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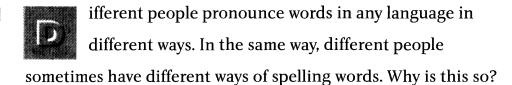
interpreting old specific and s



Looking at old spelling

n this chapter we are going to look at ways of 'reconstituting' pronunciation and correct spelling of words that are to be found in old written sources. We will show you some methods for working with old documents to sort out how old spellings can be interpreted. However, you must remember that reconstitution can only be as good as the sources that it is based on; if the spelling in the sources is poor then our reconstitution will be affected by this, and you will not be able to come up with very accurate interpretations. Sometimes, it will even be necessary to say, 'We don't know what sounds the writer is trying to represent — it could be this, or it could be that, or even, 'We simply can't tell'. It is important to be honest about this from the beginning and to recognise the limitations that face us when we try to work with old spellings. This doesn't mean that we should give up and not try to interpret the materials we have available; rather, that we must be realistic and accept that, like reconstituted orange juice, the language can never sound as good as the original did.

Spelling and pronunciation



Differences in pronunciation can arise for a number of reasons.

Sometimes, people who speak the same language come from different places, so we say that they speak different dialects of that language. They can understand one another pretty well, but

sometimes they choose to use a different word or expression, or sometimes they may use the same word but pronounce it slightly differently. We are familiar with this in English: people from Australia speak differently from people from England (and even within England there are lots of regional variations), and people from both places speak differently from people in America (again, there is lots of regional variation to be found in America).

The same is true for Aboriginal languages. For example, the word that we write in English as 'Koori' is derived from a word that originally just meant 'man' in the language of the Sydney area, and some of the languages along the coast to the north of Sydney, as far as Kempsey. In these languages, some people used to say *guri*, while others used to say *kuri*. It wouldn't have mattered, from the point of view of understanding one another, which pronunciation somebody used, since both were perfectly acceptable to speakers of all of these languages at the time. When we come to spell words that vary in their pronunciation like this, our main aim is going to be consistency, so that spelling reflects pronunciation in a consistent way.

Sometimes differences in pronunciation can be purely personal, as with a person who has a lisp, or someone who swallows their sounds when they speak. Again, we have to be careful to recognise this and to aim for a spelling that represents the most common pronunciation and one that all people will recognise and understand.

When you work with written source materials and try to figure out the original pronunciations of old words, you will notice immediately that different people have written the same words in different ways. Why is this?

For English, correct spelling is taken to be a sign of literacy and a good education, but not many people realise that it was only in the last few hundred years that spelling became so strict as it is now. It was only when English dictionaries became widely available, and spelling was taught in school, that it became possible to say that one spelling was 'correct' and another 'incorrect'. Before that, people often spelled words in different ways (and sometimes one person spelled the same word differently, as the mood took them), adding a letter here or a letter there, or leaving them out as they liked. Sometimes printers did this to make up the length of lines in books. It didn't matter much as long as everyone was still able to read what was written, and understand what was meant.

When it comes to spelling words in a foreign language, as Aboriginal languages were to almost all the early writers, there are a number of extra reasons why we might find different spellings in the written records that are available to us. One of these is the writer's own language background (whether they spoke English, or French, as their main language, for example), and even their dialect (working class northern English versus educated southern English). We will discuss this in more detail later. Another reason could be the length of time they spent

learning the language. We might reasonably expect that someone who had spent many years living in a community (such as a teacher or missionary) might have a better grasp of the language and be able to spell words better than someone who had just visited for a day or so, like a passing traveller. We might also expect that a person who has lived in or visited several different communities, or who had tried to learn several languages, might be better placed to respond to language differences. This isn't always true, but we must keep it in mind and look into the background of the person who wrote down the words we are trying to make sense of, including where he or she lived and where they travelled to.

Another reason we might find spelling differences is the general level of interest in language and culture shown by the person who collected the information. Someone who is more sympathetic to Aboriginal people and culture is more likely to spend the time to learn the language properly and to try to spell it more accurately. Individual differences play a large part here: some collectors were just more careful and tried harder to be accurate than others did.

Looking at source materials in archives such as those at AIATSIS shows that there are many different spelling systems in use by language collectors. When trained linguists write words in Aboriginal languages, they use a special (phonetic) alphabet that makes it possible to clearly indicate exactly how a word is

pronounced. When other linguists trained to use the same symbols look at how a word has been written, they know immediately how it should be pronounced.

Many of you will have seen books written about Aboriginal languages in which a number of strange-looking symbols might occur. Words written using these symbols might look something like this (see for example the phonetics used on pp 51–52):

While linguists know how to interpret spellings such as these, people who have not been trained in linguistics often cannot make much sense out of what has been written.

This means that when we write languages that have not been written before by their speakers, we need to have a more practical way of spelling them, which only uses letters of the alphabet that ordinary people are familiar with. The spelling system that is adopted for any particular language will always depend in the end on how the people with an inherited interest in the language want to write it themselves.

At the same time, there are several important principles that people have to keep in mind when a writing system is being developed for a language. The most important principle is that the same sound should always be represented in the same way in the spelling system in whatever word it occurs in. This means that when we write a language we should not represent a k-sound sometimes as k, and at other times as k or even as k.

By using the same spelling for the same sound, we are making sure that there can never be any confusion about how a word is to be pronounced. For instance, if a word that is pronounced *maka* were to be written by one person as *maka* and by another person as *maca*, a third person trying to read the same words would not be sure if these two spellings were meant to represent one pronunciation, or two different pronunciations.

We have shown you elsewhere in this manual some of the kinds of decisions that have been made about spelling different Aboriginal languages in Australia, so we will not go into any more detail at this point about how a spelling system could be devised for your language if it does not already have one.

The important point to keep in mind is that very few of the published and unpublished sources on the languages that you will be dealing with were written by people with training in linguistics. The vast majority of the people who were writing words in Aboriginal languages in the nineteenth century, and even in most of the early part of the twentieth century, were English speakers who were hearing the sounds of Aboriginal languages through the sounds of English that they already knew, and who were writing these sounds with the spelling system that they had already learned in school for English.

A smaller number of people who were speakers of other European languages wrote words in Aboriginal languages as well, especially speakers of French and German. When these people wrote words in Aboriginal languages, they would have heard the sounds through the sounds of their own languages, and they would have written them down following the spelling rules of their own languages, as in the case study of Ngarla (see Chapter 9) where the recorder was Italian.

Because of this fact, it is important to pay attention to the language background of the person who was writing your ancestral language. The same spelling given by a speaker of German, or of French, or of English, might have been intended to represent quite different things. In fact, even speakers of different varieties of English may have used different sorts of spellings to represent the same sounds, depending on how they pronounced words in their own dialect of English.

Information sources

he amount of information that has been recorded for different languages varies quite a lot. For some languages we might have only one or two wordlists, and for others there can be many vocabularies available. It is important to realise that there can be errors in the wordlists that collectors took down. Several sorts of errors can creep in, especially when the collector was not properly trained and did not spend a great deal of time studying the language. From our own work, and that of linguists like Luise Hercus and Gavan Breen, we can identify the following types of errors as being common:

misunderstanding what a word in an Aboriginal language meant

- mixing words from several different languages together in a single list
- mistakes in spelling words

We will look at each of these in turn.

Firstly, misunderstanding the meanings of words is not uncommon in old sources, especially when the collector and interviewee had no language in common and must have relied on gestures and pointing. Sometimes, the meaning given in a wordlist is completely wrong because the collector did not understand the English spoken by the Aboriginal person who gave them the words. In early days, Aboriginal people's English was often heavily accented and showed the effect of the languages they spoke. This can be seen in the following examples taken from wordlists that we have examined:

Wordlist meaning	Correct meaning
heart	hot
wet	sweat
moths	boss
shit, dung	tongue

Sometimes, the Aboriginal person may have given the correct English word, and pronounced it correctly as well. However, if it was a word that has more than one meaning in English, the collector may have thought the word referred to a different thing. For instance, there is an example where an Aboriginal person said that a particular word meant 'bark', which the collector took to mean 'bark of a tree'. In fact, however, the

Aboriginal person was referring to the barking of dogs, and the word should have been translated as 'bark' or 'make a sound'.

Another problem is that sometimes a specific term is translated for a general term, or a general term is given when a specific term was meant. Here are some examples:

Wordlist meaning	Correct meaning
grass	vegetation
boy	uninitiated youth
beard	hair
day	now
thumb	your hand
girl	female
snake	carpet snake

Finally, we sometimes find a meaning listed for a word which is actually that of a related word; this is especially true where pointing and gestures would have been used. Here are some examples:

Wordlist meaning	Correct meaning
thighs	buttocks
cloud	sky
woman	wife
hair	head
ground	camp
frown	blind
spider	to bite
dig	drink

You can imagine how the last two came about — the collector points at an insect and says 'spider', while the Aboriginal person giving words says, 'Look out. It will bite'. For the last example, the collector could have said, 'Dig the ground', perhaps making the motions of scratching a hole in the ground, and the Aboriginal person thinks, 'Poor fellow. He's thirsty and is digging a soakage for a drink!'

Mixing words from different Aboriginal languages in vocabulary lists is something that we must be careful of and try to look out for. Sometimes, it can even look as if a wordlist belongs to just one language, while what has really happened is just that the writer has thrown together words from a variety of different languages into a single list for some reason! Some Europeans also seem to have believed that all Aboriginal languages were somehow the same, so it was alright to put together words that they gathered from different places into single lists.

One other common mistake of this kind was the recording of some of the pidgin English words that were widely used in the past as if they were words in a particular local language. Words like *bindji* for 'stomach', or *coolamon* for 'dish', spread out from Sydney with the early settlers and these words sometimes appear in vocabularies from other areas instead of the original words for these things.

Finally, there can be mistakes in the written sources because of problems with spelling words. We cover these in the next section.

Comparing information



compare the spellings and meanings of words given to come up with guesses about what the language was probably like. Generally speaking, the greater the amount of recorded information, the greater the amount of inconsistency there seems to be in how words were recorded. It often seems that there were as many different ways for people to spell the same

word as there were people who were trying to write it!

hen we have two or more written sources we can

While it might seem like a nuisance that there is so much variation in people's spellings of words in Aboriginal languages, we should, in fact, regard this inconsistency as our friend, rather than our enemy. Very often, the fact that people have given us different spellings can point to the exact sound that they were trying to represent, but which they were having so much trouble with. We can compare the different spellings to get at the most likely original pronunciation.

Let us take a simple example first of all. A number of different sources from the 1800s and early 1900s have written the word for 'man' in Bundjalung (which comes from the northern coast of New South Wales, and extends into parts of southern Queensland) like this:

bygul beigal bigal bygle bycol baygul

In this case, we are lucky because there are still lots of people living in Lismore and surrounding areas who can tell us how the Bundjalung word for 'man' is actually pronounced. These pronunciations tell us that the correct spelling should be *baygal*. So, how is it that these earlier observers managed to write this word in so many different ways, with not a single spelling being correct? The answer is that these people were all English speakers, and they tried to interpret the pronunciation of the word *baygal* as if it were an English word. They then tried to represent their interpretation of the sound by spelling it as if it were an English word.

The first part of the Bundjalung word is spelt *bay-*, and it sounds very much like the English word 'by', as in 'the man sat by his wife'. The same sound in English can also be spelt as 'bi', in a word such as 'biting'. That is why many of the early recorders wrote the word beginning with 'by-', while some others represented this sound as 'bi-'.

In Bundjalung, it does not make any difference in a word like baygal whether you make the sound a or e. (In this respect, Bundjalung is very similar to many other Aboriginal languages.) Because it does not matter if people actually pronounce ay (as in English 'eye') or ey (as in English 'ray'), it is best to write these sounds all the same, and the Bundjalung have agreed to write ay.

Some of the people who wrote this word in these early sources clearly heard an *ey*-sound. In one of these words, 'beigal' you can see that the person tried to represent this as 'ei'. The spelling 'baygul' was perhaps also meant to represent the same sound, with the first part of the word rhyming with the English words 'bay' and 'ray'.

If we turn our attention to the middle of the word, you will see that most people have written a g, while one person has written a c. The letter c in English is often used to represent a k-sound, as in words like 'can' or 'because'. In very many Aboriginal languages (including Bundjalung) it does not make any difference whether we pronounce a g or a k, so these two sounds should be represented by the same spelling wherever they occur. In the spelling system that has been agreed on for Bundjalung, these sounds are both written as g.

The very last letter of this word is written in most sources as l, so it seems to be fairly certain that these people were all trying to write a word that ends in the sound l. The spelling 'bygle' might seem a little puzzling, but in fact many words that end in the sound l in English are spelt with -le at the end:

rifle little wriggle puzzle

So far, we have been able to show that this word should be reconstituted as having begun with *bayg*- and as ending in *-l*. But we still have not shown what has happened with the sound that occurs between the *g* and the *l*. The spellings that have been recorded seem to vary quite a lot. Some sources give us 'a', some give us 'o', while others give us 'u'.

The spelling 'bygle' makes it look like the sound between the *g* and the *l* was the same indistinct sort of sound that we find before the final sound in words like 'rifle', 'little', 'wriggle', 'puzzle'

and so on. This indistinct sound is the same sound that is represented in a variety of different ways in English spelling:

total wretched cannon awful putrid

What happens in Bundjalung (as well as many other Australian languages) is that the sounds *a*, *i* and *u* all often end up sounding a bit like this indistinct sound in English when there is more emphasis placed on another part of the word. In Bundjalung, there is greater emphasis placed on the first part of the word, ie on *bay*-, while the second half of the word gets swallowed up a little bit.

But if you listen very carefully, or if you get a speaker of Bundjalung to pronounce the word very slowly, you will hear that this indistinct sound is really meant to be an *a*-sound. This means that on the basis of all of these alternative spellings, we could settle on the correct spelling for this word as *baygal*. And, of course, we are lucky enough in this case to have Bundjalung people who can still pronounce the word, and we can see that this is in fact the correct spelling.

This demonstration shows that when there are a number of different spellings of a word in old sources, what you should do is compare these spellings against one another. One easy way to do this is to line up spellings above one another and compare the letters that were used to write the words. Here are these old

spellings once again lined up in the kind of way that we mean:

b	ay	g	a	ı
Ь	у	С	0	
Ь	у	g		le
b	i	g	a	I
b	ei	g	a	ı
b	у	g	u	l
b	ay	g	u	I

Common spelling errors

ere is an example of another set of spellings lined up in the same way, this time the word for 'ear', so we can see how the correct pronunciation of this word can be worked out. The correct spelling as provided by speakers of Bundjalung is given under the line at the bottom:

b	i	n	a	ng
b	i	n	0	ng
Р	i	n	a	ng
b	i	nn	u	ng
Ь	i	n	u	ng
Р	е	n	u	ng

The first thing that you should note is that the spellings 'b' and 'p' at the beginning of this word point to the same kind of variation as we found in the middle of the word *baygal*. Just as *g* and *k*-sounds in Aboriginal languages are often interchangeable, the difference between *b* and *p* generally does not need to be

represented in the spelling systems for these languages. The spelling system that has been adopted for Bundjalung represents both of these sounds as *b*.

You should note that double letters like nn in the middle of a word in English generally show that the previous vowel is short, and not that the doubled letter itself is pronounced double. This means that a spelling like 'binnung' is probably meant to be pronounced with a short i like in the word 'dinner'. If it had been a single n, the sound might have been the longer sound that we find in the English word 'diner'.

In the spelling 'bigal' for the previous word, all of the sources write the middle sound with only one *g*, which indicates that the preceding letter is meant to be pronounced with a sound like the *i* in 'fine'. If the word for 'man' were meant to be pronounced 'bigal' rather than *baygal*, we would have expected the old sources to give spellings something like 'biggal' or 'biggle'.

You can see that one of the sources has spelt the word for 'ear' as 'penung', in which the first part of the word contains an 'e' spelling rather than an 'i' spelling. Aboriginal languages generally only have three vowel sounds — *a*, *i* and *u*. Where you find variation in spellings between *i* and *e*, the correct spelling is probably *i*.

Similarly, when there is variation in spellings between *a* and *o*, the correct spelling is probably *a*. In this example, you can see that there are spellings that show this kind of variation, such as 'pinang'

and 'binong'. These suggest that the word should be written as binang. The spellings that contain 'u' before the final 'ng', such as 'binnung', are also consistent with this pronunciation, as the letter u in English, when it is followed by a consonant (or a group of consonants) at the end of a word, is often used to represent a similar sort of sound in English:

but sung crust

What we will do now is show you a list of many of the different kinds of spellings that are often used by speakers of English when they are writing words in Aboriginal languages. One of the problems is that often the same letter can be used to represent a number of different sounds in the Aboriginal language, so unless you are able to check some pronunciations out with some older people who still remember some of the language, it may not be possible to be certain about the exact original pronunciation at all.

Vowel sounds

We will begin with the vowel sounds (see the table opposite). You will remember that we said it was important to consider what a person's own language background is when you are working out how to interpret old spellings. If you come across a spelling like *u* in many English words, it is not always possible to be sure whether this is meant to represent the sound *u* or *a*, because the letter *u* can be pronounced as in the word 'put', or as in the word 'but'.

Spelling	Possible pronunc- iation	Comment	Examples	Correct spelling
a, ar	а	in the middle of a word	parneh	bana
er, ah, eh	a	at the end of a word	parneh	bana
a	ay	when there is a single consonant followed by a vowel	pana	bayna
e	i		pena	bina
	а	especially after y, dj or ny	jena	djana
i, ee, ie	1		peenar	bina
ea	i.	following y or dj	yealki	yilgi
l	ay	when there is a single consonant followed by a vowel, especially e	biner	bayna
у	ау	when there is a single consonant followed by a vowel	bynah	bayna
	1	especially at the end of a word	pyny	bayni
o	u		poonah	buna
	а	especially after w	woner	wana
u, 00	u		puna	buna
u	a	when there is a double consonant after it in the middle of a word, or a single consonant at the end of a word	punnah	bana

But, if you have two different people recording a word, one an English person who writes u, and another a French person who writes ou, then it is likely that the sound should have been u rather than a. The reason for this is that the letters ou in French are only ever used to spell the sound u, and never a. The word bouche in French, which means 'mouth', is pronounced very much like the English word 'bush'. If a French person wanted to write a word that sounds like English 'rush', it would look quite different — probably something like rache.

Some Aboriginal languages make a difference between long vowels and short vowels; long vowels are drawn out in their pronunciation, and they are written double. This can make quite a meaning difference, as in the following words from Gamilaraay:

tharra	'thigh'	tharraa	'drunk'
guway	'blood'	guwaay	'is speaking'
garril	'leaf'	gariil	'cold'

Unfortunately, it is very difficult to distinguish long and short vowels in the spelling of old sources since they are almost never consistent on this point. Sometimes, when old sources contain *ar* the writer might have intended to represent a long *aa*, but it is just as possible that *a* plus following *r* or *rr* was meant.

Even with some writers who seem to have gone to a considerable amount of trouble to clearly mark long vowels, there can often be misleading spellings. For example, Gamilaraay words were written down by the missionary William Ridley in the 1860s in a

fairly consistent spelling system. Ridley had studied a number of languages (including Latin and Greek) and lived in northern New South Wales for some time, getting a good grasp of the language. He uses a line over vowel sounds to show when they are long, as in 'guddū' for guduu 'cod fish' and 'karīl' for garriil 'cold'. Unfortunately, when the vowel follows the first letter of a word, Ridley's use of the line becomes inconsistent: sometimes the vowel is really long (as we know from later recordings), but sometimes it is short. Most Gamilaraay words have emphasis on the first vowel, and Ridley must have sometimes heard this as lengthening the vowel. For example, he writes 'būkhai' for bagaay 'creek', and 'mūrū' for muru 'nose'. Notice that he also slipped up in writing 'ar' where he should have had ā in 'pullar' for balaa 'white', and 'kārlin' for gaalan 'meat ant'.

Consonant sounds

Let us now look at consonant sounds. The examples that we have already looked at indicate that older spellings often vary in the following sorts of ways:

b	and	Þ	
d	and	t	
j	and	ch	(and also g before i or e)
g	and	k	(and also c or ck)

This is because it is common in Aboriginal languages for all the speakers of a language to pronounce words with sounds that are actually halfway between a *b* and a *p*, or between a *d* and a *t*. Some-

times, even if some people clearly pronounce a g or a d, other people might clearly pronounce the same words with k and t. Or the same person might pronounce a word with b on one occasion, but pronounce the same word with p on another occasion.

In languages where there are these kinds of variation (and you should remember that this covers most of the languages of Australia), you should settle on a single spelling for these sounds no matter what sorts of different spellings are given in the old sources. It does not matter whether you write all the words of the language with *p*'s, *t*'s and *k*'s (as is done in Pitjantjatjara), or with *b*'s, *d*'s and *g*'s (as is done in Bundjalung). The important thing is to write the sounds consistently in all the words that they are found in.

Another feature of Aboriginal languages is that they usually have more than one *r*-sound. One of these *r*-sounds is pronounced very much like the kind of 'softer' *r* we have in Australian English, while the other *r*-sound is rolled the way the Scots typically pronounce their *r*'s, or pronounced as a very quick flapping sound. Although the rolled *r* does not occur in the kind of English that is spoken in Australia, something very close to it is often found in words spelt with *t* or *d* between two vowels in words like 'butter' and 'ladder' when they are said quickly and casually.

The softer *r*-sound is often written in Aboriginal languages just as 'r', while the rolled *r* is often written double, as 'rr'. It is

important to indicate the difference between these two *r*-sounds in Aboriginal languages, because the choice of one sound over the other can often change the meaning of a word. For instance, in the Gamilaraay language of north-central New South Wales, we need to spell these two sounds differently to show the difference between words such as the following:

muru nose

murru bottom, buttocks

(You wouldn't want to make a mistake if you were trying to comment that somebody had a big nose, and you accidentally ended up saying that they had an unusually large bottom!)

English speakers who wrote Aboriginal languages were often not aware of the need to write these two sounds differently, so we cannot always be certain about how sounds written as *r* should be spelt. However, there are often clues in the kinds of spelling variations that we find which tell us how words spelt with *r* should be pronounced.

One clue involves variations between spellings with r and spellings with d. If you find this kind of variation, you can be reasonably sure that you are dealing with the rolled r, rather than the softer r-sound. Bundjalung is one of those few Australian languages which have only a single r-sound. Because there is only one r-sound, we only need to use the single letter r, though in its pronunciation, the Bundjalung r sounds just like the rr that we find in other Aboriginal languages.

The word for 'bone' in this language was recorded by two different people as follows:

tarrigon

dadigun

The fact that one person has written 'rr', while the other has written 'd' suggests that the sound they were trying to represent was a rolled *r* rather than a *d*. We can confirm this guess by listening to the way that this word is pronounced by the old people today, who say *darigan*, and not 'dadigan'.

English speakers also seem to have had a lot of trouble writing words that end with the rolled *r*-sound. This is hard for English speakers to hear, firstly because we do not have rolled *r*'s in Australian English, and secondly because although we do have the softer *r*'s, we do not have them at the ends of words. (Although in Australia we do not pronounce *r*'s at the ends of words, they are pronounced by Americans, in words such as 'car' and 'four'.)

When these early observers tried to write Aboriginal words with a rolled r at the end, they often put in additional vowels instead, to make the words sound more like English words. So, if old sources have the same word ending sometimes in a vowel and sometimes r, the word may well have ended in a rolled r-sound. Sometimes when writers added a vowel at the end of a word, they also dropped the vowel that occurred before the r-sound.

Look at the following different ways that people wrote the Bundjalung word for 'fire':

wybera

wibbera

wyborough

waibar

y-bur-a

wyebra

whyburra

The old Bundjalung people today pronounce this word as waybar, and these early writers generally misheard this as 'waybra' or as 'waybara', and tried to spell it according to the pronunciation that they had actually misheard. (Note that these spellings also indicate that sometimes the old sources use letters of the alphabet to stand for the sounds represented by the NAME of the letter, and not just the sound that they represent. So, the spelling 'y-bur-a' begins with the letter 'y', but we are supposed to read this so that it sounds like the name of the letter itself).

Another thing that early writers often did when they heard rolled *r*-sounds at the ends of words was to mishear them as *l*-sounds, which are not really too different from *r*-sounds. (Remember, for example, that Japanese people often have trouble distinguishing *l*'s from *r*'s.) So, if you find variations in spelling between *r* and *l* at the end of a word, it may be that you are dealing with a rolled *r*.

Look at the following spellings of the word for 'one' in Bundjalung:

yabbroo

yaburu

yabberu

yabul

The fact that there are vowels at the ends of words with the letter *r* coming before them, and with the vowel before the *r* being dropped should make you think that there is actually a rolled *r* at the end of this word. That is, when early sources seem to vary between spellings that point to pronunciations such as 'yabru' and 'yaburu', they were probably trying to represent something more like *yabur*.

You can see that the last of these spellings is actually closest to this suggested pronunciation, except that the writer has incorrectly written the final sound as *l*. When you see these kinds of variations in spellings, you should also be suspicious that the last sound was meant to be a rolled *r*. Once again, we can confirm this guess by checking with the old people, who pronounce the word for 'one' in Bundjalung as *yabur*.

In English, the letters *th* are used to represent two different sounds. Firstly, they can represent the sound in the word 'this', and secondly, they can represent the sound in 'thin'. Neither of these sounds occurs in most Aboriginal languages. However, there is another sound that occurs in many Aboriginal

languages that is not found in English. This is a sound that is halfway between sounds that we write as d or t, and the sounds that we write as th, sounding very much like the sounds in 'got the' and 'had the'. In many Aboriginal languages, this sound is written as dh, or as th.

For instance, in the Gamilaraay language of north-central New South Wales, there are words such as the following, where it is important to distinguish between words spelt with d and words spelt with th (as well as words spelt with dj) because there is very often little else that distinguishes between these words. Look at the following examples:

madamada knotty (as hair)

matha women's marriage division

madja exclamation of sorrow

Although some writers misheard this sound as *th*, there are plenty of other writers who couldn't hear it as a separate sound at all, and simply represented it as *t* or *d*. This means that if you come across examples of variation in spelling between *t* and *d* and *th*, then the sound that you are dealing with could well be *th*.

There are other writers who also found the sound that we spell in Aboriginal languages as dj or tj (or sometimes as dy and ty) difficult to distinguish from the sounds that we spell as d or t. Where you find variation in spellings between ch or j (or dge at the ends of words) and t or d, it may well be that you are dealing with the sound dj.

Languages spoken in central and western Australia have a further type of *d*-sound, one in which the tongue tip is turned back slightly (we call these retroflex sounds, something like the pronunciation of a person from India or Pakistan). We write this sound as *rd*. English speakers have trouble with this sound, but we can sometimes tell it is present when the spelling contains a vowel (usually *e*, *u* or *o*) plus *rt* or *rd*, as in the following examples from Diyari, spoken east of Lake Eyre:

Wordlist spelling	Correct spelling	English meaning
murtie	mardi	heavy
wordoo	wardu	short
merda	marda	stone

Aboriginal languages don't often have words starting with vowel sounds. If you see words written in old sources that start with vowels, you should be suspicious that maybe they contain some kind of mistake, and that the European writer was actually mishearing a vowel for something else. Aboriginal languages do not usually have words containing *h*-sounds either, so you should also be suspicious of words in old sources with the letter *h*, especially if it comes at the beginnings of words.

One thing that Aboriginal languages do have, which English does not have, are words starting with the sound *ng*. English words do have this sound, but only in the middle of words (such as 'singer'), or at the end of words (as in 'bang'). The sound *ng* at

the beginning of words in Aboriginal languages is very hard for English speakers to hear. Sometimes they would not hear this sound at all. Sometimes they would hear it, but they would mistake it for an n or m, or for an h, or for a g. So, when you see the same word starting with spellings that vary between h, g, m or n, or which sometimes have just a vowel at the beginning, there is a good chance it starts with the ng-sound.

Look at the following spellings of the Bundjalung word for 'dog':

augham

aggum

nuccum

nargum

We would expect that this would should have ng at the beginning. The next sound would be a. With the variation between spellings such as g and c, we can be sure that the next sound should be g. The final part of the word should be am. Thus, we would guess that the word should be ngagam, and this is exactly what the old Bundjalung people tell us it should be.

Aboriginal languages often have an *n*-sound like in English 'onion' or 'news'. In many Aboriginal languages, this sound is written as *ny* (though sometimes, it is spelt instead as *yn* at the ends of words). English only has this *ny*-sound at the beginning and in the middle of words, but it never has the *ny*-sound at the end of words. This makes it very difficult for English speakers to hear when it occurs at the ends of words.

Typically, when English speakers come across the *ny*-sound at the end of a word, they mishear it as *n*, or as *ng*. These are both sounds that do occur at the end of words in English, so it is easy for English speakers to hear them. When there is a *ny* at the end of a word in an Aboriginal language, this may also cause an English speaker to mishear the vowel that comes before it as an *i*-sound as well, or for there to be a *y*-sound between the vowel and the final consonant (giving spellings like *ain* or *oin*). So, if you find spellings that vary between *n* and *ng*, especially when there seems to be inconsistency in the spelling of the vowels before these sounds as well, it may be that there should be a *ny*-sound at the end of the word.

Look at the following early spellings of the Bundjalung word for 'tongue':

yalling

yullan

We can be fairly certain that the first part of this word should be written as *yal*-. The variation between the *i* and *a* spellings, as well as the variation between the *ng* and *n* spellings, suggests that it should probably be correctly spelt as *yalayn*. (Remember that the letters *yn* at the end of a word in Bundjalung spell the same sound that is written as *ny* at the beginning and in the middle of words such as *nyula* 'he' and *ganyahl* 'fishing line'.)

It is possible to imagine a number of other spellings that early writers might have given for a word pronounced *yalayn* in an

Aboriginal language. Other possible spellings pointing to the same pronunciation might include the following:

yullain

yallane

yalline

yullin

yaline

yalyne

yaling

Although English does have *ny*-sounds at the beginning and in the middle of words (in words like 'news' and 'banyan'), these do not sound exactly like the sounds that are written as *ny* in Aboriginal languages. This is because the *ny*-sounds in English really consist of an ordinary *n*-sound with a following *y*-sound. However, in Aboriginal languages, the sound that is written as *ny* is really just a single sound, which is halfway between *n* and *y* in its pronunciation .

This means that what should be correctly written in Aboriginal languages as *ny* is often misheard as just *n* or *y*. Where you see spellings that vary between *n* and *y*, there is a good chance that the writer was mishearing this *ny*-sound.

Although English speakers sometimes had trouble writing *ng*-sounds and *ny*-sounds in some parts of words, there are some other sounds that they almost always had trouble writing. In fact, many writers never heard these sounds at all, which means

that for many words in some languages, we can never be completely sure whether our spellings are correct or not.

Some languages have a sound that is more or less halfway between the *th*-sound and the *ny*-sound. In those languages that have this sound, it is often written as *nh*. In Yuwaaliyaay of north-central New South Wales, it is important to write this sound differently to both *n* and *ny* as sometimes this is just about all that is used to distinguish different words from each other. Look at the following words:

guna shit

gunharr kangaroo rat

To an English speaker, these words would sound almost identical, yet a speaker of Yuwaaliyaay would hear the difference without any trouble. No doubt you can appreciate how important it would be to clearly distinguish the pronunciation (and spelling) of these two words in this language. Imagine the consequences of any possible mistakes!

Similarly, in central and western Australian languages there is an *n*-sound pronounced with the tongue tip turned backwards (like *rd* we described above). We write this as *rn*, but in the early sources it sometimes appears as 'rn' and sometimes just as 'n'. Examples from Diyari are 'merna' for *marna* 'mouth', and 'achana' for *ngadjarna* 'to ask'.

The problem is that in nearly all of the earlier sources, words containing the *nh* or *rn*-sound would have been written with the

letter *n*, which also represents the *n*-sound. This means that if your language is one of those which has separate *nh* or *rn*-sounds and you see a spelling such as 'noodil', you can never be sure whether the first letter is meant to represent *n* or *nh* or *rn*. So, a spelling like this could be interpreted just as easily as being meant to represent 'nudil' or 'rnudil' (or 'ngudil') as 'nhudil'.

In fact, if you only have a single spelling for this word, there are some other pronunciations that you could not rule out as well. An early spelling such as 'noodil' could therefore easily also have been meant to represent any one of the following kinds of pronunciation:

nuc		nuthil	nudjil	nurdil
nhu	ıdil	nhuthil	nhudjil	nhurdil
nyu	ıdil	nyuthil	nyudjil	nyurdil
ngu	ıdil	nguthil	ngudjil	ngurdil
rnu	dil	rnuthil	rnudjil	rnurdil

In cases like this, we can only decide which of this whole range of possibilities is correct by asking one of the old people what the correct pronunciation of the word is. Unfortunately, if it happens that there are no old people left who still remember the word, we can never be certain about which pronunciation was correct.

This kind of ambiguity can also come about when consonants come together in the middle of a word. Thus, a spelling like *ng* in the middle of a word could indicate:

the single sound ng, as in 'singer';

- the sequences of sounds n followed by g (we write this as n.g), as in mankind;
- m ng followed by g (ngg), as in finger;
- \blacksquare n followed by dj (ndj), as in whinger.

For example, 'cangell' for ganggal, or 'carnungool' for ganundjul.

Aboriginal languages rarely have the kinds of rasping 'noisy' sounds that we write as s, sh, z, f and v in English. You should be suspicious of any words in an early source that contain these letters. It could be that these letters represent printing mistakes, but it is also possible that these sounds represent a sound that somebody misheard. The sounds that these letters are most likely to represent are as follows:

s, sh, z represent tj, dj (also spelt as ty or dy)
f, v represent p, b

Using these kinds of general guiding principles it is often possible to compare spellings to one another and to arrive at a reasonable idea of how the word should be pronounced.

Printing mistakes

f we did not have enough problems already in correctly interpreting old spellings, there is the final problem that old published sources often include mistakes that the writers did not discover when their material was published. If it is at all possible, you should check the spelling of a doubtful form against the spelling in the original handwritten

manuscripts. Some of the more common printing errors that you will expect to find are interchanges of the following letters:

u	and	n
n	and	m
n	and	r
1	and	t
i	and	j
i	and	1
g	and	у

There may also be confusion between *o*, *a*, *e* and *s*, because in the handwriting of the time, it was often difficult to decide exactly which letter people were intending to write (especially if the ink has faded over the years). See Jaki Troy's chapter (p 37) for more discussion of interpreting old handwriting.

For instance, there is a whole variety of different sources which indicate that the word in Bundjalung for 'hand' should be written as *danggan*. However, there is just one old source which gives the word as 'tungau'. This spelling by itself would probably be more consistent with a number of other pronunciations, including 'danggaw' or 'dangga' or 'danggu', but certainly not *danggan*. Probably what happened is that in this single source, somebody mistakenly printed the *n* upside down, and it came out as a *u*! This means that it was meant to have been printed as 'tungan', and not as 'tungau' at all.

Using information from other languages



ometimes the source information that we have on a particular language is quite poor in quality, or limited in

scope, and we are unable to decide which is the correct pronunciation of a word from among a number of possibilities. Occasionally, we can look at information on neighbouring languages and use that to help us decide. We have to be careful when comparing neighbouring languages to realise that sometimes their words will be different, but on many occasions there will be enough similarities that these can help us decide between a number of competing alternatives.

For example, the Gamilaraay language of north-central New South Wales ceased to be spoken in the 1950s as a result of the policies of the New South Wales government that prevented older people passing on their knowledge to younger generations. We have a little information on the language from professional records made in 1955 by S.A. Wurm, and lots of early recordings collected by missionaries and settlers. The language which was the western neighbour of Gamilaraay is called Yuwaaliyaay — it continued to be spoken until the 1980s and we have good records of it, including tape recordings. We can use this information to compare with Gamilaraay old sources to help sort out spellings.

In general, Gamilaraay words and Yuwaaliyaay words look pretty similar. Where there are differences between a pair of words in the two languages, we often find that the same kind of difference is found in many other words at the same time. For instance, when Gamilaraay has the soft *r*-sound between identical vowels, Yuwaaliyaay has no *r* and just a long vowel. Here are some examples:

Gamilaraay	Yuwaaliyaay	English meaning
mara	maa	hand
biri	bii	chest
yuru	yuu	cloud, dust

There are lots more examples of this type of difference in words in the two languages. However, when there is a rolled r between two identical vowels in Gamilaraay, we do not find any difference at all between the two languages. This means that Gamilaraay rr corresponds to Yuwaaliyaay rr, as in the following words, which are the same in both languages:

Gamilaraay	Yuwaaliyaay	English meaning
barra	barra	to fly
mirril	mirril	nasal mucus, snot
burrul	burrul	big
murrun	murrun	alive

Now, we can use this comparative information on the two languages to help in interpreting some of the spellings in old Gamilaraay sources. First, look at the following spellings for the word for 'black swan':

barriamul pariamul parrearmel parrimul

We can line these spellings up and use the principles we described earlier to work out the correct spelling:

b	a	??	aya	m	a	
Р	a	rr	i	m	u	ı
P	a	rr	ear	m	e	I
P	a	r	ia	m	u	ı
b	a	rr	ia	m	· u	I

The problem is: what about the sound that is written alternately as *r* and *rr*? These spellings could equally well have been meant to represent 'barayamal' or 'barrayamal'.

Looking at Yuwaaliyaay, we find that its word for 'black swan' is baayamal. This fits with the kinds of correspondences between the two languages where there is a soft r-sound between the two vowels, so we can guess that the original sound was probably r and not rr. The reconstituted spelling for 'black swan' in Gamilaraay should therefore be barayamal.

Now look at this example of the spellings for 'black duck' in Gamilaraay:

kurranghi

yurrungee

currunga

koorangee

kurrongey

koorangee

We can line these up as follows:

g	a	??	a	??	g	??
k	00	r	a	n	g	ee
k	u	rr	0	n	g	еу
k	00	r	a	n	g	ee
С	u	rr	u	n	g	a
у	u	rr	u	n	g	ee
k	u	rr	a	n	gh	i

Here we have several problems:

- \blacksquare What is the *r*-sound?
- **■** What is the final sound?
- Was the sound before the *g* really an *n*, or could it have been the *ng*-sound?

On the basis of the spellings in the Gamilaraay sources, the final sound could have been i (suggested by 'ee') or ay (suggested by 'ey', and the letter names a and i). The r-sound could have been r or rr. Thus, any of the following would be pronunciations that these spellings could have been trying to represent:

garangay	garanggay
garrangay	garranggay
garangi	garanggi
garrangi	garranggi

In Yuwaaliyaay, the word 'black duck' has been correctly recorded as *garrangay*. Since this is one of the possible pronunciations that

is consistent with the various Gamilaraay sources, we should assume that this was probably the original form of the Gamilaraay word as well.

While information from neighbouring languages can help us out in cases like this, we should point out that it is very easy to misuse information from other languages, especially if you are not trained in how languages change over time, and how languages are related to each other. If you are thinking that perhaps this kind of information might be able to help you to interpret some sources for a particular language, it would probably be best to ask for help from an experienced linguist.

The word for 'fly' in Gamilaraay appears in old sources as:

burulu

budulu

boorooloo

poodeloo

buriloo

What do you think the correct spelling should be?

Answer

The different spellings of **p** and **b** at the beginning of the word show variants of a sound **b**. The use of **u** and **oo** for the next sound suggests **u**. The next sound is spelled as **r** or **d** and we saw that this indicated the rolled **r**, rather than the smooth **r**-sound. The next sound is also **u**, as indicated by **u** and **oo** (in Gamilaraay main emphasis generally goes on the first syllable, so middle vowels tend to sound weaker and more indistinct to English speakers. This is why we also get **e** and **i** in the spellings here). The next sound is invariably **l**, while the final sound is again **u**.

This gives us: **burrulu**. Wurm's notes from 1955 confirm this as the correct pronunciation. ■

The word for 'bone' in Bundjalung is spelt in old sources as:

tarregun derigun duregan tarrigon dadigun

What do you think the correct spelling should be?

Answer

The variation between the spellings t and d at the beginning of the word indicates that the difference between these sounds is not important, as we find in very many Aboriginal languages. We should settle on only one of these to write all examples of such variation, and in the case of the accepted Bundjalung spelling, the choice has been to spell these sounds as d. The a spellings, as well as the u and e spellings, all point to the next sound being an a. There is only one r-sound in Bundjalung (though in most Aboriginal languages there are two separate r-sounds, a 'softer' sound which is generally written as r, and a 'stronger' sound that is generally written double, as rr). This means that we only need to write this as r in Bundjalung. The fact that one of these spellings contains a **d** is because the **r**sound in Bundjalung is in fact pronounced rather more 'strongly' than the normal r of English. This caused the person writing this word to hear it as the same kind of sound that we sometimes make in English when we pronounce a word like 'steady' very casually. The variation between the spellings a, o and u all point to the sound being a. Finally, the last sound is consistently spelt as n, so there are no problems in deciding that it should be spelt as n.

The correct spelling of this word in Bundjalung should be darigan.

The word for 'wood' in one of the Tasmanian Aboriginal languages was spelt as follows by English people:

moo.mer.rer

mume.mer.rer

moomerah

moomara

The same word was recorded by French people as follows:

moumra

moumbra

What do you think the correct spelling should be?

Answer

The first part of this word was almost certainly **mu**. The spellings **oo** in English and **ou** in French both suggest that the second sound was **u**. Other spellings such as **mume** in English for this part of the word also suggest that the second sound was **u**. All sources point to the next sound being another **m**. All sources also point to the last sound being **a**. There are a few problems with the middle of the word, however. The English sources suggest that following the second **m**-sound, there was a vowel, which is spelt as either **a** or **e**. In the French sources, however, there is no vowel at all. This could be interpreted as meaning two different things:

There really was a vowel there, but the first vowel may have been more strongly emphasised, leaving the vowel in the middle of the word 'swallowed up' a little bit, making it harder to hear for the French people. If there was a vowel here, then it was probably a, given that there is variation between the spellings a and e.

There was no vowel here at all, and the English speakers

put one in where it shouldn't have been, in much the same

way that some people speaking English say 'fillum' instead

of 'film', or 'burgular' instead of 'burglar'.

We also have to decide how to represent the **r**-sounds. You will notice that one of the French recorders has written a **b** between the **m** and the **r**. This might have been because the sound that he wrote as **r** was pronounced very strongly. In olden times in English, our **r**-sounds were pronounced much more strongly than they are nowadays (more like the Scots roll their **r**'s today).

When our rolled r's came after sounds like **n**, people sometimes inserted a **d**-sound between the **n** and the **r**. There was once a word 'thunrian' in English, which people came to pronounce as 'thundrian'. This has come down to us today as the word 'thunder', but the **d** in that word was originally not there at all.

What could have happened in the case of the spelling **moumbra** by the French writer is that he was hearing something like **mumarra** (or **mumrra**), but because there was a rolled **r**-sound, he might have inserted the **b** when it should not really have been there, in the same way that English speakers in the past once put the **d** in the word 'thunder'.

So, in the case of the word for 'wood' in this Tasmanian language, we cannot be sure from the written records whether these spellings were meant to represent the pronunciation **mumarra**, or **mumrra**. This is one of the few words of Tasmanian languages that

have been remembered down to modern times, and one of the grand-daughters of one of the women who was born in the Flinders Island settlement in the 1800s was recorded on tape with a pronunciation something like mumara. She pronounced a vowel after the second m, but her r-sound was very soft, like the normal Australian English r, and not rolled like the Scots r. However, we cannot take this old lady's pronunciation as necessarily meaning that the original pronunciation had a soft r, as people who speak only English often find it quite difficult to pronounce rolled r's.

What all of this means is that the original pronunciation of the word for 'wood' was probably mumarra, though we cannot rule out other possibilities, such as mumara, or mumrra, or even mumra.

Look at the following spellings of the Gamilaraay word for 'right hand':

thurial

toorial

turial

tooreal

What do you think the correct spelling should be? (Hint: 'right hand' in Yuwaaliyaay is **thuuyaal**).

Answer

The t and th at the beginning here indicate th. The next sound is u, as shown by spellings u and oo. Next we have an r, but we cannot tell if it represents r or rr. The next sequence of ia or ea probably represents something like iya or uya, while the ending is clearly I. On the basis of the old sources we would say the word is thur(r?)i/uyal. Now, when we look at Yuwaaliyaay we find thuu at the beginning; this points to Gamilaraay having thuru (remember that when Gamilaraay has r between identical vowels, Yuwaaliyaay just has two vowels and this helps us decide between r and rr). As for the ending, the old writers of Gamilaraay probably missed the long vowel aa, so we can use the comparative information from Yuwaaliyaay to say that the Gamilaraay word for 'right hand' was probably thuruyaal.

The word for 'ear' in a Tasmanian Aboriginal language is spelt in the following ways by the same person, writing on different occasions:

nin.ne.woon.er hen.ne.wun.ner un.ne.woo.ner

What do you think the correct spelling of this word should be?

Answer

The hardest part of this word is probably the beginning, so we will leave that till last. The spellings woon and wun probably point to a pronunciation like wun. (It is significant to note that the Englishman who wrote these words was a poorly educated lower class man, who spoke a dialect of English where the word **but** rhymes with put.) The last sound was probably meant to be a. Thus, the word probably ended in wuna. If we assume that Tasmanian had only three vowels — \mathbf{i} , \mathbf{u} and \mathbf{a} — then the \mathbf{e} that precedes the \mathbf{w} is a problem. In order to work out whether this should be i or a (as both are possible), then we really need some more spellings which point in the correct direction. However, we simply do not have any more spellings, so we cannot decide between these two alternatives. The next preceding sound is fairly straightforward, as it was almost certainly n. The vowel that comes before this is our biggest headache in deciding the correct spelling of this word. The spelling i suggests that it was i, whereas the spelling u suggests that it was either **u** or **a**. The spelling **e** could be interpreted as either **i** or **a**.

continued...

This spelling is therefore completely ambiguous between all three vowels, and there is no way that we can decide which is correct! The first sound of the word might look like a problem as well, though perhaps it is not as big a problem as it first seems. Variations in spelling between **n**, **h** and nothing often points to the sound **ng** that English speakers often have so much trouble with at the beginning of a word. So, what we have is a set of spellings that point in any of the following directions:

nginiwuna nganiwuna nguniwuna nginawuna nganawuna ngunawuna

Unfortunately, in this case, there is no longer anybody left who remembers enough of the language to be able to help us decide which of these possibilities is correct.

inguists working on Australian Aboriginal languages have not written much about the problems of working out spellings from old sources, so really there is nothing you can read that will give you more details on these kinds of problems apart from what we have said. However, there are a couple of books and articles that mention some of the problems that we have described, and use the techniques we have discussed. You may wish to look at them for further ideas.

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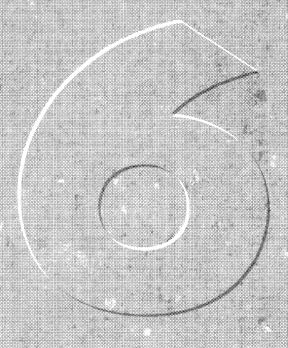
Ganai—a lost opprotunity

In 1963, Luise Hercus recorded several speakers of Ganai (a Gippsland language) including Jack Connolly of Fitzroy. Jack, then in his seventies, recalled some language from his early days at Lake Tyers and words he had learnt from his mother. Jack's mother was born at Yarram and spoke all the Ganai dialects fluently. She cherished her knowledge and before her death in the 1940s, at the urging of a local pastor, wrote down an entire vocabulary of her Yarram dialect. When Luise Hercus met Jack Connolly in 1963 only one page remained, the rest having been destroyed by children who did not realise its importance.



Nicholas Thieberger

Total Centre State Control Centre Cen



How to decide on a spelling system

n other parts of this book we have seen that untrained people recording Australian languages often made mistakes because they tried to use the spelling system of their own language. Each language has its own system of sounds, and it is by finding out what those sounds are and how they work in the language that we can then develop a good spelling system. Ideally a spelling system should aim to show what the meaningful sounds of a language are.

Can't we use the English system?

nglish has a spelling system that got stuck a few hundred years ago and has not been able to keep up with changes in the language. It has also had words from other languages coming in at various times and on top of all of that, scholars changed the spelling system to try and show the origins of words, so we got stuck with a b in debt, p in receipt and h in honour. The spelling we use in English does its best and really does very well, but it also has lots of ways of spelling the same sounds. Think about words like these in which the bolded parts are all the same sounds:

eye	aye	why	sigh	рi	pie	
cow	bough					
kit	wome	n				
sew	hoe	crow	pro	thoug	h	

Now think of examples which use the same spelling, but are pronounced differently:

bough	cough	through
how	tow	

The problem of trying to write an Australian indigenous language using an English spelling system has been the topic of other parts of this book. When we come to design a spelling system for a language that has not been written before, we can make it much more sensible than the English one.

We should try to make the spelling system so that one sound in the language has one letter. All spelling systems which linguists help develop should follow this approach, each sound having one symbol. There are good spelling systems in use all over Australia, used in schools, in major reference works like dictionaries and in other books. The chart on pages 112-113 shows some variant spellings that have been used in the past and compares them with the spelling systems of some of the languages mentioned in this book.

In the next few pages you will see examples of spelling systems from different languages. Sometimes neighbouring languages can use the same spelling system, so if you know the sound system of a nearby language, and it is similar to the one you are working on (they could be related languages like Italian, French and Spanish) then you may be able to use the same spelling system (see the discussion in Chapter 5 on using information from other languages).

However, you have to be careful. Warlpiri, Arrernte and Pitjantjatjara are geographically close to each other, but each has a different sound system and uses a different spelling system.

The following charts (pages 106–11) are given to show what systems are being used and what you can expect to find in your area. The maps give a general location of the country of the language; they are not meant to show what the boundaries of the language group are. (They show the 1:1,000,000 map on which the country associated with the language occurs.)

Note that there are many similarities among the sound systems of Australian languages, and so the spelling systems are also often similar or identical.



Adnyamathanha (Yura Ngawaria)

ੁੱਚੇ 	labial	inter- dental	alveolar	retroflex	lamino palatal	velar
stop	P	th	t	rt	ty	k
voiced stop	b	dh	d	rd	dy	
fricative	vnh					
nasal	m	lh	n	rn	ny	ng
lateral				rl	ly	
flap			d	rd		
trill			rr			
glide	w		r		у	

vowels a aa i u



Arrente (Eastern Arrente)

	מ	labial	inter- dental	alveolar	retroflex	lamino- palatal	velar
stop		Р	th	t	rt	ty	k
nasal		m	nh	n	rn	ny	ng
pre-stop	ped	pm	tnh	tn	rtn	tny	kng
lateral			lh	1	rl	ly	
trill			rr				
glide		w	r	у		h	

vowels a e i u



	Burarra - Gun-nartpa					
	bilabial	alveolar	retroflex	lamino- palatal	velar	
stop	P	t	rt	ch	k	
voiced stop	b	d	rd	j	g	
nasal	m	n	rn	ny	ng	
lateral		1	rl	ly		
flap, trill		rr	rd			
glide	w		r	у		

vowels a e i o u



ີ່ Gupapuyກູu

	Ŭ	bilabial	dental	alveolar	retroflex	lamino- palatal	velar	glottal
stop		p/b	th/dh	t/d	<u>t/d</u>	tj/dj	k/g	ı
nasal		m	nh	n	<u>n</u>	ny	ŋ	
lateral				1	<u>I</u>			
flap, trill				rr				
glide		w			r	у		

vowels a ä e i o u



Gurindji

	bilabial	alveolar	retroflex	lamino palatal	velar
stop	Р	t .	rt	j	k
nasal	m	n	rn	ny	ng
iateral		1	rl	ly	
flap, trill		rr			
glide	w		r	у	

vowels a i u



Jaru

	ซี	bilabial	alveolar	retroflex	lamino- palatal	veiar
stop		b	d	rd	j	g
nasal		m	n	rn	ny	ng
lateral			rl	ly		
flap, trill		rr	rd			
glide		w	r	у		

vowels a aa i ii u uu



Ngarluma

مسي	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	bilabial	dental	alveolar	retroflex	lamino- palatal	velar
stop		b	th	d	rd	j	k/g
nasal		m	nh	n	rn	ny	ng
lateral			lh	1	rl ′	ly	
flap, tri				rr	rd		
glide		w			r	у	

vowels a i u

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Paakantyi

	ชี	bilabial	dental	alveolar	retroflex	lamino- palatal	velar
stop		Р	th	t	rd	ty	k
nasal		m	nh	n	rn	ny	ng
lateral			lh		rl	ly	
flap, trill				rr	rd		
glide		w			r	у	

vowels a aa i ii u uu



Pitjantjatjara

	§b □	bilabial	alveolar	retroflex	lamino- palatal	velar
stop		Р	t	<u>t</u>	tj	k
nasal		m	n	<u>n</u>	ny	ng
lateral			I	<u>I</u>	ly	
flap, trill			r			
glide		w		<u>r</u>	у	

vowels a a: i i: u u:



Wik-Mungkan

***************************************	Ŭ	bilabial	dental	alveolar	retroflex	lamino- palatal	velar	glottal
stop		Р	th	t		ch	k	•
nasal		m	nh	n		ny	ng	
lateral				I				
flap, trill				rr				
glide		w			r	у		

vowels a aa e ee i ii o oo u uu

he following table lists letters and other symbols that have been used in historical sources together with descriptions of the sounds they have been used to represent. As pointed out elsewhere in this book, it is important to know where a writer comes from, and to understand the effect of their own language's spelling system on their choice of symbols.

Letters,
sounds and
how to say
them

The column 'Most common spelling' shows the set of letters and pairs of letters most commonly drawn on in modern spelling systems for writing Australian languages. There are no phonetic characters or diacritics, which makes them easy to use with computers.

The table is based on Yallop (1982) with three extra columns for the spelling systems of the languages mentioned most often in this book, so you have a key for reading Bundjalung, Gamilaraay and Kaurna words aloud.

Most common spelling	Bundjalung spelling	Gamilaraay spelling	Kaurna spelling	Similar English sound
a	a	a	a	as in about, cut
aa	ah	aa		as in father
b/p	Ь	b	b /p	between English b and p
d/t	ď	d	d/t	between English t and d
dh / th	dh e eh	th eh		made with your tongue blade pressed against the back of your top front teeth, as for a th sound in English sometimes used as a long
				i sound, otherwise like e in h e n
g	g	g	g/k	between English k and g , occasionally written as k when at the beginning of a word
i	i	1	i/e	as in p i n
ii	ih	ii		as in p ee l
i	İ	dj	ty	sometimes like j in bu dg e, sometimes like ch in cat ch er
ı	1	- I	1	like English I
lh				made by saying I with your tongue blade pressed against the back of your top front teet
ly			ly	as in million
m	m	m	m	like English m
n	n	n	n	like English n
ng nh	ŋ	ng nh	ng	like ng in singer made by saying n with your tongue blade pressed against the back of your top front teet
ny	ny/ yn	ny	ny	as in o ni on
				glottal stop, like in cockney pronunciation of tt in bottle
r	r	r	rr	like r in English run, with the tongue tip turned back
rd / rt			rt	like t said with the tongue tip curled backwards
rl			rl	like I said with the tongue tip curled backwards
rn			rn	like n said with the tongue tip curled backwards
rr		rr	r/rr	a trilled <i>r</i> like in Italian or Scottish English
u	u	u	u/o	as in p u t
uu	uh	uu		as in c oo l
W	W	W	W	like English w
у	у	у	у	like English y

Phonetic symbol	Linguistic description	Other letters and symbols that have often been used
a	low back vowel	a, ah, ar, o, u
aı	long low back vowel	a, ah, ar
b / p	bilabial stop	
d	alveolar stop	t
	interdental stop	dh, th, d, t
e/ε/i:	long high front vowel	
0/6/11	iong mgn none vower	
g	velar stop	c, cc, k
i	high front vowel	e, ee, y
ir	long high front vowel	e, ee, y, iy, ih
d3 / t∫	alveolar affricate	c, ch, dy, dy, dj, tj, ty, ty
1	alveolar lateral	
J	interdental lateral	
**		
λ	palatal lateral	ا ما از ان
m	bilabial nasal	l, gl, lj, ly
n	alveolar nasal	
ŋ	velar nasal	gn, n, ŋ
ņ	interdental nasal	n, n
Jì	palatal nasal	gn, nj, ny, ñ
?	glottal stop	h
	Ø 10.1	
J	retroflex glide or approximant	R, r, ŗ
J	retroflex stop	d,t, d, t, t, d
[/]	retroflex lateral	
η/ p	retroflex nasal	n, ņ
r/r	alveolar flap or trill	r, d, ř
u/o	high back unrounded vowel	0, 00
u:	long high back unrounded vowel	0, 00
w	labiovelar or bilabial glide	
j	palatal glide	j, i

Workshop exercises

Exercise I — Sound systems

These exercises aim to show how sound systems work and how they are or are not reflected by spelling systems.

Circle the following pairs of words which differ in only one sound.

cat / dog pit / bit pig / big

does / goes in / it fat / thin

heart / cart hate / wait

2 Circle the silent letters in the following words:

kneel talk comb sign island honest

3 Circle the parts of the following pairs that have the same sound. Notice that the same sound can be represented by different letters.

enough / full women / trip

knight / plan loose / snooze

which / catch thing / breathing

4 What do these exercises tell us about the spelling system of English?

5 Write the following words using a practical spelling system.

a. Gundagai b. Woolloomoolloo

c. Kununurra d. Pardoo

e. Mia Mia f. Coolgardie

Exercise 2 — Spelling Look through either a dictionary or a wordlist of an Australian language. Find a word that contains the following sound and write it in the space provided. Practise pronouncing the words as you read them and copy them. a k lh ly m n ng nh ny р rl rn rr rt th u W y

Look at this example text in Manjiljarra, a language of the Great Sandy Desert. Written by Mitchell Biljaba.

Ngayu-rna yutirringu Nyika-ngka Taakuruutu-ngka nyarra-

karti. I was born over past the Stock Route at Nyika.

Nyika-ngka kakarra Jilukurru-ngka.

Nyika is east of Durba Hills.

Maa-rni-ya kanyirnu yuwinmanu.

My family kept me and "grew me up".

Palunyajanu-rni-ya katingu kakarra Yirnangarri.

After that they took me east to Yirnangarri

Payarr-wana Puyulykura-wana.

around Payarr and around Puyulykura.

Puyulykura-ngka-ya nyinangu pakarnu Maliki...Jukurrpa.

At Puyulykura Maliki people stayed and then got up...in the Dreamtime.

Ka-ya yanu kakarra.

And they went to the east.

Ka-laju yanu marlaku Taakuruutu-karti.

And we went back to the Stock Route.

Jiingulyu-laju nyinangu rawa.

We stayed there a long time.

Maa-rna kuka pungurringu.

I learned how to kill animals (for meat).

Palunyajanu-lajura yanu Mamurnarra-karti.

After that we went on to Mamurnarra.

continued...

Ka-laju-jananya watijunu jina pulukuwinti yanunyja.

And we followed the tracks of the people taking the cattle [on the Stock Route].

Pungu-ya ngalangu junu tarrka puluku.

They killed and ate a bullock and left the bones.

Ka-laju manu paarnu ngalangu.

And we got [what was left] and cooked it and ate it.

Ka-laju yanu yapurra Karlamilyi-karti.

And we went west to Rudall River.

Fill in the English words for the following (I and 2 are done for you).

ı	-laju	we
2	-wana	around
3	-rna	
4	Ka	
5	yapurra	
6	puluku	
7	-ya	
8	ngalangu	
9	yanu	
10	-ngka	
П	kakarra	
12	-ku	
13	-karti	
14	-rni	
15	marlaku	
16	Taakuruutu	

Exercise 4 — Ngarluma language

Look carefully at these sentences from Ngarluma, one of the languages of the area around Roebourne.

- I Ngayi nyinku nhaku-ru birri-ngka I (subject) you (object) see (-future) afternoon (-place) I'll see you in the afternoon
- 2 Balu ngaju thalku-nha warnda-ka S/he (subject) me(object) hit (-past) stick(-with) He hit me with a stick
- 3 Thardaji-rna yukurru kuju-yi bury(-past) dog bone(-object) The dog buried a bone
- 4 Ngaju warli bilya-rna snake (subject) bite(-past) I (object) The snake bit me
- 5 Thukutha-nma mangkuru kurjarda-wari ngunhu spear (-imperative) kangaroo that one spear(-with) Spear that roo with a spear
- 6 Balalyi mayaka-bura waka-na thaka-ru nyamina-ku then man(-plural) go(-past) get(-past) dugong(-object) In those days men would hunt for dugong
- 7 Ngayi nyinku yarnima-ru wirrba-yi I (subject) make (-future) boomerang you(object) (-indirect object)

I'll make you a boomerang

continued...