this verb. See also: barndi.

**barnka** (nominal) – goanna; longtail, racehorse lizard. See also: bangga.

barraja (nominal) - land.

**barrangga** (adverb) – by and by, soon, later. See also: barda, barranja.

**barranja** (adverb) – by and by, soon, later. See also: barda, barrangga.

barrgudu (nominal) - bread.

**barrithayinyina** (verb) – finish. Examples: ngatha barrithayiniyan = I have finished (e.g. talking). Only the form *barrithayiniyan* was recorded for this verb.

**batharnu** (verb) – shoot. Examples: batharnu marlu! = shoot the kangaroo! Only the form *batharnu* was recorded for this verb. bathunyina (verb) – blow.

Examples: winthu bathunyina = the wind is blowing. Only the present tense form *bathunyina* was recorded for this verb. Synonyms: murinyina.

**bayirri** (adverb) – away, over there. Examples: nyinda bayirri yan = you run over there. See also: bajirri yana.

bibi (nominal) – breast.

bibijirri (nominal) - name of an outcamp on Carrarang Station.

**bigurda** (nominal) – grey kangaroo. See also: marlu, yawarda.

bilada (nominal) - spear.

biligurdu (nominal) – echidna, porcupine.

bilu (nominal) – boomerang.

**bilyunu** (nominal) – baby.

**bimba** (nominal) – sp. red-coloured tree, possibly a wattle, with edible gum. [*Acacia* sp.] The gum could be collected to make a drink when mixed with sugar and water.

binja (verb) - hit, hit with open hand; crush (seed). Examples: gurra bumba nganha! = don't hit me! ngatha bungiyanu nyindanha = I hit you. ngatha buci bungu = I hit the cat. gurra bumbanu = don't hit (her). ngatha bungiyan duthu = I hit the dog. This verb is unusual in that all the various forms of this verb differ from one another. The forms recorded for this verb are: bumba (imperative), bungu (imperative), bumbanu (past tense), binja (present tense), bumanha (future tense), bungiyanu.

**bintharri**, **bintharru** (nominal) sp. tree, saltbush. This tree grows on Carrarang station.

**binyathayinyina** (verb) – fight. Examples: nhagan, nhagan, gardu gutharra binyathayinyina = look, look, two men fighting. The tense forms for this verb were as expected for verbs formed using the *-thayi* inchoative suffix

bira (nominal) - moon.

birlirung (nominal) - everlastings, sp. daisy.

These plants are daisies, and could be either the yellow or pink variety of everlastings common to the Shark Bay area. And note this word has an unusual final stop, since /ng/ does not appear word-final in any other entries in the wordlist.

birriji, birrirri (nominal) - shoulder.

bithanu (nominal) – liver.

**biyagu** (nominal) – galah, pink and grey galah. [*Cacatua Roseicapilla*] These were a source of food.

**buci** (nominal) – cat, pussycat. The language consultants pronounced [buci], i.e. with a voiceless intervocalic stop. Note that this word has been borrowed from English.

**buga** (nominal) – short.

**buga** (nominal) – smells bad, stinks. See also: bugathayinyina.

**bugathayinyina** (verb) – rot, go off, become smelly. Only the form *bugathayiniyan* was recorded for this verb. See also: buga.

bugurra (nominal) – old woman.

**bulanu** (nominal, pronoun) – he, she, third person singular pronoun. Examples: bulanu yanangana = he's leaving.

**bulanu**, **burlanu, burlanurla** (adverb) – enough, finished. Examples: ngatha bulanu nganiyanu = I'm finished eating.

**bulhamarda** (nominal) – black snapper, sp. fish. See also: bulymada.

bulyarru (nominal) - hungry.

**bulymada** (nominal) – black snapper, sp. fish. See also: bulhamarda.

buna (nominal) - day.

**bunda**, **bundu** (nominal) – rain. See also: bunduthayinyina.

**bundi** (nominal) – skin, peel, bark. Synonyms: udbi, wurdbi.

bundilyjirri (nominal) - swallow, sp. bird.

bundu, burndu (nominal) – back (of body).

**bunduthayinyina** (verb) – to rain. Only the future tense form of this verb *bunduthayimanha* was recorded. See also: bunda.

burda (nominal) - star.

buthu, buthurru (nominal) - sand.

**buyungurra** (nominal) – turtle. Examples: buyungurranuga = (lots of) turtles.

**dawada**, **dawarra** (nominal) – name of a language. It is not known which language this word is referring to.

**duthu** (nominal) – dog. Examples: duthu wayamanha = (he's) chasing a dog.

**Duthuduguda** (nominal) – Broadhurst Bight. This place is located on the western side of Cape Peron North. e'e, i'i (interjection) – yes, okay.

Note that this word is often pronounced as [e'e], i.e. with a glottal stop between the vowels. And also note that there is a similar word in Nhanda, 'e'e meaning 'yes'.

gaba (interjection) - come on.

gagara (nominal) - hip.

gagarrala (nominal) – east.

**gajirri** (nominal) – far, long way. See also: gayirri.

**galga** (nominal) – thigh. Synonyms: unda, yunda.

**gambanyina** (verb) – cook; burn. Examples: garlangu ngathanha gambaniya = the fire burnt me. garla gambanyina = the fire is burning.

buyungurra gambalinyja = cooking a turtle.

The forms recorded for this verb are: gambanu (past tense), gambanyina (present tense), gambanmanha (future tense), gambaniya. A non-finite form *gambalinyja* was also recorded for this verb. Note also that this verb is unusual in that it is both transitive, where it takes a direct object (e.g. 'meat' in 'Dogs eat meat'), as well as intransitive, where it cannot have a direct object (e.g. no direct object is possible in 'Fish swim'). Most Malgana verbs are either transitive or intransitive but not both.

**gambarra** (nominal) – clever. Examples: gambarra nyinda = you're clever.

ganjarri (nominal) – motorcar.

**ganmanha** (verb) – take. Examples: nanggangu ganyigiya! = take your mother! ngatha ganmanha marugudu = I'll take (her) tomorrow. The forms recorded for this verb are: ganmanha (future tense), ganyigiya.

gantharri (nominal) - grandchild, grandparent.

**gardu** (nominal) – man. See also: nyarlu.

**gardabudanu** (verb) – cut. Examples: gardabudanu bali = cut yourself. Only the form *gardabudanu* was recorded for this verb, and the tense of this form is unclear.

garla (nominal) - fire.

**garlaya** (nominal) – emu. Synonyms: yalibidi.

**garlgunyina** (verb) – wait for. Examples: nyinda garlgunyina ngathangu = you're waiting for me. nayiwu nyinda garlgunyina? = what are you waiting for? ngatha garlgulinyjangu marugudu = I'm waiting for you tomorrow. The forms recorded for this verb are: garlgunu (past tense), garlgunyina (present tense). Other forms recorded for this verb include *garlguyayi* and *garlgulinyja*. See also: wirda(na), wirra. **Gathaagudu**, **Gatharrgudu** (nominal) – Shark Bay. Examples: nhanganha Gathaagudu = this is Shark Bay.

gayagu (nominal) - crow.

**gayirri** (nominal) – far away, far off, long way. Examples: gayirri yanmanha = will go a long way. See also: gajirri.

**guba**, **gubanga** (nominal) – south. Examples: yananganha gubanga = going south.

**guga** (nominal) – fish, meat, animal. This word is mostly used to refer to fish as this was the main meat.

gugu (nominal) – boy, little boy.

gugu, guugu (interjection) – yes, okay, good.

**gulga**, **gurlga** (nominal) – ears. Examples: gulgathadi = no ears (i.e. deaf, stupid).

**gulyba** (nominal) – sick. See also: gulybathayinyina.

**gulybathayinyina** (verb) – become sick. Examples: ngatha gulybathayimanha = I might get sick. The forms recorded for this verb are: gulybathayimanha (future tense), gulybathayiniya. See also: gulyba.

gumurru (nominal) – blind.

gunda (nominal) - shit, faeces.

**gura**, **gurra** (adverb) – don't, not. Examples: gurra bumba nganha! = don't hit me!

**gurarda**, **gurardangu** (nominal) – sp. small tree, with hard-cased seeds. [*Acacia tetragonophylla*?] The hard-casings of the seeds were cracked using small stones. The seeds were then crushed up and eaten.

gurda, gurdu (nominal) - brother, elder brother.

-gurra, -gurru (suffix) – comitative suffix. Examples: nyarlugurra = (he) has a woman. duthumuthugurru = (someone) with lots of dogs.

gurri (nominal) – smoke.

guru (nominal) - eyes.

**gutharra** (nominal) – two. Examples: nyarlu gutharra, gardu gutharra, yamba gutharra = two women, two men and two children.

**gutiya** (nominal) – one. The language consultants pronounced this [gutica], i.e. with a voiceless intervocalic alveolar stop

guwandu (nominal) – milk.

Barlee had *koandoo* in the original, and the spelling is adapted to the orthography being used here. Similar words with the same meaning are found in the following Pilbara languages: Yinyjiparnti *gurndu*, Ngarluma *kurndu*, Payungu *kurntu*, Thalanyji *kurntu*.

**guyu** (nominal) – father. Synonyms: mama. See also: nanga (mother), ngangga (mother).

i'i, e'e (interjection) – yes, okay. Note that this word is often pronounced as [e'e], i.e. with a glottal stop between the vowels. And also note that there is a similar word in Nhanda, *'e'e* meaning 'yes'.

### icithayinyina (verb) – become upset.

This verb was recorded as [icithayiniyan] i.e. with a voiceless intervocalic post-alveolar stop (although a consultant later once used [ijithayiniyan]), and Hooley's spelling suggests a voiceless stop. The extended meaning is 'becoming upset and getting sulky'. Note also that there is a similar word in Nhanda, *icici*- meaning 'pain, hurt'.

**irra**, **yirra** (nominal) – mouth. Synonyms: namanu. See also: yirra (tooth).

**irrabuga** (nominal) – dolphin. See also: yinabuga.

**irrangu** (adverb) – up. Examples: ngatha yirangana wandinyanu ngayangu = I climbed up the wattle tree. Synonyms: yiranga. See also: ngardinga.

irrumarri (nominal) - bream, sp. fish.

**jabi** (nominal) – sp. small lizard.

**jali** (nominal) – kookaburra.

jalyanu (nominal) - grass.

jayarra (nominal) – white cockatoo.

**jina** (nominal) – foot. Examples: jina ngatha yanmanha = I'm going walking.

jinagabi (nominal) - ghost.

jinamada (nominal) - dirty.

**jindi** (nominal) – quiet. See also: jindithayinyina.

**jindithayinyina** (verb) – become quiet. The forms recorded for this verb are: jindithayinu (past tense), jindthayinyina (present tense). See also: jindi.

jirrijirri (nominal) – willie wagtail, sp. bird [*Rhipidura leucophrys*]

**jirriyi** (adverb) – long ago. Examples: jirriyi yanaang = he went a long time ago.

judu (nominal) – guts, intestines, internal organs.

jungga, jurlga (nominal) – arm.

jurni (nominal) – carpet snake.

jurruna (nominal) – pelican.

-la (suffix) – locative suffix. Examples: marugudu ngatha ngurrala nyinamanha = tomorrow I'll be home. See also: -nga.

maga (nominal) - head.

malajarri (nominal) - thunder.

malamala (nominal) - root.

malawarra (nominal) - clouds; cloudy.

**malu** (nominal) – shade. Examples: yugarrinyina malunga = standing in the shade.

**mama**, **mamadi** (nominal) – father. Synonyms: guyu. See also: nanga (mother), nganga (mother).

mambu (nominal) - bone.

manda (nominal) – buttocks, bottom.

mandarrinu (verb) - laugh. Examples: nayiwunga mandarriniya? = why are you laughing? ngatha mandarriniya = I laughed. The forms recorded for this verb are: mandarriniya (past tense), mandarrinu (present tense), mandarrimanha (future tense).

mandilu (nominal) - thirsty.

**manga** (nominal) – cold. See also: mangathayinyina.

**mangathayinyina** (verb) – be cold. Only the form *mangathayiniyan* was recorded for this verb. See also: manga.

**manggutha** (nominal) – three. The following construction was also recorded: *marnkurru-nugu* = 'three-PL'. See also: marnkurru.

maniwiri, maniwirri (nominal) - red.

**manthi** (nominal) – term for Aboriginal people of the Carnarvon area at the mouth of the Gascoyne.

May be a subgroup of the Yinggarda. People who were born or grew up in this area may be referred to by this term.

mara (nominal) – hand; smaller, top grinding stone.

mararra (nominal) – hitting stick.

**mardiji** (nominal) – married. Examples: nyinda mardiji(ya)? = are you married?. See also: mardijithayinyina.

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### mardijithayinyina (verb) - marry, get married.

Examples: marugudu ngatha mardijithayimanha = tomorrow I'm getting married. The tense forms for this verb were as expected for verbs formed using the *-thayi* inchoative suffix See also: mardiji.

mardirra (nominal) - pink snapper, sp. fish.

**marlu** (nominal) – sp. kangaroo. See also: bigurda, yawarda.

**marnkurru** (nominal) – three. The following construction was also recorded: *marnkurru-nugu* = 'three-PL'. See also: manggutha.

**marrigudu** (nominal) – sore. Examples: jina marrigudu = sore foot. A possible analysis for this word is: *marri-gudu* = 'marri-COM'. See also: mimithayinyina.

**marrithayinyina** (verb) – be, get sick, sore. Examples: ngatha marrithayiniyan = I'm sick. Only the form *marrithayiniyan* was recorded for this verb. Synonyms: mimithayinyina. See also: marrigudu.

**maru** (nominal) – dark; night. See also: maruguda, marumaru, maruthayinyina.

maruguda, marugudu (nominal) – tomorrow.

Examples: nyinda mardijithayimanha marugudu = you're getting married tomorrow. See also: maru.

**marumaru** (nominal) – afternoon. See also: maru.

**maruthayinyina** (verb) – get dark, late. Only the form *maruthayiniyan* was recorded for this verb. See also: maru.

mathara, matharra (nominal) – black; black cockatoo.

maya (nominal) – camp, home.

**migarda**, **migarra** (nominal) – sp. lizard, possibly thorny devil. [*Moloch horridus*] These were a source of food.

milhunu (nominal) – sp. green snake.

**mimithayinyina** (verb) – be, get sore, sick. Only the present tense form *mimithayinyina* was recorded for this verb. The was reported to be babytalk, i.e. the way little children would talk. Synonyms: marrithayinyina. See also: marrigudu.

mirda (interjection) – no.

muga (nominal) – deep water.

**mulgarda** (nominal) – mullet, sp. fish. See also: mulygada.

mulha (nominal) – nose.

mulhagadara (nominal) - whiting, sp. fish.

**mulygada** (nominal) – mullet, sp. fish. See also: mulgarda.

**munggurru** (nominal) – cheeky. Examples: duthu munggurru = cheeky dog. See also: munggurruthayinyina.

**munggurruthayinyina** (verb) – get cheeky. Only the form *munggurruthayiniyan* was recorded for this verb. See also: munggurru.

**munyju** (nominal) – cogla bush; cogla fruit, bush banana. [*Marsdenia australis*] Lots of these grew on Nanga Station. The fruit is edible, and can be cooked by rolling it in hot ashes.

**murinyina** (verb) – blow. Examples: wirndu murinyina = the wind is blowing. Only the present tense form *murinyina* was recorded for this verb. Synonyms: bathunyina.

**murla** (nominal) – dead. See also: murlathayinyina.

**murlathayinyina** (verb) – die. Examples: duthu murlathayiniya = the dog is dead. The forms recorded for this verb are: murlathayimanha (future), murlathayiniya. See also: murla.

-mutha, -muthu (suffix) - plural suffix. Examples: babamutha = lots of water. bardalyimutha = lots of money. yajarlumutha = lots of friends. nyarlu yananganha duthumuthugurru = a woman going along with lots of dogs. See also: -nuga.

**muwa** (nominal) – devil. Examples: muwa yana = devil (is) coming.

**nala**, **narla** (nominal, dem) – here, this, this one. Examples: narla duthu = here dog.

**namanu** (nominal) – mouth. Note that there is a similar word in Nhanda, *ngarnmanu* meaning 'inside of mouth'. Synonyms: irra, yirra. See also: yirra (tooth).

nanga (nominal) – mother. Synonyms: ngangga. See also: mama, guyu. **nanga** (nominal) – beard. See also: nganja, nganyga, ngunyu.

nayi, ngayi (nominal, interrogative) - what. Examples: ngayi bandi? = what's wrong? ngayiwu nyinda garlgunyina? = what are you waiting for? nayiwunga? = what for? nayi nhaga? = what looking (at)?

**nayi naga!** (phrase) – look at this! This is an imperative form of *nangiyanu*. See also: nhanja.

-nga (suffix) – locative suffix. Examples: nyinda nanganha yambanugu marunga = you'll see your kids tonight. gardu gutharra yugarrinyina malunga = two men are standing in the shade. See also: -la.

**ngabirinyina**, **ngabirrinyina** (verb) – swim. Only the present tense form *ngabirrinyina* was recorded for this verb.

ngabu (nominal) - fat.

ngagiya (nominal) – flathead, sp. fish.

**ngaja** (nominal, pronoun) – I, first person singular subject pronoun. Synonyms: ngatha.

**ngali** (nominal, pronoun) – we two, first person dual subject pronoun. Examples: ngali yananganha; ngali gutharra nyinanangayi = we two are going; we two are sitting.

**ngana** (nominal, interrogative) – who. Examples: nganabaga nyinda nanyjagura? = who are you looking for? ngananugu nyinangayi? = who are they sitting down? ngana nagana? = who's that?

**ngana** (nominal, pronoun) – me, first person singular object pronoun. Examples: gura bumba ngana = don't hit me! yunggarnu ngana = give it to me. Possible contraction of *ngathana* 

ngangga (nominal) - chin.

**ngangga** (nominal) – mother. Synonyms: nanga. See also: mama, guyu.

**ngangguyanu** (verb) – hear. Examples: ngatha ngangguyanu = I heard it. Only the past tense form *ngangguyanu* was recorded for this verb. A possible non-finite form *nganggulinja* was also recorded by O'Grady.

nganharra (nominal, pronoun) – we, first person plural subject pronoun.

**nganja** (nominal) – beard. See also: nanga, nganyga, ngunyu.

nganka (nominal) - tree.

**nganuralu** (nominal, pro) – we, first person plural pronoun. Examples: nganuralu babarna wuriliinyja = we drink the water.

**nganyga** (nominal) – beard. See also: nanga, nganja, ngunyu.

nganyimarra (nominal) - cloud.

**ngardinga** (nominal) – down. See also: irrangu, yiranga.

ngarlungarlu (nominal) – sp. small tree with edible beans. [Acacia sp.?]

ngarnija (verb) - drink; eat. Examples: ngarnija baba = (he's) drinking water. nyinda ngarnija = you're eating (it). ngatha ngarniyanu = I ate (it). e'e, nyinda yanagiyani ngathaanu guga = yes, you came and ate the meat. The forms recorded for this verb are: ngathaanu (past tense), ngarnija (present tense), ngarnmanha (future tense), ngarniyanu.

**ngarrinyina** (verb) – stab, stabbing. Examples: ngatha ngarrinmanha = I'll stab (it). wirranguru ngarri = stab it with a gidgee! The forms recorded for this verb are: ngarri (imperative), ngarrinu (past tense), ngarrinyina (present tense), ngarrinmanha (future tense).

**ngatha** (nominal, pronoun) – I, first person singular subject pronoun. Examples: ngatha gulybathayiniya = I'm getting sick. ngathangura warlu = my spouse. Synonyms: ngaja.

**ngathinyina** (verb) – cry. Examples: yamba ngathinyina = the baby is crying. ngayiwu nyinda ngathimanha? = what are you going to cry for? The forms recorded for this verb are: ngathinu (past tense), ngathinyina (present tense), ngathimanha (future tense), ngathiniya.

**ngawu** (nominal) – egg. Synonyms: warla.

**ngaya** (nominal) – sp. wattle tree. It seems that this term was used for all kinds of wattles. Some types of these trees had small, oblong shaped beans which were tasty.

-ngu (suffix) – ergative suffix.

nguba (nominal) - blood.

**ngugunu**, **ngugurnu** (nominal) – good. Examples: nyinda gutharra ngugurnu? = are you two good? nhurra ngugurnunugu? = are you all well?

ngundanyina (verb) - sleep.

Examples: nyinda marugudu ngundamanha = tomorrow you'll sleep. The forms recorded for this verb are: ngundanyina (present tense), ngundamanha (future tense), ngundaniya.

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**nguntha** (nominal) – face. Note that there is a similar word in Nhanda, *ngunda* meaning 'face'.

**ngunyu** (nominal) – hair of head. See also: nanga (beard).

**-ngura** (suffix) – possessive suffix for pronouns. Examples: ngathangura yajarlu; ngaya utpigura = my friends; wattle tree bark.

ngurndi (nominal) – tail.

**ngurra** (nominal) – home, camp, place. Examples: marugudu ngatha ngurrala nyinamanha = I'll be at home tonight.

**nguutu** (nominal) – horse. Note that there is a similar word in Nhanda, *nguutu* meaning 'horse'.

**nhanganha** (nominal, demonstrative) – this, this one. Examples: nhanganha buci = this is a pussycat.

nhanja (verb) - see, look. Examples: nangiyanunha wirriya = I see the sea. nagarn! = look! nagarnu bali = look at yourself! The forms recorded for this verb are: n(h)aga (imperative), nhanja (present tense), nangiyanu, nagarn, nanyjagura. See also: nayi naga.

nhuna, nyuna (nominal) – sp. black snake.

**nhura**, **nhurra** (nominal, pronoun) – you mob, you all, youse, second person plural pronoun. Examples: nhurra ngugurnunugu? = are you mob okay?

nhuwunu, nuunu (nominal) – yellowtail, sp. fish.

-nuga, -nugu (suffix) – plural suffix. Examples: gardunuga = men. marnkurrunugu = three. See also: -mutha.

**nyarlu** (nominal) – woman; female animal. Examples: nyarlu marlu = female kangaroo. See also: gardu.

**nyinanu** (verb, intransitive) – sit. Examples: marugudu ngatha ngurrala nyinamanha = tomorrow I will be at home. The forms recorded for this verb are: nyinanu (past tense), nyinamanha (future tense), nyinangayi, nyiniyan.

nyinarri (nominal) - sp. bird.

**nyinda** (nominal, pronoun) – you (singular), second person singular subject pronoun. Examples: nyinda yananganha = you're going.

**nyiru** (nominal) – sp. bird.

**nyuju** (nominal) – elbow.

**thaaka** (nominal) – shark. This word was borrowed from English and adapted to Malgana phonology. Thaamarli (nominal) – Tamala station.

thalaaba (nominal) – ashes (cold).

thalanyu (nominal) – tongue.

thalbadi (nominal) – tired.

thalganjangu (nominal) – tidal pool, lagoon.

**thali** (adverb) – away. Examples: thali yanagirr = go away.

thamanu (verb) - cover, dress. Examples: thamanu bali = cover yourself. Only the form *thamanu* was recorded for this verb, and the meaning of this form is unclear. It is likely past tense.

thami (nominal) – uncle, mother's brother.

**thana** (nominal, pro) – they, third person plural pronoun. Examples: nganuralu nhanja thayanha = we see them.

tharda (nominal) – knee.

**thayadi** (nominal) – snake. See also: thayirri.

**thayirri** (nominal) – snake. See also: thayadi.

**thilygi** (nominal) – sp. small tree with small edible yellow fruit. These trees grow on Carrarang Station.

thudarru (nominal) - song.

thurdu (nominal) - daughter.

**udbi** (nominal) – skin, lip, bark. Note that there is a similar word in Nhanda, *wurtpi* meaning 'skin'. Synonyms: bundi, wurdbi.

**unda** (nominal) – thigh. Synonyms: galga.

**wabagu** (nominal) – sea eagle. See also: walbaju.

wabarnu (nominal) - sun.

**wabathuru** (adverb) – quickly. Examples: gaba warrbathu = come quickly. See also: warrbathu.

wagardi (nominal) – carpet snake, sp. large brown snake.

**walbaju** (nominal) – eaglehawk. See also: wabagu.

walgabuda (nominal) - feather, wing.

walgu (nominal) – quondong fruit and tree. [Santalum acuminatum]

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**wambu** (nominal) – bad. Examples: baba wambu = bad water. See also: wambuthayinyina.

**wambuthayinyina** (verb) – become sick. Only the form *wambuthayiniya* of this verb was recorded. See also: wambu.

wanamalu, wanamarlu (nominal) - shag, sp. bird.

wandinyina (verb) - climb up. Examples: wabarnu wandinyina = the sun is coming up. Only the present tense form *wandinyina* was recorded for this verb.

wangala (nominal) - crow.

**wangga** (nominal) – language, talk, speech, word. See also: wangganyina.

wangganyina, wangginyina (verb) - speak, talk. Examples: bundiljirri wangganyina = the swallow is talking (singing). wirdana wangginyina.= wait (I'm) talking. The forms recorded for this verb are: wangganu (past tense), wangganyina (present tense), wanggamanha (future tense). See also: wangga.

wanka (nominal) - raw (of meat), unripe (of fruit), uncooked (of food).

**wantha(la)**, **warnda(la)** (nominal, interrogative) – where. Examples: wanthala duthu = where's the dog?

wanthanu (verb) – leave something.Examples: bulanu, wanthanu! = enough, leave it!Only the form *wanthanu* was recorded for this verb. This form is likely past tense.Note that there is a similar word in Western Desert, *wandi* meaning 'leave'.

wanyu (nominal) – sp. acacia tree. [Acacia linophylla]

warabadi (nominal) - big.

warani (verb) - return.

**waranyu** (nominal) – sp. yam. [*Dioscorea hastifolia*?] This was the main type of yam eaten. The holes dug for collecting the yam could be quite deep, more than waist deep. Note also that there is a word in Nhanda, *ajuga* meaning 'bush yam'. Synonyms: ajugawu.

warawara (nominal) – small.

warda (nominal) - pearl.

wardandu (nominal) - west.

wardu (nominal) - neck; throat, front part of neck.

**warla** (nominal) – egg. Synonyms: ngawu.

**warlu** (nominal) – lover, boyfriend, girlfriend, husband, wife, spouse. Synonyms: ardu. **warniyanu** (verb) – fall. The forms recorded for this verb are: warnigi, warniyanu.

warrari (nominal) - fly, housefly.

**warrbathu** (adverb) – quickly. Examples: gaba warrbathu = come quickly. See also: wabathuru.

wayaman (verb) – chase.Examples: duthu wayaman = chasing a dog.Only the form *wayaman* was recorded for this verb, and the form and meaning of this verb are unclear.

**wayanguthayinyina** (verb) – frighten. Examples: ngathanha wayanguthayinyina nyindangu = you frighten me. Only the present tense form *wayanguthayinyina* was recorded for this verb.

**wigi** (nominal) – spit, sputum, froth, bubbles. Examples: wigimutha = beer. Note that the example is made up of *wigi* and the plural suffix *-mutha*.

**Wilamaya**, **Wilyamaya** (nominal) – place on tip of Heirisson Prong. This word literally means 'shell camp/home'. See also entries for *wilya* and *maya*.

wilaru (nominal) – seagull. These were a source of food. See also: wilya, wilya (shell), wilyara (pearl shell).

wilithi (nominal) – white.

wiluwilura (nominal) – plover, sp. bird.

wilya (nominal) – shell. See also: wilyara (pearl shell).

wilya, wilyaa, wilyara (nominal) – seagull. These were a source of food. See also: wilaru, wilyara (pearl shell).

wilyara (nominal) – pearl shell. See also: wilya (shell).

wilygu, wirlgu (nominal) – belly, stomach (internal).

winja (nominal) – old man.

winthu (nominal) – wind. See also: wirndu.

wirda (nominal) - shin.

wirda(na), wirdawala (interjection) – wait. Examples: wirra wirra! = wait! wirdana, wangganyina = wait, (I'm) talking. wirdawala nyinayana = wait a minute I'm sitting down. See also: garlgunyina, wirra.

wirndu (nominal) – wind. See also: winthu. wirra (interjection) - wait. Examples: wirra wirra! = wait! wirdana, wangganyina = wait, (I'm) talking. wirdawala nyinayana = wait a minute I'm sitting down. See also: garlgunyina, wirda(na).

wirrangu (nominal) – fishing spear, a gidgee.

**wirriya** (nominal) – sea; salt water. Examples: wirriyala = in the sea.

Wirruwana (nominal) - Dirk Hartog Island.

**wiyabandi** (nominal) – young man. Barlee recorded the form as *wia-bandy*, which I have adapted to the spelling system being used here. Nhanda also has a form *wiyabarndi* meaning 'boy'.

wudgagarri, wulgagarri (nominal) - tailor, sp. fish.

wudura, wuduru (nominal) - heart.

wujanu, wujarnu (nominal) - stranger.

wulada (nominal) - long, tall.

**wulawula** (nominal) – near, close by. See also: wurla, wurlagura, wurlathayinyina.

Wulyibidi (nominal) – Peron Peninsula.

**wurdbi** (nominal) – skin. Synonyms: bundi, udbi.

**wurilinyja** (verb) – swallow. Only the form *wurilinyja* was recorded for this verb, and it is probably non-finite.

**wurla**, **wurlawurla** (nominal) – near, close by. See also: wulawula, wurlagura, wurlathayinyina.

**wurlagura** (verb) – come closer. See also: wulawula, wurlathayinyina.

**wurlathayinyina** (verb) – come closer. The forms recorded for this verb are: wurlathayinu (past tense), wurlathayiniyanu. See also: wulawula, wurlagura.

**wurnda** (nominal) – shield. Barlee lists another form *yourakoa* meaning 'shield'.

wurrayi (nominal) – lots (of something).

wurrinyu (nominal) - young woman.

wuthuga (nominal) – dugong.

wuthuuga (nominal) - spear.

**yaana** (nominal) – silly. Examples: maga yaana = silly head.

yaburru (nominal) – north. Examples: ngatha yanmanha yaburru = I'm going north. **yajala**, **yajarla** (nominal) – friend. See also: yajalhu, yajarlu.

**yajalhu**, **yajarlu** (nominal) – friend. See also: yajala, yajarla.

yajiyanu (verb) - dig.

yalgari (nominal) – tree (generic).

**yalibidi, yalibirri** (nominal) – emu. Synonyms: garlaya.

yamaji (nominal) - aboriginal person.

yamba (nominal) - child, baby, boy.

**yananganarri-** (verb) – return. Only the form *yananganarri-* was recorded for this verb, and the meaning and form of this verb is unclear. See also: yaninyina.

**yaninyina** (verb) – walk, go. Examples: nyinda yanagiya = you walk. ngatha yanmanha ngurrala = I'm going home.

The forms recorded for this verb are: yana(a)ngu (past tense), yaninyina (present tense), yanmanha (future tense), yanagiya. Another form *yananganha* was recorded for this verb, which is probably non-finite.

See also: yananganarri-.

yanyigiya (verb) – throw.
Examples: balyalyi yanyigiya = throw a rock.
Only the form *yanyigiya* was recorded for this verb, and the meaning of this form is unclear.

yarranu (verb) - growl at, tell off. Examples: nyarlungu ngathanha yarriniyan = the woman growled at me. ngatha yarranu nyindanha = I'm growling at you. The forms recorded for this verb are: yarran (imperative), yarranu (past tense), yarramanha

(future tense), yarraniya(n). Another form *yarralinyja* was also recorded for this verb, which is probably a non-finite form.

**yawarda** (nominal) – sp. kangaroo. See also: bigurda, marlu.

yiba (nominal) – sister, elder sister.

**yinabuga** (nominal) – dolphin. See also: irrabuga.

**yiranga** (adverb) – up. Examples: ngatha yirangana wandinyanu ngayangu = I climbed up the wattle tree. Synonyms: irrangu. See also: ngardinga.

yirra (nominal) – tooth. See also: irra (mouth), namanu.

yiyindi (nominal) – forehead.

yudu, yurdu (nominal) – bush, scrub.

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yuga, yuganga (adverb) – yesterday.

yugarrinyina (verb) - stand. Examples: ngatha yugarri = I'm standing. ngana thana yugarrinyina? = who's that standing (up)? The forms recorded for this verb are: yugarri (imperative), yugarrinu (past tense), yugarrinyina (present tense), yugarrimanha (future tense).

**yungganu** (verb) – give. Examples: ngathanha yungganu bajalbuga = give me a cigarette. Only the form *yungganu* was recorded for this verb.

yuragu (nominal) - spearthrower.

yurda (nominal) – possum.

yurla (nominal) – male bobtail, goanna.

yuwara (nominal) - somewhere, all over, around.

## Appendix H: English–Malgana finderlist

aboriginal person yamaji aboriginal people of Carnarvon area (at the mouth of the Gascoyne) *manthi* acacia tree wanyu after barda afternoon marumaru animal, fish, meat guga animal (female), woman nyarlu arm jungga ashes (cold) thalaaba away thali away, over there bayirri baby bilyunu, yamba back (of body) bundu bad wambu banana (bush banana) munyju bark, lip, skin udbi beard nganja be cold mangathayinyina become quiet jindithayinyina become sick gulybathayinyina become sick wambuthayinyina become upset icithayinyina belly-wilygu big warabadi, nyinarri bird (cockatoo, black) matharra bird (cockatoo, white) jayarra bird (diver) baraji bird (eaglehawk) walbaju bird (emu) yalibidi bird (plover) wiluwilura bird (sandpiper?) nviru

bird (seagull) wilaru bird (shag) wanamalu bird (swallow) bundilyjirri bird (willie wagtail) jirrijirri bite bajanmanha black matharra blind gumurru blood nguba blow bathunyina, murinyina bobtail (male) vurla bone mambu boomerang bilu boy gugu, yamba boyfriend, lover, girlfriend, husband, wife, spouse ardu, warlu bread barrgudu bream, sp. fish irrumarri breast bibi Broadhurst Bight Duthuduguda brother, elder brother gurda bubbles, froth, spit, sputum wigi burn, cook gambanyina bush yudu bush banana munyju bush turkey barduda buttocks manda by and by barrangga, barda camp, home maya camp, home, place ngurra carpet snake jurni, wagardi cat buci

chain, money, stone, rock bardalyi chase wayaman cheeky *munggurru* (get cheeky = munggurruthayinyina) child vamba chin ngangga cigarette bajalbuga clever gambarra climb up wandinyina cloud nganyimarra clouds *malawarra* cloudy malawarra cockatoo (black), sp. bird matharra cockatoo (white), sp. bird jayarra cogla (cogla bush, cogla fruit, bush banana) *munyju* cold manga (be cold = mangathayinyina) come closer wurlagura, wurlathayinyina come on gaba cook, burn gambanyina cover thamanu crow gayagu, wangala crush (seed), hit, hit with open hand binja cry ngathinyina cut gardabudanu dark, night maru (get dark = *maruthayinyina*) daughter thurdu day buna dead murla deep water muga devil muwa die murlathayinyina dig yajiyanu Dirk Hartog Island Wirruwana dirty jinamada diver, sp. bird baraji dog duthu dolphin irrabuga don't, not gura down ngardinga dress thamanu drink, eat ngarnija duck banaji dugong wuthuga

eaglehawk, sp. bird walbaju ears gulga east gagarrala eat, drink ngarnija echidna, porcupine biligurdu egg ngawu, warla elbow nyuju elder brother, brother gurda elder sister, sister viba emu garlaya, yalibidi enough, finished bulanu everlastings, sp. daisy birlirung eyes guru face nguntha faeces, shit gunda fall warniyanu far away, far off, long way gayirri far, long way gajirri fat ngabu father guyu, mama feather, wing walgabuda female (animal, person) nyarlu fight binyathayinyina finish barrithayinyina finished, enough bulanu fire garla fish bulhamarda fish, animal, meat guga fish (black snapper) bulhamarda fish (bream) irrumarri fish (flathead) ngagiya fish (mullet) mulgarda fish (pink snapper) mardirra fish (tailor) wudgagarri fish (whiting) mulhagadara fish (yellowtail) nhuwunu fishing spear, gidgee wirrangu flathead, sp. fish ngagiya fly, housefly warrari food, vegetable food barlga foot jina forehead yiyindi friend yajala frighten wayanguthayinyina

froth, bubbles, spit, sputum wigi galah, pink and grey galah biyagu get cheeky munggurruthayinyina get dark maruthayinyina get late maruthayinyina get married mardijithayinyina ghost jinagabi gidgee, fishing spear wirrangu girlfriend, boyfriend, husband, lover, spouse, wife ardu, warlu give yungganu go, walk yaninyina goanna (bobtail) balhada goanna (racehorse) bangga good ngugunu grandchild, grandparent gantharri grass jalyanu grinding stone (smaller, top stone), hand mara growl at, tell off yarranu guts, intestines, internal organs judu hair of head ngunyu hand, grinding stone (smaller, top stone) mara he, she, third person singular subject pronoun bulanu head maga hear ngangguyanu heart wudura Heirisson Prong (place on tip of Heirisson Prong) Wilamaya here, this, this one *nala* hill barlu hip gagara hit, hit with open hand, crush (seed) binja hitting stick *mararra* home, camp maya home, camp, place ngurra horse nguutu housefly, fly warrari hungry bulyarru husband, boyfriend, girlfriend, lover, spouse, wife ardu, warlu I, first person singular subject pronoun ngaja, ngatha

kangaroo marlu, yawarda kangaroo (grey) bigurda knee tharda kookaburra jali lagoon, tidal pool thalganjangu land *barraja* language, talk, word wangga language name dawada late (i.e. get late) maruthayinyina later barda, barrangga laugh *mandarrinu* leave something *wanthanu* lip, bark, skin udbi liver bithanu lizard *migarda*, *jabi* lizard (racehorse goanna) bangga, barnka long ago *jirriyi* long way, far away, far off gayirri long, tall wulada look at this! nayi naga! lots (of something) wurravi lover, boyfriend, girlfriend, husband, spouse, wife ardu, warlu male bobtail, goanna yurla man gardu man (old) winja man (young) wiyabandi many, plenty balu married mardiji marry, get married mardijithayinyina me, first person singular object pronoun ngana meat, fish, animal guga milk guwandu mollyhawk, Royal albatross, Wandering albatross banduga money, chain, rock, stone bardalyi moon *bira* mother nanga, ngangga mother's brother (uncle) thami motorcar ganjarri mouth irra, namanu, yirra mullet, sp. fish mulgarda name of a language near Shark Bay dawada name of an outcamp on Carrarang Station bibijirri near, close by wulawula neck, throat, front part of neck wardu no mirda no, nothing, not bardiyalu north yaburru nose *mulha* not, don't gura not, no, nothing bardiyalu nothing, no, not bardiyalu old man winja old woman bugurra one gutiya pearl warda pearl shell wilyara pelican jurruna Peron Peninsula Wulyibidi pink snapper, sp. fish mardirra place, camp, home ngurra plant (with red flowers) babalybabaly plenty, many balu plover, sp. bird wiluwilura policeman bardajigurra porcupine, echidna biligurdu possum yurda quickly wabathuru quiet *jindi* quiet (become quiet) jindithayinyina quondong fruit and tree walgu rain baba rain *bunda* (to rain *bunduthayimanha*) raw (of meat), uncooked (of food), unripe (of fruit) wanka red maniwiri return warani return yananganarrirock, stone, chain, money bardalvi root malamala rot, go off, become smelly bugathayinyina run *bajirri yana* sand buthurru sea eagle wabagu sea, salt water wirriya

seagull wilaru see, look nhanja self, oneself bali shade *malu* shag, sp. bird wanamalu shark thaaka Shark Bay Gathaagudu she, he, third person singular subject pronoun bulanu shell wilya shell (pearl) wilyara shield wurnta shin wirda shit, faeces gunda shoot batharnu short buga shoulder birriji sick gulyba sick (become sick) gulybathayinyina, wambuthayinyina sick, sore (be sick, sore) mimithayinyina silly *vaana* sister, elder sister yiba sit nvinangavi skin wurdbi skin, bark, lip udbi skin, peel, bark bundi sleep ngundanyina smell barndi, warawara smell something barndiyanu smells bad, stinks buga smoke gurri smoking bajalinyja snake milhunu, thayadi, thayirri snake (black) nhuna snake (carpet) jurni, wagardi somewhere, all over, around yuwara song thudarru soon barrangga sore marrigudu south guba speak, talk wangganyina spear bilada, wuthuuga spear (gidgee, fishing spear) wirrangu

spearthrower *yuraku* speech wangga spit, bubbles, froth, sputum wigi spouse, boyfriend, girlfriend, husband, lover, wife ardu, warlu sputum, bubbles, froth, spit wigi stab, stabbing ngarrinyina stand *vugarrinvina* star burda stinks, smells bad buga stomach wirlgu stone, rock, chain, money bardalyi stranger wujanu sun wabarnu swallow wurilinyja swallow, sp. bird bundilyjirri swim ngabirrinyina tail ngurndi tailor, sp. fish wudgagarri take ganmanha talk, language, word wangga talk, speak wangganyina tall, long wulada Tamala station Thaamarli tell off, growl at yarranu there, over there bayirri they, third person plural subject pronoun thana thigh galga, unda, yunda thirsty mandilu this, this one *nhanganha* three marnkurru throat, front part of neck, neck wardu throw yaninyina thunder malajarri tidal pool, lagoon thalganjangu tire (i.e. get tired) bandathayinyina, barndagudu tired banda, thalbadi tomorrow maruguda tongue thalanvu tooth yirra tree *bimba*, *nganka*, *valgari* tree (acacia) wanyu tree (quondong, fruit and tree) walgu

tree (silver with edible beans) barlbinyu tree (small, saltbush) bintharri tree (small with edible beans) ngarlungarlu tree (small with edible yellow fruit) thilygi tree (small with hard-cased seeds) gurarda tree (wattle) ngaya turkey (bush turkey) barduda turtle buyungurra two gutharra uncle, mother's brother thami uncooked (of food), raw (of meat), unripe (of fruit) wanka unripe (of fruit), raw (of meat), uncooked (of food) wanka up *irrangu*, *yiranga* upset (become upset) icithavinvina vegetable food, food barlga wait *wirda(na)* wait for *garlgunvina* walk, go *vaninyina* water baba we, first person plural subject pronoun nganharra, nganuralu we (two), first person dual subject pronoun ngali west wardandu what navi where wantha(la) white wilithi whiting, sp. fish *mulhagadara* who ngana wife, boyfriend, girlfriend, husband, lover, spouse ardu, warlu willie wagtail, sp. bird jirrijirri wind winthu wing, feather walgabuda woman nyarlu woman (old) bugurra woman (young) wurrinyu word, language, talk wangga yam ajugawu, waranyu yellowtail, sp. fish nhuwunu yes, okay gug, i'i, e'e vesterday vuga

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you, second person singular subject pronoun *nyinda* 

you (you all), second person plural subject pronoun *nhura* 

young man *wiyabandi* young woman *wurrinyu* 

## Appendix I: Malgana semantic domains

The following list of semantic domains for Malgana is based on the categories from Peter Sutton and Michael Walsh (1987), *Wordlist for Australian languages*, Second edition Canberra, Australian Institute of Aboriginal Studies. (This list can be found on David Nash's website: http://www.anu.edu.au/linguistics/nash/aust/domains.html). No detailed semantic information was obtained from living Malgana speakers, and the classifications that follow are based on the semantics of English translations ('?' represents a significant degree of uncertainty about a particular classification)

#### Nouns

#### A: Body parts and products

bibi (breast) birriji, birrirri (shoulder) *bithanu* (liver) bundu, burndu (back [of body]) bundi (skin) gagara (hip) galga (thigh) gulga, gurlga (ears) gunda (shit, faeces) guru (eyes) guwandu (milk) irra, yirra (mouth) *jina* (foot) judu (guts, intestines, internal organs) jungga, jurlga (arm) maga (head) mara (hand) mambu (bone) manda (buttocks, bottom) mulha (nose) namanu (mouth) nanga (beard) ngangga (chin)

nganja (beard) nganyga (beard) ngawu (egg) nguba (blood) nguntha (face) ngunyu (hair of head) ngurndi (tail) nyuju (elbow) thalanyu (tongue) tharda (knee) udbi (skin, lip, bark) unda (thigh) warda (pearl) wardu (neck; throat, front part of neck) warla (egg) wigi (spit, sputum, froth, bubbles) wilva (shell) wilvara (pearl shell) wilygu, wirlgu (belly, stomach [internal]) wirda (shin) wudura, wuduru (heart) wurdbi (skin) virra (tooth) yiyindi (forehead) walgabuda (feather, wing)

### **B:** Human classification

ardu (lover, boyfriend, girlfriend, husband, wife, spouse) *bardajigurra* (policeman) bardalyigurra (policeman) bilyunu (baby) *bugurra* (old woman) gantharri (grandchild, grandparent) gardu (man) gugu (boy, little boy) gurda, gurdu (brother, elder brother) guyu (father) mama, mamadi (father) manthi (term for Aboriginal people of the Carnarvon area at the mouth of the Gascoyne) mardiji (married) mardijithayinyina (marry, get married) nanga (mother) ngangga (mother) *nyarlu* (woman) thami (uncle, mother's brother) *thurdu* (daughter) *winja* (old man) wiyabandi (young man) wujanu, wujarnu (stranger) wurrinyu (young woman) warlu (lover, boyfriend, girlfriend, husband, wife, spouse) yamaji (aboriginal person) yamba (child, baby, boy) yajala, yajarla (friend) yajalhu, yajarlu (friend) yiba (sister, elder sister)

# C: Language, mythology, ceremony (and associated objects)

*jinagabi* (ghost) *muwa* (devil)

# D: Human artifacts (weapons, tools, clothing, etc.)

*bajalbuga* (cigarette) *bardalyi*, *barldalyi*, *baralyi* (chain; money) *bilada* (spear) *bilu* (boomerang) *ganjarri* (motorcar) *mara* (smaller, top grinding stone) *mararra* (hitting stick) *maya* (camp, home) *ngurra* (home, camp, place) *thamanu* (cover, dress) *wirrangu* (fishing spear, a gidgee) *wurnda* (shield) *wuthuuga* (spear) *yuragu* (spearthrower)

### E: Food, cooking and fire

ajugawu (yam) bajalbuga (cigarette) barlga (vegetable food; food) barrgudu (bread) gambanyina (cook; burn) garla (fire) guga (fish, meat, animal) gurri (smoke) thalaaba (ashes [cold]) wanka (raw (of meat), unripe (of fruit), uncooked (of food))

### F: Water (fresh, salt, mud, current, etc.)

*baba* (water) *wirriya* (sea; salt water)

### G: Elements (weather, sky, topography, etc.)

baba (rain) bardalyi, barldalyi, baralyi (stone, rock) barlu (hill) barndi (smell) barraja (land) bibijirri (name of an outcamp on Carrarang Station) bira (moon) bunda, bundu (rain) bunduthayinyina (to rain) burda (star) buthu, buthurru (sand) Duthuduguda (Broadhurst Bight) Gathaagudu, Gatharrgudu (Shark Bay)

gagarrala (east) guba, gubanga (south) *malajarri* (thunder) malawarra (clouds; cloudy) *malu* (shade) muga (deep water) nganyimarra (cloud) Thaamarli (Tamala station) thalganjangu (tidal pool, lagoon) wabarnu (sun) wirndu (wind) winthu (wind) wardandu (west) Wilamaya, Wilyamaya (place on the tip of Heirisson Prong) wirruwana (Dirk Hartog Island) Wulyibidi (Peron Peninsula) *yaburru* (north)

### H: Mammals

*bigurda* (grey kangaroo) *biligurdu* (echidna, porcupine) *buci* (cat, pussycat) *duthu* (dog) *marlu* (sp. kangaroo) *nguutu* (horse) *wuthuga* (dugong) *yawarda* (sp. kangaroo) *yinabuga* (dolphin) *yurda* (possum)

### I: Reptiles (marine and land)

balhada (goanna, bobtail) barnka (goanna; longtail, racehorse lizard) bangga (goanna; longtail, racehorse lizard) jabi (sp. small lizard) jurni (carpet snake) migarda, migarra (sp. lizard, possibly thorny devil) milhunu (sp. green snake) nhuna, nyuna (sp. black snake) thayadi (snake) thayirri (snake) wagardi (carpet snake, sp. large brown snake) yurla (male bobtail)

### J: Birds

banaji (duck) banduga (mollyhawk, Royal albatross, Wandering albatross) baraji (diver, sp. bird) barduda, bardura (bush turkey, bustard) *biyagu* (galah, pink and grey galah) bundilyjirri (swallow, sp. bird) garlava (emu) gayagu (crow) *jali* (kookaburra) jayarra (white cockatoo) *jirrijirri* (willie wagtail) jurruna (pelican) mathara, matharra (black; black cockatoo) nyinarri (sp. bird) nyiru (sp. bird) wabagu (sea eagle) walbaju (eaglehawk) wanamalu, wanamarlu (shag, sp. bird) wangala (crow) wilaru (seagull) wiluwilura (plover, sp. bird) wilya, wilyaa, wilyara (seagull) yalibidi, yalibirri (emu)

# K: Marine life (except mammals and reptiles)

bulhamarda (black snapper, sp. fish) bulymada (black snapper, sp. fish) buyungurra (turtle) irrabuga (dolphin) irrumarri (bream, sp. fish) mardirra (pink snapper, sp. fish) mulgarda (mullet, sp. fish) mulhagadara (whiting, sp. fish) mulygada (mullet, sp. fish) ngagiya (flathead, sp. fish) nhuwunu, nuunu (yellowtail, sp. fish) thaaka (shark) wudgagarri, wulgagarri (tailor, sp. fish)

L: Insects and spiders

warrari (fly, housefly)

### M: Plants

ajugawu (yam) babalybabaly (plant with red flowers which often contains nectar) barlbinyu (sp. tree, silver in colour with edible beans) bimba (sp. red-coloured tree, possibly a wattle, with edible gum) bintharri, bintharru (sp. tree, saltbush) *birlirung* (everlastings, sp. daisy) bundi (peel, bark) gurarda, gurardangu (sp. small tree, with hard-cased seeds) *jalyanu* (grass) malamala (root) *munyju* (cogla bush; cogla fruit, bush banana) nganka (tree) ngarlungarlu (sp. small tree with edible beans) ngaya (sp. wattle tree) thilygi (sp. small tree with small edible vellow fruit) walgu (quondong fruit and tree) wanyu (sp. acacia tree) *waranyu* (sp. yam) *valgari* (tree (generic)) yudu, yurdu (bush, scrub)

### Adjectives

## N: Physical (bodily states, colours, dimensions, quantity)

balu, balunugu (many, plenty) bardiyalu (no, nothing, not) barndagudu (tire, i.e. make tired) buga (short) buga (smells bad, stinks) bugathayinyina (rot, go off, become smelly) bulyarru (hungry) gulyba (sick) gutharra (two) gutiya (one) gulybathayinyina (become sick) gumurru (blind) icithayinyina (become upset) malawarra (cloudy) mandilu (thirsty) manga (cold) mangathayinyina (be cold) manggutha (three) maniwiri, maniwirri (red) marnkurru (three) ngabu (fat) wambuthayinyina (become sick) warabadi (big) warawara (small) wilithi (white) wulada (long, tall) wurrayi (lots (of something))

### **0:** Non-physical (values, emotions, etc.)

*jinamada* (dirty) *mandarrinu* (laugh) *ngugunu, ngugurnu* (good) *wambu* (bad) *yaana* (silly)

### Verbs

### P: Motion

bajirri yana (run) garlgunyina (wait for) ngabirinyina, ngabirrinyina (swim) nyinanu (sit) thali (away) wabathuru (quickly) warani (return) warniyanu (fall) warrbathu (quickly) wayaman (chase) wirda(na), wirdawala (wait) wandinyina (climb up) yananganarri- (return) yaninyina (walk, go) yugarrinyina (stand)

### Q: State

*barrithayinyina* (finish) *bulanu, burlanu, burlanurla* (enough, finished)

### **R:** Vocalising and thought

dawada, dawarra (name of a language) jindi (quiet) jindithayinyina (become quiet) gambarra (clever) munggurru (cheeky) munggurruthayinyina (get cheeky) ngangguyanu (hear) thudarru (song) wangga (language, talk, speech, word) wangganyina, wangginyina (speak, talk) wayanguthayinyina (frighten) yarranu (growl at, tell off)

### S: Bodily function

*bajalinyja* (smoking) bajanmanha (bite) banda (tired) bandithayinyina (tire, i.e. get tired) barndiyanu (smell something) *bathunyina* (blow) marrigudu (sore) marrithayinyina (be, get sick, sore) mimithayinyina (be, get sore, sick) murinvina (blow) murla (dead) *murlathayinyina* (die) ngarnija (drink; eat) ngathinyina (cry) ngundanyina (sleep) nhanja (see, look) *thalbadi* (tired) wurilinyja (swallow)

### T: Impact and violence

*bajanmanha* (bite) *batharnu* (shoot) *binja* (hit, hit with open hand; crush (seed)) *binyathayinyina* (fight) *gardabudanu* (cut) *ngarrinyina* (stab, stabbing) *yajiyanu* (dig)

### U: Holding and transfer

ganmanha (take) wanthanu (leave something) yanyigiya (throw) yungganu (give)

### Miscellaneous

### V: Locationals, temporals, directionals

barda, bardanga (later, by and by, after) *barrangga* (by and by, soon, later) barranja (by and by, soon, later) bayirri (away, over there) *buna* (day) gajirri (far, long way) gayirri (far away, far off, long way) *jirriyi* (long ago) maru (dark; night) maruguda, marugudu (tomorrow) *maruthayinyina* (get dark, late) marumaru (afternoon) *nala*, *narla* (here, this, this one) ngardinga (down) wulawula (near, close by) wurla, wurlawurla (near, close by) wurlagura (come closer) wurlathayinyina (come closer) *yiranga* (up) yuga, yuganga (yesterday) yuwara (somewhere, all over, around)

### W: Interrogatives

nayi, ngayi (what) ngana (who) wantha(la), warnda(la) (where)

### X: Interjections

*bardiyalu* (no, nothing, not) *e'e, i'i* (yes, okay) *gaba* (come on) *gugu, guugu* (yes, okay, good) *mirda* (no) *nayi naga*! (look at this!) *wirra* (wait)

### Y: Particles

?gura, gurra (don't, not) ?irrangu (up)

### Z: Pronouns

bali (self, oneself)
bulanu (he, she, third person singular pronoun)
ngaja (I, first person singular subject pronoun)
ngali (we two, first person dual subject pronoun)

ngana (me, first person singular object pronoun)
nganharra (we, first person plural subject pronoun)
nganuralu (we, first person plural pronoun)
ngatha (I, first person singular subject pronoun)
nhanganha (this, this one)
nhura, nhurra (you mob, you all, youse, second person plural pronoun)
nyinda (you (singular), second person singular subject pronoun)
thana (they, third person plural pronoun)

### References

- Alpher, Barry and David Nash, 1999, Lexical replacement and cognate equilibrium in Australia. *Australian Journal of Linguistics* 19:5–56.
- Amery, Rob, 2000, *Warrabarna Kaurna: reclaiming an Australian language*. Lisse, The Netherlands: Swets and Zeitlinger.
- Austin, Peter, 1988, Phonological voicing contrasts in Australian Aboriginal languages. La Trobe Papers in Linguistics, vol. 1, 17–42. Linguistics Program, La Trobe University.
- 1992a, *Jiwarli*. Bundoora: Department of Linguistics, La Trobe University.
- —— 1992b, Payungu. Bundoora: Department of Linguistics, La Trobe University.
- —— 1992c, *Thalanyji*. Bundoora: Department of Linguistics, La Trobe University.
- —— 1992d, Yinggarda. Bundoora: Department of Linguistics, La Trobe University.
- Barlee, F., 1886, Vocabulary no.12, Shark Bay: The Majanna tribe. In Edward Micklethwaite Curr, *The Australian race: its origin, languages, customs, place of landing in Australia, and the routes by which it spread itself over that continent*, vol. 1, 306–309. Melbourne: Government. Printer, 1886–1887.
- Blevins, Juliet, 2001, *Nhanda: an Aboriginal language of Western Australia*. University of Hawai'i Press.
- Blevins, Juliet and Doug Marmion, 1994, Nhanta historical phonology. *Australian Journal* of *Linguistics* 14: 193–216.
- Brandenstein, Carl George von. 1966 (Audiotape recordings from WA) AIATSIS Tape #A448b. Canberra: Australian Institute of Aboriginal and Torres Strait Islander Studies.
- Capell, Arthur, 1963, *Linguistic survey of Australia*. Sydney: Australian Institute of Aboriginal Studies.
- Cooper, Russell, 1997, Shark Bay legends. Geraldton, W.A.: L.J. Cogan.
- Dench, Alan, 1991, Panyjima. In R.M.W. Dixon and B.J. Blake, eds *Handbook of Australian languages*, vol. 4, 125–243. Oxford: Oxford University Press.
- 1994a, The historical development of pronoun paradigms in the Pilbara Region of Western Australia. *Australian Journal of Linguistics* 14:155–191.
- —— 1994b, *Martuthunira: a language of the Pilbara region of Western Australia*. Canberra: Pacific Linguistics.

- 1996, Pilbara verbal morphology and the Western Desert: some first steps toward a comparative reconstruction. Paper presented at The Third Australian Linguistic Institute workshop at The Australian National University.
- —— 1998, *Yingkarta*. Languages of the World/Materials 137. Muennchen: Lincom Europa.
- Dixon, Robert M.W., 1980, *The languages of Australia*. Cambridge: Cambridge University Press.
  - 2002, *Australian languages: their nature and development*. Cambridge: Cambridge University Press.
- Douglas, Wilfred H., 1981, Watjarri. In R.M.W. Dixon and B.J. Blake, eds *Handbook of Australian languages*, vol. 2, 196–272. Canberra: The Australian National University Press.
- Dunn, L., 1988, Badimaya, a Western Australian language. *Papers in Australian Linguistics* No.17:19–149.
- Edwards, Hugh, 1999, *Shark Bay through four centuries, 1616 to 2000.* Shark Bay, W.A.: Shark Bay Shire.
- Evans, Nicholas, 1995, Current issues in the phonology of Australian languages. In J.A. Goldsmith, ed. *Handbook of phonological theory*, 723–761. Cambridge, Mass.: Blackwell.
- O'Grady, Geoffrey, N., Charles F. Voegelin and F.M. Voegelin, 1966, *Languages of the World: Indo-Pacific Fascicle Six (=Anthropological Linguistics* 8(2)):1–197.
- Radcliffe-Brown, Alfred, R., 1931, *The social organization of Australian tribes*. Melbourne: Macmillan.
- Sharp, Janet, 2004, *Nyangumarta: a language of the Pilbara region of Western Australia.* Canberra: Pacific Linguistics.
- Tindale, Norman, B., 1940. Distribution of Australian Aboriginal tribes: a field survey. *Transactions of the Royal Society of South Australia* 64:140–231.
- Tindale, Norman B., 1966, AA338/1/27 Journal of a trip to Western Australia. N.B. Tindale Collection, South Australian Museum.
- —— 1974, Aboriginal tribes of Australia: their terrain, environmental controls, distribution, limits and proper names. Canberra: The Australian National University Press.