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A GRAMMAR OF WARRONGO

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Tasaku Tsunoda

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Preface

What follows is a description of the Warrongo language, once spoken in the upper Herbert River area of north Queensland, Australia. I conducted fieldwork on several languages in north Queensland from 1971 to 1974. They were all endangered at that time. I worked mainly on Warrongo, recording it from perhaps about ten people. But almost all the data on it were provided by the late Mr. Alf Palmer (Warrongo name: Jinbilnggay), the last fluent speaker of the language. A very small amount of information — nonetheless invaluable — was recorded from the late Mr. Alec Collins (Warrongo name: Wolngarra) by Peter Sutton and by me.

Alf Palmer passed away in 1981. But towards the end of the 20th century, a movement to revive the ancestral languages of the area (including Warrongo) started, and I have been conducting Warrongo language lessons in Townsville since 2002 (Tsunoda (2002, 2004, 2005: 212-213) and Tsunoda and Tsunoda (2006, 2007, 2008, 2010)).

The first outcome of the fieldwork in the early 1970s was my M.A. thesis (Tsunoda 1974a), submitted to Monash University. Subsequently I wrote about various aspects of Warrongo: Tsunoda (1976a, 1976b, 1984, 1987, 1988a, 1988b, 1990, 1992, 1995, 1997, 1998, 1999, 2006, 2007, 2008), among others. The main points of these papers are incorporated into the present work. With permission from Mrs. Rachel Cummins (née Rachel Wilson), who is Mr. Alf Palmer's daughter's daughter, I conducted a course on the Warrongo language at the University of Tokyo in the academic years 2003, 2005, 2007 and 2009. The present work is almost entirely based on the lecture notes for that course. Some of the comments from the students are incorporated into the present work.

The present grammar is not a revision of Tsunoda (1974a). It is an entirely new work. It contains the following parts: Chapter 1 The language and its speakers, Chapter 2 Phonology, Chapter 3 Word classes and morphology, Chapter 4 Syntax, and Texts. This format is based on the guideline *Handbook of Australian Languages* prepared by R. M. W. Dixon and Barry J. Blake. Inevitably there are overlaps among the chapters. For example, Chapter 3 contains a large amount of syntactic information. There is no separate chapter for semantics, discourse, or comparative-historical linguistics. Nonetheless some information on semantics is included in Chapters 1, 3, and 4; some information on discourse in Chapter 4; and some information on comparative-historical linguistics in Chapters 1 to 4.

The present work is a description of a language that was already endangered when the fieldwork was conducted. In view of this, in each chapter, I make an effort to provide as detailed a description as possible, accompanied by as many examples as possible. I even report a phenomenon that may not have existed when the language was thriving; see 2.11. This is because, when working on an endangered language, we can never tell what may turn out to be important – for

the linguistic academia and/or the community concerned. It is important to bear in mind that 'the data one will be collecting may well be all that there will be of documentation of the language' (Grinevald 2007: 43), and that 'any record made is likely to be used for other purposes later on' (Mithun 2001: 34).

Furthermore, in works on endangered languages, the 'reliability of the data needs to be assessed, ... and care must be taken in order to provide a reliable documentation' (Tsunoda 2005: 244). In view of this, for each sentential example, I indicate whether it was given by Alf Palmer ('AP') or by Alec Collins ('AC'). For many (though not all) of the examples given by Alf Palmer, I indicate whether it is cited from a text, it was uttered spontaneously during a conversation between Alf Palmer and me, or it is a Warrongo translation of an English sentence. For many (though not all) of the examples cited from a text or our conversation, the context in which that sentence was uttered, is presented.

The examples that were composed by me too late to be checked by Alf Palmer are marked with '(TT)'. The vast majority of the examples marked by '(AP') were uttered by Alf Palmer either in a text or during our conversation. However, they (marked with '(AP)') include a very small number of examples that were composed by me and approved by Alf Palmer; the abbreviation '(TT, AP)' is used when it is deemed useful to emphasize that the example in question is such an example. In addition it is important to mention that maximum caution is exercised in presenting Table 3-14 Verbal paradigm (1).

As can be seen, the present work is an example of what can be done, and what cannot be done, when only the last single speaker is available.

In addition to north Queensland (where I conducted field work from 1971 to 1974), I have been carrying out fieldwork in Kimberley, Western Australia since 1975, working on Djaru, Wanyjirra and a few other languages; one of the outcomes is Tsunoda (1981a) on Djaru. A similarity or a difference between Warrongo and Djaru/Wanyjirra will be sometimes be pointed out, for this may be useful to a reader who is not familiar with Australian languages.

August 2011 Tasaku Tsunoda

National Institute for Japanese Language and Linguistics Tachikawa City, Tokyo, Japan

Acknowledgements

The present work is dedicated to the memory of the late Mr. Alf Palmer, to whom my most sincere words of gratitude are due. He was an extremely intelligent and helpful consultant. Also he was entertaining and humorous, as can be seen in a fair number of sentential examples given below. He was deeply concerned about the fate of his language, and was eager to have his language recorded for posterity. He used to say to me, 'I'm the last one to speak Warrongo. When I die, this language will die. I'll teach you everything I know, so put it down properly' (Tsunoda 2005: vii). Indeed, he made admirable efforts to each me everything he knew (Tsunoda 2004: 273-274). In retrospect, it was Alf Palmer who taught me the importance of documenting endangered languages. It is truly unfortunate that I was not competent enough to fully document his knowledge. It is also unfortunate that there was no opportunity to visit the Warrongo country with him – to check placenames, etc., or just to see the country where he was born and grew up. (See 1.8.4.1 for his biography and an account of his linguistic knowledge.)

Alf Palmer named me after his uncle – no doubt, mother' brother (MB), and not father's brother (FB) (see 1.5.4.2-[2]). This has an important implication. According to Berndt and Berndt (1965: 87-88), in the traditional Aboriginal societies, MB and father's sister (FZ) played pivotal and crucial roles, involving 'special obligations and responsibilities'. In view of this, it is an honour and privilege to be named after Alf Palmer's uncle (no doubt MB). At the same time, his intention may have been to assign me an obligation and responsibility to document his language to pass it on to posterity. In Rachel Cummins' words, he entrusted the Warrongo language to me.

The Warrongo language revival movement is making a slow but steady progress (see Tsunoda and Tsunoda (2010), among others). Alf Palmer's dedicated efforts to have his language documented have proved to be truly worthwhile. What he sowed four decades ago is now beginning to be harvested by his descendants.

Also in the 1970s, the following people each provided a limited amount of – nonetheless invaluable – data on Warrongo: Alec Collins (1.8.4.2.), and also Harry Bunn, Vera Smallwood, Mr. Williamson, Mrs. Morgenstern, Denny Hoolihan, Mrs. Cassidy, Tommy Murray, Tommy Springcart, and Ado Cashmere (1.8.4.3).

The then Australian Institute of Aboriginal Studies (now Australian Institute of Aboriginal and Torres Strait Islander Studies) and Monash University financed my research into the Warrongo language in the 1970s.

Barry J. Blake supervised my M.A. study (and also Ph.D. study) at Monash University, and he has been continuing to give me advice.

Peter Sutton made available all his unpublished data on Warrongo recorded from Alec Collins, and also his unpublished data on Gugu-Badhun and Gujal. I recorded a very small amount of data from Alec Collins (see 1.8.4.2), but all the

examples provided by Alec Collins that are given below were recorded by Peter Sutton.

Gavan Breen made available his data on Guial recorded from George Reid.

R. M. W. Dixon made available his unpublished data on Warrongo recorded from Alf Palmer, and also provided a photocopy of a word list of the Ngaygungu language (1.4.1): 'Tribes of Aboriginal met with around Atherton' by Department of Commissioner of Police, Brisbane, dated 4 November 1898.

In the 2000s, during my participation in the Warrongo language movement, Rachel Cummins (Alf Palmer's daughter's daughter) provided a large amount of information, in particular, on the biography of Alf Palmer (1.8.4.1). She also issued permission to conduct the class on Warrongo at the University of Tokyo, and to publish the present volume.

Willy Santo (Gujal group) and Shirley Johnson (Wulgurugaba group), both interviewed in 2001, supplied information on the mythology of the region. (See 1.5.3.)

Leigh Pentecost and Rod Nielson provided information on aspects of the geography and history of the region. (See 1.7.)

The students of the class on Warrongo that I conducted at the University of Tokyo supplied helpful comments.

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Tatsuyuki Mimura and Kan Sasaki each read a draft of Chapter 2 and furnished comments and references. Kan Sasaki detected a fair number of typos in 4.11.

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Yasunari Imamura checked the numbering of examples. Minoru Yamaizumi examined the contents and pagination. Hatsue Ishii prepared the basis of Maps 1, 3 and 4.

The National Institute for Japanese Language and Linguistics (Tachikawa City, Tokyo, Japan), where I serve as the Director of the Department of Crosslinguistic Studies, has supported my research, including the preparation and the publication of the present work. Parts of the present work are an outcome of the research I carried out for the collaborative research project that I am conducting, as the project leader, at the Institute: 'Modal and speech-act constraints on clause-linkage'.

The anonymous reviewer of the manuscript and Bernard Comrie, one of the editors of Mouton Grammar Library, furnished very detailed and helpful comments.

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List of abbreviations and symbols

The following abbreviations follow 'The Leipzig Glossing Rules' (www.eva.mpg.de/lingua/pdf/LGR09 02 23.pdf; accessed on the 21 February 2011) wherever possible.

A (a) male member of a section, (b) so-called transitive subject

a female member of a section

ABL ablative
AC Alec Collins
ACC accusative
Adj adjective
Adv adverb
ADNOM adnominal

AFFIMP affirmative imperative

anim animate
ANTIP antipassive
AP (a) Alf Palmer

(b) word, sentence, etc. that was:

(b-i) given by Alf Palmer spontaneously (in a text, during elicitation, or during our conversation), or given by him as a Warrongo translation

of an English sentence, or,

(b-ii) suggested by Tasaku Tsunoda and approved by Alf Palmer

APPL applicative APPR apprehensional

B male member of a section B&G Bidyara and Gungabula

BI Bidyara

b female member of a section

B.T.L. Blue Tongue Lizard

C (a) male member of a section, (b) consonant

c female member of a section

CAUS causative CAUSE cause

CF counter-factual COM comitative

D (a) daughter, (b) male member of a section

d female member of a section

DAT dative

DD daughter's daughter DH daughter's husband

DNK 'I do not know' (gloss for the enclitic =bajon (4.25-[2])

DS daughter's son

DU dual

d-S derived S
EB elder brother
ERG ergative
EZ elder sister
F father

FB father's brother
FEM feminine
FF father's father
FM father's mother

FOC focus FUT future

FZ father's sister GEN genitive GNG Gungabula GNY Gunya

H (a) husband, (b) high pitch

HB Harry Bunn
hum
human
IMP imperative
inan inanimate
INS instrumental

INTR intransitive-stem-forming suffix

ITER iterative
L low pitch
LINK linking interfix
Lit. literal translation

LOC locative

M (a) mother, (b) middle-level pitch, (c) man

MA Margany

MB mother's brother MF mother's father

MID middle

MM mother's mother MZ mother's sister

N nasal NEG negation

NEGIMP negative imperative

NF nonfuture NOM nominative NONINT non-interference

O so-called transitive object

PTCP participle

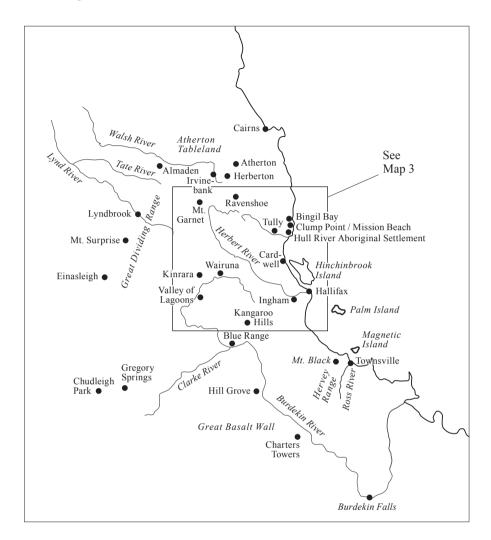
p.c. personal communication

PL. plural PROH prohibition PST past pronoun pron **PURP** purposive question 0 RECP reciprocal REFL reflexive S (a) son, (b) so-called intransitive subject, (c) stop SD son's daughter singular SG SS son's son sp. species **STAT** stative SW son's wife **TAGQ** tag question transitive-stem-forming suffix TR TT This indicates (a) words, sentences, etc. that were made up by Tasaku Tsunoda or (b) information, words, etc. supplied by Tasaku Tsunoda. TT, AP This emphasizes that the item in question was suggested by Tasaku Tsunoda and approved by Alf Palmer. V vowel intransitive verb Vi Vt transitive verb W (a) wife, (b) woman W-GB-G Warrongo, Gugu-Badhun and Gujal WM wife's mother YByounger brother ΥZ younger sister 1 first person 2 second person third person 3 [] This indicates (a) words that were supplied by Tasaku Tsunoda or (b) so-called deletion. TT] This indicates words that were supplied by Tasaku Tsunoda. This precedes an enclitic. This precedes a suffix or indicates a morpheme boundary within a word. 9 A question mark following a verb indicates that the conjugational class membership of this verb is not known. This indicates that one or more words have been deleted by Tasaku Tsunoda from the original sentence, for the purpose of exposition.

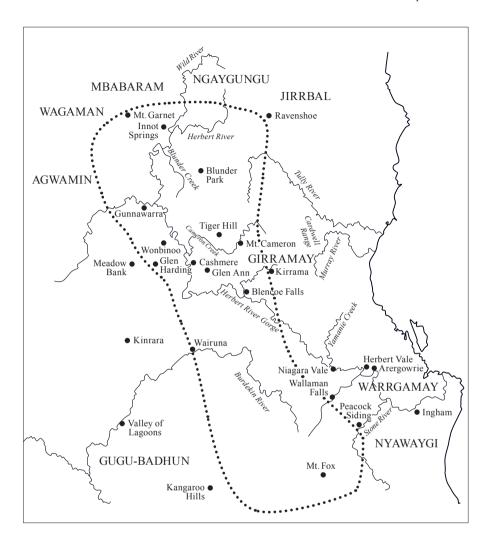
e.g. 'S: O' indicates that 'the S corresponds to the O'. This indicates (a) reduplication or (b) alternation.



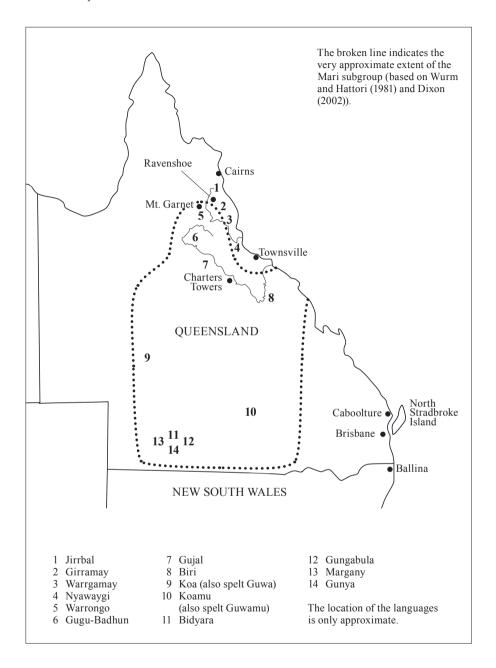
Map 1. Australia



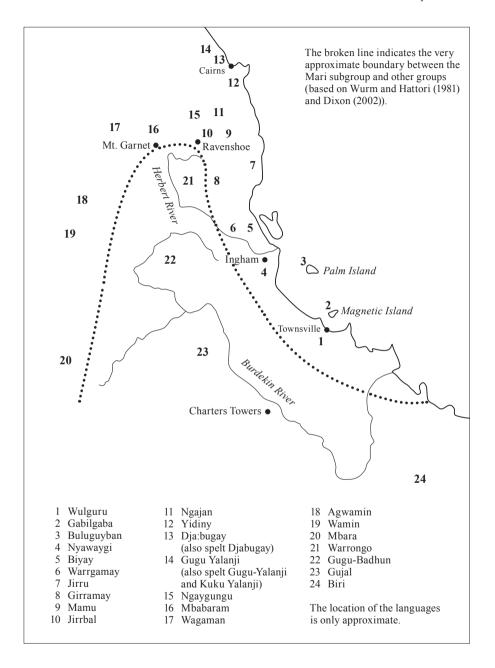
Map 2. Herbert-Burdekin area (1): placenames



Map 3. Warrongo territory



Map 4. Mari subgroup



Map 5. Herbert-Burdekin area (2): languages



Photo 1. Alf Palmer (July 1972, Palm Island, Queensland, Australia)



Photo 2. Alf Palmer (r.) and Tasaku Tsunoda (l.) (September 1974, Palm Island, Queensland, Australia)

Chapter 1

The language and its speakers

1.1. Linguistic type

Warrongo is a fairly typical Australian language – except for the existence of syntactic ergativity, a phenomenon that is unique not only among Australian languages, but also among the world's languages, being mainly found in less than ten languages of a small area in northeast Australia.

The following phonemes can be set up for Warrongo: /b, d, J, g, m, n, p, n, r, I, l, j, w, a, i, u, aa/, i.e. four stops (labial, apical, laminal, dorsal; voicing is not distinctive), four nasals each corresponding to a stop, two rhotics, one lateral, two semivowels, three short vowels, and one long vowel. Stress and pitch are not distinctive.

The practical orthography employed for the present work is as follows: b, d, j, g, m, n, ny, ng, rr, r, l, y, w, a, i, o, aa. The rhotic /r, written with rr, is generally an alveolar tap, while the other rhotic /r, written with r, is generally a retroflex approximant. Note that the stop /r is written with r, and the semivowel r with r. This practical orthography is identical with many other practical orthographies used for Australian languages except that r written with r0, and not r1. But the letter r1, and not r2, will be used when citing from other sources.

Warrongo is almost entirely suffixing, although there are elements which may be considered interfixes (not as suffixes): linking interfixes (cf. comments on, e.g., Tables 3-3, 3-5 to 3-7) and epenthetic phonemes (2.6-[2]). Warrongo is agglutinative, except that the singular pronouns of the first person and the second person exhibit fusion.

Five word classes can be set up: (personal) pronoun, noun (including 'adjective-like' noun), adverb, verb, and interjection. As a rule each stem belongs to only one word class, although there are a very small number of stems that may possibly have dual class membership of noun and verb. There are two productive processes for deriving verbs from nouns, etc., but there is no productive process for deriving nouns from verbs. In addition to words, there are a fair number of enclitics, whose function is largely modal.

Pronouns have three numbers (singular, dual, plural) and three persons (first, second, third), without an inclusive/exclusive distinction. Nouns in the main lack a number distinction. Nouns and pronouns have eight cases, while some of adverbs have a limited set of cases. Roughly speaking, nouns have the $A \neq S = O$ pattern (the ergative-absolutive pattern), and pronouns the $A = S \neq O$ pattern (the nominative-accusative pattern).

Verbs have three conjugational classes. One (L-class) is predominantly transitive, while the other two (Y-class and ZERO-class) are entirely intransitive. Verbal inflectional suffixes have a temporal, aspectual, and/or modal meaning. Subordination is productively formed by the pan-Australian purposive and also by a few other conjugational categories.

There are four voice-related constructions: antipassive, reflexive/middle, reciprocal, applicative, and one construction that is dominantly aspectual: iterative. Syntactic ergativity is attained predominantly by means of the antipassive construction.

Modal qualification of sentences can be achieved by enclitics and/or adverbs of modality. Polar questions can be formed by the use of the question marker *wayi* or simply just a rising intonation.

Word order is fairly free, but there are a small number of restrictions or tendencies. For example, interrogative words and the question marker *wayi* tend to occur sentence-initially. Also, word order is fixed in a few types of noun phrases and probably in a few types of verb phrases, and Warrongo is configurational regarding these phrases, although it is in the main non-configurational. Warrongo discourse is often highly elliptical.

1.2. Names of the language and people

In Aboriginal Australia the name of a language is often used to refer to the people in question as well (cf. Dixon 1980: 41).

The name of the language under study is [warono] /warunu/. The rhotic is an alveolar tap, and not an approximant. This name has been spelt in various ways, e.g. 'War-oong-oo' (William Craig's letter dated 24th July 1898; see 1.8.2-[2]), 'Warungu' (Oates and Oates 1970, Tindale 1940, 1974, Tsunoda 1974b), 'Warunu' (Dixon 1970, 1972, Tsunoda 1974a), 'Warunu' (Tindale 1940, 1974) (the apostrophe indicates stress (Tindale 1974: 2)), and 'Warrungu' (Tsunoda 1988b). The present work employs 'Warrongo' (the reason for this choice is given in 2.14).

The meaning of the word *warrongo* is not known. Tindale (1974: 188) states that ['waruŋu] means 'woman'. However, in this language, the word for woman is [warŋo] /warŋu/, and not [waroŋo] /waruŋu/. Girramay, immediately east of Warrongo (see Map 5), has the noun *warrungu* 'evening star' (Dixon 1982: 1). Yidiny, about 80 km northeast of Warrongo, has the compound verb *warrungu-gilju-L* 'dream about'; the verb *gilju-L* means 'bite' (Dixon 1991a: 286, 299). But the meaning of *warrungu* is not given. It would be expected to mean 'dream' (a noun). It is not known if these two words (*warrungu*) are related to the name Warrongo.

Names other than [warono] and its various spellings have been given. Oates and Oates (1970: 175) list *Bara* as an alternative to *Warungu*. According to Sutton (1973: 9), there was a language called Mbara, southwest of Gugu-Badhun and west

of Gujal, around Gregory Springs and Chudleigh Park Stations (see Map 2). Bara is possibly a mishearing for Mbara. The initial /m/ of Mbara would have been difficult to detect; see 1.4.2.2.

Tindale (1974: 188) lists Warungu, 'Warunu, and Warrialgona. But he comments: 'The suggested Warrialgona equation is doubtful'. The meaning of Warrialgona is not known – if such a word exists at all. See 1.8.2-[1] for more on the word Warrialgona.

Alec Collins (cf. 1.8.4.2) referred to his language as Warrongo and also as Gobobarra. The noun gobo means 'leaf', and the suffix -barra 'denizen of, belonging to, associated with' (cf. 3.7.1-[1]). Therefore, literally gobobarra means 'person(s) of a place with [lots of] leaves'. Tommy Murray, a Jirrbal speaker (cf. 1.8.4.3-[7]), independently stated that there were a group of people and a language called Gobobarra around Mount Garnet (see Map 3). But Alec Collins seems to have come from Herbert Gorge area (cf. 1.8.4.2), and not from Mt. Garnet. It is possible that Gobobarra refers to the Warrongo language and people of an area that includes Mt. Garnet and Herbert Gorge. However, the vegetation of Mt. Garnet is an open forest, while that of Herbert Gorge is a dense rainforest (cf. 1.5.1). In view of this, the name Gobobarra seems appropriate for the language and the people of Herbert Gorge, rather than of Mt. Garnet.

Alf Palmer (cf. 1.8.4.1) referred to Warrongo people as Warrongo and also as Gonarribarra 'basalt person(s)' (gonarri 'basalt'). In addition, Alf Palmer gave the following words: (i) barribiri 'lava', 'lava country', 'Valley of Lagoons' (see Maps 2 and 3), 'person of/from lava country', e.g. a Warrongo person, a Gugu-Badhun person; and (ii) barribiribarra 'person of/from Valley of Lagoons'. There was volcanic activity in the region, which produced much lava and basalt (cf. 1.5.1).

1.3. Dialects

Warrongo probably had dialects. However, they were impossible to investigate already in the early 1970s, when I conducted fieldwork on the language. There appear to have been at least two dialects. One is presented by the data obtained from Alf Palmer, a central dialect (?) (1.8.4.1), and the other by the data obtained form Alec Collins, an eastern dialect (?) (1.8.4.2).

The data from Alf Palmer are extensive, but the data from Alec Collins are severely limited. Nonetheless, it is clear that these two dialects were mutually intelligible perfectly. They are identical regarding their phoneme inventory, and presumably phonotactics as well. Morphologically Alec Collins' Warrongo in the main does not differ from Alf Palmer's, although it exhibits a small number of differences (see 3.2.1.1 and 4.9.1). Regarding syntax, again Alec Collins' Warrongo does not seem to differ from Alf Palmer's. As for basic vocabulary, the two dialects share 90%. (This figure is in terms of K. L. Hale's core vocabulary for Australian languages, cited in Sutton and Walsh (1979: 38), which comprises 99 items. Since

Alec Collins' data are limited, only 80 items were available for comparison.) The shared vocabulary consists of cognates – both identical and non-identical ones. For example, for 'mother's brother', Alf Palmer used /galŋana/ (and /galŋa/) only, but Alec Collins used /galŋina/ (the second vowel is /i/) (see 1.8.4.2), in addition to /galŋana/ (and /galŋa/) (see 3.2.1.2 and (4-257)). (The suffix -na is used with vowel-final kin nouns. See 3.7.1-[16].)

1.4. Territory and neighbouring languages

1.4.1. Territory

The exact extent of Warrongo territory is not known. Tindale (1940: 174) gives the following as Warrongo territory: 'Head-waters of Burdekin River, south probably to about Clarke River; west to Dividing Range; east to inland foot of Coast Range'. (See Maps 2 and 3.) Tindale (1974: 188) gives '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 Coastal Range and to the big southern loop of the Burdekin'. Oates and Oates (1970: 175) give 'Headwaters of Burdekin River, south to Clarke River, to Dividing Range, to foot of Coastal Range'.

Dixon (1970: 662) states:- 'Warunu was spoken over a long tract on top of the range, in contiguity with Wargamay, Giramay and Dyirbal and also, to a lesser extent, with Nyawigi [sic], Mbabaram and probably Wagaman' (cf. also Dixon 1972: 26), and Warrongo territory extends to 'just north of Mount Garnet' (Dixon 1991b: 350).

Sutton (1973: 14) states that Warrongo territory includes an area from Mount Garnet southeast along the Herbert River and it has its border with Gugu-Badhun at Meadowbank, Glenharding and Wairuna Stations.

R. S. Atkinson – a member of the Atkinson family who own many cattle stations in the region – stated in his letter to me dated 12th September 1974 that there was a man called Wambino who was, according to R. S. Atkinson, the king of the tribe. They used to travel as far as Wairuna, Abergowrie, Tully River and Ravenshoe. Perhaps that was, R. S. Atkinson suggested, the rough outline of the tribal territory. (Wambino is Alec Collins' father; cf. 1.8.4.2. The etymology of the name *Wambino* is given in 1.5.4.2-[1] and 3.7.1-[12].)

The language northeast of Warrongo is Jirrbal. According to Dixon (1970: 658), the latter's territory includes Ravenshoe.

South of Jirrbal and east of Warrongo is Girramay. There was a cattle station called Kirrama Station. According to Peter Sutton (p.c.), that station was named after Girramay. (Like most of the Australian languages (cf. 1.1), Girramay has no phonemic contrast between /g/ and /k/ and, and no doubt the initial consonant of

this word was perceived as [k] by the person who named that station.) According to Dixon ([1983] 1989a: 78), Kirrama Station is in the Girramay country. In March 2001, Leigh Pentecost (p.c.), an archaeologist, stated that Kirrama Station is on the border among Jirrbal, Girramay and Warrongo. This view is shared by Rachel Cummins, Alf Palmer's daughter's daughter (e-mail message of 25 July 2006). (Jirrbal, Girramay, Mamu, etc., are collectively called Dyirbal by Dixon (1972).)

South of Girramay and east of Warrongo is Warrgamay. According to Dixon (1981: 0, 2), its territory extends from just west of Ingham up along the Herbert River, past Abergowrie, and beyond Niagara Vale and Yamanie Creek, and it includes Wallman Falls and Peacock Siding. However, according to Alf Palmer, Warrongo territory extends close to Abergowrie.

South of Warrgamay and east of Warrongo is Nyawaygi. According to Dixon (1983: 432), the Stone River is in Warrongo territory.

West of Nyawaygi and south of Warrongo is Gugu-Badhun. According to Sutton (1973: 14), Gugu-Badhun territory reaches as far as Meadowbank, Glenharding and Wairuna Stations in the north (as noted above), and Clarke River in the south, about where it joins the Burdekin River.

South of Gugu-Badhun is Gujal (also spelt Gudial; also known as Gujala and Gurjal). According to Sutton (1973: 14), its approximate southern boundary is Charters Towers.

According to Sutton (1973: 9), west of Jirrbal and northwest of Warrongo is Mbabaram. South of Mbabaram and west of Warrongo is Agwamin. South of Agwamin and west of Gugu-Badhun is Wamin. Mbara (mentioned in 1.2) is south of Wamin and west of Gujal.

According to Dixon (1991b: 348, 350), west of Jirrbal and north of Warrongo is Ngaygungu, its territory including Atherton but excluding Mount Garnet. West of Ngaygungu and north of Warrongo is Mbabaram, its territory including Irvinebank. West of Mbabaram and northwest of Warrongo is Wagaman, its territory including Almaden and upper reaches of Tate River. South of Wagaman and west of Warrongo is Agwamin, its territory including Lynnbrook [sic], Mount Surprise, and Einasleigh. (The road maps I have show the place name 'Lyndbrook', not 'Lynnbrook'.)

Rachel Cummins stated (e-mail message of 3 April 2007) that it was agreed upon by Warrongo people and Mbabaram people that the border between their territories is south of Mount Garnet.

Taking all this into account, the approximate border of Warrongo territory seems to be (i) Mount Garnet, Innot Hot Springs, and close to - but excluding -Ravenshoe on the north, (ii) close to Kirrama Homestead, down the Herbert River Gorge close to Abergowrie, and the Stone River on the east, (iii) Wairuna, Glenharding, and Meadowbank Stations on the south, and (iv) the Great Dividing Range on the west. Warrongo territory seems to have an oblong shape; see Map 3. The information available does not say whether Warrongo territory includes Kangaroo Hills.

In view of the above, the location of Warrongo in Oates and Oates (1970: 180), Tindale's (1974) map, and Map 23 of Wurm and Hattori (1981) appears to be incorrect. Warrongo is located in Gugu-Badhun territory (and Gugu-Badhun in Warrongo territory).

As mentioned at the beginning of 1.4.1, the exact extent of Warrongo territory is not known. The preceding account of Warrongo territory is highly tentative, and it is by no means definitive.

1.4.2. Neighbouring languages and their classification

1.4.2.1. Proposed classifications

As examples of classification of the languages mentioned above and those mentioned below, two of the more recent classifications are cited: Wurm and Hattori (1981) in Table 1-1, and Dixon (2002: xxxii–xxxiii) in Table 1-2. (The languages that are not mentioned in the present work are not listed in these tables. The spellings of the language names are left intact.)

The label 'Paman' is taken from the word *pama* 'man, person'. (This word is written *bama* in the practical orthography employed in the present work; recall the absence of voicing opposition (1.1).) This word is common in the languages to the north of Warrongo, e.g. Yidiny (Dixon 1977b: 547), Kuku Yalanji (Oates and Oates 1964: 81), Kuuk Thaayorre (or Thaayorre) (Map 1) (Foote and Hall 1992: 101). It also occurs in Warrgamay (Dixon 1981: 124), east of Warrongo. Similarly, the label 'Maric' is based on the word *mari* 'man'. This word (or its cognate) is common in the languages to the south of Warrongo, e.g. Biri (my data), Bidyara and Gungabula (Breen 1973: 206) and Margany and Gunya (Breen 1981: 362) (Map 4.)

1.4.2.2. Studies on the neighbouring languages

Available descriptions of the neighbouring languages were mentioned in 1.4.1. For Gujal, south of Gugu-Badhun, Sutton's unpublished data (see 1.8.4.3-[9]) are available. For the lexical comparison given in the second paragraph below, my Jirrbal data recorded from Tommy Springcart and Tommy Murray in 1974 (see 1.8.4.3-[7]) are included.

Ngaygugu (north of Warrongo) and the languages to the northwest and west of Warrongo – i.e. Wagaman, Agwamin, Wamin, and Mbara – are poorly documented. Except for Ngaygugu, they and Mbabaram underwent a series of drastic phonological changes (Dixon 1991b, Sutton 1973: 60–67). One of the results is the existence of word-initial consonant clusters, e.g. the names of the languages: Mbabaram and Mbara. Such clusters are unusual among the languages of the region. (Alf Palmer knew the name Mbabaram, but he pronounced it [ba:baṭam]. He dropped the initial nasal /m/ and replaced the short vowel [ba] with the long

vowel [ba:]. This vowel lengthening is an instance of compensatory lengthening; see 2.6-[4].) As mentioned in 1.2, the putative language name 'Bara' may be a mishearing for 'Mbara'. For Wamin, I recorded twelve words from Freddy Fulford in 1974, but I am unable to analyze the data. In his pronunciation, the name of his language is [wamen]. (Alf Palmer knew this name, and he, too, pronounced it [wamen]. This word occurs in the example (4-348).) Almost certainly these languages are mutually unintelligible with Warrongo.

Table 1-1. Wurm and Hattori's (1981) classification

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Pama-Nyungan family:
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Yalandyic group: Kuku Yalanji

Yidinyic group: Yidiny

Paman group:

Western Pama subgroup: Thaayorre

Southern Pama subgroup: Agwamin, Mbabaram, Ngaygungu, Wamin, Mbara

Dvirbalic group:

Dvirbal: Dvirrbal, Girramay

Warrgamay

Nyawaygic group: Nyawaygi, Wulguru

Maric group:

Mari subgroup: Warungu, Gugu Badhun, Gudjala, Biri, Bidyara, Gungabula, Margany, Gunya

Table 1-2. Dixon's (2002) classification

```
E Western Cape York Peninsular areal group: Kuuk Thaayorre
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- F Kuku-Yalanji: Kuku-Yalanji, (Kuku-)Wakaman
- G Cairns subgroup: Yidiny
- H Herbert River Group:
 - H1 Dyirbal: Jirrbal, Girramay
 - H2 Warrgamay
 - H3 Nyawaygi
 - H4 Manbarra: Buluguyban, Wulgurukaba
- J Greater Maric Group:
 - Ja Maric Proper subgroup:
 - Jal Bidjara [i.e. Bidyara TT], Gungabula, Marganj [i.e. Margany TT], Gunja [i.e. Gunya – TT]
 - Ja2 Biri
 - Ja3 Warungu, Gugu-Badhun, Gudjal(a)
 - Ja4 Ngaygungu
 - Jb Mbabaram/Agwamin group:
 - Jb1 Mbabaram
 - Jb2 Agwamin (or Wamin)

The languages of Dixon's Herbert River Group are fairly different from Warrongo. For example, in terms of K. L. Hale's 99-item core vocabulary for Australian languages (cf. 1.3), Warrongo shares 46% with Jirrbal, 39% with Girramay, 42% with Warrgamay, and 27% with Nyawaygi. (In contrast, it shares around 90% with Gugu-Badhun and Gujal; see Table 1-3.)

No doubt Warrongo and the languages of Herbert River Group are mutually unintelligible. Alf Palmer stated that Jirrbal is 'hard'. Reciprocally, Dixon (1970: 662; cf. also Dixon 1972: 26) states: 'speakers of Dyirbal [i.e. Jirrbal, Girramay, etc. – TT] always refer to Warunu as a very "difficult" language, far harder for them to speak and understand than Wargamay...'

Despite this, among the speakers interviewed for Warrongo, bilingualism involving Warrongo and one language (or two) of Herbert River Group (e.g. Jirrbal) was common. See 1.8.4.1 to 1.8.4.3.

1.4.2.3. Warrongo, Gugu-Badhun and Gujal as a linguistic unity

Hereafter the names of these three languages will be often abbreviated as 'W-GB-G'. (They are referred to as 'Herbert-Burdekin Languages' in Tsunoda (1984).) The classifications cited in Tables 1-1 and 1-2 – and virtually all other classifications, e.g. O'Grady, Voegelin and Voegelin (1966: 51–52), Oates and Oates (1970: 169–177), Wurm (1972: 141) – consider W-GB-G as the most northerly members of a large group of closely related languages that 'stretched from the southern edge of the Cairns rain forest region, north Queensland, to the border of New South Wales' (Sutton 1973: 4, cf. also Breen 1981: 275), whose most southerly members are Margany, Gunya, Bidyara and Gungabula. (See Map 4.) They are Wurm and Hattori's Mari subgroup, and Dixon's Maric proper subgroup. Hereafter, this group will be referred to as Mari subgroup.

In contrast with Warrongo, the data on Gugu-Badhun are limited, and even more so on Gujal. Nonetheless, it is clear that these three languages are very similar to each other, and no doubt they are mutually intelligible.

Table 1-3. Lexical sharing among Warrongo, Gugu-Badhun and Gujal

Warro	ongo				
90	Gugu	ı-Badhun			
94	88	Gujal			

Lexically, W-GB-G share around 90% of basic vocabulary (in terms of K. L. Hale's 99-item vocabulary); see Table 1-3. (For Warrongo, both the data recorded by me from Alf Palmer, and those recorded by Peter Sutton from Alec Collins are used.)

Morphologically, too, they are very similar. The syntactic information on Gugu-Badhun and that on Gujal are limited, and it is difficult to make any significant comparison.

In phonology, W-GB-G show a small difference. Gujal has the laminal contrast in each of stops and nasals (i.e. /d/ versus /\f/; /n/ versus /\pi/) (Sutton 1973: 34). Warrongo has no laminal contrast, either in stops or nasals. Gugu-Badhun, which is geographically between Gujal and Warrongo, has the laminal contrast in stops only, and lacks it in nasals (Sutton 1973: 34). See Table 1-4. See (i-i) and (i-ii) of Table 1-6 for examples. (Dixon (1980: 141) shows the distribution of the laminal contrasts on the continent. The border between the languages with laminal contrast(s) and those without runs between Gugu-Badhun and Warrongo.)

Table 1-4. Oppositions in laminal consonants

	stops	nasals	
Warrongo Gugu-Badhun	/ɟ/ /d̪/ /ɟ/	/ɲ/ /p/	
Gujal	/d/ /J/	/n/ /n/	

W-GB-G are very similar to each other, so that they can be regarded as 'dialects' of the same 'language'. Their similarities were noticed not only by their speakers but also by speakers of other languages, for example, by Tommy Murray (a Jirrbal speaker; see 1.8.4.3-[7]).

Sutton (1973: 14) notes that the peoples of W-GB-G 'formed something of a unity', and he cites Eric Gertz, a Gugu-Badhun speaker (cf. 1.8.4.3-[8]), who said: 'Our mob used to run all the way from the [Atherton - TT] Tableland to Charters Towers'. The southern end of Atherton Tableland is around Mt. Garnet (http:// www.athertontableland.com/, accessed on 30 March 2007). Therefore, the area mentioned by Eric Gertz (i.e. from Mt. Garnet to Charters Towers) coincides with the territories of W-GB-G.

W-GB-G seem to have been sometimes collectively referred to by one single label, as follows.

- (i) In 1971, when Alf Palmer started working with me, he called his language [kojitfal] (Gurijal), but in 1972 and 1974 he called it Warrongo (cf. 1.8.4.1).
- (ii) Harry Bunn called his language Gujal (in 1974), despite the fact that his language appears to be Warrongo (see 1.8.4.3-[1]). He stated that the outline of Gujal territory is Mt. Garnet, Cashmere Station, Herbert Gorge (excluding Glen Ann and Kirrama Stations), Wairuna, Mt. Fox, Blue Range and Hill Grove Stations (excluding Charters Towers) and Mount Surprise. He did not know if Innot Hot Springs was included in the territory. (See Maps 2 and 3.) This area roughly coincides with the W-GB-G territories.
- (iii) Pompy Clumppoint (a Jirru speaker from the coast) stated (in 1974) that Gurjal was spoken from Mt. Garnet to Charters Towers. This area coincides with the W-GB-G territories

The remarks cited above suggest that W-GB-G were collectively referred to by one single label – Gurijal or something similar.

1.4.2.4. Problems with the proposed classifications

As noted above, Wurm and Hattori (1981), Dixon (2002), and also virtually all other classifications assign W-GB-G to the Mari subgroup. However, this classification is not free from problems. The problems are discussed in Tsunoda (1984), and the main points are summarized below. We shall look at the following groups of languages.

- (a) Dixon's Herbert River Group:Jirrbal, Girramay, Warrgamay, and Nyawaygi.
- (b) Mari subgroup:
 - (b-1) Most northerly members: Warrongo, Gugu-Badhun, and Gujal.
 - (b-2) Biri.
 - (b-3) Most southerly members: Bidyara and Gungabula; and Gunya and Margany.

The sources of information are as follows. (i) Jirrbal: Dixon (1972), and my data recorded from Tommy Springcart and Tommy Murray, (ii) Girramay: Dixon (1972), (iii) Warrgamay: Dixon (1981), (iv) Nyawaygi: Dixon (1983), (v) Warrongo: my data recorded from Alf Palmer, (vi) Gugu-Badhun: Sutton (1973), (vii) Gujal: Peter Sutton's data recorded from Freddy Toomba and Ranji Pope, (viii) Biri: my data recorded from Harry Johnson, Eddy Barker, and Reggie Dodd, (ix) Bidyara and Gungabula: Breen (1973); and (x) Gunya and Margany: Breen (1981). For Warrongo, only the data from Alf Palmer (and not from Alec Collins) are cited. See 1.8.4.1-[1] for the reason.

The languages of (a) are W-GB-G's northern and eastern neighbours. (As noted in 1.4.2.2, the languages to the northwest and the west of Warrongo are poorly documented, and consequently difficult to assess.) The languages of (b-3) are more than 1,000 km away from Warrongo. The languages between (b-1) and (b-3) are poorly documented, and there is no published grammar available, except for Terrill (1998) on (b-2) Biri. (Terrill (1998) incorporates my data on Biri.)

A comparison of these languages shows that there are contradicting pieces of evidence regarding the genetic classification of W-GB-G.

There are three pieces of evidence that support the classification of W-GB-G as Mari languages, and not as those of Herbert River Group.

Evidence 1: Pronouns

The pronouns of (b) differ from those of (a). The differences are most clear in '1SG', '2SG', '2DU', and '2PL'. Their NOM/ERG forms are cited in Table 1-5, with the Warrongo forms as the representative of (b), and the Jirrbal forms as the representative of (a). There are slight variations among the languages of each of (a) and (b).

In Table 1-5, the two items in each pair are cognates. Note the three correspondences: (i) the palatal stop $/\frac{1}{7}$ and the semivowel $/\frac{1}{7}$ in '1SG', (ii) the velar nasal $/\frac{1}{7}$ and the semivowel /j/ in '2SG', and (iii) the nasal /p/ and the semivowel /j/ in '2DU' and '2PL'. (The Jirrbal forms are conservative, and the Warrongo forms are innovative.)

Table 1-5. Selected pronouns of Warrongo and Jirrbal

	Jirrbal	Warrongo	
ʻ1SG'	ngaja (/ŋaɟa/)	ngaya (/ŋaja/)	
'2SG'	nginda (/ŋinda/)	yinda (/jinda/)	
ʻ2DU'	nyubalaji (/ɲubalaɟi/)	yobala (/jubala/)	
'2PL'	nyurraji (/ɲuɾaɟi/)	yorra (/juɾa/)	

Evidence 2: Verb roots

In terms of the 22 verbs from K. L. Hale's 99-item list, W-GB-G share a higher percentage with (b-2) Biri and (b-3) than with (a). This is despite the fact that (a) is immediately contiguous with (b-1), in contrast with Biri, which is about 500 km away from (b-1), and with (b-3), which is about 1,000 km away from (b-1). Thus, Warrongo shares:

- 36% with Jirrbal, 38% with Girramay, 41% with Warrgamay, 52% with (a) Nyawavgi:
- (b-1) 95% with Gugu-Badhun, 94% with Gujal;
- (b-2) 52% with Biri;
- (b-3) 55% with Bidyara and Gungabula, 55% with Gunya, and 45% with Margany.

For examples, see the verb roots in Table 1-6: 'to bite', 'to cook', 'to see', and 'to enter'.

Evidence 3: Regular phonological correspondences

See Table 1-6. (The abbreviations of the names of the languages are as follows: BI – Bidyara, GI – Girramay, GNG – Gungabula, GNY – Gunya, JI – Jirrbal, MA – Margany, NY – Nyawaygi.)

- (b-1) shares at least three sets of regular phonological correspondences with (b-3). The three sets involve (i) a laminal, (ii) a retroflex, and (iii) a stop-plus-stop sequence.
- (b-1) shares at least one set of regular phonological correspondence with (b-2) Biri. This involves (i) a laminal. (The words with an asterisk – /juxi/* 'meat' and /barbia/* 'echidna' – are identical to those of Warrongo. The word with two asterisks – /badbixa/** 'echidna' – is an exception to the correspondence in question.)

For each set, selected examples are given.

(b-1) does share correspondences with (a) (see (vi) below, Table 1.5, 2.4-[2] to -[6], and 3.11.1.3), but these correspondences are neither so systematic nor so regular as those between (b-1) and (b-2)-plus-(b-3).

Table 1-6. Phonological correspondences

		(a)	(b-1) Warrongo	Gugu-Badhun	Gujal	(b-2) Biri
<i>(</i> ')	1 . 1		- vuirongo	Gugu Duanan	Gujui	
(i)	laminal					
	(i-i) /ɟ/~/d/ 'head'		/gaza/	/gada/	/gada/	/gada/
	'to bite'	/baɟa/	/gaɟa/ /baɟa/	/gaḍa/ /baḍa/	/gaḍa/ /baḍa/	/gaḍa/ /baḍa/
	to one	(JI)	/ Uaja/	/baya/	/ baya/	/baya/
	'to cook'	(-)	/wa j u/	/wadu/	/wadu/	/wadu/
	(i-ii) /n/~/n/					
	'to see'	/na:/ (NY)	/naga/	/naga/	/naga/	/naga/
(ii)	retroflex					
	/ J /~/d/					
	'kangaroo'	/ju.i/	/јилі/	/ju.ri/	/ju.i/	/ju.i/*
		(JI, GI)			'meat'	'meat'
(iii)) rhotic+stop ~ st	top+stop	/1 1 /	(1 1 · /	/1 1 /	/1 1 · /d-
	'echidna'		/barbi.ia/	/barbira/	/barbi.a/	/barbiaa/*, /badbiaa/**
	'to enter'		/ɟaɹga/	/darga/		/badbisa/ · ·
		(1. 2)				
		(b-3)				
(i)	laminal					
	(i-i) / _J /~/d/					
	'head'	/gaḍa/ (MA)			
	'to bite'	/baḍa/				
		(BI, GNG, C	SNY, MA)			
	'to cook'	/wadu/				
		(BI, GNG, C	SNY, MA)			
	(i-ii) /n/~/n/					
	'to see'	/naga/ (GN	Y)			
(ii)	retroflex					
()	/1/~/d/					
	'kangaroo'	/judi/				
		'meat, anima	al'			
		(BI, GNG, C				
(iii) rhotic+stop ~ st		*			
(-11	'echidna'	/badbida/				
		(BI, GNG, C	NY. MA)			
	'to enter'	/dadga/ (GN				

The correspondences in (i) involve a laminal consonant. In (i-i), /d/ of (b-2) and (b-3) corresponds to /d/ of Gujal and Gugu-Badhun, and to /f/ of Warrongo. In (i-ii), /n/ of (b-2) and (b-3) corresponds to /n/ of Gujal, and to /n/ of Gugu-Badhun and Warrongo. In (ii), the retroflex stop of (b-3) corresponds to the retroflex approximant of (b-1). (Here, (b-2) Biri shares /juui/ 'kangaroo'/'meat' with (b-1), and not with (b-3). That is, in this respect, (b-1) and (b-2) should be grouped together.) In (iii) a stop-plus-stop sequence of (b-3) corresponds to a rhotic-plus-stop sequence of (b-1). (Here again, (b-2) Biri shares /barbia/ 'echidna' with (b-1), and not with (b-3). In this respect, too, (b-1) and (b-2) should be grouped together. The form /badbia/ is an exception to this correspondence.)

(b-1) and (b-3) share these regular phonological correspondences, although they are about 1,000 km away from each other. (b-1) and (b-2) exhibit regular phonological correspondences in terms of (i). They share /juxi/ 'kangaroo'/'meat' and /barbiza/ 'echidna'. In contrast, as shown in Table 1-6, (a) often lacks a corresponding cognate where (b-1) and (3) – and also (b-2) in terms of (i) – exhibit a correspondence. This is despite the fact that (a) is contiguous with (b-1).

Thus far, we have seen three pieces of evidence that indicate that (b-1) (W-GB-G) should be grouped with (b-2) (Biri) and (b-3) (southern Mari languages).

Now, there is one piece of evidence that suggests that (b-1) should be assigned to (a) (Herbert River Group), and not to Mari subgroup.

Evidence 4: Verbal inflectional morphology

(b-1) shares at least six verbal inflectional suffixes with (a), to the exclusion of (b-2) and (b-3). They are listed below. In contrast, (b-1) shares no such suffix with (b-2) and/or (b-3), to the exclusion of (a). This strongly indicates that (b-1) (W-GB-G) should be assigned to (a) (Herbert River Group), and not to (b) (Mari subgroup).

- (i) (a) -ya 'imperative' in Warrgamay. (b-1) -ya 'imperative' in W-GB-G.
- (ii) (a) -y 'unmarked aspect' in Warrgamay. (b-1) -y 'past/present' in Warrongo, -y 'present/future' in Gugu-Badhun, -y 'past/present (?)' in Gujal.
- (iii) (a) -*n* 'past/present' in Jirrbal and Girramay. (b-1) -*n* 'past/present' in Warrongo, -*n* 'past' in Gugu-Badhun and Gujal.
- (iv) (a) -nyu 'past/present' in Jirrbal and Girramay, -nyu 'perfect' and 'subordinate' in Warrgamay, -nya 'unmarked' of Nyawaygi. (Dixon (1983: 476) suggests that the Nyawaygi -nya derives from -nyu.) (b-1) -nyu (also written -nyo) 'subordinate' in Warrongo and Gujal.
- (v) (a) -ngu 'subordinate' in Jirrbal and Girramay. (b-1) -ngu (also written -ngo) 'subordinate' in Warrongo and Gujal.
- (vi) (a) -l-jay and -n-jay 'future' in Girramay. (b-1) -yay 'future' in Warrongo and Gugu-Badhun. (Note that these suffixes exhibit an alternation $(j \sim y)$ that parallels the alternation between ngaja '1SG' of (a) and ngaya '1SG' of (b); see Table 1-5.)

To sum up, the evidence regarding pronouns, verb roots and regular phonological correspondences supports the classification of W-GB-G as Mari languages. However, the evidence regarding the verbal inflectional morphology indicates that they should be assigned to Herbert River Group.

One possible scenario to account for this puzzle is as follows. W-GB-G were (and still are?) Mari languages, but they heavily borrowed verbal inflectional suffixes from Herbert River Group. (This is despite the claim that verbal inflectional morphology is very resistant to borrowing; cf. Sapir [1921] 1949: 201–206, Weinreich [1953] 1974: 32, Bynon 1977: 189, 253, Heath 1978: 68–71.) That is, (all?) Warrongo verbs have retained the Mari root but use a Herbert-River-Group inflectional suffix – rather like the Copper Island dialect of Aleut (Comrie 1981b: 253), which has retained native verb roots but uses Russian inflectional suffixes.

One possible cause for this massive borrowing may be the fact that Warrongo, Jirrbal and Girramay groups had frequent contacts with each other in the pre-contact times (see 1.7) and that they lived together at Kirrama Station in the post-contact times (see 1.7, 1.8.4.1-[1] and 1.8.4.2).

It is relevant to note in this connection that the word for 'man' in W-GB-G is *bama*, and not *mari*. This is despite the fact that they are generally classified as Mari languages. That is, the distribution of the word *mari* 'man' and the territory of Mari languages do not coextend. (I owe this observation to the anonymous reviewer.) At least Alf Palmer, and almost certainly all the other W-GB-G speakers, knew the word *mari*. As noted in 1.4.2.1, the word *bama* 'man' is common in the languages to the north of Warrongo.

1.5. Environmental and socio-cultural background

1.5.1. Environmental setting

It seems that Warrongo territory can be roughly divided into two areas. (i) The eastern area: 'The precipitous eastern [area is – TT] characterized by waterfalls, deep gorges and valleys, the most notable of which is the Herbert Gorge' (Brayshaw 1990: 2), and it is covered by a dense rainforest. (ii) The western area is flatter, and it is drier, consisting of open forests.

There was volcanic activity in the region, and its remnants still remain, such as lava, basalt (e.g. Great Basalt Wall), volcanic craters (e.g. Herberton Crater), and hot springs (e.g. Innot Hot Springs). (See Maps 2 and 3.) There are Dream Time stories associated with the volcanic activity; see 1.5.3. Also there are words based on the word for lava or basalt that refers to Warrongo and Gugu-Badhun people (1.2).

1.5.2. Archaeological and anthropological accounts

Archaeological evidence indicates that humans reached this continent more than 53,000 years ago (Flood [1983] 1995: 32). They may have arrived at Atherton Tableland about 38,000 years ago (Flood 1995: 95).

There appears to be no archaeological or anthropological work that exclusively deals with Warrongo people. But there are works that refer to them. For example, Brayshaw (1990: 38), in a detailed survey of archaeological and anthropological works of the Herbert-Burdekin River area, refers to Warrongo people: 'Warungu of the Herbert River had much in common culturally with the rainforest peoples [e.g. Girramay and Warrgamay - TT], although linguistically they had more in common with the Burdekin group of languages [i.e. Gugu-Badhun and Gujal – TT].

In 1.5.3 and the subsequent sections, we shall look at some selected topics regarding the socio-cultural background of these peoples.

1.5.3. Mythology

The mythology explains the origin and formation of the universe that surrounds the people. Thus, a story narrated (in English, in 1974) by Reggie Palm Island, a speaker of Buluguyban of Palm Island (Map 3), tells that the islands off the eastern coast were once connected to the mainland. This story, repeated from Tsunoda (1996), is roughly as follows. (See Map 2.)

Long ago this area was dry. From somewhere north, a carpet snake came, through Hinchinbrook Channel [between Hinchinbrook Island and the main land – TT], to Palm Island and arrived at what is now called Cannon Bay. It went up the hill and came to Bamboo Creek. There was a big pool, where some children were swimming. The carpet snake swallowed up one of them. It travelled over the hills, came down to near Butler Bay (?), and then went over to Magnetic Island. When the child's parents came back from hunting, they learned what had happened. They walked over to Magnetic Island, found the carpet snake, and cut it open. There inside the snake they found their child [alive? – TT].

The word for 'carpet snake' is gabul in the languages of the region, including Warrongo. Phonetically it is [gabol] in Reggie Palm Island's pronunciation. (It is [kabol] in Alf Palmer's. It is spelt gabol in the orthography employed in the present work.) According to Rachel Cummins (e-mail message of 6 February 2009), the child in question is a young girl.

The pool at Bamboo Creek existed in 1974, when Reggie Palm Island narrated this story. However, in 1976 or 1977 (Rachel Cummins, e-mail of 6 February 2009), the Queensland Government built a dam there, and completely destroyed this extremely important site – despite the local Aboriginal people's vehement protest. (Unfortunately, this is not an isolated incident. It is just one of numerous destructions of Aboriginal sites.)

In the story narrated by Reggie Palm Island, Carpet Snake's travel ends on Magnetic Island. However, in the myth of people south of Palm Island, Carpet Snake continues its travel beyond Magnetic Island. Thus, (in March 2001) Shirley Johnson, of the Wulgurugaba group of the Townsville-Magnetic Island area, narrated roughly as follows.

The track of Carpet Snake goes from the bottom [i.e. mouth? – TT] of Herbert River to Hinchinbrook [Channel - TT], past Palm Island, past Magnetic Island, up Ross River, up Hervey Range, where it rests. There is a rock painting of [gabol] [on Hervey Range? —TT].

(In Shirley Johnson's pronunciation the word for 'carpet snake' is [gabol].) See Map 2 for Ross River and Hervey Range.

There is a word based on gabul (or gabol) 'carpet snake': gabulbarra 'carpet snake person(s), person(s) associated with carpet snake'. (For the suffix -barra 'denizen of, associated with' (mentioned in 1.2), see 3.7.1-[1]. The rhotic is a tap, and not an approximant.) This word seems to refer to the (original) people of Townsville-Magnetic Island area. The Aboriginal reference group of which Shirley Johnson is a member, has the name 'Gubalbarra Reference Group'. No doubt, 'Gubalbarra' refers to gabulbarra 'carpet snake person(s)'.

In the myth of people west of Townsville, Carpet Snake seems to travel farther west. (In March 2001) Willy Santo, a Gujal person, narrated a story about how the Great Basalt Wall, west of Charters Towers, was formed. It is summarized as follows.

Fire Serpent and Water Serpent fought at Echo Hole. Water Serpent killed Fire Serpent. Then, at the Burdekin Falls, Water Serpent fought Rainbow Serpent, which came from Palm Island.

Echo Hole appears to be at the foot of the Great Basalt Wall. (For the locations of these places, see http://www.pacificislandtravel.com/australia/queensland/ charteredtowers.asp; accessed on 4 May 2011.) Presumably the Great Basalt Wall was formed during the first battle. Willy Santo stated that the name of Rainbow Serpent is [gaboba₁a]. He said that [gabo] means 'snake' (note that the lateral [1] is missing) and that [bala] means 'people'. (In his pronunciation, the rhotic is not a tap, but an approximant – an interference from English.) No doubt, this word corresponds to [qabolbara] gabul-barra 'carpet snake-denizen'. Since Rainbow Serpent came from Palm Island, almost certainly it corresponds to Carpet Snake of Reggie Palm Island's and Shirley Johnson's stories. That is, in Willy Santo's story, this snake travels farther west than Townsville.

A dam was built over the Burdekin Falls in 1987 and the falls no longer exist (Rachel Cummins, e-mail of 6 February 2009; also http://en.wikipedia.org/wiki/ Burdekin Dam; accessed on 9 February 2009). This is another instance of the destruction of an Aboriginal site.

The word gabul 'carpet snake' is found as far south as southern Queensland and northern New South Wales - more than 1,000 km away from Warrongo, e.g. Bidyara and Gungabula (Breen 1973: 199) and Margany and Gunya (Breen 1981: 366). Also, Watkin and Hamilton (1887: 224) list kabool for 'Carpet snake' in the languages of Stradbroke and Moreton Islands, immediately east of Brisbane. (See Map 4.) E. Ross (1887: 290) lists coble for 'Snake (carpet)' in the language of Ballina (New South Wales). About 50km north of Brisbane, there is a shire whose name is 'Caboolture'. It is pronounced [kabú:ltfə], with stress on [bu:], and not on [ka] (again an interference from English). According to a tourist brochure (Bribie Island & Caboolture Shire Tourist Map & Information Guide), this name means 'the place of the carpet snake'. Obviously *cabool* means 'carpet snake'. The meaning of -ture [tfə] is not known. It may possibly be the comitative suffix ('with, having'). (For the comitative or the like, Warrongo has C-ji/V-yi (cf. 3.6.8), and Djaru of Western Australia has C-jaru/V-yaru (Tsunoda 1981a: 227). Similar comitative suffixes occur in many other languages (Dixon 2002: 170).) If this is the case, 'Caboolture' means '[a place] with [many?] carpet snakes'. The occurrence of the word gabul 'carpet snake' in these southern languages suggests that there may be versions of the story in which Carpet Snake traveled farther south than the Burdekin Falls.

As mentioned in 1.5.1, there was volcanic activity in the W-GB-G and nearby regions, and there are many stories that concern it and its results, e.g. lava, basalt, volcanic craters, and hot springs.

Vera Smallwood (1.8.4.3-[2]) narrated a story (in 1974, in English) that describes the origin of the Herberton Crater (Map 2), roughly as follows.

Once upon a time there lived a greedy snake. It collected all the scrub turkey eggs. The scrub turkeys got angry, and chased the snake. The earth, too, got angry and fire came out of the ground, which created a big crater there. The snake, which had been chased, fled into the crater and was trapped in it. Nowadays there is a creek running into the crater. This is the route by which the snake fled into the crater.

Going down south, there is a story that describes the origin of Innot Hot Springs (Map 3). Alf Palmer narrated two versions of this story (in English). The story line is as follows.

One night, three men went to spear the gigantic eel Yamani, with torches in their hands. They came to Nettle Creek, at Innot Hot Springs. They found the eel and one of them speared it. He then grabbed the spear and tried to pull it out, but the spear did not come out. The eel began to drag the man, and he dropped the torch from his hand. Suddenly the area became hot, and hot water came out of the ground. This is what is now Innot Hot Springs. The eel dragged the man into a cave. The other two men tried to chase the eel and the man, but they couldn't, for the area around the cave was too hot. So they just waited for him outside the cave. They waited and waited, but the man never returned. They went back to their camp and told other people what had happened. They searched for the man again. A few days

later, they came to Blunder Swamp and found the eel dead and lying/resting on a log. They cut the eel open, but they did not find the man inside it. One of the men present was so overwhelmed by this incident that he decided to name his children after it. One boy was named Wambino, for the eel was found lying/resting on a log. [There is an intransitive verb wambi-L 'rest (on something)' – TT.] Another boy was named Babino, for the eel was cut open. [There is a transitive verb babi-L 'cut' – TT.] A third boy was named Bayombirri, for an eel waves its tail. [There is a transitive verb bayombi-L '[fish] wave [its tail].) A fourth boy was named Wagaygorro after wagay 'wishbone' of the eel. One girl was named Jilanggo after the fig trees (jilanggo) that were found in the swamp. Another girl was named Jalbino after the water lilies (jalbino) in the swamp.

Nettle Creek flows southwards by the township of Innot Hot Springs (the map in Glenville Pike [1976] 1990: 217). No doubt, 'Blunder Swamp' refers to the swamp south of Blunder Park Station (see Map 3). The noun *jilanggo* exhibits interesting morphological behaviour. See 3.2.1.2. Also, the name Bayombirri will be discussed in 3.2.1.2.

According to Tommy Murray, a Jirrbal speaker (1.2, 1.8.4.3-[7]), in the story about Innot Hot Springs, a snake (not an eel) swallowed up humans.

Going further south, there is a Gujal story that concerns the formation of the Great Basalt Wall, west of Charters Towers; it was cited above.

Thus far, we have looked at stories that in the main describe the formation of geological features. In addition, the mythology explains the origin of fire, of water, etc. Thus, a story about *banggarra* 'blue tongue lizard' concerns the origin of water. The version narrated by Alf Palmer tells how Blue Tongue Lizard used to hide water at Cameron Creek (almost certainly in Warrongo territory; see Map 3), but two mice rolled Banggarra over, so that the water flowed again. This story is in Text 1 in this volume, repeated from Tsunoda (1988b). (Another version of this story, narrated by Chloe Grant, who is a speaker of Jirrbal and Girramay, is in Dixon (1989a: 32).) Also, Alf Palmer narrated a story about *bajinyjila* (bird sp.) regarding the origin of fire. (A Jirrbal version narrated by Chloe Grant is in Dixon (1989a: 32–33), and a Girramay version narrated by George Watson is in Dixon (1989a: 187–188). Dixon's gloss for *bajinyjila* is 'spangled drongo'.)

Dixon (1972: 29, 1989a: 153–154, 295) suggests, regarding the myths he recorded, that some of them possibly describe events that actually took place. The same may apply to some of the stories cited above. For example, the story about the Herberton Crater may be a description of a volcanic eruption. The Carpet Snake Story may concern the ice age when the sea level was low and it was possible to walk to Magnetic and Palm Islands.

The volcanic craters may have been formed about 10,000 years ago (cf. Dixon 1989a: 154). Similarly, the last ice age ended 10,000 years ago (Flood 1995: 313). In view of the above, these stories may possibly have been handed down for about 10,000 years (Dixon 1989a: 155).

1.5.4. Names of groups, individuals, and places

Some names have a known etymology, while others do not. Many of the known etymologies have a mythological origin, but others may not. In terms of structure, names can be roughly classified as follows.

- (a) One word: (a-1) one root, (a-2) two roots (i.e. compounding), (a-3) one root and one suffix (i.e. suffixation).
- (b) One noun phrase.
- (c) One sentence.

1.5.4.1. Names of groups

Most of the names of groups, e.g. Warrongo, seem to consist of just one root. There are two suffixes used in the names of groups: -barra and -gaba.

[1] -barra 'denizen of, associated with' (3.7.1-[1])

This suffix is added to place names, nouns describing characteristics of places (e.g. plants), and adverbs indicating cardinal directions, among others. The resultant stems refer to person(s) who belong(s) to, or, who is(/are) associated with, or who come(s) from, the place or the like. They often refer to a group of people, but they can also refer to its individual members. They refer to humans, and there is no example that refers to animals or plants. This suffix is very common in languages of Queensland (Tindale 1974: 143, Dixon 1980: 325), including Warrongo. Examples include (i) gobo-barra 'person(s) of a leafy country' (gobo 'leaf') (this probably refers to a group within the Warrongo group; see 1.2), (ii) gonarri-barra 'basalt person(s)', i.e. 'Warrongo person(s)' (gonarri 'basalt') (1.2); and (iii) gabol-barra 'Carpet Snake person(s)', i.e. 'person(s) of the Townsville-Magnetic Island area' (1.5.3).

[2] *-gaba*

This suffix appears to mean 'people' (Sutton 1973:103) or 'denizen of', and to denote 'an intrinsic relationship, one of belonging or identity' (Peter Sutton, e-mail message of 26 May 2003). It appears to be non-productive, being attested in the following names only.

(a) Gabilgaba 'Townsville'

Alec White Sr. stated in 1972 that his language is [kabilqaja] Gabilgara (with -gara, and not -gaba) and that it was spoken in Townsville and on Magnetic Island. In 1974 he stated that the name of Townsville is [kabilgaba] Gabilgaba (with -gaba, not -gara). (See Tsunoda 1996.) In Alf Palmer's Warrongo, too, Townsville is called Gabilgaba. It seems almost certain that gabil is related to gabul 'carpet snake' (the vowel changed from u to i). If this is the case, gabil-gaba means 'person(s) of Carpet Snake'. (The meaning of -gara in Gabilgara is not known.)

(b) Wulgurugaba 'person(s) of many canoes' (?)

According to Tindale (1940: 175; 1974: 190), Oates and Oates (1970: 180, 182), and Sutton (1973: 9, 44), there was a language called Wulguru or Wulgurugaba (also spelt Wulgurukaba) in the Townsville area. (This language may be the same as Alec White Sr.'s Gabilgara.) The rhotic is an approximant, and not a tap (Sutton, e-mail message of 26th May 2003). Tindale states that wulguru means 'man'. However, Shirley Johnson, who is a descendant of the group in question, said in March 2001 that the word Wulgurugaba or Wulgurukaba means 'canoe people'. (According to Donahue (2007: 48), Tindale recorded the word wulgurru (the rhotic is a trill, not an approximant) with the meaning 'canoe' (not 'man').) The word wolgo or wulgu occurs in Warrongo (meaning 'boat'), Nyawaygi (meaning 'boat'; Dixon 1983: 511), and Warrgamay (meaning 'bark canoe'; Dixon 1981: 120). Warrongo has the suffix -rV 'many', whose vowel copies that of the preceding syllable (see 3.7.1-[16] and 3.13.1.4). (Again, the rhotic is an approximant, and not a tap.) The names Wulguru and Wulgurugaba may contain -rV. If this is the case, wulgu-ru means 'many canoes' and wulgu-ru-gaba means 'person(s) of many canoes'. The latter word is used in the name of an Aboriginal organization on Magnetic Island, off Townsville: Wulgurukaba Aboriginal Corporation. (There is a suburb called Wulguru in Townsville. No doubt it was named after the language Wulguru, Judging by the phonetics of the languages of this region, the name of the language was most probably pronounced [ólkojo] (with stress on the initial syllable). However, according to Rachel Cummins, the name of the suburb Wulguru is pronounced [walqa.iú:]. This pronunciation is a spelling pronunciation and also it is heavily anglicized.)

(c) Nhawalgaba

According to Sutton (1995, and e-mail message of 16 June 2003), in 1970 and 1973 Reggie Palm Island referred to the Townsville people as Nhawalgaba. The meaning of *nhawal* is not known. The letters *nh* represents an interdental nasal (Peter Sutton, p.c.).

(d) Birigaba

The language of the Bowen area is Biri (Maps 4 and 5). It is also called Birigaba. The meaning of *biri* is not known.

1.5.4.2. Names of individuals

Selected examples are given below.

[1] Some of the individuals' names have a mythological origin. As seen in 1.5.3, the story about Yamani, the gigantic eel, vielded six personal names: Wambino (cf. wambi-L Vi 'rest'), Babino (cf. babi-L Vt 'cut'), Bayombirri (cf. bayombi-L Vt '[fish] wave [its tail]'), Wagaygorro (wagay 'wishbone'), Jilanggo (jilanggo 'fig tree'), and Jalbino (*jalbino* 'water lily'). The first two names are based on verbs and contain the suffix -no. (See 3.7.1-[12] for -no. It is probably accidental that the name Jalbino contains no; this name is not based on a verb.) The name Bayombirri contains the (non-productive) suffix -rri, and the name Wagavgorro contains the (non-productive) suffix -gorro. The suffixes -rri and -gorro are not attested elsewhere in Warrongo. But see 3.11.1.7 regarding -rri.

There was at least one Warrongo person whose name is taken from the Yamani story, and it was Wambino (mentioned in 1.4.1), who is the father of Alec Collins (mentioned in 1.2 and 1.3). Further information on them is in 1.8.4.2. There is a cattle station called 'Wombinoo Station' in Warrongo territory (Map 3). No doubt it was named after Wambino.

There are two other names that do not seem to be related to this myth, but have the suffix -no. See 3.7.1-[12].

According to Atkinson (1979: 36), Wambino had a brother whose name is 'Warkagaroo'. Possibly this is the name Wagaygorro ([wákaigoro]).

- [2] There was a man with the name Gonira ([gónija]). He is Alf Palmer's uncle (also mentioned in 1.5.5 and Table 3-3). This name is based on the verb goni-L Vt 'fight' (cf. (4-546), (4-547)), and it means 'fighter'. The suffix -ra means 'someone who does ...' (3.7.1-[11]), like the English suffix -er; cf. fight-er. (As noted in Acknowledgements, Alf Palmer named me Gonira. See also 1.8.4.1-[3].)
- [3] There are names whose etymology is not known, but for which a tentative suggestion may be made. Examples include the following, which are all Alf Palmer's children's names: (i) Jinabarro 'Maurice Palmer' (cf. jina 'foot', barro 'bent, crooked'), (ii) Nganyiri 'Edith Lenoy' (cf. nganyi 'face'), and (iii) Gayangara 'Alf Palmer, Jr.' (cf. gaya 'father', ngara 'it is not easy to do' (4.24-[10])). If the name Jinabarro consists of jina 'foot' and barro 'bent, crooked', it means 'crooked/bent foot', and it is an instance of compounding.
- [4] There are names for which no suggestion may be made, e.g. Dolobo 'Joyce Palmer', Wilbanyo 'Norris Palmer' (both Alf Palmer's children), and Wolngarra 'Alec Collins' (data from Peter Sutton).

1.5.4.3. Names of places

Most of the placenames consist of one word. But some of the placenames have the form of a sentence. (Sentential place names appear to be common in some other parts of Australia as well; see Baker (2002: 113–118).) There is at least one placename that has the form of a noun phrase.

- [1] In the myth that concerns the origin of water (cf. 1.5.3, given in Text 1), two mice (*galo* 'mouse') rolled over a blue tongue lizard (*banggarra*), which had been lying on top of a spring (?) and hiding water from other animals. Alf Palmer said that this place (Cameron Creek) has three names: (i) Banggarra ('blue tongue lizard), e.g. (4-65-b), Text 1, Line 28, (ii) Galo ('mouse'), and (iii):
- (1-1) galo-nggo balba-n banggarra-Ø. mouse-ERG roll-NF B.T.L.-ACC 'Mice rolled Blue Tongue Lizard.'

The placename (1-1) has the form of a sentence. The placenames Banggarra and Galo are instances of those consisting of one word.

- [2] In the myth that describes the origin of Innot Hot Springs, a burning torch hit the ground, upon which hot water gushed out of the ground (1.5.3). Alf Palmer gave the name of Innot Hot Springs as follows.
- (1-2) nyalbay-Ø jido-Ø galngga-n. story-NOM torch-NOM fall-NF Tentative translation: '[In] a story a torch fell down.'

This name, too, has the form of a sentence. But it is not known how to analyze the syntactic status of the first word.

- [3] A Gugu-Badhun story, narrated by Richard Hoolihan and recorded by Peter Sutton (in the early 1970s), describes the formation of a turtle-shaped lava. Alf Palmer (a Warrongo speaker) said that there is a place that he called 'Turtle Jump' in English. For its Warrongo name, he gave three alternative forms. They all have the form of a sentence.
- (1-3) banggorro-Ø jolba-n. turtle-NOM jump-NF 'Turtle jumped.'
- (1-4) banggorro-Ø jolba-l. turtle-NOM jump-NF '(As above.)'

(1-5) banggorro-Ø jolba-y. turtle-NOM jump-NF '(As above.)'

Alf Palmer said that this place is in Wairuna area (that is, around the border between the Warrongo and Gugu-Badhun territories; cf. 1.4.1), through which the Burdekin River flows. This placename probably refers to the event depicted in the Gugu-Badhun story mentioned above. (The verb jolba- seems to belong to L-class in (1-4), but to Y-class in (1-5). See 3.9.3 for the significance of this dual membership of conjugation.) The version (1-5) occurs in Text 1, Line 17.

The locative form of the version (1-5) is attested: banggorro jolba-ja 'turtle jump-LOC'; see (2-63). Note that the final y is deleted. (See 3.2.1.1 for the locative forms.)

In passing, there is something like a sentential place name that is followed by the ablative-1 suffix (-ngomay): garri-Ø galngga-n-ngomay-Ø 'sun-NOM fall-NF-ABL-NOM', i.e. '[a person who comes] from [the place where] the sun sets'.

These are the only two instances in which a sentential place name or the like is followed by a case suffix.

- [4] Another Gugu-Badhun story, narrated by Harry Gertz and recorded by Peter Sutton in 1974, tells how a woomera (wumbun) slipped down in the river. (See Goetz and Sutton (1986) for details. The narrator's surname is spelt in two different ways: Gertz and Geotz.) This place, whose exact location is not known, is called Wumbunbarra in Gugu-Badhun. (The use of the suffix -barra for a place name is unusual. It is generally used for names of groups/persons (1.5.4.1-[1] and 3.7.1-[1]).) Alf Palmer stated that there is a place that has the following name (another sentential place name):
- (1-6) *wombon-*Ø joyora-n. woomera-NOM slip-NF 'A woomera slipped.'

Alf Palmer stated that this place is two miles down the Burdekin River from Valley of Lagoons. Therefore, it must be in Gugu-Badhun territory. Then the Gugu-Badhun name Wumbunbarra and the Warrongo name Wombon Joyoran appear to refer to the same place. (Recall that the practical orthography employed for the present work uses o in place of u.)

- [5] There is another sentential placename:
- (1-7)warrngo-Ø jana-n. woman-NOM stand-NF 'A woman stood.'

Alf Palmer gave a place name that appears to be in the Warrgamay language. Consulting Dixon (1981), it is tentatively analyzed as follows (employing the practical orthography adopted for the present work).

(1-8) ngolmboro jowarra-ngorra
woman stand-?
Tentative translation: 'A woman stood.'

The meaning of *-ngorra* is not known. Alf Palmer said that the place is on Herbert River, below Abergowrie. This place is in Warrgamay territory (1.4.1). It is possible that (1-7) is the Warrongo name of this place.

[6] The place name *jolay nyon.gol* 'tree one' has the form of a noun phrase. Alf Palmer said that its English name is 'One Tree Plain' and that it is on Herbert River. It is possible, though by no means certain, that this name is a Warrongo translation of the English placename 'One Tree Plain'.

We have seen place names that have the form of a sentence or a noun phrase. In terms of stress, they do not seem to constitute one single unit. Thus, where the name consists of two words, e.g. (1-3) to (1-7) and *jolay nyon.gol* ('tree one'), the primary stress seems to fall on the first syllable of the second word, with the secondary stress on the first syllable of the first word. If they constituted one single unit, the primary stress would fall on the first syllable of the first word. See 2.7 for stress.

- [7] There are placenames which appear to involve a suffix but whose etymology is not known. For example, the placename Jalnyjanbara 'Cashmere Station' (where Alf Palmer grew up; cf. 1.8.4.1) appears to contain the suffix *-bara* (not *-barra*; cf. 1.5.4.1-[1]). The suffix *-bara* is attested in many words; see 3.7.1-[8]. The meaning of *jalnyjan* is not known.
- [8] There is possibly one placename that consists of a noun and an enclitic. As mentioned in 1.5.3, in the story given by Tommy Murray, a Jirrbal speaker, a snake (not an eel) swallowed up humans at Innot Hot Springs. According to him, the name of Innot Hot Springs is *jambalgoli*. This may be a Warrongo placename. First, Tommy Murray stated that it is a Warrongo name. Second, Innot Hot Springs appears to be in Warrongo territory (1.4.1). Third, the word for 'snake' is *wadam* in Jirrbal (Dixon 1972: 407), but it is *jambal* in Warrongo. If this is a Warrongo name, it may be analyzed as follows. It will consist of the noun *jambal-O* and the enclitic *goli* 'only'.
- (1-9) *jambal-Ø=goli* snake-NOM/ACC=only Tentative translation: 'only the snake'
- [9] There are many placenames that appear to be based on the geography, flora, fauna, etc. that characterize the place, e.g. (i) gaba 'white clay' and 'place on Stone

River', (ii) dogal 'fern sp., whose root is edible' and 'place on Herbert River (a swampy area where many dogal-ferns grow)', and (iii) bigal 'death adder (snake sp.)' and 'Henrietta Creek (near Abergowrie)'.

[10] There are also many placenames whose etymology is not known. One example is bajobala ([bat[obala]) 'Kirrama Station'. This station appears to be on the border among Warrongo, Jirrbal and Girramay territories (1.4.1), but the name is known to, and used by, many other groups. Kirrama Station has played an important role in the post-contact history of the region; see 1.7, 1.8.4.1, and 1.8.4.2.

1.5.5. Sections and totems

In the Warrongo group, as in the neighbouring groups of the region, its members are divided into four sections. (The sections were sometimes called 'skin' in the English of Aboriginal people; cf. Sharp 1939: 442.) The information on the Warrongo section terms is incomplete, but complete information is available for Gugu-Badhun (Sutton 1973: 106) and Warrgamay (Dixon 1981: 5). These three groups appear to have an identical section system, and virtually identical section terms – apart from a few differences in the two rhotics, i.e. an alveolar tap (written with rr) versus a retroflex approximant (written with r); see below.

The section terms of Alf Palmer's Warrongo are shown in Table 1-7. Those terms marked with '[TT]' have been reconstructed on the basis of (i) the other terms in Warrongo and (ii) the equivalent terms in Gugu-Badhun and Warrgamay. The terms of female members contain the feminine suffix -gan (3.7.1-[17]). In addition, they all involve the insertion of y and ng (2.6-[2]-(c-3), -(d)). Three of them involve the change of the root-final vowel o to a, and one of them (won.go-rra-yng-gan) involves the insertion of -rra.

male members	female members
gorgorro gorrgila	gorgorra-y-ng-gan gorrgila-y-ng-gan [TT]
won.go	won.go-rra-y-ng-gan [TT]
wojorro	wojorra-y-ng-gan [TT]

Table 1-7. Warrongo section terms (1) (Alf Palmer's Warrongo)

Harry Bunn (a Warrongo speaker (?); cf. 1.4.2.3 and 1.8.4.3-[1]) gave the following terms: gorrgila, gorrgoro, wojorro, and won.go. No term for female members was given.

In my data and the sources consulted, there is an alternation between an alveolar tap (written with rr) and a retroflex approximant (written with r) in the following terms (see 2.1.3.1 for these phonemes). (In each of these languages, the two rhotics are in opposition.)

- (a) (i) *gurrgila* or *gorrgila* in Warrgamay, Alf Palmer's Warrongo (and also Alec Collins' Warrongo, Harry Bunn's Warrongo (?), Girramay, Jirrbal (Dixon 1972: 31), Nyawaygi (Dixon 1983: 433)), and (ii) *gurgila* in Gugu-Badhun.
- (b) (i) *gurrguru* in Gugu-Badhun (and also Harry Bunn's Warrongo (?), Nyawaygi (Dixon 1983: 433)), (ii) *gorgorro* in Alf Palmer's Warrongo (and also Girramay and Jirrbal (Dixon 1972: 31)), and (iii) *gurguru* in Warrgamay.

Note that the correspondences between rr and r are irregular. (Only the term wojorro or wujurru contains a tap consistently, in my data and all the sources cited above.) This fluctuation between the two rhotics is possibly due to language obsolescence. (See 1.8.4.1 to 1.8.4.3 for a discussion of the nature of the data obtained for the present study.) Some of the speakers may have found the rhotic contrast difficult to retain since English lacks this opposition (see Schmidt 1985: 192–193). Alternatively, this fluctuation may be due to errors on the part of the linguist(s) concerned. Finally, the forms cited above may be traditional ('correct') words, and this fluctuation may reflect the situation of the pre-contact times.

It seems that, in the traditional society, although each person had his/her name (e.g. Jinbilnggay for Alf Palmer), people often called someone by his/her section name. This practice among Warrgamay people is described by Lumholtz ([1889] 1980: 218, 303), the Norwegian zoologist who lived among Warrgamay people from August 1882 to July 1883 (see 1.5.8-[3] and 1.7). An analogous practice is still now observed in Kimberley (Tsunoda 1981a: 8). No doubt it was common among Warrongo people as well. Thus, someone would call out to a *gorgorro* man, 'Gorgorro!'

Table 1-8	Warrongo	section	terms	(2)	(Alf	Palmer'	's Warrongo)

Set A	Set B	
gorgorro	goynba	
gorrgila	woragaja	
won.go	wolmirri	
wojorro	yawonya	

Alf Palmer gave two sets of equivalent terms. See Table 1-8. Note that the corresponding terms from the two sets are not just phonological variations. Dixon (1989b: 265) reports regarding Jirrbal, Girramay and Mamu that 'each section has associated with it "polite" terms for referring to male and female members respectively. These are used for address and seem to be in the nature of terms of endearment'. The 'polite' terms for referring to male members are wurany, wulmirri, yawunya and guymba. They are identical to the Warrongo terms except for wurany (its Warrongo equivalent will be woragaja) and except that Dixon lists guymba (the nasal is bilabial) where I list goynba (the nasal is alveolar). In view of this, Set B of Warrongo seems to be a set of 'polite' terms for referring to male members.

Alf Palmer said that Gonira, his uncle (1.5.4.2-[2]), was a wolmirri (a term from Set B). It seems that Alec Collins, too, had these two sets. Thus, he said he was a govnba (Set B), although the term gorrgila (Set A) occurs elsewhere in his data. Ranji Pope, a Gujal speaker (1.8.4.3-[9]), said he was a won.go (Set A). It is not known if he had the two sets. Alf Palmer's use of the term wolmirri (Set B) to refer to his mother's brother fits in Dixon's characterization of 'polite' terms. But Alec Collins' use of govnba (Set B) to refer to himself does not seem to.

Each section has totem(s). Attested totems are given in Table 1-9. Harry Bunn said his totem was garrgay 'sparrowhawk'. Therefore, his section would be gorrgoro.

TT 11	1 0	OD: 4
Tahle	1-9	Totems

	section	totem
Alf Palmer	gorgorro gorrgila won.go wojorro	'carpet snake' (probably gabol – TT) wajagan 'crow' 'echidna' (probably barrbira – TT) 'eaglehawk' (probably gorrijala – TT) 'carpet snake' (probably gabol – TT)
Harry Bunn	gorrgoro gorrgila won.go wojorro	garrgay 'sparrowhawk' gorrijala 'eaglehawk' gorraga 'dove' (HB not certain) gondolo 'emu' (HB not certain)

Sharp (1939: 450) gives the following words as section names for Gugu-Badhun and several other languages: Kuparu, Kurkila, Wunggu, Banbari. Sutton's (1973: 106) list of Gugu-Badhun section terms contains gurgila (Sharp's Kurkila) and wun.gu (Sharp's Wunggu), but it does not contain any term like Kuparu or Banbari. My data on Alf Palmer's Warrongo contain another section term, namely, bambari, and its totem seems to be possum (gajarra). This suggests that Alf Palmer knew at least one more section term and its totem. (The bilabial nasal may be due to my mishearing, and the correct form may be banbari. Cf. Sharp's Banbari. The rhotic in *bambari* is an approximant, and not a tap.)

1.5.6. Marriage rules

Many aspects of the social life were conducted according to the section system. One example is marriage arrangement. Ideally, a person must choose his/her spouse from the right section; he/she cannot marry just anyone. Their child's section membership is determined automatically. Unfortunately, I failed to obtain information on marriage rules of Warrongo. However, as seen in 1.5.5, Warrongo shares with Gugu-Badhun and Warrgamay an identical section system and virtually identical section terms. Fortunately, complete information on marriage rules is available for Gugu-Badhun (Sutton 1973: 106–107) and Warrgamay (Dixon 1981: 5). It is almost certain that Warrongo had the same marriage rules. They would be as shown in Table 1-10. In accordance with Radcliffe-Brown's (1930: 38) convention, the labels 'A, B, C, D' are used for male members, and 'a, b, c, d' for the corresponding female members.

A man who is:	must marry a woman	and their chil	and their child is:		
WIIO 13.	who is:	son:	daughter:		
gorgorro	won.gorraynggan (b)	wojorro	wojorraynggan		
(A)		(D)	(d)		
won.go (B)	gorgorraynggan	gorrgila	gorrgilaynggan		
	(a)	(C)	(c)		
gorrgila	wojorraynggan	won.go (B)	won.gorraynggan		
(C)	(d)		(b)		
wojorro	gorrgilaynggan	gorgorro	gorgorraynggan		
(D)	(c)	(A)	(a)		

Table 1-10 exhibits interesting regularities. For example, regarding male members, A's son is D, D's son is A, A's son is D, D's son is A, and so on. That is, we have an alternation between A and D (hence, 'A \sim D'). This will continue indefinitely (if the marriages conform with these rules). Similarly, B's son is C, C's son is B, B's son is C, C's so is B, and so on (i.e. B \sim C). Concerning female members, b's daughter is d, d's daughter is b, b's daughter is d, d's daughter is b, and so on (i.e. b \sim d). Finally, a's daughter is c, c's daughter is a, a's daughter is c, c's daughter is a, and so on (i.e. a \sim c).

As alluded to above, this system of marriage rules presents the 'ideal' arrangements. In real life, however, there were probably marriages that deviated from them, as was the case, for instance, in Kimberley, Western Australia (Tsunoda 1981a: 10–11).

1.5.7. Kinship system

The kinship system in Alf Palmer's Warrongo seems to be as follows, although there are points that are not certain. (Those kin terms that are relatively more certain, include those that concern parents, uncles, aunts, grandparents, grandchildren, and spouses.)

Figure 1-1 concerns a male EGO. The letter 'D' has two uses. 'D' below a kin term, e.g. *galbin*, refers to (a male member of) a section, while 'D' above a kin term, e.g. *galbin*, means 'daughter'. Vowel-final kin terms generally have two forms: one with the suffix -na (3.7.1-[18]) and the other without. *ngaji-na* was not

attested, but almost certainly it is a bona fide Warrongo word. ('ngaji(na)*' indicates that 'ngaji' is attested, but that 'ngajina' is not.) In the following discussion, the forms without -na will be used.

For a male EGO, his father (FG) is *gaya*, and his mother (M) *yanga*. Among his grandparents, his father's father (FF) is *bolo*, father's mother (FM) *gami*, mother's father (MF) *ngaji*, and mother's mother (MM) *babi*. His wife (W) is *birgo*. His son (S) and daughter (D) are *galbin*, that is, 'child'. Among his grandchildren, his son's son (SS) and son's daughter (SD) are *bolo*, while his daughter's son (DS) and daughter's daughter (DD) are *ngaji*. (As seen above, *galbin* may mean 'man's son' and 'man's daughter'. In (4-551), *galbin* was translated 'niece' by Alf Palmer. In view of the kin term system observed in Kimberley, Western Australia (Tsunoda 1981a: 11–13), probably *galbin* can also mean 'man's brother's son' (i.e. 'nephew') and 'man's brother's daughter' (i.e. 'niece').)

We shall look at Figure 1-1 in connection with the marriage rules (cf. Table 1-10). Take FF of Figure 1-1, for instance. For the purpose of exposition, the section A is arbitrarily assigned to him. His son (F) is D, whose son (EGO) is A, whose son (S) is D, whose son (SS) is A. That is, we have an alternation between A and D, exactly as stated regarding Table 1-10.

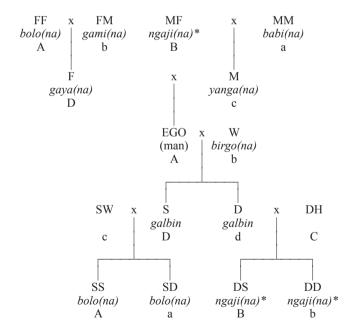


Figure 1-1. Pedigree (1): a male EGO

Figure 1-2 concerns a female EGO. For the purpose of exposition, in Figure 1-1, a male EGO was assigned to A, and his wife is to b. Likewise, in Figure 1-2, a

female EGO is assigned to b, and her husband to A. (In fact, the statements about the kin relationship are applicable irrespective of an EGO's section membership.)

For her parents and grandparents, a female EGO uses the same terms as those used by a male EGO. But the terms for her spouse, children and grandchildren differ from those used by a male EGO. Her spouse, i.e. husband (H), is gornggal. Her son (S; a 'D' man) is jowana. (The form jowa, without -na, is hardly ever used. See 3.7.1-[18]. For jowana, Alf Palmer gave the gloss 'nephew' as well. Probably jowana can mean 'woman' son' and 'woman's sister's son' (i.e. 'nephew').) A female EGO's daughter (D; a 'd' woman) may be yindala, but this is not certain. Alf Palmer gave *yindala*, indicating that it meant (i) 'female EGO's daughter (D)', i.e. 'woman's daughter', and (ii) 'niece' (probably 'woman's sister's daughter' and 'man's sister's daughter'). But later he denied the meaning (i). (Alf Palmer's gloss for *yindala* is, in effect, 'niece from sister's side') Therefore, it is not certain if there is a word for 'female EGO's daughter'. If yindala really means 'female EGO's daughter', there are separate words for 'son' and 'daughter' for a mother (though not for a father; see Figure 1-1). (Mamu, north of Jirrbal (Maps 4 and 5), has the kin term vindala. Its referents seem to include 'female EGO's son and daughter' (Dixon 1980: 109).)

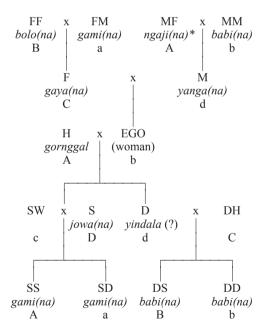


Figure 1-2. Pedigree (2): a female EGO

Regarding Figure 1-1, we saw an instance of the alternation between two sections, involving men. Alternations occur concerning women as well. Take MM, for

example. She is b. Her daughter (M) is d, whose daughter (EGO) is b, whose daughter (D) is d, whose daughter (DD) is b. That is, we have an alternation of 'b \sim d'.

The terms for the grandparents' generation and the grandchildren's mean 'X and reciprocal' (cf. Dixon 1972: 399). For instance, bolo may mean 'male EGO's FF' (Figure 1-1), and also 'female EGO's FF' (Figure 1-2). In addition, it means 'male EGO's SS and SD' (Figure 1-1). That is, 'FF and reciprocal'. Similarly, ngaji may mean 'male EGO's MF' (Figure 1-1) and also 'female EGO's MF' (Figure 1-2). In addition, it means 'male EGO's DS and DD' (Figure 1-2). That is, 'MF and reciprocal'. The same applies to gami 'FM and reciprocal', and to babi 'MM and reciprocal'.

The use of some of the kin terms is remembered still now. For example, in March 2002, Rachel Cummins (Alf Palmer's DD) stated that Alf Palmer used to refer to Raymond Palmer and Roderick Palmer (they are his SS) as bolo. (Reciprocally, the latter would refer to Alf Palmer (their FF) as bolo.) She also stated that Alf Palmer (her MF) used to call her (his DD) ngaji. (Reciprocally, she would call him *ngaji*.)

Other attested kin terms include the following. A few of the terms listed above are repeated for convenience.

(a) For both a male EGO and a female EGO: (i) F and FB: gaya(na), (ii) FZ: bimo(na), (iii) M and MZ: yanga(na), (iv) MB: galnga(na).

Note that gava refers to F and also FB. Similarly, vanga refers to M and also MZ. There is no single term for 'uncle'. It has to be either gava 'FB' or galnga 'MB'. Similarly, there is no single term for 'aunt'. It has to be either bimo 'FZ' or yanga 'MZ'. (As noted in 1.3, for MB, Alec Collins used galngina in addition to galngana.)

For a male EGO, bimo can mean WM, in addition to FZ. Then, galnga will be expected to mean WF, in addition to MB. But it is not known if galnga can mean WF.

(b) For a male EGO: (i) EB: mogina (mogi not attested), (ii) EZ: bolgo (bolgona not attested), (iii) YB: yabojana (yaboja not attested), (iv) YZ: barrina, bolgo (barri not attested. Cf. barri 'stone'.)

Bolgo seems to mean both EZ and YZ. If this is the case, the opposition between 'elder' and 'younger' is neutralized in the case of bolgo for a male EGO (i.e. the opposite sex to EZ and YZ). It will be interesting to see if this neutralization occurs between EB and YB for a female EGO. Unfortunately no relevant data are available.

(c) Alf Palmer gave the following kin nouns and glossed them as shown: (i) jorgana 'elder sister' (jorga not attested), (ii) woribo 'son-in-law' (woribo-na not attested), (iii) marga 'brother-in-law', and (iv) marga-yan 'daughter-in-law'. (-yan may be a feminine suffix. There is a more productive feminine suffix: -gan (3.7.1-[17].) Also he gave (v) joway 'brother-in-law' (probably WB, and not HB), (vi) jowaynggorro 'term by which brothers-in-law call (address? refer to?) each other' (later, Alf

Palmer cancelled this meaning and gave the gloss 'big mob of *joway*'), (vi) *mogoyo* 'sister-in-law' (probably HZ, and not WZ), and (vii) *mogoynggon* 'term by which to refer to one's deceased wife in avoidance of her name'. A song by Alf Palmer (see (1-10)) yielded *gorramara* 'YB, YZ'. See 3.8.1-[7] for its possible etymology.

1.5.8. Other topics

We shall look at some other topics regarding the socio-cultural background – mainly those topics which are relevant to the language itself, those which are expressed in the language or those which occur in the examples cited.

- [1] A person's language seems to have been a marker for self-identification at an inter-tribal encounter (cf. Clarke 2003: 39). See Text 1, Line 7.
- [2] The ear is regarded as the seat of intelligence and memory (cf. Dixon 1972: 30, Tsunoda 1981a: 7). There are a noun *borrmo* 'deaf', and two verbs derived from it: *borrmo-bi-L* Vi 'become deaf' and also 'forget' (4.7.1-[1]-(a)), e.g. (3-88), (4-243), (4-276), and *borrmo-nga-L* Vt 'make [someone] forget' (4.7.2-[1]-(a).
- [3] Message sticks were used for conveying a message. According to Leigh Pentecost (e-mail message of 26 March 2009), a message 'stick was their "passport" that would allow them to enter others' territory without being killed. Carl Lumholtz ([1889] 1980: 327–328) (mentioned in 1.5.5; cf. also 1.7) describes message sticks used by Warrgamay people. In Warrongo, figures on message sticks are called *jin.gorr*, and message sticks are known as *jin.gorr-ji* 'message figure-COM', i.e. '[wood] with/having message figure'. See 3.6.8 for the comitative *-ji*.
- [4] There are a noun *jigobina* 'shooting star', and an intransitive verb derived from it: *jigobina-bi-L* (4.7.1-[1]-(a)). This verb literally means 'be/become a shooting star', but Alf Palmer used it to describe a young man who was getting married soon. The same noun and the intransitive verb derived from it occur in Jirrbal (Henry 1967: 55, Dixon 1972: 401, 1997: 23), but no connection with a man's marriage is known.
- [5] As elsewhere in Australia, there was a taboo on the use of the name of a deceased person (Berndt and Berndt [1964] 1968: 112, 297, 389, Clarke 2003: 49, Dixon 1980: 28–29, Tsunoda 1981a: 7).
- [6] A deceased relation's skull was carried for safety; it would warn its carrier of an approaching danger. See (4-764).
- [7] Cannibalism was practiced in this region (Lumholtz 1980: 294, Dixon 1972: 28). Dixon states: 'Anyone who has persistently broken the social code may be killed by some of the senior men of the tribe, his flesh eaten and his blood offered to younger men to drink.' Dixon continues: 'Some men attain the status of *gubi* ("wise man" or "doctor"). They generally have a thorough knowledge of their en-

vironment and of the customs and beliefs of the tribe. ... A necessary prerequisite for being a gubi is that one has drunk the cannibalistic victim ...'. The word gobi occurs in Warrongo, too; see (4-698), and Text 3, Line 30. Alf Palmer seemed to believe that a *gobi* ate human flesh (*jalgor*). See (4-6). He dreaded a *gobi*.

- [8] People believed in the existence of two types of imaginary hairy human-like beings, who live in lava scrub: (i) gandaro, smaller type, and (ii) gangaligan, larger type. At least gandaro – possibly gangaligan as well – was feared by Alf Palmer and presumably by other people, too. The word gandaro occurs in (3-68). See also (4-401).
- [9] Alf Palmer described a technique for possum hunting as follows. When a possum climbs a tree (e.g. a bloodwood tree), it scratches its bark. The hunter blows on its trunk. If the trunk has a fresh track left by a possum, then barks chips, dust, etc. caused by the possum, come off the trunk, indicating that the possum is likely to be still on that tree. (See also Clarke 2003: 130.) (4-165) contains the verb boya-L Vt. 'blow with mouth' and describes this technique. There are two words derived from boya-L: (i) the noun boyal~boyal 'bark chips that come off a trunk caused by a possum's scratches (for instance, on a bloodwood tree)', and (ii) the verb boyal~boyal-bi-L Vi 'be/become [such] bark chips' (3.11.1.6-[5], -[6]).
- [10] The noun mandija means (i) 'grub in its early stage of growth' and (ii) 'tooth ache'. Possibly tooth ache was believed to be caused by this grub.
- [11] A type of vine poison (marra) and a type of fruit poison (manga) were used for fishing, to intoxicate fish. See Text 2, Lines 5, 6.
- [12] The noun dombil means 'knot of a forest ti-tree'. The knot contains water, which was used as drinking water by Aboriginal people. There are a verb dombil-bi-L Vi 'have a knot (which contains water)' (4.7.1-[1]-(a)), e.g. (4-900) (second B), and a place name dombil-bolo (3.7.1-[5]).
- [13] There are at least three terms for seasons: birrgil, birrgi-bara (the latter without l; see 2.6-[3]) 'cold weather, winter', wovolo 'summer, beginning of summer', and garrimal 'summer'.

Alf Palmer produced running texts of about six hours. They contain valuable information on the traditional ways of life and beliefs. They need to be analyzed. Three excerpts are included in the present volume.

1.6. Special styles of speech and songs

1.6.1. Jalngoy: the avoidance style of speech

Like many other Australian languages (cf. Dixon 1980: 58-65, Tsunoda 1981a: 14-15, 215-220), Warrongo had a special style of speech that was used between taboo kin. Its name is Jalngoy, which Alf Palm referred to as 'big word' in English. There appears to be no special term for the ordinary style of speech, and probably it was simply called *gogo* 'speech, language'.

Information on Jalngoy is scanty. Alf Palmer had an excellent knowledge of the ordinary style, but he admitted that he could not speak Jalngoy. (In a language death situation, a special style of speech seems to be among the first to cease to be transmitted, and it is lost earlier than the ordinary style; see Tsunoda 2005: 97–98, 107–108.) Nonetheless, Dyirbal, too, had an avoidance style of speech (with the same label 'Jalnguy'), and detailed information is available on it (Dixon 1972: 32–34, 292–327).

In Dyirbal, for a male EGO, one of the primary taboo relatives is his wife's mother (WM). For example, he had to use Jalnguy whenever his WM was within earshot. Probably the same applied to Warrongo as well.

Warrongo has two intransitive verbs that mean 'speak in Jalngoy': (i) *jalngoy-bi-L* ('*Jalngoy-INTR*') literally 'be Jalngoy' (4.7.1-[1]-(a)), e.g. (3-139), and (ii) *jalngony-ji-bi-L* ('Jalngoy-COM-INTR') literally 'be with/having Jalngoy'. See 3.6.8-[3] for the comitative case. Note the alternation between *y* and *ny* (3.2.1.1-[4]). In Warrongo, the word for WM is *bimo* (1.5.7). Alf Palmer gave a Warrongo sentence that means 'When you are at your *bimo*'s house, you must speak in Jalngoy': (3-139). See also (4-544).

In Dyirbal, Jalnguy and the ordinary style (called Guwal) are identical in phonology, and almost the same in grammar, but entirely different in vocabulary (Dixon 1972: 32). Presumably the same was true of Warrongo. Alec Collins (Sutton's data) and Alf Palmer independently gave many nouns and verbs as Jalngoy words. Unfortunately these words were not crosschecked. Nonetheless, there are two words that coincide: *wombal* 'dog' (the ordinary style equivalent is *gando*) and the transitive verb *ngarrambi-L* 'hear' (the ordinary style equivalent is *ngawa-L*, e.g. (3-305)). It seems certain that these two words are Jalngoy words. For *ngarrambi-L* 'hear', see (1-10-d, -e) and 3.11.1.1.

Dixon (1970: 667, 1972: 320) suggests that Jalnguy of a given language was built up by borrowing words from the ordinary style of nearby languages. Indeed, this may apply to some of the words given by Alf Palmer and/or Alec Collins as Jalngoy. Thus, the noun *wombal* 'dog, dingo' occurs in (the ordinary style, no doubt) of Buluguyban of Palm Island (Tsunoda 1996: 82). The verb *ngambi*- Vt 'hear' occurs in (the ordinary style, no doubt) of Freddy Toomba's Gujal (Peter Sutton's data). It may be related to the Warrongo *ngarrambi-L* 'hear'. (For Freddy Toomba, see 1.8.4.3-[9].)

1.6.2. Songs

A number of songs by Alf Palmer were recorded. They concern *garrgay* 'sparrow hawk', a funeral, a sick person, e.g. (4-70), love, e.g. (1-10), and sexual relationship,

e.g. (1-11), etc. The ex. (1-10) is cited from the end of Tape 72/25. In this story, after living on Palm Island for many years, Alf Palmer returned to Cashmere Station (where he grew up; see 1.8.4.1-[1]), and sang this song: the lines c to f. The song is presented by IPA symbols and the practical orthography adopted for the present work. I am unable to indicate melody, rhythm, voice quality, etc.

- (1-10) a. ngaya borrgoman-da nvina=ngomav-Ø 1SG.NOM(S) Palm.Island-LOC stay=after-NOM ngoni-ngomay-Ø yarro-wo golmi yani-Ø ngava vamba-wo 1SG.NOM(S) there-ABL-NOM here-DAT back come-NF camp-DAT wara-vi wara-vi-d-go. 1SG.GEN (error) one's.own-COM-LINK-DAT 'After I had stayed on Palm Island, I came back here.' (S=S)
 - b. ngona-ngomay ngaya varro-n-da nvila=gol iangala-Ø 1SG.ERG here-LINK-LOC today=only Jangala-ACC that-after ngava bava-lgo. 1SG.ERG sing-PURP 'Then I will sing Jangala here, soon [or, for the first time].'
 - c. [kaorai naja jaisolndzo: rayiwolnyjo-wo gaworra-yi-Ø ngaya love-COM-NOM 1SG.NOM very.good.looking.girl-DAT maborao goramajao naja] maborra-wo gorramara-wo ngaya good.looking.girl-DAT last.one-DAT 1SG.NOM 'I [am] in love with a very good-looking girl, a good-looking girl[, and] the last one.'
 - d. [nawai: nawala ηαηα nanarambelao nga-ngarrambi-la-wo / nga-wayi ngawa-la nganya hear-PST 1SG.ACC nga-hear-PST-wo 'Did you hear me [singing (?)]?'
 - e. [wai: nawala nanarambela] nana wayi ngawa-la nganya nga-ngarrambi-la hear-PST 1SG.ACC nga-hear-PST 'Did you hear me [singing (?)]?'

one[, and] the promised one.'

f. [jai:olndzo: maborao goramajao rayiwolnyjo-wo mahorra-wo gorramara-wo very.good.looking.girl-DAT good.looking.girl-DAT last.one-DAT midricaingo] naja mijirray-nggo / ngaya 1SG.NOM promised.one-DAT 'I [am in love] with a very good-looking girl, a good-looking girl, the last g. jalnyjanbara-ngga wara-yi-da ngaya wa Cashmere.Station-LOC 1SG.NOM(S) (error) one's.own-COM-LOC bava-gali-Ø sing-ANTIP-NF vinda ngawa-val nyila=gol nganya 2SG.ERG(A) 1SG.ACC(O) hear-PURP today=only [ngaya TT] golmi yani-ngo-Ø. (AP) [1SG.NOM(S)] back come-ADNOM-NOM(S) 'At Cashmere Station, my own [country], I sang [Jangala] so that you would hear me [sing], who had just come back today.'

The song is from the lines c to f. Alf Palmer said that this song is *jangala*. (*Jangala* means 'a singing style' in Jirrbal and Girramay (Dixon 1972: 401), and 'obscene song style' in Warrgamay (Dixon 1981: 114).) In the lines c to f, a slash indicates a pause. There is no pause between the lines c and d, and between e and f. In the line c, the last vowel of each word is somewhat longer than usual, but this is not shown in the above presentation.

Etymologically, *rayiwolnyjo* contains the noun *rayi* 'young girl' (used in the ordinary style), but *rayiwolnyjo* seems to be used in songs only. The meaning of *-wolnyjo* is not known. The meaning of *gorramara* is not clear. Alf Palmer's gloss for it is 'last one'. In this context, this may mean 'least or less good-looking girl'. He also said it meant 'younger brother, younger sister' (1.5.7). (See 3.8.1-[7] for a possible etymology of *gorramara*.) *Mijirray* means 'fiancée promised by a prospective father-in-law or mother-in-law'.

This portion of the text cited in (1-10) contains useful examples for the discussion of Warrongo morphology and syntax. They will be referred to in relevant sections. A song about sexual relationship:

(1-11) (A man was having sex with a woman.)

- a. wajila-nggo galoworo-nggo gombo-Ø jingga-la. testicles-ERG testicles-ERG buttocks-ACC hit-PST 'The [man's] testicles hit the [woman's] buttocks.'
- b. gombo-Ø ngarba-la ngarba-la. (AP) buttocks-NOM jump-PST jump-PST '[Her] buttocks jumped with a fright.'

Songs exhibit a few differences from the ordinary speech, as follows.

The suffix -la 'past' (3.10.1) is quite common in songs, e.g. (1-10-d, -e) and (1-11), but it rarely occurs in the ordinary style of speech, e.g. (3-192). According to Alf Palmer, ngawa-la is a song word. In contrast, the nonfuture form ngawa-n 'hear-NF', i.e. 'hear, heard', occurs in the ordinary style.

Songs contain a number of words that Alf Palmer considered as Jalngoy. They also contain words that occur in songs only. For example, (1-10-d, -e) contains

ngarrambi-L Vt 'hear' (this may be a Jalngoy word; cf. 1.6.1) – in addition to ngawa-L Vt 'hear' of the ordinary style. (1-11) contains wajila 'testicles' (which Alf Palmer regarded as Jalngov) and galoworo 'testicles' (which occurs in songs only). (The ordinary-style word for 'testicles' is galon, e.g. (4-904).)

The syllable [na] nga is added to the beginning of wavi and ngarrambi-la in (1-10-d). Consequently, all the resultant 'words' begin with nga. (This is an instance of alliteration.) Also, in (1-10-e), nga is added to the beginning of ngarrambi-la. Furthermore, in (1-10-d), the syllable [o] wo is added to the end of ngarrambi-la. The addition of such syllables may be for the purpose of rhyming or adjusting the number of syllables (or morae). Such elements, used in songs without any clear meaning, are called vocables by Hinton (1994: 145). (Similar phenomena occur in some of the songs of Diaru and Wanyjirra of the northwest Australia.)

See 3.11.1.1 for a comparative account of ngarrambi- Vt 'hear' (a verb that Alf Palmer and Alec Collins considered as Jalngoy) and two verbs that occur in songs only.

1.6.3. Curses and expressions for abuse

Alf Palmer gave four expressions that appear to be curses or expressions for abuse. One of them appears to be a Warrgamay sentence. (Alf Palmer knew Warrgamay; see 1.8.4.1-[1]. He worked as a consultant for Dixon's study of Warrgamay (Dixon 1981: 13).) Its phonetic presentation and its tentative phonemicization are given. Also, tentative morpheme-by-morpheme glosses and translation, based on Dixon (1981), are added.

(1-12) [wi:ki ninba ónanbolo] /wigi ninba wunan-bulu/ no.good 2SG.NOM lustful-very 'You are no good. You are very lustful.'

The other three are as follows.

- (1-13) [mákojango nani gandzindá:lena]
- (1-14) [wandandá:lango nani mákojango gandzindá:lena]
- (1-15) [jáimondo jáidzan gowatsi]

It is not known what these expressions mean. (1-13) and (1-14) are probably variants of the same expression. Phonetically and phonologically, these expressions do not deviate from the usual pattern of Warrongo (see Chapter 2). Indeed, there are Warrongo words that resemble (part of) them: ngani 'what', ganyji-n carry-NF', and wanyja 'where'. Nonetheless, they do not seem to be Warrongo. Indeed, for a reason that is not understood, (1-15) sounds a little exotic, i.e. non-Warrongo, to my ears.

It is interesting to note that these expressions are either not Warrongo or do not seem to be Warrongo. Possibly people thought that cursing/abuse was more effective when uttered in a foreign language.

Other styles of speech, e.g. initiation style and secret style, and also sign language (cf. Kendon 1988, Tsunoda 1981a: 15) may have existed, but no information on any of them was obtained.

1.7. Post-contact history

Allingham (1993), Bolton ([1963] 1975), Jones ([1961] 1970) and Glenville Pike ([1976] 1990), among others, provide accounts of the post-contact history of a region that includes Warrongo territory. The post-contact history of Warrongo people's neighbours is described by Dixon (1991b: 350) on Mbabaram, Dixon (1972: 34–37) on Dyirbal (i.e. Jirrbal, Girramay, etc.), Dixon (1981: 6-9) on Warrgamay, Dixon (1983: 434) on Nyawaygi, and Sutton (1973: 20–21) on Gugu-Badhun.

Cattle and gold – preceded by explorers – decimated the original inhabitants and destroyed their traditional life, as was the case in Kimberley, Western Australia (Tsunoda 1981a: 16).

The first Europeans who entered Warrongo territory appear to be the Prussian explorer, Ludwig Leichhardt, and his party, who in 1845 followed Burdekin River, crossed the Great Dividing Range, and went on to Lynd River (Leichhardt [1847] 1996). They seem to have passed around the western border of Warrongo territory. Leichhardt details his encounters with the local Aboriginal people. Some of them may have been Warrongo.

In 1848, Edmund Kennedy's expedition left Cardwell and headed northwest. Jones (1970: 50) suggests that the party travelled near Ravenshoe. Judging by the map in Carron ([1849] 1996), they passed somewhere near Innot Hot Springs and Mount Garnet. Mount Garnet appears to be around the northern border of Warrongo territory (1.4.1). So they may have entered Warrongo territory.

The following expeditions did not enter, or do not seem to have entered, Warrongo territory: Augustus and Francis Gregory's expedition in 1856 (Gregory and Gregory [1844] 1968: 180–184), George Dalrymple's in 1859 (Farnfield 1968: 17), and Frank and Alexander Jardine's in 1864 (Hiddins 1998).

Leichhardt and the Gregorys reported on the promising potential of this region for pastoral industry, and this attracted the attention of pastoralists and people with similar interests. Soon afterwards, pastoral industry was introduced into this region. In probably 1860 the Valley of Lagoons, which is no doubt the most attractive tract of land for pastoral industry, was taken up by Dalrymple and his partners (Jones 1970: 65). This was followed by the establishment of other cattle stations.

'Between 1873 and 1877 ... Cashmere and Gunnawarra stations were carved from the outlying blocks of the Valley of Lagoons' (Bolton 1975: 92). In 1872–73 John Atherton established Cashmere Station (Jones 1970: 149). Cashmere and

Gunnawarra are in Warrongo territory. Kirrama Station was taken up by Edgar Collins in the 1880s (Atkinson 1979: 31).

Carl Lumholtz (1.5.5 and 1.5.8-[3]), a Norwegian ethnographer, lived among Warrgamay people from 1882 to 1883 (Lumholtz 1980). He was based at Herbert Vale, but in February 1883 he visited the Valley of Lagoons Station. Jones (1970: 241) suggests that he visited Cashmere Station. No doubt he travelled through Warrongo territory.

Gold rushes broke out in the 1860s and 1870s, and one of the largest gold rushes occurred at Charters Towers in 1872 (Bolton 1975: 44-49, 52, Jones 1970: 136). The gold rushes occurred outside Warrongo territory, and no gold seems to have been found inside it

Gold was not the only metal that affected the life of the Aboriginal people. In or near Warrongo territory, tin was found in 1880 at Wild River (Map 3), a tributary of Herbert River (Bolton 1975: 116, Glenville Pike 1990: 68). Silver was found in 1881 at Silver Valley, on Dry River (a branch of Wild River) (Bolton 1975: 117–118, Glenville Pike 1990: 134–135). Copper was found at Mount Garnet in 1883 (?) (Bolton 1975: 118). On the basis of Glenville Pike's (1990: 217) map and Dixon's (1991b: 348) map, Wild River may be in Ngaygungu territory or in Warrongo territory, and Silver Valley, southeast of Irvinebank, appears to be in Ngaygungu territory.

The influx of miners and fossickers, together with the establishment of cattle stations and the introduction of cattle, destroyed the traditional pattern of life. Then followed the railway, which extended from Cairns and reached Mt. Garnet in 1902 (Glenville Pike 1990: 84).

The clashes between the original inhabitants and the intruders led to many massacres, which were carried out by local property owners and the police from Cardwell and Herberton all around the district (Allingham 1993; Bolton 1975; Dixon 1972: 34–35: Jones 1970). As an example, in March 2000, Rachel Cummins told me that, at Blencoe Falls in the Herbert River Gorge (in Warrongo territory), a group of Aboriginal people were pushed over and fell into the gorge. One of the people killed was Lucy, Alf Palmer's mother, i.e. Rachel Cummins' great-grandmother (see 1.8.4.1-[1]). Alf Palmer gave two sentences that describe his mother's drowning: (3-31) and (3-291). Local Aboriginal people say that still now the place is haunted. (This massacre occurred probably around 1900.)

Poisoning of Aboriginal people by white settlers was common (Allingham 1993: 125, Dixon 1972: 34). Thus, according to Rachel Cummins, Alf Palmer became ill from eating poison flour supplied by a white man.

As seen above, the life of the original inhabitants of this region was drastically affected. Nonetheless, according to Bolton (1975: 95) 'until 1914 some of the Aborigines between the Herbert and the Atherton Tableland maintained their traditional way of life in a form at least comparable with their ancestors'. It seems that a fair number of people from different tribes, including Warrongo, lived at Kirrama Station, which is on the border among Jirrbal, Girramay and Warrongo (cf. 1.4.1). This probably explains why people like Alf Palmer and Alec Collins knew both Warrongo and Jirrbal, among other languages. See also 1.8.4.1 to 1.8.4.3.

No doubt these groups had frequent contacts with each other in pre-contact times as well. (This explains, at least partially, the massive borrowing from the Herbert River Group into Warrongo, Gugu-Badhun and Gujal (1.4.2.4).) Thus, according to Leigh Pentecost (e-mail messages of 26 March 2009 and 6 April 2009), prior to European settlement, Girramay, Jirrbal and Warrongo shared the initiation site and the ceremonial ground.

There was more to befall the Aboriginal people and destroy their life. In 1914 the Hull River Aboriginal Settlement, southeast of Tully, started and it 'finally broke up the tribes' (Jones 1970: 304). Aboriginal people from different tribes were collected and sent there. Some of them were 'handcuffed and chained to be driven to the [settlement – TT] ... which seems to have been ... a penal settlement' (Jones 1970: 305). Mixing of people with different language had a deteriorating effect on the maintenance of the traditional languages (see Tsunoda 2005: 58–59). In March 1918 the Hull River Aboriginal Settlement was destroyed by 'the worst cyclone in living memory to strike the coast' (Jones 1970: 308). 'Houses, personnel and aborigines were removed to Palm Island' (Jones 1970: 310). Nowadays Palm Island, too, is known as a penal settlement. Rosser (1978) gives an account of the situation on Palm Island, from an Aboriginal perspective.

1.8. Studies on the Warrongo language

1.8.1. Introductory notes

Studies on the Warrongo language can be divided into two groups: early studies (1.8.2) and modern studies (1.8.3).

Ludwig Leichhardt's (1996) journal (cf. 1.7) does not contain any information on any language of the region. Sharp (1939: 256–257, 439–441) mentions the names of 'tribes' of northeast Australia, but he does not mention Warrongo. Also, the location of some of the tribes does not match that shown in 1.4.2.2.

1.8.2. Early studies on Warrongo

Early works on Warrongo were by people who were not trained in linguistics. They used spellings that were based on the English orthography. Some of the words are recognizable, but others are not.

[1] E. M. Curr 'circulated among squatters, policemen and magistrates across the continent a list of 125 English words, for which he requested the local Aboriginal equivalents; he published the resulting 300 vocabularies as a four-volume work' (Dixon 1980: 13). The book is Curr (1886). Unfortunately, it does not contain any word list that was collected in Warrongo territory. The word lists that were collected nearby include the following. The pages are as in Vol. 2 of Curr (1886). (i) No. 112. 'The Lynd River', by W. O. K. Hill (pp. 400–401). (ii) No. 114. 'Near the head of the

Walsh River', by John Atherton (pp. 408–411). (iii) No. 117. 'Head of Gilbert River', by Edward Curr (pp. 416–417). (iv) No. 119. 'Herbert River', by William S. Stephen (pp. 422–423). (v) No. 122. 'Clarke River', by Gresley Lukin (pp. 436–437). (vi) No. 123. 'Top of the range near Dalrymple', by W. E. Armit (pp. 440–442).

Dixon (1970: 676) briefly assesses ten word lists, and Sutton (1973: 16-20) provides a detailed assessment of nineteen word lists. There is not much more to add, except to note the following two points.

First, Dixon (1970: 676) suggested that Nos. 114, 117 and 122 might be in Warrongo, and that No. 123 was either in Warrongo or some other closely related dialect. However, subsequent research by Sutton (1973: 16-20) and myself indicate that they are not Warrongo.

Second, in No. 112, Hill states that the tribe in question was surrounded by three tribes, one of them being Warrialgona. As mentioned in 1.2, Tindale (1974: 188) gives Warrialgona as an alternative name of 'Warungu', but he doubts if Warrialgona is really 'Warungu'. Indeed, the language recorded by Hill is clearly not Warrongo, and consequently Warrialgona does not seem to be an alternative name of Warrongo.

[2] As mentioned in 1.2, William Craig's letter dated 24th July 1898 to A. W. Howitt (cited by Dixon 1981: 11) lists the names of the five tribes of the region, one of which is "War-oong-oo". This may be the first written record of the name of the language and people under study. The letter contains eight Warrongo words, seven of which are recognizable. My comments, preceded by 'TT', are added.

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Yuln-gun 'Sun'
                (TT: This is not recognizable. The Warrongo word for 'sun' is
                 /gari/. Warrgamay has /jugan/ 'rain' (Dixon 1981: 121).)
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Ballanoo 'Moon' (TT: This is Warrongo: /balanu/ balano 'moon'.)

(TT: This is Warrongo: /buxi/ bori 'fire'.) Boor-ee 'Fire'

Com-oo 'Water' (TT: This is Warrongo: /gamu/ gamo 'water'.)

Nowa 'No' (TT: This is Warrongo: /nawa/ nyawa 'no'.)

(TT: This is Warrongo: /juwu/ vowo 'ves'.) Yae-oo 'Yes'

(TT: This is Warrongo: /wan+a/ wanyja 'where'.) Wan-ja 'Where'

van-ulgoo 'go'

Yan-ulgoo is not attested in modern Warrongo. It will be discussed in 3.9.4.1.

1.8.3. Modern studies on Warrongo

Modern studies on Warrongo have been carried out by trained anthropologists or linguists (Peter Sutton and Tasaku Tsunoda were postgraduate students in the early 1970s), with the exception of Jack Doolan.

[1] La Mont West and E. F. Aguas worked on Warrongo briefly (cf. Oates and Oates (1970: 175-176)).

- [2] Jack Doolan is a white man who worked on Palm Island reserve in the 1960s as 'a clerk in the settlement office' (Dixon 1989a: 116). He recorded Warrongo from Alf Palmer. Peter Sutton kindly made his transcripts of Doolan's tapes available to me.
- [3] 'Norman B. Tindale [...] An obituary' by Philip G. Jones (http://www.anu.edu. au/linguistics/nash/aust/nbt/obituary.html, accessed on 19 April 2007) states as follows: 'During an eighteen month period through 1938–39, Tindale led a datagathering expedition'. In 1938 on Palm Island, Tindale recorded Alf Palmer's genealogy, and photographed him. Tindale's 'Wordlists in North Queensland languages' (1938, unpublished) (whose photocopies were made available to me by Peter Sutton) contain about 100 words for 'Waruŋu'. Less than half of them are recognizable. Furthermore, they appear to include a fair number of words that are not Warrongo, e.g. *jara* (in Tindale's spelling) 'man', i.e. *yara* (in the orthography adopted for the present work). For 'man', Warrongo has *bama*, while Jirrbal, Girramay and Mamu have *yara* (Dixon 1972: 408). Tindale (1974: 45–46) lists five words from 'Warungu'. Most of these words are fairly accurately transcribed and glossed. However, it seems that Tindale did not distinguish the two rhotics: an alveolar tap and a retroflex approximant.
- [4] Since 1963, R. M. W. Dixon has been working on many languages of North Queensland; see 1.4.1 for his works. He obtained some data on Warrongo from Alf Palmer and Alec Collins. (Dixon 1989a describes his fieldwork in North Queensland, and contains accounts of Alf Palmer and Alec Collins. There is a photo of Alf Palmer, taken in 1964 on Palm Island, on p. 112. See p. 78 for Alec Collins.) R. M. W. Dixon kindly made his data from Alf Palmer available to me. As for the data from Alec Collins, Dixon (p.c.) stated that there is nothing in them that is not in Sutton's Warrongo data from Alec Collins ([5] below). The ex. (3-232) describes linguistic work by Alf Palmer and R. M. W. Dixon.
- [5] Peter Sutton conducted a survey of a vast area in North Queensland in 1970, salvaging what was left of a large number of languages, such as Gugu-Badhun, Warrongo, Gujal, Wamin/Agwamin, Mbara, Buluguyban, and Biri. He worked on Gugu-Badhun twice in 1970 and again in 1974; one of the outcomes is his M.A. thesis (Sutton 1973). In 1970 Peter Sutton interviewed Alec Collins and obtained some materials on Warrongo. He generously made all his Warrongo data and also his unpublished data on Gugu-Badhun and Gujal available to me.
- [6] I carried out fieldwork mainly on Palm Island and also in the adjacent areas on the mainland, three times in all, in 1971, 1972 and 1974. My main focus was on Warrongo, but I also obtained a small amount of data on Biri, Gujal, Gabilgaba, Buluguyban, Nyawaygi, Wagaman, and Wamin, among others. The outcome of the work on Buluguyban and Gabilgaba is Tsunoda (1996). Sutton's and my data on Biri are incorporated into Terrill (1998). My previous works on Warrongo are my M.A. thesis (Tsunoda 1974a) and a number of papers that deal with aspects of

the language (mentioned in the Preface); they are all incorporated into the present work.

[7] According to Dixon (1991b: 353), in 1977 'a man who called himself Alec Chalk (or Col Stephens) and who purported to speak Mbabaram', was recorded at the then Australian Institute of Aboriginal Studies; the materials were transcribed by Michael Walsh. 'Of the 200 words or so words he gave, about 20 are recognisable as Mbabaram ...; the remainder are largely Warungu, ...' I have no expertise to comment on Mbabaram, but at least I recognize a number of words that are identical with the corresponding words recorded from Alf Palmer, e.g. wangal 'boomerang', *mongan* 'mountain' (in the orthography adopted for the present work)

1.8.4. Speakers interviewed for the present study

Already in the early 1970s Warrongo was on the verge of extinction, and there were only two fluent speakers left: Alf Palmer and Alec Collins. Dorian (1973: 437) notes: 'the last speakers of a dying language can be a very misleading source of information about ... the language'. In view of this, it is vital to describe the nature of the data obtained, regarding factors such as the speaker's proficiency, his/her biography, and the conditions of the work (Tsunoda 2005: 234). Comments on the speakers interviewed for the Warrongo language are provided in the following.

1.8.4.1. Alf Palmer (Warrongo name: Jinbilnggay)

[1] Biography

Alf Palmer's Aboriginal name is /inbilngaj/ Jinbilngay. (According to Dixon (1981: 13, 115), his name is /Ŧimbilnaj/.)

The evidence provided by Rachel Cummins (Alf Palmer's daughter's daughter) suggests that Alf Palmer was born around 1880. Also he told me that he remembered the Boer War (1899-1902). This indicates that by 1899-1902 he was old enough to know about a war that had broken out overseas.

Rachel Cummins stated that Alf Palmer told her that he was born at a cattle station called Silver Valley, south of Mount Garnet. (I have been unable to find the location of this station.)

According to the information obtained by Norman B. Tindale in 1938 on Palm island (cf. 1.8.3-[3]), Alf Palmer's mother is a 'Djiru' person from 'Clump Pt', her English name is Lucy, and his father is an Englishman whose name is Palmer. Indeed, Alf Palmer told me that his father was an Englishman. (Rachel Cummins, too, stated that Alf Palmer's mother's name is Lucy.) 'Djiru', i.e. Jirru, is the language of Clump Point, north of Tully; see Dixon (1972: 25, 1989a: 110). (Photocopies of Tindale's records are lodged at Aitkenvale Library in Townsville.)

According to 'Identification Cards', Alf Palmer was born in 1891 (not around 1880) at Herberton (not at Silver Valley). His father is Tom Palmer and his mother Kitty Palmer (not Lucy). (The printouts of the computer-typed version of 'Identification Cards' I obtained at Aitkenvale Library have the following title: 'Card Index held by the Community and Personal History Section of the Department of Aboriginal and Torres Strait Islander Policy in Brisbane'.) According to Rachel Cummins, Kitty was a Warrongo woman, who looked after Alf Palmer at Gunnawarra Station, after his mother (Lucy) had been killed in a massacre at Blencoe Falls (cf. 1.7).

Alf Palmer told me that he grew up at Cashmere Station (Warrongo name: Jalnyjanbara). (See (1-10-g).) According to Rachel Cummins, he worked around Gunnawarra Station and Cashmere Station (in Warrongo territory – TT), and also in various places such Valley of Lagoons Station (in Gugu-Badhun territory – TT). In my view, the fact that he mainly worked around Gunnawarra and Cashmere strongly suggests that the language he acquired first is Warrongo, rather than any other Aboriginal language. And that he spoke a central dialect of Warrongo.

Alf Palmer married a Jirrbal woman whose English name is Elizabeth and who was born at Kirrama Station (on the border among Jirrbal, Girramay and Warrongo; see 1.4.1 and 1.7). Elizabeth worked at Kirrama Station while Alf was working around the area. But they were moved to Hull River Mission, and when the mission was destroyed by the 1918 cyclone, they were moved to the Palm Island settlement (cf. 1.7). Alf Palmer lived on Palm Island all the while until his death in 1981. (The information provided in this paragraph is largely from Rachel Cummins.)

[2] Linguistic knowledge

As noted above, Alf Palmer's first language was probably Warrongo. In addition, he knew many other Aboriginal languages, and English. (Alf Palmer himself said that he knew many languages. This is also seen in Text 1, Lines 2 to 6.) Dixon (1989a: 112) states: 'Besides Warungu, Alf also knew Jirrbal and Girramay, and Warrgamay'. According to Rachel Cummins, Alf Palmer told her that he spoke to Elizabeth in Jirrbal. Also, he acted as a consultant for Dixon's study of Warrgamay (Dixon 1981: 13–14).

Alf Palmer was interviewed by R. M. W. Dixon on Palm Island in 1964, and produced some Warrongo materials (Dixon 1989a: 112–113).

Alf Palmer was interviewed by me during three spells of fieldwork in 1971–72, 1972 and 1974 on Palm Island. (The examples (4-234) to (4-236) and (4-681) describe our linguistic work.) In 1971, he was about 90 years old. But he was strong and active. (I sometimes saw him rowing a dinghy and going out to the sea for fishing, to supply fish to his family and friends. The exx. (3-146), (4-318), and (4-319) and (4-765) describe how he maintained his fishing net or made a new one.) He was alert, and he retained a very good memory. He produced extensive data, including about six hours of running texts, about 1,500 words, and details on mor-

phology and syntax. This is comparable to the kind of data that I obtained on a living Aboriginal language, i.e. Djaru of Kimberley, Western Australia (Tsunoda 1981a). This is truly remarkable at least for two reasons. First, already in the early 1970s most of the languages in this area were extinct or facing extinction. Alf Palmer's linguistic knowledge was exceptional. Second, according to Alf Palmer, he had not spoken Warrongo for 50 years (apart from linguistic interviews), i.e. approximately since he came to Palm Island.

In my experience of fieldwork in North Queensland and also Kimberley, people who have a good knowledge of their language, generally speak the kind of English very different from that of white people. Alf Palmer was exceptional in another respect: he had a very good knowledge of Warrongo, and at the same time he spoke a variety of English very close to that of white people. This indicates that he had a talent for language.

Despite his excellent knowledge of (the ordinary style of) Warrongo, Alf Palmer admitted that he could not speak Jalngoy, the avoidance style. (See 1.6.1.) This suggests that, when he was acquiring the ordinary style, probably before 1900, Jalngov was no longer used actively.

When Alf Palmer started working with me in 1971, he called his language [kojitfal] (Gurijal), but in 1972 and 1974 he called it Warrongo. See 1.4.2.3 for a possible implication of this.

As mentioned above, Alf Palmer knew many other languages than Warrongo to varying degrees, including Jirrbal and Warrgamay. The data obtained in 1971 and 1972 contained many non-Warrongo elements – largely lexical – but they were checked with him in 1974.

It is interesting to see how Alf Palmer pronounced the names of other languages. Examples follow. (i) Gugu-Badhun was pronounced [kokobadzon]. Clearly Alf Palmer lacked the laminal contrast of /d/ versus /t/ (cf. Table 1-4.). (ii) For Yidiny (Dixon 1977b), Alf Palmer gave [itin]. He correctly recognized the wordfinal lamino-palatal nasal. (iii) Alf Palmer knew the name of the Wamin language (west of Gugu-Badhun) and pronounced it [wamen] (1.4.2.2). (iv) As seen in 1.4.2.2, for Mbabaram, Alf Palmer gave [ba:bajam]. He dropped the initial nasal /m/ and replaced the short vowel [ba] with the long vowel [ba:]. In Warrongo, no consonant cluster is allowed word-initially. (This vowel lengthening is an instance of compensatory lengthening; see 2.6-[4].) (v) An interesting case concerns the language whose name is written by Dixon (1983) as Nyawaygi. This name appears to contain the comitative suffix -gi 'with' (Dixon 1983: 433, 458). North of Nyawaygi and east of Warrgamay is Biyay, which is, together with Warrgamay, described by Dixon (1981). According to Dixon (1981: 3), the people 'could refer to themselves as Biyaygiri, involving the productive derivational suffix -giri "with". The word biyay means 'no', and Biyaygiri literally means '[person] with the word biyay "no". Now, for Nyawaygi, Alf Palmer gave [nawagjuji]. This may be tentatively written 'Nyawagiri'. It is possible that Alf Palmer was confused between the Nyawaygi suffix -gi and the Biyaygiri suffix -giri and that he used the Biyaygiri

-giri for the name of Nyawaygi. However, it is also possible that the suffix *-giri* once existed in Nyawaygi as well and that it survived in the name 'Nyawagiri'. See also 3.7.1-[22] for *-giri*.

The reliability of the Warrongo data I recorded from Alf Palmer has been the target of some criticism, e.g. Dixon (1981: 13, 1994: 180). However, this criticism is misguided.

Regarding morphology, Alf Palmer's data are reliable, for he remembered details in morphology, and he even remembered irregularities in it. See, for example, (i) the ergative suffix -lo (3.2.1.2), (ii) the comitative case (Table 3-11), and (iii) the suffix -nyjarr 'kinship' (3.7.1-[19]). (Language obsolescence often causes leveling of paradigms, and therefore, if there is any irregularity in a given paradigm, and if it occurs consistently, then it is likely to constitute reliable data; cf. Tsunoda 2005: 242–243.)

As for vocabulary, Alf Palmer's data initially contained intrusions from other language(s). However, when confronted with the data, he was careful to correct any mistake he might have made. For an example, see Text 2, Line 6.

Furthermore, Alf Palmer's vocabulary exhibits regular phonological correspondences with those of southern Mari languages, which are more than 1,000 km away (1.4.2.4). This indicates that Alf Palmer's vocabulary is reliable. (It is in order to show this point that, for Warrongo of Table 1-6, only the words from Alf Palmer (and not from Alec Collins) were given.)

Dixon (1994: 180) states that many of the Warrongo texts that I recorded from Alf Palmer 'are conversations in Warrungu between him and Tsunoda'. This is not correct. The six hours of running texts are entirely monologues by Alf Palmer. Excerpts of the texts are given in Tsunoda (1974a: 610–651, 1988: 643–645), and also in the present volume. All my field tapes (or their copies) are lodged with the Australian Institute of Aboriginal and Torres Strait Islander Studies in Canberra.

Dixon (1981: 13) adds: 'Although Palmer's parents were Warrungu, he has lived most of his life in Wargamay- and Dyirbal-speaking territories'. Again, this is not correct; see Alf Palmer's biography given above.

There are reported instances in which a language with no written tradition has been influenced by one with that tradition. For example, Mithun (1988: 351) reports many instances of borrowing of conjunctions, in a contact situation, from a language with that tradition to one without. (See Olson and Astington (1990: 706–708) on the impact of writing on language change.) However, it seems certain that Alf Palmer's Warrongo was not influenced by a language with that tradition – English, in this case – except for about one dozen nouns (2.13.2) and possibly the tag question marker /aj/ [ai] (2.2.3.1). This is because Warrongo has not had a written tradition. Alf Palmer neither read nor wrote English. The same is almost certainly true of the people from whom Alf Palmer learned Warrongo (probably before 1900).

[3] Letter from Alf Palmer written by Rachel Wilson

Probably in 1972 (or 1974?), Rachel Wilson (who is Alf Palmer's DD, about sixteen or seventeen years old at that time, and who was to become Mrs. Rachel

Cummins) wrote a letter to me on behalf of Alf Palmer. It was a reply to my letter. It starts as follows.

(1-16) Dear Gunira,

Nyah varoo younangoo coco birin. I hope you understand my spelling of the language. I am Alf Palmers granddaughter and he has asked me to write this letter to you. ...

The first word, Gunira, is the name that Alf Palmer gave me (1.5.4.2-[2]). At that time, I used the letter 'u' for the phoneme /u/ (cf. 1.1, and also 2.14). Clearly Rachel Wilson adopted my spelling. The other words are analyzed as follows.

(1-17) [ŋaja iaro inongo koko bicinl ngava yarro-Ø yinon-n-go gogo-Ø hirri-n 1SG.ERG this-ACC 2SG-LINK-DAT word-ACC send-NF 'I am sending this word to you.'

This letter also contains the word 'Djinbilnggay', i.e. Alf Palmer's name. Again, Rachel Wilson adopted my spelling of that time. This letter contains two more Warrongo words. In the letter, Alf Palmer says that they are the names of his grandchildren. One is "Japanoo". This is no doubt Jabino and the name of Roderick Palmer (Alf Palmer's SS; see 1.5.4.2-[1]). The other is "Indinoo". It is not recognizable. According to the practical orthography adopted for the present work (1.1, 2.14), it may be written as Yindino. Rachel Cummins believes that it is the Warrongo name of Raymond Palmer, who is Roderick's EB.

This letter, written by Rachel Wilson, is probably the very first written record of the language ever made by a Warrongo person.

1.8.4.2. Alec Collins (Warrongo name: Wolngarra)

Atkinson (1979: 31) states: 'In the 1920's there was still a small tribe of blacks living in their wild state in the Herbert River Gorge. The head of this tribe was Wambino. He had seven sons and a daughter', including Patrick Hooligan and Alec Collins. (Atkinson uses the spelling 'Alick', and not 'Alec'). This suggests that Alec Collins grew up in the Herbert River Gorge. (See 1.5.4.2-[1] and 3.7.1-[12] for the name Wambino.) Alec Collins' Warrongo name is Wolngarra (data from Peter Sutton). Atkinson (1979) contains accounts of Wambino and his family, and a photo of Wambino on p.32. The photo on p.40 shows some of Wambino's sons, including Alec. Both photos were taken in 1925 at Kirrama Station. At that time, they were living at Kirrama Station (in Girramay territory?; cf. 1.4.1).

Since Alec Collins appears to have grown up in the Herbert River Gorge, probably he spoke an eastern dialect of Warrongo. (How Alf Palmer and Alec Collins referred to their language was discussed in 1.2.)

Alec Collins was interviewed by R. M. W. Dixon in 1963 (?) at Kirrama Station. He was also interviewed by Peter Sutton at Kirrama Station in 1970, and produced some material, including some words and sentences that he said were Jalngoy ('avoidance style'). Subsequently, however, his whereabouts were not known. After a long search, in September 1974 I found Alec Collins – alas! – lying in bed at Herberton Hospital. He was already too weak to do any linguistic work. Nonetheless, I talked to him in the Warrongo language that I had learned from Alf Palmer. It seems certain that he understood my Warrongo perfectly. Also, I asked him a fair number of questions in Warrongo, which he answered in Warrongo. For example, I asked him about Alf Palmer as follows.

(1-18) ngani-Ø nyongo gogo-Ø? (TT) what-NOM 3SG.GEN language-NOM 'What is his language?'

Alec Collins replied, saying '[waroŋo]'. Furthermore, I narrated a hunting story in Warrongo (the kind of story Alf Palmer had narrated to me many times). Alec Collins enjoyed it very much. There were no signs of incomprehension on his part. This suggests that the Warrongo language as recorded from Alf Palmer is reliable, being perfectly interpretable by another speaker of the language. (My interview of Alec Collins is reported in Tsunoda 2005: 242.) Alec Collins was probably almost as proficient as Alf Palmer was. He passed away in 1975, before adequate data were recorded form him.

Alec Collins said that Alf Palmer was his [kalnina] /galnina/ 'MB'. It is not known if he meant 'actual MB', or 'classificatory MB'. (For 'MB', Alf Palmer used /galnana/ and /galna/; the second vowel is /a/, and not /i/. This is one of the small lexical differences between their idiolects (1.3).)

1.8.4.3. Other speakers

- [1] Harry Bunn was interviewed by me in Townsville in September 1974. He was born at Innot Hot Springs (on the northern border of Warrongo territory) to a mother from Valley of Lagoons (a Gugu-Badhun person?) and a father from Stanley Hill, Irvinebank (a Mbabaram person?). Ranji Pope, a Gujal speaker (see below), is his half-brother and Richard Hoolihan, a Gugu-Badhun speaker (see [8] below), is his uncle (presumably MB, not FB; in Aboriginal people's English, the word 'uncle' often means 'MB'). He called his language Gujal, but it was probably Warrongo, for, like Warrongo but unlike Gugu-Badhun and Gujal, it lacked a laminal opposition (Table 1-4). He was able to produce only limited data, mainly lexical. The section terms and totems given by him are cited in Table 1-9.
- [2] Vera Smallwood was interviewed by me in Ingham in September 1974. She told me that she was born in 1922 at Mount Garnet to a Russian father. (Mt. Garnet