

## Lieferschein

Universitätsbibliothek Frankfurt am Main

- Dokumentlieferung –  
Bockenheimer Landstr. 134/138

D-60325 Frankfurt am Main

Tel.: ++49-69-798-39202  
Fax: ++49-69-798-39095  
Email: fernleihe@ub.uni-frankfurt.de

### Empfänger

MPI fuer evolutionaere Anthropologie

Bibliothek

D-04103 Leipzig

Deutscher Platz 6

### Angaben zur Bestellung:

Bestelldatum: 2013-02-21 15:56:14  
Bestellnummer: SUBITO:VE13022101973 E000036765  
Name des Bestellers: MPI fuer evolutionaere Anthropologie  
Benutzerkennung: SLS02X00039  
  
Lieferdatum: 2013-02-21 19:21:05  
Lieferpriorität: NORMAL  
Aktueller Lieferweg: Email  
E-Mail Adresse: subito@eva.mpg.de

Bemerkungen zur Auslieferung:

### Angaben zum Dokument:

Signatur: 8 B 14.139/1  
Autor:  
Titel: Transactions of the Royal Society of South Australia  
Jahr: 2009  
Band / Jahrgang: 133 / 2  
Seiten: 219-256  
Aufsatzautor: Breen  
Aufsatztitel: The Biri dialects and their neighbours  
ISSN:  
ISBN: 0372-1426  
CODEN:

Ihre Bemerkung zur Bestellung: harald hammarstrom

## subito Urheberrechtshinweis



Die Bestellung und Nutzung der über subito gelieferten Aufsatzkopien unterliegen den urheberrechtlichen Bestimmungen. Mit der Registrierung bei subito verpflichten Sie sich, diese einzuhalten, d.h. insbesondere, dass die Kopien ausschließlich zum eigenen Gebrauch bestimmt sind und nicht an Dritte weitergegeben werden dürfen. Sie dürfen ohne Genehmigung des Verlags nicht zum Wiederverkauf, Wiederabdruck, zu systematischer Verteilung, Emailversand, Webhosting eingeschlossen institutionelle Repositorien/Archive oder jedweden anderen kommerziellen Zweck verwendet werden.

Sofern Sie eine Lieferung per Email oder FTP erhalten, dürfen Sie die Kopie nur einmal ausdrucken und müssen diese anschließend dauerhaft löschen.

Die Kopien sind mit einem Wasserzeichen versehen, welches ein Urheberrechtsvermerk enthält. Das von subito e.V. angebrachte Wasserzeichen darf nicht entfernt werden.

- Sprigg, R.C. (1984). 'Arkaroola – Mount Painter in the northern Flinders Ranges, S.A. The last billion years' (Lutheran Publishing House).
- Tomlin, S.G. (1979). Bragg, Sir William Henry (1862–1942), *Australian Dictionary of Biography* 7: 387–388.
- Ward, L.K. (1913). The Mount Painter District. *Mining Review, South Australia* 17: 27–33.
- Ward, L.K. (1914a). The Radium Hill Mining Field. *Mining Review, South Australia* 19: 26–31.
- Ward, L.K. (1914b). The Radium Extraction Company Mine at Mount Painter. *Mining Review, South Australia* 20: 36–40.

## THE BIRI DIALECTS AND THEIR NEIGHBOURS

GAVAN BREEN

Institute for Aboriginal Development, PO Box 2531, Alice Springs NT 0871, Australia.  
Ph (08)89511342, Fx (08) 8953 1884, Email: [dictionaries@iad.edu.au](mailto:dictionaries@iad.edu.au)

## Abstract

The literature on a large group of indigenous dialects of central Queensland, forming a language which has been called Biri after the best-known member, and on the neighbouring languages, has been reviewed in the light of the many nineteenth and (mostly early) twentieth century sources, published and unpublished, familiar and recently unearthed, on which the language and tribal maps of the area have been or should have been based. The main publications on this area have been found to be incorrect in a number of respects. More probable interpretations of the data have been proposed, involving, for example, considering Tindale's (1974) tribal map of Australia, moving some groups away from their previously mapped location, adding some previously unrecognised groups (in some cases with still unknown names), and merging two previously separated groups.

KEY WORDS: Australian languages, central Queensland, tribal territories, Tindale map.

## 1. Introduction

The 'Biri dialects' are a group of twelve, more or less, dialects formerly spoken in central Queensland. These are argued by Terrill (1998) to be dialects of a single language, to which she, arbitrarily but reasonably, gives the name of one of the dialects, Biri. Another dialect name, Gangulu, also has been generalized to cover much of the area of this language, first (as 'Kaangooloo thaa') by McIntosh (1887). This language forms one of the branches of Mari (also called Maric, see Barrett 2005). This is (as Barrett points out) approximately the same as Schmidt's (1919a,b) 'Nord-Central-Gruppe', and part of O'Grady *et al.*'s (1966) Pama-Maric Group (although there are some errors in their listing, with, for example, Gangulu being excluded). Schmidt (as Barrett also notes) pioneered the use of the word *mari* ('murri' in his spelling) 'man' to refer to these languages.

I agree with Terrill's analysis in general, but not with several of the details of assignment of material from old sources (the only sources for most of the dialects), and in one case from a modern source, to various dialects. In addition, some conclusions reached by Beale (1975) prove to be unjustified. Furthermore, a large quantity of additional, albeit poor quality, information, from various sources, has been unearthed by Jefferies (2005, 2006) and this has allowed some unsuspected but serious errors to be corrected.<sup>1</sup>

Terrill (1998) is based on a BA Honours thesis written by the author, as a student in the Department of Linguistics at the Australian National University. The first part is a salvage grammar of the Biri dialect of the Mari (or Maric) subgroup of central and southern Queensland. The second part deals with the language of which Biri is a dialect and briefly with its neighbours. It is this second part for which I am attempting to provide a more probable assessment of the available facts.

The available facts include:

- Tindale's (1940, 1974) mapping of the area, giving tribal boundaries and associated names; he also collected wordlists of a number of languages;
- Information collected by early anthropologists (or pre-anthropologists) such as W.E. Roth, R.H. Mathews and A.W. Howitt;

<sup>1</sup> The methods, aims and results of Jefferies' analysis of his material differ from mine.

- Wordlists collected by amateurs (mostly by correspondents of E.M. Curr, but important individual collectors include Archibald Meston and Thomas Illidge) from various localities in the area;
- Material collected by professional linguists.

For the majority of the languages and dialects of the area we have only Tindale's mapping and Curr vocabularies. There is no linguistic material at all on some.

The amateur wordlists sometimes gave a language name or a name for the people, and where this corresponded with the name given by Tindale it can reasonably be assumed, unless there is good evidence to the contrary, that this is the actual language name. When it did not, a first approximation is to assume that the name of the language is the name given by Tindale for the area in which the source location falls. This was done by Oates and Oates (1970), not always accurately, however. While there are errors for which the compilers must be responsible, compilers of an Australia-wide survey such as this should not necessarily be responsible for noticing that the language of a wordlist does not match the area from which it was collected, as is the case for the list by Armstrong (1886) mentioned by Terrill (1998:68). This can be left to the linguist making a more detailed study of a particular area; in this case Sutton (1973a:19) made the correction.

For professional linguists, who in this area were reduced to working with partial speakers who were often not living in their ancestral country and did not always know the name of their language, it may be necessary to compare vocabulary they have collected with other vocabularies from better-documented sources, and note peculiarities of the phonology, in order to work out the identity of the language. Some examples of inadequate research will be referred to in several subsections below.

Comparing the vocabularies of amateur wordlists as a method of identifying the language or dialect of a particular list, or determining how closely related the languages of two lists were, is fraught with difficulty. Terrill (1998:67) herself comments on the likelihood of getting 'artificially low scores', because of poor spelling, printing mistakes or misunderstandings, for the Curr wordlists. Sutton (1973a:19) gives some examples of how mistakes can get into wordlists; see also Breen (1990:67–68) on the effect of errors on calculations of similarity. An example of a particularly poor effort at collecting a vocabulary is that for Charters Towers from (or on behalf of) the Chief Commissioner of Police, Brisbane (1886; Curr 1886–1887 no.128); it has words for only 67 of the 123 items in the list, and it has 'alla' for both 'tooth' and 'tongue', 'abra' for 'water', 'thirsty' and 'drink' (and 'oobra' for 'rain'), and 'yamba' for both 'camp' and 'sleep'.

The effect of poor quality of wordlists on apparent percentage of common vocabulary is shown in Table 1, giving counts for vocabularies in Yirandhali (to the west of the northernmost Biri dialects). These are my counts, but Sutton (1973a:240) has similar figures. The table is from my report to the Central Queensland Land Council: See the Acknowledgements. In notes I refer to this report simply as CQLC. The figures in brackets, in this table and following any percentage cognate figure elsewhere in this paper, denote the number of items counted. EC is Edward Curr and MC Montagu Curr—collectors of the respective lists. The names are the tribal names as given by the collectors.

Table 1. Cognate counts for Yirandhali sources

	Dalleburra	Pooroga (EC)	Pooroga (MC)	Tateburra	Mungerra
Jirandali	77 (47)	69 (45)	61 (36)	77 (44)	69 (47)
Dalleburra		72 (93)	59 (61)	58 (85)	49 (91)
Pooroga (EC)			64 (64)	55 (89)	44 (94)
Pooroga (MC)				43 (60)	47 (59)
Tateburra					45 (85)

If Tindale's (Jirandali<sup>2</sup>) figures are left out of consideration one might conclude that the Mungerra list (at least) is in a different language, and indeed Beale (1975),<sup>3</sup> without the benefit of Tindale's list, came to that conclusion. Introducing Tindale's higher quality wordlist into consideration makes it clear that the other wordlists are much more closely related than one would have thought. (Remember that Tindale's list is for just one of the tribal groups/dialects; we don't know which.) If Sutton's (1973a:240) supposition is correct, that Tateburra is a misreading for Taleburra and is therefore the same as Dalleburra, then these are the same dialect, despite the mere 58% they seem to have in common. If the amateur lists were of the same quality as the Tindale lists there would no doubt be a further dramatic increase in the 'same' percentages. All the lists must represent dialects of one language. A similar result is obtained, with rather smaller numbers of comparable items (16 to 25), with a wordlist collected by Osborne Johnson from Paddy, King of Redcliffe (a station a short distance southeast of Hughenden) in 1890<sup>4</sup>: percentages in common with all of the above nineteenth century wordlists were 50 or a little less, but with Tindale's list 77 (i.e. thirteen words out of seventeen).

It follows that, in dealing with a large group of dialects, as we have here, it is not always possible to identify a wordlist as belonging to a particular dialect by counting the percentage of the words in it that are shared with wordlists of other dialects, or even the same dialect. To see this, consider a dialect chain A B C D. One linguist's wordlist is available from A's area, nothing from B's, and one amateur wordlist from each of C's and D's. A and B share 90% of their vocabulary, as do B and C, and C and D, while A and C share 81%, as do B and D. (I assume that, for example, A and C don't share any items that are not in B; in a real situation they would probably share a small number.) A and D share 73%. Because of the poor quality of the lists the comparison of C and D indicates a figure of only 60%, while comparison of the C wordlist with the higher quality A wordlist gives a figure of 75%. The temptation is to assign the C wordlist to dialect A, and to assume that its apparent provenance in the C area is a mistake.

Furthermore, it is well known that the speech of people whose land is close to a named dialect boundary might be closer to the next dialect than to that of other more (geographically) distant speakers of their own (according to the name) dialect (see, for example, Breen 1981a:279).

In some cases I find Terrill's method of deciding which dialect a particular source belongs to, insofar as I understand it, unsatisfactory.<sup>5</sup> I would consider items of evidence in the following order of decreasing weight:

1. Dialect or tribal name as given (if given) by the source;
2. Location of the group speaking the dialect;
3. Comparison of the vocabulary with other sources of what seems to be the same dialect;
4. Comparison of the vocabulary with vocabularies of other nearby dialects.

I would require fairly strong evidence at a lower level to counterbalance the evidence at a higher level (and such strong evidence certainly exists in some cases; see Sutton 1973a:16–20).

As well as vocabulary, when considering evidence of types 3 and 4, it is advisable to note aspects of the phonology where this is possible. There are a number of sound changes observable in various parts of the Mari area even with amateurish transcriptions. These include loss of initial /g/ (thus *gamu* in some dialects, *amu* in some, 'water'), stop /rd/ corresponding to glide /r/ (*burdi* in some dialects, *huri* in many, 'fire'), change of /r/ to /y/ after /a/ (*gulbari*, *gulbayi* 'emu', *waragan*, *wayagan* 'crow') Some other changes, such as that exemplified by Gunya *nhula*, Bidjara *nula*, Gunggari *ngula* '3sgNOM' or that exemplified by Margayn (Margany) *barri*, Biri *bari*

<sup>2</sup> Note that Tindale and also Holmer use *j* in Aboriginal language words and language names where other writers generally use *y* (except perhaps in digraphs *dj* and *tj*).

<sup>3</sup> I have not seen this work; my information on it comes from personal communications from Bevan Barrett and Harold Koch.

<sup>4</sup> One of the many wordlists for which I have to thank Tony Jefferies.

<sup>5</sup> This paragraph from CQLC.

<sup>6</sup> Digraphs used include those with *r* as first member for retroflex consonants (*rd*, *rn*), those with *h* as second member for interdental consonants (*dh*, *nh*), *dj* for palatal stop, *ng* for velar nasal and *rr* for trilled or tapped rhotic. I use *yn* instead of *ny* for the palatal nasal when it is word-final or the first member of a heterorganic cluster. I simplify homorganic clusters *nhdh* and *nydj* to *ndh* and *ndj* respectively.



'stone' are not likely to be detectable, however, in amateur transcriptions. Barrett (2005:46–49) summarizes sound changes in Maric (although perhaps over-rating the ability of the transcriber in some cases).

An interesting example of clash between different items of evidence is the case of Hodgkinson (1886a) (vocabulary no. 121 in Curr).<sup>7</sup> He gives the language name as Brecaba, which seems to be a variant of Birigaba, a name used for Biri. But it is located in Gugu-Badhun country. Sutton (1973a) says that it is definitely not Gugu-Badhun and that it bears a strong resemblance to Biri. Terrill says it is Biri but notes that 'Cognate comparisons are not particularly helpful with this list; it scores 51% with the Biri dialect.' She goes on to say: '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 'Brecaba', and that it is in fact the Biri dialect.' But surely the location and the low cognate count must be considered as evidence to the contrary. However, I obtained figures of 62% (84) with Biri,<sup>8</sup> 42% (93) with Gugu-Badhun, 53% (94) with a Yilba list, 47% (75) with Muirhead (probably Yangga) and 46% (98) with Bridgeman (Wirri). Twelve of the items which did not match Biri did match Gugu-Badhun (and some of them were in lists from other northern Biri dialects). It is probably Biri contaminated with Gugu-Badhun (so I cannot quarrel with Terrill's conclusion). Sutton (1973a:17) notes that:

There was a camp of Birigaba native police stationed on the upper Burdekin (16 miles upstream from Valley of Lagoons Station, according to my main Gugu-Badhun informant), in early times.

(See also Sutton's 1973a:16–17 assessment of Curr's list no.114.) To further complicate the matter, Curr says that Hodgkinson obtained the vocabulary from 'a very intelligent Brecaba woman who lives at Maytown on the Palmer River.' This makes me wonder whether there is confusion here with another of the lists that Hodgkinson sent to Curr; perhaps the one from Princess Charlotte Bay (1886b), or the one from Thornborough Diggings (1886c). But certainly there is no contamination from either of those areas in the 'Brecaba' vocabulary.

Terrill and I are in agreement in giving first priority to the dialect name, in the minority of cases where it is given, but not in the weight to be given to other considerations. In particular, Terrill disregards the location in some cases and assigns the vocabulary to a particular dialect because it seems to have more in common with that dialect than with others, or perhaps even because it has a lot in common with that dialect. In view of the variability of the quality and reliability of the old amateur wordlists, as discussed above, this is an unwise procedure. Vocabulary counts can be a good indication that a list belongs to the Biri group of dialects, but are not a good indication that it belongs to a particular dialect in that group.

## 2. The languages

Dialects of the Biri dialect area, and (dialects of) neighbouring languages as they appear on Tindale's (1974) map, but with the names spelt as by the most authoritative known linguistic source on the language (even though the only changes might be to make the name fit better with the known facts about the phonology of languages in the area), are as follows:<sup>9</sup>

From north to south, mostly down the coast but heading inland at the southern end: Bindal, Yuru, Giya, Ngaro, Yuwibarra, Guynmal, Dharumbal, Bayali, Tuluwa, Gureng-Gureng, Guweng-Guweng, Daribalang, Waka-Waka, Wuli-Wuli, Yiman. The 'Bindal' area contained at least two languages. Yuwibarra is a variety of Biri, and I think is probably part of Wirri, as explained below. Yiman, south of Tindale's Wadja area (where

<sup>7</sup> This and the next paragraph from CQLC.

<sup>8</sup> Earlier I got 58%. One tends to get higher scores as one becomes more familiar with the material; for example, one realises that a term given in one wordlist for 'snake', say, is specific and should not be counted against the (desired) generic term in another list. No doubt revision of the other Biri dialect scores would result in a higher score too, because, for one thing, I would not count 'native companion' because the word given by Hodgkinson, 'burgum', is a version of a common word for the plains turkey (for which, in fact, Hodgkinson's informant gave the Gudjal word).

<sup>9</sup> These two paragraphs adapted from CQLC.

I have tentatively placed Mandalgu) and east of Gungabula, has been classified as a Mari language, but there seems to be no evidence for this and it is certainly (as Jefferies 2005 finds) a Waka-Waka dialect or a group of Waka-Waka dialects (see §6.9).

Biri dialects, starting again in the north and moving south, then west: Biri, Yangga, Yilba, Miyan, Yambina, Wirri, Gabulbarra, Baradha, Baranha, Yetimarala, Garaynbal, Gangulu (with other dialects extending into the area Tindale gives to Wadja) and an unnamed dialect on the Brown River.

Other Mari languages/dialects contiguous with Biri dialects, starting in the south: Gungabula, Nguri, Bidjara, Ganulu, Gara-Gara and Ara-Ara (Tindale's Kairi), Yagalingu, Yiningayi, Yirandhali, Gudjal. Another language, Wadjigu, that I have recorded from a speaker from Rolleston, seems to have been located in the area where Tindale places Garaynbal. I place Garaynbal in the northern part of Tindale's Ganulu (Kanolu) area, as indicated by several sources. I believe Jefferies (2006) is correct in concluding that Tindale's Wadja is my Wadjigu, and I argue that it was not located in the area where Tindale placed it.

Nothing is known of the dialect called Wan.gan. It is south of Yambina, west of Baranha and Gabulbarra, north of Gara-Gara and east of Yagalingu. It could be a dialect of the Biri group or of the Bidjara group.

Locations of each of these, and sources of linguistic information on them, will now be considered. The order will be: Biri dialects, other Mari dialects, probable Mari dialect with no attestation, other languages. Tindale (1940, 1974) will be the default authority on boundaries; his boundaries will be accepted as probably correct unless there is evidence to cast doubt on them. Despite criticisms of Tindale's concept of the tribe (e.g. in Peterson ed. 1976, Sutton 1978), of some of his locations of tribes (see below, also Breen 1990: 22, 23, 27, 69, 109, to give only references concerned with southern Queensland languages) and of his methods of relating information gathered from his interviewees to dialect names (Jefferies 2006, e.g. Part 2:324–329, Part 3:40), there is simply no other documentation in many cases. I will also give local group or clan (or 'horde') names given by Tindale, but without all the variant spellings.

## 3. The Biri Dialects

Text on each dialect begins with the name (as the heading), followed by Tindale's version of the name in brackets, followed by Tindale's notes on its location and other comments.

### 3.1 BIRI<sup>10</sup>

(Biria): 'On Bowen River north to junction with Burdekin River; east to Clarke Range; west to Leichhardt Range; south to Netherdale.'

The people were called Birigaba. A possible variant Biriya is indicated by a spelling Brecaba (see above) and also (as Sutton 1973a:18 noted) a place name Briaba. Scott's (1886) Perenbba may be a misreading of Perecaba; note the comparable suggested source for Euronbba mentioned below (§6.2).

Biri has been recorded by several linguists, notably Beale (1974), who produced a brief grammar and vocabulary based on his work, essentially with a single informant. Terrill (1998) expanded this study and published a grammar, mainly based on Beale's work, however (since his informant was the only one with a fair knowledge of the morphology). It is not clear, however, that she has listened to the tapes herself and checked Beale's transcripts, which I (having recorded a small quantity of Biri myself) think should be done. She complains at one point (1998:8) that:

When linguistic sources disagree over a transcription the decision [as to what is correct] 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.

<sup>10</sup> Sub-sections 3.1 to 3.7 adapted from CQLC.

But surely when linguistic sources (normally based on tape recordings) disagree the most reliable way for a competent linguist to resolve the disagreements is to listen to the tapes and check the transcripts.

Details of work done by other linguists who have recorded some Biri are listed by Terrill (1998:69) and, with one correction, in §3.15 below. There is also a list from Tindale (1938a) and a list from Curr (Hodgkinson 1886a), discussed above. Another list identified by Terrill as probably Biri and by me as probably Wirri is discussed below (§3.5).

### 3.2 YANGGA

(Jangga): 'Eastern headwaters of Suttor River; south to Glen Avon; at Yacamunda and Hidden Valley; northern boundary unknown.' Durroburra were a northern group.

Yangga was spoken west of Biri. Tindale gives Muirhead in Curr (1887) as a source for this language and also for Miyan. Beale (1975) assigned this vocabulary to Yilba. Terrill (1998) says it is Wirri. Tindale is undoubtedly more correct; the location for this wordlist as described and mapped by Curr is not precise but is clearly in either Yangga or Miyan territory. It is too far south for Yilba (notwithstanding that the northern boundary of Yangga, according to Tindale, is unknown), and much too far west for Wirri. If the presence of *miyan* as the word for man is diagnostic for Miyan, we can conclude that Muirhead's list is in Yangga. However, Muirhead, who was a correspondent of AW Howitt, owned Elgin Downs Station, whose homestead, on Mistake Creek, is near the junction of Miyan, Yangga and Yambina territories, and, to judge from material quoted by Jefferies (2006, Appendix, note 27; pages not numbered but about the eighth) it seems likely that his wordlist comes from people living west and south of there, towards and on the Belyando River, and so probably on Miyan country.

I found that Muirhead's vocabulary had 84% (51) in common with Tindale's (1938a) Widi (= Wirri), 63% (67) with Biri (Beale 1974), 86% (77) with Miyan (MacGlashan 1887) and 62% (81) with Yambina (Wilson and Murray 1887). It shares some of the same terms, for example the words for 'nose', 'fish', 'possum', as MacGlashan's vocabulary does with Bidjara dialects, although both are clearly Biri dialects. Curr's no.143 (Muirhead and Lowe 1887) includes two wordlists: Muirhead's and one by Lowe. The latter is not Miyan and is very likely Yangga.<sup>11</sup> It has only 54% (89) in common with MacGlashan, but has 67% (72) with Muirhead, 68% (41) with Tindale's (1938a) Jangga (Yangga) and 75% (44) with Tindale's Widi (Wirri). Curr's no. 144, for 'Logan Creek and part of Suttor and Mistake Creeks' (Anonymous 1887), left 'unallocated' by Terrill, also clearly belongs in this area, probably Yangga but possibly Yambina. The anonymous contributor was a resident of Avon Downs Station, on the boundary between Yangga and Yambina. The list shares 85% (62) with Muirhead's list, 81% (42) with Tindale's Jangga and 63% (78) with Wilson and Murray's (1887) Yambina list. It also shares 63% (84) with the MacGlashan Miyan list and 65% (55) with Lowe's. It differs from Lowe's in that the latter has lost initial /g/ from most words in which the former, and other lists that seem to belong to this area, have it. I conclude, but not confidently, that it is Yangga.

As explained in the following section, I have tentatively assigned to Yangga two wordlists (M. Curr 1886a and Kent 1886) that Sutton and Terrill assigned to Yilba. The wordlist collected by Rigsby (1987) from a white man, Jack Quinn, is of what was said to be the Suttor River language, so it could be Yangga. However, he learnt the language from workmates and at various localities from that area to as far south as Baradha country, so it will probably be impossible to assign it to a particular dialect. It has 80% or more in common with Biri, Baradha and various supposed Yangga sources, but only 50% (of 30 words) with M. Curr (1886a).

The introduction to Curr's lists no.143 give a list of tribal names and locations; these refer to several dialect areas, some belonging to the Biri group and others perhaps to the Bidjara group (see §4.7).

### 3.3 YILBA

(Ilba) '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. Six hordes are

known. One, the Munkibara, is also claimed as a Mian tribe horde. The name Eneby may be Curr's misreading of Elleby.'

Roth (1910:83) gave 'Yilbar-Kappa' as the name of the Charters Towers language.

Alternative names or group names include Yukkaburra, Munkibara, Moothaburra, Mungerra, Pagulloburra. However, the name Mungerra seems to apply to a Yirandhali group; see §§1 and 4.9. Eneby was Curr's spelling of the language name. Sutton's (1973a) map 2 shows a placename Eneby on the Flinders Highway just east of the Burdekin.

Yilba is the most deviant of this group of dialects, and in the most outlying area. Sources listed by Sutton (1973a:239) are:

- Curr II p.456 & 457, No.127 Porter's Range, by M. Curr
- Curr II p.458 & 459, No.128 Charters Towers, from the Chief Commissioner of Police, Brisbane
- Curr II p.468–483, No.131 Natal Downs Station, Cape River, by F.M. Tompson and W. Chatfield; on p.477–9 are approximately 150 extra words by Chatfield, then a wordlist from Tompson on p.480 & 481, and a wordlist by Chatfield on p.482 & 483
- Curr II p.484 & 485, No.132, Ravenswood, Upper Burdekin, by W.H. Kent.

Terrill (1998:69) gives the same list and also Chatfield (1873–4) and Beuzeville (1919). These two lists are rather different, but clearly not independent. Chatfield's is larger and more reliable, and is the same, or almost the same, as his material in Curr. Chatfield (1873–4:264) gives:

Tribes speaking this language, or rather dialect, with a slight difference in each tribe.

Yückaburra (supposed to be the original stock).  
Peghullaburra.<sup>12</sup>  
Woccüllaburra (Eel nation).  
Goondoolooburra (Emu nation).  
Monkeyburra.  
Monghuburra.

Another useful source that has recently come to light (thanks to the efforts of Tony Jefferies) is Barnett (1891), containing a list of about 100 words from Ukalunda, near the junction of the Burdekin and Belyando (or Suttor, on some maps) rivers. This is in the same district as the Porter's Range and Ravenswood lists (see above), and its identification will be considered below in conjunction with theirs.

Sutton (1973a:18) notes also that the vocabulary from Curr (no.122) labelled 'Clarke or Cape River' (de la Tour 1886) is definitely not from the Clarke River and seems to be Yilba from the Cape River. It is not a normal Curr-type wordlist and contains only a few items comparable with other Cape River wordlists, but these 'show enough accord for it to be Yilba.' (The other wordlist in no.122, Lukin 1886, is identified by Sutton as Gudjal.)

The vocabulary in Curr's no.123 'Top of the Range near Dalrymple' (Armit 1886) could be Yilba (see also §6.1). Note, by the way, that Dalrymple — about 50 km northwest of Charters Towers — is not found on some modern maps.

A list of about 150 words, headed 'Homestead blacks, Hughenden line', was collected by Archibald Meston, about 1900 (Meston nda). Despite the location, this seems to be Gudjal (as observed also by R.M.W. Dixon, p.c., and note Tindale's remark, quoted in §4.10, about their move south in the early days of settlement). It has 67% (48) in common with Gudjal, 52% (106) with Gugu-Badhun (not contiguous) and 48% (94) with

<sup>11</sup> Breen (1990) tentatively (and wrongly) suggested that Lowe's wordlist might be of Yagalingu.

<sup>12</sup> The italic *h* apparently stands for 'hard'; Chatfield also uses italic *s*, presumably 'soft'. Both are used only after *g*. With *s*, the sound of the *g* is what I am writing as *dj*. With *h* it is [g], or if *n* precedes the *g* it seems to be either [ŋ] (the velar nasal) or [ŋg].

Yilba. Much of this list has been copied out again and appears in Meston's papers under the heading 'Aboriginal words used in central district, Clermont, Queensland' (Meston ndc<sup>13</sup>). The vocabulary fits much less comfortably in the Clermont area: counts with local Biri dialects are similar to the Yilba figure above (but the numbers of comparable items are down around the 30 mark), and counts with nearby Bidjara dialects give figures of well under 50%.

I was not able to locate Porter's Range on a map, except on the Curr map, where it is placed south of Ravenswood and north of the large loop of the Burdekin River. It would seem to be part of the Leichhardt Range just north of the river. Porter's Range, Ravenswood and Ukalunda, all the same area, which I will call the Ravenswood area, seem to be too far east for Yilba. The area in which they lie is in 'Warungu' (i.e. Gugubadhun; see §4.10) country according to Tindale (1974). However, these two wordlists are not in Gugubadhun; I found that the Porter's Range list has 37% (52) in common with Gugubadhun, the Ravenswood list (which has only 38 words) has 32% (28) and the Ukalunda list has 35% (85). Sutton's (1973a:239) comparisons of the first two of these wordlists with his other three Yilba sources, with my added figures for Ukalunda, are given in Table 2.

**Table 2.** Comparisons of Ravenswood area sources with Yilba sources

	Ravenswood	Ukalunda	Ch Towers	Cape R. (T)	Cape R. (Ch)
Porter's Ra	53	69 (55)	63	59	63
Ravenswood		63 (27)	45	66	64
Ukalunda			74 (39)	71 (55)	69 (75)
Charters Towers				63	70
Cape R (Tompson)					72

I have also made comparisons of these Ravenswood area lists with the two 'Bindal' lists from Curr no.134 (Bindal being the language to the east of their area according to Tindale; C and G stand for the names of the two collectors, Cunningham and Gorton), with Biri (Beale's vocabulary), with Yangga (Tindale's Jangga) and with the anonymous Logan Creek wordlist, Curr no.144, these being the dialects to the south and the anonymous list being, apart perhaps from Tindale's, that geographically closest to their area (albeit a long way south). The figures are given in Table 3.

**Table 3.** Comparison of Ravenswood area and neighbouring languages

	Curr 134 (C)	Curr 134 (G)	Biri	Logan Ck	Jangga
Porter's Range	31 (95)	22 (67)	54 (82)	61 (71)	61 (44)
Ravenswood	31 (35)	25 (28)	50 (30)	57 (35)	68 (31)
Ukalunda	29 (54)	22 (41)	67 (79)	74 (54)	71 (48)

Unfortunately, my examination of the data, as presented in Tables 2 and 3, does not yet even provide convincing evidence that the three Ravenswood area wordlists belong to the same dialect, let alone which other wordlists they should be grouped with. Since the figures for comparisons with Yilba and with Yangga are so close, and in view of the fact that Tindale was not able to find a northern boundary for Yangga, and

<sup>13</sup> However, there is another list with the same name (Meston ndf), and clearly belonging to this district, so this may not be Meston's doing.

notes on his Yangga vocabulary 'of upper Burdekin', it seems wiser to assign the area to Yangga rather than to Yilba (which would require Yilba's eastern boundary to be extended further to the east).

Sutton (1973a), using Tompson's and Chatfield's lists as more representative of the dialect, found that Yilba had 65% in common with Biri, while Terrill (1998) found that various Yilba sources had from 61 to 72% in common with Tindale's Jangga list — the only Yangga source she recognized.

### 3.4 MIYAN

(Mian): 'Lower Belyando River north to Mount Douglas; at Bulliwallah; west to Dividing Range; south to Lake Galilee and Labona. (mian = man).'

Terrill (1998) found no data for this dialect, and left it out of her revised map. This is the dialect that has the word *miyan* for 'man', as Tindale (1940, 1974) noted; he was presumably told it by his informant. He gave two sources, wordlists by MacGlashan and Muirhead, the latter obviously doubtfully, as he named it also for Yangga (see §3.2). MacGlashan is the only one apart from Tindale to give the word *miyan* (his 'meean') for 'man' in a Mari dialect (but there is one vocabulary, Armstrong 1886, apparently collected in Yilba country but identified by Sutton as Yirandhali, that has what seems to be *miyana*, and *miyan* is found also in Waka-Waka, southeast from the Mari area). The location of MacGlashan's vocabulary is squarely in the area that Tindale gives for the dialect. Terrill assigned it to Wirri, but it is even further from the Wirri area than Muirhead's list. Beale (1975) called it Yilba, but it is too far south.

### 3.5 WIRRI

(Wiri): 'On Coast Range behind Mackay; inland to Nebo and heads of Suttor and Bowen Rivers; on Connor and Denham Ranges; inhabitants principally of rain scrub country.'

(Terrill 1998:71 repeats this with Brown River instead of Bowen River.) Holmer's informant thought of Wirri as the 'Clermont language' (see below) but Clermont is a considerable distance west and south of Tindale's location. Meston (see Terrill 1998:71) placed it much further south again, at Emerald; Terrill dismisses this with 'if his locations are as unreliable as his transcriptions, we can safely disregard this placement.'

Wirri has been studied to some extent by modern linguists: Estrella Aguas recorded 18 sentences in 1964 (AIATSIS archive tape A1301), which Peter Sutton (1973b) transcribed. N.M. Holmer collected a vocabulary and some grammar. His notes (1983:282) about his informant, however, do not inspire confidence in the identification of the dialect she spoke; she called it Wirri but said it was the 'Clermont language' and that she and her family came from Clermont.<sup>14</sup> However, comparison of his material with that from other sources suggests that there is no other reason to doubt his material. Speakers of a number of languages gravitated to Clermont; I don't know when, but I found partial speakers of several languages there in the 1970s and Aguas recorded a Wirri speaker from there (Sutton 1973b). As noted earlier (§§3.2, 3.4), I do not accept three of Terrill's nominations of old sources as relevant. A fourth that I would add to this list is GF (1896), referred to by Terrill as Anon (1896), for which see §3.10. I do think the Hodgkinson (1887) list for 'Fort Cooper—Aminungo tribe' is Wirri though. It is squarely in Wirri country and shares 65% (51) with the Tindale list. It is part of Terrill's 'unallocated' list. This was until recently listed on the AIATSIS website as if it were 'the Aminungo tribe from Fort Cooper', and Terrill seems to interpret it this way too (as did Davidson (1938) and Oates and Oates (1970)). However, it must be 'the tribe from the Fort Cooper - Aminungo area'. Aminungo and Fort Cooper are a little way west of Mackay.

<sup>14</sup> Holmer's main informant was Mrs Ada Mack, of Cherbourg. Her father and mother were both Wirri. The other informant, little used, was Mrs Melba Saunders, of Brisbane, who came from the same area as Mrs Mack. Holmer says of Mrs Mack: 'At the same time as she speaks English, she speaks a little of the "Glenelg language"'. At the same

[She] — as well as her people — hailed from Clermont and she also considered Wirri as the ‘Clermont language’. At the same time, however, she claimed to be a ‘Gunggari’ and further maintained that ‘Gunggari’ and ‘Wirri’ are actually the same language. This probably may be taken as an indication of the general importance of the Gunggari language (see 1.1) within the group which we have chosen to call the ‘Gunggari languages’. Apart from this, there is no immediate connection between Wirri and Gunggari proper, which both rather belong to different subgroups inside the main group. Wirri is clearly related to Gangulu, Birri and Ngawun and forms along with these languages a northern subdivision of the Gunggari group of languages.

Holmer's reference to Ngawun here as belonging to this group is mistaken; see Breen 1981b:14.



There is some doubt about the spelling of the name of this dialect. Holmer (1883) spells it Wirri, but in his vocabulary he spells it using *r* with a subscript dot, indicating a retroflex glide. He also uses the spelling Birri for what others (notably Beale who wrote a grammar of the language, also Breen who recorded a little) spell Biri. In his vocabulary, however, he spells this name (probably in error) as *biri*, using [r] which represents an alveolar tap. He spells the language names Bidjara and Gunggari with <ɾ>, and these have retroflex glides. Tindale (1940, 1974) spells it Wiri, and gives alternative spellings Widi (which he calls a 'valid alternative') and Wierdi. He used Widi as the heading on his wordlist (1938b). Tindale was unable to distinguish the two *r*-sounds, and his use of *d* suggests that the sound was a tap, thus suggesting that Wirri is correct. The alternative explanation, that the *d*, and the *rd* of Wierdi, represents a retroflex stop is discounted as there is no evidence of retroflex stops in this or neighbouring dialects. Another suggestion that comes to mind is that Holmer is right in suggesting that it is Wiri, and that Wiri and Biri are a pair involving lenition of initial /b/ to /w/. There is one example of such lenition in the area; see §3.8. However, there are no other examples, and initial /b/ is common. The language name does not appear on the tape recorded by Aguas and transcribed by Sutton, although it seems that Aguas spelt it Widi (see Oates and Oates 1970:173). I am maintaining the usual spelling, Wirri.

Yuwibarra, according to Tindale (1974, his Juipera), was located 'At Mackay; St Helens south to Cape Palmerston; inland to Connor Range.' This is very closely related to Biri, Bridgeman's list in Curr (Bridgeman and Bucas 1887) having over 80% (80) in common with the Biri collected by Beale. Terrill (who counted 73% common with Biri) regarded it as Biri; it is certainly at least a dialect of the Biri group, but it would seem more logical, from its location, to assign it to Wirri than to Biri. As it shares over 80% (64) with Tindale's 'Widi' wordlist I have done that. The name is clearly of the local group type (having the *-barra* suffix) rather than a dialect or language name. Curr received three vocabularies for the area, one from Bridgeman, one from Bucas and one anonymous, but published only one because they agreed so well. According to Bridgeman there were four tribes within a radius of fifty miles or so (80 km) of Mackay, differing little in their speech. One was the Yuipera (as he spelt it), whose territory included the town. The others were the Kungulburra, between Port Mackay and Broad Sound, the Toolginburra, just to the west of the Kungulburra, and the Googaburra or Island Blacks. I suggest that Tindale's spelling, Juipera, was adapted from the spelling used in Curr, Yuipera, and not from his own hearing of the name, and that because of this spelling he did not recognize the name as a local group (or 'horde') name (with suffix *-barra*).

Despite all my reservations about sources, I have no reason to doubt that Wirri is a dialect of the Biri group. I would say that Bridgeman (in Bridgeman and Bucas 1887) and Tindale (1938a) are reliable sources (given that we have data from other dialects that enable us to correct spellings). Having recorded Gangulu, Guwamu and Barindji (a Darling River language) on the only occasion I worked in Emerald, I cannot dismiss Meston's wordlist for being collected there. The fact that the dialect is named is a good reason for accepting Meston's, Holmer's and Aguas's (Sutton 1973b) material as genuine, given that there is no strong reason for not doing so. It is likely that at the time of Holmer's and Aguas's recordings differences between dialects were being lost, however. (Compare the situation for Bidjara and Gungabula (Breen 1973)).

### 3.6 GABULBARRA

(Kabalbara): 'West of Mackenzie and Isaac Rivers to Peak Range; north nearly to Cotherstone. I formerly thought Howitt's term, when written as Jetimarala, might be the proper name; my tribal informant knew only Kabalbara which might appear to be one more applicable to a horde of a tribe; however, other information now suggests the Jetimarala tribe was a separate one related to the Barada, and living on the Broad Sound Ranges and it has been so treated.'

There is no linguistic information on Gabalbarra and so Terrill deleted it from her revised map. If McIntosh's (1887) description of the country of the 'Kaangooloo thaa' includes this dialect (which is not clear), this would be an indication that it is a Biri dialect. It is surrounded on three of the four sides by Biri dialect areas. I follow Dixon (2002:xxxiii) in calling it Gabulbarra, with the meaning 'carpet snake people', in preference to Tindale's Gabalbara (and note that Tindale spelt it with schwa as the second vowel). In any case, with the formative *-barra* it is probably a local group name (as Tindale suggested), not a language name.

Tindale (1938b, as quoted by Jefferies 2006 Part 2:331, Part 3:6) identifies Gabalbarra with Barara, which Jefferies regards as another name for Baradha. It might conceivably be a dialect name contrasting with Baradha and Baranha (see §§3.7 and 3.8), although if it were Tindale would surely have said so. In any case, it is a reasonable assumption that it was the name of a group speaking a Biri dialect.

### 3.7 BARADHA

(Barada): 'On Connors River from Killarney north to Nebo; west to near Bombandy.' Local group names are Tha-ra-ra-burra ('horde at Cardowan') and Toolginburra.

Tindale (1938b:687-9) spells the name 'Baroḏa'<sup>15</sup> and gives more information on the territory: it "includes Saltbush Park, Lotus Creek, Bombandy, Cleve, Collaroy, Tierwonbo, Wardu (Funnel Creek), Bolingbroke, and Apis Creek Stations or parts of them." This is generally consistent with other information, except that Apis Creek and perhaps Cleve (if it is what maps I have seen call Clive) seem rather too far south. I assume Tierwonbo is what my map calls Tierawoomba. I cannot locate Bolingbroke or Wardu, but Funnel Creek is a rather long creek which runs into the Isaacs River from the north and is clearly in Baradha country.

Baradha was studied by a linguistics student, Warwick Norman, with the last speakers,<sup>16</sup> and we have better material than for most of the other dialects, probably excluding only Biri. Norman gave the location only as Nebo, which is not very specific given that Tindale has Baradha and Wirri country meeting at Nebo. However, a speaker apparently knew the language name—not a universal accomplishment for aged last speakers of languages.

Another wordlist of interest, although hardly trustworthy enough to be called a source, is Fox (1897). This is for the Mamburra Tribe, which is said (although not clearly; Fox 1899) to inhabit the Bombandy—St Lawrence area. The western part of this area is in Baradha country, as is the eastern part according to Roth's 1898 map, but it is in Guymnal (Dharumbal) country according to Tindale (1974). The wordlist is short and shares about 60% (33) with Baradha and very little with Dharumbal (although it does have *mili* for 'eye'). It seems to be evidence that Baradha country did extend to the coast from St Lawrence north; see also §6.6.

### 3.8 BARANHA

(Barna): 'Headwaters of Isaac River, west to Denham Range; south to Cotherstone; at Grosvenor Downs.'

An alternative name given was Parnabal; note, however, that this is (also?) the name of a place some distance to the south, on the railway line east of Blackwater. Terrill (1998) spelt it Bana.

Baranha is almost unknown apart from Tindale's information about its location. The only linguistic information seems to be a short question and answer given to Tindale (1938b: 687–689) to compare the dialect name with that of Baradha. As read for me by Peter Sutton,<sup>17</sup> the exchange in the two dialects is:

'Baroḏa	
'Ngani junta 'baroḏa?	'Kam:u
What do you want?	water
'Bar:nə	
'Ngani 'jinta bar:nə?	'Kam:u
What do you want?	water

<sup>15</sup> Here and in the quote from Tindale in §3.8 I use the standard diacritic for interdental articulation instead of that Tindale used, which could be described as a subscript grave accent.

<sup>16</sup> See Terrill (1998:5). There is a mention here of a language called Gaji, said to be not a Biri dialect; the only other information on it is the surname of the speaker, who mixed it with Biri.

<sup>17</sup> I was made aware of this passage by Tony Jefferies who had read it, quoted without the diacritics and with <a> replacing schwa, in an unpublished report by Rod Hagen



It seems that the two differ in this sample only in having a different present(?) tense marker on the verb. The existence of a verb stem *bara-* with a meaning 'want' in Baradha is confirmed by Terrill's vocabulary (from Norman's notes) but the tense marker *-dha* is not found in Norman's grammar as summarized by Terrill (1998:73–77). It seems, too, that each of these two dialect names is in this tense form of this verb, which Terrill glosses, for Baradha, as 'be, become, do, want, make'. This is an unusual word to use for naming a dialect in Australia. The verb *bara-* is given with the meaning 'want' for Yambina (Wilson and Murray 1887) and with meanings including 'become', 'get', 'be', 'want', 'say' for Wirri and Gangulu A (Holmer 1983: 326; and see §§3.5 and 3.12). It is lenited to *wara-* in Biri. Barrett (2005:137–140) discusses the functions of a tense/aspect suffix *-na* or *-nha* in Maric languages. Since the interdental stop in the name Baradha is clearly correct, confirmed by Tindale 1938b and his maps (1940, 1974) as well as by Norman's work, I would expect the corresponding nasal in the name of its neighbour to be interdental too. Hence the spelling 'Baranha'.

### 3.9 YAMBINA

(Jambina): 'Logan Creek south of Avon Downs; east to Denham Range and Logan Downs; west to Elgin Downs; at Solferino.'

Alternative names he gives are Jampal (i.e. Yambal) and Narboo Murre (which is question-marked). He gives two words, both of which also appear in the source mentioned below.

There is one vocabulary for this dialect in Curr: Wilson and Murray (1887). They give the language name as Yambeena. In addition to the normal Curr wordlist they give 103 extra words, of which 45 are verbs.

### 3.10 YETİMARLARA

(Jetimara): 'On Boomer and Broad Sound Ranges from Fitzroy River north to about Killarney; west to the Mackenzie and Isaac rivers. In my 1940 work this was listed only as a supposed part of either the Barada or Kabalbara tribes. Davidson (1938) correctly recognized it on his map as a separate tribe. Further comment under Kabalbara.'

Jefferies (2006, Part 2:13–16) comments on the way Tindale has changed from his earlier non-recognition of this tribe, and concludes that the sources of his information were trustworthy and he was probably correct. He regards Roth's (1898:26) map of the district as the source of Tindale's boundaries; however, as Rod Hagen (pers. comm.) points out, Roth has the eastern boundary of Yetimarala much further east than Tindale. Roth's map was based on information from a knowledgeable local pastoralist, WH Flowers. It is not consistent with the location given for Muller's (1887) vocabulary in Curr: Broad Sound, Yaamba, Maryborough [sic Marlborough], and St Lawrence (see §6.6); Roth, who is probably more trustworthy, would have St Lawrence as Yetimarala country.

I use Terrill's spelling; a vowel /e/ would not be expected in a Mari language, and voiced stop symbols are normally used, but she was unable to suggest a likely phonemicization and neither can I.

Terrill (1998:77) says that 'the only source for this dialect is Roth 1898, who gives a word list of 75 items.' However, there is a longer version of Roth's list (105 words) in an 1897 report to the Commissioner of Police, and there are two other sources. One is a wordlist regarded as anonymous by Terrill (1998:71) of which she says:

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.

This wordlist is entitled 'Dialect of tribe at Croydon Station' and Croydon Station is located in Yetimarala country, near its northern boundary. The contributor seems to be someone with the initials GF and I list the source as GF (1896). The other source is Tindale (1974), who gives two words: (in my orthography) *yamba* 'camp' and *marj* 'man'. The GF list and the Roth list have only 29 comparable items, and they share 76% if we assume that the typist of the GF list misread five items.

### 3.11 GARAYNBAL

(Karingbal): '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. It is a tribe quite separate from the Kanolu and Kangulu. Davidson's placings of this and neighbouring tribes are based on Kelly's incorrect sketch map that shows Emerald 50 miles out of position with respect to Springsure.'

Kelly's (i.e. Tennant-Kelly 1935) placing of Emerald is certainly wrong, in relation to Clermont as well as Springsure, but it is hard to see how this error can account for the difference between Tindale's location of this language and Tennant-Kelly's / Davidson's.<sup>18</sup> Tennant-Kelly has Emerald too far west — probably not as much as 50 miles — while the difference between the two locations is a north-south one: Tindale has 'Karingbal' south of Springsure while Tennant-Kelly has it north. Tennant-Kelly's map is certainly unreliable: Bidjara, which in her text she calls, correctly, a language of the upper reaches of the Warrego River, is placed 200 km north of there on the map, and Wirri is nearly 200 km south of where Tindale places it. She has Gangulu too far west — an error which is not made by Davidson, who uses a different spelling and has obviously used a different source for locating it.

Cameron (1904) acknowledges information from E.P.H. Birt of Iellinbah [sic, Jellinbah] Station on the Mackenzie River, north of Blackwater ‘regarding the Karingbool Tribe, which inhabits the country in that locality.’ This is further north than Tindale’s location and would put Garaynbal into McIntosh *et al.*’s (1887) ‘Kaangooloo’ area (as McIntosh did, see §3.12). Davidson (1938) following Tennant-Kelly (1935) puts ‘Kaingbul’ a little further south, near Springsure. Holmer’s Gangulu informant Claude Anderson (see Holmer 1983:268, 343, 382 note 93) locates Garaynbal between (or at?) Blackwater and Comet. This is a very small area and no doubt an underestimate, but it agrees well with what Cameron says. Bob Martin, a partial speaker of Bidjara from Rolleston, told me that Garaynbal was on the Mackenzie River (and?) at Dingo, again in the ‘Kaangooloo’ area. My Wadjigu informant Amy Miller thought (vaguely) that it was in the Baralaba area (a little way southeast of Anderson’s and Martin’s area). This may have been simply because she thought it was east of Rolleston, which she claimed as her own country, and Baralaba is east of Rolleston.

Jefferies (2006 Part 3:28) concurs with me in finding that there is little evidence for Tindale's placing of this dialect, and considerable evidence for it being in the Mackenzie River area.

The spelling 'Garaynbal' (see note 6) is equivalent to the spelling given by Holmer (1983:343) and is supported by McIntosh *et al.*'s (1887) spelling Karranbal (see §3.12). Note also that Mari languages do not, as far as I know, permit heterorganic clusters with velar nasal as first member. It assumes mishearing by Tindale, who certainly did make mistakes of that type — and who, in fact, also spelt it Karainpal, Karaingbal and Garanjbāl (as quoted by Jefferies 2006, Part 2:159, 477, Part 3:57). Holmer speculates that the name is derived from the negative *gara* which this dialect presumably has, in contrast to *gangu* in Gangulu; he was unaware that Birt (quoted by Cameron 1904) had indeed said that this was its derivation. However, Barrett (2005) finds *gara* to be commonly reported in this group of dialects, being recorded even in Gangulu (but not in Holmer's Gangulu B, see below).

Terrill (1998:83) states that the only source of information is Tindale's list of 33 items (actually there are 49). However, the material contributed by Birt in Cameron (1904) includes a list of thirteen words, plus a few other odd words. These include the names of four 'exogamous intermarrying clans' — the male names are 'Bunyart', 'Thadbine', 'Binjool' and 'Kiarra' and a suffix, obviously *-an*, forms the feminine — which are quite different from the names I would expect for this area. The first two of them have apparent cognates in Bundjalung dialects, Yugambeh and Gidjhalab, of far southeast Queensland/northeast New South Wales; see Wafer and Lissarrague (2008:460-461). Another unexpected word was 'deebury' 'eye'; this is found also in Mayi-Kutuna in far northwest Queensland (Breen 1981b:96), one of the languages of Tindale's Bindal area (see §6.1) and Yuru (§6.2).

<sup>18</sup> Davidson's spellings sometimes differ from Tennant-Kelly's in that he adds a hyphen, presumably to mark off a formative or supposed formative. For example, his 'Kaing-bul' is Tennant-Kelly's 'Kaingbul'.

Another possible source of vocabulary is a wordlist by Meston copied by Bannister (1977) and appearing as 'Garingbal' vocabulary in Jefferies (2006). This seems to be part of Meston (n.d.), published as 'Springsure language'. Presumably the language name was on the version seen by Bannister.

See §3.14 for discussion of the Curr wordlist for the Brown River (Murray 1887) which Terrill classes as 'unallocated data', and which would seem to be Garaynbal if Tindale's location were correct.

Given the information on the location of Garaynbal in the second paragraph of this subsection, I would like to conclude that McIntosh, Cameron, Anderson and Martin, and perhaps Tennant-Kelly, Davidson and Miller, are right, and Tindale wrong. Since *gara* 'no' (or *garda* in some southern dialects) is almost universal in the Mari area, one would not expect a dialect to be named from its possession of it, unless (as suggested by McIntosh *et al.*'s (1887) information) it is part of a group of dialects in the rest of which another word (in this case *gangu*) is generally used. However, Tindale did record some vocabulary from a person (at Woorabinda) who, presumably, claimed to be Garaynbal, as well as obtaining data on the territory. (He did not get the word for 'no'.) Furthermore, we have the Brown River wordlist, which seems to be in Tindale's Garaynbal country but, having *gangu* for 'no', lacks the diagnostic feature I (and others before me) have proposed for Garaynbal. Also, it is outside McIntosh's 'Kaangooloo' area; it ought to be further north if McIntosh were right.

Tindale's Karingbal shares 94% (36) with Gangulu B and 85% (33) with Gangulu A. This is evidence (weak, because so few items could be compared) that Gangulu B, at least, and Garaynbal were contiguous, and not separated by another dialect as Tindale has them. I am therefore placing Garaynbal in the western part of McIntosh's 'Kaangooloo' territory, centring on Jellinbah. This is the northern and eastern part of Tindale's Kanolu territory. Tindale's Karingbal territory as described above would, then, be irrelevant. See also §§4.5, 4.6.

Another small point in favour of this reassignment of territory is that it gives us a more likely looking territory for the Biri dialects as a whole. Without this, they have a shape rather like Lake Eyre — a large block of country in the north, a somewhat smaller block in the south, and a narrow stretch of land (Yetimarala country) linking them on the east side. With Garaynbal contiguous with Yetimarala and Gangulu the Biri dialect area is much more compact.

### 3.12 GANGULU

(Kangulu): 'Dawson River south to Banana and Theodore; northwest to Mackenzie River and near Duaringa and Coomoolooloo. East to Biloela, Mount Morgan, Gogango Range, and the upper Don River; southeast to Thangool and the headwaters of Grevillea Creek. In the 1940 edition a western tribe, the Kanolu, was incorrectly mapped along with this one. It will be noted that their vocabularies have little in common. Two names mentioned by McIntosh, namely Maudalgo and Mulkali, may belong to one or another of these tribes, but no data have been found to enable them to be applied.'

The area given for the Gangulu in Curr is 'Eastern slopes of Expedition Range, Lower Dawson, Upper Fitzroy, Mackenzie and Isaac Rivers and many of their tributaries.' McIntosh (McIntosh *et al.* 1887:58) says that 'The Kaangooloo are a confederation of several tribes: the Karranbal, the Maudalgo, the Mulkali and others, all speaking the same thaa, or tongue.' This area includes the areas Tindale gives for Gangulu, Wadja, probably Gabulbarra, Baranba and Baradha, but not Garaynbal. It is not impossible that Maudalgo is a misreading of Mandalgo, and that this, respelt Mandalgo to fit Maric phonology, is the name of a tribe using *manda* as the verb 'to go', as used by the Gunggari (compare Tindale's name 'Mandandanji'<sup>19</sup>), one of

Thomas Illidge's informants, from Charleville, perhaps Bidjara (see §4.2), Tindale's Nguri, Kanolu, and one of the dialects in Tindale's Kairi area, and in Waka-Waka dialects, to the south and east of the south-easternmost Mari language. I do not know of any other evidence of this word *manda* in the Biri language, but if just one dialect used it, it would be likely to be used as a designation for that dialect.

Areas given by Mathews (1899:108) and Howitt (1904:111) are less specific than but not inconsistent with that given by Tindale.

There is a fair number of sources (see the list in §3.15), but little is known of the morphology (and this is summarized by Terrill 1998:78–83). A number of the sources are surely attributable to the Gangulu confederation rather than to the individual dialects that were part of the confederation. For example, Nebo is well outside the territory of the Gangulu dialect, being on or close to the border between Baradha and Wirri, and yet one of Holmer's informants was from a Nebo family (1983:268), Aguas's informant was from Nebo (Sutton 1973b)—and note that she had *gara* for 'no'—and one of my informants had a mother from Nebo (and her father was from Cootherstone, on the Baradha/Gabulbarra boundary).

Holmer (1983:267) regarded his Gangulu informants as being speakers of two different dialects, which he called Gangulu A (western and northern, Springsure and Nebo areas) and Gangulu B (Woorabinda and vicinity). It is not clear why he unites the two mutually quite distant areas in his A dialect. I believe this is a mixture of dialects, but as Holmer did not give full details of the sources of words in his vocabulary they cannot be separated, and I will go along with the fiction, as I see it, that it is a single dialect. Holmer worked with three speakers of each dialect. Both are clearly Biri dialects; the A dialect shares less than 50% (about 140) of vocabulary with Bidjara. The two groups share about 77% (113) vocabulary, which suggests, given the greater reliability of the glossing and transcription as compared with amateur collectors, that they are different dialects. There is some evidence of a sound change separating the two, lenition of intervocalic /t/ to /y/ in B, which, Holmer (1983:267–270) argues (unconvincingly), has conditioned the separation of a fourth vowel phoneme, /e/. There are very few examples of this change in Gangulu from other sources; one of my informants gave both *yuri* and *yiya* for 'meat' (and she was from Banana, which would seem to be Gangulu B country), McIntosh *et al.* (1887) gave 'booyia' for 'fire' (commonly *burri*), and Gir-oonbah (1894) gave 'ye' for 'meat' (at Duaringa—Gangulu B country). Unfortunately, as Terrill also notes (1998:82), Holmer did not publish his corpus. This would have been far more informative than his analysis of it.

Holmer's Gangulu A shares 83% (124) with Biri, while Gangulu B shares 60% (170). The Gangulu A figure seems more consistent with a location at the northern end of Holmer's range for it than at the western. Gangulu B seems more likely to be the 'real' Gangulu.

### 3.13 WADJA

(Wadja): 'Streams on east side of Expedition Range; south to Bigge Range; east nearly to Dawson River. Closely related to the Kangulu. The original inhabitants of Woorabinda. Native tradition is that they were formerly two separate small tribes, Wadja and Wainjigo. They lived together for 'a long time' until their separate identities were submerged.'

Terrill states that 'Breen (1967b) provides the only information on Wadya.' This document, whose date is actually given as 1967-, i.e. from 1967 to an unspecified date, is entitled 'Mari subgroup: miscellaneous field notes' and is AIATSIS MS 112. I am not familiar with the document but it must comprise photocopies of various field notes of which I have the originals. I can find no mention of these supposed 'Wadya' field notes in the description of this manuscript in the AIATSIS Mura catalogue. The original field notes have a series of tentative identifications of the language on the front page; the chronological order is not completely clear but seems to be:

'Gairi or Garingbal?', crossed out and replaced with  
'or Bidjara (see map)?' never crossed out, followed by  
'Probably not Bidjara (see word for nose)' crossed out and replaced with  
'Wadjami?', and finally, at the top of the page in large block letters  
'BIDJARA'.

<sup>19</sup> I prefer this etymology to the one given by Chrystal (n.d.), apparently after Tindale. This is that the name means 'fishing net people', from mandan or mandin (probably *mandayn*) 'fishing net'. This is a plausible etymology for the alternative name given by Tindale (1974:181), spelt Mundaebura and Mundainbara, which, having the common formative *-barra* 'people', is clearly a name for the people, not the language. Chrystal's explanation of the last two syllables of the language name as being 'dhanji' (i.e. *dhanyi*) 'people' is less plausible and there is little other evidence for such a formative. There is some similarity to the formative, probably *-lany*, in the name Tindale gives as Wadjalang, based on *wadja* 'to go'; this is, of course, added to a verb stem and so is more comparable to *-ndanyi* on *manda* 'to go' than to something on *mandayn* 'net'.

I suspect that this was at its second-last stage when AIAS (as it then was, now AIATSIS) copied it. My final identification was made by comparing the vocabulary and apparent phonology with Bidjara from other sources.

On the basis of these field notes Terrill concluded that Wadja did not belong to the Biri group of dialects. She did not note the interesting result that this would mean that Garingbal (Garaynbal) (accepting Tindale's location of it as she did) is isolated from the other dialects of the Biri group, being completely surrounded by dialects of the Bidjara group. This, together with the indecision about the identity of the language, should have inspired further research on the provenance of this vocabulary. Several sources were available; the most useful would have been the recorder of the tape concerned, but others are Breen (1967:8), Australian Institute of Aboriginal Studies (1968:8), Breen (1971:13 & 14) and Breen (1973:4).

However, it does seem that Terrill came to a correct conclusion, at least inasmuch as Wadja does not belong to the Biri group. Jefferies found a wordlist in Wadja in Tindale (1938b): 31 words, mostly kinship terms, which, as he noted, show it, as clearly as such a small corpus could, to be the same dialect as the Wadjigu I recorded in the early 70s (see §4.4). I go further and conclude that since this dialect does not belong to the Biri group but to the Bidjara group, its location is not what Tindale gives for it, since this contradicts the earlier information given by McIntosh (1887), which has Gangulu dialects (= Biri dialects) on the eastern slopes of the Expedition Range. Tindale's information here seems to be from a reputable source (as Jefferies notes; see his 2006 Part 2:157–159 for his summary and quotations of Tindale's notes), but I choose to prefer McIntosh's (and Amy Miller's).

I move now into the realm of speculation. Those dialects and languages using the word *manda* for 'go', as listed in the preceding section, are clustered in an area to the south and west of Tindale's Wadja country. Amy Miller's Wadjigu is an exception; she used *wadji* (as in several occurrences of a present tense form *wadjina*), not the common *wadja*, and this would be the base of the name of her dialect. There may have been a recent change from *manda*, and a recent naming. The 'Wadja' country is therefore a plausible location for the only Biri dialect to use *manda*. I have, therefore placed the name Mandalgu (duly question-marked) in that area.

### 3.14 BROWN RIVER LANGUAGE

Curr's number 157 (Murray 1887) is a vocabulary attributed to the Brown River. It is certainly a Biri dialect; the wordlist shares 75% (28) with Tindale's Garaynbal and 47% (73) with the rather distant Biri. It has *gangu* for 'no' and shares 83% (69) with Holmer's Gangulu B. However, it is not in the area of the 'Kaangooloo confederation', being to the west of the Expedition Range. It does not have *manda* for 'go', but *yani*, a very widespread word, being (as his *jan(a)*-) one of Capell's (1956) 'Common Australian' words, but having a scattered distribution in this area: it is found in Gara-Gara to the north (not contiguous), and in Yambina, Yangga, Biri and Wirri further north, and in the non-Mari languages Giya and Dharumbal to the northeast, and (as well as *manda*) in Waka-Waka dialects to the south.

The collector of this wordlist, F.J. Murray, was an Inspector of Mounted Police, and so presumably not a local person. It is possible that it is wrongly located. Note that, although according to maps the Brown River runs from its source to a point between Lake Nuga Nuga and Rolleston, and downstream of there is called Comet River, locally it is sometimes known as Brown River at least as far downstream as Rolleston (T. Jefferies pers. comm.). If the location is correct, and Tindale's location of Wadja (= Wadjigu, see §4.4), which is a Bidjara dialect, is correct, then the speakers of this dialect were an enclave of Biri-dialect speakers surrounded by Bidjara-dialect speakers. This is Jefferies' (2006 Part 2:262–265) idea of the likely situation. My view, very tentative, is that Wadja is not where Tindale puts it, and that the Brown River dialect is contiguous with a Gangulu dialect (possibly Mandalgu) but is outside the 'Kaangooloo confederation' (unless McIntosh was wrong in making the Expedition Range the western boundary). Both views seem unlikely.

A name Yambabara, quoted by Jefferies (2006, Part 2: 333) from Thomas Wills (died 1880) seems to refer to this area.

### 3.15 SUMMARY AND GENERAL NOTES

Sources for Biri dialects are, more or less tentatively as indicated above, as follows:

Biri (the last twelve items—modern linguistic work—are after Terrill 1998:69 and most of them have not been sighted by me. See Terrill for further details.):

Hodgkinson (1886a)

Tindale (1938a)

Sharpe (1967), Breen (1967–) (the tape was actually recorded in 1971), Sutton (1970), Tsunoda (1971, 1971–1972), Dixon (1972), Norman (c.1973), Beale (1974, nd), Sommer (1974), Holmer (1983).

Yangga:

Muirhead and Lowe (1887), Anonymous (1886), M. Curr (1886a), Kent (1886).

Barnett (1891) (= Meston ndh?)

Rigsby (1987)

Yilba:

Chatfield (1873–1874)

Chief Commissioner of Police (1886), Thompson and Chatfield (1886)

Beuzeville (1919)

Miyan:

MacGlashan (1887)

Tindale (1940, 1974)

Wirri:

Hodgkinson (1887), Bridgeman and Bucas (1887)

Tindale (1938a)

Sutton (1973a)

Baradha:

Tindale (1938b)

Norman (c.1973)

Baranha:

Tindale (1938b)

Yetimarala:

GF (1896)

Roth (1898)

Gangulu: (the last six items—modern linguistic work—are after Terrill 1998:69 and some of them have not been sighted by me; nor has some of the Meston material. See Terrill for details of these.

Terrill's Meston (c.1900a), my Meston (ndd), I now identify tentatively as Garaynbal)

McIntosh, Cooke and Barthelemy (1886)

Gir-oonbah (1894)

Meston (ndg, ndi)

Tindale (1938a)

Osborne (1966)

Sharpe (1966–1967)

Breen (1967–) (the tapes were actually recorded in 1970 and 1971, from four speakers, all separately; in one case some unidentified bystanders helped),

Sutton (1973b)

Tsunoda (1974)

Holmer (1983)

Garaynbal:

Cameron (1904)

Tindale (1938a)

Meston (ndd)

Wadja:

see Wadjigu, §4.4

Brown River

Murray (1887)



Fox (1898) gives eighteen words of the Bumburra-burra Tribe. Several words, such as those for 'sun', 'one', 'good', 'bad', 'die' make it clear that it is in a Biri dialect, probably one of the southern ones, but without information on where it was collected we cannot say more. A.M.F. (1897) is intriguing. It is clearly Maric, but may be a mixture of dialects. The words for 'man', 'woman', 'beard', 'one' and 'good' suggest that it is a Biri dialect, 'mouth' is *munu* which is not widespread with that meaning but has been found in both Bidjara and Biri dialects (and it means 'lip' in some other dialects), 'hand' and 'arm' suggest Bidjara (including Gara-Gara), 'head' and 'nose' suggest Biri plus Gara-Gara. As the location is given simply as 'Queensland' the identification might as well remain a mystery.

#### 4. Other Mari languages

##### 4.1 GUNGABULA

(Kongabula): 'Headwaters of Injune (Hutton) Creek and Dawson River above their junction; east and north of the Great Dividing Range; south of Carnarvon Range. Their country includes the high, rough, forested areas of the Carnarvon Range.'

Tennant-Kelly (1935), however, in her text mentions 'Kungabula' as being on the Warrego River, but on her map placed 'Khungabula' further north, on the other side of the Great Dividing Range. Bob Martin (Bidjara) placed it at Roma, which, given his viewpoint in the north, tends to support Tindale.

As noted in Breen (1973), Gungabula merged with Bidjara and the two, at the time of my study in the 1970s, were indistinguishable. The people had retained their name but, it seems, no memory of any territory different from that of the Bidjara. If Tindale's location is correct, Gungabula may have differed from Bidjara at least in the same way as 'Nguri' did (see §4.2). Meston (ndc) writes the name as 'Oong-aboolla', suggesting that they had dropped initial /g/, and Jefferies (2006 Part 2:477) quotes Tindale as writing Ongabula.

##### 4.2 NGURI

(Nguri): 'Upper Maranoa River from Mount Elliot and Donnybrook north to Merivale on the western side of the Dividing Range; west to Hillside and Redford. Their territory is bounded on the northeast by the summit of the Dividing Range, on their northwest are the steep cliffs and deep gorges of the Chesterton Range. They were not on the upper Warrego River as stated by Mathews.'

I doubt the genuineness of Nguri as a dialect name. In Breen (1981a:227) I said:

Information on Nguri is inconsistent. Tindale places it on the Maranoa River and Mathews (1905) further west, on the middle Warrego (see also Mathews 1898), but Barlow (1872) has it to the south-east, near the Moonie River. Tindale and Barlow both give wordlists which support their statements on the location (and, consequently, differ greatly from one another).

Meston (1887) places the 'Gnooree' tribe and sub-tribes west of the Warrego. However, Meston (ndc) heads his relevant section 'Gnooree tribe joined Yeeman of Dawson' and a couple of lines later has 'Gnooree (Maranoa)', both of which (if we assume that 'joined' means 'joined on the west') place it on or near the Maranoa. However, the geographical information given on this page is quite confused: he says 'Badjerie next down river' which suggests that it is on the Warrego, and then 'Goammo [i.e. Guwamu] south', putting it back on the Maranoa. He has 'Barraballa' to the north. This is a name which may be identified with the name 'Barbarlee' attached to a wordlist collected by Thomas Illidge (1887-) from speakers Digenda and Boondare in Charleville. In the field I met only one person who claimed to know the name 'Nguri', a Bidjara speaker who placed it on the Langlo River, Maranoa River, Nebine Creek and at Wyandra. This is an impossibly widespread set of locations.

Whatever the facts about the name might be, the Tindale 'Nguri' wordlist is of a dialect that is very closely related to Bidjara. The two share 94% (96), but are differentiated by a phonological change (which, of course, is disregarded in counting the percentage of common vocabulary): the retroflex stop /rd/ in Bidjara

corresponds, whether intervocalic or word-final (its only environments) to the glide /r/ in 'Nguri'. Tindale's 96 vocabulary items include fourteen examples of this correspondence. The 'Barbarlee' list is similar: the retroflex stop has been softened to the glide (perhaps with a vowel added so that it does not occur word-finally, e.g. *dhangurd* 'possum' becomes *dhanguru*) but otherwise the vocabulary is very close to Bidjara. There is no evidence of loss of initial /g/ (as occurred in Gunggari) in these two wordlists.

The few items of vocabulary given by Meston (ndc) are clearly of a Bidjara-Gunggari type dialect, although the evidence as to whether it drops initial /g/ is ambiguous. Meston's wording does not make it clear that it is 'Gnooree' and not 'Yeeman', but as the latter is not a Maric language (see §6.8.1) it must be 'Gnooree'.

##### 4.3 BIDJARA

(Pitjara): 'Headwaters of Nogoa and Warrego rivers; south to Caroline, north of Augathella; east to Killarney and Chesterton; west to Nive River; north to Mantuan Downs. Not to be confused with Badjiri of the lower Warrego River or the Bitjara of southwestern Queensland. Some evidence suggests that a late prehistoric eastward movement of tribes south of Charleville caused a separation between the Pitjara and Badjiri; they are now separate tribes. The eastern boundary of the tribal area is marked by sheer cliffs and their country is well wooded.'

The linguistic evidence shows that any separation between Bidjara and Badjiri was long before late prehistoric times, and was part of a separation between Badjiri (at least) and an ancestor of the whole Mari group. Badjiri is not relevant to the topic of this paper.

Bidjara is the most thoroughly studied Mari language; see Breen 1973. Note that Tindale has Bidjara country on both sides of the Great Dividing Range. However, it seems unlikely that it is contiguous with a Biri dialect at any point. In the late 20th Century Bidjara people were concentrated in the Charleville-Augathella area south of the Divide, and at Clermont north of it (Breen 1973:3 & 4), and the southern group called the northern group Wadjaningu or Wadjaniga. They seem to have called themselves Bidjara. Sydney King gave Donovan (1976:116) a name Ding-gel-burra which was apparently given as a placename but seems to mean 'dinggel people' and may be a name for people living in this part of Bidjara country.

##### 4.4 WADJIGU

As mentioned above (§2), I have recorded a dialect that seems to belong to the area in which Tindale located Garaynbal, or close to it (see also §3.11). This goes by the name Wadjigu, and was recorded from Amy Miller, from Rolleston, perhaps born at Consuelo (see Breen 1973:4,7). This is a dialect of the Bidjara group; the localities are in Tindale's Karingbal (Garaynbal) territory but close to Bidjara and Gara-Gara country.

Tindale's (1938b) Wadja material (extracted from Jefferies 2006, in which Tindale's j is replaced by y and velar nasal symbol by ng) seems to belong to the same dialect as Wadjigu, as illustrated by the following comparison (including also Bidjara). Only items attested in both Wadja and Wadjigu are included, except for forms pointing to probable errors in Wadja and Wadjigu (one in each):

	<u>Wadja</u> (Tindale)	<u>Wadjigu</u>	<u>Bidjara</u>
man	mari	mari	mardi
woman	kombo	gumbu	gambi (+)
mother's mother	kamuru, kamiru	gami	gami-
mother's father		ngadhi	ngadhi-
father's father, son's son		ngatiru	miya-
father's mother	mimuru	yabura	mimi-

<sup>20</sup> It is not possible to distinguish the rhotics /r/ and /rr/ in Tindale's spelling, but logically one would expect the retroflex stop to lenite to the retroflex rhotic /r/, and there are many examples of such lenition in the Mari languages.

father's sister		yabu-	yabu-
father	yavo	yabu	yabu
mother, mother's sister	kaiya	gaya	yanga
mother's brother	kangaro	gangayn	gangayn
elder brother	taguru	dhaguyn	dhagu
younger brother	waburu	waburl	wabu
elder sister	men-ngo:ngo	bayi	bari
younger sister	men-ngo:ngo	wabugan	wabuganu (+)
husband	gungga, kungga	gun.ganu	gun.ga-
son <sup>21</sup>	tuana	dhuwana	dhuwana
meat	yuri	yuri	yurdi
grey kangaroo	ngarugo	ngarrgu	ngarrgu
emu	ngo:ny	nguriyn(?)	gulbari
sand goanna	manguany	mangguli	dhagayn (+)
black goanna	waruwiny	warruyn	waruyn
fish	nyanngari	wina	guyu, wina
fire	buri	buri	burdi

The probable errors referred to above are:

*ngatiru* 'father's father' in the Wadja list; compare *ngadhi* 'mother's father' in Wadjigu and Bidjara, and *yabura* 'father's mother' in the Wadjigu list; compare Wadja *mimuru* and Bidjara *mimi*, and also *yabu* for father in all.

Other Wadja items doubted are the word given for both 'elder sister' and 'younger sister', and *nyanngari* 'fish' —probably a name for a specific type of fish. There may be one or two errors of detail in the word for 'sand goanna'.

#### 4.5 GANULU

(Kanolu): Eastern headwaters of the Comet River from Rolleston north to Blackwater and upper Mackenzie River; east to about Dingo and vicinity of Duaringa. Their original population in 1860 was about 500 persons. Because of a similarity of name, this tribe has been confused with an eastern neighbour, the Kangulu, from whom they differed widely in dialect. Their word for 'man' was [mari] and for 'no' was [kara], contrasting with the [bama] and [ka:ɲu] of the Gangulu. In the 1940 edition of this map, they were incorrectly shown as a western part of the Kangulu.

The location that I have assumed for Garaynbal (see §3.11) is the northern and eastern part of this 'Kanolu' area. This leaves only the western part, which does not seem to belong to the area of McIntosh's Kaangooloo confederation.

The only source for Ganulu is Josephson (1887). The location is given as 'Head of the Comet River', and it is not clear what this means. Modern maps show the Comet River as not having a 'head'; going upstream (southwards) from Rolleston one comes to a point where the river is no longer the Comet but the Brown (and so the Brown River is a 'head of the Comet River'). That river is in Tindale's Garaynbal country. The eastern headwaters referred to by Tindale would presumably be the headwaters of Planet Creek and some smaller creeks.

At first sight one is tempted to suggest that Tindale (1940) was more correct, Tindale (1974) was wrong, and that 'Kanooloo' (Josephson's spelling) is a misspelt misnomer, the name is Gangulu and it does not apply to Josephson's wordlist. (Jefferies 2006 Part 2:223-224 also comments on the anomalous appearance of this name.) However, the 'Kanooloo' vocabulary is of a Bidjara-type dialect, not a Biri- (or Gangulu-)type,

<sup>21</sup> Tindale adds '(f.s)' = '(female speaking)'.

notwithstanding that, contrary to what Tindale suggests, the words *mari* 'man' and *gara* 'no' are found in the Gangulu dialects, alongside *bama* and *gangu*.

Comparison of Josephson's wordlist with Gangulu gives only 33% (82) in common. See below (§4.6) for comparisons of this wordlist and the Wadjigu vocabulary with nearby Bidjara-group dialects. On the basis of these comparisons I conclude that Ganulu (Kanooloo) and Wadjigu are closely related but different dialects. Ganulu would have occupied the western part of Tindale's Kanolu country and Wadjigu perhaps the western part of the country that Tindale gives for Karingbal (Garaynbal), as described in §3.11.

#### 4.6 GARA-GARA AND ARA-ARA

(Kairi): 'From the Great Dividing Range south of Springsure north to Capella; west to Drummond Range; east to Comet and upper Mackenzie (Nogoa) rivers.'

Donovan (1976:128)<sup>22</sup> notes that Tindale's map is not consistent with the above description of Kairi territory, showing the southern boundary:

... cutting north-west across Buckland Plateau, possibly following Buckland Creek from a position near Black Alley Range; crossing through the Basin to a point north-west of Mantuan Downs where Balmy Creek rises in the Drummond Range. Thus annexing some 525 km<sup>2</sup> of what has been previously defined as Kairi territory. The southern section and including the upper catchment of the Warrego River is then said to be Pitjara territory.

Gara-Gara is presumably the name that Tennant-Kelly (1935) writes as 'Khararya'. Jefferies (2006) uses the spelling Kaira and relates it to *gara* 'no' (Part 2: 332). The spelling Gayiri, adapted from Kairi, has been used by some linguists. The name Gara-Gara (spelt Kurra-Kurra) seems to have been first recorded by Donovan (1976:79 (map), 119) (given to her by Clare Foote of Springsure) as the name of a group living around Springsure. I am using this form because it has a meaning (from *gara* 'no') and follows a pattern seen in other language names in southern Queensland (such as Gurang-Gurang and Waka-Waka) of a name meaning 'no-no'. Tindale's Kairi is presumably based on this in some way (as is, a little more transparently, Tennant-Kelly's Khararya), but is used as a name for an area containing (as we know now) two or more dialects.

Two wordlists in Curr seem to apply to this area, both under his number 156 headed 'Nogoa River' (i.e. Middleton and Noble 1887). However, as Terrill notes, these belong to two different dialects. They share 60% (52) vocabulary, and differ in that Middleton's list (originally compiled by the Wills family of Cullin-la-ringo, on the Nogoa about 40 km southwest of Emerald — Jefferies 2006 Appendix) retains initial /g/ while Noble's list has consistently lost it. Terrill seems to assign the name Gayiri to Middleton's list. Since Middleton's list (for the language of the Bimurraburra) is from the eastern part of Tindale's Kairi area, and Donovan's Gara-Gara is also from the eastern part, a little further south, and Gara-Gara is clearly a language/dialect name whereas Bimurraburra is a tribal name (with the *-barra* suffix), I will use Gara-Gara as the dialect name for the eastern area. There are a few indications that the provenance of Noble's wordlist is more westerly: Noble has *nundurra* 'nose', *manda* 'to walk' and *ulbayi* 'emu' while Middleton has *wudha*, *yana*- and *gundulu*, respectively, and there are a couple of other similar indications that Middleton's dialect is more influenced by eastern neighbours that are Biri dialects (although there is no reason to believe that Noble's informant group were not also contiguous with a Biri group, such as Gabulbarra). The sources of the Belyando River are close to some of the sources of the Nogoa, and there is some slight evidence — a name variously spelt as Owanburra, Kowanburra and Auanburra and described as 'a horde on upper Belyando River' (see §4.7), and, equally inconsistently, names of section terms on the Belyando headwaters with one term retaining initial /g/ and another having lost it (letter by W.H. Flowers quoted in Jefferies 2006 Part 2:43) — suggesting g-dropping in that area. Curr gave for Noble no location more specific than 'Nogoa River'; historical research may perhaps reveal his address and so suggest a specific part of the river, and perhaps relate it to a tribal name. Since Noble's wordlist differs from Middleton's in lacking initial /g/, I will use Ara-Ara as the dialect name for the western part of Tindale's Kairi area (which, note, does not include the westernmost part of the Nogoa watershed, which he maps as part of Bidjara country, see §4.3).

<sup>22</sup> I became aware of this thesis through the work of Jefferies (2006).



Names of tribes in the area, as given by Jefferies (2006 Part 2:333-337) from earlier sources, were Bee-murra-burra (spelt Bimurraburra in Curr), Gnarka-burra (Emerald Downs and Comet River), Bee-bun-berra (Beaufort, location unclear), Coca-ea-berra (or Coca-ra-berra?, southwest of Springsure) and Wylbung (west of Springsure).

The sources of Beale's (1975) wordlist for Yagalingu (see §4.7), which shares 95% (59) with Bidjara, are given as Meston (nd) (my ndb) 'Mantuan Downs' and Breen tapes. Mantuan Downs is, according to Tindale, on the boundary between Bidjara and Yagalingu. The Meston list is a short vocabulary which includes one place name, for Salvator Lake, which is south of Mantuan Downs and in Bidjara country.<sup>23</sup> The list is from a two-page insert in one of Meston's notebooks, but the second page is in a quite different language;<sup>24</sup> the first page is obviously in a Bidjara dialect. It includes four words which have /rd/ in Bidjara from further south; three of them show lenition to /r/ while the fourth retains the stop. Another wordlist from Mantuan Downs was collected by Thomas Illidge (1887-) from Egilma, and the language was called Bcebinburra. I identify this as Bidjara, but note the resemblance of the name to Babbiburra and Babingburra, names given for a Yagalingu group (see §4.7). (See also the name Bee-bun-berra in the previous paragraph.) There is some evidence (see §4.7) that Yagalingu may be a dialect that drops initial /g/, but Egilma's dialect does not. (Note the resemblance between the person's name, Egilma, which could be a rendering of Yagilima, since a cluster lm is not permitted in this language, and the dialect name Yagalingu.)

The Breen source must be a recording of Siddy King<sup>25</sup> at Clermont in a language which he called Yangurru (actually a moiety name), from Springsure area, and which I previously identified as Bidjara. (The Australian Institute of Aboriginal Studies Catalogue of Tape Archive No.8 (1971) gives the language as 'Janguru possibly Gairi'.) He was born at Mantuan Downs, which is on the northern boundary of Bidjara according to Tindale, and since Yagalingu is the dialect spoken to the north of Mantuan Downs, it is possible that he was Yagalingu, but there seems to be no evidence that he was. Holmer (1983:203) met him and said that he was Bidjara (presumably because King told him so).<sup>26</sup> Every word that Beale gives except one (*wina* 'fish') can be found in this Breen tape, and a couple of these I know from nowhere else. The word for 'fish' does not come from the Meston list either: in fact, it is clear that Beale has not made any use of Meston's wordlist.

Donovan (1976) contains over a hundred words collected from King, the majority words that I had not got from him. Of these, 23 are items that I did not already have from other Bidjara sources. The remainder are, with only a couple of exceptions, identifiable as items in my vocabulary (notwithstanding that Donovan recognized only 13 as like words she had seen in Breen 1973). Armed with this additional vocabulary, I have reviewed my identification of King's dialect, and still find that it shares 96% with Bidjara. However, if I compare his vocabulary with that of southern Bidjara speakers, individually, I find that the percentages are in the 80s, whereas the other speakers share well over 90%, even 100% (of up to 50 items) in some cases, with one another. King's vocabulary shares about 70% with each of the two attested dialects of Tindale's Kairi area (see below) and with Wadjigu. It retains /rd/ (lost by Wadjigu) and initial /g/ (lost by Ara-Ara). However, one regionalism it shares with those three and some Gangulu sources is *munu* 'mouth' (which is 'lip' in some other dialects<sup>27</sup>). Another word shared with only the Bimurraburra (Gara-Gara) wordlist, as far as I know, is

<sup>23</sup> Or more likely this is a tribal name rather than a placename; it is 'Googarraburra' which looks like a Bidjara name meaning 'brigalow people' and is clearly the same name as 'Coca-ea-berra' given in the previous paragraph.

<sup>24</sup> Identified tentatively by R.M.W. Dixon (p.c.) as Gabi-Gabi.

<sup>25</sup> Called, no doubt more correctly, Sydney King by Donovan (1976).

<sup>26</sup> He adds the note 'very briefly interviewed' and perhaps elicited no vocabulary from him; looking through about 30% of the 'Gunggari, Bidjara and Marganj vocabulary' (Holmer 1983: 223-266) I found no reference to any word or example contributed by King.

<sup>27</sup> Holmer (1983:258) gives *munu* as both 'lips' and 'mouth' for Bidjara and Marrgayn; I have *dhaa* 'mouth' from several sources for both, and *munu* 'lips' (specifically 'bottom lip' from one speaker) in Bidjara and not present at all in Marrgayn (in which 'lip' is *mimi*). Of Holmer's seven 'Marganj' informants, four would have spoken Bidjara: a woman from a prominent family of Gungabula descent, her husband, from a prominent Bidjara family, and two daughters. The mother was a daughter of Jimmy Lawton (not Laughton), with whom I worked on several occasions; Holmer knew of his existence but never worked with him. The father was a son of Jack Fraser; I worked on Bidjara with Jack Fraser, and extensively with his brother. Two of the informants are from a Marrgayn family, and I have no knowledge of the seventh. See Holmer (1983:218).

*gumbunyu* 'tomorrow'. Springsure is in, or close to, Bimurraburra country. It may be that, like Gungabula (see Breen 1973:3-4), other dialects of this group have lost differences with Bidjara in modern times, and we can never be sure what this speaker's dialect would have been. There is no justification for assuming that he was anything but northern Bidjara (Wadjananga).

Donovan (1976) collected or received in writing short wordlists from old white people who had grown up on stations in the Nogoa area or in Springsure. These all support the belief that the local dialects belonged to the Bidjara type rather than the Biri type. She discounted (p.22) (as I do) the list of words published under the name 'Commissioner of Police, Brisbane' (1907), supposedly from the Nogoa River but in a Biri dialect.

Tindale (1974) gives *gara* 'no' and *mardi* 'man', presumably for Gara-Gara or a similar dialect with initial /g/ preserved. Jefferies (2006) gives fourteen words from Tindale (1938b), which are possibly not from the same source as those two, as 'man' is given as *mari*, not *mardi*. It is from a source that retains initial /g/, and seven of ten comparable items are the same as in Middleton's Gara-Gara list. Notable differences are that it has eastern words for 'woman' (*gayu*) and 'sun' (*garri*). Jefferies (2006, Part 3:40) speculates on who Tindale's informant may have been.

Meston (ndd) is said to be "a list of words in everyday use among the aboriginals in the Springsure district, spelt phonetically", sent to a newspaper under the pseudonym Mecolo (which is presumably his spelling of *migulu*, 'white man' in Biri). It is quite different from the language of other Springsure sources, having only about 35% (of about 100 words) in common with Bidjara, but over 90% (of 58) in common with Holmer's (1983) Gangulu B. (Jefferies also — 2006:Part 2:265 — notes that this wordlist is of a Gangulu dialect.)

Comparisons of Bidjara-group dialects in this area give the following figures:

	Wadjigu	Gara-Gara	S.King	Ara-Ara	Ganulu
Bidjara	75 (180)	68 (99)	96 (123)	66 (50)	64 (100)
Wadjigu		70 (70)	71 (83)	52 (54)	71 (65)
Gara-Gara					
(Bimurraburra)			70 (60)	60 (52)	50 (103)
S.King				72 (40)	62 (61)
Ara-Ara (Noble)					48 (50)

Linguistically, Wadjigu is much closer to Gara-Gara (70%) and to Ganulu (70%) than to Ara-Ara (52%), and retains its initial /g/s, but differs from Gara-Gara (and resembles Ganulu) in that it has lost the retroflex stop. (The Ara-Ara list is of unusually poor quality.)

#### 4.7 YAGALINGU<sup>28</sup>

(Jagalingu) 'Headwaters of Belyando River south to Avoca; north to about Laglan; west to Dividing Range; east and south to Drummond Range. Howitt's 1904 sketch map indicates that his attribution of 'Wakelbara' in his text to 'West of the Great Dividing Range' was a slip for 'east.' Wakelbara may be a horde of the Mian rather than the Jagalingu tribe and placed too far south by Howitt.'

He adds: 'Wakelbara (a northern horde name, near Laglan arbitrarily adopted as the tribal name by Howitt; ['wakel'] = eel), Kokleburra (another horde), Owanburra = Kowanburra (a horde on upper Belyando River), Auanbura (same horde).'

Muirhead and Lowe (1887) give a meaning for the owan ~ kowan ~ auan of the above horde name (which they also spell owen): 'emu', and also give another Yagalingu horde name as variously Babbiburra and Babingburra, 'named after the bottle tree'. I know of no likely cognates of these words (which I guess could be *awayn* and *babiyn*); the corresponding Bidjara words are quite different.

<sup>28</sup> Subsections 4.7 and 4.8 are adapted from CQLC.



This information probably came from Muirhead, who also gave information about horde names to Howitt. Note, however, that the name given as meaning 'emu' is not the word for 'emu' that appears in either Muirhead's or Lowe's vocabulary. Both of these vocabularies are from Biri dialects, and not Yagalingu. See also §3.2.

Another name that seems to belong to Yagalingu country is Duringbara, quoted by Jefferies (2006, Part 2:333) from Thomas Wills, and misspelt Durnig-burra in Donovan (1976:99).

See above (§4.6) for my assessment of the data attributed to Yagalingu by Beale (1975). The only reasonably reliable information on the language other than the two words given above, the suffix 'burra', and the fact that it may be a g-dropping dialect, is a list of words collected by FAB Turner (1863) from the Belyando River, west of Clermont and extracted from Jefferies (2006). This list, which was copied by Meston (ndf) (with acknowledgment), shares 78% (40) with Bidjara, 84% (28) with Gara-Gara and 80% (22) with Ara-Ara (Middleton and Noble 1887), 78% (25) with Wadjabangayi (Breen 1990) but only 67% (29) with Yambina (Wilson and Murray (1887), 60% (29) with Miyan (MacGlashan 1887) and 60% (26) with Yiningayi (Breen 1990). The number of items involved is small in all cases, but the weight of evidence links it to the Bidjara dialects. It could be (or be part of) what Bidjara speakers called Wadjaninga, in which case it could extend south as far as the Great Dividing Range; my main Gungabula informant said that Cungelcilla (just north of the range) was not in his country (= Bidjara country) but was Wadjaninga. It is not from a g-dropping dialect.

#### 4.8 YININGAYI

(Iningai): 'West of Dividing Range to Forsyth Range, Maneroo Creek and Longreach; south along Alice River tributaries to about Mexico; north to Muttaborra, Cornish Creek, Tower Hill, Bowen Downs, and North Oakvale; at Aramac. Their well-wooded country has broad meandering streams flowing generally west; a few plateau remnants exist. Some people moved southeast to Alpha in later years; the Wadjabangai (which see) may be a subtribe; Yankiburra of Howitt are probably a horde of Kuungkari and placed too far east on his map.'

Local group names given by Tindale were Muttaborra (or Moothaborra) in the vicinity of the present town of Muttaborra, Tateburra (north of Cornish Creek) and Terrebura (on Alice River).

Breen (1990:67) found that this area contained two languages, and described the Alice River language, a dialect of the Bidjara group, under the name Yiningayi. The Muttaborra and Tateburra lists seem to belong with Yirandhali (see §4.9). Yiningayi would, therefore, not be contiguous with any Biri dialect. (Fig. 2) shows it as having a very short common boundary with Miyan.). It seems to be not relevant to this study. Other Mari dialects south of Yiningayi (see Fig. 1) also are not relevant.

Douglas (1900) is a list of about 40 words supposedly from Bowen Downs. This is in the north-east corner of Tindale's Iningai area, close to his Yirandhali, Miyan and Yagalingu country. The list cannot be related to any of the neighbouring dialects, although it does seem to belong to the Biri group rather than Bidjara or Yirandhali. It was rightly relegated by Terrill (1998:84) to her 'unallocated' list.

#### 4.9 YIRANDHALI

(Jirandali): 'On upper Dutton and Flinders Rivers west of the Great Dividing Range, from near Mount Sturgeon south to Caledonia, west to near Richmond, Corfield and near Winton; on Torrens, Tower Hill and Landsborough Creeks; at Lammermoor, Hughenden and Tangorin.'

Yirandhali is generally regarded as part of the Mari subgroup although Sutton (1973a:45) thought it was not (but the understanding of what is a subgroup was different then), and Barrett (2005:5) points out that there is not enough information available on it (yet, at least) to prove that it is.

Much of the linguistic information is for the 'Dalleburra' people, whose country was apparently around Hughenden, south to Cameron Downs and north to Glendower. Neighbours on the Cameron Downs side

were called 'Widdy Murry'.<sup>29</sup> This information is from the Christison Family Papers, partially transcribed and supplied to me some years ago by Rod Hagen. Other names relevant to the area are in the next paragraph.

Sources for this language include several wordlists in Curr: no.129: 'Upper Flinders, Hughenden, and Dutton River' (two wordlists in 'Pooroga', which apparently means 'many', one by Edward Curr, one by Montagu Curr), no.130: 'Watershed and Upper Portion of Cape River' by M. Armstrong, the language called 'Mungerra', no.137: Tower Hill and Cornish Creeks—Tateburra tribe' by F.L. Dalhenty, no.138: 'Upper Thomson' by Robert Christison. In addition there is a vocabulary by Christison in 'Dalleburra' in the book 'Christison of Lammermoor' by M.M. Bennett (1927), and a wordlist obtained by Robert Christison for A.W. Howitt in the 1890s. The latter, from the Christison Family Papers, is, in the copy I have seen, very badly typed (presumably due to peculiarities of the handwriting; done by a student for Rod Hagen), with initial Y, K (or G) and T consistently appearing as G, B and L, respectively. There are a number of wordlists collected in 1890 by Osborne Johnson and included in his diary of a droving trip south from the Hughenden area. There are two anonymous wordlists in *Science of Man*: one for 'The Mootaborra tribe' (1900) and one from Corfield (1906). There is a vocabulary in 'Jirandali' collected from Paddy Flynn at Woorabinda by Tindale (1938a).<sup>30</sup> Tennant-Kelly (1935) gives one sentence in 'Irendely'. There are some handwritten notes from the Christison Family Papers, probably dating from the 1940s or 50s, transcribed in a preliminary fashion by Rod Hagen, mostly in English but containing some items of language which, if it can be confirmed to be Yirandhali, include a little grammatical information.

Sutton (1973a:240) thinks that Tateburra is a mistake for Taleburra, i.e. the same name as that spelt Dalleburra. It may well be, but I am not assuming that it is. The Mungerra list is located in Yilba country, but Sutton (1973a:241) identifies it as Yirandhali, with some borrowing from Yilba. Beale (1975) regarded it as a separate language, but the comparison of these vocabularies, given in §1 above, shows that it is reasonable to assume that they all belong to the same language.

#### 4.10 GUDJAL AND GUGU-BADHUN

The name 'the Upper Burdekin group' was used by Sutton (1973a) for the group of closely related Mari dialects Warrungu, Gugu-Badhun and Gudjal / Gurrjdjal. The northernmost is Warrungu (which is not contiguous with Biri dialects). According to Tindale (1940) Warungu (in his spelling) was located as follows:

Headwaters of Burdekin River; south probably to about Clarke River; west to Dividing Range; east to inland foot of Coast Range.

However, Tindale (1974) gives it as:

Headwaters of Burdekin River, southeast to near Charters Towers and southwest along the Clarke River; west to the Dividing Range; east to the inland foot of the Coast Range and to the big southern loop of the Burdekin. Very little is known of these people and it is possible another tribe occupying a portion of this area has escaped record.

This revised description extends their territory much further southeast, including all the country north of the Burdekin where it makes a big loop south of Ravenswood. This area was discussed in §3.3 and will be touched on again below.

Tindale's location is not correct; Peter Sutton (p.c.) has informed me that Tindale had the locations of Warrungu and Gugu-Badhun correct in his field notes, but they were transposed in the published material. Tsunoda, who is preparing a grammar of Warrungu for publication<sup>31</sup>, has considered material from Dixon (1970, 1991), Sutton (1973a), and Warrungu and other local people whom he has consulted, and has concluded that:

<sup>29</sup> The resemblance to Wirri, the dialect name, plus *mari* 'man' may be coincidental. Note, however, Narboo Murre also as a name of a tribe (Anonymous 1887).

<sup>30</sup> It seems hardly likely that this is the same Paddy as the one who gave some vocabulary to Osborne Johnson in 1890; see §1.

<sup>31</sup> The (working) title uses the spelling Warrongo, obviously a spelling preferred by the people, although Tsunoda uses Warrungu elsewhere.

the approximate border of the Warrungu territory seems to be Mount Garnet, Innot Hot Springs, and close to—but excluding—Ravenshoe on the north; close to Kirrama Homestead, down the Herbert River Gorge reaching close to Abergowrie, and the Stone River on the east; Wairuna, Glenharding, and Meadowbank Stations on the south; and the Great Dividing Range on the west.

Sutton (1973a:14) says of the Gugu-Badhun that:

The Gugu-Badhun inhabited the upper Burdekin (on both sides of the river), north to Meadowbank, Glenharding and Wairuna Stations, where they had their border with the Warungu. Their southern border was the Clarke River, about where it joins the Burdekin. There they met the Gudjal (also known as Gur(i)djal).

He says that Sharp's (1939) map, the first to show the location of the Gugu-Badhun, is 'imprecise but relatively correct'. Tindale has it (his Kokopaton, but actually referring to Warrungu) 'East of the Great Dividing Range; north to Mount Garnet; east to Gunawarra and Herbert Rivers; south to Dry River and Meadowbank.' He adds: 'This seems to be the Jullanka tribe of Parry-Okeden. Reference to Burdekin River in the 1940 work was a lapse for Gilbert River.' In fact, in 1940 he had said 'east to Burdekin River', now corrected to 'east to ... Herbert River', so he 'lapsed' again in explaining his error. Sutton (1973a) had criticized this earlier description as locating the language too far north and west.

Tindale locates Gudjal (his Kutjala) 'At Mount Sturgeon, Mount Emu Plains; Lolworth and Reedy Springs Stations along both sides of the Dividing Range; on upper Clarke River; east to near Charters Towers; eastern boundary not well defined (moved south to Hughenden and Pentland in early days of settlement).'

The southern part of the large area which Tindale's map gives to his misplaced Warrungu (i.e. Gugu-Badhun) was tentatively assigned above to Yangga, and the northern part, between, say, Charters Towers and the Clarke River, may be Gudjal country; note Tindale's 'eastern boundary not well defined' above. It would seem, then, that Gudjal may have been the only dialect of the upper Burdekin group which was contiguous with Biri dialects.

Sutton (1973a) is a thorough study of all that could be learnt of Gugu-Badhun, with frequent and detailed references to Warrungu and Gudjal. See especially his page 18 with reference to Gudjal sources. As noted above (§3.3), there is also a wordlist collected by Meston. Santo (2003) is a small dictionary of Gudjal.

## 5. Mari language lacking data

Wan.gan

Wangan: 'Capella north to near Blair Athol; east to Peak Ranges; west to Drummond Range; at Peak Downs.'

Wangan is Tindale's spelling. Since he did not use the velar nasal symbol to write this name on his maps, it is clear that the <ng> means [ŋ] followed by [g], which I write <n.g>. (Such distinctions, requiring the use of non-alphabetic symbols, are not made in the spelling on one of the two versions of his 1974 map.)

As noted above (2.), this could be a dialect of either the Biri group or the Bidjara group. Note that the area as given by Tindale includes the town of Clermont, and Holmer (1983:368) gives Wangan as the Aboriginal name for Clermont. One might suppose that this is an indication that Wan.gan is not really a dialect name at all.

A wordlist supposedly collected at Clermont by Meston (nde) is in fact essentially his Homestead list; see §3.3 above. A name Ba:dalibara, quoted by Jefferies (2006, Part 2: 333) from Thomas Wills is said to apply to the Clermont tribe.

## 6. Coastal languages

### 6.1 BINDAL<sup>32</sup>

Bindal, according to Tindale (1974), was located 'From mouth of Burdekin River north to Cape Cleveland; inland to Leichhardt Range; at Ayr.'

Terrill (1998:86) says:

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.

Curr's heading on the first of these no.134 wordlists is confusing; he has:

No.134 — LOWER BURDEKIN

BY E. CUNNINGHAM, ESQ., AND F.J. GORTON, ESQ.

However, this does not mean that the list which follows this heading is from Cunningham and Gorton, but simply that No.134 has contributions from Cunningham and from Gorton. This confusion does not arise if there is only one wordlist under the number, as in most cases, or if there is any introductory or additional material before the first wordlist. The heading of the second list gives Gorton's name, but it is only the fact that Curr refers to '[the list] of Mr E. Cunningham' that makes the situation (moderately) clear.

In fact, Curr says that he did not include the third list that he was offered because it 'so much resembles that of Mr E. Cunningham'. He did not refer to any resemblance with the Gorton list. Comparing these two lists with one another I found that they have 35% (72) in common. They represent two different languages! (This was noticed also by RMW Dixon, see Dixon 2002:xxxiii.) Presumably one of them is Bindal; there seems to be no alternative to calling them Bindal C and Bindal G, or something equally ad hoc. Neither of them is in a Mari dialect; Bindal C shares about a third of its vocabulary with nearby Mari dialects, and Bindal G about a fifth.

Sutton (1973a:18) is incorrect in locating Curr list no.123 ('Top of the range near Dalrymple' W.E. Armit 1886) in Bindal country, since it is west of the Bindal western boundary (as given by Tindale), the Leichhardt Range. It is clearly in a Mari dialect, although it is not clear whether it is closer to Gudjal or Yilba. It shares about a quarter of its vocabulary with each of the Bindal lists.

Mount Elliott (Curr's list no.125, Anonymous 1886) seems to be in Bindal country though; it is just south of Townsville, between the Flinders and Bruce Highways. As Sutton notes:

This small list bears practically no resemblance to any of the known Wulguru or Bindal sources, except for a few already widespread items. It probably contains insufficient evidence for a definite identification.

It has only 34 words. A somewhat longer (and, it seems, more correct) version of the list is available (Murrells 1934). My counts gave 39% (33) with the Cunningham list, 32% (25) with the Gorton list, 26% (27) with Manbarra (= Wulguru, to the north) and 21% (33) with Yuru. It could be a third language of the Bindal area (say, Bindal M).

Comparing these three possible 'Bindal' languages to lists for the nearest Biri dialects, we get for Yangga (Porter's Range) 30% (95), 22% (67), 25% (28) (Ravenswood very similar) and for Yilba (Charters Towers) 25% (52), 21% (42), 14% (21). Clearly, none of these three are Biri dialects.

<sup>32</sup> Subsections 6.1 to 6.6 are adapted from CQLC.

## 6.2 YURU

Yuru, according to Tindale (1974), was located 'From Bowen north to Burdekin River at Home Hill; southwest to Bogie Range; at Upstart Bay; south to Mount Pleasant and Mount Abbot.' Roth (1910:83) refers to 'Yuro-kappa' as the 'Bowen language'. One of the tribes from which Hall (1886) collected was 'Euronbba', which seems to be Euro (i.e. Yuru) with an ending -nba. Perhaps it is a misreading of Eurocaba. The only language source for this area seems to be Curr no.126, 'Mouths of the Burdekin River' collected by J. O'Connor (1886). This shares 18% (72), by my generous count, with Biri; Terrill (1998:86) made it 13% and that may be more realistic. Any relationship is clearly distant.

## 6.3 GIYA

Giya, according to Tindale (1974), was located from 'Bowen to St Helens and Mount Dalrymple; inland to Clarke Range; at Proserpine, Gloucester Head, Gloucester Island and Repulse Bay; not at Cape Conway.' Roth (1910:83) names Kia-Kappa as the Proserpine language. The only language source is Curr no.136, 'Port Denison to Cape Gloucester', by B. Shea (1887).

Terrill (1998:87) found that this shared 45% with Biri, and I counted 46% (83) (slightly inflated by fauna terms) with Wirri (Bridgeman list). This could be related to the Biri dialects, either as another dialect or a closely related language. It may have words with initial /gi/ (the language name, and 'githa' 'spcar') which is a non-Mari feature.

## 6.4 SCRUBBY CREEK

This wordlist (Curr no.146, collected by Edward Curr 1887) seems, from EM Curr's map, to be located near the coast at the south end of the Clarke Range. Perhaps Scrubby Creek ran down to the coast north of Mackay from that part of the range, but it cannot be located on modern maps. There is a Murray Creek in about the right position (Kim de Rijke, p.c.). Tony Jefferies (p.c.) has located a Scrubby Creek in what seems to be Baranba country, but finds the dialect to be aberrant for that area, with no explanation to hand. Scrubby Creek is a fairly common name, and a type of name that is not stable; very susceptible to renaming after a prominent person. The vocabulary shares 52% (81) with Wirri (Bridgeman's vocabulary), 44% (64) with Biri, 48% (77) with Giya and 36% (42) with Ngaro (inflated by a number of fauna terms). Fauna terminology makes only a small contribution to the Biri figure, but a rather bigger one with the others, especially with Ngaro. Given the similarities to the small isolated coastal languages Giya and Ngaro, I prefer to accept the evidence of Curr's map (especially as the information was supplied to Curr by his son) and assume that the name of the creek has been changed. This could be part of Giya, part of Wirri, part of Biri, a separate Biri dialect or a separate language. Or it could be a mixture of languages.

## 6.5 NGARO

Ngaro, according to Tindale (1940, 1974), was located at 'Whitsunday Island; ranging over Cumberland Islands; also to mainland at Cape Conway and on mountains east of Proserpine.' The only information is a wordlist collected by Tindale (1938a). This language is not mentioned by Terrill. It shares 26% (50), mostly fauna terminology, with Wirri (Bridgeman's vocabulary).

## 6.6 GUYNMAL

Koinjmal, according to Tindale (1974), was located 'West of Normanby Range (Pine Mountain) to Styx; on Broad Sound north to Cape Palmerston along a narrow coastal strip; at St Lawrence; inland to Coast Range; south to Marlborough (misprinted as Maryborough in Curr).'

This is substantially different from the territory given in Roth's (1898) map, which I have followed in my map.

Beale (1975) spells this name Guwinymal. I suggest the 'i' in Tindale's spelling of the name represents an on-glide to the palatal nasal, so Guynmal would be more likely. A practical spelling would be Guynmal or Kuynmal. Note that *guyn* or something similar seems to be the word for 'ghost' in Dharumbal (Terrill 2002:63), and can be compared with *guyn* in Warrgamay, *guwuy* in Djirbal and Gugu-Badhun, 'coyn' 'white

man' in Yiningayi, 'gooing' in Curr's 'Koongeri' vocabulary (see Breen 1990:101) and *guwiy* in Dhanggati (NSW) (Lissarrague 2007:147) and neighbouring languages. It seems likely, however, that the 'koin' of Tindale's name and the 'kooi' of Roth's Kooimur-burra, the name of a tribe belonging to Dharumbal, are the same morpheme. Tindale gives Kuinmurbura as another spelling and says that *kuinmur* means 'plain'; he also gives an alternative name for the people as Koinbal and adds '(plains people)'. Some information on the Kuinmurbura and territories in this area is in Howitt (1904:60 et seq., 111, 218).

Beale's wordlist suggests that 'Guwinymal' is a Biri dialect. However, his sources are given as two Roth vocabularies, one from Apis Creek, in Yetimarala country and one from Marlborough, a little to the east of Yetimarala country. Beale's wordlist is the same as Terrill's Yetimarala, except that Terrill's has an additional 44 words, and Beale has one word that Terrill must have overlooked. Terrill would certainly be correct in her identification of it.

This group would, I believe, have spoken a dialect of Dharumbal, although Terrill, in her grammar of Dharumbal (2002), does not mention this name or make any reference to Tindale's information on the location of this group, which he regarded as a separate tribe, or of Dharumbal (his Darambal). Muller's (1887) wordlist for 'Broad Sound, Yaamba, Maryborough [sic Marlborough] and St Lawrence' would seem to apply to at least the bulk of this area, and this is clearly Dharumbal. Kuinmurbura (mentioned above) was treated as part of Dharumbal by Terrill (who also accepted Muller's vocabulary as Dharumbal).

The introduction to Leney (1904) says that the boundaries of the Marlborough tribe:

would begin somewhere about Yaamba, and ran about 20 miles this side of the coast to St Lawrence and thence to the McKenzie River, and followed that river and the Fitzroy down again to Yaamba. The Blacks at Yaamba spoke the same language, but at Torilla and all along the coast to St Lawrence, at St Lawrence along the McKenzie River, and on the other side of the Fitzroy from Marlborough the language spoken was different.

Perhaps the second half of this quotation refers to Tindale's Koinjmal. It does not support the Tindale boundary, which would seem to run too far north. See also §3.7.

## 6.7 DHARUMBAL

Tindale's Darambal is located:

From Arthur Point on Shoalwater Bay south to Yeppoon, mouth of Fitzroy River, and Keppel Bay; inland to Boomer Range; at Marlborough, Yeppoon, Yaamba, Rockhampton, and Gracemere. Thirteen or more hordes are mentioned; one local group was on the Keppel Islands, another was said to belong to the Ningebal tribe. Other information suggests an extinct horde or tribe (Warabal) at foot of Boomer Range. Mathews [sic, Mathew] (1914) seems to have used the name Tarambol in error for Kangulu on p. 435 of his paper; he gives the latter term for the same people. His map also is in error.

Mathew (1914) is dated '(1913) 1914' in Tindale's bibliography and 1913 in Carrington and Triffitt (1999).

Terrill (2002) 'aims to be a comprehensive synthesis of all surviving information on the Dharumbal language' but was severely criticized in a review by Breen (2004). However, she shows clearly that it is very distinct from the Mari languages.

## 6.8 SOUTHEASTERN LANGUAGES

Languages around the southeastern corner of the Biri area, i.e. to the east and south of Gangulu, have been dealt with by Terrill (1998:87–89), who found that they had very little in common with the Biri dialects.

The languages of this area are Bayali (south of Dharumbal), Tulua (further south and perhaps not contiguous with Gangulu), Gureng-Gureng (with dialects Guweng-Guweng and Daribalang) and Waka-Waka (with dialect Wulili). Their locations, as given (with some additional comments) by Tindale (1974), were:



## Bayali (Baiali):

At mouth of Fitzroy River; on Curtis Island; at Keppel Bay; south to Calliope River and Gladstone; inland to Mount Morgan.

## Tulua

Calliope River to Port Curtis; inland to the Coast Range and headwaters of Boyne River (northern river of this name); at Many Peaks.

## Gureng-Gureng (Korenggoreng)

East bank of upper Burnett River from Mundubbera north to Monto and Many Peaks. Not to be confused with the Goeng. In the first edition the tribal area was incorrectly mapped and included the territory of the Wulili who lived to the west. Mathew (1910) also mapped the Wulili area incorrectly as belonging to the Wakawaka. Gayndah is mentioned by Riley and Curr as within the tribal area but this is too far south, in Wakawaka territory.

## Guweng-Guweng (Goeng)

From the south end of Port Curtis to near mouth of Baffle Creek; inland to headwaters of Kolan River, Many Peaks Range, Lowmead, and Miriam Vale. Mathew (1914) equated this tribe in error with the inland Korenggoreng.

## Daribalang (Taribelang)

Vicinity of Bundaberg; inland to about Walla; north to Rosedale; along lower reaches of Kolan River. Believed extinct; only scant data.

## Waka-Waka (Wakawaka)

Nanango north to Mount Perry behind the Coast Range; west to Boyne River, upper Burnett River, and Mundubbera; at Kingaroy, Murgon, and Gayndah. The small Kaiabara tribelet of the upper Boyne River may be a horde, but could be a detached portion of the Kabikabi. See additional notes under Kaiabara. Mathew (1910, 1914, and 1926) shows a large area in the west as belonging to this tribe; actually it is Djakunda and Wulili territory.

## Wulili (also called Wuli-Wuli)

Headwaters of Auburn River and Redbank Creek; north to Walloon and Camboon and on the ranges east of Dawson River; eastern boundary near Eidsvold. Omitted in error from my 1940 work. Mathews [sic, Mathew] (1910) included the tribal territory in his 'Wakka' language area (see other notes under Koreng-goreng). The reduplicated form of the name ... was on a manuscript map that originated with L P Winterbotham.

The reduplicated form of the name seems to be more correct; it is based on the negative *wuli*.

## 6.8.1 YIMAN

This language was classed as Maric by Beale (1975). Its location is given by Tindale, who spelt it Jiman, as:

'Upper Middle Dawson River from Bigge Range south to Great Dividing Range; east to Theodore, Cracow, and Cockatoo Creek; west to Baroondah and Durham Downs; at Wandoan and Taroom; on the Nimmi plain.'

Information I have from the late Bob Martin (Bidjara) supports this location.

Beale (1975) gives a vocabulary, but his source is 'Breen tapes'. The actual tape is one that I recorded in 1967, ostensibly in Gurang-Gurang, but actually in a Mari language. The speaker, who was drunk, was born at Mitchell (Gunggari country) but moved to the South Burnett area and said his home town was Gayndah. He was living in Cloncurry at the time. There are several words which are not found in other Mari languages, and the vocabulary shares only 59% (51) with Bidjara. However, apart from *binang* 'ear' and a word for 'go' beginning with *ya*, both widespread in Australia, there is nothing to suggest borrowing from Gurang-Gurang

or related dialects nor from Wuli-Wuli or Barunggam, dialects of the same language as Waka-Waka which are contiguous with Yiman (according to Holmer's 1983 vocabularies of these languages). Beale perhaps decided to call it Yiman because that is the geographically nearest supposed Mari dialect to Gurang-Gurang.

Jefferies (2005 and p.c.) has studied the material available on Waka-Waka and related dialects and finds convincing evidence that dialects of this group, probably more than one, were spoken in this area. The two Dawson River wordlists of O'Connor and Cunningham (1887) seem to be from Yiman country, and a wordlist by Thomas Illidge (1887-) certainly is — it was collected at Taroom. Jefferies also regards Barlow's (1872) vocabulary of 'Parrungoom' as belonging to this area (rather than to Barunggam immediately to the south). The form of some placenames in the area provides a little additional evidence that Yiman is not Maric; Taroom, with its final /m/, and Ghinghinda, with initial /gi/, could not be southern Maric<sup>33</sup>.

## 7. Conclusion

Fig. 1 shows my tentative idea of the language situation as it was in the area under consideration. Dashed lines separate dialects belonging to different languages (except when, as in the Bindal area, there is no evidence at all as to where they might be; Bindal is the only name given in that area). Dialects belonging to the same language are not separated. Locations of boundaries, where shown, are very approximate and sometimes largely guesswork, but take account of Tindale's boundaries when there is no evidence that those are wrong. Fig. 2 shows Tindale's (1974) map for the area. Fig. 1 does not show the languages to the east of Gangulu; I have no change to make to Tindale's map (Fig. 2) in this area.

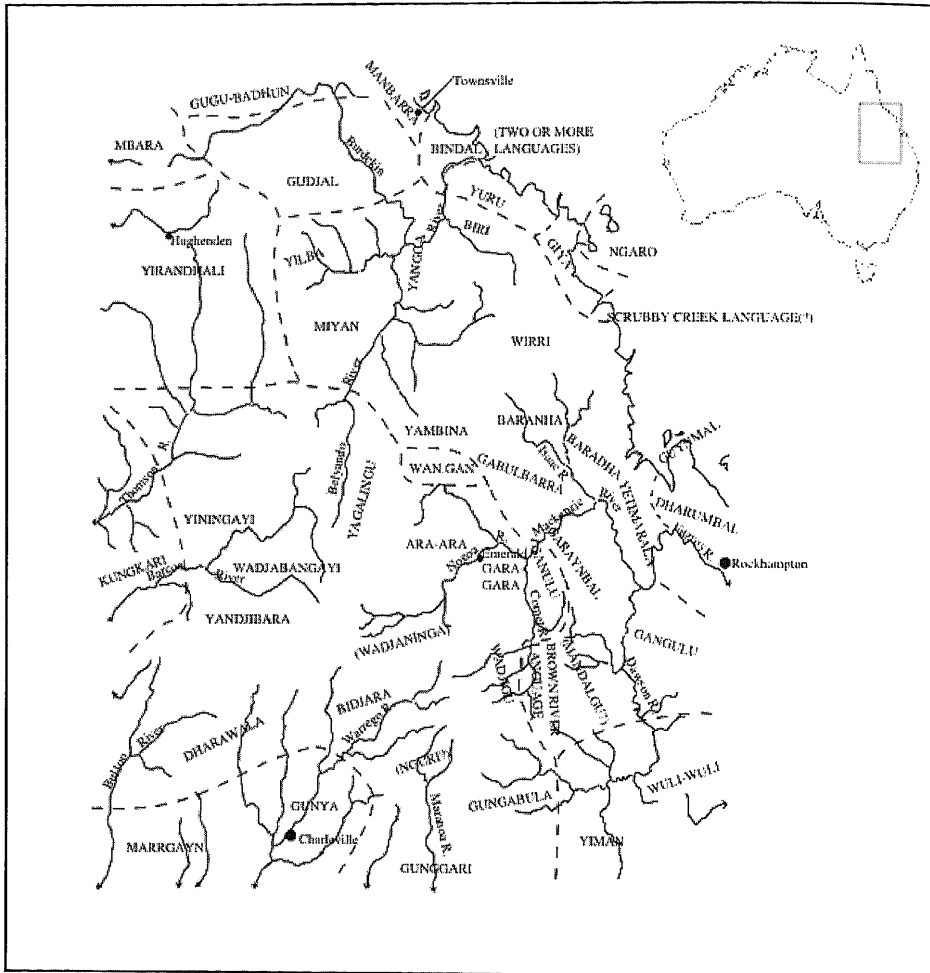
Changes that I have made to Tindale's map in Fig. 1 include (as well as a number of minor spelling changes):

- southernmost part of Warungu given to Yangga;
- a southern part of Warungu given to Gudjal (after Sutton 1973);
- Bindal as a name covering two or more languages (after Dixon 2002);
- Scrubby Creek Language added (tentatively);
- Juipera becomes part of Wirri;
- Transfer of coastal strip between Cape Palmerston and St Lawrence from Guynmal to Baradha;
- Elucidation of name of Baranha;
- Karingbal moved north (as Garaynbal);
- Wadja moved west, as Wadjigu (in the former Karingbal area);
- Mandalgu added (tentatively) as a Gangulu dialect ('Kaangooloo confederation') in the former Wadja area;
- Brown River Language added (as separate from Garaynbal);
- Kairi area divided between Gara-Gara and Ara-Ara dialects.

## Acknowledgements

I first became aware of the need for a reassessment of the sources for the Biri dialects and surrounding languages when I wrote a report for the Central Queensland Land Council (CQLC) on the languages in the languages when I wrote a report for the Central Queensland Land Council (CQLC) on the languages in the area for which it is responsible. About half of the Biri dialects fall in this area. I am grateful to the CQLC for permission to repeat much of that report in this paper. Thanks also to Kim de Rijke, Peter Sutton, Kazuko Obata, R.M.W. Dixon, Rod Hagen, Bruce Rigsby and (especially) Tony Jefferies for information. Rosalie Breen photographed Fig. 2.

<sup>33</sup> Although at least one word that seems to have final /m/ — *barrgam*, meaning 'plains turkey' — is found in some of the more northerly Mari vocabularies (and in some neighbouring languages).



**Figure 1. Map.**

## References

- Aguas, Estrella (1964). [Wirri and Gangulu elicited material] AIATSIS archive tape A1301 (not seen).
- A.M.F. (1897). 'Dialect sent by A.M.F., from Queensland' *Australasian Anthropological Journal* 1(4): 88 & 89.
- Anonymous (1886). 'Mount Elliott', in Curr, EM (1886–87), 2: 452–453.
- Anonymous (1887). 'Logan Creek, part of lower Suttor and lower Mistake Creek. Narboo Murre Tribe', in Curr, EM (1886–87), 3: 36–39.
- Anonymous (1900). 'The Mootaburra tribe' *Science of Man* 3(5): 82 & 83 (June 21, 1900).
- Anonymous (1906). 'Corfield' *Science of Man* 8: 15 (March 1, 1906).



**Figure 2.** Portion of Tindale (1974) map.

- Armit, W.E. (1886). 'Top of the range near Dalrymple', in Curr, EM (1886-87), 2: 440-442.
- Armstrong, M. (1886). 'The watershed and upper portion of the Cape River', in Curr, E.M. (1886-87), 2:464-467.
- Australian Institute of Aboriginal Studies (1968). *Catalogue of Tape Archive No.2* April 1968.
- Australian Institute of Aboriginal Studies (1971). *Catalogue of Tape Archive No.8* August 1971.
- Bannister, Dennis Daniel (1977). *Papers on the Aboriginal languages of Queensland* AIATSIS Ms 2171 (original held in the State Library of Queensland) (not seen).
- Barlow, Harriott (1872). 'Vocabulary of Aboriginal dialects of Queensland', *Journal of the Anthropological Society* 2(2): 166-175.



- Barnett, Jas.R. (1891). 'The Aboriginal Language' [letter to the editor], *The Queenslander*, April 11, 1891:703.
- Barrett, Bevan (2005). *Historical reconstruction of the Maric languages of Central Queensland* Master of Linguistics thesis, Australian National University.
- Beale, Antony (1974). *A grammar of the Biri language of North Queensland*, Ms.
- Beale, Antony (1975). *The Mari languages*, BA Honours sub-thesis, Australian National University (not seen).
- Beale, Antony (nd). Field notes on the Biri dialect, unpublished MS (not seen).
- Bennett, M.M. (1927). *Christison of Lammermoor* London: Alston Rivers.
- Beuzeville, J.P. (1919). 'Vocabulary of one hundred and fifty-four words of the Yuckaburra dialect, spoken by the Munkeeburra, South Kennedy District, Cape River, Queensland' *Journal and Proceedings of the Royal Society, NSW*, Vol 53: 102–106 (Collected about 1860, sent in after the collector's death by his son.)
- Breen, Gavan (1967). 'Preliminary report of linguistic survey of western Queensland, 1967' Ms.
- Breen, Gavan (1967–). 'Mari subgroup: miscellaneous field notes', AIATSIS MS 112.
- Breen, Gavan (1970). Tape no.201 side 2 (on AIATSIS Archive tape A1890).
- Breen, Gavan (1971). 'Aboriginal languages of western Queensland', *Linguistic Communications* 5: 1–88.
- Breen, Gavan (1973). *Bidyara and Gungabula: Grammar and vocabulary* (Linguistic Communications 8) Melbourne: Monash University.
- Breen, Gavan (1980). 'Linguistic salvage in Australia' *Lingua* 52: 179–193.
- Breen, Gavan (1981a). 'Margany and Gunya'. In Dixon, R.M.W. and Blake, B.J., eds, *Handbook of Australian Languages* Vol.2: 274–393, Canberra: ANU Press.
- Breen, Gavan (1981b). *The Mayi languages of the Queensland Gulf Country* Canberra: Australian Institute of Aboriginal Studies.
- Breen, Gavan (1990). *Salvage studies of Western Queensland Aboriginal languages* Canberra: Pacific Linguistics (PL B-106).
- Breen, Gavan (2004). Review of Angela Terrill 'Dharumbal: the language of Rockhampton, Australia' *Australian Journal of Linguistics* 24 No.1: 127–133.
- Bridgeman, G.F. and Bucas, H. (1887). 'Port Mackay and its Neighbourhood', in Curr, E.M. (1886–87), 3:44–51.
- Cameron, A.L.P. (1904) On two Queensland tribes, *Science of Man* 7 No.2: 27–29.
- Capell, A. (1956). *A new approach to Australian linguistics* (Oceania Linguistic Monograph 1) University of Sydney.
- Carrington, Lois and Triffitt, Geraldine (1999). *Ozbib: A linguistic bibliography of Aboriginal Australia and the Torres Strait Islands* Canberra: Pacific Linguistics (PL D-92).
- Chatfield, W. (1873–4). 'Yuckaburra Dialect: spoken by various tribes on the Cape River, Kennedy District, Queensland; lat. 21° south, long. 146° east.' *Journal of the Anthropological Institute of Great Britain and Ireland* Vol.3: p.261–264 (This appears under the heading 'Specimens of Native Australian Languages' by A. Mackenzie.)
- Chief Commissioner of Police, Brisbane (1886). 'Charters Towers', in Curr, E.M. (1886–87), 2: 458 & 459.
- Christison, Robert (1887). 'Upper Thomson (Lat.22°, Long.144°) or thereabouts', in Curr, E.M. (1886–87), 3: 10 & 11.
- Christison Family Papers* (n.d.) [partly typed for Rod Hagen].
- Chrystal, Lewis W. (n.d.). 'Their language', unpublished Ms.
- Commissioner of Police, Brisbane (1907). 'Dialect of the Nogoa River tribe' *Science of Man* 9(10): 157.
- Cunningham, E. and Gorton, F.J. (1886). 'Lower Burdekin', in Curr, E.M. (1886–87), 2: 488–491.

- Curr, Edward (1886). 'Upper Flinders, Hughenden, and Dutton River', in Curr, E.M. (1886–87), 2: 462 & 463.
- Curr, Edward (1887). 'Scrubby Creek', in Curr, E.M. (1886–87), 3: 42 & 43.
- Curr, E.M. (1886–87). *The Australian race* 4 vols. Melbourne: John Ferres.
- Curr, Montagu (1886a). 'Porter's Range', in Curr, E.M. (1886–87), 2: 456 & 457.
- Curr, Montagu (1886b). 'Upper Flinders, Hughenden, and Dutton River', in Curr, E.M. (1886–87), 2: 460 & 461.
- Dalhunny, F.L. (1887). 'Tower Hill and Cornish Creeks—Tateburra Tribe', in Curr, E.M. (1886–87), 3: 8 & 9.
- Davidson, D.S. (1938). An ethnic map of Australia. *Proceedings of the American Philosophical Society* 79(4): 649–679.
- de la Tour (1886). 'The Clarke or Cape River', in Curr, E.M. (1886–87), 2: 438 & 439.
- Dixon, R.M.W. (1970). 'Languages of the Cairns rain-forest region', in Wurm, S.A. and Laycock, D.C., eds, *Pacific Linguistic studies in honour of Arthur Capell* Canberra: Pacific Linguistics, 651–687.
- Dixon, R.M.W. (1972). Biri wordlist, Ms (not seen).
- Dixon, R.M.W. (1991). 'Mbabaram', in Dixon, R.M.W. and Blake, B.J., eds, *Handbook of Australian Languages* Vol.4, Oxford University Press.
- Dixon, R.M.W. (2002). *Australian languages* (Cambridge Language Surveys) CUP.
- Donovan, H.L. (1976). *The Aborigines of the Nogoa Basin: an ethnohistorical / archaeological approach* BA Honours thesis, University of Queensland.
- Douglas, A. Douglas (1900). 'Bowen Downs, Queensland' *Science of Man* 3(1):8–9.
- Fox, Mrs F.Y. (1897). 'Mamburra tribal dialect' *Australasian Anthropological Journal* 1(4):88–89.
- Fox, Mrs F.Y. (1898). 'Bumburra-burra Tribe' *Science of Man* 1(3): 62.
- Fox, Mrs F.Y. (1899). 'Mamburra Tribe' *Science of Man* 2(4): 63.
- G.F. (1896). 'Dialect of tribe at Croydon Station' *Australasian Anthropological Journal* 1(1): 12 & 13.
- 'Gir-oonbah' (1894). Letter to the editor, *The Queenslander* (October 20) [In another contribution, later the same year, the name is spelt Girroonbah].
- Hodgkinson, W.O. (1886a). 'The head-waters of the Burdekin River', in Curr, E.M. (1886–87), 2: 432–435.
- Hodgkinson, W.O. (1886b). 'Princess Charlotte's Bay, North Queensland', in Curr, E.M. (1886–87), 2: 389–391.
- Hodgkinson, W.O. (1886c). 'Country about Thornborough Diggings and near the head of the Mitchell', in Curr, E.M. (1886–87), 2: 412–413.
- Hodgkinson, W.O. (1887). 'Fort Cooper—Aminungo Tribe', in Curr, E.M. (1886–87), 3: 40 & 41.
- Holmer, N.M. (1983). *Linguistic survey of south-eastern Queensland* Canberra: Pacific Linguistics.
- Howitt, A.W. (1904). *The native tribes of south-east Australia* London: Macmillan.
- Illidge, Thomas (1887–). [wordlists of Barbarlee (Charleville), Beebinburra (Mantuan Downs), Yabooburra (Taroom)] in *Thomas Illidge — Records* John Oxley Library, Manuscripts and Business Records Collection, State Library of Queensland OM72–115.
- Jefferies, Tony (2005). *The northern dialects of Wakka: a lexical comparison* Ms, Gurang Land Council.
- Jefferies, Tony (2006). *The Maric dialects of Fitzroy River Basin* Ms, Gurang Land Council.
- Johnson, Osborne (1890). [Diary] held at John Oxley Library, State Library of Queensland.
- Josephson, T. (1887). 'Head of the Comet River' in Curr, E.M. (1886–87), 3: 96–99.



- Kent, W.H. (1886). 'Ravenswood, Upper Burdekin' in Curr, E.M. (1886-87), 2:484-485.
- Leney, G.W. (1904). 'Marlborough District' *Science of Man* 7(5): 72 & 73.
- Lissarrague, Amanda (2007). *Dhanggati grammar and dictionary, with Dhanggati stories* Nambucca Heads, NSW: Muurrbay Aboriginal Language and Culture Co-operative.
- Lukin, Gresley (1886). 'Clarke River', in Curr, E.M. (1886-87), 2: 436 & 437.
- MacGlashan, James (1887). 'Main Range between the Belyando and Cape Rivers waters', in Curr, E.M. (1886-87), 3: 19-25.
- McIntosh, Peter, W.D. Cooke and C.G. Barthelemy (1887). 'Eastern slopes of Expedition Range, lower Dawson, upper Fitzroy, Mackenzie and Isaac Rivers, and many of their tributaries', in Curr, E.M. (1886-87), 3: 58-63.
- Mathew, John (1910). *Two representative tribes of Queensland ...*, London: Fisher Unwin.
- Mathew, John (1914). 'Note on the Gurang Gurang tribe of Queensland, with vocabulary' *Report of the Australasian Association for the Advancement of Science* 14: 433-443.
- Mathew, John (1926). 'Vocabulary of the Kiramai language, Herbert River, Queensland and of the Wulili language, Auburn, Redbank, Canboon, Walloor on the Dawson' *Report of the Australasian Association for the Advancement of Science* 18: 547-550.
- Mathews, R.H. (1898). Divisions of Queensland Aborigines *Proceedings American Philosophical Society* XXXVII: 327-336.
- Mathews, R.H. (1899). 'Divisions of some Aboriginal tribes, Queensland' *Journal & Proceedings of the Royal Society of New South Wales* 33: 108-114.
- Mathews, R.H. (1905). 'Ethnological notes on the Aboriginal tribes of Queensland' *Proceedings of the Royal Geographical Society of Australasia, Queensland Branch* 20: 49-75.
- Meston, A. (1887). First report on Western[?], unclear] Aborigines to the Home Secretary, Sir Horace Tozer: 'Gnoorce' tribe and sub-tribes west of the Warrego, Ms.
- Meston, A. (nda, about 1900). 'Homestead blacks, Hughenden line', Ms held in the State Library of Queensland.
- Meston, A. (ndb). [wordlist from Mantuan Downs], Ms held in the State Library of Queensland.
- Meston, A. (ndc). [wordlist in 'Gnoorce'], Ms held in the State Library of Queensland.
- Meston, A. (nnd). [Springsure language] newspaper cutting in A. Meston Cuttings Book, Box 3 (7). held in the State Library of Queensland.
- Meston, A. (nde). Aboriginal words used in central district, Clermont, Queensland, Ms held in the State Library of Queensland.
- Meston, A. (ndf). Aboriginal words used in central district, Clermont, Queensland ("brought from the locality by Francis A.B. Turner"), Ms held in the State Library of Queensland.
- Meston, A. (ndg). unpublished papers, Emerald, Small Octavo book S5:3, Ms held in the State Library of Queensland.
- Meston, A. (ndh). unpublished papers, Ukalunda, Small Octavo book S5:13, Ms held in the State Library of Queensland (not seen; probably a copy of Barnett 1891).
- Meston, A. (ndi). [two short wordlists in Wirri, reproduced in Bannister (1977)].
- Middleton, Thomas, and E. Irving Noble (1887). 'Nogoa River' in Curr, E.M. (1886-87), 3: 90-95.
- Muirhead, James and Charles Lowe (1887). 'Belyando River' in Curr, E.M. (1886-87), 3: 26-35.
- Muller, Frederic (1887). 'Broad Sound, Yaamba, Maryborough, and St Lawrence' in Curr, E.M. (1886-87), 3: 52-53.
- Murray, F.J. (1887). 'Brown River' in Curr, E.M. (1886-87), 3: 100-101.
- Murrells, James (1934). in 'Aboriginal Language: Dialects of Vanished Tribes: Burdekin River Tribe' *The Queenslander* February :13 [taken from *Narrative of James Murrells ('Jemmy Morrill') Seventeen Years Exile Among the Wild Blacks of North Queensland* written and printed by Edmund Gregory, Government Printer, Brisbane, 1896].

- Norman, Warwick, (c.1973). Baradha and Biri field notes, unpublished Ms, Australian National University (not seen).
- Oates, W.J. and L.F. (1970). *A revised linguistic survey of Australia* Canberra: Australian Institute of Aboriginal Studies.
- O'Connor, John (1886) 'Mouths of the Burdekin River' in Curr, E.M. (1886-87), 2: 454 & 455.
- O'Connor, John and Cunningham, E. (1887). 'Dawson River' in Curr, E.M. (1886-87), 3: 102-113.
- O'Grady, G.N. and Voegelin, C.F. and F.M. (1966). *Languages of the world: Indo-Pacific fascicle six, Anthropological Linguistics* 8 (2).
- Osborne, C. (1966). Gangulu transcript, AIATSIS pMS 1341 (not seen),
- Peterson, Nicolas (1976). ed. *Tribes and boundaries in Australia*. (Social Anthropology 10) Canberra: Australian Institute of Aboriginal Studies.
- Rigsby, Bruce (1987). [Suttor River language] unpublished Ms.
- Roth, W.E. (1897). [Vocabulary of] Bau-wi-wa-ra Sub-tribe, [report to] Department of Commissioner of Police, Brisbane, Ms.
- Roth, W.E. (1898). The Aborigines of Rockhampton and surrounding coastal districts, AIATSIS MS 1005.
- Roth, W.E. (1910). 'Social and individual nomenclature' *Records of the Australian Museum* 8 (1) 79-106 (*North Queensland Ethnography Bulletin* No.18).
- Santo, William (compiler; edited by Cassy Nancarrow) (2003). *Gudjal language dictionary: Gudjala to English and English to Gudjala* Thuringowa (Qld): Black Ink Press.
- Schmidt, Wilhelm (1919a). *Die Gliederung der australischen Sprachen, geographische, bibliographische, linguistische Grundzüge der Erforschung der australischen Sprachen* Vienna: Mechtharisten Buchdruckerei.
- Schmidt, Wilhelm (1919b). *Die Personalpronomina in den australischen Sprachen* Vienna: Akademie der Wissenschaften.
- Scott, J. Hall (1886). 'Burdekin River— various tribes', in Curr, E.M. (1886-87), 2: 492-501.
- Sharp, R.L. (1939). 'Tribes and totemism in north-east Australia' *Oceania* 9: 254-75, 439-61.
- Sharpe, Margaret (1966-67). 'Gangulu from Eddie Conway' AIATSIS MS 1428 (not seen).
- Sharpe, Margaret (1967). 'Biri language data' AIATSIS tape A3090 (not seen).
- Shea, B. (1887). 'Port Denison to Cape Gloucester' in Curr, E.M. (1886-87), 3: 4-7.
- Sommer, Bruce (1974). 'Biri language data' AIATSIS tapes nos A3231 and A3232 (not seen).
- Sutton, Peter (1970). *Report of fieldwork in northeast Queensland, June to August 1970* AIATSIS MS 379 (not seen).
- Sutton, Peter (1973a). *Gugu-Badhun and its neighbours: a linguistic salvage study* Master of Arts thesis, Macquarie University.
- Sutton, Peter (1973b). [transcript of Aguas 1964] AIATSIS MS 1781.
- Sutton, Peter (1978). *Wik: Aboriginal society, territory and language at Cape Keerweer, Cape York Peninsula, Australia* PhD thesis, University of Queensland.
- Tennant-Kelly, C. (1935). 'Tribes on Cherburg Settlement, Queensland' *Oceania* 5 no.4: 461-473.
- Terrill, Angela (1998). *Biri* (Languages of the world / Materials 258) Lincom Europa, Munich.
- Terrill, Angela (2002). *Dharumbal: the language of Rockhampton, Australia* Canberra: Pacific Linguistics.
- Tindale, N.B. (1938a). Parallel vocabularies, Ms.
- Tindale, N.B. (1938b). Harvard and Adelaide Universities Anthropological Expedition, Journal and notes, Volume 1, Ms (at South Australian Museum).

# MOSQUITO (DIPTERA: CULICIDAE) AND RAINFALL ASSOCIATIONS WITH ARBOVIRUS DISEASE IN EASTERN VICTORIA

PHILIP S. BARTON<sup>1,3</sup> & HAYLEE J. WEAVER<sup>2</sup>

1. School of Life and Environmental Sciences,  
Deakin University, Geelong, VIC 3217,

2. National Centre for Epidemiology and Population Health,  
Australian National University, Canberra, ACT 0200,

3. Present Address: Fenner School of Environment and Society,  
Australian National University, Canberra, ACT 0200. Email: [philip.barton@anu.edu.au](mailto:philip.barton@anu.edu.au)

## Abstract

Associations between mosquito abundance and Ross River virus (RRV) and Barmah Forest virus (BFV) disease are demonstrated for the Gippsland Lakes region of eastern Victoria, Australia. Significant correlations were obtained between RRV and BFV disease notifications and mosquito counts after lag times ranging from 2–4 months for the dominant mosquito species *Aedes camptorhynchus*, and 0–3 months for the less abundant mosquitoes *Anopheles annulipes*, *Culex australicus* and *Culex globocoxitus*. Correlations between RRV and BFV disease notifications and rainfall were significant after lag times of 3–4 months. Monthly abundance of *Ae. camptorhynchus* was significantly higher during above-average years of RRV notifications, with higher mosquito abundance during November to January. Together, these results clarify some important timelines between rainfall, mosquito abundance and increased arbovirus activity in eastern Victoria.

KEYWORDS: *Aedes camptorhynchus*, Barmah Forest virus, Gippsland Lakes, *Ochlerotatus*, rainfall, Ross River virus.

## Introduction

The mosquito fauna of the Gippsland Lake wetlands of eastern Victoria, Australia, is of interest due to its role in the transmission of enzootic Ross River and Barmah Forest viruses to humans (Campbell *et al.* 1989b; Aldred 1993; Russell 1995; Mackenzie *et al.* 1998). The dominant mosquito in the area is the southern saltmarsh mosquito *Aedes camptorhynchus* (Thomson) (see Dhileepan *et al.* 1997), and is a demonstrated vector of Ross River virus (RRV) (Ballard & Marshall 1986; Campbell *et al.* 1989a; Aзуolas *et al.* 2003) and suspected vector of Barmah Forest virus (BFV) (Aldred *et al.* 1990; Passmore *et al.* 2002). Less abundant mosquitoes in the region, including *Anopheles annulipes* s.l. Walker, *Culex globocoxitus* Dobrotworsky and *Culex australicus* Dobrotworsky and Drummond, may also play a role in arbovirus ecology, albeit minor (Russell 1995, 2002; Aзуolas *et al.* 2003; Barton *et al.* 2004b). For consistency with current practice in other medical entomology journals, in this paper we use the genus *Aedes* Meigen, 1818 in place of *Ochlerotatus* Lynch Arribalzaga, 1891. However, we recognise recent phylogenetic analysis indicates the elevation to generic rank of the subgenus *Ochlerotatus* (see Reinert *et al.* 2004; Reinert *et al.* 2008).

Outbreaks of RRV and BFV disease in Australia have previously been linked to high rainfall and increased mosquito abundance in parts of Queensland (Ryan *et al.* 1999; Kelly-Hope *et al.* 2004a; Gatton *et al.* 2005), the southwest of Western Australia (Woodruff *et al.* 2003; Woodruff *et al.* 2006), and northern Victoria (Wishart 2002; Woodruff *et al.* 2002). Reported outbreaks of RRV disease have occurred in the Gippsland Lakes region in 1989 (Campbell *et al.* 1989b) and 1993 (Norris 1993), and outbreaks of BFV disease in 1993 (Norris & Robinson 1995) and 2002 (Passmore *et al.* 2002). An understanding of the association between the incidence of arbovirus disease, key environmental factors such as rainfall, and increases in vector mosquito populations will contribute to our knowledge of regional arbovirus ecology, and may lead to enhanced predictive abilities for future outbreaks.

Tindale, N.B. (1940). 'Distribution of Australian Aboriginal tribes: a field survey' *Transactions of the Royal Society of South Australia* 64: 140–231.

Tindale, N.B. (1974). *Aboriginal tribes of Australia: their terrain, environmental controls, distribution, limits, and proper names* Berkeley: University of California Press / Canberra: Australian National University Press.

Tompson, F.M. and Chatfield, W. (1886). 'Natal Downs Station, Cape River' in Curr, E.M. (1886–87), 2: 468–483.

Tsunoda, Tasaku (1971). 'Biri language data' AIATSIS Archive tapes A2777, A2778 (not seen).

Tsunoda, Tasaku (1971–2). Field Report on Biri and Kuritij, AIATSIS pMS 1883 (not seen).

Tsunoda, Tasaku (1974). *A grammar of the Warungu language, north Queensland* MA thesis, Monash University.

Tsunoda, Tasaku (in preparation) [Warrongo grammar].

Turner, F.A.B. (1863). unpublished Ms (quoted by Jefferies 2006).

Wafer, Jim and Lissarrague, Amanda (eds) (2008). *A Handbook of Aboriginal Languages of New South Wales and the Australian Capital Territory* Nambucca Heads: Muurrbay Aboriginal Language and Culture Co-operative.

Wilson, Sir Samuel and Murray, T. (1887). 'Peak Downs District, Logan Downs Station' in Curr, E.M. (1886–87), 3: 64–69.