

Tasmanian

*by Terry Crowley
and R.M.W. Dixon*

1. LANGUAGES AND SOURCES

1.1 LINGUISTIC TYPE

The source material on the now extinct Tasmanian languages is so poor that only very limited conclusions can be drawn concerning the structure of the languages.

They appear to have had a phonological system similar to those of languages on the Australian mainland. There were at least four contrasting stops - bilabial, apico-alveolar, laminal and dorso-velar - and a nasal corresponding to each. There was a phonetic distinction - and perhaps also a phonemic contrast - between lamino-dental and lamino-palatal stops (and, conceivably, nasals). There is evidence for a single lateral, two rhotics and two semi-vowels. The vowel system probably had three members, possibly more. The phonotactics also followed a normal Australian pattern - words consisted of at least two syllables; consonant clusters were common intervocalically but rare initially; in most of the languages/dialects all words ended in a vowel.

The languages appear to have been suffixing, but scarcely anything can be said about the meanings or functions of the handful of putative suffixes that can be isolated. The sentence material is so slight that it is not possible to say how syntactic function was marked, for instance. The preferred word order appears to have been SVO and Noun-Adjective (although the former may reflect the fact that most sentences were elicited - perhaps word-by-word - from English SVO sentences).

Although Tasmanian languages seem typologically similar to languages of the Australian family, there are insufficient cognates and systematic correspondences to justify an even tentative hypothesis of genetic relationship. All we can say, is that there is *no* evidence that Tasmanian languages were *not*, at a considerable time depth, related to languages spoken on the mainland.

1.2 BACKGROUND INFORMATION

The disintegration and extinction of Tasmanian tribes is well documented; it provides what is perhaps the most horrifying example of genocide from anywhere in the world. The original population of from three to five thousand - before the white invasion of 1803 - was halved each decade, partly by introduced diseases, partly by murder. Then, during 1829-34, the self-styled missionary George Augustus Robinson gathered together the 100 or so survivors and transported them to an island in the Bass Strait. Separated from their homeland, numbers decreased even more rapidly - there were 82 left in 1838, 16 in 1854 and only 6 by 1863. Truganini, the last full-blood Tasmanian left on the island, died in 1876 (fuller details are in Jones 1971). N.B.Tindale (1974:318) reports that the last full-blood among the Tasmanian Aboriginal women who had been taken by white sealers to Kangaroo Island, off South Australia, died there about 1888.

Estimates of the number of 'tribes' in Tasmania range from nine or ten to twenty or more; each had a number of constituent local groups. Limited information is available on their residence patterns, implements, foods, hunting methods, mourning customs and the like. But there is virtually no information about the kinship system, for example, or marriage rules (see Jones 1974 and further references therein).

1.3 LINGUISTIC SOURCES

The source material for Tasmanian languages can be divided into five groups:

[i] *Journals of maritime explorers.* A number of early expeditions spent short periods in Tasmania and took down word-lists ranging from the 9 words of Captain Cook (1777) to between 100 and 200 in the several vocabularies from the D'Entrecasteaux expedition, in 1792-3. All of the maritime vocabularies are from the south-eastern dialects, save for the short list of about two dozen words taken down by Allen Cunningham, botanist accompanying Captain P.P.King, in 1819 from Macquarie Harbour, on the central west coast.

[ii] *Early colonial accounts.* There are half-a-dozen short vocabularies taken down by early settlers and visitors to Tasmania, commencing with 30 words recorded by Robert Brown at the Derwent in 1804. These were mostly of south-eastern dialects - Bruny Island, Oyster Bay and the like. But Jorgen Jorgenson did collect about 60 words from Circular Head, on the north-west coast, and a similar number from the 'western language', while the words gathered by Governor George Arthur include some from the north-east.

[iii] *George Augustus Robinson.* At the back of Robinson's diaries, during his expeditions to contact and bring in all the remaining Tasmanians, in 1829-34, there are fairly copious word lists covering all parts of the island (although

last, audible sound recordings of Tasmanian. He recorded material from Mrs. Heffernan and Mrs. Mundy, granddaughters of Fanny Cochrane Smith. This comprised five words:

[lǎŋəne]	'foot'
[jǎŋəne]	'hand'
[múkəltina]	'head'
[lǎmθəni]	'meat'
[təʃf:lə]	'native bread'

and a complete sentence (Mrs. Heffernan gave a translation for the whole sentence but did not gloss individual words; we have been able to do this from consultation of earlier materials):

[tǎbenti	nǎŋəne	múməʃə	ɲóbəbi	paɲú:lə]
go	get	wood	put	fire

Get a bit of wood and put it on the fire.

Mrs. Heffernan also sang a fragment of a corroboree song, said to have been sung by Fanny Cochrane Smith before an audience at Government House in Hobart. The song has a lilting melody but unfortunately the meaning of the words has been lost. We have transcribed it as:

[kuməjayngow ku:nəku:nəli
-- -- hiɲiyawa: taɲima: taɲima:]

The two dashes represent an imitation of a bird call.

Mrs. Heffernan had plainly never 'used' the few words she knew and recalled having to beg her mother to tell her what she remembered of Tasmanian. Her pronunciation of this material was almost wholly assimilated to that of Australian English (and on one repetition she added English pluraliser -s to [lǎŋəne] and to [jǎŋəne].) Note, though, that these words do show a velar nasal [ŋ] between vowels, something that is almost unknown in English, and also the sequence [mθ]. The forms that Crowley collected for 'foot', 'head' 'meat' and 'bread', are found in Westlake's short list, as is the complete sentence he recorded, suggesting that there has been a small set of words and sentences handed down among the descendants of Tasmanians this century. There can be no certainty that these correspond exactly to the forms occurring in the Tasmanian languages when they were actively spoken. But the Crowley recordings are the only check we have on philological inferences based on comparison of early transcriptions. We discuss this further in 2.1 below.

The Tasmanian materials have long fascinated scholars and there have been many attempts to gather together most or all source materials - by H. de Charencey in 1880, E.M. Curr in 1887, H. Ling Roth in 1890, J.E. Calder in 1901, F. Hestermann in 1936, W. Schmidt in 1952 and finally N.J.B. Plomley in 1976. Plomley's is by far the most complete compendium, being the only one to include the extensive Robinson materials (which only came into notice in the 1950s) and also the Westlake and Meston lists. Plomley has systematically collated all word lists and thoroughly checked his materials against the original sources. We have used his volume as the basis for our study.

There is only a little information on Tasmanian which is not included in Plomley. He does not have the material from Tindale's 1939 journal, nor the 1972 recordings by Crowley; we have given these in full here. Plomley also omits mention of the language material in Calder 1874 (although this was commented on extensively by Capell 1968). And he does not list the four manuscripts in the Marsden collection of the library of the School of Oriental and African Studies, University of London (see Mander-Jones 1972:362) comprising four 'short vocabularies of the languages of natives of Van Dieman's Land, collected by the officers of the French frigates *La Recherche* and *L'Esperance*, in 1793'; these are further versions of the vocabularies of the D'Entrecasteaux Expedition (Plomley 1976:13-4).

A sample check of Plomley's materials against the original publications or manuscripts suggests that he has achieved a high level of accuracy and reliability. There do, however, appear to be a few odd omissions. For instance, Plomley does not give *Ganna* 'teeth' from the Jorgenson vocabulary (Braum 1846:258), and for 'ear' he gives the published spelling *pelverata* (Braum 1846:257) and does not mention that the manuscript version of this vocabulary in the Mitchell Library Sydney (see Plomley 1976:17) shows a spelling *pulverata*.

Plomley (1976:5-71) has an extensive and excellent bibliography of source materials and there would be little point in our repeating it here. References in this volume cover sources that we specifically cite; for the attestation of forms etc the reader is referred to Plomley and his bibliographic references.

Almost all the Tasmanian material consists of simple word lists, sometimes indicating the part of Tasmania an item comes from and sometimes omitting this information. Plomley (1976:44-55) gives all known song texts; unfortunately, meanings have not been recorded for most of these. The corpus of sentences in Tasmanian is even slimmer - there are a handful of sentences in Jorgenson and Robinson and about 100 short sentences and phrases were gathered by Milligan; there are also two versions of the translation of some verses of Genesis, by Thomas Wilkinson, and two versions of a sermon in Tasmanian, by Robinson. It is likely that most of this material was translated word by word from English; little about the structure of Tasmanian can be inferred from it. Plomley (1976:34-43) brings together all this material excepting the alternate version of Robinson's sermon, and two or three 'spontaneous' sentences, in Calder (1874:16, 18, 28).

1.4 DIALECTS AND LANGUAGES

It is clear that each local group of each tribe had a slightly different dialect from its neighbours, and some dialects could be grouped together as constituting a single 'language' (in the linguistic sense, defined in terms of mutual intelligibility - see Dixon 1980a:33-40). The important question concerns how many distinct languages there

were in Tasmania.

J.W.Walker noted in his journal, at the Flinders Island settlement that 'every tribe speaks a different dialect, it might almost be said a different language...' (Roth 1899:179). Bonwick (1870:133) discussed the question of language, beginning by quoting Robinson's testimony that 'the different tribes spoke quite a different language; there was not the slightest analogy between the languages'. He continued: 'When a captured woman from Cape Grim, to the north-west, was brought to Flinders, it was found that she was as ignorant of the dialect of the rest as they of hers. It was this ignorance of each other's language that kept alive those tribal jealousies and antagonisms, which so often threatened the peace of the Strait settlement. When, however, they had constructed, by force of circumstances, a sort of *lingua franca* - a common language - their friendship grew, and local feeling improved. Mr. Clark, the catechist, thus wrote to me of the condition of linguistic affairs then: "The languages spoken were different; so much so, that, on my first joining them in 1834, I found them instructing each other to speak their respective tongues. There were at one time eight or ten different languages or dialects spoken by about two hundred persons who were domiciled at Flinders." '

Schmidt decided that there must have been five distinct languages - western, northern, north-eastern, mid-eastern, and south-eastern - giving the data on which his conclusions were based. O'Grady, Voegelin and Voegelin (1966:19) suggested just two languages - Schmidt's northern being one, and the other four Schmidt groups making up the second - but did not indicate the grounds on which this suggestion was based.

It is, in fact, impossible to come to any definite decision concerning the number of distinct languages in Tasmania. Drawing the line between language and dialect is never an easy matter; it must involve a full comparison of linguistic systems - phonology, grammar and lexicon. The materials on Tasmanian dialects range from poor to almost non-existent; we have two or three hundred words from some of the south-eastern groups but only a dozen or so words from some groups in the western regions. There is almost no grammatical information - at best two pronominal forms.

A preliminary judgement concerning dialect relationship can be made on the basis of vocabulary comparison (lexicostatistics) but this should always be followed up by a full comparison of the complete lexicons and grammatical systems. Work on mainland Australian languages has suggested that lexical replacement (often, following the tabooing of the names of deceased persons, and of lexical items similar to them in form) can apply in all sections of the vocabulary. The sources indicate that tabooing was a major factor in Tasmania (see Milligan 1857:34-5, Bonwick 1870:145), and the lexical pattern found on the mainland may apply here also.

It can be shown that if two, rather different, languages come into contiguity they will borrow back and forth (partly, to replace lexemes that have been tabooed) until the common

vocabulary makes up about 50% (in practice, say, 40-60%) of each language's total vocabulary. If one tribe splits into two new tribes, each will taboo and replace words independently of the other, and the percentage of common vocabulary will steadily drop, until it reaches the 40-60% equilibrium level.

It is possible to draw tentative inferences concerning genetic relationship from vocabulary comparison; as we have already stressed, these should always be verified by a full comparison of the complete language systems. If two groups have about 70% common vocabulary or more, it is likely that they are dialects of a single language (and we would expect their grammars to be very similar). If they score between 60% and 70% then they are probably two distinct languages which are closely genetically related (and we would again expect there to be more grammatical than lexical similarities). If they score less than 40% then they are probably not closely related, but have come into contact relatively recently (and there would normally be fewer grammatical than there are lexical similarities). If the lexical score between two contiguous languages is between about 40% and about 60% - that is, somewhere around the 'equilibrium level' of 50% - it is not possible to draw any conclusions about their genetic relationship from lexical score alone.

On the map we show 15 distinct regions to which Robinson and other early investigators assign vocabulary. Collectively, the regions from South-western round to Circular Head are designated 'Western'; Piper River, Ben Lomond and Cape Portland are 'North-eastern'; and Big River, Oyster Bay and Little Swanport constitute 'East central'. It is clear that each locality represents a distinct dialect (or, in some cases, possibly a blend of several closely-related dialects).

We have compared each pair of vocabularies, considering forms for which the same English or French glosses are given. The number of pairs that can be obtained varies from 119 between Little Swanport and Big River, to just 9 between South-Western and Macquarie Harbour. The actual numbers of words compared, and the number that appear to be cognate, are shown in Table 1. The percentage figures are given in Table 2, in cases where the denominator is 15 or more.

The number of words which can be compared is so small that we would hesitate to hazard *any* conclusions if we were not dealing with so difficult and obscure a situation as that in Tasmania. The following inferences must all be regarded as speculative.

[i] Oyster Bay and Big River have 85% in common and are very likely to be dialects of a single language.

[ii] There is very little information for Little Swanport but what there is would be compatible with it being a further dialect of the Oyster Bay/Big River language.

[iii] South-eastern appears to be a language distinct from Oyster Bay/Big River; the scores are about the equilibrium range, making it impossible to draw any inferences on genetic connection between these two languages.

TABLE 1 - *Lexical comparison (actual figures)*

South-Western														
$\frac{5}{9}$	Macquarie Harbour													
$\frac{14}{25}$	$\frac{5}{12}$	North-Western												
$\frac{13}{31}$	$\frac{5}{11}$	$\frac{22}{30}$	Robbins Island											
$\frac{8}{19}$	$\frac{6}{14}$	$\frac{12}{22}$	$\frac{12}{23}$	Circular Head										
$\frac{1}{26}$	$\frac{0}{9}$	$\frac{1}{22}$	$\frac{2}{21}$	$\frac{0}{17}$	Northern									
$\frac{2}{27}$	$\frac{1}{11}$	$\frac{1}{21}$	$\frac{2}{32}$	$\frac{1}{22}$	$\frac{7}{34}$	Port Sorell								
$\frac{0}{19}$	$\frac{0}{11}$	$\frac{0}{18}$	$\frac{0}{20}$	$\frac{1}{13}$	$\frac{6}{28}$	$\frac{1}{40}$	North Midlands							
$\frac{0}{14}$	$\frac{1}{8}$	$\frac{1}{14}$	$\frac{0}{7}$	$\frac{2}{12}$	$\frac{14}{28}$	$\frac{6}{28}$	$\frac{5}{26}$	Piper River						
$\frac{1}{27}$	$\frac{2}{9}$	$\frac{1}{24}$	$\frac{1}{28}$	$\frac{1}{19}$	$\frac{24}{52}$	$\frac{9}{47}$	$\frac{20}{37}$	$\frac{27}{41}$	Cape Portland					
$\frac{0}{23}$	$\frac{0}{15}$	$\frac{1}{23}$	$\frac{1}{26}$	$\frac{2}{20}$	$\frac{13}{39}$	$\frac{13}{85}$	$\frac{14}{44}$	$\frac{25}{41}$	$\frac{39}{67}$	Ben Lomond				
$\frac{1}{36}$	$\frac{2}{18}$	$\frac{1}{33}$	$\frac{3}{40}$	$\frac{4}{33}$	$\frac{8}{52}$	$\frac{13}{56}$	$\frac{9}{59}$	$\frac{13}{37}$	$\frac{12}{62}$	$\frac{19}{64}$	Oyster Bay			
$\frac{0}{8}$	$\frac{0}{2}$	$\frac{0}{7}$	$\frac{0}{7}$	$\frac{0}{8}$	$\frac{1}{10}$	$\frac{1}{9}$	$\frac{2}{8}$	$\frac{0}{5}$	$\frac{1}{10}$	$\frac{2}{8}$	$\frac{12}{18}$	Little Swanport		
$\frac{3}{28}$	$\frac{3}{15}$	$\frac{2}{25}$	$\frac{4}{29}$	$\frac{2}{26}$	$\frac{5}{35}$	$\frac{15}{48}$	$\frac{3}{46}$	$\frac{9}{27}$	$\frac{11}{40}$	$\frac{15}{52}$	$\frac{70}{82}$	$\frac{6}{10}$	Big River	
$\frac{9}{50}$	$\frac{3}{21}$	$\frac{4}{46}$	$\frac{5}{57}$	$\frac{4}{30}$	$\frac{6}{45}$	$\frac{9}{60}$	$\frac{7}{58}$	$\frac{7}{37}$	$\frac{7}{61}$	$\frac{9}{76}$	$\frac{64}{119}$	$\frac{1}{17}$	$\frac{29}{79}$	South-Eastern

[iv] Piper River, Cape Portland and Ben Lomond form an interrelated group. The first two - and just possibly all three - could be dialects of a single language. If Ben Lomond was a separate language - as these figures tend to suggest - it was very likely to be closely genetically related to Piper River/Cape Portland.

[v] North Midlands must be a distinct language. Although it scores 54% with Cape Portland, the figure is only 19% with Piper River, making a close genetic connection with the Piper River/Cape Portland/Ben Lomond group rather unlikely.

[vi] Port Sorell is a further language, its low scores with all other vocabularies making it unlikely that there is any close genetic connection between Port Sorell and any other language.

TABLE 2 - *Lexical comparison (percentage figures)*

South-Western													
- Macquarie Harbour													
56	- North-Western												
41	- 73 Robbins Island												
42	- 55 52 Circular Head												
4	- 5 10 0 Northern												
8	- 5 6 5 21 Port Sorell												
0	- 0 6 - 21 3 North Midlands												
-	- - - - 50 21 19 Piper River												
4	- 4 4 5 46 19 54 66 Cape Portland												
0	0 4 4 10 33 15 32 61 58 Ben Lomond												
3	11 3 8 12 15 23 15 35 19 30 Oyster Bay												
-	- - - - - - - - - 67 Little Swanport												
11	20 8 14 8 14 31 7 33 28 29 85 - Big River												
18	14 9 9 13 13 15 12 19 11 12 54 6 37 South-Eastern												

[vii] Northern is probably a language on its own, although the figure of 50% with Piper River (with which it is not contiguous) does not discount it being a dialect of the same language.

[viii] North-western and Robbins Island are probably dialects of a single language.

[ix] Circular Head scores only just over 50% with North-western and Robbins Island, but the data available is so scanty that this is not incompatible with it being a dialect of the same language.

[x] The data available for South-western and for Macquarie Harbour are so slight that it is bordering on the farcical to draw any inferences from them. There is certainly no strong evidence that they should be grouped with other vocabularies. Note that 50 items can be compared with South-eastern but these yield a score of only 18%, a very low figure for contiguous languages.

The conclusion we draw from this is that there must have been at least the following six languages:

- (a) Oyster Bay, Big River, Little Swanport
- (b) South-eastern
- (c) Piper River, Cape Portland, Ben Lomond, Northern
- (d) North Midlands
- (e) Port Sorell
- (f) North-western, Robbins' Island, Circular Head

There are in addition South-western and Macquarie Harbour which may well comprise two further languages.

So there were probably at least eight distinct languages in Tasmania. There may have been considerably more. Only the Big River and Oyster Bay lists unequivocally demand to be treated as dialects of a single language. It is possible - although perhaps not likely - that there could have been as many as twelve (or even fourteen?) languages.

The only grammatical data available is forms for 'I' and 'you' in a few dialects (and some putative suffixes, of whose meanings we cannot be sure). These support the tentative conclusions we have drawn from lexical comparison. 'I' and 'you' have quite different forms in Port Sorell, in Ben Lomond (in the single source available for each) and in the mid-eastern region. Oyster Bay and Big River have identical or closely similar forms. Some of the forms in South-eastern are close to those in Big River/Oyster Bay.

The data we have used are so slight that the conclusions we have drawn are very tentative. The real answer to the question 'how many languages were there spoken in Tasmania' is 'we don't know'; to say 'probably somewhere between eight and twelve' is to hazard an only slightly informed guess.

It will be seen that there are no grounds at all for saying that the languages of Tasmania make up a single genetic family. We can do little more than say that - whatever the dialect/language division - each of the groups listed in (a) were probably genetically related, in a linguistic sense, and that the same applies to (c) and to (f). It is possible, perhaps even likely, that (a) and (b) were related, as were (c) and (d). It is certainly possible that South-Western and Macquarie Harbour were related to the North-Western Group, and that both (e) and (c-d) were related to (a-b), giving just two genetic groups, one comprising (a-e) and the other the western and north-western languages. The evidence available is compatible with there being two distinct language families in Tasmania, or with there being four (or even as many as eight) distinct families. And the data available are so slight that we can scarcely exclude any possibility - such as the languages making up a single family, although there is certainly no evidence in favour of this.

2. PHONETICS AND PHONOLOGY

2.1 INTERPRETATION OF WRITTEN RECORDS

Determining the phonetic form of words in the Tasmanian languages from the written records available is a far from easy task. There is only a little descriptive information of what the languages sounded like; it is usefully collected together by Plomley 1976:27-31. Most of the comments are of limited value. Robinson, for example, said only 'the eastern native is the most indistinct or guttural of any natives I have visited'; and 'some said one thing, some another, but as the natives find it difficult to pronounce

the "s", the whole appeared to say instead of "good health" "go to hell". If he had been more perceptive Robinson might have inferred from this that there was no voicing contrast, so that *d* and *t* were interchangeable, that since all words ended in a vowel, 'good' would be pronounced like 'go to'. (And pace Robinson's comment, there is no *s* in 'Good health'; the Tasmanian languages appear to have had a lamino-interdental stop, which may have had a pronunciation rather like English *th*; the difficulty here concerned the sequence of *l* followed by *th* at the end of a word.)

The only informative comments on Tasmanian pronunciation are those of G.W.Walker and especially of Joseph Milligan on the vowels (see 2.3) and also the remarks of R.H.Davis (Plomley 1976:29): 'Their language is very soft and liquid, ending, I think without exception, in vowels... The dialects are numerous, and the language in different parts of the island appears to be wholly different... The aborigines from the westward, and those from the eastward did not at first understand each other, when brought to Flinders' Island... but they afterwards, in common with the whites, used a kind of lingua franca... The aborigines shew great facility in attaining the pronunciation even of English words, dissimilar as that language is to their own; they cannot, however, pronounce the hard letters, as *d* and *s*; doctor, they pronounce togata, or tokata; sugar, tugana; tea, teana.'

It is possible, by comparing several different renditions of what appears to be a single word, to make a fair attempt at reconstituting its phonetic shape. Milligan gave fairly explicit information about the conventions he employed (see 2.2, 2.3) and seems to have followed these reasonably consistently. Compare four versions of 'emu' for the Bruny Island (South-eastern) dialect:

Robinson: gon.nan.ner, gonanner
 Milligan: 'ngunannah
 Roberts: nganana

It is likely that the form was [ŋanana].

Although Robinson gathered the most data, and probably had more contact with the Tasmanians than any other Europeans, it is plain that he cannot have had any real command of the language, but in all likelihood just strung together some Tasmanian words with a basic English grammar. His transcription is very poor - initial [ŋ] may be represented as *g* (as in the example just given) or *n* or *h* or may be omitted altogether; he seldom deviates from the letter combinations possible in spelling English words!

For many words the only forms we have are those by G.A.Robinson, or by his son Charles Robinson. Consider, for instance 'ear' in the Cape Portland and in the related Ben Lomond dialects:

Cape Portland (G.A.Robinson): nin.ne.woon.er
 hen.ne.wun.ner
 un.ne.woo.ner
 Ben Lomond (Charles Robinson): yher.na.win.ner
 yer.na.win.ner

Comparison of the three different beginnings for the Cape Portland word suggest that it may have commenced with [ŋ]; the most likely form for this word is [ŋiniwuna]. The Ben Lomond form may also have begun in [ŋ], and may also have been [ŋiniwuna] or else some form very similar to this.

This example should illustrate the difficulties and interdeterminacies surrounding the interpretation of Robinson's and others' early transcriptions; for some dialects the only or almost the only information we have is that recorded by Robinson.

The recordings made by Crowley in 1972 - slight and late as they are - provided an invaluable check on the reconstitutions we had already attempted by comparison of early transcriptions. For 'head' there are three early versions similar to that given by Mrs. Heffernan, all by Robinson:

muck.el.ten.ner (Piper River)
 mo.kel.te. (Piper River)
 muk.el.ten.ner (Northern, perhaps actually north-eastern)

Westlake also recorded mookeltina 'head' and, from Mary Jane Miller, mookelteena 'chin'; thirty odd years later Meston recorded mookatinna from Mrs. Miller. We inferred from these a phonetic form [mukʋitina], corresponding well with the form Crowley tape-recorded, [mukəltina].

There is a single early transcription of a form for 'meat' similar to that given by Mrs. Heffernan. Robinson wrote down larm.ten.er for the Cape Portland dialect (Westlake also noted larnty and larnte and Meston lahmti). From the Robinson form we inferred [lɑmtina] whereas in fact Mrs. Heffernan said [lɑmθəni]. There is no trace in the earlier versions of the dental sound [θ], and in this instance Robinson's final -er was actually [i] (for 'head' his final -er appears to have been [ɑ]).

There are about twenty early versions of 'foot' that show some similarity to Mrs. Heffernan's [lɑŋəne]; and Westlake recorded lang-ena from two informants. Fourteen of them (including all five by Robinson) have simply -g- or -gg- between the first two vowels, while five show -ng-; there may well have been dialectal differences. Although Westlake's hyphen in lang-ena suggests a form [lɑŋəna], the spellings langana from Jorgenson and McGeary, langena from Backhouse, lāngəhněh from Walker and lāngōonār from Sterling would not allow us to decide between [ŋ] and [ŋg].

This comparison between the 1972 recordings and reconstitutions attempted on the basis of the nineteenth century written records suggest that no more than half the reconstitutions are likely to be at least tolerably correct. It suggests that it would not be worthwhile trying to reconstitute the phonetic form of every word, from the forms collated by Plomley. In view of this we do not include a list of words in Tasmanian languages at the end of this paper, but instead refer the reader to the original sources, drawn together in Plomley's compendium.

We can, however, attempt some *generalisations* concerning the phonetics and phonology of the Tasmanian languages.

We may not be able to reconstruct initial [ŋ] in every word in which it occurred, but we can be quite certain that words did commence with [ŋ] in Tasmania. Similarly, comparison of spellings indicates that voicing was not phonologically contrastive in any part of the island. In the next sections we outline what is known and can be inferred about the phonetics of Tasmanian languages, and make tentative deductions concerning their phonology.

Although it seems incontrovertible that there were a number of distinct languages in Tasmania (perhaps belonging to a number of distinct language families) there were many areal similarities, as would be expected of languages confined to a small island for any period of time. In particular, they seem to have been very similar at the phonetic and phonological levels.

Discussion of phonetics and phonology, in the remainder of this chapter, is based mainly on the mid-eastern and south-eastern languages, for which the greatest information is available. It seems likely that most of our remarks will also apply to languages in other parts of Tasmania.

2.2 CONSONANTS

The full set of consonantal sounds in the Tasmanian languages appears to have been:

	<i>apico- alveolar</i>	<i>lamino- dental</i>	<i>lamino- palatal</i>	<i>dorso- velar</i>	<i>bi- labial</i>	<i>labio- dental</i>
<i>voiced stop</i>	[d]	[ɖ]	[ɟ]	[g]	[b]	
<i>voiceless stop</i>	[t]	[t̪]	[tʃ]	[k]	[p]	
<i>voiced fricative</i>				[ɣ]		[v]
<i>voiceless fricative</i>				[χ]		
<i>nasal</i>	[n]	([ɳ]?)	[ɲ]	[ŋ]	[m]	
<i>lateral</i>	[l]					
<i>flap</i>	[r]					
<i>continuant</i>	[ɹ]					
<i>semi-vowel</i>			[y]		[w]	

Milligan recognised the velar fricatives, transcribing them by 'ch' and 'gh'; he explained that 'ch and gh are pronounced as in the German word *hochachten* and in the Irish word *lough*'. Note that there is no trace of sibilants in Tasmanian languages. Plomley does quote the form *riz lia* 'mains' from a published vocabulary of the D'Entrecasteaux expedition but this was a typographical error in the original publication; the manuscript version (see 1.3) has *ria lia*. Similar explanations are probably appropriate for other odd occurrences of *z* and *s* in the corpus.

A number of attempts have been made to work out the underlying phonological system, the most extreme being that of Ritz (1910) who suggested that there were just four basic consonants: a labial, a dental, a velar and a liquid (cover-

ing nasals, lateral and rhotics); Ritz correlated this phonological simplicity with the childishness of the minds of the Tasmanians!

We shall discuss a number of phonetic parameters, and decide for each whether it is likely to have been phonologically significant.

[a] *Voicing*. Schmidt suggested that voicing was not contrastive in Tasmania (as it is not in almost all languages of mainland Australia). There seems no doubt that this is a correct observation, and that it applies to every Tasmanian language. A given word would be transcribed in one instance using a voiced and in another with a voiceless symbol, e.g.

<i>source spellings</i>	<i>reconstructed forms</i>
Robinson: ko.ger Milligan: koka	/guga/ 'blood' [South-east]
Robinson: muth.er Milligan: matta D'Entrecasteaux: mada	/mada/ 'testicles' [South-east]
Robinson: too.deen.ner " too.te.yen.er	/dudiyina/ 'emu' [East]
Robinson: no.pine.ner " no.bine	/nubay(na)/ 'dream' [West coast]
Milligan: toggana " tokana	/tugana/ 'heel' [Oyster Bay]
Gaimard: kible Backhouse: gibbleh Jorgenson: giblee	/gibli/ 'to eat' [North-western]

Schmidt makes what appear to be accurate observations: that stops are almost always voiceless at the beginning of a word; and that a stop between the first and second vowels of a word is likely to be voiced if the word begins with a cluster of stop plus *r*, or with one of *r*, *l*, *m*, *n* or *w*.

Either voiced or voiceless symbols could be used for stops in Tasmanian languages; we have chosen to use /b/, /d/, /g/ etc since this is the majority convention for the transcription of languages on the mainland.

[b] *Fricatives*. The letter *v* occurs infrequently in the transcription of Tasmanian words. In every case it appears to be an alternant of *w*, suggesting that the articulation of /w/ could occasionally involve slight friction, e.g.

<i>source spellings</i>	<i>reconstructed forms</i>
Robinson: vee.ner " wee.nar Milligan: weenah McGeary: vena	/wina/ 'moon' [North-west]
Gaimard: livore Lhostky: levira Jorgenson: leware Robinson: lee.wur.rer	/liwVra/ 'night' [North-east] NOTE: the quality of the second vowel cannot be determined.

<i>source spellings</i>	<i>reconstructed forms</i>
Robinson: vaw.ty	/waɟi/ 'ice', icicle' [South-east]
Sterling: wor.thy	

The velar fricatives mentioned by Milligan appear to have been rather uncommon, and were probably further allophones of /g/, occurring mainly before /r/ (and probably also before /l/ or /w/) e.g.

<i>source spellings</i>	<i>reconstructed forms</i>
Milligan: tughrah	/dugra(na)/ 'to eat' [South-east]
" tuggranah	
Milligan: pugherittah	/bigrida/ 'swan' [South-east]
Robinson: pick.rer.dar	
" pick.er.rer.dar	
Sterling: pïck.ër.rër.där	

[c] *Laminal stops.* All mainland Australian languages have sounds which involve the blade of the tongue. In some languages there is a phonological contrast between lamino-(inter) dentals (d , n) and lamino-alveopalatals (ɟ , ɲ); in others there is a single laminal stop and nasal, but each may have lamino-dental and lamino-alveopalatal allophones.

The evidence for a lamino-alveopalatal stop occurring in Tasmanian lies in the frequency of spellings such as *ty* and *tch*, and the unmistakable occurrence of [ɟ] in Mrs. Heffernan's song. Tindale mentions an interdental stop, and the interdental fricative is attested by *th* spellings and Mrs. Mundy's [læmθəni] 'meat'. It is highly likely that [d], [ɟ] and [θ] were members of a single phoneme - that is, the lamino-dental stop could sometimes involve some friction, as it does in many Australian languages.

It remains to enquire whether Tasmanian had a contrast between two laminal stops. This question is, in fact, impossible to answer from the data available. In mainland languages that have a single laminal stop phoneme, the lamino-palatal allophone often occurs after, or else anywhere next to, /i/ and the lamino-dental allophone elsewhere. Many of the occurrences of the lamino-palatal stop in Tasmanian languages are next to /i/, but there do seem to be some occurrences of the interdental stop in the same environment, e.g.

<i>reconstructed forms</i>	<i>deduced from spellings</i>
/miɟina/ 'bush'	mëethënr̥ (Sterling)
/druɟina/ 'hang' [N-W]	droe.thin.ner (Robinson)
/baɟila/ 'opossum' [S-E]	par.thel.ler (Robinson), pawtella (Milligan) etc.
/waɟiga/ 'to hold' [N-W]	warth.hick.ar (Robinson)

compare with:

/maligi/ 'white' [Oyster Bay]	malleetyë (Milligan), mal.lit.yer (Robinson)
/Jaygi(na)/ 'white man, devil' [Mid-E, S-E]	rut.yer, rite.cher, raege, (Robinson) ragi, ragina (Scott)

If the Tasmanian languages had a single lateral stop, it is possible that there might have been a certain amount of free variation between the dental and palatal allophones.

We can conclude that Tasmanian certainly had at least one laminal stop, and that there were both lamino-dental and lamino-palatal sounds, at the phonetic level. The question of whether there was a laminal contrast at the phonological level cannot be given a sure answer from the data available.

[d] *Apical series*. Australian languages have either one or two contrastive stop-nasal series which involve sounds made with the tip of the tongue. If there are two series one involves apico-alveolar and the other apico-postalveolar or retroflex articulation; if there is a single phonological series, there may be alveolar and post-alveolar allophones.

There is no evidence in the Tasmanian materials for any retroflex sounds, let alone retroflex phonemes. The evidence does seem fairly clear that all the Tasmanian languages had apico-alveolar stop /d/, nasal /n/ and lateral /l/.

[e] *Nasals*. It is a characteristic of Australian languages that there is a nasal corresponding to each stop. The Tasmanian corpus provides clear evidence for four nasals, /n/, /ɲ/, /ŋ/ and /m/. The contrast between /n/ and /ɲ/ can be exemplified:

<i>reconstructed form</i>	<i>deduced from spellings</i>
/lina/ 'place' [Oyster Bay]	lenna (Milligan), lunna (Bedford)
/wina/ 'periwinkle' [Oyster Bay]	winnya (Milligan)

There is no real evidence for a lamino-dental nasal [ɲ]. But this is a sound which is difficult to distinguish from [n], for someone who does not have the contrast in his native language, and we could scarcely expect the sources for Tasmanian to show it.

[f] *Laterals*. The orthographic sequence *ly* occurs a few times in Milligan's and also in Robinson's vocabularies, but there is insufficient evidence to support a lamino-palatal lateral, in addition to the well-attested apico-alveolar lateral /l/.

[g] *Rhotics*. There is some evidence that Tasmanian, like almost all languages from the Australian mainland, contrasted a flap or trill /r/ with a frictionless continuant /ɹ/.

Where there is alternation in the sources between *r* and *l*, or between *r* and *w*, we infer a continuant /ɹ/ e.g.

<i>source spellings</i>	<i>reconstructed forms</i>
Scott: roogara Arthur: lugarana	/ɹugara(na)/ 'ear' [Oyster Bay]
Jorgenson: wadewewanna McGeary: vadaburena	/wadibVɹana/ 'ashamed' [East]

In *The Van Diemen's Land Almanack* for 1831 (pages 141-2)

Henry Melville commented: 'What their language is, is not much known, but they have been noticed to sound the letter R, with a rough deep emphasis, particularly when excited by anger or otherwise, and that upon these occasions also, they use the word *werr*, *werr* very vehemently'. We infer that the alternation of *dr* with *r* in the sources indicates a flapped or trilled rhotic, e.g.

<i>source spellings</i>	<i>reconstructed form</i>
G.A. Robinson: ree.wool.lar, dray.wool.ler	/riwula/ 'elbow' [North-east]
Chas. Robinson: dray.will.ar	
Sterling: drã.n.gÿr	/ranga/ or /raŋga/ 'knee'
Brown: ranga	[South-east]
D'Entrecasteaux: ranga	

[h] *Semi-vowels*. Evidence from all sources strongly suggests that Tasmanian languages had two semi-vowels, /w/ and /y/.

We have inferred (as tentatively as one must, when dealing with any point concerning the Tasmanian languages) that the consonant system may have been:

/d/	/g/	/g/	/b/
/n/	/n/	/ŋ/	/m/
/l/			
/r/	/ɹ/		
		/y/	/w/

There may also have been a second laminal stop, lamino-dental /d̪/. There is no evidence for any phonological differences between the various languages (although of course there may well have been at least minor differences).

This consonantal pattern is a common one on the Australian mainland. Indeed, recent comparative work suggests that proto-Australian may have had exactly this system (with the possible addition of a laminal lateral /l/) - see Dixon 1980a:150-9.

2.3 VOWELS

Deciding on what the vowel system or systems of the Tasmanian languages may have been is a far more difficult matter. Of the early recorders, G.W. Walker gave short notes on how his orthography for Tasmanian related to English sounds (Plomley 1976:29), Joseph Milligan (1857) provided a detailed and useful account of his spelling conventions:

'The orthography of the aboriginal vocabulary agrees as nearly as possible with the ordinary phonetic expression of the English alphabet, with the following qualifications - the vowel *a* when it stands alone, is to be pronounced as in *cat*, *rap*, etc, but *aa* is sounded nearly as *aw* in the word *lawn*; *e* is pronounced as in the English word *the*, and *ee* as in *thee*, *me*, *see*, etc, but *é* is to be pronounced like *a* in *potatoe* and in *day*; *i* is to be pronounced as in *sigh*, *fie*, etc.; *o* is to be sounded as in *so*, *go*, *flow*, and *oo*

positions in a word (in some languages), e.g.

<i>reconstructed form</i>	<i>source spellings</i>
/i/ = [ə] /lugrabani/ 'boat'	McGeary: lukrapani; Backhouse: leucropene; Sterling: loo.crop.per.ner
/u/ = [ə] /bVluwida/ 'neck'	Milligan: pilowettah Robinson: pale.wet.ter
/a/ = [ə] /tuga(na)/ 'heel'	Milligan: tokana; Robinson: touger

It is hard to tell whether vowel length was distinctive in Tasmanian. One recorder may have used a spelling which implied that there was a longish vowel in a certain word, but in most such cases there will be another spelling which suggests a short vowel e.g. Robinson's ware.ter 'limpet' suggests (in terms of the English spelling conventions Robinson used) [wa:ta] while Milligan's transcription of the same word for the same locality (Oyster Bay) is wattah, suggesting just [wata]. These and other examples point to the length of vowel being a phonetic phenomenon, often varying in each pronunciation of a word. On balance, it is unlikely that vowel length was phonologically significant.

Our conclusion that the Tasmanian languages may have just had three short vowels is put forward with great caution; it is perhaps most satisfactory to say that we cannot presently find evidence for more than three contrastive vowels. But there may have been more; and there may, of course, have been slightly different vowel systems in languages from different parts of the island.

2.4 STRESS

The position of stress within a word is perhaps the most elusive aspect of Tasmanian phonology. We have the following source material:

[a] *Walker* marks each vowel with either $\bar{\quad}$ or $\check{\quad}$; these marks apparently indicate accent rather than quantity (see the comment in Roth 1899, p.1 of Appendix).

[b] *Norman* uses the same marks, probably in the same way.

[c] *Milligan* says 'when a double consonant or two consonants stand together, the first carries the accent, as in the English words *cunningly*, *peppery*, *cobbler*, *pipkin*.' This somewhat elusive statement perhaps means that the vowel preceding a sequence of two consonants (in Milligan's orthography) bears stress.

[d] *Tindale's* transcriptions.

[e] The *Fanny Cochrane Smith* recordings.

[f] The 1972 *Crowley* recordings of *Mrs. Heffernan* and *Mrs. Mundy*.

From these sources it appears that a disyllabic word is always stressed on the first syllable, whereas a tri-syllabic word can be stressed on either first or second syllable. Our only general conclusion concerning stress in Tasmanian is thus: any syllable except the last can bear stress.

2.5 PHONOTACTICS

Almost every word in the Tasmanian corpus consists of at least two syllables; the few monosyllables all appear to have polysyllabic variants e.g. *ler~ler.lare* 'foot' [Port Sorell]. There is no evidence for any word beginning with a vowel; vowel-initial spellings often derive from a form with initial /ŋ/ (which is evident from other spellings of the same item) or else may relate to initial /w/ or /y/.

About ninety percent of words appear to end in a vowel; sometimes it may be a quite short, central vowel which is scarcely audible in some pronunciations of the word, e.g. *Robinson now.hum.mer*; *Milligan noamma, nowam* 'thunder' [North-West]. Words that end in a consonant come almost exclusively from the dialects of the west coast; (some of) these may, indeed, have an underlying final vowel, which is sometimes not articulated very strongly (as in the example just quoted).

There are some medial consonant clusters, although these are by no means common. The structure of most words in the corpus is thus:

$$CV(C)CV((C)CV)^n$$

The only exception to this formula - apart from the possibility of consonant-final words in the west - is that perhaps 3% of words appear to commence with a consonant cluster; the set of initial clusters appears to be /b/ or /g/ followed by a lateral or rhotic, or /d/ followed by a rhotic.

It is likely that all consonants could occur in initial position; we have record of very few initial laminals, but this may be an indication of the difficulty early observers had of transcribing these, and distinguishing them from /d/ and /n/. Because of the difficulty of making sure reconstructions we hesitate to attempt statistics about the proportion of words that commence with each consonant; we can, however, comment on some points of interest.

On a sample of about 800 reconstructions no less than 17% of words begin with /l/; this is exceeded only by /b/, with 19%, and is just ahead of /m/, 15% and /g/, 13%, /d/, 13%. According to our interpretation of rhotics, about 6% of words begin with /r/ and perhaps a further 1% with /ɹ/.

Intervocalic consonant clusters can be reconstructed for only about 12% of the corpus. Those sequences that are reasonably well-attested are [i] nasal followed by (homorganic or non-homorganic) stop; [ii] lateral or rhotic followed by stop; and, the commonest sequence of all, [iii] stop followed by lateral or rhotic.

2.6 SUMMARY

We have interpreted the written material on the Tasmanian languages from the point of view of the recurrent phonological patterns on the Australian mainland. Phonetically, and also phonologically, the Tasmanian languages appear to present a familiar Australian pattern. The consonant and

vowel systems we have suggested do in fact accord very closely with the systems that have been reconstructed for proto-Australian.

Tasmanian languages are also similar to most mainland languages in demanding that each word consist of at least two syllables, and commence with a consonant. The most striking differences are, firstly, the fact that very few syllables end with a consonant - it is rare to encounter a word-final consonant, and intervocalic clusters occur in only a small minority of words. The second significant difference from Australian languages concerns the high frequency of the lateral and rhotic(s) in syllable-initial position. Most Australian languages do not have laterals or rhotics in word-initial position; if they can occur in this slot only a very small number of words will begin with a segment of this type. And on the mainland a lateral or rhotic may be the first, but scarcely ever the second, member of an intervocalic cluster. In Tasmanian the rhotics and specially the lateral occur at the beginnings of many words, and can occur as the second element in an intervocalic cluster. The occurrence of a few initial clusters in Tasmanian is another, more minor, point of difference; initial clusters are rare in Australian languages but where they do occur (around Lake Alexandrina, and in Gippsland, for instance) they generally involve a stop plus lateral or rhotic, as in Tasmanian.

We were able, on lexical grounds, to conclude that there were probably at least eight separate languages in Tasmania. With the exception of consonant-final words occurring mostly in the west, we are able to say nothing about phonetic or phonological differences. It does seem that Tasmania was characterised by a fairly uniform phonetics/phonology, as an areal feature. But there must have been *some* differences between the individual languages; unfortunately, the poverty of the source materials does not allow us to discern these.

3. GRAMMAR

3.1 NOUN AND VERB SUFFIXES.

The Tasmanian languages appear to have had a variety of suffixes; there is no strong evidence for any prefixes. A word will sometimes be quoted with a final syllable such as *-na*, *-ga* and sometimes without it, in vocabulary elicitation. There is little sentence material; the sermons by Robinson and Bible translations by Wilkinson were probably in a sort of pidgin, with Tasmanian words being strung together according to English word order. Probably the only spontaneous sentences are the few recorded by Jorgenson and Milligan (and just a handful in Robinson's diary).

Of the early investigators, Milligan wrote that 'the affixes, which signify nothing, are la, lah, le, leh, leah, na, ne, nah, ba, be, beah, bo, ma, me, meah, pa, poo, ra, re, ta, te, ak, ek, ik, etc'. Robinson added *-na* onto English words ending in a consonant when trying to speak Tasmanian, apparently following a common pattern for loan

words; he explained: 'they seem to have had no idea of the existence of a creative, presiding power, implied by the word God, nor any term corresponding with such a sentiment in their vocabulary. The English word has therefore been adopted by the translator, with the native termination superadded, making Gōdnēh. The same with respect to several others. Several of these anglicised terms are now in such common use among the natives, that they may be considered as incorporated with the language: the word grässneh, for grass, is more frequently used among those at the settlement, than the original term given above...' (Plomley 1976:41). No other contemporary recorder commented on affixes in Tasmanian languages, their meaning or function.

Some suggestions about morphology were made by Roth, Schmidt and others, scarcely any of them convincing; none of these scholars had access to the substantial material collected by Robinson (which roughly doubles the Tasmanian corpus). We attempted to reassess the morphology by examining the occurrence of putative suffixes and examining possible hypotheses concerning their meaning or function.

Our procedure was to compare variant transcriptions of a single word. Where one appeared to have a final syllable that the other lacked, this syllable was marked as a possible suffix; /na/ as a possible suffix is demonstrated by the forms quoted for 'dream', 'eat', 'white man' and 'ear' in 2.2, and 'heel' in 2.3. Using this procedure we were able to isolate 23 suffixes on nouns and 19 on verbs - 16 of them coincide in form. All, except for a putative *-way*, are of the shape CV. Some of these possible affixes are attested in only two or three words, and it would be impossible to attempt any generalisations concerning them.

We then restricted ourselves to a study of the five most frequent affixes, each of which occurs with both nouns and verbs: /-na/, /-ya/, /-ga/, /-ra/, /-li/. Two hypotheses suggested themselves, and attempts were made to verify them:

[i] We get the following combinations of these affixes:

/-ga/ + /-na/ /-ra/ + /-na/ /-li/ + /-ya/

This suggests that /-ya/ may be in complementary distribution with /-na/; that is, /-ya/ and /-na/ may be allomorphs of a single morpheme. An exhaustive check of the data reveals that /-ya/ only occurs after roots (or the affix /-li/) ending in /-i/. However, there are many examples of /-na/ occurring after /-i/, as well as after /-a/ or /-u/. The data thus does not provide support for our hypothesis.

(It is of course possible that the very frequent *-na* really covers two distinct suffixes - say /-na/, occurring after all vowels; and /-na/, occurring only after /a/ and /u/ and being in complementary distribution with /-ya/. The poor quality of Tasmanian material makes it impossible to prove or disprove this or similar hypotheses.)

/-na/ does not appear to mark any syntactic function - in the limited and unreliable sentence material available it occurs attached to nouns in intransitive subject, transitive subject and transitive object functions.

[ii] /-ga/, /-ra/ and /-li/ appear, from their tactic possibilities, to constitute a 'system' of affixes. The fact

that they can be suffixes to both nouns and verbs suggests that they may in fact carry a pronominal meaning - with a noun they could indicate 'possession' and attached to a verb they might refer to the subject or object of that verb. However, a careful check of the words with which these affixes occur does not lend credence to this hypothesis - they occur with body part and kinship nouns (which might reasonably be expected to bear a possessive suffix) but also with words such as 'sun', 'worm', 'grass', 'bark', 'rain', 'moon', 'ice' with which a possessive suffix would be implausible. There is, in fact, no more support for attaching a possessive meaning to /-ga/, /-ra/ and /-li/ than to /-na/ or other of the suffixes.

Our thorough investigation of the corpus did not support *any* plausible hypothesis concerning the putative suffixes in the Tasmanian languages.

Capell (1968) provides an exemplary critical account of what is known - or not known - of Tasmanian morphology. Roth (1899:184) had suggested that *-na* marks the singular but there is really no supporting evidence (there is also no evidence to the contrary). Schmidt decided that *-na* was a type of definite article - similar comments apply. Roth (1899:184) also repeated La Billardière's suggestion that the disyllabic suffix *-li'a* (probably /liya/) marked the plural; it occurs with the words for 'ear', 'eye', 'breast', 'arm', 'tooth', 'testicle' and 'family' in his vocabulary, lending a degree of plausibility to this suggestion. Reduplication may have been used to mark plurality in some instances although there are only a handful of possible examples e.g. *nuba nuberai* 'eyes' (unreduplicated *nubré* is also attested), *lori lori* 'fingers' (there is no record of unreduplicated *lori*). Note also Gaimard's recording of *karde* 'five' and *karde karde* 'ten'.

Most other comments on possible affixes in the literature seem very speculative. On the basis of Milligan's sentences

Tallé lenutoo	'Tell him to go to the house'
Onnabea nangato	'Tell your Father of this'

Müller (1882, II.88) suggested that *-to* was the dative case marking on nouns, parallel to dative *-to* on pronouns.

Although Müller, Schmidt and others have devoted a great deal of attention to the forms of verbs, they have - like us - been unable to draw any significant conclusions.

3.2 PRONOUNS

Two sets of pronouns are reasonably well attested:

	'I'	'you'
South-eastern, Oyster Bay and Big River	/mina(na)/	/nina(na)/
North-west and West	/maŋ(a)/	/niŋ(a)/

For Port Sorell and Ben Lomond there is one form of each pronoun, given by Robinson:

'I'

'you'

Port Sorell bi.near.re.ne.re.pare de.nare.re.pare

Ben Lomond i.tho yal.ler.me.yoe

Further corroboration would be required before we could be sure that these were the forms of pronouns in these languages.

The only clue concerning a plural pronoun is the form wārrāndēr 'we' in the Norman vocabulary. Again, there is no corroboration from other sources. A form /narra/ may have been a third person pronoun in some eastern languages; it is glossed 'they, he, her, them, that' by Jorgenson, 'him' by Charles Robinson, 'he, she, they' by Sterling (and 'you, thou' by Backhouse!). Similarly /niga/ is glossed 'this' by several sources. Some forms for 'what' and 'where' are gathered together by Plomley but most of them were originally glossed 'what's your name?' or 'what's the matter?' etc. We can tentatively reconstruct /diliŋa/ 'what' for Oyster Bay, but the other spellings show variation of both form and meaning (or are given by just one recorder).

There are one or two tantalising sentences recorded by Milligan which have been commented on by a number of scholars:

- (1) Noia meahteang meena neeto linah
'I will not give you any water'
- (2) Loona *or* Loina tyennabeah mito
'Give me a stone'
- (3) Tugganna lunameatah
'I shall go to my house'

On the basis of these Müller suggested neeto is the dative of the second person and mito the dative of the first person pronoun (correlating with the two examples he found of dative *-to* on nouns - 3.1). This is a quite possible interpretation, although more corroboration would be needed before it could be accepted with certainty.

Sentence (1) can be tentatively phonemicised, and glossed:

- (1) nuya miya-diyaŋ mina nidu liyana
not ? give I you water

The interesting point here concerns the first element of the verb word; this could be a prefix *mi-*, a reduced form of the first person pronoun. Similarly, the second word of sentence (3) could conceivably be segmented into root *luna* 'house', suffix *-mi* 'my' and dative *-to*. There are, however, other examples of a putative affix *-mi-* where the sentence has no reference to first person. The evidence is not conclusive (nothing is, in Tasmanian studies) but it is in fact rather likely that there were bound forms of pronouns, which could attach to the beginnings or ends of other words, perhaps having a possessive function with nouns and marking subject with verbs.

3.3 SYNTAX

Capell (1968) includes a thorough study of word order in the Tasmanian materials. Robinson's sermons and Wilkinson's Bible translations show a Subject-Verb-Object word order but this probably tells us little about Tasmanian grammar; they appear to be written in a type of pidgin and would probably have been translated from English word-by-word.

In fact, SVO is the commonest pattern in the sentences recorded by Milligan and Jorgenson (and those in Robinson's diary) but it is by no means the only pattern found. There are examples of the object preceding the verb, as in (2), and of the subject following it, as in (1) above.

An adjective appears to have followed its head noun. There are a fair number of examples, from several sources e.g. 'stomach' + 'full', 'water' + 'salty', 'earth' + 'white'. The only exception is Robinson who in his sermon maintains English word order in 'one God'.

4. POSSIBLE RELATIONSHIP WITH AUSTRALIAN LANGUAGES

At the end of the last century it was suggested that Tasmanians differed from mainland Australians in physical type, culture and also language. In recent years anthropologists have inclined more to the view that the Tasmanians were originally a group of Australian Aborigines, cut off when sea-level rose - flooding Bass Strait and cutting off Tasmania - about 12,000 years ago.

N.B.Tindale and J.B.Birdsell (1941) suggested that the peoples of the Cairns Rain Forest region, in North Queensland, were 'Tasmanoid' in physical type. There is, however, so little information on any aspect of the Tasmanians that this theory must be regarded as speculative; there is no real evidence of any particular similarity to the rain forest Aborigines.

The firmest conclusions we have been able to draw concern the phonological system of Tasmanian languages. In section 2 we suggested that the phoneme system and some aspects of the phonotactics were typologically of the predominant Australian variety; the main points of difference are that words in Tasmanian seldom end in a consonant (although there are *some* groups of Australian languages like this) and that *l* and *r* are very common at the beginning of a syllable in Tasmanian.

For proof of genetic relationship we do, of course, need not just typological similarity but systematic correspondences of grammar and lexicon. At the grammatical level, there is scarcely a whisper of similarity. Tasmanian pronouns /mina/, /maŋ(a)/ 'I' and /nina/, /niŋ(a)/ 'you' are rather different from the recurrent Australian forms /ŋay-/ 'I' and /ŋin-/~/ŋin-/~/ŋun-/ 'you'. Only the Ben Lomond form recorded by Robinson, i.tho might be thought to be a candidate for comparison. Words in Tasmanian languages do not begin with a vowel and the initial consonant of this form may have been /y/ or else perhaps /ŋ/; if the latter it could have been

/ŋaydu/ which is a frequent form of the first person singular pronoun in Australian languages. But this - the best grammatical cognate we can put forward - does involve several leaps of the imagination.

Even the putative dative suffix *-du* differs from the recurrent Australian dative *-gu*. Australian languages do generally order an adjective after a noun - like Tasmanian - but almost all of them prefer to put the verb at the end of the sentence - unlike the majority pattern in the small corpus of Tasmanian sentences.

Lexical comparison yields equally meagre results. E.M. Curr (1887:III,596) quoted seven possible cognates between Tasmanian and Australian languages; for six of them he was also able to find what for him were plausible cognates from the languages of Africa! John Mathew (1889:361-2) expanded the list to 22 items. There are in fact a few Tasmanian forms that are very similar to recurrent lexemes in Australian languages, notably:

<i>Tasmanian source spellings</i>	<i>Australian form</i>
tullah, tullana, tullanee, tullane [West and North-West]	/ḡalan/ 'tongue'
boula, boulla, böw.lȳ, poalih bura, bourai [South-eastern]	/bula/ 'two'

But these, and a handful more, are no more than an acquisitive investigator could uncover through detailed comparison of *any* two languages.

We concluded, in 1.4, that there may well have been four or more distinct language families in Tasmania. There is absolutely no evidence that any of these had a genetic relation with the Australian language family. It must be remembered, though, that Tasmanian languages may have been isolated from contact with the mainland for 12,000 years. The facts available are perfectly compatible with a genetic connection having been evident at that time, but having become less and less recoverable over the intervening millenia. The similarity of phonological type would also be consistent with this. The best summary is, perhaps, to say that there is *no* evidence that some or all of the Tasmanian languages are *not* ultimately related to the Australian language family.

There is no hint of a relationship with languages from any other part of the world. (Greenberg, 1971, suggested a link between Tasmanian, Andamanese and the Papuan languages of New Guinea. He quoted eleven grammatical criteria - Tasmanian languages satisfy one of them; of the 84 lexical forms considered by Greenberg putative Tasmanian cognates are quoted for less than 25% - none of them is convincing. Greenberg's is one of the more outrageous of the many hypotheses that have been put forward concerning the Tasmanian languages.)

The material on Tasmanian is so poor that almost nothing can be inferred with any degree of confidence. Standards that are applied to work on other language families tend to be relaxed when scholars approach Tasmanian, so that speculation becomes the order of the day. Not wishing to be

the exception to this general trend, we shall finish with some speculations of our own.

Archaeologists believe that until 12,000 years ago there were people living in the land area of what is now Bass Strait but that there was probably no habitation over most of Tasmania, where the weather and conditions would have been much less favourable than they are today. Sea-level rose when the ice melted, flooding Bass Strait and forcing the people to move to higher ground; at the same time, the temperature would have risen and living conditions improved on Tasmania itself. It is reasonable to assume that some of the people from Bass Strait moved south into Tasmania as the sea-level gradually rose. On the map we have shown (by a broken line) the 35 fathom level, which would have been the coastline at a certain historical stage. It is likely that two groups of people moved into Tasmania - a group on the land around King Island could have moved into the north-western region and down into the western corridor, while another group from the land around Flinders Island could have moved into the eastern part of the island.

If this had happened we would expect a severe linguistic discontinuity where the two waves met, at the southern tip of Tasmania. And this is what we find. The figure of 18% possibly cognate vocabulary between South-western and South-eastern (see Tables 1 and 2 in 1.4) is low, lower in fact for any other score between contiguous languages except for those involving Port Sorell and North Midlands.

Turning now to the promised speculation. In Table 2 Northern has a higher score with Piper River, with which it is not contiguous, than it does with any of its neighbours. The statistical pattern in Table 2 would conform to the geographical pattern exactly if Northern speakers lived immediately to the north of Piper River - its scores of 50% with Piper River, 46% with Cape Portland, 33% with Ben Lomond, and so on, would then be perfectly compatible with the relative positions of these groups.

What if the Northern group *did* originally live immediately to the north of Piper River, just before sea-level reached its present height. When they were forced to move to higher ground they may have had to move to the south-west in order to find country that was not already occupied. This would perfectly explain the vocabulary scores.

Having put forward our hypothesis, we must hasten to demolish it. Sea level rose to its present height many millenia ago. Although we do not know the exact rate at which vocabulary is borrowed between neighbouring languages it must surely be at a fast enough rate for any relationship of this sort to be obscured over a period of ten or more thousand years. This idea is surely as wild and empty as others that have been proposed over the century and more since the Tasmanian languages ceased to be actively spoken.

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