

Practical Spelling

David and Daphne Lithgow

April, 1986

0. Introduction

In this paper we record some of the practical lessons learnt through establishing an orthography and teaching reading in two languages of Milne Bay Province, Papua New Guinea, and in assisting national writers to devise orthographies in related languages.¹

1. Glottal Stop

There is a deep-seated problem with the glottal stop because it is not recognised as significant in the English language, so there is no letter for it. It is used in English in words like **uh-uh** or in the London Cockney pronunciation of medial t, e.g.

bo'l	bottle
le'a	letter.

Some early missionaries ignored it;² others taught that it was a hardening of the following vowel, which they indicated with the apostrophe sign, e.g. **sa'u**, **'enega**³. A glottal at the

¹ ED: Although most examples in this paper are from Milne Bay languages, David Lithgow (personal communication) says, "The generalisations have been tested, and work, in Austronesian languages of Milne Bay Province and other parts. Daphne ... finds the principles work in non-Austronesian as well as Austronesian languages of P.N.G. We can be less dogmatic about non-Austronesian languages, but suspect they are valid in most of them, too."

beginning of a sentence was not recognised as a capital glottal but only as an appendage of the following vowel which was then capitalised, e.g. 'Enegea, 'Abo. Lutheran missionaries in the Kâte and Yabim languages used the letter c to symbolise glottal stop in all positions.

Most expatriates who determined the alphabets of PNG languages did not teach that glottal is an independent phoneme in its own right, and only used an apostrophe for it, so it is not surprising that most PNG people do not realise its significance or write it. Previous printing presses and typewriters used *ʼ*, with a conspicuous head and definite tail, which was reasonably visible, but modern typewriters and computers use the insignificant *'*, which is easily ignored. Omitting it leads to some serious reading difficulties, and giving it a letter, like *q* or *c*, may lead to confusion with the function of that letter in English.

We have introduced **C** for capital glottal, and left *'* for small glottal for the Vernacular Component in Community Schools in the Dobu speaking area of Milne Bay Province. This was done after consultation with Education leaders and with the endorsement of the Provincial Education authorities. There are some thousands of young people who have gone through these thirty schools in the last ten years who read fluently, with no difficulty or confusion of **C** in Dobu books (glottal stop) with the **C** of English. It is a matter of teaching and practice. The **C** for capital glottal stop is used in Scriptures being printed

² It is hard for English ears to hear *'*, especially at the beginning of a word. The addition of a prefix to the word highlights its presence or absence. In Dobu *'al* means 'eat' and *al* means 'marry'. If *sl-* 'they' is added, it is easy to hear the difference between *sl'al* and *slal*. Comparison with related dialects or languages which substitute *k* for *'* can give further help in determining the presence or absence of glottal stop.

³ Glosses and language identifications are given in Appendix A.

in the Auhelawa and Bunama languages, which are within the Dobu speaking area, and no great difficulties have arisen. It is not completely satisfactory, because it means reteaching those who have learnt to read another way, but no previous method has proved satisfactory nor can there be any easy solution while there is no English letter for this sound.

2. Syllable Patterns

2.1. Early Orthographies

The commonest and most basic unit in Papua New Guinean languages is the syllable of a consonant plus vowel, the CV syllable. Much vernacular education half a century ago consisted of teaching these syllables from a chart:

ba	be	bi	bo	bu
na	ne	ni	no	nu
etc.				

However, many missionaries and other early language workers introduced unnecessary difficulties because they seemed to prefer strings of vowels, so they used **u** or **o** where **w** was possible, and **i** or **e** where **y** was possible, e.g.

uaga	for waga (Nakanai) ⁴
toea	for toya ⁵ (Motu)

Often **w** and **y** were omitted between vowels, even though a

⁴ Language or dialect names are indicated in parentheses.

⁵ ED: Note the respelling of **oea** as **oya** assumes the **e** is not representing a mid front semivowel which contrasts with a high front semivowel. In a number of languages a single front semivowel has been represented orthographically in more than one way.

fricative sound indicated that there was a consonant in that position, e.g.

nigea for **nigeya** (Dobu)
Boagis for **Bowagis** (Muyuw)

Consonants made with lip-rounding (labialisation) make one syllable pulse with the accompanying vowel, not two. Examples are **qu**, **tw**, **sw** as in English **queen**, **twig** and **sweet**. These are often written in PNG languages with the vowel sign **o** or **u** to represent the labialisation, rather than **w**, e.g.

gwauscala for **gwausowala** (Dobu)
poana for **pwana** (Dobu).

In the second example a two syllable word **pwa-na** is made to look like a three syllable word **po-a-na** (or **po-wa-na**, as some readers actually pronounce it).

These early orthographies were quite readable, and people learnt to read them very fluently. However CV syllables are better than strings of vowels for the teaching of reading. Clearly defined syllables make for rapid recognition of component parts, and develop confident word attack skills.

Take the Dobu word **yauyauna**. This is three syllables, **yau-yau-na**, the **au** being a diphthong with only one sound pulse. Even if uncertain readers gave the **au** two sound pulses **a-u**, it would be less difficult for them than the original Dobu spelling **iauiaina**, which could be pronounced as **ya-wi-au-na**, **l-ya-wi-au-na** or **l-yau-l-yau-na**.⁶

⁶ ED: The Lithgows give the following forms which contrast in syllable structure: **yage** (/yɑ-ge/) 'thing' vs. **iyana** (/l-yɑ-nɑ/) 'fish'. In the old orthography both began **ia** (**iage** and **iana**).

2.2. Dominant Syllable Patterns

All languages have dominant syllable patterns. To write the language in a way that fits these patterns makes for ease of reading, and accuracy of writing.

In languages like Muyuw, if we have to choose between writing **kau** and **kaw**, or between **yey** and **yey**, we look for the dominant pattern of short words in that language. If most short words are of a CVC pattern, e.g. **tan**, **wag**, **sop**, **bik**, etc., we should write the two suspect words **kaw** and **yey**; but if consonants are rare or absent at the end of words, we should spell those two words **kau** and **yey**.

In spellings which are difficult to decide, we need to compare the problem word with other words of the same part of speech, of the same length, the same stress pattern, and with the same affixes. For example, in Dobu, the word for 'reef' could be spelled **nua** or **nua**. By comparing with similar words we find nouns like **nua**, **nua**, **nua**, **nua**; so we should spell the problem word **nua** rather than **nua**. In Muyuw, the continuous form of the intransitive verb **iysiyos** sounds like **isiyos**. It has to be compared with other intransitive verbs with the same stress and syllable patterns, such as **ibsibas** and **iksikis**. Thus it can be seen that **iysiyos** is the correct spelling.

In most languages there are a few variations or exceptions to the basic pattern. Suspect words should be interpreted according to the dominant pattern, rather than the pattern of the rare exceptions. In some cases there may be two dominant patterns, and we seem to have an equal choice. In such a situation we should prefer the pattern that does not disguise the component parts of the word.

In Dobu, the prefixes **gi-** 'with the hand', **lo-**, a causative, and **e-** 'to become' may be added to word roots.

too	to try	gltoo	to touch
kwakwala	to scrape	glkwakwala	to scratch with fingers
nige ya	no, not	lonige ya	to say no
mwawasa	to die	lonmwawasa	to faint
loba	to find	eloba	to meet
waiwai	strong	ewaiwai	to become strong

These prefixes may be combined to form loe- and gle-.

gesl	wrongly	loegesl	to do wrong
waiwai	strong	glewaiwai	to make strong

The latter could be spelled either **giyewaiwai** or **glewaiwai** following either of the dominant syllable patterns in Dobu, CVCV or CVV. But **giyewaiwai** disguises the component parts of the word, so we choose **glewaiwai**, which allows the meaningful particles to be clearly seen.

2.3. Teaching by Analogy

Syllables are easily taught by the analogy of man, woman, and marriage. Men are consonants and vowels are women. Each CV syllable is made by the marriage of a man to a woman, e.g.

b plus **a** makes **ba**
d plus **i** makes **di**.

Labialised consonants are taught as fat men who marry in the same way,

pw plus **a** makes **pwa**.

Words are sequences of marriage units, e.g.

ka-gu-to-ki	kagutoki (Dobu)
si-ma-la-ma-la-to-ni	simmaalammaalatonni (Dobu).

Phoneme loss in another dialect or related language can be explained as the death of a man, or woman, leaving either an isolated widow or widower or giving a VV or CC sequence.

hi-la (Bunama)	ila (Dobu)
ma-li (Dobu)	ma-l (Muyuw)
ya-ki-da-si (Kiriwina)	ya-ki-d-s (Muyuw)
we-we-lo-he (Bunama)	we-we-lo-e (Dobu)
to-ho-lo (Galubwa)	to-o-lo (Dobu Island dialect)

Phoneme change between dialects or related languages can be explained as divorce and remarriage. One of the most frequent is the shift between **k** and glottal stop ', e.g.

ka-bo-ka-gu (Sanalowa)	'a-bo-'a-gu (Dobu).
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In this the woman **a** has changed her husband from **k** to '. Similarly, the man **kw** (labialised **k**) can be divorced, and the woman **a** remarries **'w** (labialised glottal stop), e.g.

kwa-ma (Sanalowa)	'wa-ma (Dobu).
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Labialised consonants are a common feature of Milne Bay languages. Those found include some or all of the series **mw**, **pw**, **bw**, **kw**, **gw**, **'w**, **hw**. They occur only with front and mid vowels and are often restricted to occurring with **a** and **e**. The difference between the man **b** and the fat man **bw** is taught by making the lips straight to say the syllable **ba**, then making them round, like a fat man, for the **bwa** sound. All of the labialised consonants can be taught in this way. It must be stressed that they are one man, not two, even though they are written with two letters.

2.4. Spelling Influences Pronunciation

There is always the question - should the language be written phonemically, as spoken, or morphophonemically, showing the underlying form of the words and trusting to fluent readers making the necessary modifications as the environment indicates? This may be possible for advanced readers, but beginning readers read what is there. The mechanics of reading absorb all their attention, and having to decode a word as it is written, pronounce it, then repronounce it to fit the environment, slows them considerably. Instead, they tend to change pronunciation to fit the spelling. Especially is this so for people from related dialects and adjacent languages who may not be confident speakers of the language they are reading.

Yet even mother tongue speakers will change pronunciation to fit the spelling. In Muryuw **mo** 'then' is pronounced **mwa** in some environments, but we wrote it always as **mo** to maintain consistency of spelling and word shape for fast recognition, believing that Muryuw readers would automatically change it to **mwa** in the appropriate places. Now we find natural Muryuw readers tend to read it as **mo** in all places, because it is written that way. The same applies to **bo** and its variant **bwa**, the emphatic particle, which we wrote always as **bo**, and which now tends to be pronounced that way even when it should be pronounced **bwa**.

The Dobu labialised glottal 'w has traditionally be written as 'o as in

le'oasa, 'oama.

This gives the same sequence of letters as in to-a-nu-ga-na and so the 'o and following vowel tends to be read in the same way as a two vowel sequence, e.g.

le-'o-a-sa, 'o-a-ma.

Writing labialised glottal as a consonant,

le-'wa-sa, 'wa-ma,

shows the syllables clearly and makes for accurate pronunciation.

In true Dobu speech, the syllable tɪ does not occur. For the change of a verb from intransitive to transitive, the final -ta should change to -tɪ, thus,

'l-'l-ta-'l-'l-ta to 'l-'l-ta-'l-'l-tɪ.

However, the transitive form is pronounced 'l-'l-ta-'l-'l-sɪ.

It could be written with final -tɪ, expecting Dobu speakers would know to change to an s sound in this environment. Because s and t are distinct in English, it is preferable to make an equal distinction in Dobu. It is unlikely that all Dobu speakers would make the adjustment of t to s where it is needed, and it would be much more difficult for those who use Dobu as a second language.

2.5. Local Advice

Even though a spelling system may be inconsistent through violating the basic pattern of the language, people have become accustomed to it and can read fluently, as we do in English.

Such readers are not able to give helpful advice about how their words SHOULD be spelled, because they prefer what they are used to, even if it disrupts basic patterning. In Dobu we found that if younger people are taught the syllable patterns of their language, using the man-woman-marriage-divorce-widowhood analogy, they get excited

about exploring the structure of their own language, and can give accurate advice about its spelling. Others who do not understand the underlying structure will prefer the familiar spelling and say it is correct, because that is the way they have always seen it.

2.6. Conclusion

It is important to find the dominant syllable patterns of a language and use these as the basis for determining its alphabet and spelling. Complicating factors include pre-existing orthographies, the influence of spelling on pronunciation, and pressure from neighbouring and national languages.

Appendix A

Meanings of vernacular words in this article

sa'u	put (Dobu)
'enega	from it (Dobu)
'abo	if (Dobu)
uaga	canoe (Nakanai)
toea	shell money (Motu)
nigee/nigeya	negative (Dobu)
Boagis/Bowagis	place name (Muyuw)
guausoala/gwausowala	joy (Dobu)
poana/pwana	cloud (Dobu)
iauliauna/yauyauna	many (Dobu)
kaw	personal bag (Muyuw)
yey	I (Muyuw)
tan	tide (Muyuw)
wag	canoe (Muyuw)
sop	water (Muyuw)
bik	dirtiness (Muyuw)

nua/nuwa	reef (Dobu)
newa	nest (Dobu)
neya	oar (Dobu)
numa	drink (Dobu)
nuta	wetness (Dobu)
iysiyos	he is holding (Muyuw)
ibsibas	he is piercing (Muyuw)
iksikis	he is tearing apart (Muyuw)
kagutoki	thank you (Dobu)
simwalamwalatoni	they know (Dobu)
hila	return (Bunama)
mwali	armshell (Dobu)
yakidasi	we (inclusive) (Kiriwina)
wewelohe	unmarried (Bunama)
toholo	stand (Dobu, Galubwa dialect)
kabokagu	I (Dobu, Sanalowa dialect)
kwama	clothes (Dobu, Sanalowa dialect)
le'oasa/le'wasa	sickness (Dobu)
'oama/'wama	clothing (Dobu)
toanugana	leader (Dobu)
'i'ita'i'ita	he is watching (Dobu)

Appendix B

Other articles on this subject by the same authors

Lithgow, Daphne. 1984. Dobu-English Dictionary (revised).

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