

Biri

Angela Terrill

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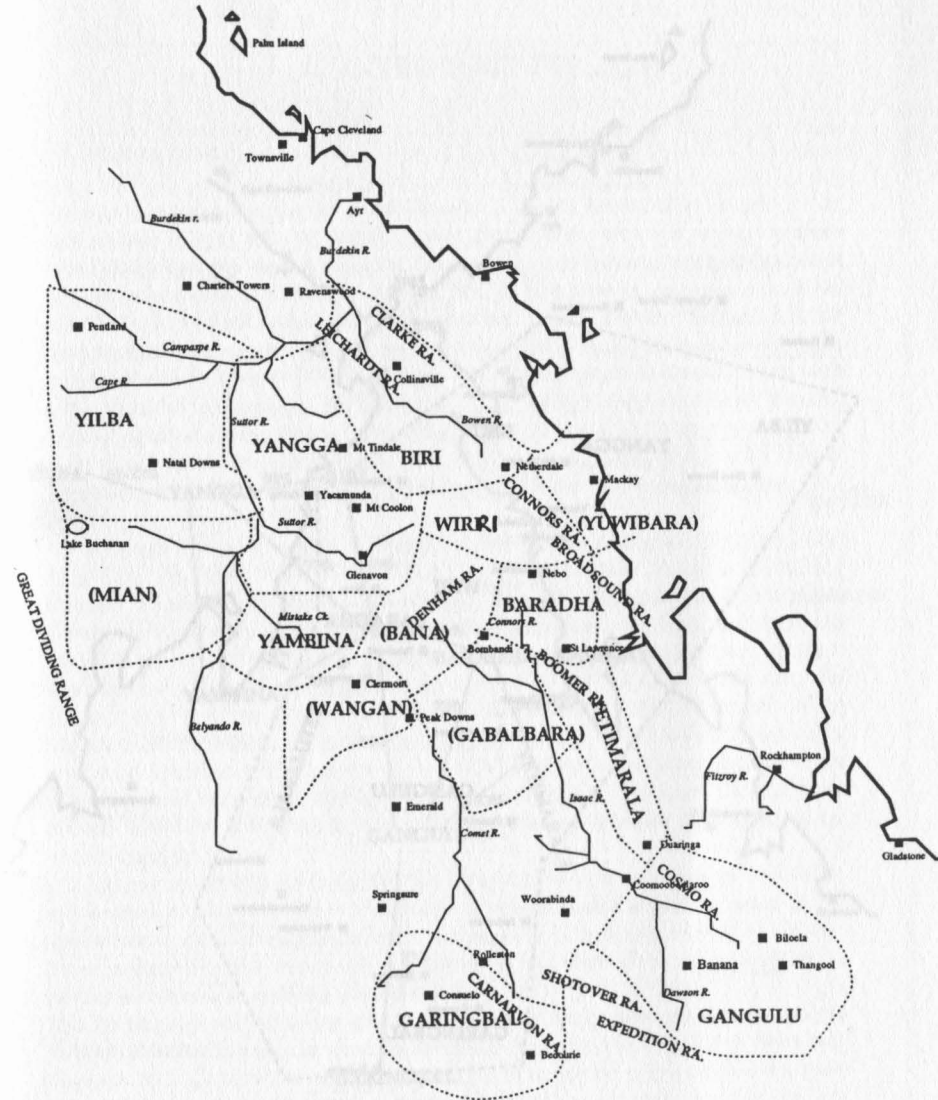
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ABBREVIATIONS AND CONVENTIONS

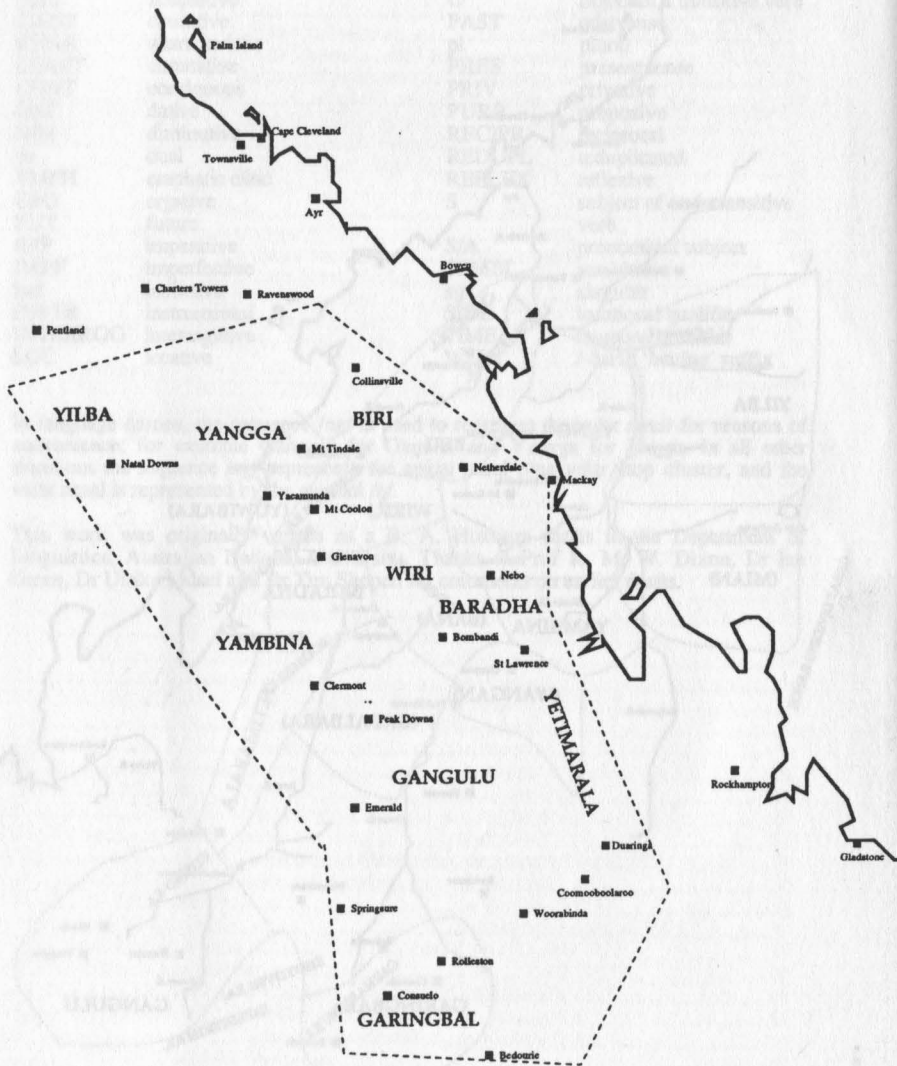
A	subject of a transitive verb	NEARLY	'near miss' aspect
ABL	ablative	NEG	negative
ABS	absolutive	O	object of a transitive verb
CAUS	causative	PAST	past tense
CHAR	characteristic	pl	plural
COMIT	comitative	PRES	present tense
CONT	continuous	PRIV	privative
DAT	dative	PURP	purposive
DIM	diminutive	RECIPR	reciprocal
du	dual	REDUPL	reduplicated
EMPH	emphatic clitic	REFLEX	reflexive
ERG	ergative	S	subject of an intransitive verb
FUT	future	S/A	pronominal subject
IMP	imperative	SEMBL	semblative
IMPF	imperfective	sg	singular
incl	inclusive	SIDE	locational qualifier
INSTR	instrumental	TIME	temporal qualifier
INTERROG	interrogative	WITH	/-bari/; 'having' suffix
LOC	locative		

In language names, the sequence /ng/ is used to represent the velar nasal for reasons of convenience; for example Gangulu for Gaṅulu, and Yangga for Yangga. In all other situations the sequence /ng/ represents the apical nasal plus velar stop cluster, and the velar nasal is represented by the symbol /ŋ/.

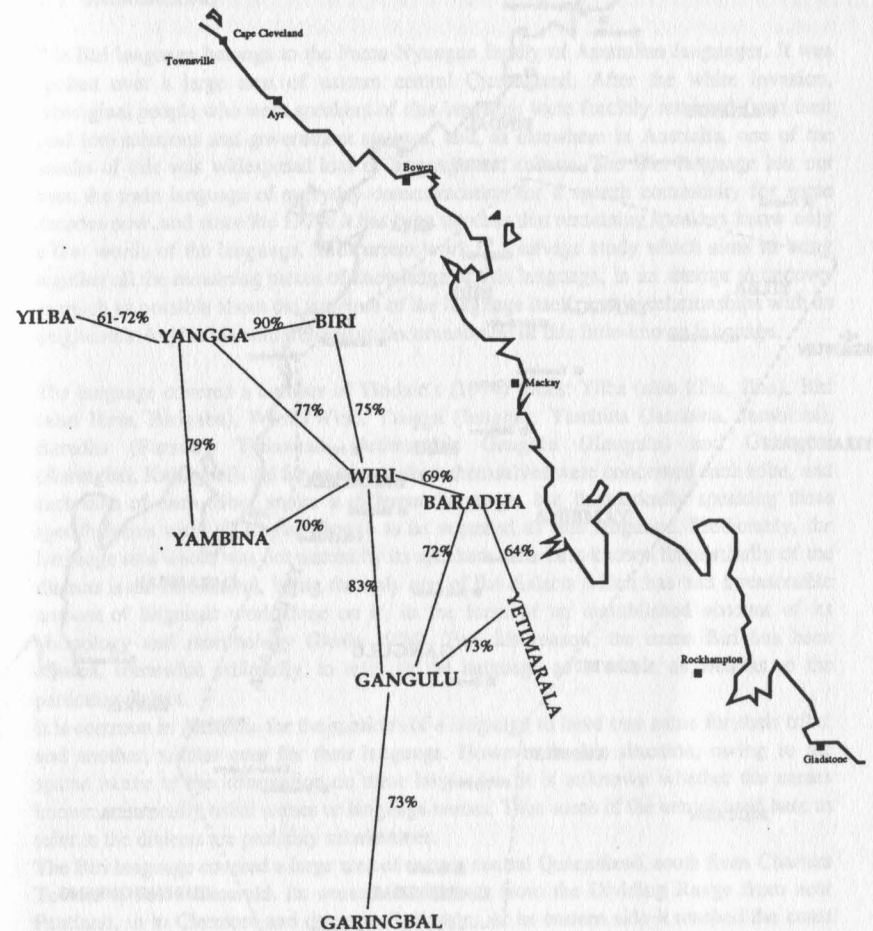
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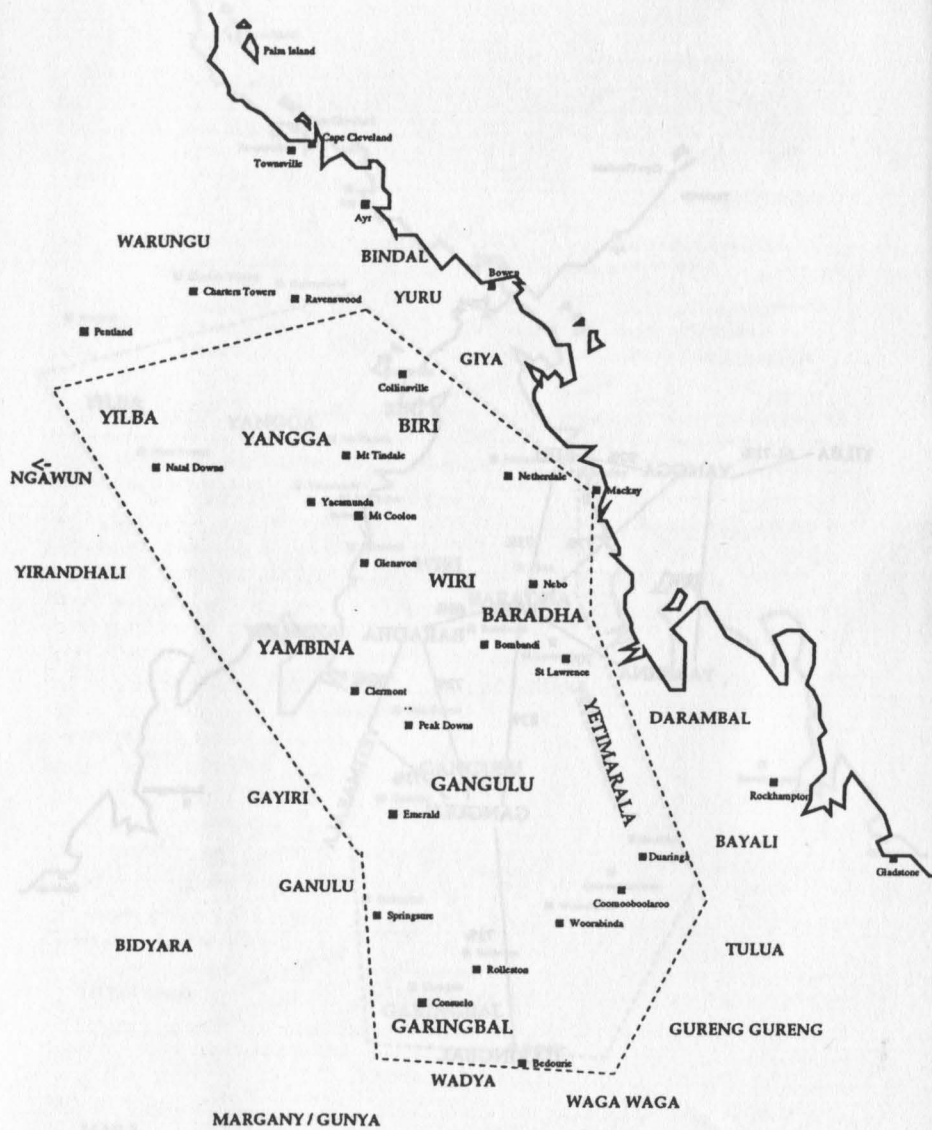
MAP 1
Tindale's location of the Biri dialects. Adapted from Tindale 1974



MAP 2
Tentative relative locations of the Biri dialects



MAP 3
Cognate percentages of dialects which border on each other.



MAP 4
Relative locations of languages sharing a border with Biri

1. INTRODUCTION

1.1 BACKGROUND

The Biri language belongs to the Pama-Nyungan family of Australian languages. It was spoken over a large area of eastern central Queensland. After the white invasion, Aboriginal people who were speakers of this language were forcibly removed from their land into missions and government stations, and, as elsewhere in Australia, one of the results of this was widespread loss of language and culture. The Biri language has not been the main language of everyday communication for a speech community for some decades now, and since the 1970s it has been the case that remaining speakers know only a few words of the language. The current work is a salvage study which aims to bring together all the remaining pieces of knowledge of this language, in an attempt to uncover as much as possible about the structure of the language itself, and its relationships with its neighbours, to provide comprehensive documentation of this little-known language.

The language covered a number of Tindale's (1974) tribes: Yilba (also I:lba, Ilba), Biri (also Biri, Birigaba), Wirri (Wiri), Yangga (Jangga), Yambina (Jambina, Jambina:na), Baradha (Barada), Yetimarala (Jetimarala), Gangulu (Kangulu) and Garingbal (Karingbal, Karingbel). As far as the speakers themselves were concerned each tribe, and each clan of each tribe, spoke a different language, but linguistically speaking these speech forms were all similar enough to be regarded as one language. Predictably, the language as a whole was not named by its speakers. The best-known linguistically of the dialects is the Biri dialect, being the only one of the dialects which has had a reasonable amount of linguistic work done on it, in the form of an unpublished account of its phonology and morphology (Beale 1974). For this reason, the name Biri has been chosen, somewhat arbitrarily, to refer to the language as a whole as well as to the particular dialect.

It is common in Australia for the speakers of a language to have one name for their tribe, and another, similar one, for their language. However in this situation, owing to the sparse nature of the information on these languages, it is unknown whether the names known are actually tribal names or language names. Thus some of the names used here to refer to the dialects are probably tribal names.

The Biri language covered a large area of eastern central Queensland, south from Charters Towers to below Emerald. Its western border was from the Dividing Range from near Pentland, in to Clermont and down to Rolleston. At its eastern side it reached the coast only at Mackay, continuing south down to Thangool. At its south west border lies Bidyara; Warungu lies to the north, the Waka-Kabic languages to the south and Darambal, Giya and Bayali to its east.

Data on the dialects of Biri spans over a hundred years, beginning with the word lists collected by amateur scholars and others from the middle to late 19th century when white settlement reached the area, through to the first half of the 20th century. Recordings of

this language ceased from this time until the late 1960s to 1980s, when a second wave of interest brought trained linguists to the area. The 'dead years' of research into and interest in Australian languages during the middle of this century were experienced throughout the continent, as repressive government attitudes to Aborigines both shaped and were shaped by white attitudes to Aborigines.

As the last speakers died, further recording of the language has become impossible, and it now remains to put together the existing data, and draw as complete a picture of the language and its dialects as this data will allow.

Unfortunately, although information on the language has been collected by so many people, it is confined mainly to two or three of the fifteen or so dialects and, in the case of the early amateur collectors, consists almost entirely of vocabulary.

1.2 SOCIOLINGUISTIC SITUATION

Very little is known of the culture of the people who spoke the Biri language before the Europeans arrived in the area in the late 1850s.

Early sources tell us something of the social organisation of some clans associated with this language. In the 19th century there was some interest in the kinship, marriage and inheritance systems in Aboriginal societies, and as a consequence some of these have been recorded for some Biri-speaking groups. Many Aboriginal societies in this area, as indeed over much of the continent, had kinship systems based on moieties and sections; every person in the group belonged to one of two matrimoieties; which one a person belonged to depended on the moiety of their mother. Each moiety was further subdivided into two sections; membership of a section was determined by the sections of the parents. Each of the sections were named, and often the moieties were named as well. Names for sections varied between dialect and language group. For some Biri groups these names have been recorded.

Thus, Wilson and Murray 1886 say that Yambina had two matrimoieties named *yaḡaru* and *wudharu* respectively. The section names were *gurdyila* (m), *gudyilagan* (f) and *banbayu* (m), *banbayugan* (f) for the *yaḡaru* moiety; and *guburu* (m), *guburugan* (f) and *wuḡuga* (m), *wuḡugan* (f), for the *wudharu* moiety.

Chatfield (1873-4), Thomson (1886) and Chatfield (1886) give us section names for the *Yilba*: the sections are *gurrigila*, *wudharu*, *muldhuru* and *yaḡaru*. The similarity between some of these *Yilba* section names and the *Yambina* moiety names suggests some confusion on the part of the people collecting these words.

The fact that these groups had section and moiety names, in any case, suggests that their society had similar structural features to Aboriginal societies recorded elsewhere in the region. Unfortunately, however, this scant information is all that is now known of these cultures.

1.3 SOURCES FOR THIS STUDY

1.3.1 THE EARLY AMATEUR WORD LISTS

This study uses every existent source on the language, published and unpublished. The

earliest information we have of the language is from 1865. It comes from James Morrell (also Murrells, Morrill), an English sailor who was one of several survivors of a shipwreck off the coast of Queensland. His raft landed on Cape Cleveland, where he was rescued and taken in by the Aborigines of Mount Elliott, with whom he lived for 17 years. His account of this experience includes a short word list of the language of the Mt Elliott people, published as Gregory 1865. However, it is poorly transcribed and inaccurate, and in fact contains a mixture of at least five languages or dialects: *Biri*, *Yilba*, and the little-known languages of *Ayr*: *Bindal* and *Yuru*. Only 8 of the 30 words are *Biri/Yilba*. However the list is the earliest record of the language and as such it is very valuable.

William Chatfield Jr (Chatfield 1873-4) gives a word list of the "yuckaburra" dialect, spoken on the Cape River, apparently by a number of groups including the "yuckaburra", "peghullaburra", "woccollaburra", "goondoolooburra", "monkeyburra" and "monghuburra". These are clearly clan names. Chatfield also comments on the structure of the language:

"as regards the grammatical construction I can only say that the inflection of the voice and position of the words, as a rule, have more to do with the meaning of a sentence than I can express. The substantives and the adjectives appear to have no declensions, nor the verbs conjugations."

Biri, like all Australian languages, in fact has extensive verbal and nominal morphology. Possibly the explanation of Chatfield's comment lies not purely in his ignorance of the language, but in his Aboriginal informants' attempts to simplify their language for him by reducing the morphology.

Chatfield also contributes a vocabulary list from the same language to the *Curr* volume (Chatfield 1886). These lists are very similar, except for the spelling; spellings are regularised, and diacritics are removed.

E. M. *Curr*'s vocabularies provide an extremely rich body of data; there are 18 word lists which contain at least some trace of *Biri* dialects. *Curr*'s method of collecting the data was to send questionnaires to pastoralists, policemen, magistrates and so on all over the country, consisting of 125 English words, of which they were to provide the local Aboriginal equivalent. He collected 300 lists which were published in four volumes as *The Australian Race* (1886a). Many of the contributors sent in ethnographic information concerning the customs of the local Aborigines. Much of this is highly bizarre and sensationalised, and often wrong. Unfortunately much of the linguistic information is also inaccurate. The lists differ greatly in the quality of transcription. A couple are of reasonable quality, for instance no.150, which was actually done by a group of people, but most are fairly poor. *Curr* himself edited the lists, as has been mentioned, and changed the spelling to conform to his spelling system, but unfortunately his system lacked consistency and did not recognise all of the Aboriginal phonemes.

Some of the contributors sent in grammatical information as well, and this too tends to be of mixed usefulness. For instance the Rev. H. *Bucas*, who contributed to no.147, wrote down ten sentences, about which he comments that:

"Prepositions are an important feature in this language, and are always affixed to substantives or pronouns..." (*Bucas* 1886: 48)

His "prepositions" are actually morphological inflections, but he is correct in his observation of their importance. He obviously has some knowledge of classical languages, and in analysing verb forms makes the rather amusing comment about the conjugation of the verb burumbula, meaning 'do' or 'make' that "this verb resembles the Latin verb facio" (ibid). (Facio also can be translated as 'do' or 'make'). This is an example of the way Europeans insisted on seeing Aborigines, their culture, and their languages, in European terms.

Dr W. E. Roth, Northern Protector of Aborigines from 1898, and later Chief Protector of Aborigines (1904-6) did much ethnographic and linguistic work among Aborigines, including an 1897 word list of about 100 items from the "Yettimaralla" language (Roth 1898). This is a remarkably accurate and competent rendering of Aboriginal words, notwithstanding his lack of linguistic knowledge.

The *Australasian Anthropological Journal*, published from 1896-7, contained many tidbits of information about Aborigines, sent by interested people who had dealings with Aborigines, including many word lists. Of interest are a 'dialect' from Queensland sent in by A.M.F. (1897), and a word list of a dialect spoken at Croyden Station (anon 1896). Unfortunately these are very poorly transcribed, inaccurate and unreliable.

The journal changed its name to *Science of Man* in 1898, and in this format published a few relevant articles and word lists, including: a short word list from Bowen Downs by A. Douglas Douglas (no 3 vol 1:8-9 1900); a list from the "Mamburra" tribe sent in by F. Y. Fox, Esq (no.1 vol4:88-9 1897); 18 words of the "Bumburra-burra Tribe" by Mrs Fox (no 3 vol 1:62 1898); and a short letter containing a couple of words from a Yaamba tribe (anon 1899). These are all of low accuracy, have mixed languages, and are poorly transcribed.

Around 1900, Archibald Meston, a well known journalist and advocate of the Aborigines at the time, collected a number of short word lists from the area in question (Meston c. 1900a-e). Unfortunately the glosses, transcription and named location of the languages are grossly inaccurate and unreliable and the lists contain a mixture of languages.

J. P. Beuzeville, manager of a pastoral station in the South Kennedy district of Queensland, collected about 100 words from the "yuckaburra" dialect, spoken by the "Munkeeburra" of the South Kennedy district. This was published in 1919 in the *Journal and Proceedings of the Royal Society N.S.W.* It covers the same area as Chatfield's list, and in fact appears to be the same dialect, spoken by a different clan (Chatfield's "Monkeyburra"), with the slight differences to be expected of a dialect spoken by different clans.

Gerhard Laves collected 8 words from an unnamed Aborigine at Hughenden (Laves 1929-1932).

The anthropologist Norman Tindale took word lists from five dialects: Biri, Wirri, Gangulu, Garingbal and Yangga (Tindale 1938). These are by far the most competent and reliable transcriptions of any of these non-linguists.

1.3.2 DATA COLLECTED BY LINGUISTS

The first linguistic work done on the dialects was by C. R. Osborne (Osborne 1966), who collected 21 Gangulu words from Mrs Bessie Bradley in 1965. This is a fairly accurate phonetic transcription, in that it matches closely most other sources.

Margaret Sharpe made numerous recordings and transcriptions of Biri and Gangulu in 1966-7, with informants Eddie Conway, Adrian Conway and Ruby Lang (all Gangulu), and Viola Tears for Biri (Sharpe 1966-7; 1967). These transcriptions are very accurate and reliable.

In 1967 Gavan Breen recorded a small amount of Gangulu (informant Olive Solomon) and Biri (informant Reg Dodd). His transcription (Breen 1967a) tallies with most other sources).

Peter Sutton in 1970 recorded 16 pages of the coastal variety of Biri from Eddie Barker (Sutton 1970). He also transcribed a tape recorded in 1966 by E. F. Aguas of Gangulu and Wirri, with informant Leslie Hatfield (Sutton 1973b). His Biri data is quite extensive, and as such is very useful. His transcription is close to that of other sources.

Tasaku Tsunoda (1971, 1971-2) made extensive field notes and tapes of Biri vocabulary and phonology, and some morphology, from all his informants: Eddie Barker, Harry Johnson, Alf Palmer and Reg Dodd. He also collected a small amount in 1974 from Henry Williams, whom he said spoke Gangulu or Wirri. Tsunoda's data differs markedly from other sources. For instance for Harry Johnson's Biri he posits a retroflex nasal and lateral, and an /s/; phonemes completely unknown in neighbouring languages and indeed in all other sources of Biri. Likewise for Eddie Barker he proposes an interdental lateral, again unknown in any other sources, and typologically unlikely, as Biri is east of Dixon's (1980) lateral line, and therefore would be expected to have only one lateral, the apico-alveolar lateral. Similarly the little morphological analysis he has is not backed up by the observable facts of the language, or indeed by Beale's (1974) analysis.

R. M. W. Dixon collected some Biri from Archie Lay (Dixon 1972a). This data is close to that of other sources.

Warwick Norman (c.1973) collected some words and many sentences in Biri, Baradha and Gaji. Gaji is actually not a Biri dialect, but his informant was speaking mixed Gaji and Biri. His Baradha informants were Darcy Nay (a white man), Bill Bell, A. D. Shannon and Duke Barker. His Biri informants were Mrs Atto and Tommy Atto, and Jimmy Daisy. His Gaji informant is known only by the surname of Lampton. His Baradha data is extremely useful, and his transcriptions are generally accurate.

Tony Beale wrote a short grammatical sketch of Biri (Beale 1974), dealing mainly with phonology and morphology, and including a comparative lexicon of Biri and Baradha. His Biri data comes from his own fieldwork with Reg Dodd, and his Baradha data is based on Norman's work. This data is reasonably reliable; the transcriptions are accurate, apart from a few differences from other sources among the rhotics, and the analysis is mostly backed up by the observable facts.

Also in 1974, Bruce Sommer recorded George Bowen speaking some words and sentences of Biri, which were transcribed by the present author.

Nils Holmer (1983) has a short analysis of Gangulu, Wirri and Biri, complete with an extensive lexicon from English into all these dialects. His Gangulu informants were Claude Anderson, Kruger White, Michael Murphy, Maudy Tilbury, Nelly Orton and Tim Albury. His Wirri informants were Ada Mack and Melba Saunders. His Biri informants were Archie Lay, Cecil 'Pinchy' Cook, Joe Hegarty, Liza Jackson, Reg Dodd, Violet Abingdon (or Tear), and William 'Bill' Skene. He also has some data called Ngawun; Ngawun is not a Biri dialect, but his informant, Rosie Freeman, was actually speaking mixed Ngawun and Biri. Holmer's phonology is somewhat unusual; for instance he denies

the existence of interdental phonemes. However the phonemic status of these can be fairly easily proved (see Chapter 2 on phonology). His morphological analysis also differs somewhat from that of Beale. See Dixon (1992) for further remarks on Holmer's work on another group of languages.

The last fieldwork was done in 1987 by Bruce Rigsby, who collected a vocabulary of the Sutor River people from a white man, Jack Quinn, who had learnt the language many years ago from Aboriginal friends. Unfortunately the speaker was not very proficient in the language, and the transcription consists entirely of vocabulary.

Holmer, Tsunoda and Beale are the only linguists who have done any analysis at all on this language.

1.3.3 PROBLEMS WITH THE DATA

Data from the amateur word lists poses some problems for the linguist trying to analyse the language from which it was taken. The first problem is with what these collectors recorded; nearly all of the data is in the form of single words. There are probably only twenty full sentences in all the amateur data. Because of this, little can be said about syntax or morphology on the basis of these sources.

The second problem concerns the way in which the data was recorded. Australian languages contain some phonemes which do not exist in English (dh, nh, dy, ny), and in places where they are not allowed in English (initial ŋ). It is extremely difficult for the untrained ear to hear these sounds. It is also likely that even if these sounds are heard, they will not be recognised as being phonemic. It is also difficult to render these sounds using the Roman alphabet without some sort of system, as some symbols needed are not available in the Roman alphabet. At the time of these transcriptions there was no phonetic alphabet available as there is today; the collectors would have had to use digraphs based on the Roman alphabet, or invent their own symbols. Obviously this would be a lot to expect from an untrained transcriber. However these problems of hearing and transcribing Aboriginal sounds mean that much phonetic detail is lost in the process of recording.

However orthographic problems are not as bad as they first seem; there are some systematic habits and mistakes that many of the writers made. Thus final 'ine' in a word generally represents /-any/. /oo/, /o/, /ou/, /u/ and /eu/ were written for /u/; /ee/, /i/, /y/, /ie/ and /e/ were written for /i/; /o/ and /u/ for /a/. Initial /ŋ/ was often missed, but as there are no Biri words beginning with a vowel, this can usually be guessed at. /J/, /dg/, /g/ and even /ds/ were written for /dy/. Often a postvocalic r was written to indicate vowel length or quality, and should be interpreted as silent, as in many dialects of English. Many medial consonants were doubled to indicate a preceding short vowel, as is common in English. On the other hand both vowels and consonants were frequently doubled for no discernable reason. Occasionally syllabification was shown, which is very useful. Sometimes diacritics were added seemingly at random, and again for no apparent reason. Chatfield is particularly notable for this.

In all the amateur sources it is impossible to distinguish the rhotic tap /ɾ/ from the continuant /r/. The distinction is not phonemic in English, and therefore would not have seemed important to a native English-speaking collector. Besides, there was no symbol to represent the tap at the time these transcriptions were written.

Similarly, it is usually impossible to distinguish /ŋ/, /ŋg/ and /ng/ in the amateur lists; all are written [ng]. Occasionally /ŋg/ is written as [ngg] (eg. Scott 1886), but it is impossible to tell if the writer did this consistently - the rest of his spelling conventions are inconsistent - so this is of limited use.

Consistency is rare in any of these word lists. Often the same word will be spelt differently in different places in the same list. Thus anon (1886a) has 'kamoo' water and 'kamo' rain (they are both the same word gamu). And Douglas 1900 has 'mullo' arm; 'malla' wrist and hand; 'mulla' fingers: they are all mala. The transcription of vowels is notoriously inconsistent.

Orthographic difficulties also lead to a high degree of ambiguity in the resultant written form of a word. Thus for instance Thomson 1886 has "nein" fly; this could be interpreted as /niin/, /nain/, /nein/, /niyin/, or many other possibilities. And some forms are unreconstructible with any degree of certainty eg. Beuzeville "oughwhoi" duck; anon 1896 "cirrhara" sea, and "caunuu" swamp.

Some writers are influenced so much by English spelling that they even add the silent letters present in some English words when rendering an Aboriginal word, eg. Meston "palma" man for bama!

In addition there are general problems of inaccuracy; glosses are wrong, or perhaps two glosses are in switched order. Communication problems between informant and collector have no doubt also contributed to mistakes in the word lists.

A further problem with the amateur lists is the frequent lack of precise geographical information given. For example A.M.F. 1897 refers to his word list simply as a "dialect of Queensland".

Another difficulty lies in deciphering the handwriting of some of the contributors. This is also a problem with some of the field notes made by linguists.

Most of the above difficulties are overcome by some linguistic training. Instead there are other problems with the work done by linguists. Given the fact that white settlement came to the area in about the 1880s, at which time Aborigines were either killed or forced off their lands into reserves, by the time linguists came to the area from the late 1960s, much of the language was already lost. There were at this stage only a few elderly semi-speakers left from only a few of the dialects.

These speakers had not used the language for some years and their knowledge was extremely limited. Often it was possible to elicit single words for common concrete nouns, but morphology was past recall, and syntax largely followed that of English. The best informant is probably Reg Dodd, a speaker of the Biri dialect; he has a rich morphology, which he utilises fully and with variety. However most informants stick to a couple of verbal endings, and a few noun cases, and indeed often have sentences with no case marking at all. This means that the morphological and syntactic analysis to follow (chapters 3, 4 and 5) is based almost entirely on Reg Dodd's knowledge.

There is also one orthographic difficulty with the linguistic sources. This is the distinction between the rhotic tap and continuant. Amateur sources do not distinguish these at all; linguists do, but as the symbols for the two vary and overlap it is sometimes difficult to tell which rhotic was intended.

1.3.4 INTERPRETATION OF THE DATA

For some of the more common words of the Biri language, up to fifty different renditions of the same word were found in the sources. From a comparison of words in which the Aboriginal form and English meaning were similar, the possible phonological form of the word was reconstructed.

For example, the word for 'meat' was given variously as "yurri", "yuri", (most linguists gave one of these forms), "ury" (Bridgeman and Bucas 1886), "yuree" (Wilson and Murray 1886), "urie-urie" (Scott 1886), and so forth. The form is probably yuri; it is less likely to be yurri, because a trilled /r/ is frequently rendered by amateurs as /d/, whereas this rhotic only appears in amateur lists as an [r]. The variation among the linguists could be explained by differing orthographic conventions.

In general in making these decisions more weight is given to transcriptions done by linguists; they are trained to hear and transcribe systematically sounds which are unknown in their own languages. Where linguistic sources disagree over a transcription the decision becomes more difficult. The matter can generally be resolved by looking at the whole of each linguist's transcription; their individual tendencies are often quite consistent. So for example if one knows that a particular source often misses an initial /nh/, one would not be surprised at a divergence in this respect from the transcriptions of other linguists.

Not all words show such fortunate homogeneity as the previous example; where there are competing forms these are all noted, with the dialect affiliation if known.

For a salvage study, the data is very rich in some areas; all 47 collectors contribute to the vocabulary, making crosschecking in this area comparatively straightforward. However for most of the dialects lexical data is all there is. In the other areas of morphology and particularly syntax, the data is scant. Morphological data is available on Biri, Gangulu, Baradha and Wirri only. Tony Beale's (nd) 400 sentences and 4 texts provide the only material suitable for syntactic analysis. And indeed for some dialects all that is known of their existence is their name on Tindale's tribal map; Bar:na, Wangan, Mian, Juipera and Kabalbara are in this category. It is impossible to say anything about these languages, except that from their geographical position it is possible and indeed likely that they were dialects of Biri.

A further point to be made about the data concerns the large expanse of time over which data has been recorded. Any language will experience change over a hundred years. The years from 1863 to 1987 would have been particularly turbulent for Biri speakers and thus for the language; in fact the language would have been in the process of dying for most of this time. Because of this one would expect to find differences between the earlier sources and the later material, due simply to the process of change. Unfortunately, partly due to the poor quality of the earlier sources, it is hard to tell whether divergence between early and later forms is due simply to poor transcription, miscommunication and mistakes, or whether it is a genuine example of language change.

Given the limitations of the data and the impossibility of checking hypotheses with Biri speakers, the conclusions drawn in this study must be considered as tentative. More data would perhaps produce different conclusions, and would doubtless answer the many questions that insufficient data must always raise. However as this is an impossibility, this work merely attempts to set down the knowledge that is available, and accepts that there are large gaps left which must now remain unfilled.

2. PHONOLOGY

2.1 INTRODUCTION

This section is necessarily sketchy; the nature of the data does not permit a full phonological analysis.

Biri has a phonological system typical for languages of the area (Dixon 1980: 141). There are five stops, five nasals corresponding in place of articulation to the stops, two rhotics, two semivowels, one lateral and three vowels with contrastive length.

2.2 PHONEME INVENTORY

The phonemes of Biri are represented in the table below, using the conventional orthography common to most Australian languages, and in keeping with the tradition of using voiced symbols for the stops for most of the languages of the South East Queensland/NSW region.

Consonants

	bilabial	apico-alveolar	lamino-dental	lamino-palatal	dorso-velar
stop	b	d	dh	dy	g
nasal	m	n	nh	ny	ŋ
lateral		l			
rhotic		r rr			
glide	w			y	

Vowels

	front	back
high	i	u
low		a

2.3 PHONETIC REALISATIONS

2.3.1 CONSONANTS

Stops are generally voiceless and unaspirated, alternating freely with voiced unaspirated and voiceless aspirated allophones.

/dh/ tends to be realised as a fricative intervocally and initially before /a/ and /i/. Elsewhere it is a voiced interdental stop.

/g/ becomes /w/ before or after a /u/ vowel.

/n/ and lateral /l/ tend to be slightly retroflexed before or after /u/. Elsewhere they are realised as apical alveolar.

/rr/ is realised as a voiced alveolar trill.

/r/ is realised as a voiced frictionless retroflex glide.

2.3.2 VOWELS

Vowels become raised and fronted before a palatal consonant /dy/, /ny/, and /y/. They are pronounced further back before /w/.

/i/ is realised as front and close finally. Elsewhere it is more backed and open.

/a/ is more backed and open in a final closed syllable. It is more backed and close preceding /w/ and /r/. It is more central and fronted medially.

/u/ is more back and open before nasals, and more fronted and close elsewhere.

There are two words with long vowels:

wa:ga	'work'
ga:gini	'Reg Dodd' (personal name)

The first word is a loan word from English 'work'. These are the only two instances of phonetic long vowels in the data. Clearly long vowels are not a strong feature of the language. Note however that the Marrgany/Gunya language, directly to the west of Biri, has a long mid vowel /a:/ (Breen 1981a).

2.4 PHONEMIC CONTRASTS

d : dh	dana 'come', 'get up'	dhana 'sit', 'stop'
n : nh	guna 'faeces' nudha 'to smell'	gunha 'there' nhula 'he'
dh : dy	dhiga 'red kangaroo' nadhi 'grandfather'	dyigadyiga 'willy wagtail' madyira 'white clay'
nh : ny	nhagga 'beard' gunhami 'that'	nyanggal 'cheekbone' gunyala 'Goonyella' (place name)
r : rr	garba 'to hide' gura 'behind'	barrga 'throat' gurran 'flying fox'

d : rr gudgan 'tall' marrgin 'gun'

2.5 PHONOTACTICS

2.5.1 WORD STRUCTURE

Syllables are of the form

C₁ V (C₂)

C₁ is any initial consonant (see 2.5.2)

C₂ is any nasal, /l/ or /rr/. If the syllable is word-final, the possibilities are as in 2.5.3.

There are no monosyllabic words or roots in Biri. Most words (60%) are disyllabic. Many words (34%) are trisyllabic. Some (5%) contain four syllables, and there is one word in the data that contains five syllables; waynbarinydala 'very fast'. This word is interesting; it appears in Nyawaygi, a non-contiguous language to the north of Biri (Dixon 1983): wayinbi is a verb meaning 'move quickly' and /-dyala/ is an intensifier. It is possible that this is a loan from Nyawaygi, or that the speaker was mixing languages.

2.5.2 WORD INITIAL POSSIBILITIES

A word can begin with any stop, any nasal or a semivowel (b, dh, dy, g, m, n, nh, ny, ŋ, y, w). That is, a word cannot begin with a vowel, a lateral, or a rhotic. Initial apical consonants are rare, but do occur.

Words beginning with the lamino-palatal stop and nasal /dy/ and /ny/ are rare; there is only one example of each. Only 2% of words begin with the apical nasal /n/ and the laminodental nasal /nh/ respectively. Words most commonly begin with the bilabial stop (22%) or velar stop (22%) or the semivowels (12% each). The other initially occurring phonemes are less common: /dh/ 11%; /m/ 11% and /ŋ/ 5%.

Words do not begin with vowels, but there is a rule that the palatal glide /y/ tends not to be pronounced initially before the palatal vowel /i/. Similarly, the semivowel /w/ tends to disappear initially before the vowel /u/.

2.5.3 WORD FINAL POSSIBILITIES

A word can end in a vowel, the lateral, the apical nasal, bilabial nasal or lamino-palatal nasal (i, a, u, l, n, m, ny).

Most words (48%) end in the vowel /a/, or /i/ (20%), or /u/ (19%). Only 8% of words end in /n/, and 2% end in /ny/ and /l/ respectively.

2.6 CONSONANT CLUSTERS

2.6.1 INITIAL CLUSTERS

There are only two examples of initial clusters in the data:

brigi 'cry'
briguna 'wife'

These two words are considered as exceptions to the syllable structure rules presented in the previous section. They are perhaps a relic of an earlier phonotactic structure, or possibly they are loan words.

2.6.2 MEDIAL CLUSTERS

a) all nasals can appear in clusters with the homorganic stop:

/mb/ /nd/ /nhdh/ /nydy/ /ŋg/

banamba 'change'
bandara 'sky'
banhdhu 'hit, hurt'
bandyi 'brother-in-law'
banga 'fall'

b) The apical nasal and velar nasal can also form heterorganic clusters with the peripheral stops:

/nb/ /ng/ /ŋb/

binbi 'good'
dingula 'Burdekin plum'
dhanba 'hold'

The apical nasal can also form clusters with the velar nasal:

/ng/
banga 'kangaroo rat'

c) the lateral can form a cluster with any non-interdental stop or nasal, although there are no instances of /lɲy/:

/lb/ /lm/ /ln/ /ld/ /ldy/ /lg/ /lŋ/

bulban 'flower'
dulmi 'brain'
dhalngan 'light, flame'
yaldara 'tree snake'
baldyan 'brigalow tree'
balga 'jump, kill'
balganbara 'young'

d) rhotics can form clusters with peripheral stops, although there are no examples in the corpus of /rg/:

/rb/ /rɲb/ /rrg/
birbina 'chest'
barrbirra 'echidna'
birrga(gu) 'tomorrow'

There are two instances of clusters of the form /dg/:

gudgan 'tall'
gawudgara 'kookaburra'

There are only two instances of the cluster /ng/:

dhalngan 'light'
wungu 'black goanna'

There are only two occurrences of a three-member cluster in the data:

/ng/
dhaln.gan 'light', 'flame'
galn.ga 'fall'

Note that the /ng/ sequence is not a velar nasal; it is in fact a cluster of an alveolar nasal followed by a velar stop. These are the only words in the corpus which have a three-member cluster.

2.7 STRESS

Primary stress falls on the first syllable of a word. Secondary stress falls on the third syllable if present.

3. NOMINAL MORPHOLOGY

3.1 INTRODUCTION

Beale's (1974) work provides a short analysis of the Biri dialect. Some sections of this chapter and the next draw similar conclusions to Beale's work, but on many occasions the analysis departs substantially from that of Beale. This is particularly the case in the sections on the superlocative case, the nominal paradigm, pronouns, transitive markers, the causative marker and so on. There are many minor differences throughout the work.

The analysis below is based on the Biri dialect, because the Biri dialect data is by far the most comprehensive of all the dialects as far as morphology is concerned. The morphology of most of the informants is severely limited, often to one case - the dative - with the nominals, and to a few tense suffixes with the verbs. Beale's informant Reg Dodd, however, had what appears to be full nominal and pronominal paradigms, and a large variety of verbal affixes, and it is for this reason that most of the examples are from his speech (Beale nd). In chapter 6, the morphology of other dialects will be examined

3.2 NOMINAL PARADIGM

There are nine nominal cases in Biri. The forms of some of these case markers depend on the final phoneme of the nominal stem, as shown below:

CASE	FINAL PHONEME OF NOMINAL STEM			
	VOWEL	-L	-N	-NY
Absolutive	-∅	-∅	-∅	-∅
Ergative	-ŋgu	-du	-du	-dyu
Instrumental	-ŋgu	-du	-du	-dyu
Dative	-gu	-gu	-gu	-gu
Ablative	-dhamu	-damu	-damu	-dhamu
Locative	-ŋga	-da	-da	-dya
Superlocative	-gunda	-nunda	-unda	-unda
Semblative	-ŋamu	-ŋamu	-ŋamu	-ŋamu
Comitative	-bari	-bari	-bari	-bari

3.3 USE OF CASES

Case marking appears as a suffix on the head of the noun phrase and on any accompanying demonstrative, numeral or quantifier (but not on an accompanying adjective). Nouns in Biri inflect on an ergative-absolutive basis. Biri actually has a split system; personal pronouns inflect on a nominative-accusative basis, and interrogatives inflect on a three-way basis. This will be discussed below (3.4 and 3.5).

3.3.1 ABSOLUTIVE

The absolutive case is used for the subject of an intransitive verb and the object of a transitive verb. As is common across Australia, it has a zero realisation. The following two examples show absolutive-marked intransitive subjects, and example (3) below shows an absolutive-marked transitive object (with an ergative-marked transitive subject) (all examples throughout this work come from Beale (nd) unless otherwise stated):

1) gunhami buri ganda-lba-ŋa-la
that-ABS fire-ABS burn-CONT-PRES-3sgS/A
that fire is burning

2) wandi waga wanydya-li
dog-ABS run go-PAST
the dog ran away

3.3.2 ERGATIVE

The ergative case marks a noun as transitive subject. Its allomorphs /-ŋgu/ and /-du/ are very common across the continent.

3) gunhami-ŋgu gayu-ŋgu yaba-nha-la-ŋgu manhdha
that-ERG woman-ERG give-FUT-3sgS/A-1duDAT food-ABS
ŋali-ŋu
1duDAT
that woman will give us some food

The ergative case is also used to mark the subject of a derived transitive verb, formed from an intransitive verb by adding the causative affix /-mba/ (see section 4.5.1 for details of causative constructions):

4) banabana-ŋgu binbi wara-mba-li-na
doctor-ERG good be-CAUS-PAST-1sgO
a doctor made me feel better

It is also used to mark the subject of derived reciprocal verbs (see 4.5.4 for discussion).

3.3.3 INSTRUMENTAL

The instrumental case is formally identical to the ergative, as is frequent in Australian languages. They can be distinguished on syntactic grounds; the ergative marks an A; the instrumental marks an oblique argument. Also, it is possible to have only one ergative noun phrase in a sentence, but a sentence can have an ergative and an instrumental noun phrase. In addition, an instrumental NP almost always follows the verb, whereas an ergative NP almost always precedes it.

The instrumental case is used to mark an indirect agent- typically an object used to perform the action of the verb:

- 5) *ŋanhi wara-mba-li-nda balgu-ŋgu*
 what be-CAUS-PAST-2duS/A axe-INSTR
 what did you make with that axe?
- 6) *ŋaya bari yaga-mba-l-aya mala-ŋgu*
 1sgS/A stone-ABS rise-CAUS-PAST-1sgS/A hand-INSTR
wurrayi-nha-gu, banga-la dhina-ŋunda
 take- FUT-PURP fall-3sgS/A foot-SUPER
 I picked up a stone with my hand and it fell on my foot

The instrumental case is also used to mark the material from which something is made:

- 7) *yinhami guga bama-ŋgu wara-mba-l-dhana dhula-ŋgu*
 this-ABS house-ABS man-ERG be-CAUS-PAST-3plS/A wood-INSTR
 a man built this house out of wood

The instrumental NP does not have to be inanimate however:

- 8) *yalu binbi wara-l-dhana dhiya-lba-l-dhana*
 child good be-PAST-3plS/A dance-CONT-PAST-3plS/A
wandi-ŋgu
 dog-INSTR
 the children were happy playing with their dog

3.3.4 DATIVE

This is a multi-purpose case that subsumes many different functions. Its form /-gu/ is a common dative form among Australian languages (cf. Blake 1976).

a) Purposive function

The purposive function of the dative case is often, but not always, used with a purposive-marked verb. It marks the goal of an action:

- 9) *ŋali yanhi-l-ali wina-gu*
 1duS/A go-PAST-1duS/A fish-DAT
 both of us went for fish

b) Allative function

This function indicates motion towards an object:

- 10) *ŋana wanydyanda-nh-ana yina-dhamu yara yanhi-nh-ana*
 1plS/A go away-FUT-1plS/A here-ABL there go-FUT-1plS/A
 gilibinbi-gu

Townsville-DAT

we will all go away from here to Townsville

- 11) *wandi-ŋgu bundi-li dhaguru waynbarinydyala, yanhi-li*
 dog-ERG run after-PAST possum-ABS fast go-PAST
budyi-gu
 bush-DAT
 the dog chased the possum into the bush...

There are also a couple of instances where this function covers 'position at a place'; there is some overlap between this function of the dative case and the locative cases. This is particularly frequent with the locative adverbs 'here' and 'there':

- 12) *gunhami bama nhaga-l-anya dhandari-li*
 that-ABS man-ABS see-PAST-1sgS/A+3sgO stand-PAST
gunha-ŋa dhula-ŋga gaynmirra-dhamu
 there-LOC tree-LOC sun-ABL
 I saw that man standing there under that tree away from the sun

c) Recipient function

The dative case is used to mark a recipient or beneficiary:

- 13) *gunhami yuri ŋaya yanhi-ri-nh-ana gamu-gu*
 that-ABS meat-ABS 1sgS/A go-TRANS-FUT-1plS/A water-DAT
dhagany-gu yaba-nh-aya
 crocodile-DAT give-FUT-1sgS/A
 I will take that meat to the river to give to the crocodile

- 14) *ŋaya gulma-ŋ-anya wura gunhami-gu bama-gu*
 1sgS/A cut-PRES-1sgS+3sgO kangaroo-ABS that-DAT man-DAT
wuna-lba-ŋa-la yamba-ŋga
 rest-CONT-PRES-3sgS/A camp-LOC
 I am cutting up the kangaroo for that man who lived in that camp

d) Possessive function

The dative case can mark possession. See 5.8 for a full discussion of possession.

- 15) *gunhami yamba bunbun-gu*
 that-ABS camp-ABS pheasant-DAT
 that nest is the pheasant's
- 16) *gunhami dhula dhandari-lba-ŋa-la gunhagu*
 that-ABS tree-ABS stand-CONT-PRES-3sgS/A there
wanmal-gu
 koala-DAT

that tree there belongs to the koala

e) The dative of verbs of emotion and cognition:

The dative case can mark the goal of verbs of feeling and thinking:

- 17) gunhami-ŋgu gayurrba-ŋgu wara-ŋa-la gunhami-gu bama-gu
that-ERG woman-ERG be-PRES-3SGS/A that-DAT man-DAT
that woman wants that man
- 18) ŋaya manhdha-gu wara-ŋ-aya. Gangiri wara-ŋ-aya
1sgS/A food-DAT be-PRES-1sgS/A hungry be-PRES-1sgS/A
I feel hungry for food
- 19) ŋaya gara binbi wuna-ŋ-aya briguna-gu
1sgS/A NEG good rest-PRES-1sgS/A wife-DAT
I am worried about my wife

3.3.5 ABLATIVE

The ablative case indicates motion or action away from a place. It can be translated as 'out of', 'away from', 'off', and so on:

- 20) yalu waga wanydyanda-li bunbun-dhamu
child-ABS run go away-PAST pheasant-ABL
the boy ran away from the pheasant
- 21) ŋaya nhaga-l-aya gayurrba manhdha wurra-li dhula-dhamu
1sgS/A see-PAST-1sgS/A woman-ABS food-ABS take-PAST tree-ABL
I saw the woman picking berries off the tree

The ablative case does not always have reference to motion:

- 22) ŋali nudhunda-l-ali buri yinha-dhamu
1duS/A smell-PAST-1duS/A fire-ABS here-ABL
The two of us smelt the fire from here

The ablative case can also indicate the source of fear:

- 23) ŋaya yidhirra-ŋ-aya dhagany-mu
1sgS/A afraid-PRES-1sgS/A crocodile-ABL
I am afraid of crocodiles

Note the reduced form of the ablative suffix here. It seems to be a mistake, as it occurs nowhere else in the data.

- 24) yidyiga bama gara yidhirra-ŋa-la yuwunydyi-dhamu
today man-ABS not afraid-PRES-3sgS/A spirit-ABL
today no-one is afraid of spirits

The ablative also appears in other senses:

- 25) yinhami bama wara-ŋa-la bulnan-dhamu
this-ABS man-ABS be-PRES-3sgS/A old-ABL
this man is feeling old
- 26) ŋaya yaga-lba-l-aya wumbara-dhamu gaynmirra
1sgS/A rise-CONT-PAST-1sgS/A sleep-ABL sun-ABS
gara-wa yaga-lba-li
NEG rise-CONT-PAST
I got up early (I awoke from sleep when the sun hadn't risen)

3.3.6 LOCATIVE CASE

The locative case indicates the position of an object, ie 'on', 'in', 'by' (27), (28) and (29); location with other people (30), and location in time (31). Its formative /-ŋga/ is a very common Australian one.

- 27) gunhami yidha-nda dhula-ŋga, yandu yanhi-nda
that-ABS leave-2sgS/A tree-LOC come on go-2sgS/A
put that on the log and come
- 28) nhula banhdhu-li yalu yaŋana wuna-ŋa-la
3sgS/A hit-PAST child-ABS mother-ABS rest-PRES-3sgS/A
yamba-ŋga gunhagu
camp-LOC there
he hit the boy whose mother lives in that camp
- 29) wandi ŋaya wara-mba-l-anya dhana-nha-gu
dog-ABS 1sgS/A be-CAUS-PAST-1sgS/A+3sgO sit-FUT-PURP
buri-ŋga
fire-LOC
I made the dog sit by the fire
- 30) yalu dhana-ŋa-la bama-ŋga
child sit-PRES-3sgS/A man-LOC
the child is sitting with the men
- 31) gugunda-ŋga guranda-li yaŋana-ŋgu yama-li-li
night-LOC return-PAST mother-ERG say-REFLEX-PAST
his mother returned at night and she said

3.3.7 SUPERLOCATIVE CASE

This case marks an entity as being on top of something. Generally it involves motion; an object moves to, or sometimes from, on top of the entity.

32) bama dhandari-li dhina-ggu bunbun-unda
man-ABS stand-PAST foot-INSTR pheasant-SUPER
the man stood on the pheasant

33) gaya bari yaga-mba-l-aya mala-ggu
1sgS/A stone-ABS rise-CAUS-PAST-1sgS/A hand-INSTR
wurayi-nha-gu bagga-la dhina-gunda
take-FUT-PURP fall-3sgS/A foot-SUPER
I picked up a stone with my hand and it fell on my foot

34) bama-ggu dhula warrga-li dhagany-unda
man-ERG stick-ABS throw-PAST crocodile-SUPER
the man threw a stick at the crocodile

35) gaba dhana-li wagal-nunda
bee-ABS sit-PAST boomerang-SUPER
the bee sat down on the boomerang

36) mari-ggu banhdhu-li-li dhilany-unda
man-ERG hit-REFLEX-PAST thumb-SUPER
the man hit himself on the thumb

37) yaga-yi-la dhula-gunda
rise-CHAR-3sgS/A tree-SUPER
it would fly up off the tree

There are minimal pairs involving this case and the locative case. Further data would confirm or refute the hypothesis that the meaning difference between the locative-marked NP and the NP glossed SUPER in the following pair of examples is that the first refers to a situation in which the speaker is thinking just of the general location of the event, whereas in the second, the speaker is thinking more of the relationship of the movement of the boy towards the top of the boomerang.

38) yalu dhana-ga-la wagal-nunda
child sit-PRES-3sgS/A boomerang-SUPER
the boy is sitting down on the boomerang

39) yalu dhana-ga-la wagal-da

child sit-PRES-3sgS/A boomerang-LOC

the boy is sitting on the boomerang

The choice between the locative and the superlocative case clearly depends on what feature of the event the speaker wishes to emphasise.

3.3.8 SEMBLATIVE

This case is used to indicate a resemblance between two entities in the sentence:

40) yalu dhana-ga-la bama-gamu
child-ABS sit-PRES-3sgS/A man-SEMBL
the way the boy is sitting he looks like a man

41) yinhami gamu balgara-gamu - budharri
this-ABS water-ABS sky-SEMBL cold
this water is like the sky - cold

42) gunhami yaraman yaga-lba-g-la dhibila-gamu
that-ABS horse-ABS rise-CONT-PRES-3sgS/A bird-SEMBL
that horse is flying like a bird

The semblative case can also be used to mark actual metamorphosis:

43) gunhami gayu wara-li munda-gamu
that-ABS woman-ABS be-PAST snake-SEMBL
that woman turned into a snake

3.3.9 COMITATIVE CASE

The suffix /-bari/ has been discussed by Beale 1976. /-bari/ is an instance of a very common feature of Australian languages; a derivational affix 'having'. In Biri, it is not a derivational suffix but a case marker; this is indicated by the fact that it cannot co-occur with any case markers; and thus fills the same functional slot as case markers. /-bari/ can be suffixed to a noun or predicative adjective. The central meaning of the comitative suffix is 'having', or 'with', but this can be modified in various ways:

44) bama dhandari-ga-la ganda-bari
man-ABS stand-PRES-3sgS/A spear-COMIT
the man is standing with a spear

If the spear were to play a more active role it would appear in the instrumental case, without /-bari/:

45) bama dhandari-ga-la gandu-ggu
man-ABS stand-PRES-3sgS/A spear-INSTR

the man is standing up with (the aid of) a spear

Further examples:

46) gunhami bama waga wanydyanda-ŋa-la gabingara-bari
that-ABS man-ABS run go away-PRES-3sgS/A boomerang-COMIT
that man is running away with a boomerang (ie. with the boomerang in his hand)

47) gunhami bama yani-ŋa-la briguna-bari
that-ABS man-ABS go-PRES-3sgS/A wife-COMIT
that man is bringing his wife

48) ŋaya wandi-bari yani-gu
1sgS/A dog-COMIT go-PURP
I go with the dog

49) ŋali yani-nha-li gaynmirra-bari
1duS/A go-FUT-1duS/A sun-COMIT
we two will go in the daytime

50) ŋana wuna-la-na gudyara-ŋga budharri-bari
1plS/A live-PAST-1plS/A coast-LOC winter-COMIT
we all lived at the coast in winter

51) ŋaya gangiri-bari
1sgS/A hungry-COMIT
I feel hungry

52) ŋaya banhdhu-la-ya guli-bari
1sgS/A hit-PAST-1sgS/A cheeky-COMIT
I hit the cheeky chap

53) bama yanmira-ŋa-la dhili muga-bari
man-ABS laugh-PRES-3sgS/A eye bad-COMIT
nhaga-lba-ŋa-la mabu-bari bama
see-CONT-PRES-3sgS/A poor-COMIT man-ABS
the man was laughing at the blind man while watching the poor chap

The comitative case can also indicate manner:

54) gunhami yaraman yaga-ŋa-la munyumunyu-bari
that-ABS horse-ABS rise-PRES-3sgS/A bat-COMIT
that horse flies like a bat

55) gunhami yalu dhana-ŋa-la bama-bari
that-ABS boy-ABS sit-PRES-3sgS/A man-COMIT
that boy is sitting in the same way men sit

This contrasts with:

56) gunhami yalu dhana-ŋa-la bama-ŋamu
that-ABS boy-ABS sit-PRES-3sgS/A man-SEMBL
that boy is sitting in a way that makes him look like a man.

Beale assumes that this affix is derivational. However there is little evidence to prove that /-bari/ is derivational rather than inflectional: structurally it does not derive an adjective from a noun, the way the 'having' affixes do in other languages (Dixon ed. 1976); it acts in exactly the same way as other case inflections, and alternates with case inflections.

3.4 PRONOUNS

Personal pronouns can be expressed using either a free form pronoun or a clitic suffixed to the verb.

3.4.1 PERSONAL PRONOUNS- FREE FORMS

As has been mentioned (3.3) pronouns inflect on a nominative-accusative basis. As well as these core cases, pronouns inflect for the dative, the locative, the ablative and the semblative cases.

Singular	1st person	2nd person	3rd person
Nominative	ŋaya	yinda	nhula
Accusative	ŋadyu-na	yinda-(ŋu)-na	nhu-(ŋu)-na
Dative	ŋadyu	yinda-ŋu	nhu-ŋu
Locative	ŋadyu-nda	yinda-(ŋu)-nda	nhu-(ŋu)-nda
Ablative	ŋadyu-dhamu	yinda-(ŋu)-dhamu	nhu-(ŋu)-dhamu
Semblative	ŋadyu-ŋamu	yinda-ŋamu	nhu-(ŋu)-ŋamu

Dual	1st person	2nd person
Nominative	ŋali	yibala
Accusative	ŋali-(ŋu)-na	yibala-(ŋu)-na
Dative	ŋali-ŋu	yibala-ŋu
Locative	ŋali-(ŋu)-nda	yibala-(ŋu)-nda
Ablative	ŋali-(ŋu)-dhamu	yibala-(ŋu)-dhamu
Semblative	ŋali-ŋamu	yibala-ŋamu

Plural	1st person	2nd person	3rd person
Nominative	gana	yura	dhana
Accusative	gana-(gu)-na	yura-(gu)-na	dhana-(gu)-na
Dative	gana-gu	yura-gu	dhana-gu
Locative	gana-(gu)-nda	yura-(gu)-nda	dhana-(gu)-nda
Ablative	gana-(gu)-dhamu	yura-(gu)-dhamu	dhana-(gu)-dhamu
Semblative	gana-gamu	yura-(gu)-gamu	dhana-gamu

Inclusion and exclusion are only distinguished in the dual.

There is an optional /-gu/ in most case forms. This is the dative morpheme. It appears that accusative, locative, allative and semblative case forms were built upon the dative model, but the dative marker/-gu/ is now optional, especially in the longer forms. It is likely that the /-gu/ marker is possible in all forms, but it has only been observed in the forms so marked.

The case forms displayed by the personal pronouns are almost totally regular. The formatives are in the ablative and semblative cases the same as those of nouns; see 3.2 above:

Nominative	-ø
Accusative	-na
Dative	-gu
Locative	-nda
Ablative	-dhamu
Semblative	-gamu

There are only two instances of stem allomorphy. In the first person singular paradigm the underlying stem is the dative form. The other forms are modelled on this, except for the nominative, which is irregular. One would expect gadyu for the nominative and gadyugu for the dative in this paradigm. The same situation applies to the third person singular; the dative form is the underlying stem, and the nominative form is irregular, containing /-la/. This item is used in the clitic pronouns (see below, 3.4.2.). Apart from these instances, the paradigm is totally regular.

There are no third person dual pronouns. Beale (1974) has a paradigm based on the demonstrative gunhami- 'that' and the word for 'two'- bularu; the forms literally mean 'those two'. However they are not true pronouns; they constitute regular noun phrases.

There is an alternative paradigm for the second person plural:

Nominative	yubala
Accusative	yubala-(gu)-na
Dative	yubala-gu
Locative	yubala-(gu)-nda
Ablative	yubala-dhamu
Semblative	yubala-gamu

Beale sees this paradigm was possibly formed by a combination of yura and yibala, with

the /yi-/ being analysed as second person dual, and /yu-/ as second person plural, and the /-bala/ taken from the dual paradigm, perhaps meaning non-singular. The paradigm would then be formed accordingly, by analogy with the yibala paradigm.

This paradigm is possibly based on the Aboriginal English word for 'you fellow', and thus is a new addition to the language. However it is unusual for a new loan word to be incorporated into the morphological system to the extent of being fully inflected. The inflected paradigm only appears in the speech of Reg Dodd. It is possible that in the field situation he was just trying to be helpful, by extending the very regular case formation rules to this yubala word, in order to give the linguist recording him what it was probably obvious he wanted.

Beale sees the yibala paradigm as derived from morphemes already available in the Biri dialect. His argument is as follows: the second person singular yinda plus the dual marker /-bula/, formed *yindabula. This became *-ndabula/ by deleting the second person marker /yi-/. Then the free form was abbreviated after the development of the clitic system, to *yibula, which eventually became yibala.

Looking at the bound pronouns (see below), this argument is possible; the bound 2nd person dual marker /-ndabula/ provides evidence that /-ndabula/, as 2nd person dual, is a meaningful element in the language. It is much more likely however that yibala came from proto-Australian *nhubala (Dixon 1980: 334ff) > yubala > yibala, with the /u/ being fronted to /i/ after the /y/.

3.4.2 PERSONAL PRONOUNS- BOUND FORMS

There is a set of pronoun clitics which can be suffixed to the verb. The full pronominal system is not represented in the clitics. These clitics are only used to cross-reference to NPs in transitive or intransitive subject or transitive object function, or those marked by dative case:

Singular	1st person	2nd person	3rd person
Nominative	-aya	-nda	-la
Accusative	-na	-nu	-gga
Dative	-dyu	-nu	
<u>Dual</u>			
Nominative	-ali	-ndabula	-bula
Dative	-ggu		
<u>Plural</u>			
Nominative	-ana	-ra	-dhana

Some of these forms undergo allomorphy in conjunction with other elements (note that there is an obligatory order of pronominal clitics: subject-object-dative):

1. 1sgS/A	/-aya/	plus 3sgO	/-gga/	-> /-anya/
2. Present tense	/-ga/	plus 1sgS/A	/-aya/	-> /-gaya/
3. Future tense	/-nha/	plus 1sgS/A	/-aya/	-> /-nhaya/
4. Past tense	/-li/	plus 1sgS/A	/-aya/	-> /-laya/
5. Habitual aspect	/-dyi/	plus 1sgS/A	/-aya/	-> /-dyiya/

In 2. and 3. /-a/ deletes when next to another /-a/. It is impossible to tell whether the /-a/ of the tense marker or the pronoun is lost. Numbers 4. and 5., where the vowels are different, do not help decide the point, because in 4. the vowel of the tense marker is lost, whereas in 5. it is the vowel of the pronoun which is lost.

It is interesting that some of these bound forms end with a vowel and some end with a consonant. All verb stems and verbal affixes end in vowels, so in most cases an initial vowel on these pronouns will be deleted. However it is still evident that these initial vowels are there, because of situations such as number 4. above; without positing an underlying form /-aya/ for the pronoun, it is impossible to explain where the /-a/ comes from when the past tense and 1st person pronoun are combined. The same situation exactly obtains for two the other vowel-initial forms in the paradigm: 1st person dual and plural. For this reason these forms must be seen as vowel-initial.

Note that most of these bound pronouns are transparently derived from the free pronouns. The only ones which are not are the second person singular accusative and dative, the third person singular accusative, and the first person dual dative forms. It is difficult to account for these forms; in languages where the bound pronouns are transparently derived from the free forms, the bound forms are usually of fairly recent origin. However the fact that most of these bound forms are transparent reductions, but not all, makes it difficult to tell whether these bound forms are of recent origin or not.

3.4.3 USE OF CLITICS AND FREE FORMS

In a sentence, either a clitic pronoun, or the full form, or neither, or both can be used. For example compare the subject pronouns in the following sentences:

57) nhula yama-li-na guya
3sgS/A tell-PAST-1sgO bad
he told me something bad

58) banhdhu-nh-aya-gga bari-ggu
hit-FUT-1sgS/A+3sgO stone-INST
I am going to hit it with a stone

59) ganhi-gu yinda banhdhu-li-nda-gga bama
why 2sgS/A hit-PAST-2sgS/A+3sgO man-ABS
why did you hit that man?

60) gara yama-li-na binbi...
NEG tell-PAST-1sgO good
(he) didn't tell me something good...

In the first example the subject is expressed by a free form pronoun; in the second example the subject is expressed by a clitic. Note that the third person clitics, as well as the full form pronouns, can represent nouns of inanimate reference. In the third example,

both a free form and a clitic express the subject, and in the fourth the subject is not overtly expressed at all. The same situation obtains for accusative and dative pronouns. It is likely, as in most non-prefixing Australian languages, that the choice of clitic, free form or both, depends on considerations of emphasis. Note however that the only situation where there is no overt expression of the subject is when the subject is a third person singular.

Clitic pronouns can also be used to cross-reference nouns. Again there are no clear rules for when to use or omit a clitic when its noun is overtly stated. However it could depend to some extent on the expression of number. Nouns are not marked for plurality in Biri. Thus a clitic pronoun cross-referencing the noun can be used when the number of a noun phrase is not clear from the context, and when it needs to be made specific:

61) yalu binbi wara-l-dhana dhiya-lba-l-dhana wandi-gga
child good be-PAST-3plS/A dance-CONT-PAST-3plS/A dog-INST
the children were happy playing with their dog

62) ganhdharu bama murringa wuna-lba-l-dhana yinhagu
where-S/A man-ABS once rest-CONT-PAST-3plS/A here
where are the men who once lived here?

When more than one clitic appears on a verb, the order of appearance is subject- object-dative. All three clitics can occur on one verb:

63) nhula manhdha yaba-nha-la-gga-ggu
3sgS/A food-ABS give-FUT-3sgS/A+3sgO-1duDAT
he will give us two food

3.5 INTERROGATIVES

There are two paradigms of interrogatives; ganhdha- 'who/when/where' and ganhi- 'what'.

'who'

Transitive subject	'who?'	ganhdha-(ru)-ggu
Intransitive subject	'who?'	ganhdha-lu / ganhdha-ru
Object	'whom?'	ganhdha-lu-na/ganhdha-(ru)-na
Possessive	'whose?'	ganhdha-gu
Dative	'to/for whom?'	ganhdha-(ru)-gu
Ablative	'from whom?'	ganhdha-dhamu
Semblative	'like who?'	ganhdha-(ru)-gamu
Locative	'where?'	ganhdha-ru
Temporal	'when?'	ganhdha-yabila
Cause	'what cause?'	ganhdha-mba

'what'

Intransitive subject	'what?'	ḡanhi
Object	'what?'	ḡanhi
Instrumental	'what with?'	ḡanhi-ḡḡu
Dative	'why?'	ḡanhi-gu
Number	'how many?'	ḡanhi-muru
Semblative	'what like?'	ḡanhi-ḡamu
Aversive	'afraid of what?'	ḡanhi-dhamu

Note the three-way syntactic split with the animate forms; there is a separate form for the transitive subject, intransitive subject and transitive object. There is no form in the data for the transitive subject 'who'. The fact that the intransitive subject and object of the inanimate forms are identical indicates that a three-way split does not occur in the inanimate forms; like nouns, the inanimate interrogatives follow an ergative system.

The 'what' forms are totally predictable from the nominal case paradigm, except of course for the number form, for which there is no nominal equivalent.

The 'who/when/where' forms are more complicated. The optional /-ru/ in many forms appears to be the locative formative. It is in some ways parallel to the dative /-ḡu/ apparent in many personal pronouns forms. In this situation it appears that the case forms are built upon the model of the locative case. Again it is likely that all interrogative case forms have this optional /-ru/, but only some of these have been recorded.

The transitive subject formative /-ḡḡu/ is the same as the ergative noun marker. The accusative form /-na/ is the same as the accusative pronoun marker. The intransitive form /-ru,-lu/ is new. Its /-ru/ form is identical to the locative form. The other form has /-lu/, which appears only in this and the transitive object marker, and thus seems to be an absolutive formative. The alternative forms are used interchangeably.

The locative form is completely different to that which appears in the noun and personal pronoun paradigm; it is /-ḡḡa,-da,-dya/ for nouns and /-nda/ for personal pronouns. The dative, ablative and semblative forms are exactly those of the noun paradigm. It is interesting that there is a separate possessive form, and that the possessive function is not subsumed under the dative case as happens in the nominal paradigm. The allative function is subsumed under the dative in this paradigm, and the aversive is a function of ablative here as it is with the nouns. The temporal form does not have a parallel in any other paradigm.

Note that there is also an interrogative verb ḡanhdha 'be what?', which is discussed in 5.6.3.

3.6 DEMONSTRATIVES

The demonstrative stems are:

'that'	ḡunhami-
'this'	yinhami-

These stems are also found in the locational qualifiers (see below, 3.7). The stems are best seen as yinha- 'this', 'here' and ḡunha- 'that', 'there' respectively. The suffix /-mi/

indicates that the stem is functioning as a demonstrative pronoun.

Demonstrative pronouns agree with the nouns they modify. The paradigm is exactly the same as that for nouns. For example:

- 64) ḡunhami-ḡḡu mari-ḡḡu ḡabḡḡara yaba-li yalu-riny- dyu
 that-ERG man-ERG boomerang-ABS give-PAST child-PL- DAT
 that man gave the boomerang to the children
- 65) yinhami manhdha yuga-lba-ḡ-aya ḡuya...
 this-ABS food-ABS eat-CONT-PRES-2sgS/A bad
 this food I'm eating is bad

When demonstratives appear with a head noun, they always precede it. They can also appear alone as full NPs, or with a qualifying adjective:

- 66) ḡunhami dhaga-nha-nda nhami-ḡḡa dhula-ḡi yaga-nha- la
 that-ABS bury-FUT-2sgS/A ground-LOC tree-EMPH rise-FUT-3sgS/A
 bury that in the ground and a tree will grow
- 67) ḡunhami-ḡḡu bularu-ḡḡu binbi wara-ra-ḡa-bula
 that-ERG two-ERG good be-RECIP-PRES-3duS/A
 those two love each other

There is an interrogative demonstrative ḡanhdhami 'which?'. This is based on the inanimate interrogative stem (see 3.5).

3.7 LOCATIONAL QUALIFIERS

There are five locational qualifiers:

yinha-	here
ḡunha-	there
ḡura-	behind
yara(-)	(to) there
bara(-)	down

The first two stems also function as demonstrative pronouns, with the addition of suffix /-mi/ (3.6). Yinha, ḡunha and ḡura are obligatorily case marked. Yara and bara can appear with or without case marking. The locational qualifiers can take locative and ablative case marking, as for nouns:

- 68) yinha-ḡḡa binbi wina-gu, ḡunha-gu ḡuya. Wina ḡara
 here-LOC good fish-DAT there-LOC bad fish-ABS NEG
 wuna-ḡa ḡunha-ḡḡa
 rest-PRES there-LOC

here is good for fish; there is no good. Fish don't live over there

- 69) gana wanydyanda-nh-ana yinha-dhamu yara
 1plS/A go away-FUT-1plS/A here-ABL there
 yanhi-nh-ana gilibinbi-gu
 go-FUT-1plS/A Townsville-DAT

We will all go from here to Townsville

They can also take allative /-gu/:

- 70) gaya yanhi-l-aya gilibinbi-gu, gaya guranda-l-aya
 1sgS/A go-PAST-1sgS/A Townsville-DAT 1sgS/A return-PAST-1sgS/A
 yinha-gu
 here-ALL

I went to Townsville and came back here again

This allative, which is a function of the dative noun case marker, can also have a locative meaning:

- 71) gaya wudya-ŋ-aya gayu yinha-gu wuna-li
 1sgS/A know-PRES-1sgS/A woman-ABS this-ALL rest-PAST

I know that woman; she used to live here

The locational qualifiers can also take an affix /-mbarru/, which indicates position relative to whatever the speaker is referring to. It is glossed as 'SIDE'. Thus gunha-mbarru indicates 'front side', or 'in front of'; gura-mbarru indicates 'back side' or 'behind'; yinha-mbarru indicates 'this side'; yara-mbarru indicates 'the other side' and so on.

- 72) nhula dhandari-ŋa-la gura-mbarru
 3sgS/A stand-PRES-3sgS/A behind-SIDE

he is standing behind (us)

- 73) gunhami munda wuna-lba-ŋa-la gunha-mbarru
 that-ABS snake-ABS rest-CONT-PRES-3sgS/A that-SIDE

that snake is in front of us

The gunha and yinha stems are also found with affix /-nybila/. In these cases, the locational qualifiers have a temporal meaning:

- 74) yibala yanhi-l-bula wina-gu yinha-ynbila gana
 2duS/A go-PAST-2duS/A fish-DAT this/here-TIME 1plS/A
 wanganany yanhi-l-ana
 many go-PAST-1duS/A

you two used to go fishing when we all went fishing (...at the time when)
 we all went fishing

- 75) murringa nhula nhaga-li-li waburru, yinha-ynbila
 once 3sgS/A see-REFLEX-PAST small this/here-TIME
 bulgana wara-li-ŋa-la
 big be-REFLEX-PRES-3sgS/A

once he looked so small, now he seems big

This /-nybila/ affix is also found on the temporal interrogative ganhdhaynbila (see 3.5).

3.8 NOMINAL DERIVATION

3.8.1 THE KINSHIP SUFFIX /-NA/

This is a non-productive suffix occurring on some occasions on some kinship terms. The following instances have been found:

yabu-na / yabu	'father'
wabu-na / wabu	'brother'
yaga-na / yaga	'mother'
birrgu-na / birrgu	'wife'
bibi-na / bibi	'aunt'
gadha-na / gadha	'brother'
ŋadhi-na / ŋadhi	'grandfather'/'grandson'
gami-na / gami	'grandmother'/'granddaughter'
gadha-na / gadha	'sister'
galga-na / galga	'uncle'

Holmer (1983) suggests that the difference between the two is that the plain form just indicates the family member, whereas the /-na/ form indicates 'one's' family member; that is it indicates a relationship of inalienable possession. He actually calls it a "dual-comitative" suffix. This is possible: in first of the following pair of examples, wabu 'brother' is possessed by the dative 1sg pronoun; in the second example, wabuna, with this kinship suffix, does not appear with an overt pronominal possessor.

- 76) gadyu wabu yanhi-l-ali...
 1sgDAT brother go-PAST-1duS/A

I went with my elder brother

- 77) gaya yanhi-nha-gu wabuna wina-gu mana-nha-gu
 1sgS/A go-FUT-PURP brother fish-DAT catch-FUT-PURP

I was going to go fishing with my brother

However it is unclear what the function of this suffix is. In Bidyara, a language closely related to Biri, this suffix is an object marker on kinship nouns. See 8.1.3 for a discussion of this suffix.

3.8.2 PLURALITY

There is evidence of only one plural form in Biri:

yalu- child
yaluriny- children

In all other cases number is not marked on nouns.

3.8.3 REDUPLICATION

There are some instances of reduplication in the data, with adjectives and nouns:

manamana	'very fast'	mana	'fast'
midhamidha	'black'	midha	'blue'/'black'
waganwagan	'mad'/'silly'	wagan	'mad'
budhabudha	'white'	budya/budhu	'white' (Gangulu)
gamugamu	'grog'	gamu	'water'
banabana	'doctor'	bana	'stomach'

All these forms display full reduplication; there are no instances of partial reduplication.

There is obviously a connection between the reduplicated form and the unreduplicated one. However as there are so few examples of both, the exact meaning of the reduplication process cannot be stated. In fact in some cases it appears that reduplication does not change the meaning of the word. Unlike some other languages (for example Dyirbal (Dixon 1972b) nominal reduplication does not indicate plurality.

There are many other words with reduplicated forms for which there is no known unreduplicated form:

gudigudi	'red'
nayinayi	'brown'
barubaru	'crooked'
bagunybaguny	'crooked'
burabura	'naughty'
gubalgubal	'pretty'
murumuru	'round'
bunbun	'pheasant'
banydyubanydyu	'hat'
munyumunyu	'bat'
dharudharu	'happy family bird'
bugabuga	'butterfly'
dyigadyiga	'willy wagtail'

Some of these forms are obviously displaying inherent reduplication, for instance bunbun 'pheasant'. This word cannot have an unreduplicated form *bun, because monosyllables are not allowed in the language. With the other reduplicated forms it is impossible to tell if

their reduplication is inherent, like that of bunbun, or productive, like those in the first list, because the absence of a recorded form could mean either that the form does not exist, or that it just was not recorded.

Note the instances of reduplicated colour terms. However not all colour terms are reduplicated: burba- 'green'; bingara- 'grey'.

3.8.4 THE FEMALE SUFFIX /-GAN/

There is a semi-productive suffix /-gan/, which appears sometimes on words which have female reference:

waynmarigan / waynmariny	'woman'	(Gangulu)
bungagan / bungani	'old woman'	(Gangulu, Wirri)
nangagan	'woman'	
wadhagan	'old woman'	(Gangulu)

These are the only examples of the suffix. There are no recorded instances of the last two words without /-gan/. This could be just a gap in the data; it is impossible to tell.

This is quite a common suffix among eastern languages; for example it is productive in both Dyirbal to the north and Bandjalang to the south.

4. VERBAL MORPHOLOGY

A Biri verb may consist of a stem plus certain combinations of the following: a stem-forming suffix; a continuous aspect marker; a tense marker or characteristic or "near miss" or imperative mood marker; a purposive marker; and subject, object and dative pronominal clitics, in that order. There are no conjugational classes for the verbs, which is unusual for languages of this area, and indeed for most Australian languages (cf. Dixon 1980: 224).

Thus:

V ->	STEM (suffix)	(CONT) (Tense)	(PURP)	(Pron. Clitic)
		(CHAR)		
		(NEARLY)		
		(IMP)		

4.1 TENSE

Three tenses are distinguished in Biri; past, present and future. Their formatives are:

Present	-ga-
Past	-li-
Future	-nha-

4.1.1 PRESENT TENSE

The present tense is used to distinguish verbs whose action takes place at the current time. The form undergoes allomorphy such that when it occurs immediately before one of the following pronominal clitics, it loses its vowel:

/-ga-/ -> /-ŋ-/	_-/aya/ 1sgS/A
	_-/ali/ 1duS/A
	_-/ana/ 1plS/A

As both the vowel of the tense suffix and the initial vowel of the pronominal clitics are identical, it is impossible to say which one is lost if one only looks at the present tense marker. However, allomorphy of the past tense marker definitely involves losing the first vowel, the vowel of the tense marker (see 4.1.2). So it is possible that perhaps a similar process occurs with the present tense suffix.

- 1) गया manhdha-gu wara-ŋ-aya ganggiri wara-ŋ-aya
 1sgS/A food-DAT be-PRES-1sgS/A hungry be-PRES-1sgS/A
 I feel hungry for food

- 2) gunhami yalu brigi-ŋa-la dhagany-dyu waga
 that-ABS child-ABS cry-PRES-3sgS/A crocodile-ERG run
 bundi-li-la-ŋga
 chase-PAST-3sgS/A-3sgO
 that child is crying because a crocodile chased him

The present tense can also have an ongoing meaning:

- 3) gunhami wagarany wuna-ŋa-dhana bidhal-da
 that-ABS all-ABS rest-PRES-3plS/A Woodhouse Stn-LOC
 all of them are staying at Woodhouse Station

The present tense can also indicate that the action of the verb is characteristic of the subject:

- 4) गया yidhira-ŋ-aya dhagany-mu
 1sgS/A afraid-PRES-1sgS/A crocodile-ABL
 I am afraid of crocodiles

There is some overlap with the characteristic aspect here (see 4.2.2)

4.1.2 PAST TENSE

As with the present tense, the past tense formative loses its vowel before some pronominal clitics:

/-li-/ -> /-l-/	_-/aya/ 1sgS/A
	_-/ali/ 1duS/A
	_-/ana/ 1plS/A

The past tense marker also loses its vowel before the consonants of the following pronominal clitics:

/-li/-> /-l-/	_-/bula/ 3duS/A
	_-/dhana/ 3plS/A

This is not a general morphophonemic rule, but rather the vowel loss occurs only before these particular suffixes. For example, the vowel of the past tense marker is retained before a following -dyu suffix:

- 5) nhula mala-ŋgu wara-mba-li-dyu yanhi-nha-gu
 3sgS/A arm-INSTR be-CAUS-PAST-1sgDAT go-FUT-PURP
 nhugu gaba niba-nha-la-na
 3sgS/A honey-ABS show-FUT-3sgS/A-1sgO
 he beckoned me over to show me the honey

The past tense indicates that the action of the verb took place at any time before the current time:

- 6) bunbun-du badha-li yuraḡuna
pheasant-ERG bite-PAST 2plO
that pheasant bit all of you
- 7) gunhami bularu bama muringga yanhi-l-bula
that-ABS two man-ABS long ago go-PAST-2duS/A
bidhal-gu
Woodhouse Stn-DAT
those two men went to Woodhouse Station long ago
- 8) nhula yidyiga guranda-li yinhagu bidhal-dhamu
3sgS/A today return-PAST here Woodhouse Stn-ABL
he has just returned here from Woodhouse Station

4.1.3 FUTURE TENSE

As with the present tense and the past tense, the future tense formative loses its vowel before an identical following vowel:

/-nha-/ -> /-nh-/ _/-a/

The future tense is used to express any action that has not yet occurred:

- 9) ḡaya dhana-ḡ-aya yabuna guranda-nha-la
1sgS/A sit-PRES-1sgS/A father-ABS return-FUT-3sgS/A
I am waiting for my father to return

The future tense is frequently used with the purposive marker (see 5.13.2 for a discussion of purposive clauses).

- 10) ḡaya yanhi-nh-aya dhigga-nha-gu banabana
1sgS/A go-FUT-1sgS/A find-FUT-PURP doctor-ABS
I will go and look for the doctor

The future is also used in a relative sense, in situations where the event of the future-marked verb happens after the event of a previous verb:

- 11) dhina wara-mba-l-dhana-na baḡga-nha-gu
3plS/A be-CAUS-PAST-3plS/A-1sgO fall-FUT-PURP
they all made me fall over
- 12) ḡaya dhadya-l-anya bama yara yanhi-nha-la

1sgS/A tell-PAST-1sgS/A+3sgO man-ABS there go-FUT-3sgS/A
budyi-gu gula-nha-la dhaguru
bush-DAT kill-FUT-3sgS/A possum-ABS

I told the man there: go into the bush and kill a possum

4.2 ASPECT

Three aspects are recognised in Biri; the continuous aspect, the characteristic aspect and the "near miss" aspect.

4.2.1 CONTINUOUS ASPECT

The Continuous Aspect indicates that an action is or was or will be ongoing for some time. There is some overlap here with some uses of the present tense marker. The continuous aspect is marked by /-lba-/ which follows the verb stem and precedes the tense marker. It can co-occur with any tense marker and the purposive marker.

- 13) gunhami munda wuna-lba-ḡa-la gunha-mbarru
that-ABS snake-ABS rest-CONT-PRES-3sgS/A that-side
that snake is lying in front of us

- 14) gaynmirra yaga-lba-nha-gu ḡali yanhi-nh-ali
sun-ABS rise-CONT-FUT-PURP 1duS/A go-FUT-1duS/A
baladha-ḡa
boat-LOC
when the sun is rising we'll go down the river

4.2.2 CHARACTERISTIC ASPECT

The Characteristic Aspect is used to indicate that the subject usually and typically does the action in question; in other words, the action is characteristic of the subject. Its formatives are:

/-dyi-/ with a first person singular subject clitic, and
/-yi-/ with a third person singular subject clitic.

No other subjects have been found with this aspect; this is probably just a gap in the data; this aspect marker is not very common. Neither this aspect or the "Near Miss" aspect can co-occur with Tense markers or the Purposive marker.

- 15) gara wara-mba-dyi-ya baladha gunhami yama
NEG be-CAUS-CHAR-1sgS/A boat-ABS that way
ḡaya wara-mba-dyi-ya yinha-mbarru
1sgS/A be-CAUS-CHAR-1sgS/A this side

I don't build boats that way, I build them this way

- 16) gunhami-ngu dhibila-ngu gara ganu galga-yi-la
 that-ERG bird-ERG NEG egg-ABS lay-CHAR-3sgS/A
 birragagu. dhana-yi-la. dhagu-wa:ni galga-yi-la
 tomorrow sit-CHAR-3sgS/A by-and-by-EMPH lay-CHAR-3sgS/A
 that bird won't lay an egg tomorrow. It always sits. Some time it will lay an egg.

4.2.3 "NEAR MISS" ASPECT

This aspect is used to indicate that an event occurred which could have had very bad consequences for the subject. It is marked by /-mi/.

- 17) gunhami dhula bagga-li. gani gula-mi-la-nnga
 that-ABS tree-ABS fall-PAST nearly kill-NEARLY-3sgS/A-3sgO
 bama dhandari-lba-li gunhagu
 man-ABS stand-CONT-PAST there
 that tree fell down, nearly killing the man standing there.

- 18) munda-ngu badha-li-nnga ḡadyu yabuna, gani
 snake-ERG bite-PAST-3sgO 1sgDAT father-ABS nearly
 wula-mi-la
 die-NEARLY-3sgS/A
 a snake bit my father and he nearly died

The initial event (the one which nearly had bad consequences for the subject) must have actually occurred, however. If the initial event only nearly occurred, a different construction is used:

- 19) ḡali, gara munda-ngu badha-nha-gu ḡaliḡuna. nhula
 1duS/A NEG snake-ERG bite-FUT-PURP 1duO 3sgS/A
 badha-nha-la ḡaliḡuna gara ḡudya-ḡ-aya.
 bite-FUT-3sgS/A 1duO NEG know-PRES-1sgS/A
 the snake might or might not bite us, I don't know.

In this example, the snake did not actually bite the subjects, and so the marker is not used.

4.3 IMPERATIVE MOOD

The imperative mood, both positive and negative, is marked by the bare stem of the verb, which is unusual for Australian languages; in most Australian languages the imperative is marked by a verbal suffix. It is used to form a command. All imperatives in the corpus are in the second person. The second person pronoun can occur with an imperative verb;

either the free form, or the clitic, or both. The imperative mood is not used with any other verbal suffixes:

- 20) yinda gabari-ø-nda gunhagu
 2sgS/A hide-IMP-2sgS/A there
 you hide there

- 21) yinda wadya gara wara-ø-nda, nhula yimba-nha- la-nu
 2sgS/A talk NEG be-IMP-2sgS/A 3sgS/A hear-FUT-3sgS/A-2sgO
 don't talk or he will hear you

- 22) ḡaya yama-l-anya yinda gula-ø-nda
 1sgS/A tell-PAST-1sgS/A+3sgO 2sgS/A kill-IMP-2sgS/A
 dhaguru
 possum-ABS
 I told him: you kill a possum

4.4 PURPOSIVE

This is a very common suffix across the continent, and in Biri the formative /-gu/ conforms with that of most other languages (cf. Blake 1976). The purposive marker is used primarily to signal intention. It does not co-occur with pronominal clitics, and thus is always the final suffix on a verb. The future tense is the only tense with which it can co-occur. It is very commonly used with a dative-marked noun, to express the goal of the action:

- 23) ḡana yanhi-nh-ana manhdha yaba-nha-gu banabana-gu
 1plS/A go-FUT-1plS/A food-ABS give-FUT-PURP doctor-DAT
 we will go to give some food to the doctor

- 24) ḡaya yama-l-anya bama yanhi-nha-gu
 1sgS/A tell-PAST-1sgS/A+3sgO man-ABS go-FUT-PURP
 budyi-gu gula-nha-gu wura-ABS
 bush-DAT kill-FUT-PURP kangaroo
 I told the man to go to the bush and kill a kangaroo

When /-gu/ is affixed directly to the verb stem it indicates a desiderative aspect. This meaning is common for this suffix across the continent (Blake 1976):

- 25) ḡaya yani-gu yuri-gu
 1sgS/A go-PURP meat-DAT
 I want to go hunting

4.5 STEM-FORMING SUFFIXES

There are five stem-forming suffixes involved with verbs: a causative suffix; a comitative suffix; a reflexive suffix; a reciprocal suffix; and a suffix /-mbi-/, the function of which is unclear. These suffixes are always positioned directly after the verb stem.

4.5.1 CAUSATIVE SUFFIX

The suffix /-mba-/ is added to an intransitive verb stem to denote causation. It also transitivity the verb; the causer becomes the new A, and the old S becomes the O:

26) dhana wara-mba-l-dhana-na banga-nha-gu
3plS/A be-CAUS-PAST-3plS/A-1sgO fall-FUT-PURP

they all made me fall over

27) ŋaya bari yaga-mba-l-aya...
1sgS/A stone-ABS rise-CAUS-PAST-1sgS/A

I picked up a stone...

28) banabana-ŋgu gubun bari-li gamu wara-mba-li
doctor-ERG song-ABS sing-PAST rain-ABS be-CAUS-PAST

the doctor sang a song that made it rain

Beale (1974) sees /-mba/ as purely a transitivity marker, used with all verbs other than verbs of motion (which he says take /-ri/ as a transitivity marker). However semantically, the causative analysis seems preferable.

There is one instance of /-mba/ which needs some explanation:

29) nhula yidyira-mba-li-ŋa-la
3sgS/A scratch-MBA-REFLEX-PRES-3sgS/A

he scratched himself

In this case /-mba/ is added to an already transitive verb, which happens nowhere else in the data. In addition, a causative analysis is inappropriate in this instance. A tentative hypothesis to explain this anomalous use of /-mba/ is that it should in fact be analysed as /-mbali/, an allomorph of the reflexive /-li/. A similar situation occurs in Dyrirbal, to the north of Biri; the reflexive suffix has allomorphs /-riy, /-yiry, /-(m)bariy, /-mariy/ (Dixon 1972b:89). In Dyrirbal the conditioning is dialectal, conjugational and phonological. In Biri it is impossible to say on one example. Further evidence for this hypothesis comes from Holmer, who has /-mbili, /-mbali/ as a causative-reflexive suffix.

4.5.2 COMITATIVE SUFFIX

The suffix /-ri/ is used only nine times in the data, on only three different verbs, so the

following analysis is tentative. It usually has a meaning of accompaniment, and it transitivity the verb; S becomes A:

30) yinda nhaga-li-nda-ŋga ganda wanydya-ri-li-la
2sgS/A see-PAST-2sgS/A-3sgO spear-ABS go away-COMIT-PAST-3sgS/A
waga-:ni wanydyanda-li-la
run-EMPH go away-PAST-3sgS/A
you saw him run away with the spear

31) bama-ŋgu wanydya-ri-li-la-ŋga waruŋu
man-ERG go away-COMIT-PAST-3sgS/A-3sgO woman-ABS
the man ran away with the woman

32) ŋaya nhuguna yinda yanhi-ri-nh-aya-ŋga
1sgS/A 3sgO 2sgS/A go-COMIT-FUT-1sgS/A-3sgO
I will send him with you

Actually, in eight of the nine examples /-ri/ has a comitative meaning, and transitivity the verb; in the ninth example, it does neither of these things:

33) gunhami-ŋgu dhibila-ŋgu gubun bari-ŋga-la gara
that-ERG bird-ERG song-ABS sing-PRES-3sgS/A NEG
dhana-ri-la dhana-yi-la
sit-RI-3sgS/A sit-CHAR-3sgS/A
that bird sings without stopping. It always sits.

This use is difficult to explain. It could be a mistake on the part of the informant or transcriber. A mistake seems likely, as the example goes against the evidence not only of the other examples in Beale's data, but also that of Holmer; Holmer finds this suffix with four verbs other than those mentioned here:

wuna-ri 'lie with' wuna 'lie'
banga-ri 'knock down' banga 'fall'
gugurra-ri 'bring home' gura 'go home'
manydya-ri 'walk away with' (simple meaning not found)

Note that this suffix has causative implications; for instance baggari and gugurrari have causative meanings with respect to their underived counterparts. In the example above, the /-ri/ could easily be a mispronunciation or a misprint for /-yi/, as in the next clause. Unfortunately the lack of further evidence means that this argument must remain inconclusive.

Beale sees /-ri/ and /-mba-/ as simple transitive markers; the first, /-ri/, being only used with verbs of motion, and /-mba/ being used on all other verbs. However there is an important difference between them, which is that, while both function to transitivity

verbs, the causative marker /-mba/ adds a new A, whereas the comitative marker /-ri/ adds a new O.

4.5.3 REFLEXIVE SUFFIX

The reflexive suffix /-li-/ is formally identical to the past tense marker. However they can be easily distinguished; the reflexive suffix can only be preceded by the causative suffix or /-mbi/, and it can co-occur with all three tense markers, whereas the past tense marker occurs after any stem-forming suffixes, and cannot co-occur with any other tense markers.

The reflexive suffix follows the causative marker and /-mbi-/ if either of these are present. The reflexive suffix is used when the subject and object of a verb have the same reference. It intransitivises the verb. That is, no subject of a reflexive-marked verb receives ergative case marking; and no objects or object clitics occur with reflexive-marked verbs:

- 34) *ɲaya ganda-ɲgu maŋga-li-l-aya*
 1sgS/A spear-INSTR hit-REFLEX-PAST-1sgS/A
 I speared myself
- 35) *yindaɲu wandi yidyari-li-ɲa-la*
 2sgDAT dog-ABS scratch-REFLEX-PRES-3sgS/A
 your dog is scratching himself
- 36) *nhula yimba-li-ɲa-la gubun bari-ɲa-la*
 3sgS/A hear-REFLEX-PRES-3sgS/A song-ABS sing-PRES-3sgS/A
 he heard himself singing a song

The reflexive marker is also used in another way. It occurs when the predicate of a verb is an adjective or another verb which refers to the subject. The suffix intransitivises the verb and indicates that the subject and the predicate have the same reference. This suffix is only found with some verbs: *nhaga* 'see'; *yimba* 'hear'; *nudha* 'smell'; *wara* 'be'. For example:

- 37) *gunhami budyi binbi nhaga-li-ɲa-la*
 that-ABS bush-ABS good see-REFLEX-PRES-3sgS/A
 that bush looks beautiful
- 38) *nhula nhaga-li-ɲa-la brigi-ɲa-la*
 3sgS/A see-REFLEX-PRES-3sgS/A cry-PRES-3sgS/A
 she looks like she's crying
- 39) *gunhami gamu binbi wara-li-ɲa-la*
 that-ABS water-ABS good be-REFLEX-PRES-3sgS/A

that water feels good

Beale sees this use of the suffix /-li-/ as having an antipassive function. However a true antipassive takes an ERG-ABS marked sentence and derives from it an ABS-OBLIQUE marked sentence, changing the transitive agent into an intransitive subject, and the transitive object into an optional adjunct in an oblique case. This happens in none of the examples with /-li-/. In each example there is only one noun phrase; the predicate is adjectival or verbal. A better analysis is to see it as a function of the reflexive marker, used when the predicate is not a noun, and which has some intransitivising effects.

4.5.4 RECIPROCAL SUFFIX

The reciprocal suffix /-ra-/ is used to indicate that the dual or plural subjects are doing the action of the verb to each other:

- 40) *wangarany-dyu bama-ɲgu yanmira-ra-ɲa-dhana*
 all-ERG man-ERG laugh-RECIPR-PRES-3plS/A
 those men are all laughing at each other
- 41) *gunhami-ɲgu bama-ɲgu banhdha-ra-ɲa-bula*
 that-ERG man-ERG hit-RECIPR-PRES-3duS/A
 those two men are fighting each other

The transitivity of these sentences is anomalous; the subject is marked ergative, but there are no overt objects. This is the only situation in the language where a sentence which has ergative marking does not also obligatorily have an overt object. See 5.6.1 for a discussion of transitivity.

There is another suffix /-dhala/ which seems to have a similar effect. There are only two examples of this suffix in the data:

- 42) *gunhami-ɲgu bularu-ɲgu guya-dhala*
 that-ERG two-ERG bad-DHALA
 those two hate each other
- 43) *yubala guya-dhala*
 2plS/A bad-DHALA
 all of you hate each other

Like /-ri/, /-dhala/ has a reciprocal meaning. However it is suffixed to a modifier, not a verb. The fact that in the first example the head NP is marked ergatively is extremely interesting; the sentence is not transitive. Indeed there is no verb. Like /-ri/, /-dhala/ seems to allow ergative marking in a non-transitive sentence. It is possible that /-dhala/ actually has verbalising functions as well as its reciprocal function.

The suffix /-mbi-/ occurs only twice in the data:

44) nhula wara-mbi-li-ga-la gubun binbi bari-nha-la
 3sgS/A be-MBI-REFLEX-PRES-3sgS/A song-ABS good sing-FUT-3sgS/A
 he wants to learn to sing well (he wants himself to sing songs well)

45) nhula wara-mbi-li-ga-la banabana wuna-ga-la
 3sgS/A be-MBI-REFLEX-PRES-3sgS/A doctor-ABS rest-PRES-3sgS/A
 he's practising to be a doctor (he wants himself to be a doctor)

Beale suggests that this suffix is a "continuative transitiviser" (1974: 26); however another alternative is that it is a complementiser, introducing complement clauses 'gubun binbi barinhala' and 'banabana wunagala' respectively. Unfortunately there is so little data that it is impossible to say exactly what /-mbi-/ is.

5. SYNTAX

5.1 INTRODUCTION

At the time at which a significant amount of Biri was recorded, the viability of the Biri language was severely threatened, and most speakers used English as their main language of communication. As a result, the speech of most Biri speakers utilises Biri words, some Biri morphology, but mostly English syntax. For this reason, the syntactic generalisations that can be made about Biri are based on the language of only a few key speakers; mainly Reg Dodd (as recorded by Beale nd).

5.2 WORD CLASSES

The following word classes can be recognised for Biri, on syntactic and morphological grounds:

NOUN

MODIFIER

NUMERAL

LOCATIONAL / TEMPORAL QUALIFIER

PRONOUN / DEMONSTRATIVE

INTERROGATIVE

VERB

PARTICLE

INTERJECTION

EMPHATIC CLITIC

5.2.1 NOUNS

Nouns are an open word class which denote things: animals, people, places, objects in the real world, abstract notions and so on. Nouns are obligatorily marked for case.

5.2.2 MODIFIERS

Modifiers can be divided into two subclasses; adjectives and adverbs. Adjectives and adverbs constitute one word class with two different functions; adjectives modify nouns and adverbs modify verbs.

Adjectives can be recognised as a separate category from nouns on a number of criteria. There are morphological differences between adjectives and nouns. Adjectives do not receive case marking. Adjectives modify nouns. Adjectives can appear alone in the noun phrase, but they usually appear in conjunction with a (usually following) noun.

Adjectives differ from nouns further in that when an adjective appears as the head of a noun phrase, it cannot be modified by another adjective. There are also semantic differences between adjectives and nouns; adjectives qualify or further describe nouns. They indicate quality, size, shape, colour, general appearance, value, physical properties, human characteristics, and so on.

Adverbs differ from verbs in that they do not appear with any morphological inflections, and they must appear with a verb.

5.2.3 NUMERALS

Numerals obligatorily agree in case with their head noun, and thus differ morphologically from adjectives. Functionally they are modifiers of nouns. They cannot be modified by adjectives. It is unknown whether quantifiers receive case marking (see 5.7c); thus it is unclear whether they belong with adjectives or with numerals in this classification.

5.2.4 LOCATIONAL AND TEMPORAL QUALIFIERS

There is a closed set of five locational qualifiers. Three of these inflect obligatorily for the locative, allative and ablative cases, and for relative position of the object. Two of them, yara and bara, can appear with or without case marking. Locational Qualifiers provide further information on the location of something, or the direction of movement.

Two of the locational qualifier stems, gunha and yinha can be used as time qualifiers after the addition of the affix /-nybila/. See 3.7 for further discussion of locational and temporal qualifiers.

5.2.5 PRONOUNS / DEMONSTRATIVES

There is a closed set of personal pronouns which inflect for case and which are marked for person and number. See 3.4 for further discussion of personal pronouns.

There are two demonstrative pronouns which generally appear with a noun, and agree in case with it. They add further specificity to a noun. Again, they are based on the stems gunha and yinha. See 3.6 for more information.

5.2.6 INTERROGATIVES

There is a set of interrogatives, with paradigms for animate and inanimate referents. These inflect for case (see 3.5).

5.2.7 VERBS

Verbs are an open class of words which are obligatorily marked with a set of verbal inflections. Semantically, they denote actions, processes and so on.

5.2.8 PARTICLES

There are two particles in the language: gara 'not' and gani 'nearly'. These words can occur anywhere in the sentence, and do not bear any morphological inflexions. Gara is also an interjection (see below).

5.2.9 INTERJECTIONS

There are two interjections in the language: gara 'no' (homophonous with the particle 'not') and yayi 'yes'.

5.2.10 EMPHATIC CLITICS

There are a small number of enclitics in the language which provide emphasis for the word to which they are attached:

Emphatic clitics are phonologically bound to the previous word, which can be any part of speech. There is no restriction on where in the sentence they can appear.

5.3 CONSTITUENT ORDER

Constituent order is relatively free in Biri. By far the most common order of the main constituents is SV, or AVO, with any oblique argument following the object. This is possibly due to influence from the word order of the English elicitation sentences. However this is by no means the only possible order. There are instances of the object preceding the subject for instance.

Constituent order within the NP is likewise relatively free. The typical situation is for the noun to follow any adjective, pronoun or demonstrative, but it can precede any of these. Again, this could be interference from English; it is unusual for Australian languages (Dixon 1980: 442).

5.4 NOMINAL AND VERBAL MODIFIERS

There is no morphological distinction between adjectives and adverbs. Syntactically however, they perform different functions.

5.4.1 ADJECTIVES

Adjectives are used both predicatively and attributively (that is, within an NP, acting as a modifier of the head noun). They typically precede their head noun, but this is not a fixed rule:

- 1) yinha-gga binbi wina-gu, gunha-gga guya.
 here-LOC good fish-DAT there-LOC bad
 this place is good for fish; that place is no good
- 2) dhalgari gamu wara-mba-li gunhami gamu
 much water-ABS be-CAUS-PAST that-ABS water-ABS
 yinda-lba-ga-la
 rise-CONT-PRES-3sgS/A
 much rain made the river rise

One adjective, guya, also occurs with affix /-gala, galu/.

- 3) gadyu yabuna yama-li-na munda guya-gala
 1sgDAT father-ABS tell-PAST-1sgO snake-ABS bad-GALA
 my father told me snakes are dangerous
- 4) gara yimba-nda-gga gunhami bama guya-gala-lu
 NEG hear-2sgS/A-3sgO that-ABS man-ABS bad-GALA-EMPH
 don't listen to that man, he's no good

he's making up a song, don't talk

- 5) gunhami bunbun yalga-nga wuna-lba-nga-la,
 that-ABS pheasant-ABS road-LOC lie-CONT-PRES-3sgS/A
 guya-galu
 bad-GALU

that pheasant is lying on the road, it's dangerous

In at least one instance guya takes a pronominal clitic after this suffix:

- 6) yinda guya-gala-nda, gara wa:ga wara-nga-nda
 2sgS/A bad-GALA-2sgS/A NEG work be-PRES-2sgS/A
 you are no good, you don't work

It is unusual that an adjective appears with a pronominal clitic, but it is interesting that it does so in a verbless clause, where the adjective is a predicate. However normally adjectival predicates do not receive pronominal clitics.

This /-gala, galu/ affix appears only four times in the data, each time with guya. It does seem that the two forms belong to the same suffix; they appear in the same environments. It seems to be a non-productive affix that forms an idiomatic expression with guya, meaning something like 'no good'. The sentence in which guya appears with a pronominal clitic is extremely problematic; it is the only instance in which a pronominal clitic is attached to anything other than a verb. The suffix could in fact be a verbaliser, from the examples above it does behave like one. But without more data, its function must remain obscure.

5.4.2 ADVERBS

Adverbs precede the verb which they modify. Some words can be used adjectivally as well as adverbially, for example binbi (see example (7) below). There are a small number of adverbs which seem to favour only one verb: for example waga 'running' only appears with wanydyda(nda) 'go', and wa:ga 'working' and wadya 'talking' only occur with wara 'be/want/happen/feel'. Thus the normal way to express running motion for instance is to say someone 'goes in a running manner'; to work is to 'be/do working', and to talk is to 'be/do talking'.

- 7) yinda gara gabingara warrga-nha-nda binbi
 2sgS/A NEG boomerang-ABS throw-FUT-2sgS/A well
 yaraba bagga-nha-gu mari banhdhu-nha-la
 there fall-FUT-PURPman-ABS hit-FUT-3sgS/A
 if you don't throw that boomerang properly it might fall and hit the man
- 8) wandi yidharra-li waga:-ni wanydyanda-li
 dog-ABS scared-PAST running-EMPH go away-PAST
 the dog got scared and ran away
- 9) gubun wara-mbi-nga-la gara wadya wara-nda
 song-ABS be-CAUS-PRES-3sgS/A NEG talking be-2sgS/A

5.5 EMPHATIC CLITICS

There are a number of non-pronominal emphatic clitics in the language:

-ru 'again'

-madhi 'very'

-la, -lu, emphasis

:-ni emphasis This clitic has some phonological alternations:

-ni / a-

-wa:ni / u-

-yani / i-

-a:ni / C-

-bila emphasis. This clitic is only used with binbi 'good'.

These clitics can attach to the end of any word in the sentence. Only another clitic can follow a clitic in a word. The clitic provides emphasis for the element on which it appears.

- 10) ɲaya gara:-ni nhaga-nh-aya-nu-ru yaɲana
 1sgS/A NEG-EMPH see-FUT-1sgS/A-2sgO-again mother-ABS
 I'll never ever see you again mother
- 11) gunhami dhula nhaga-li-nga-la dhadyara-madhi
 that-ABS stick-ABS see-REFLEX-PRES-3sgS/A straight-very
 that stick looks very straight
- 12) yaɲana bari-yani wara-li
 mother-ABS stone-EMPH be-PAST
 (his) mother really turned to stone

5.6 SYNTAX OF VERBS

5.6.1 TRANSITIVITY

An intransitive clause is one in which there is an S (marked Absolutive if it is nominal or Nominative if pronominal), no direct object, and possibly an indirect object (marked dative).

A transitive clause is one in which there is an A (marked Ergative if it is nominal or Nominative if pronominal) and an O (marked Absolutive if nominal, or Accusative if pronominal).

A ditransitive clause is one in which there is an A (marked Ergative if nominal, Nominative if pronominal), an O (marked Absolutive if nominal, Accusative if pronominal) and an indirect object marked Dative.

A semitransitive clause is one in which there are two NPs, one marked Ergative if nominal or Nominative if pronominal, and one marked Dative. This transitivity type occurs with verbs of emotion. (see 3.3.4.e).

A reciprocal clause has only one argument, marked Ergative if nominal or Nominative if pronominal (see 4.5.4).

Examples of each of these follow:

Intransitive:

- 13) wandi waga wanydyanda-li
dog-ABS run go-PAST
the dog ran away

Transitive:

- 14) gaya nhaga-l-aya dhibila
1sgS/A see-PAST-1sg bird-ABS
I saw the bird

Ditransitive:

- 15) gunhami-ngu gayu-ngu yaba-nha-la-ngu manhdha
that-ERG woman-ERG give-FUT-3sgS/A-1duDAT food-ABS
gali-gu
1duDAT
that woman will give us some food

Semitransitive:

- 16) gunhami-ngu gayurrba-ngu wara-ŋa-la gunhami-gu bama-gu
that-ERG woman-ERG be-PRES-3SGS/A that-DAT man-DAT
that woman wants that man

Reciprocal:

- 17) wanggarany-dyu bama-ngu yanmira-ra-ŋa-dhana
all-ERG man-ERG laugh-RECIPR-PRES-3plS/A
those men are all laughing at each other

There is not a strict separation between transitive and intransitive verbs in Biri. Of the verbs in the data, 24% are used only intransitively, 42% are used only transitively, and 35% are used both ways. When a verb is used both ways, the S and A correspond.

For example:

Intransitive only: brigi 'cry'; guranda 'return':

- 18) gaya yalu dhaguru mala-ngu mana-l-aya,
1sgS/A child-ABS possum-ABS hand-INSTR catch-PAST-1sgS/A
brigi-li
cry-PAST
The young possum cried when I caught it in my hand

- 19) gaya dhana-ŋ-aya yabuna guranda-nha-la
1sgS/A sit-PRES-1sgS/A father-ABS return-FUT-3sgS/A

I am waiting for my father to return

Transitive only: dhaŋa 'send away'; gulma 'cut', 'tear':

- 20) gaya dhaŋa-nh-aya gudhana
1sgS/A send away-FUT-1sgS/A sister-ABS
I will send my sister away

- 21) guwari-ngu dhula gulma-la
wind-ERG tree-ABS tear-3sgS/A
wind tore out the trees

Transitive and intransitive: gabari 'hide':

- 22) yubala ganda gabari-ra
2plS/A spear-ABS hide-2plS/A
all of you hide your spears

- 23) mari waga wanydy-li budyi-ŋga gabari-li
man-ABS run go-PAST bush-LOC hide-PAST
the man ran away and hid in the bush

Two verbs (niba 'show'; yaba 'give') are also used ditransitively. For example yaba 'give':

Intransitive (subject, dative-marked indirect object, no direct object):

- 24) murriga gaya yaba-l-aya nhugu
once 1sgS/A give-PAST-1sgS/A 3sgDAT
once I gave (the boomerang) to him

Unfortunately, there are no examples of this with a nominal subject, which would show the transitivity morphologically to make the situation more clear. But the fact that there is no object is revealing; all transitive sentences in Biri must have an overt object.

Ditransitive (subject, absolutive-marked direct object, and dative-marked indirect object):

- 25) nhula yaba-li-dyu gabigara
3sgS/A give-PAST-1sgDAT boomerang-ABS
he gave the boomerang to me

In the majority of Australian languages verbs have fixed transitivity; in fact Dixon (1980:278) states: "Each Australian language makes a strict division between transitive and intransitive verbs ... Each root has a strict transitivity value". The situation in Biri, in which nearly as many roots are both transitive and intransitive, as are one or the other, is clearly unusual. It is possible that the mixed transitivity of so many verbs is a direct result of interference from English. However it is also possible that this situation occurred in pre-contact Biri. On the other hand, some languages show mixed transitivity patterns; for

instance in Warrgamay (Dixon 1981) there is a distinction between transitive and intransitive verbs, but all transitive verbs can also be used intransitively.

5.6.2 WARÁ

The verb wara has varied uses. It can be both transitive and intransitive. It has no fixed meaning, but derives its meaning from its context. When it appears with the causative marker /-mba/, it means 'make', both in the sense of 'create' and 'cause', similar to the English verb 'make'. Some of its other meanings include 'do', 'be', 'want', 'become' and 'feel':

- 26) yabuna-ngu wara-mba-li baladha
father-ERG be-CAUS-PAST boat-ABS
(my) father made the boat

- 27) yibala wara-ŋa-bula banhdhu-nha-gu ŋaliguna
2duS/A be-PRES-2duS/A hit-FUT-PURP 1duO
you two want to hit us two

- 28) gunhami gamu binbi wara-li-ŋa-la
that-ABS water-ABS good be-REFLEX-PRES-3sgS/A
that water feels good

- 29) migulu-ngu gayurrba wara-ŋa-la-ŋga briguna-gu
white man-ERG woman-ABS be-PRES-3sgS/A-3sgO wife-DAT
the white man wants that woman for his wife

Wara can serve as a copula (see Terrill forthcoming):

- 30) gara biri wara-ŋa-la
NEG biri be-PRES-3sgS/A
no, he's not Biri

- 31) ŋanhdharu-dhamu wara-li bama
where-ABL be-PAST man-ABS
where is the man from?

The uses are slightly different here; the first refers to identity, the second to location. Sometimes the function of wara appears to be purely syntactic; it is used simply to carry verbal morphology, while not adding any semantic input of its own:

- 32) dhana wara-mba-l-dhana-na bagga-nha-gu
3plS/A be-CAUS-PAST-3plS/A-1sgO fall-FUT-PURP
they all made me fall over

(Compare the following with the above:)

- 33) nhula banga-mba-li ganu gulma-li-ŋga
3sgS/A fall-CAUS-PAST egg-ABS cut-PAST-3sgO
he dropped the egg and broke it

Also:

- 34) ŋaya yimba-ŋ-aya-nu wadya wara-lba-ŋa-nda
1sgS/A hear-PRES-1sgS/A-2sgO talk be-CONT-PRES-2sgS/A
I can hear you talking

- 35) wandi ŋaya wara-mba-l-anya dhana-nha-gu
dog-ABS 1sgS/A be-CAUS-PAST-1sgA+3sgO sit-FUT-PURP
buri-ŋga
fire-LOC
I made the dog sit by the fire

It is also used to carry verbal inflexions if the main verb is carrying an emphatic clitic:

- 36) yama:-ni wara-li "ŋanhdha-mba yinhami wara-mba-ŋa-la?"
say-EMPH be-PAST what-CAUS this-ABS be-CAUS-PRES-3sgS/A
he said "what caused this?"

It is unknown whether this verb is derived from some normal verb in the language. The Bidyara language (Breen 1973) has a copula wiyi, which could be cognate (see 7.1.3).

5.6.3 THE INTERROGATIVE VERB

There are three instances in the data of interrogatives carrying verbal morphology, and functioning as verbs:

- 37) yinhami yuri gara yuga-ŋ-aya. ŋanhdha-mba-la
this-ABS meat-ABS NEG eat-PRES-1sgS/A what-CAUS-3sgS/A
guya
bad
I can't eat this meat. What's wrong with it? (lit. What makes it bad?)

- 38) yinda ŋanhi-nda yuri ŋaya dhaguru
2sgS/A what-2sgS/A meat-ABS 1sgS/A possum-ABS
what meat are you? I'm possum

- 39) ŋanhdha-mba yinhami wara-mba-ŋa-la?
what-CAUS this-ABS be-CAUS-PRES-3sgS/A
what is causing this?

5.7 THE EXPRESSION OF NUMBER

Generally, the number of a noun phrase is not expressed. There is only one plural form in the language (see 3.8.2). However, there are a few ways in which the number of the

noun phrase can be indicated:

a) Number is indicated by the pronominal clitic on the verb if there is one, as is the case with the subject of the following sentence:

- 40) murrigga mari wuna-lba-dhana yamba-gga
once man-ABS lie-CONT-3plS/A camp-LOC
once men lived in camps

Note however that the plurality of yamba must be derived from the context.

b) Number can be indicated by a qualifying numeral in the noun phrase:

- 41) gunhami bularu bama murrigga
that-ABS two-ABS man-ABS once
yanhi-l-bula bidhal-gu
go-PAST-2duS/A Woodhouse Stn-DAT
those two men went to Woodhouse Station long ago

- 42) gunhami-ggu bularu-ggu gula-l-bula dhaguru
those-ERG two-ERG kill-PAST-2duS/A possum-ABS
those two killed a possum

Numerals agree with their head noun with respect to case.

Only the first three numbers are commonly specified. The word for 'one' is warrba; 'three' is gurrbara, and the word for 'four', bularu bularu, is a reduplication of the word for 'two'. Numbers higher than that cannot easily be reconstructed. Tsunoda (1971), however, reports up to twenty; the word given to him for 'twenty' is gurrbara gurrbara gurrbara warrba, gurrbara gurrbara gurrbara warrba. This form notwithstanding, it is probable that for numbers larger than three or four, a quantifier meaning 'many' would normally have been used.

c) Number can be expressed by a quantifier:

- 43) yara dhalgari mari wuna-lba-l-dhana
there many men-ABS lie-CONT-PAST-3plS/A
many men used to live there

There is no distinction in Biri between mass and count nouns; thus dhalgari can mean 'much' or 'many', as appropriate.

- 44) gunhami waggarany wuna-ga-dhana bidhal-da
that-ABS all lie-PRES-3plS/A Woodhouse Stn-LOC
all of those people are staying at Woodhouse Station

Dhalgari and waggarany are the only quantifiers found. In the data, they happen only to

appear in the absolutive function, so unfortunately it is impossible to tell whether or not they would take case marking in any other function.

d) Number can be inferred from the context alone:

- 45) गया yidhirra-g-aya dhagany-mu
1sgS/A fear-PRES-1sgS/A crocodiles-ABL
I am afraid of crocodiles

5.8 POSSESSION

There is no difference morphologically between alienable and inalienable possession in Biri. All can be shown by:

a) the possessor being in the dative case, whether it is nominal or pronominal. The possessor usually, but not obligatorily, precedes the possessed item (46), (47), (48). In (49) it follows the possessed item.

b) no morphological marking if it is clear from the context (50), (51). See also 3.3.4d for the possessive function of the dative case.

- 46) गद्यु यालु-ग्गु मण्डु-नहा-ला-ग्गु गुणहामी बामा
1sgDAT child-ERG marry-FUT-3sgS/A-3sgO that-ABS man-ABS
my daughter is going to marry that man

- 47) वान्दी बाल्गा-लि धुला-ग्गा गया
dog-ABS jump-PAST tree-LOC 1sgS/A
धन्दारी-लबा-ल-आय नहुगु धिना-ग्गा
stand-CONT-PAST-1sgS/A 3sgDAT foot-LOC
the dog jumped in the tree because I was standing on his foot

- 48) यिन्दागु वान्दी यिदियारी-लि-गा-ला
2sgDAT dog-ABS scratch-REFLEX-PRES-3sgS/A
your dog is scratching himself

- 49) याम्बा नहुगु गुन्हा-गु
camp-ABS 3sgDAT this-DAT
this was his home

- 50) नारु बान्बाना-न्दा, यिन्दा गद्युना वारा-लबा-नहा-न्दा
name-ABS call-2sgS/A 2sgS/A 1sgO be-CONT-FUT-2sgS/A
call (my) name if you want me

- 51) गया वान्दिया-ल-आय याम्बा-धामु यिद्हा-ल-आय
1sgS/A go away-PAST-1sgS/A camp-ABL leave-PAST-1sgS/A
banydyubanydyu याम्बा-ग्गा

hat-ABS camp-LOC

I went away from the camp leaving my hat at the camp

5.9 QUESTIONS

Content questions are typically formed with an interrogative. The interrogative is almost always word-initial, but, as is the general pattern in this language, the order is not fixed:

52) ḡanhdhaynbila gamu yinda-lba-li-la
when water-ABS rise-CONT-PAST-3sgS/A
when did the river rise?

53) yinhami manhdha yuga-lba-ḡ-aya guya, yindaḡu
this-ABS food-ABS eat-CONT-PRES-1sgS/A bad 2sgDAT
manhdha ḡani-ḡamu
food-ABS what-SEMBL
this food I'm eating is bad; what's yours like?

Yes-no questions, which do not use interrogatives, also occur:

54) yinda nhaga-ḡa-nda ḡunhami bama yanhi-lba-ḡa-la
2sgS/A see-PRES-2sgS/A that-ABS man-ABS go-CONT-PRES-3sgS/A
bari-ḡga
stone-LOC
can you see that man going over the hill?

In these situations, the interrogative nature of the sentence is not marked syntactically; it is indicated by rising intonation at the end of the question sentence.

5.10 NEGATION

Negation is always accomplished by means of the negative particle gara. This particle is used to negate noun predicates:

55) gara biri wara-ḡa-la
NEG Biri be-PRES-3sgS/A
he's not Biri

It may be used with adjectival predicates as well, although there are no examples of these in the data.

Gara is also used to negate equative verbless clauses:

56) gara yuwinydyi yinda yuwinydyi
NEG ghost-ABS 2sgS/A ghost-ABS

it wasn't a ghost, you're the ghost

Gara also negates verbal predicates. It always precedes the verb:

57) ḡaya wara-ḡ-aya yanhi-nha-gu ḡilibinbi-gu,
1sgS/A be-PRES-1sgS/A go-FUT-PURP Townsville-DAT
gara:ni yanhi-nh-aya
NEG-EMPH go-FUT-1sg-S/A
I want to go to Townsville but I can't go

58) gara:-ni dhiga-l-ana buliman
NEG-EMPH find-PAST-1sgS/A+3sgO policeman-ABS
I can't find the policeman

59) gara banhdhu-ḡga
NEG hit-3sgO
(he) didn't hit him

60) ḡali gara wudya-l-ali yinda yanhi-nha-gu
1duS/A NEG know-PAST-1duS/A 2sgS/A go-FUT-PURP
yinhagu
here
we didn't know that you would be here

The same particle is used to form negative imperatives:

61) gara yidhirra-nda ḡabul-dhamu
NEG fear-2sgS/A snake-ABL
Don't be scared of the snake

5.11 NOUN PHRASES

The only obligatory element in a noun phrase is the head, which is a noun or pronoun. A noun phrase may consist of just a demonstrative, or just an adjective; but in these cases, the head is understood to be ellipsed, and is always retrievable from context. The head may be modified by a determiner, a pronoun, an adjective, a quantifier or a numeral.

A demonstrative appearing with a head noun in the noun phrase will bear the same case inflection as the noun. A numeral will likewise agree in case. An adjective however does not carry case marking.

Modifiers typically precede the head of the noun phrase, but this is a preferred order, not obligatory.

5.12 SIMPLE SENTENCES

A clause may consist of just a verb. It more typically consists of an NP and a verb for intransitive verbs, or an NP, a verb and a second NP for transitive verbs. Adverbial modifiers may occur anywhere in the sentence, but typically precede the verb. A clause does not obligatorily contain a verb.

5.12.1 VERBLESS CLAUSES

Clauses do not always contain verbs. This is particularly frequent in clauses expressing attribution, identity, equation, and so on, where the subject and the predicate are the only elements to appear:

- 62) gunhami bama Birigaba-lu
that-ABS man-ABS Biri-EMPH
that man is a Biri

- 63) gaya gangiri-bari
1sgS/A hungry-WITH
I am hungry

Verbless clauses also occur with possessive constructions:

- 64) gara yira-ni
NEG tooth-EMPH
(I've got) no teeth

- 65) gunhami wandi yuragu
that-ABS dog-ABS 2sgDAT
are those dogs yours?

5.12.2 CONSECUTIVE CLAUSES

Any number of simple clauses may be used in sequence. In fact it is much more common to have a string of simple clauses juxtaposed than it is to use any kind of coordination or subordination devices. (In the following examples square brackets are used to indicate clause boundaries.)

- 66) [nhula gamugamu yuga-li dhalgari], [gara-ni
3sgS/A grog-ABS eat-PAST much NEG-EMPH
dhandari-ŋa-la], [bajga-ŋa-la nhani-gu]
stand-PRES-3sgS/A fall-PRES-3sgS/A ground-DAT
he drank so much grog, he couldn't stand, he fell to the ground

- 67) [ŋaya yanhi-dyi-ya gilibinbi-gu] [gara dhana-nha-gu,]
1sgS/A go-CHAR-1sgS/A Townsville-DAT NEG sit-FUT-PURP
[yandu guranda-dyi-ya yinha-gu], [yanhi-dyi-ya
come return-CHAR-1sgS/A here-DAT go-CHAR-1sgS/A
gilibinbi-gu]
Townsville-DAT

I go to Townsville, I don't stay here, I return back here, and I go to
Townsville again

There are no coordinating particles to join these clauses; they are simply juxtaposed.

5.13 COMPLEX SENTENCES

Seven types of complex clauses are recognised here: coordinated clauses; purposive clauses; relative clauses; complement clauses; adverbial clauses, result clauses and conditional clauses.

Purposive clauses are the only syntactically subordinate clauses in the language. The other clause types are all finite independent clauses; they are recognised as separate on semantic grounds. There are no relativisers or complementisers for instance.

Apart from coreferential noun phrase deletion in some clause types, and the purposive marker in purposive clauses, there are no syntactic or morphological devices for marking complex clauses. They are simply juxtaposed after the main clause. It is possible that in pre-contact Biri there were no complex syntactic operations, but it is much more likely that the lack of them is rather a result of syntactic simplification due to language death. Dixon 1991 speaks of a similar situation for Mbabaram, a language which was in the process of dying when it was recorded, as does Schmidt 1985 in her work on language death in Dyirbal. In these studies it was found that subordinated and coordinated clauses were replaced by series of simple apposed clauses. This is largely the case in Biri; most of the English elicitations which contain relative clauses, complement clauses and so on are translated by sequences of apposed clauses.

5.13.1 CO-ORDINATED CLAUSES

Two clauses which share a noun phrase may be said to be co-ordinated. The shared noun phrase may be omitted in the second instance of its occurrence. In the Biri data, shared noun phrases are in S, A, O or oblique function the first clause, and S or A function in the second.

A-A coordination:

- 68) nhula bajga-mba-li ganu gulma-li-ŋga
3sgS/A fall-CAUS-PAST egg-ABS break-PAST-3sgO
he dropped the egg and broke it

S-A coordination:

- 69) [bama yanhi-li yinha-gu], [nhaga-li-na]
man-ABS go-PAST here-DAT see-PAST-1sgO
the man came here and saw me

S-S coordination:

- 70) [mari balga-li gamu-gu] [buri-dhamu gaba-li]
man-ABS jump-PAST water-DAT fire-ABL hide-PAST
the man jumped into the water and hid from the bushfire

O-A coordination:

- 71) [gaya banhdhu-l-ana wandi] [badha-lba-li-nu]
1sgS/A hit-PAST-1sgA+3sgO dog-ABS bite-CONT-PAST-2sgO
I hit the dog who was biting you

Dat-A coordination:

- 72) [gaya yaba-nh-aya yuri] [bama-gu wagal]
1sgS/A give-FUT-1sgS/A meat-ABS man-DAT boomerang-ABS
wara-mba-li binbi]
be-CAUS-PAST good
I will give meat to the man who made the good boomerang

Superlocative-S coordination:

- 73) [dhula banga-li bama-gunda] [wumbara wuna-li
tree-ABS fall-PAST man-SUPER asleep lie-PAST
gunha-gu]
there-DAT
the tree fell on the man lying asleep there

It is interesting that coreferentiality can exist between an NP in what appears to be any syntactic function in the first clause, and an S or A in the second clause. It is more typical for an Australian language to employ some coreferentiality constraints on the syntactic function which shared noun phrases must be in if the clauses are to be coordinated. If there are no coreferentiality constraints, and no other devices such as switch reference to aid the listener, it becomes difficult to tell who the intended subject of the second clause is. This must be determined by context, but there will still be a degree of ambiguity. The lack of coreferentiality constraints is possibly a fact of language death. It is possible that pre-contact S/O or S/A coreferentiality constraints were mixed with coordination devices which exist in English, resulting in the situation described above.

The same shared NP deletion also occurs in purposive clauses and relative clauses.

5.13.2 PURPOSIVE CLAUSES

Purposive clauses are almost always syntactically subordinate to a preceding main clause. They consist of a verb and, depending on the transitivity of the verb, one or more noun

phrases. The source or goal of the action appears in the dative case.

- 74) gaya yanhi-nha-gu wabuna wina-gu mana-nha-gu
1sgS/A go-FUT-PURP brother fish-DAT catch-FUT-PURP
I was going to go fishing with my brother

- 75) yagana-ggu gubun bari-li [wumbara wara-mba-nha-gu
mother-ERG song-ABS sing-PAST sleep be-CAUS-FUT-PURP
yalu]
child-ABS
the mother sang a song to put her child to sleep

- 76) gaya dhana-g-aya [wina yaga-nha-gu gamu-gga]
1sgS/A sit-PRES-1sgS/A fish-ABS rise-FUT-PURP water-LOC
I am waiting for a fish to come up the river

- 77) dhana wara-mba-l-dhana-na [banga-nha-gu]
3plS/A be-CAUS-PAST-3plS/A-1sgO fall-FUT-PURP
they all made me fall over

There are examples of non-subordinate purposive clauses:

- 78) yubala yanhi-nha-gu
2plS/A go-FUT-PURP
All of you will go

- 79) gaya yani-gu yuri-gu
1sgS/A go-PURP meat-DAT
I want to go hunting

5.13.3 RELATIVE CLAUSES

Relative clauses function as modifiers of noun phrases. As with most other clause types in Biri, relative clauses are not marked syntactically or morphologically. They usually directly follow their head noun phrase. When a noun phrase is shared between the main clause and a relative clause, the same coreferentiality as discussed above applies. These clauses too have coreferential NP deletion. In Hale's (1976) terms then, Biri relative clauses are adjoined, not embedded.

- 80) ganhdharu bama [murringa wuna-lba-l-dhana yinha-gu]
where man-ABS once live-CONT-PAST-3plS/A here-DAT
where are the men who once lived here?

- 81) gani gula-mi-la-nga bama [dhandari-lba-li
nearly kill-NEARLY-3sgS/A-3sgO man-ABS stand-CONT-PAST

gunha-gu]
there-DAT

it nearly killed the man who was standing there

- 82) yinda ɲudya-ɲa-nda-ɲga bama
2sgS/A know-PRES-2sgS/A-3sgO man-ABS
[gula-lba-li-ɲga wura yinha-gu]
kill-CONT-PAST-3sgO kangaroo-ABS there-DAT
do you know the man who killed the kangaroo?

5.13.4 COMPLEMENT CLAUSES

Complement clauses function syntactically as core arguments. Biri has no overt markers to indicate complementation. The complement clause follows the main clause. There are no structural differences between the complement clause and the main clause. In terms of function however, complement clauses behave as noun phrases in core function.

- 83) mari-ɲgu wara-nha-la [ɲaya yanhi-nh-aya mana-nh-aya
man-ERG be-FUT-3sgS/A 1sgS/A go-FUT-1sgS/A catch-FUT-1sgS/A
gamu-gu yandu guraya-nh-aya nhuɲu]
water-DAT come return-FUT-1sgS/A 1sgDAT
the man wants me to go and get some water and come back again to me

Note that mari 'man' is in the ergative case, and there is no object clitic on the verb, and the complement clause subject pronoun is in the nominative case, not the accusative. This shows that the second clause can only be analysed as a complement of the first; all transitive sentences must have an object (see 5.6.1). Note, however, that elsewhere the verb wara is intransitive, and can only be used transitively when it appears with the causative suffix. It is difficult to know how to analyse this sentence: more data would tell us whether or not wara is simply polysemous for instance.

The next example is analysed on the same lines, although the presence of the object clitic makes the situation somewhat less clear.

- 84) migulu-ɲgu nhaga-li-ɲga [bunbun waga
white man-ERG see-PAST-3sgO pheasant-ABS run
wanydyanda-li]
go away-PAST
the white man saw the pheasant run away

5.13.5 ADVERBIAL CLAUSES

Adverbial clauses function as modifiers of the main verb. They are recognised on semantic grounds. They often specify when an action was performed. For example:

- 85) ɲaya yidha-nh-aya yamba [gaynmirra

1sgS/A leave-FUT-1sgS/A camp-ABS sun-ABS
yinda-lba-nha-la]

go down-CONT-FUT-3sgS/A

I will leave the camp when the sun goes down

- 86) gara manhdha wadyu-nda, yinda dhana-nha-nda
NEG food-ABS cook-2sgS/A 2sgS/A sit-FUT-2sgS/A
[gaynmirra yinda-lba-nha-la]
sun-ABS go down-CONT-FUT-3sgS/A
don't start cooking until the sun goes down

- 87) bama yanmira-ɲa-la dhili muga-bari
man-ABS laugh-PRES-3sgS/A eye-ABS blind-WITH
[nhaga-lba-ɲa-la mabu-bari bama]
see-CONT-PRES-3sgS/A poor-WITH man-ABS
the man was laughing at the blind man while watching the poor chap

These clauses are not marked structurally or morphologically. Functionally, however, they are not main clauses; they are modifiers.

Occasionally the adverbial clause is introduced by an interrogative acting as a subordinator:

- 88) yibala yanhi-l-bula wina-gu [yinhaynbila ɲana
2duS/A go-PAST-2duS/A fish-DAT when 1plS/A
waggarany yanhi-l-ana]
many go-PAST-1plS/A
you two went fishing when we all went fishing

In some western Cape York languages, for instance in Kunjen, interrogatives function as relativisers (Sommer 1972), but this situation is not common for languages of the type that Biri represents.

On the other hand, the use of the interrogative in a clausal conjoining function here exactly mirrors the use of interrogatives in English; this Biri construction could be a result of direct translation of the English elicitation sentence by the informant.

5.13.6 RESULT CLAUSES

Result clauses are again not marked syntactically or morphologically, but semantically they are dependent on the main clause. Result clauses mark one clause as the consequence of another clause. They are usually translated into English with 'because'. However there are no equivalent subordinators in Biri; the causal link must be inferred from the context. The resulting condition precedes the cause:

- 89) gayu yalu brigi-li yajana banhdhu-li yalu
 woman-ABS child-ABS cry-PAST mother-ABS hit-PAST child-ABS
 the girl cried because her mother hit her

In the above sentence, yajana would be expected to appear with ergative marking. This is anomalous, and is possibly a mistake.

- 90) wandi balga-li dhula-gga गया dhandari-lba-l-aya
 dog-ABS jump-PAST tree-LOC 1sgS/A stand-CONT-PAST-1sgS/A
 nhugu dhina-gga
 3sgDAT foot-LOC

the dog jumped in the tree because I was standing on his foot

- 91) गया gara nhaga-l-aya guwari waynbarinydya
 1sgS/A NEG see-PAST-1sgS/A wind-ABS fast
 yanhi-la

go-3sgS/A

I couldn't see because the wind was going too fast

5.13.7 CONDITIONAL CLAUSES

As with most of the clause types above, conditional clauses are not marked by any overt means. Rather, their conditionality must be inferred from the context. There is no fixed order for these clauses.

- 92) namri banbana-nda yinda गद्युना wara-lba-nha-nda
 name-ABS call-2sgS/A 2sgS/A 1sgO be-CONT-FUT-2sgS/A
 call my name if you want me

- 93) yinda banhdhu-lba-nha-nda-gga gayu गया
 2sgS/A hit-CONT-FUT-2sgS/A-3sgO woman-ABS 1sgS/A
 wara-mba-nh-aya-nu dhana-nha-gu yinha-gu
 be-CAUS-FUT-1sgS/A-2sgO sit-FUT-PURP here-DAT

If you hit that woman I'll make you stay here

5.14 SYNTACTIC EVIDENCE OF LANGUAGE DEATH

The syntactic simplification of complex clause structures has already been discussed, as has the possible mixing of Biri and English clause coordination practices. However these are not the only indications of language loss; the syntax of the data gives an indication of the state of the language at the time this data was recorded. Throughout the data there are

many anomalous sentences in which there is no agreement between elements where agreement would be expected, and so on. There are also instances where the syntax of the Biri is suffering from interference from the English format of the elicitation sentences. For example:

- 94) gara wara-mba-dyi-ya baladha gunhami yama.
 NEG be-CAUS-CHAR-1sgS/A boat-ABS that-ABS road-ABS
 गया wara-mba-dyi-ya yinha-mbarru
 1sgS/A be-CAUS-CHAR-1sgS/A this-SIDE

I don't build boats that way, I build them this way

The phrase gunhami yama is a direct translation from the English 'that way', 'this way'. The polysemy in English of 'way' as 'road' or as 'method' is here repeated in the use of the Biri word yama, which means 'track', 'road', extended to mean 'method'. The use of the interrogative as a clausal joiner, which was discussed in 5.13.5, is also suspicious. That this occurs only once in the data indicates that it is not a fact of the syntax of the language, but suggests rather that it is a result of direct translation of the elicitation sentence by the informant.

The structure of most of the complex clauses strongly parallels English clause structures. Perhaps traditional Biri clause structure was like this; it is impossible to know. But judging from the syntax of other Australian languages, particularly those of the same region as Biri, it is possible that the clause structures discussed above are a result of language mixing with English. Biri contains none of the syntactic devices common to many Australian languages: for instance antipassives; devices for changing word classes and complex clause structures. It is likely that these rather complicated syntactic processes were gradually forgotten as the language was lost, and by the time Biri was recorded by linguists, these phenomena were lost altogether.

6. THE DIALECTS

6.1 INTRODUCTION

There could have been perhaps sixteen dialects of the Biri language before European contact. Of these, data survives for only nine.

This dialect study was done by collecting all the existing language data from the Biri region, and then evaluating it to see if it was of the Biri language. Initially this was a fairly cursory process, aimed simply at marshalling all available data. Then each piece of data was compared against known dialects of Biri, in an attempt to certify the status of that data as belonging to the Biri language and to ascertain its dialectal affiliation. As most of the data is in the form of word lists, this was done primarily by comparisons of shared lexical items. Only six of the dialects have any morphological information remaining at all, and most of this is very scant. Gangulu is the best represented dialect after Biri. There is also some information on Baradha and Wirri. What grammatical information there is will be discussed separately for each dialect.

Tindale's (1974) map provided more data in the form of tribe (and thus, often, dialect) names, which increased the scope of inquiry from the five known dialects to the sixteen marked on his map. This figure of sixteen includes all the possible candidates for dialecthood of the Biri language; that is, it includes all the named tribe/dialects on Tindale's map in the Biri region that are not already known to be a different language. These are: Biri, Wirri, Yangga, Yilba, Mian, Yambina, Yuwibara, Bana, Wangan, Baradha, Gabalbara, Yetimarala, Ganulu, Gangulu, Wadya and Garingbal (Tindale's spellings have been updated). Obviously it is possible that not all of these sixteen were dialects of the Biri language, but all those for which information is available were tested. This resulted in the inclusion of nine dialects as almost certainly dialects of the Biri language: Biri, Wirri, Gangulu, Baradha, Yilba, Yangga, Yetimarala, Yambina and Garingbal. Of these nine, Biri, Wirri, Gangulu and Baradha have all been worked on to some extent by trained linguists; thus they are named, and have both word lists and some grammar to compare. For Mian, Bana, Wangan and Gabalbara no data remains.

Note that Gabalbara is suspicious as a tribe name, containing as it does the /-bara/ suffix common to clan names, not tribe names.

6.2 METHODOLOGY

6.2.1 COMPARING WORD LISTS

As almost all of the data available on these dialects was in the form of word lists, the main tool of comparison is identifying and counting percentages of shared lexical items, or potential cognates. These were used to identify the dialect to which a word list belongs, if this was not known, and to discover the relationships between each dialect. Unsatisfactory though this method is, when there is such a paucity of data as we have

here, it is the only available tool to give us some sort of idea of the relationships between the dialects of this language.

For the purposes of the cognate comparison, the scale used in this study is that of Dixon (1980:255):

- below 40% shared cognates: the two word lists are probably from different subgroups
- between 40%-60%: the two could be different languages of the same subgroup, or different subgroups; it is impossible to say
- between 60%-70%: probably different but closely related languages
- 70% and over: probably dialects of the same language

These dividing lines are fairly arbitrary, and should not be adhered to too strictly. Because of the poor quality of many of the sources used in this study, this scale is interpreted with some flexibility; in this discussion a figure of lower than 70% will sometimes be accepted for dialects. This depends on the nature of the sources used; with the more reliable data it is not so necessary to reinterpret this scale.

Unfortunately shared cognate comparisons are a fairly unreliable tool; they are supposed not to include borrowed words, but in a study of this kind, it is impossible to distinguish borrowing from retention due to genetic relationship. Lexical borrowing has not been taken into account here for this reason. For these reasons wherever possible additional data besides lexical comparison is used to determine the status of a piece of data.

In many cases the material is of such poor quality that no conclusions can be drawn about its dialectal affiliations. This is particularly the case with the Curr (1886a) word lists, many of which probably received artificially low scores because the spelling renders the words unrecognisable, or because printing mistakes or misunderstandings on the part of the collector obscure the intended meaning.

6.2.2 MAPPING DIALECTS ONTO LOCATIONS

Finding the locations for the dialects is by no means straightforward. Again taking Tindale's map as a starting point, the locations he gave have been checked against the locations given by the authors of each piece of data. It soon becomes obvious that Tindale's map, while mainly correct on the boundaries of the whole language, is in fact somewhat inaccurate in the placing of some of the dialects.

Obviously for the two dialects for which Tindale provides the only data, his locations must be relied upon.

Map 1 shows Tindale's locations of the dialects under consideration. Map 2 shows a revised version based on evidence outlined in the following pages. In Map 2 boundaries between the dialects are not marked because with data of the quality used in this study they would be to a large extent arbitrary. Instead the general location of each dialect is indicated. The boundary around the whole language is very schematised and is not to be taken as an indication of the actual location of the boundary of the language. It is included for convenience only.

Some people have attempted to allocate names to dialects simply by matching the given locations with a language map such as Tindale's. The problem with this is that firstly, the

place at which a vocabulary was taken down is not necessarily the same as the place where the language came from. An untrained, uninterested collector of the sort Curr often used to collect these lists would not necessarily check this. Secondly, even if the given location was an accurate location for the language, no language map of this area is entirely accurate; as we will see below, for instance, Tindale's map is somewhat flawed with respect to this language.

Thus for example Oates and Oates 1970 say that Curr no. 147 (Bridgeman and Bucas 1886) is Yuwibara, and that Curr nos. 130 and 131 (Armstrong 1886 and Chatfield 1886) are Yilba. However as Oates and Oates arrived at this conclusion by simply mapping the given location of the language onto Tindale's map, their conclusions are not very reliable. An example from the Biri language is their placing of Curr 130 (Armstrong 1886), which, although it is located in Yilba territory, shares only 38% of its vocabulary with Biri, and does not score above 49% with any of the other dialects. It is probably not of the Biri language at all. However, because it is placed within Yilba territory it is assumed by Oates and Oates to be Yilba. Sutton 1973a:19 attributes it to Yirandhali, an entirely different language to the east of Yilba.

Beale 1975 states that Curr word lists 127 (M. Curr 1886), 128 (Chief Commissioner of Police 1886), 131 (Chatfield 1886), 142 (MacGlashan 1886), 143 (Muirhead 1886) and 145 (Hodgkinson 1886b) are all Yilba. He does not explain how he arrives at this conclusion; he may have used the Oates and Oates method of matching a given location with a Tindale-style map. However in this study Curr 142 (MacGlashan 1886) and 143 (Muirhead 1886) have been allocated to Wirri, based on shared cognate percentages (see 6.3.4). So unfortunately Beale's information cannot be relied upon either.

Sutton 1973a:17-20 however looks at some of the Curr lists which are under consideration here, and examines them with systematic cognate comparisons and checks on the given locations. He concludes that 122 (Lukin 1886) is not of the Biri language; it is Gudjal. 122 (De La Tour 1886) is possibly Yilba; but it is a very small list. 123 (Armit 1886) is Biri or Yilba. 127 (M. Curr 1886), 128 (Chief Commissioner of Police 1886), 131 (Chatfield 1886) and 132 (Kent 1886) are all Yilba, sharing between 53% and 72% vocabulary.

It must be kept in mind that any of these unnamed word lists could belong to dialects which I have only the names for: Mian, Bana, Wangan or Gabalbara. On the other hand, they may belong to dialects for which there is no name known. This is impossible to tell.

Finally it should be noted that the distinction between a language and a dialect is by no means clear cut. Even in cases where there is a substantial amount of data it is often difficult to tell whether a speech form is a dialect of one language, or a separate language. This problem is also encountered in Chapter 7.

6.3 AN EXHAUSTIVE SURVEY OF THE DIALECTS

The following is an exhaustive survey of the dialects found, the sources of each one, their locations, a discussion of all morphological material known, and an indication of the relationship of each to the others.

6.3.1 YILBA

Yilba is known only from the following sources:

- M. Curr 1886 (Curr no.127) 'Porter's Range': word list of 102 items
- Chief Commissioner of Police 1886 (Curr no. 128) 'Charter's Towers': word list of 66 items
- Thomson 1886 (Curr no. 131i) 'Natal Downs Station, Cape River' word list of 259 items
- Chatfield 1886 (Curr no. 131ii) 'Natal Downs Station, Cape River' word list of 104 items
- Kent 1886 (Curr no. 132) 'Ravenswood, Upper Burdekin': word list of 38 items
- Chatfield 1873-4: word list of about 200 items
- Beuzeville 1919: word list of 154 items

Chatfield and Beuzeville both named their word lists as from the "Yuckaburra" dialect. This is actually a local group name, not a tribe or dialect name. The "Yuckaburra" people would, like all local groups of a tribe, have spoken their own slightly different version of their tribe's dialect of the language. Chatfield also contributed one of the Curr 131 lists, and it was from this same "Yuckaburra" group. Chatfield's and Beuzeville's lists are very similar.

The location given by Tindale is: "On Cape River west to Dividing Range; north to about Pentland Hills and Seventy Mile Range; on Campaspe River; east to about Suttor River; south to Lake Buchanan; at Natal Downs" (p.168-9). This agrees very well with the locations named by the Curr lists.

The Yilba lists are closest to Yangga, sharing between 61%-72% of their vocabulary. Considering that the Yilba lists are all from Curr, and are of quite poor quality, these figures are quite high. Garingbal shares between 50%-63% of its vocabulary with Yilba, and Biri and Wirri score in the mid 40% to mid 60% range.

6.3.2 BIRI

Many sources are available for this dialect; the phonological, morphological and syntactic description given earlier in this work are all based on the Biri dialect:

- Sharpe 1967: field notes; about 150 words and many sentences
- Breen 1967a: 13 sentences
- Sutton 1970: 101 words and 71 sentences
- Tsunoda 1971, 1971-2: about 300 words, many sentences and short grammatical sketches of each speaker
- Dixon 1972a: about 100 words
- Norman c.1973: about 100 words and some sentences
- Beale 1974: a short grammatical sketch
- Beale nd: about 300 words, 400 sentences and 4 short texts
- Sommer 1974: 76 sentences
- Holmer 1983: Short grammatical sketch and extensive vocabulary
- Rigsby 1987: word list of 159 items

- Tindale 1938 no. 38: word list of 49 items
- Hodgkinson 1886a (Curr no. 121) 'The Headwaters of the Burdekin River': word list of 122 items, and seven sentences
- Bridgeman and Bucas 1886 (Curr no. 147) 'Port Mackay and its Neighbourhood': word list of 131 items, and 41 sentences

Curr 121 is named by Hodgkinson "Breeaba"; this could be an attempt at rendering "Birigaba", which is what the speakers of the Biri dialect were called. Cognate comparisons are not particularly helpful with this list; it scores 51% with the Biri dialect. However, in the absence of evidence to the contrary, it must be assumed that the authors were correct in calling it the language of the "Breeaba", and that it is in fact the Biri dialect. Sutton (1973a:17) comes to the same conclusion; he adds that "The word list bears a strong resemblance to Biri, the language spoken by the Birigaba of the Bowen River".

The Bridgeman and Bucas list is probably Biri; it shares 73% of its vocabulary with Biri. Considering the poor quality of the data, this is quite a high score.

A couple of sources (Sutton 1970 and Beale 1974) mention that the Biri dialect has at least two different forms; a coastal Biri and a hinterland form. However as neither of these authors point to any systematic differences, and none can be gleaned from any other data, the point can only be noted.

Beale gives the tribal area as the region encompassing Bowen, Ayr, Collinsville and Nebo. Most sources agree with these, some adding Mackay and Cape Cleveland. It is generally agreed that the Biri dialect was the language of the people of Bowen River.

Tindale agrees with this: "On Bowen River north to junction with Burdekin River; east to Clarke Range; west to Leichardt range; south to Netherdale" (p.166).

Biri is closest to Baradha and Wirri, sharing 75% of its vocabulary with each. It shares 69% with Yambina, 64% with Gangulu, and 51% with Yetimarala.

6.3.3 YANGGA

The only source of this dialect is a word list by Tindale 1938 no. 55, of 46 items. Tindale (1974:170) gives its location as "Eastern headwaters of Suttor River; south to Glenavon; at Mount Coolon, Yacamunda, Mount Tindale, and Hidden Valley; north to the Burdekin River". Yangga is contiguous with Biri to the east, and seems indeed very closely related to Biri, sharing 90% of its vocabulary.

6.3.4 WIRRI

The sources for Wirri are as follows:

- A recording by Aguas 1966, transcribed by Sutton 1973b (18 sentences)
- Holmer 1983; short analysis and extensive vocabulary
- anon 1896: word list of 53 items
- MacGlashan 1886 (Curr no. 142) "Main Range between the Belyando and Cape Rivers Waters" (115 words)
- Muirhead 1886 (Curr no. 143i) 'Belyando River' 158 words

- Lowe 1886 (Curr no. 143ii) 'Belyando River' 94 words
- Meston c. 1900b (93 words), c. 1900c (110 words), c. 1900d (20 words) and c. 1900e (14 words)
- Tindale 1938 no. 45: word list of 56 items

Anon 1896 is a word list from the *Australasian Anthropological Journal* of particularly poor quality. It shares 77% of its lexicon with Holmer's and Aguas's Wirri, and thus, with some leeway due to inaccuracies, it is quite likely to be Wirri. The Curr word lists score reasonably highly too, again considering their poor quality; the MacGlashan list shares 61% cognates, while the Muirhead list scores 80%, and the Lowe list scores 72%.

Meston's lists score between 70%-86% with Holmer's and Aguas's Wirri. Again allowing some leeway for inaccuracies, these reflect a high degree of shared words.

Locations given by these collectors for this dialect are: Clermont, Emerald, Apis Creek and Burdekin Falls, Belyando River and between the Belyando and Cape Rivers. Tindale puts it as follows: "On Coast Range behind Mackay; inland to Nebo and heads of Suttor and Brown Rivers; on Connor and Denham Ranges; principally inhabitants of rain scrub country but extending west into drier country" (p.190). This is in general agreement with the Apis Creek, Burdekin Falls, Belyando River and Cape River locations given above, but Clermont and Emerald are much further south. The Emerald location is given only by Meston; if his locations are as unreliable as his transcriptions, we can safely disregard this placement. The Clermont location however is given by two different collectors; Holmer and Aguas. Tindale's given area is probably accurate as far as it goes, but it should be extended south down to Clermont.

Wirri is closest to Gangulu (83% shared vocabulary), and also scores quite high with Biri (75%), Yangga (77%) and Garingbal (74%).

The known morphology of the Wirri dialect is as follows.

The dative case, with formative /-nda/, is used a couple of times. In this case the dative is used for alienable possession:

- 1) wandi gayu-nda
dog woman-DAT
the dog belongs to the woman

Another case is used on one occasion, with formative /-gumi/:

- 2) gayurba buri-gumi yuri-guni
woman fire-LOC meat-ABS
the woman cooks food on the fire

It could be a locative case, or it could be instrumental; it is impossible to say.

An affix /-nhi/, with allomorph /-nha/ is used for O and S functions. The suffix /-nha/ is a common marker for O in Australian languages (Dixon 1980), but it is uncommon for it to

be used with S. However this seems to be the case in this language:

- 3) gaya yugu-nha yuri-nha manhdha-nhi
1sgS/A eat-PAST meat-ABS bread-ABS
I ate meat and bread

- 4) gayurba-nhi banydyara-gani
woman-ABS sick-ABS
the woman is sick.

In addition the affixes /-guni/ and /-gani/ are used for pronouns, nouns and adjectives in S and O function. See for example (2) and (4) above, and:

- 5) yinda-gani yuri
you-ABS meat
you are eating

The 'having' affix /-bari/ appears, and is used as in the Biri dialect. Another affix /-manhi/ is used once:

- 6) mari yagu-nha yuri-manhi
man eat-PAST meat-MANHI
the man ate meat

As this is the only example of this, its function must remain obscure.

Three pronouns appear:

- 1sgS/A - gaya
2sgS/A - yinda
3sgS/A - nhani

The first two are the same as in the Biri dialect. The Biri dialect third person singular subject pronoun is nhula however.

There are three verbal affixes used. The present tense is marked by /-nhi/:

- 7) mari banhdha-nhi munda-nhi
man kill-PRES snake-ABS
the man kills the snake

There is an affix /-nha/ which appears to mark the past tense (see (3) above). In one case the sequence /-nani/ is found on a verb:

- 8) yagana yuga-nani
woman eat-NANI
the woman feeds (the child)

This sequence could actually be /-na/, a causative marker, plus /-nhi/, the present tense marker; the transcription of lamino-dental nasals is unreliable in this data.

A striking feature of this Wirri data is that the nominal and verbal affixes are almost the same. Examples (3) and (7) show this particularly clearly. It is possible that this is due to an extreme stage of language loss in the speaker; certainly the analysis above has shown that there are few constant meanings for the affixes. More data from another informant would clear this point, but unfortunately there is no more data. However there is Holmer's (1983) analysis of Wirri. Unfortunately it has the same difficulties as his Biri dialect and Gangulu dialect analyses; and indeed Holmer himself sounds a note of caution about his analysis, because it is based on the language of only one informant, Ada Mack. However it is useful in that it provides more badly needed information on this scarcely-known dialect.

He mentions the /-bari/ suffix, as has been found in the above analysis. Also he mentions a privative derivational suffix /-gudu/, and /-gan/, a female suffix, as was found in the Biri dialect. Also he says there is a derivational suffix /-bara/, the meaning of which is unknown to him. The suffix /-bara/ is common to many Queensland languages, and means 'belonging to a place'. It occurs in many Biri clan names; see Chapter 1.

He says the nominal cases are: the ergative, marked /-ngu/ after a vowel and /-ndu/, /-ndyu/, depending on the final consonant; the locative, marked by /-ga/, and the dative (which Holmer again calls allative), marked by /-gu/. These case markers are exactly as in the Biri dialect.

Personal pronouns are almost identical to the Biri dialect pronouns. Demonstrative pronouns are yina 'this'; yana 'that'; also ganda- 'that', gandu 'over there', and yugana 'that'. According to Holmer, only ganda- inflects for case.

The verbal derivational affixes which Holmer mentions are /-mba/, the causative marker; the reflexive /-li/; and the reciprocal /-ra/. These are all identical to those found in the Biri dialect (see 4.5).

Verbal tenses and their formatives are: present (Holmer again calls this imperfective) /-na/; past (called perfective) /-ba/, and the purposive /-gu/. Again these forms are familiar from either the Biri dialect or Gangulu.

Holmer's information obviously differs markedly from the data used for this study. Unfortunately as both are based on only one speaker, it is possible that both are inaccurate. Holmer's informant however seems to have been much more knowledgeable about the dialect, in that she used much more varied morphology than did Aguas' informant and, presumably, used it more consistently. However her morphology is so similar to the Biri dialect morphology, that it is possible she was actually speaking the Biri dialect. Unfortunately it is too late to tell; all that can be done is to document the scarce remains of this dialect; any convincing analysis is not possible.

6.3.5 BARADHA

Norman's (c.1973) field notes provide the only data for this dialect. These contain 86 sentences and about a hundred words. The only location he gives for Baradha is Nebo, which makes it one of the central dialects. Tindale gives more particulars; "On Connors River from Killarney north to Nebo; west to near Bombandy" (p.165). This fits in with

the Nebo location, and must be assumed to be fairly correct, in the absence of counter evidence. Baradha shares 75% of its vocabulary with Biri, has reasonable scores with Wirri, Yangga and Gangulu, and scores 50% with Garingbal.

This dialect was in an advanced state of decay when it was recorded, and much morphology has been lost. However the morphology reveals some very interesting features, including the use of pronominal clitics on verbs, as in the Biri dialect. Baradha is the only dialect apart from Biri which shows traces of these. They will be discussed further below.

There is evidence of only three cases; ergative, dative and instrumental. The ergative case is usually omitted, but it is occasionally marked by /-mu/ (all example sentences are from Norman c.1973):

- 9) migulu-mu wura unda-li-gu
white man-ERG kangaroo kill-LI-GU
the white man killed the kangaroo

It is also frequently marked by /-gu/ :

- 10) mari-gu unda-ḡala migulu yindami waggagulu
man-ERG kill-ḡala white man-ABS this-ABS boomerang
the Aboriginal man killed the white man with a boomerang

/-mu/ is an extremely unusual ergative marker; across the continent ergative markers are fairly homogenous. However there are many examples of this affix in situations where it cannot be marking anything other than the ergative case (for example sentence (9) above). The dative case is also marked by /-gu/. It is used to mark a gift, a location, and in one instance a theme:

- 11) mari migulu yindami wandi yuri-gu gaymari-nda yaliga
man white man this dog meat-DAT gave-? ?
the white man gave this dog some meat

- 12) wina balbara-gu wina baragba-la
fish river-DAT fish catch-PAST
where in the river did you catch the fish ?

- 13) ḡaya naga-lba-ya binbi waynmari-gu
1sgS/A see-CONT-1sgS/A good girl-DAT
I see a nice girl

This sentence could perhaps be more accurately represented as "I'm looking for a nice girl", in which case it is possible that the dative case is actually marking an indirect object. There is one example of the instrumental case, with the form /-gu/:

- 14) mari-gu diguru unda-ḡalu biru-gu

man-ERG bird kill-ḡalu nulla-nulla-INSTR
the Aboriginal man killed the bird with a nulla-nulla

Extensive use is made by one speaker of the demonstratives yindami / gundami 'this' and 'that' . The form of the first one varies: yinami, yindami and yidami are used interchangeably. In most sentences the subject, and in some cases the object as well, is modified by one of these. For example see (11) above, also (20) below.

In some cases they alone can carry the case marking of their noun phrase. They only appear with the case marked by /-gu/, either the dative or ergative:

- 15) mari yindami-gu unda-liga
man this-ERG kill-LIGA
this man killed (the kangaroo)

It is possible that the ergative marker appears only on the final element of the noun phrase in this dialect. This is the case in some other Australian languages, for instance Diyari, from South Australia (Austin 1981). Unfortunately there are no other suitable examples of this phenomenon in the Baradha data to be able to tell whether this is the case here.

In some cases the yindami/gundami elements can entirely replace the noun which they modify:

- 16) mari yindami gundami gundami-gu
man this hit that-DAT
this man hit that one

In fact these two words seem to behave like noun markers. They only appear in this way in the speech of one of the informants, however from the other two informants there are only four and six sentences respectively, so it is possible that they were in fact a feature of the Baradha dialect which had perhaps developed out of demonstratives in the language (demonstratives which were also shared by the Biri dialect). On the other hand it is possible that this informant is just using them for pragmatic reasons to help overcome some of the difficulties in comprehension that his lack of morphology causes. Unfortunately there is no evidence to support either speculation.

Another interesting feature of Baradha is that there is evidence of a system of pronominal clitics attached to verbs. The only forms found are:

1sgS/A - /-aya/
2sgS/A - /-nda/
3plS/A - /-dhana/

- 17) ḡaya naga-lba-ya migulu
1sgS/A see-CONT-1sgS/A white man-ABS
I see the white man

- 18) indama yaraman-gu yina indulu biralru-nda

2sgS/A horse-DAT early morning? muster-2sgS/A
 you are going to muster the horses early in the morning

- 19) nani-gu wina baral-dhana
 what-DAT fish catch-3plS/A
 why are they catching fish ?

On the evidence available, the forms and their use appear to be exactly the same as in the Biri dialect.

There are only six verbal affixes used in the data. The past tense marker is /-li/, as in the Biri dialect:

- 20) yuri yindami waydyu-li migulu-gu
 meat-ABS this-ABS cook-PAST white man-DAT
 he cooked this meat for the white man

It has allomorphs /-liga/, /-ligu/, and in one place /-lga/:

- 21) migulu yindami wina marra-liga
 white man this fish catch-PAST
 the white man caught the fish

- 22) wina bularu mara bara-ligu
 fish two ? catch-PAST
 he caught two fish

It is possible that /-liga/ and /-ligu/ are not actually allomorphs of /-li/, but that /-gu/ and /-ga/ are affixes in their own right. However they occur only after /-li/; and the only affixes that can follow a tense marker in the Biri dialect at least are pronominal clitics, which these are not. Thus it is unlikely that these forms are aspectual affixes, and likely that they are in fact allomorphs of the past tense /-li/. The allomorphic conditioning factors are unknown.

There are a couple of instances of the allomorph /-la/ which also appears in the Biri dialect. See for example (12) above, and:

- 23) migulu buri bara banga-la wura waydyul-gabul
 white man fire ? make-PAST kangaroo cook-gabul
 the white man made a fire to cook the kangaroo

A very frequently used affix is /-gala/, with allomorph /-galu/. It appears to have an imperfective meaning, although this is not the case in all situations (see for example (10) above):

- 24) wuru wagura yugu-gala
 kangaroo grass eat-IMPF
 the kangaroo is eating the grass

- 25) migulu yindami gulugu dada-gala
 white man this inside stand?-IMPF
 this white man is inside

There is one instance of a verbal affix /-gabul/; see example (23) above. In that sentence it appears that it is possibly functioning as a purposive marker, but this is unlikely, as one would expect that the purposive /-gu/, which is extremely common throughout the whole of Australia, including the Biri dialect, would appear in this dialect too if Baradha has a purposive construction. However on the evidence of one sentence it is impossible to say what its function is.

There is one instance of a verbal affix that appears to have a reciprocal function (The Biri dialect reciprocal marker is /-ra/):

- 26) migulu yindami gaya biru wadya-bara-gala gadyuldul
 white man this 1sgS/A ? talk-RECIPR-IMPF 1duS/A?
 the white man and I were talking together

6.3.6 YAMBINA

Wilson and Murray 1886 provide about 200 items in a word list, the only remaining information on this dialect. The author names it 'Yambeena', and in the absence of contradictory evidence, there is no reason to doubt that this is in fact a word list of the Yambina dialect. It is perhaps hazardous to postulate the existence of a dialect on the strength of one Curr word list, but the fact that Yambina appears on Tindale's map gives further credence to the existence of a dialect called Yambina.

The authors give its location as "Peak Downs district, Logan Downs Station". Tindale puts it at: "Logan Creek south of Avon Downs; east to Denham Range; west to about Elgin Downs" (p.169). These seem to be referring to the same region.

Yambina shares 79% of its vocabulary with Yangga, 72% with Garingbal, 71% with Gangulu, and 69% with Biri.

6.3.7 YETIMARALA

The only source for this dialect is Roth 1898, who gives a word list of 75 items. The location given on Roth's map coincides closely with that given by Tindale for this dialect: "On Boomer and Broad Sound Ranges from Fitzroy River north to about Killarney; west to the Mackenzie and Isaac Rivers" (p.171). This is probably more or less the correct location, as they both agree.

There is no evidence in the Yetimarala data of a vowel phoneme /e/, and indeed in the other dialects of the Biri language it does not occur. It is difficult then to know how to phonemise the given name of this dialect. Possibly it was, phonemically, /yatimarala/, with the /a/ raising to [e] after the /y/. However as both Roth and Tindale spell it with an /e/, and as it is not certain what the vowel actually was, their spelling of the name will be used here.

Yetimarala is closest to Gangulu, scoring 73%. It scores in the 60% range with Wirri and Baradha, and 51% with Biri.

6.3.8 GANGULU

The sources for Gangulu are:

- Sharpe 1966-7: field notes of 66 sentences and about 300 words
- Breen 1967a: 56 sentences and 75 words
- Tsunoda 1974b: 49 words
- Aguas 1966: 3 sentences transcribed by Sutton 1973b
- Holmer 1983: short grammatical sketch and extensive vocabulary
- Osborne 1966: word list of 21 items
- Gir-oonbah 1894: 7 words
- Macintosh, Cooke and Bartholomey 1886 (Curr no. 150) 'Eastern Slopes of Expedition Range, Lower Dawson, Upper Fitzroy, Mackenzie and Isaac Rivers, and many of their tributaries': 163 words
- Meston c.1900a (94 words), c.1900b (93 words), c.1900d (20 words), c.1900e (14 words)
- Tindale 1938 no. 46: word list of 52 items

The Mackintosh, Cooke and Bartholomey list only has 67% shared words with Sharpe's, Breen's, Tsunoda's, Holmer's and Aguas's Gangulu combined, but its author says it is Gangulu, and although this is not clear from the cognate comparison, it is entirely possible.

Meston's word lists b, d and e score equally with Wirri and Gangulu. It is actually impossible to say which dialect they belong to.

The locations given for Gangulu are: Emerald, Springsure, Clermont, Wooroonah, Apis Creek, Nebo, Duaringa, Dawson River and Woorabinda. Gangulu is thus a southerly dialect. Tindale says: "Dawson River south to Banana and Theodore; northwest to Mackenzie River and near Duaringa and Coomoooolaroo. East to Biloela, Mount Morgan, Gogango Range, and the upper Don River; southeast to Thangool and the headwaters of Grevillea Creek" (p.174). The northern end of Tindale's area coincides with the more southerly of these locations; but the locations given by the various collectors cover a huge area, from Nebo down to the Dawson River. No one dialect could possibly have covered this area. Tindale's location is not attested by any other of the sources, and is thus probably wrong. It is also difficult to see how the Nebo location can be correct, given the distance from Nebo to other more attested places such as the Dawson River. Possible a more accurate location for Gangulu is from Clermont south to the Dawson River.

Unfortunately there is very little surviving information on morphology; there are many instances of speakers not using case-marking, and the verbal affixes are often used interchangeably. There are also frequent examples of language mixing with English.

With the nominal morphology, all informants used only the dative case with any regularity. The dative case marker is the same as in the Biri dialect; /-gu/. The ablative case is also used occasionally. Its formative is /-mundu/. (The Biri dialect ablative marker is /-dhamu/).

27) dugara-la muggu-mundu
come-PAST hill-ABL
coming down from a hill (Sharpe 1966-7)

28) ganhdha-mundu bubara inda
where-ABL come? you
where do you come from? (Breen 1967a)

There is one instance of an instrumental case affix:

29) gaya dina-ggu wirgi gara-la
1sgS/A foot-INSTR ? step-PAST
I stepped on (someone?) with my foot (Sharpe 1966-7)

The pronouns show some differences which are worth mentioning. The following are the pronouns found. Unfortunately only a small part of the paradigm is represented:

1sgS/A gaya / gayu	2sgO yurna	3sgO nundu
1sgO gadyuḡa	2plO yurina	3plO nuḡuna/yurana
1duS/A ḡalinda		

None of the speakers used pronominal clitics.

There are some instances of reduplication in the data. Unfortunately they are both in a song, for which there is no translation given. The examples are:

30) gambiambi gayu gandu M__'s
woman-REDUPL 1sgS/A child name
I am a woman with a child, M__ (Sharpe 1966-7)

31) gala gayu gambigambi gandu K_Iris tripela
? 1sgS/A woman-REDUPLchild name ?
I am a woman with a child named K__ Iris (Sharpe 1966-7)

(These translations are tentative only)

The first instance is particularly interesting as it is the only example in the corpus of partial reduplication. The unreduplicated form is gambi; full reduplication of the same word is evident in the second example. The partially reduplicated form is probably a mistake on the part of the speaker or the transcriber; two vowels never occur together anywhere else in the data.

The verbal affixes present many problems of analysis which the paucity of data will not allow to be resolved. There is evidence of the three tenses as found in the Biri dialect, an imperfective affix, and a few other affixes, the functions of which remain obscure. The present tense marker is /-ḡa/ as in the Biri dialect. One speaker uses it for all three tenses, but its present meaning is evident from other speakers, as well as from its identity with

the Biri dialect tense marker. Another speaker has a present tense marker /-bi/ instead of /-ga/:

- 32) nhula binda-bi
3sgS/A sit-PRES
he sits (Sharpe 1966-7)

The future tense marker is used in only one example. Its formative is /-nuya/ (as opposed to /-nha/ in the Biri dialect):

- 33) yamba-gu binda-nuya danaru-gu
camp-DAT sit-FUT dinner time-DAT
I am going to sit at home at dinner time (Breen 1967a)

The affixes /-la/ and /-na/ are both used a couple of speakers; it is impossible to state the exact function or distribution of each. They both cover the past and present tense:

- 34) ŋaya ŋargu naga-la
1sgS/A kangaroo see-LA
I saw a kangaroo yesterday (Sharpe 1966-7)

- 35) ŋadyuna naga-la
1sgO see-LA
a kangaroo is watching me (Sharpe 1966-7)

- 36) gandu badyi-na
child cry-NA
the baby is crying (Breen 1967a)

- 37) gandu yadhi-la
child laugh-LA
the child is laughing (Breen 1967a)

In one case one speaker marks past time by the use of the English word 'finish':

- 38) gaya finish buri gunman
1sgS/A finish firewood chop
I've chopped the firewood (Breen 1967a)

One speaker uses /-na/ as a present tense affix:

- 39) binda-na
sit-PRES
(you are) sitting (Breen 1967a)

There is an affix /-rra/ in the speech of a couple of Gangulu people, the function of which

is unclear. It is used differently by each informant. In the speech of one of these, it occurs directly after the verb root, and can be followed by another affix, which indicates that it is probably an aspect marker or a stem-forming affix:

- 40) gaya waga wani-rra
1sgS/A run run-RRR
I am running (Sharpe 1966-7)

- 41) inda binda-rra-bi
2sgS/A sit-RRR-PRES
sit down (Sharpe 1966-7)

With the other speaker it is always used with the present tense, often with sentences which have an imperfective meaning, but not always. The function of this affix must remain obscure.

One speaker has an affix /-bi/ which appears in the speech of no other informants. It can appear after /-rra/, or on a plain verb stem. It is used with the present and the past tense: See the previous example. Also:

- 42) waga naga-bi ŋaliya
kangaroo see-BI 1duO
the kangaroo sees the two of us (Sharpe 1966-7)

In the Aguas data there is a verbal affix /-nda/ which appears once:

- 43) gandu yugu-nda
child eat-NDA
the child eats (Aguas 1966)

This affix appears nowhere else in the data. It is formally identical to the Biri dialect second person singular subject pronominal clitic, but that is obviously not its function in this situation. Its function is impossible to state however.

There is one further affix which appears once in the corpus:

- 44) dhana-nugu
stand-NUGU
stand up (Breen 1967a)

It could be an imperative marker, but other sentences translated into English as an imperative in this data are not actually imperative in the Gangulu language, but are tensed verbs. Its function is impossible to ascertain.

Unfortunately these few affixes are all that remains of Gangulu morphology. The data is so poor that this rather unsatisfying glimpse is all that can be recovered from what was no

doubt once a full and intricate morphological system.

Holmer's (1983) analysis provides more details, but as his analysis for the Biri dialect was in many instances found to be inaccurate when compared with Biri dialect data, it is unclear how much reliance should be placed on his Gangulu, and indeed his Wirri analyses. Unfortunately he does not include the corpus from which he drew his analysis; this would be extremely useful. Instead, he presents the reader with just the analysis, and only individual Gangulu words to back up his statements in most cases. However the analysis is worth discussing. There is much information that it is impossible to do justice to here, but the main morphological affixes will be outlined below for convenience. The reader is advised to consult the actual work for more detail.

One interesting thing is that Holmer claims there are actually two Gangulu dialects, which he calls Gangulu A and B. This cannot be ascertained from the data used for this work, but it is very likely; each 'tribe' would have had its own dialect, and each clan of each tribe would have spoken a slightly different version of each dialect. Unfortunately Holmer does not give any systematic description of the differences between the two dialects.

The nominal derivational affixes he describes are /-bari/, the 'having' affix, as in Biri, and /-mulu/ and /-yunda/, both apparently privative affixes (Holmer calls them caritive).

The ergative marker is /-ggu/ after a vowel, or /-du/ after a consonant with the stop assimilating in place with the previous consonant. The locative, as in the Biri dialect, is /-nga/. Holmer posits an allative case, with formative /-gu/. He does this for the Biri dialect too, but in the case of the Biri dialect, the /-gu/ formative is actually the dative case marker, which of course has an allative function. This is probably the situation here as well. And in fact from the data above the dative formative has been found to be /-gu/. These are the only nominal cases Holmer found.

The pronouns he found are the same as the Biri dialect pronouns, except that he subsumes lamino-dentals under apico-alveolars; thus he has, for example, nula for nhula (3sgS/A).

The past tense (he calls it perfective) is formed by /-la/, as in the Biri dialect of many informants apart from Reg Dodd. He also mentions a past tense affix /-ba/ in Gangulu B. This is confirmed by the findings above. The present (he calls it imperfective) is formed by /-na/. The purposive (he calls it intentional) he says is /-gu/ in Gangulu A, as in the Biri dialect, and /-na/ in Gangulu B.

Macintosh et al. 1886 is probably of the Gangulu dialect. There are only twelve sentences in this vocabulary, and they contain no nominal affixes. There are however two verbal affixes and some pronouns.

The past tense is marked by the verbal suffix /-ba/ (their transcription has been phonemicised here):

45) gani muru mawa bamima inda wanhdha-ba
INTERROG ? ? man 2sgS/A see?-PAST
how many Aboriginal men did you see?

The future tense is marked by /-nu/, as in the previous dialect:

46) gani inda umbara dhula gambira-nu
INTERROG 2sgS/A think 3plS/A fight-FUT
do you think they will fight?

The personal pronouns found are:

1sgS/A gaya
2sgS/A inda
3plS/A dhula

The 1st and 2nd person pronouns are identical to those of the Biri dialect.

The interrogatives are:

gani - general interrogative
ganhdhaŋu - where at?
ganhdhanu - when?
ganhdharu - why?

The similarities to the Bridgeman and Bucas 1886 list, and also to the Biri dialect are evident. It is unfortunate that there is no more data to give a clearer picture of this dialect. Gangulu is closely connected to Wirri (83%). Yangga, Baradha and Garingbal all score in the 70% range of shared words. Biri shares 64%.

6.3.9 GARINGBAL

A word list of 33 items by Tindale 1938 no. 47 is all that is known of this dialect. His location for it is "Headwaters of Comet River (upper Mackenzie) from below Rolleston south to the Carnarvon Range; west to Consuelo Peak; on the Brown River; east to Expedition Range and Bedourie" (1974:174-5). This would make it one of the southernmost of the Biri dialects. Garingbal scores high in comparisons of shared lexical items with Yambina (80%), Wirri (74%), Gangulu (73%), and also Yangga and Biri (72% and 71% respectively).

6.3.10 WADYA

Breen 1967b provides the only information on Wadya.

The highest percentage of words Wadya shares with any of the known Biri dialects is 68% with Gangulu. This suggests that Wadya and Gangulu are actually from separate languages. Wadya scores very low with all the other Biri dialects; 58% with Biri and not above 41% with any of the other dialects. Grammatical comparison shows some shared morphology with Gangulu; three case markers and a tense marker are the same. However these are not good indicators of shared language status, and for these reasons Wadya is not regarded as a dialect of the Biri language. Wadya will be discussed further in Chapter 8.

6.3.11 GANULU

The only remaining information on Ganulu comes from Josephson 1886 (Curr no. 157 'Head of the Comet River'). This word list is within Tindale's Ganulu territory, and the list is said by its author to be from the "Kanooloo" tribe. It appears that Ganulu is not from the Biri language, although it is partly within Biri territory. Its cognate scores with Biri dialects are quite low: 45% with Gangulu is the highest, down to 29% with the Biri dialect (cognate percentages from Beale 1975; he calls it Wadya, but his source is Curr 157). These scores suggest that Ganulu does not belong to the Biri language. Ganulu will

be discussed further in Chapter 7.

6.3.12 UNALLOCATED DATA

Many of the word lists taken down by untrained collectors could not be allocated to a dialect, in some cases because of the poor quality of the data, and in some cases because the percentages of shared lexical items were unrevealing. Below is a summary of the data that appears to be of the Biri language, but which cannot be shown to be definitely so, and which cannot be associated with any one dialect.

- Armit 1886:(Curr no. 123) 'Top of Range near Dalrymple'
- Scott 1886: (Curr no. 135) 'Burdekin River- Various Tribes'
- Lukin 1886 (Curr no. 122) 'Clarke River'
- anon 1886 (Curr no. 144) 'Logan Creek, part of Lower Suttor, and Lower Mistake Creek'
- Hodgkinson 1886b: (Curr no. 145) 'Fort Cooper'
- E. Curr 1886c: (Curr no. 146) 'Scrubby Creek'
- Murray 1886: (Curr no. 158) 'Brown River'
- A. M. F. 1897: a dialect from Queensland
- Douglas 1900: list from Bowen Downs, Qld
- anon 1899: Mamburra Tribe
- Fox 1898: Bumburra-burra tribe

6.4 THE RELATIONSHIPS BETWEEN THE DIALECTS

The following is a summary of a comparison of the percentages of shared words of each dialect. The number in brackets below each percentage shows the actual number of pairs counted. Yilba scores are presented as a percentage range of the lists used for the comparison, as there is no one reliable source for this dialect.

Garingbal									
72% (25)	Yangga								
71% (31)	90% (40)	Biri							
74% (31)	77% (37)	75% (247)	Wirri						
72% (29)	79% (38)	69% (108)	70% (84)	Yambina					
80% (25)	60% (30)	51% (69)	68% (63)	63% (52)	Yetimara				
73% (26)	76% (41)	64% (292)	83% (243)	71% (86)	73% (75)	Gangulu			
50% (28)	69% (32)	75% (103)	69% (91)	63% (71)	64% (52)	72% (96)	Baradha		
50-63% (23-31)	61-72% (24-34)	46-62% (35-115)	48-64% (27-80)	44-56% (44-56)	28-48% (18-39)	52-59% (29-87)	47-56% (26-86)	Yilba	

The situation seems to have been that each dialect of the Biri language shared at least 70% of its lexicon with at least one other dialect. Some dialects are more closely related than others; the degree of relationship seems to relate to some extent to their geographical locations. The dialects which border on each other tend to have the highest degree of shared cognates. Map 3 shows the cognate percentages of dialects which border on each other.

It is difficult to tell how much variation there was between the dialects. From the morphology available, there do seem to have been some differences, as described above. Phonologically there appear to be no discernible differences (see Chapter 2), and unfortunately other information which would enable us to build up a clear picture of the dialects is lacking.

7. NEIGHBOURING LANGUAGES AND THE MARIC SUBGROUP

This chapter examines each language which shares a border with Biri, with the aim of understanding the linguistic relationships between these languages and Biri. It will be seen that languages to the north-east, east and south-east bear little resemblance to Biri. On the other hand, the Maric languages to the south-west, west and north appear to be closely related to Biri. The Maric subgroup will be discussed in 7.2.

Some of these neighbouring languages are very poorly recorded, and the only material extant is in the form of a word list by an amateur transcriber. In these cases the only possible means of comparison with Biri is a cognate count. All the percentages of shared lexical items given in this chapter are from Dixon (n.d.), unless otherwise indicated.

It must be borne in mind that all the problems relating to paucity of data and the difficulties with shared lexical comparisons, which were discussed in Chapter 6, hold here as well. However some of the languages have grammars written; these permit more detailed comparison.

Please refer to map 4 for the locations of all languages discussed.

7.1 A SURVEY OF THE NEIGHBOURING LANGUAGES

7.1.1 LANGUAGES TO THE EAST

BINDAL

Bindal was the language of Ayr. It is closest geographically to the Biri dialect of the Biri language. From Tindale's map it is not clear that Bindal and Biri shared a border, but they were at any rate geographically very close. There are only two Curr word lists for this language, no. 134 'Lower Burdekin' (Cunningham and Gorton 1886) and no. 134 'Lower Burdekin' (Gorton 1886). These word lists have been classified as Bindal primarily on the basis of their location; but the fact that there are two of them gives credence to both. Also, Curr mentions (1886a, vol 3, p.488) that he received another word list from the same area which was so similar that he did not include it. This gives further support to the two lists he did include. The two word lists share 21% and 36% of their lexical items with Biri respectively, so it seems unlikely that there was a close relationship with Biri.

YURU

Yuru is the language just south of Bindal, and borders onto the northern part of the Biri dialect. One Curr vocabulary (O'Connor 1886) is all that remains of this language, and this shares only 13% of its vocabulary with Biri. There seems to be no genetic connection, and the fact that neighbouring languages share so little vocabulary indicates perhaps that the two languages had not been in contact for long (Dixon 1980: 254-5).

GIYA

Giya lies east of Biri, sharing the eastern boundary of the Biri dialect. Only a Curr vocab remains for this language, no.136 'Port Denison to Cape Gloucester' (Shea 1886). This is the location Tindale gives for Giya. The list matches no other languages nearby, so it is presumed to be of Giya. It scores 45% with Biri. This score means that Giya could well have a close relationship with Biri, or the two languages could just have been in close contact for some time, and have borrowed a substantial amount of each other's lexicon. Without grammatical data, it is impossible to say whether Giya and Biri were genetically related. This will be discussed further in 7.2 below.

DARAMBAL

Darambal shares a boundary with Yetimarala, an eastern central dialect of Biri (see 6.3.7; however they appear to bear little relationship to each other.

There seem to have been about five dialects of Darambal, the only remaining data of which comes from Roth, (Muller 1886) and (Archer 1886), Tindale 1938 no. 69 and Holmer 1983. These dialects share between 17%-30% cognates with Yetimarala (incidentally, the Yetimarala data also comes from Roth).

Phonologically Darambal appears somewhat different from the Biri language; there are many initial rhotics, which Biri does not have, and there is phonemic vowel length, which again Biri does not have. One source (Holmer) says there are three rhotics, whereas there are only two in Biri.

There is a small amount of grammar, which seems to be quite different from Biri. Pronouns share some similarities, but demonstratives are quite different, the case formatives are all different, and noun cases show a marking system in which the A, S and O are all marked separately. This contrasts with the split ergative system found in Biri. Also, Darambal has verb conjugations, which Biri does not.

The only cognate verbal form is the reflexive /-li-/, identical in both languages. This reflexive form is common to very many languages in this part of Queensland.

There are more differences than similarities between Darambal and Biri; they do not appear to be genetically related.

BAYALI

Bayali was spoken south-east of Gangulu, east to the sea and on Curtis Island. There is only one Curr word list for this language, no. 160 'Keppel Bay, Calliope River and Curtis Island' (anon 1886b). This list is said by its author to be of the "Byellee tribe". It is also from the same location given by Tindale for Bayali. The list contains only about seventy words. The shared lexical percentage with Biri is only 13%, which indicates that there was probably no close connection with Biri.

TULUA

Tulua is further south than the present author's estimation of Gangulu, the south-easternmost Biri dialect; but as this location was not definite, it is not clear whether or not Tulua was contiguous with Gangulu.

The only information on this language is a word list from Roth 1898 (he names it Dappil) and Curr 161 'Boyne River' (Commissioner of Police 1886), which is of the "Toolooa" tribe. As the name Tulua is also used by Tindale, it will be used here.

There is obviously very little relationship between Tulua and Biri. The Curr word list shares only 3% of its lexicon with Biri. There is some evidence of prestopped nasals in the data:

didna 'foot'
koodna 'excrement'

Dhina 'foot' and guna 'excrement' are common Australian words. Prestopping seems to have been an innovation in Tulua. There is one example of a non-homorganic prestopped nasal:

koodmary 'shield'

In Biri this word is gulmari. It is possible that in Tulua there is a general tendency for liquids to become stops before nasals.

There are also some monosyllabic words:

too 'wood'
darr 'camp'
parr 'ground'
wi 'fire'
dan 'blackfellow'
pam 'fish'
karm 'head'

The spelling of the last two words possibly indicates that vowel length was phonemic in this language; possible phonemicisations of these words are /bam/ and /gaam/ respectively.

These points show that Tulua was obviously quite a different language from Biri.

7.1.2 LANGUAGES TO THE SOUTH

GURENG-GURENG

This language, which lies to the south-east of Biri, covers three Tindale tribes: Gureng-Gureng, Guweng-Guweng and Daribalang.

Brash 1975 provides a grammar of Gureng-Gureng, which shows there to be little similarity between Gureng-Gureng and Biri.

The phonology is somewhat different; there is only one rhotic, instead of two as for Biri, there are no laminodental stops or nasals, there are five vowels, and vowel length is phonemic. In Biri there are three vowels with no contrastive length.

Pronouns show some common features; for example 1sgS/A is /ɲay/. However this form derives from proto-Australian (Dixon 1980:340), and cannot be taken to indicate a

relationship between Biri and Gureng-Gureng. Interrogatives are similar, but begin with an initial /w/ instead of initial /ŋ/. This feature appears in some other languages, for instance Warungu; see 7.1.4.

Gureng-Gureng, unlike Biri, allows monosyllabic words.

Cases all have different formatives from Biri except the dative/allative /-gu/, but again this is probably a retention from proto-Australian (Dixon 1980: 315). There is a distinction in object marking between human objects, which are unmarked, and non-human objects, which are marked with /-ŋa, -na, -a/. Case functions are allocated differently to Biri; the genitive case covers benefactive, desiderative and inalienable possession functions. These are all served by the dative case in Biri.

There are two verbal conjugations in Gureng-Gureng, whereas in Biri there are none. Verbal affixes are all different except the purposive /-gu/, which again is a retention from proto-Australian, and the reflexive /-li, -ri/. There is also an intransitiviser and a verbaliser, both of which Biri lack.

Altogether the grammar of Gureng-Gureng bears very little relationship to Biri, and with the shared lexical score of 32%, it is clear that there is no close connection between the two languages.

WAGA WAGA

Waga Waga lies to the south of the Biri language, and covers Tindale's Wulili and Waga Waga. Dineen 1988 provides a sketch grammar of this language. Thus there is some grammar to compare as well as lexical items.

A comparison of the vocabularies of Waga Waga and Biri reveals that they share only 5% of their lexicons. Other aspects of the language show great disparities.

Phonologically there are differences; there is only one laminal series instead of the two found in Biri; there are five vowels, compared to Biri's three, and there appears to be only one rhotic.

Case allomorphs are all different except for the purposive /-gu/, which is derived from proto-Australian. Animate nouns show a three-way split in case marking; that is, there are separate forms for the S, A and O functions of nouns. In Biri nouns follow an ergative case marking system.

There are three verbal conjugations, and, unlike in Biri, there are no tense markers, time being shown by temporal words instead. The causative affix is /-ma/, which parallels the Biri /-mba/. One similarity is in the transitivity of verbs; verbs, as in Biri, may function both transitively and intransitively with no overt derivational marking to show the change. There is no copula equivalent to the wara of Biri. Clauses are not coordinated, unlike in Biri, and complement clauses are embedded, not adjoined as in Biri.

Clearly there is no close connection between Biri and Waga Waga.

7.1.3 LANGUAGES TO THE WEST

These languages are all either dialects of Bidyara, or very closely related to Bidyara. They cover very many Tindale tribes including: Gungabula, Wadyigu, Nguri, Wadyalang, Wadjabangay, Yiningayi, Gayiri, Yandyibara, Yagalingu, Mandandandyi, Guwamu, Gunggari, Gugay, and perhaps others including Margany and Gunya (Tindale's spellings have been changed to conform with the orthography used here).

These languages, which I will call for convenience Bidyara dialects, are all very closely related to the Biri language. In fact in some cases it is not entirely clear that they are not the same language (see Bidyara discussion below). Evidence from Ganulu (discussed below) for instance shows that for some dialects it is not possible to determine whether they belong to Bidyara or Biri. This indicates that perhaps there was a dialect chain connecting the two languages. This question will be discussed further at the end of this section.

MARGANY AND GUNYA

Margany and Gunya are dialects of a language to the south-west of Biri. Breen 1981a provides a grammar of these dialects. It is clear that there is a very close relationship between Margany/Gunya and Biri, although the Margany and Gunya dialects are not actually contiguous with Biri; they are separated by Bidyara dialects. The closest Biri dialect is Garingbal. The shared lexical scores are 30% for Margany and Garingbal, and Gunya and Garingbal is 33% (Beale 1975). It seems that Margany/Gunya are quite closely related to Biri.

The phonology of Margany and Gunya shows some differences to that of Biri; the only differences are a second apical series in Margany/Gunya, and phonemic vowel length.

The ergative, locative, dative and comitative case forms are all the same as in Biri. The ablative form is /-mundu/, which appeared in Chapter 6 as the ablative case formative of both Gangulu and Wadya. This is very interesting; if it only appeared in Margany/Gunya and Wadya, this could be a reason for classifying Wadya as not a Biri dialect, but as from the same language as Margany/Gunya. However the fact that /-mundu/ also appears in Gangulu, which is definitely a Biri dialect, means that no conclusions can be drawn from this; the ablative suffix must be in use in both languages. In fact it seems that this suffix could be a proto-Maric form (see 7.2).

Verbal affixes show some congruities:

	MARGANY/GUNYA	BIRI
Present tense	-nhi	-ga
Past tense	:-nhi/-la	-li /-la
Future/Purposive	-ngu/-lgu	Fut -nha; Purp -gu
Causative	-ma	-mba
Reflexive	-li	-li
Reciprocal	-da; -nga	-ra

The purposive forms are common in Australian languages (Dixon 1980:311). The causative and reflexive forms, as we have noted, are common to the region, so these cannot be used to indicate any low-level subgrouping between Margany/Gunya and Biri. The present and past tense forms are suggestive however.

There are two verbal conjugations in Margany/Gunya. One fascinating parallel is that Gunya, like Biri, has a set of pronominal clitics suffixed to the verb. They only exist for nominative and accusative case forms, and not all of these forms are attested. Bound pronouns can, as in Biri, be used in conjunction with the free form or noun. They are all transparently derived from cardinal forms, and so are probably of fairly recent origin. It is interesting that the only Biri dialects for which bound pronouns are attested, the Biri dialect and Baradha, are two of the furthest Biri dialects geographically from Gunya.

Gunya bound pronoun forms are mostly derived from the cardinal form by deleting the first syllable of the cardinal form and adding an initial /-i/ where necessary (Breen 1981a:324). The attested forms are:

		1st	2nd	3rd
Sg	NOM	-(i)ya	-(i)nda	-la
	ACC		-nanha	-nha
Du	NOM	-(iga)li	-ibalu	-(i)bula
	ACC		-balunha	-bulanha
Pl	NOM			-(i)dhana
	ACC			-nhdhananha

These bound pronouns show considerable similarities to the Biri forms, especially the nominative forms (see 3.4.2); this is due to the close similarity between the full Gunya and Biri forms. The full form pronouns are formed from identical stems in Gunya and Biri; except that Gunya has a 3rd person dual paradigm, which Biri lacks.

Biri and Gunya are the only languages in the region, and indeed in their subgroup, which have bound pronouns. However it does not seem to be the case that the bound pronouns in these languages are genetically derived from the same proto-forms. The forms are similar, but there are not the systematic formal correspondences that one would expect if they were derived from common forms. Their similarity seems to stem more from the fact that the full forms they were derived from are similar. The fact that both bound systems are so clearly related to the full forms indicates too that they are of recent origin; although a couple of the Biri bound forms are not transparent reductions of the free forms (see 3.4.2).

It seems then that bound pronouns were probably not a feature of proto-Maric, but developed individually in Biri and Gunya.

Syntactically, Margany and Gunya are very similar to Biri. For example the only subordination evident is with the potential affix /-:nydyu, -wunydyu/. In Biri subordination only occurs with the purposive affix. Parallel to the Biri verb wara, there is a copula wiyi in Margany/Gunya.

These similarities point to a very close relationship between Margany/Gunya and Biri.

To the north of Margany/Gunya lies Bidyara, a language also described by Breen (1973). Bidyara is very closely related to Margany/Gunya, although Breen says (1973:9), that Gunya and Bidyara are in fact separate languages. As will be seen below, Bidyara is also very closely related to Biri.

BIDYARA

Breen 1973 is a grammar of Bidyara, a language which lies directly to the west of the Biri language.

Phonologically Bidyara is similar to Biri, with the addition of a retroflex stop. The status of this retroflex stop is not entirely clear, and there is no corresponding retroflex nasal. There is one long vowel /aa/. Bidyara allows monosyllables of the form Caa where /C/ is any initial consonant, and /aa/ is the long vowel.

Case formatives show some similarities to Biri: ergative, locative, absolute and dative forms (which Breen calls purposive) are all identical to Biri forms; however they are all

common Australian forms (Dixon 1980:311). In addition, the O marker shows a fascinating parallel with Biri. It is unmarked with most nouns, as in Biri, but kinship nouns receive an object marker /-na/. Here then lies the solution to the puzzling Biri affix /-na/ found only on kinship nouns, which was discussed in 3.8.1. The /-na/ in Biri has not retained its original grammatical function, and is not a productive affix, as it is in Bidyara. It is possible that it was borrowed from Bidyara into Biri, losing its object-marking function in the transition.

The ablative marker is /-mundu/, as in Margany/Gunya, and also in Gangulu and Wadya. There is an allative case, which Biri does not have. The 'having' affix is /-bayi/, as opposed to Biri /-bari/. There is also a privative, which Biri lacks, and a semblative affix /-gadhi/, also in Margany/Gunya, which contrasts with the /-gamu/ semblative affix in Biri.

Unlike in Biri, there is no real distinction between adjectives and nouns in Bidyara; both have the same morphosyntactic possibilities.

Pronouns are very similar indeed to those in Biri. The stems are the same and the affixes are the same, except where case formatives differ between the languages. The main difference is that /-nya-/ is inserted between the stem and affix in Bidyara, corresponding to the /-ŋa-/ which serves the same purpose in Biri. Again, as in Margany and Gunya, there is a third person dual paradigm based on the stem /bula-/. Biri does not have this paradigm.

There are two parallel series of second person singular forms. Breen suggests that one is from Bidyara and one from Gungabula, a close dialect of Bidyara. This parallels the double paradigm which Biri has for the second person plural (see 3.4.1).

Demonstratives are different to those in Biri. Interrogatives, although differing slightly in form, are based on the same stems: ɲanhɖha 'who' and ɲanhi 'what'.

Verbal affixes show some degree of similarity:

	<u>Bidyara</u>	<u>Biri</u>
Past	-la	-li/-la
Pres	-na	-ŋa
Fut	-ŋa	-nha
Purp	-lgu	-gu
Reflex	-li	-li
Caus	-ma	-mba

The last three forms are common to the whole area. It appears that the Biri present and Bidyara future forms are cognate; one of them seems to have shifted in meaning.

Continuous and reciprocal forms are different. There is an affix /-yi/ which marks a subordinate verb; the Biri corpus has nothing similar in form or function. It may have had though; the Bidyara data is fuller than that of Biri. There is an intransitiver in Bidyara, which Biri does not have.

Bidyara shows an interesting set of what appear to be cross-reference markers which appear suffixed to verbs:

- rda non-singular object marker on sensory verbs
- ma non-singular object marker for other verbs

-Igarri plural subject marker

These affixes are not obligatory, and in fact are not usually used. This could be the remnants of a system of bound pronouns. Breen does not speculate on this. If they are remnants of a bound pronoun system, it is a system which has no formal relationship to the present system of bound pronouns in Gunya and Biri.

Directional adverbs are all different, as are all the emphatic clitics.

Another interesting parallel is the suffix /-mbarru/. Breen says that this forms an adverb from 'this', 'that' and 'two', to mean 'this side', 'that side' and 'on both sides'. He mentions that it could be interpreted as an inflexional suffix forming a type of locative (p. 147). Biri has this suffix, in exactly this function; it forms a locational adverb from a locational word (see 3.7).

There is a vestigial plural suffix /-nu/ which only appears on one word; gandu 'child'. This is an odd parallel with the Biri vestigial plural /-iny/, which only appears on yalu 'child'. The plural forms are not cognate however.

Bidyara has a semi-productive suffix /-gan/ which derives the feminine form of a noun. The remains of this suffix can be seen in Biri (see 3.8.4). This suffix appears in many eastern languages.

The negative particle garda 'no', 'not', corresponds directly to the Biri gara of the same function.

This alternation between the retroflex stop in Bidyara and the continuant in Biri, that is /rd/ and /r/, can be seen in many lexical items, for example:

<u>Bidyara</u>	<u>Biri</u>	
mardi	mari	'man'
marda	marā	'hand'
garda	gara	'no', 'not'
mumird	mamira	'kidney'
bandyurd	banydyur	'stomach'
yurdi	yuri	'meat'
dhagurd	dhaguru	'possum'
barrbirda	barrbira	'porcupine'
gagarda	gagara	'moon'
bandarda	bandara	'sky'
burdi	buri	'fire'
bulardu	bularu	'two'

It is obvious that there is a very close relationship between the Bidyara dialects and Biri. Shared lexical percentages with Bidyara and Garingbal are 62%, and Bidyara and Yambina are 44%. These are the Biri dialects closest to Bidyara. It is difficult to tell whether Bidyara and Biri are in fact separate languages or not. The shared lexical scores do not give a definite answer, and the grammar, while showing an obviously close genetic relationship, does reveal important differences, for instance in the demonstratives, the directional adverbs and some syntactic features.

GANULU

Ganulu was discussed briefly in 6.3.11. Ganulu is situated north of Garingbal. It appears to be within Biri territory, but it is actually more likely to be a dialect of the Bidyara language. The only information on Ganulu comes from a Curr word list, no. 157 'Head of the Comet River' (Josephson 1886). The author of this list says that it was spoken by the "Kanoloo" tribe. It is within the location given by Tindale for the "Ganulu" tribe, and therefore it probably is indeed a word list of the Ganulu tribe. It is obviously closely related both to the Biri language to the east and north and to the Bidyara language to the west. Ganulu shares 55% of its vocabulary with Bidyara, and 33% with the Biri dialect. With other dialects of Biri it shares no more than 45% of its cognates. The Ganulu word list does not seem to have any retroflex stops, which are characteristic of Bidyara, but it does contain some monosyllabic words:

taa 'mouth'
koo 'nose'
ngaa 'light'

Bidyara does not have a long /uu/ vowel, which presumably the /oo/ of "koo" represents, but the long /aa/ vowel is characteristic of Bidyara, and indeed does not occur in Biri. The evidence is slight, but it is in favour of Ganulu being a dialect of the Bidyara language, closely related, as we would expect, to Biri.

GAYIRI

Gayiri lies directly west of Ganulu, and is another Bidyara dialect (Tindale's Kairi). Curr 156i 'Nogoa River' (Middleton and Noble 1886) appears to be from the Gayiri dialect, judging both by the given location, which matches that given by Tindale for Gayiri, and by linguistic evidence.

The word list shares 46% of its vocabulary with Ganulu, but they do appear to be different dialects. Gayiri apparently has some retroflex stops:

mardi 'man' (cf. Biri mari)
tikardi 'cockatoo' (cf. Biri digari)
karkadda 'moon' (cf. Biri gagara)
mardu 'finger' (cf. Biri mara)

Retroflex stops do not occur in Biri, but they are characteristic of Bidyara.

Curr 156ii (Noble 1886) does not appear to be of the same dialect, although the given locations are the same.

The two lists share only 55% of their vocabulary, which is low even for lists of this quality, and indicates that although they are probably of the same language, they are almost certainly not of the same dialect. The list by Noble has a retroflex stop:

burdi 'fire' (cf. Biri buri)

There is also frequent loss of initial /g/:

abul 'snake' (cf. Bidyara and Biri gabul)
uma 'blood' (cf. Bidyara and Biri guma)
amu 'water' (cf. Bidyara and Biri gamu)
oka 'bark' (cf. Bidyara and Biri guga)

Loss of initial /g/ occurs in many Bidyara dialects, for instance Gunggari (Breen 1981a:298). Curr 156 by Noble is probably a Bidyara dialect, but probably not Gayiri; it is unknown what dialect it is however.

WADYA

Wadya was discussed briefly in 6.3.10. The source of this dialect is Breen (1967b) who provided a word list of 52 items and 13 sentences. The only location he gives is Springsure, where his informant came from. Tindale's area for Wadya is between the Expedition Range on the west and Dawson Range on the east, extending south from above Woorabinda to Bedourie. This is far to the east of Springsure. It is possible that Breen's location only referred to where his informant was at the time, not where the language came from.

The highest score with any Biri dialect is 68% shared cognates with Gangulu. This score indicates that Gangulu and Wadya are probably from two different languages. The cognates shared with the other dialects are very low: 58% with Biri, in the low 40% range with Yangga and Wirri, only 34% with Baradha, and 23% with Garingbal. These scores indicate very little relationship with the other dialects. From the little grammatical information that is available on Wadya, there are some similarities in the morphologies of Wadya and Gangulu; the three case formatives remaining are exactly the same as those of Gangulu, the present tense marker is the same as in one version of Gangulu, and the past tense marker has the same form as a Baradha past tense marker (see chapter 6). But these are not good indicators of genetic relationship, if there is no other corroborating evidence. As the score with the closest Biri dialect, Garingbal, is so low, and the other Biri dialect scores are also very low, it seems probable that Wadya is from a language other than Biri, although the two languages are related. Wadya shares 73% of its vocabulary with Bidyara; it could be that Wadya is actually another Bidyara dialect.

Wadya does have a retroflex stop, as many Bidyara dialects do, and the two morphological affixes known, past tense /-la/ and present tense /-na/, are identical to those of Bidyara, as are the three known case formatives.

Obviously there is a close relationship between the Bidyara dialects and Biri. The situation does seem to have been one of two separate but closely related languages, at the border of which frequent contact and borrowing has obscured the genetic picture. That is, the two languages have similarities which are due to common ancestry, and superimposed on these are additional similarities due to recent borrowing. However it is difficult to distinguish the genetic similarities from borrowing. This is not uncommon. It is just unfortunate that so many of the borderline dialects have been lost or are so poorly described; for four of the connecting dialects, Mian, Yiman, Wangan and Gabalbara, no information whatever remains.

This problem shows the vexed nature of the dialect versus language question in Australia. Here, as in many other parts of the continent, the question of whether a speech form is a

dialect of a language or a separate language cannot be determined with any certainty.

YIRANDHALI

Yirandhali forms a boundary at the west of Yilba and Mian, the unknown dialect. Only early sources remain for Yirandhali: Curr vocabularies nos. 129 'Upper Flinders, Hughenden, and Dutton River' (E. Curr 1886b); 130 'Watershed and Upper Portion of Cape River' (Armstrong 1886); 137 'Tower Hill and Cornish Creeks' (Dalhanty 1886); and 138 'Upper Thomson' (Christison 1886). In addition, Christison of Lammermoor, an early settler who lived with the Yirandhali people, provides a word list (published in Bennett 1927), which agrees relatively well with the Curr lists.

Note that the Dalhanty list is said by its author to be from the "Tateburra" tribe. However groups names ending in /bara/ are very frequent in this area, and they are clan names, not tribe names. It is likely that the "Tateburra" people were a clan of the Yirandhali group. The Curr word lists are all from the same area, all within Tindale's Yirandhali location, and they all appear to be of the same language. Thus they can safely be seen as the Yirandhali language.

Cognate comparisons show 52% shared vocabulary with Biri. Considering the poor quality of the data this is quite a high score.

The few pronominal forms extant are similar or identical to those of Biri:

I	gayu	
you	yundu	
my	gadyunda	(natoonda)
his	nuṅunda	(noongoonda)
your	yinunda	(yinoonda)

Note that the first and second person forms are based on retentions from proto-Australian, so they do not say anything about the relationship between Biri and Yirandhali.

The lists show some Bidyara vocabulary, as is to be expected of a dialect in that area, but there are none of the Bidyara features of monosyllabic words, a retroflex stop, a long mid vowel, and so on. This indicates that Yirandhali was probably more closely linked with Biri than Bidyara. The Yirandhali language will be discussed further in 7.2.

7.1.4 LANGUAGES TO THE NORTH

WARUNGU

Warungu lies to the north of Biri. It includes three dialects: Warungu, Gugu Badhun and Gudyal. Note that the locations for the Warungu dialects which Tindale gives are wrong; Warungu is the northernmost dialect, and Gugu Badhun is actually the dialect that borders on the Biri language, with Gudyal slightly to the west of Gugu Badhun.

The Warungu language borders on the Yilba dialect of Biri, with which it shares 48% of its vocabulary. There is a dialect chain which connects the Warungu dialect more closely with Biri however (adapted from Sutton 1973:49):

Warungu - 87% - Gugu Badhun - 65% - Gudyal - 53% - Yilba

Warungu, Gugu Badhun and Gudyal are very similar, sharing most of their morphology. For this reason Warungu will be looked at most closely as a representative of the three dialects. Tsunoda 1974a provides a grammar of Warungu.

Phonologically, Warungu differs from Biri in that it has no laminodental consonants.

The pronominal system is similar, although there are no bound pronouns. First person stems are the same, but case forms are based on the genitive stem, instead of the dative stem as in Biri. The second person stems are the same as in Biri, except the dual paradigm has yubala for Biri yibala. The third dual stem is bula, as in Bidyara and Margany/Gunya. Biri does not have this paradigm. Warungu always has /ny/ for Biri /nh/. Clearly these pronominal forms are closely related to Biri forms.

Interrogatives are similar to those in Biri, but have initial /w/ for Biri /ŋ/.

Demonstratives are different however. Case formatives are the same except for the ablative and comitative forms. These two cases can take further inflexions in Warungu, a phenomenon unknown in Biri.

As in Biri, Gugu Badhun has an optional kinship suffix /-na/, and the feminine /-gan/ also appears as a productive suffix.

There are two verbal conjugations in Warungu, as is common for many of the languages surrounding Biri. These conjugations correlate with but do not correspond entirely to transitivity. Biri has no verbal conjugations, and transitivity is never morphologically marked. All verbal affixes are different except for the familiar reflexive formative /-li/. There is an antipassive marker, and various devices for changing the transitivity of verbs, all unknown in Biri.

The pronouns and nominal morphology, as well as lexical and phonological similarities, all show a fairly close genetic relationship between Warungu and Biri, although not as close as that between Bidyara and Biri.

7.1.5 CONCLUSION

The only languages which show any connection whatever with Biri are the Bidyara dialects, Margany/Gunya, Yirandhali, Warungu and maybe Giya. These are all, unsurprisingly, languages of the Maric subgroup. In the next section the Maric subgroup will be discussed.

7.2 THE MARIC SUBGROUP

The so-called Maric subgroup is a large group of languages which stretches over central Queensland, from the Belyando river down almost to the New South Wales border. The Maric languages supposedly form a subgroup on the basis of genetic relationship. The name 'Maric' derives from the word for 'man', mari, which occurs in many of these languages (note however that Biri has bama 'man' in equal frequency, and Warungu has only bama).

There is some disagreement about what languages the Maric subgroup actually consists of. Beale's (1975) thesis on the Maric languages includes four subdivisions: north (Warungu and dialects); Central (Biri and dialects, Bindal, Yuru and Giya); South (Bidyara and dialects); and West (Yirandhali, Yiningayi and Ngawun). He does not

discuss his reasons for the inclusion of these languages. Neither does he discuss any Maric features or what it is that distinguishes Maric languages from other languages. But in fact it is by no means clear what languages should be included in this genetic subgroup. Sutton 1973a has Warungu and dialects, Bindal, Yuru and Giya, Biri and dialects, and Bidyara and dialects (but no Wadya). Sutton does not include Yirandhali, because it has less than 50% cognates with its two Maric neighbours, Yilba and Gudyal. It is unclear however why he includes Bindal, Yuru and Giya, which have much less than 50% shared cognates with Biri, their closest Maric neighbour; in fact Yuru shares only 13% with Biri! It seems that three groups within the Maric subgroup can be identified with certainty: Warungu and dialects; Biri and dialects; and Bidyara and dialects. Additions to these must be carefully considered in terms of phonological and grammatical features where available, and shared cognate percentages.

Bindal, Yuru, Giya, Yirandhali and Ngawun are all possible candidates for inclusion in the Maric subgroup. To begin with, these languages will all be examined for genetic connection to other Maric languages.

7.2.1 BINDAL AND YURU

Bindal and Yuru, the languages north east of the Biri dialect, were discussed in 7.1.1. It was found that only poor data, in the form of Curr word lists, remained for both, and cognate scores with Biri were 21% and 36% for Bindal, and only 13% for Yuru. These figures are very low for contiguous Pama-Nyungan languages, and certainly do not indicate a genetic relationship between Bindal/Yuru and Biri, their closest Maric neighbour. As there is no grammatical data to compare, we must go by just the cognate count; and this does not give us any reason to suppose that Bindal and Yuru are Maric languages.

7.2.2 GIYA

Giya was also discussed in 7.1.1. The one Curr word list remaining has 45% shared cognates with Biri. As was mentioned before, this figure is quite high. It does not necessarily indicate genetic connection however; if the two languages have been in close contact for some time they could reach the equilibrium level of about 50% shared cognates through borrowing. Phonology appears to be similar to Biri, as far as can be ascertained from a poorly transcribed Curr word list. Phonotactics too present no helpful information. Beale (1975:7-8) points out that although Giya has 40% shared cognates with Biri dialects in its immediate vicinity, it shares over 70% of its vocabulary with the whole Maric group. However he does not indicate which word lists specifically he used to arrive at this figure. But this figure, if correct, indicates that Giya is definitely genetically related to languages of the Maric subgroup. It is therefore included tentatively as a Maric language.

7.2.3 YIRANDHALI

Yirandhali was discussed in 7.1.3. Sutton's (1973) comment on the non-Maric status of Yirandhali was based on the shared cognate percentages of Yirandhali with Yilba (48%) and Gudyal (37%), the closest Maric neighbours of Yirandhali. Sutton argues that a score of less than 50% makes genetic connection between neighbouring languages unlikely. Note however that the actual score for Yilba is only 2% less than the cut-off mark. I

would hesitate to be too exact in situations of this kind; these scores are approximations anyway (my own score is actually 52%). The data for Yirandhali is very poor. Grammatical data is needed to make a definite decision, but there is none. It would be premature to deny the possibility of a genetic relationship between Yirandhali and the other Maric languages. It should be included, as Giya was, tentatively only.

7.2.4 NGAWUN

Ngawun is situated north-west of Yirandhali. Breen 1981b provides a grammar of Ngawun.

According to Breen (1981b:19), Ngawun and Gugu Badhun share 29% cognates. Considering the geographical distance and the number of other languages intervening between them, this figure is quite high. There are possible Maric characteristics elsewhere in the language.

Ngawun's phonology differs from other Maric languages in that it has a full retroflex series, including a stop, nasal and lateral. Some Bidyara dialects have a retroflex stop and nasal, but no Maric language has more than one lateral. In other respects the phonology of Ngawun is familiar. Monosyllables are rare, and words, as in other Maric languages, usually begin with a consonant and end with a vowel.

Case formatives show a common heritage from proto-Australian in the ergative, locative, instrumental and purposive forms. One parallel with western Maric languages of the Bidyara type is the ablative formative /-muntu/. This form appears in Gangulu, Wadya and some Bidyara dialects, and the fact that it also appears in Ngawun indicates perhaps that the proto-Maric ablative form was /-mundu/.

S/A Pronouns are formed from the following stems:

	sg	du	pl
1st person	ɲayu	ɲali	ɲana
2nd person	yundu	yibala	yara
3rd person		bala	dhana

The first and third person stems are common Australian stems, but the second person stems are more distinctly Maric. For example Biri has ɲaya for ɲayu, yinda for yundu, and yara for yura, but all other forms are identical. The forms ɲayu and yundu are found in Yirandhali also.

Verbal suffixes are mostly unfamiliar, except those retained from proto-Australian. These indications show that Ngawun could have been a Maric language; it is not possible to be certain.

7.2.5 CONCLUSION

The languages discussed do seem to have some genetic relationship; especially Biri, Bidyara and Warungu. But the term 'Maric' has some difficulties.

This Maric subgroup is an accepted subgroup, but in fact no-one has ever identified any proto-Maric features, or special Maric innovations. Beale's work on the Maric languages (Beale 1975) does not discuss this. The existence of the subgroup has never been justified at all. In fact, similarities between Maric languages are almost all retentions from proto-Australian. Much more work needs to be done on finding which languages should belong

in this subgroup, by finding Maric innovations, not shared proto-Australian retentions, before we are justified in talking about the Maric subgroup.

8. TEXT

murrigga mari wuna-lba-l-dhana yamba-gga
once man.ABS rest-CONT-PAST-3plS/A camp-LOC
Once men lived in camps.

mari wula-lba-li-la
man.ABS die-CONT-PAST-3sgS/A
A man would die.

wanydya-ri-l-dhana-gga yara nhani-gga gamba-nha-gu
move-COMIT-PAST-3plS/A-3sgO there ground-LOC cover-FUT-PURP
They would move him there into the ground to cover him.

gaynmirra yinda-lba-la
sun.ABS go down-CONT-3plS/A
The sun would go down.

gayurrba gangali-l-dhana
woman.ABS shout-PAST-3plS/A
The women would shout.

yama-li "gara guranda-nha-nda yinha-gu
say-PAST NEG return-FUT-2sgS/A here-DAT
They would shout: "Don't return here.

wugala-:ni wanydyanda-nda
over there-EMPH go away-IMPER-2sgS/A
Go away over there!

manhdha yidha-nh-ana yinda-gu gunha-gu
food.ABS take-FUT-1plS/A 2sg-DAT there-DAT
We'll take some food there.

gara guranda-nha-nda yinha-gu
NEG return-FUT-2sgS/A here-DAT
Don't return here.

yidharra-mba-nha-nda yalu-riny
scared-CAUS-FUT-2sgS/A child-PL
You will frighten the children.

yinda wanydyanda-nha-nda"
2sgS/A go away-FUT-2sgS/A
You go away."

nhula wanydyanda-li-la
3SGS/A go away-PAST-3sgS/A
He went away.

gara guranda-li-la
NEG return-PAST-3sgS/A
He didn't return.

yinhami-gga yamba-gga gara:ni dhana wuna-ga-dhana yinha-gu
this-LOC camp-LOC NEG-EMPH 3plS/A rest-PRES-3plS/A here-DAT
That night they do not stay here in this camp.

birrgagu yaga-lba-nha-dhana mari yanhi-nha-dhana yamba-gu
tomorrow rise-CONT-FUT-3plS/A man.ABS go-FUT-3plS/A camp-DAT
Next day they will get up and go to the camp

nhaga-nha-gu nhani gunha-gu wula-lba-li-la
see-FUT-PURP ground.ABS there-DAT die-CONT-PAST-3sgS/A
to see the ground there where the man died.

nhaga-nha-dhana dhina yama:ni wara-nha-dhana
see-FUT-3plS/A foot.ABS say-EMPH be-FUT-3plS/A
(if) they saw footprints, they would say:

"guranda-lba-li-la gugunda-gga"
return-CONT-PAST-3sgS/A night-LOC
"He returned in the night."

gara:ni nhaga-nha-gu dhina wanydyanda-li-la
neg-EMPH see-FUT-PURP foot.ABS go away-PAST-3sgS/A

(If they) don't see footprints, he went away.

gara:ni guranda-nha-la
NEG-EMPH return-FUT-3sgS/A
He won't return.

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The author is Senior Lecturer in the Department of Linguistics and Second Language Teaching, *Massey University*, New Zealand. The author has a PhD in linguistics from the University of California at San Diego.

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