

Borrowing:
a Pacific perspective

Pacific Linguistics
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Borrowing: a Pacific perspective

edited by
Jan Tent and Paul Geraghty



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In memory of
Chris Corne (1942–1999) a pioneer of creole studies
and
Robert Langdon (1924–2003) a peerless historian

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Foreword

Speakers of Pacific Islands languages are well aware that their languages have borrowed and are continuing to borrow words from other languages. Most, however, probably assume that borrowing involves their own languages taking words from English or French, and many see this as not a terribly good thing. Borrowing in the Pacific is, however, more complex than this. English and French have also borrowed words from Pacific languages. And perhaps of more interest to historians and prehistorians is the fact that Pacific languages have borrowed words from other Pacific languages, a fact of which native speakers are sometimes unaware.

The study of borrowing can tell us quite a lot about who was in contact with whom, the nature of that contact, the direction in which cultural items moved, when these contacts took place, and so on. It is thus an important tool in the reconstruction of the linguistic, social and cultural history of a people, a country or a region.

The Pacific region, however, usually does not figure in the general linguistic literature on borrowing, where examples are most frequently given of borrowing among the national languages of Europe or into the languages of minority communities in the Americas. There have been quite a few studies on borrowing in the Pacific in past decades—and a few classics are reproduced in this volume—but generally these tend to be ‘one-off’: isolated journal articles, perhaps, or a discussion of borrowing within the wider framework of a descriptive or comparative study.

In this context, then, it is pleasing to see a whole volume devoted to the important topic of borrowing in the Pacific. Polynesia, Fiji and eastern Melanesia are particular geographical focuses of the papers which follow. Theoretical focuses include motivation for borrowing (or non-borrowing), structural effects (or lack of effects) of heavy lexical borrowing, borrowing as part of language planning and development, and prehistoric inference. The several authors have wide experience within the broader field of Oceanic linguistics.

This volume provides a larger database for researchers to consult, a more coordinated approach to the topic, and a number of theoretical insights which are addressed from a Pacific perspective. The editors are to be congratulated on assembling such a collection, and one might also express the hope that there will be others.

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1 *Direct and indirect inheritance in Rotuman*

BRUCE BIGGS

1 Proto Eastern Oceanic¹

There is some evidence that Fijian, Polynesian, Rotuman and certain languages of the Solomons–Vanuatu chain, including probably Arosi of San Cristoval, Ulawa of Contrariété Island, Sa'a, Lau and Kwara'ae of Malaita, Nggela of Florida, Kerebutu and Vaturanga of Guadalcanal, Mota of the Banks Islands, and Efate of Vanuatu, are members of a single subgroup of Austronesian.² This paper assumes such to be the case, calls the protolanguage of the subgroup Proto Eastern Oceanic (PEO),³ and on the basis of regular correspondences

¹ This paper was written while the author was a Senior Specialist at the Institute of Advanced Projects, East–West Center, Honolulu. The opportunity to do full-time research without teaching duties is gratefully acknowledged. [This is an edited version of the paper that first appeared in *Lingua* 14:383–415 (1965).]

² For example, Codrington (1885) has an interesting discussion of those languages of Melanesia which he considers to be alike; they include Mota, Nggela and the languages round Florida in Guadalcanal and Malaita, and Efate, and Fijian. Ray (1926:595) included among those languages 'where IN words are especially prominent' the Central Solomons in the general area of Florida, San Cristoval, and Mota. Dyen's (1963) Heonesian Hesion includes all the languages I have named which were included in his study. Wilhelm Schmidt considered the languages most closely related to Polynesian to be Fijian, Rotuman, certain languages of the southern Solomons, and certain languages of the central Vanuatu (see Grace 1961 note 8.6).

³ *Abbreviations and Orthographic Conventions.*

PAn reconstructions follow Dyen's (1963) orthography except that *ŋ* is used for his *N*. My Rotuman orthography is explained in §3.1 and §3.2. For other languages I use the orthography of the sources except that in all cases glottal stop is here written ʔ, and, in all Polynesian languages and in Fijian, long vowels are written as geminate clusters.

among the above languages reconstructs 328 starred forms, each one of which has cognates in Rotuman and at least one other non-Polynesian language.

Most of the evidence for PEO is contained in §4, where it may be seen that Fijian, Tongan, Samoan and Māori, together with Rotuman, have been cited most frequently. However, cognates from Nggela, Sa'a, Kwara'ae, Mota, Uvea, Futuna, and occasionally Lau, Arosi, Motu, Bugotu and Gedaged,⁴ also appear. Since Fijian, Rotuman and all of the Polynesian languages fail to reflect *R, this phoneme may be missing in a few reconstructions where cognates in other languages are not cited. If George Grace is right in supposing that Fijian, Rotuman, and Polynesian themselves form a subgroup, it is also possible that some of the reconstructed forms, for which no cognates were located in the West, are innovations.

Table 1: PEO consonants and their PAN and PPn correspondences

PAn	p b	mp mb	t nt	d D	nd nD l r	s z c j Z	ns nz nc nj nZ
PEO	p	mp	t nt	d	nd l r	s	ns
PPn	f	p	t	r	l	s	h

PAn	k g ŋk ŋg	m n ñ N	w q R h y
PEO	k nk	m n ŋ	w ? R Ø y
PPn	k	m n ŋ	w ? Ø Ø (Ø)

In PEO there was probably a process whereby word bases containing one of the protoconsonants *p, t, d, k, s alternated with forms in which the homorganic nasal preceded the oral consonant. In what follows the consonant alone is spoken of as the oral grade, while the nasal plus consonant is called the nasal grade. The existence of some such process is suggested (a) by the number of doublets in the daughter languages, one member containing the reflex of the oral grade and the other that of the nasal grade, (b) by imperfect correlation in this regard among cognates in the daughter languages, and (c) by possible traces of this process in certain Central Vanuatu languages.⁵

Language abbreviations are: Bug. – Bugotu; Fij. – Fiji; Fut. – Futuna; Ngg. – Nggela (Florida); Ni. – Niue; Mao. – NZ Māori; Rov. – Roviana; Sam. – Samoa; To. – Tonga; Tu. – Tuvalu; Ulw. – Ulawa; Uv. – Uvea; dial. – dialect.

⁴ The subgroup membership of the last three is not implied. To include Bugotu would require the reconstruction of *ñ as well as *n. Gedaged gives the impression of considerable structural divergence from the others.

⁵ See Capell (1962a:217; 1962b:382) and Ray (1926:241, 251). I am indebted to George Grace for drawing my attention to these features and supplying the references. This paper was also discussed with him on a number of occasions, and he read a draft, making a number of corrections, and offering several suggestions which I adopted. I take this opportunity of thanking him sincerely.

In spite of the possibility that nasal accretion reflects a morphemic process, it is shown here in reconstructed forms if the reflex of a nasal grade appears in the daughter languages. For example, while the Fijian forms *butu* 'to tread' and *qari* 'to scratch' (cf. *vutu* 'to pound' and *kari* 'to scrape') may in fact derive from morphologically complex forms in which the first morpheme ended in a nasal, nevertheless the protoforms are reconstructed as **mbutu* and **ŋkari*.⁶

On the basis of phonetic plausibility and some positive correlations (though as noted above total correlation is not found), I associate the oral and nasal grade protofonemes with reflexes in certain of the daughter languages as follows:⁷

Table 2: Oral and nasal grade reflexes of PEO phonemes

PEO	*p	*mp	*t	*nt	*d	*nd	*s	*ns	*k	*ŋk
Fijian	v	b	t	d	r	dr	s	c	k	q
Samoan	f	p	t	t	l	l	s	∅	k	k
Tongan	f	p	t	t	∅	l	h	h	k	k
Māori	wh/h	p	t	t	r	r	h	∅	k	k
Sa'a	h	p/q	∅	d	r	d	t/s	d	?	k
Nggela	p/v	mb	t	nd	r	nd	s	h	k/g	ngg
Mota	v/w	p/q	t	t	r	r	s	s	k/g	q

2 Polynesian

The existence of a Polynesian closed group is generally admitted though the internal and immediate external relationships of the group are not agreed on.

Elbert (1953) suggested that the first Polynesian split occurred between Proto Tongan (ancestor of Tongan, Niuean, and Uvean), and the protolanguage of the rest of Polynesian. A later split separated Proto Samoan from Proto Eastern Polynesian. Unpublished comparative structural work by Pawley (1962) confirms this picture on the basis of phonological and grammatical innovations. The evidence suggests that Proto Samoan was ancestral to Tuvaluan, Tokelauan and Futunan, while Proto Eastern Polynesian was ancestral to Rarotongan, Māori, Hawaiian and all languages to the east. The position of the outliers is uncertain.

⁶ If the reflex of the nasal grade appears in some but not all cognates, the starred nasal is parenthesised, for example PEO **(m)baʔa*, Fij. *baa*, To. *faʔa* 'the stem of taro'.

⁷ This interpretation, as it applies to palatals, and to **d*, is at variance with conclusions reached by others. I attempt to justify my decisions in a forthcoming paper. [The editors are not aware of this foreshadowed paper having been published.]

3 Rotuman

Rotuman is a non-Polynesian language spoken by people of Polynesian physical type on a small isolated island 250 miles [400 km]⁸ north of the most northerly Fijian island, Vanua Levu. The Polynesian islands of Futuna and Uvea lie 238 miles [385 km] and 375 miles [605 km] miles respectively to the east of Rotuma, while the Polynesian-speaking island of Funafuti in the Tuvalu group lies 260 miles [420 km] to the north. Niuafu'ou, the nearest island of the Tongan group, lies 470 miles [760 km] south-east of Rotuma. The rest of Tonga lies 200 miles [320 km] to 400 miles [645 km] south of Niuafu'ou. Savai'i, the closest Samoan island, lies 636 miles [1025 km] east of Rotuma. To the west, Tikopia (a Polynesian outlier), and Vanua Lava in the Banks Islands lie 540 miles [870 km] and 558 miles [900 km] distant from Rotuma.

The Rotuman language originally attracted attention because of its appearance of complexity, occasioned especially by the grammatical function of long and short forms of all bases in the language, and by the morphophonemic changes associated with the two forms.

More recently attention has been focused on the precise relationship of Rotuman to other Austronesian languages. Grace (1959) considers that Rotuman, Polynesian and Fijian form a subgroup within Austronesian, a decision based on innovations and lexicostatistical closeness.⁹ Dyen (1959) considers Grace's thesis unproven, and not confirmed by his (Dyen's) lexicostatistical work. Goodenough (1961) argues that if Grace's group exists it must also include West Nakanai of New Britain, which appears to be at least as close to Fijian as is Rotuman. Goodenough (1962) points out that Rotuman has borrowed many words from Polynesian and that this must be allowed for in any assessment of the relations between the two.

3.1 Rotuman vowels

Hocart (1919) listed twelve vowels for Rotuman, Codrington (1885) seven. The Wesleyan missionaries for many years wrote five, the Roman Catholics ten. Churchward (1940) writes ten distinctions but says 'to be strictly scientific ... the Rotuman alphabet requires not five vowel letters, nor yet ten, but fourteen'. He also says that each of the five primary vowels can be long, short, or medium. Haudricourt (1957-58), following Churchward, recognises fourteen vowel phonemes. Grace (1959), using the same sources, favours twelve.

This confusion over the number of vowels in Rotuman is in marked contrast to the general agreement, from earliest missionary days, concerning the vowels of Polynesian languages and Fijian, which were without exception agreed to be five in number. It also contrasts with the absence of disagreement concerning Rotuman consonants.

⁸ Distances rounded off to nearest 5 kilometres: editor.

⁹ See also Grace (1961).

Table 3: The vowel phonemes of Rotuman

	Unrounded		Rounded	
	Front	Back	Front	back
High	<i>i</i>	–	<i>ü</i>	<i>u</i>
Mid	<i>e</i>	–	<i>ö</i>	<i>o</i>
Low	<i>æ</i>	<i>a</i>	<i>œ</i>	<i>ɔ</i>

In 1959 I had the opportunity of working with Rotuman informants, and it seemed clear that there are ten contrasting vowels in the language, essentially as written by Churchward, whose orthography is phonemic, though his discussion obscures this fact.

/i e u o ɔ a/ occur in all positions. /æ/ occurs initially and medially. /ü ö œ/ occur medially only. Reasons for the restricted distribution of certain vowels appear in what follows.

Almost every base in Rotuman has two forms called long and short. The short form of any base is predictable from the long form, though the reverse does not apply. Every long form is stressed on its penultimate syllable, every short form on its final syllable. Pairs minimally distinguished by stress occur, e.g. *fáfa* ‘await’, *fafá* ‘challenge’. A stress phoneme is therefore marked.

3.1.1 The history of Rotuman vowels

The vowel phonemes of Rotuman appear to derive from the five vowels of Proto Eastern Oceanic as follows.

Pre-Rotuman had a five-vowel system reflecting one-for-one the vowels of PEO but with allophones (*æ a ɔ*) of the phoneme /a/. The *æ* allophone occurred before a syllable containing /e/, the *ɔ* allophone occurred before a syllable containing /u/ or /i/, and the *a* allophone occurred elsewhere. Pre-Rotuman /*hafu/ (PAN *batu) ‘stone’ and /*afe/ (PAN *qatay) ‘liver’ were phonetically [hɔθu]¹⁰ and [æθe].

At some time in pre-Rotuman, the dynamic being unknown, the language innovated wholesale metathesis of final syllables of bases. The metathesis had grammatical function and the non-metathesised forms continued to exist side by side with the innovated forms. Previously base shapes had been (C)V(C)V: now final consonants occurred in such base shapes as (C)VC.

Possibly simultaneously with the metathesis, but more probably after an interval of time, each metathesised form was reduced one syllable, by (a) reducing the less sonorous of two vowels to a semivowel, or (b) coalescing two similar vowels in the quality of one of them, or (c) coalescing two unlike vowels and retaining features of the quality of each. These changes had far-reaching effects on the phonology. Stress, which had always been on the penultimate

¹⁰ θ, which occurred only in directly inherited words, fell together with f subsequent to 1846 when Hale (1846:469–478) had distinguished the two consistently.

syllable of bases, now occurred on the penultimate syllable of long forms and the final syllable of short forms. A further effect was the addition of two phonemes /æ/ and /ɔ/, for in short forms such as *áʔ* and *hɔʔ* the quality of the vowel was no longer predictable. Examples follow illustrating the three processes by which the short forms were achieved. It is assumed that two steps were involved, first metathesis, then syllable reduction. The hypothetical first step is starred.

The second step resulted in a further three vowel phonemes, thus completing the inventory of ten. The last three examples in Table 4 provide illustration. In each case the new phoneme results from the coalescence of two vowels in a cluster, retaining in each case the rounding of one vowel and the front position of the other.

Table 4: Origin of Rotuman short forms

	Pre-Rotuman	Metathesised form	Present short form
(a)	* <i>tiro</i>	* <i>tior</i>	<i>tyór</i>
(a)	* <i>totóka</i>	* <i>totóak</i>	<i>totwák</i>
(a)	* <i>óta</i>	* <i>óat</i>	<i>wát</i>
(b)	*ʔ <i>éfe</i>	*ʔ <i>éef</i>	<i>ʔef</i>
(b)	* <i>tutúru</i>	* <i>tutúur</i>	<i>tutúr</i>
(b)	* <i>láje</i>	* <i>læj</i>	<i>læej</i>
(c)	* <i>séru</i>	* <i>séur</i>	<i>sör</i>
(c)	*ʔ <i>úli</i>	*ʔ <i>úil</i>	<i>ʔüil</i>
(c)	* <i>kámi</i>	* <i>káim</i>	<i>kæm</i>

3.2 Rotuman consonants

I write the consonant phonemes of Rotuman as follows: *p, t, k, m, n, g, j, s, l, r, v, f, ʔ, h*. This differs from the conventional orthography only in the use of ʔ for glottal stop instead of '. *g* is a velar nasal, *j* an unvoiced palatal affricate.

Rotuman words exhibit two sets of correspondences with protoforms. Those set I and set II reflexes which differ in shape are called diagnostic. The diagnostic members of the same set may co-occur, but no diagnostic member of one set co-occurs with diagnostic members of the other set. Thus the set I reflex ʔ < **k* co-occurs with the set I reflex *f* < **t* in the forms ʔ*áfo* (PEO **kato*) 'basket', and ʔ*éfe* (PEO **kete*) 'basket', 'belly', but no co-occurrence of *f* < **t* and the set II reflex *k* < **k* can be found.

As will be seen later, at least one diagnostic reflex is needed before the history of a Rotuman word can be decided.

Table 5: The two sets of Rotuman reflexes of PEO consonant phonemes

PEO	p	mp	t ¹¹	nt-	-nt-	d	nd	k	ŋk	R	l	r	q	s ¹¹	ns ¹¹	m	n	ŋ	w	y
I	h	p	f	f	t	r	t	ʔ	k	Ø	l	Ø ¹²	Ø	s	s	m	n	ŋ	v	Ø
II	f	p	t	t	t	r/Ø	r	k	k	Ø	r	r	ʔ	s/h	h/Ø	m	n	ŋ	v	Ø

The words with etymologies fall into two groups, those containing reflexes that are specific for either set I or set II, and those containing no diagnostic correspondences.

A number of doublets occur, for example: *híti* ‘to start with surprise’, *fíti* ‘to spring, or move suddenly’, PEO **pi(n)ti*; *sóʔa* ‘dig with a pointed stick’, *sóka* ‘to root in ground with snout’, PEO **(n)soka*; *lúmu* ‘seaweed or moss’, *rímu* ‘lichen sp.’, PEO **limu*; *séle* ‘cut off, intercept’, *sére* ‘to cut’, PEO **sele*; *séʔe* ‘upwards’, *sæke* ‘project, jut out’, PEO **(n)sake*; *síʔi* ‘to lift’, *híki* ‘to exaggerate’, PPn **siki*; *fóʔa* ‘come ashore’, *tóka* ‘to cease’, PEO **toka*.

It is apparent that we have here what Dyen (1956:83) refers to as ‘the classical problem of determining which of two opposing groups of words are inherited, and which borrowed, when in any event the borrowings must be from a related language’.

I propose to speak of directly and indirectly inherited words, rather than inherited and loan words, in order to emphasise that *all* of the words with etymologies were once part of a language ancestral to Rotuman in the comparativist’s sense. Some of them however re-entered Rotuman from a collateral related language after undergoing changes other than those which affected forms which had remained continuously in the Rotuman line. The different histories of directly inherited words and indirectly inherited words, together with factors introduced by the re-entry of the latter into Rotuman, resulted in two sets of correspondences with the protolanguage.

The decision as to which set of correspondences occur in directly inherited words, and which in those words that have re-entered Rotuman from another language, is made with reference to basic vocabulary, which contains those items less likely to have been lost or substituted for in the original word store. The following sections show that set I correspondences occur in such basic words as: *three*, *seven*, *ten*, *land*, *man*, *star*, *fruit*, *house*, *eye*, *ear*, *navel*, *skin*, and in several pronouns. Set II diagnostic correspondences occur in few body parts, no numerals, no pronouns, and distinctly fewer words of all categories that might be considered basic, than do set I correspondences.

Set I correspondences then, are those which occur in directly inherited words, and of the set the following correspondences are diagnostic: *h* from **p*; *f* from **t* and **nt-*; *t* from **nd-*; *ʔ* from **k*; *Ø* from **r*.

¹¹ Rotuman *j* also reflects both **t* and **(n)s* under conditions which cannot be stated at present (see §4.1).

¹² As far as I know, Rotuman is the only Eastern language which distinguishes PAn **d* and **r* (see §4.6 and §4.12a).

Set II correspondences are found in indirectly inherited words, and the following correspondences are diagnostic: *f* from **p*; *t* from **t* and **nt*; \emptyset from **d*; *k* from **k*; *r* from **l*; *r* from **r*; ʔ from * ʔ ; *h* from *(*n*)*s*; \emptyset from *(*n*)*s*.

4 PEO reflexes in Rotuman

4.1 Rotuman *j*

The history of Rotuman *j* is problematical. It apparently reflects both *(*n*)*s* and *(*n*)*t* under conditions which cannot be defined at present.

(a) Rotuman *j* reflects PEO *(*n*)*s*:

PEO *(*n*)*sipo* ‘downwards’. Fij. *civocivo* ‘wind sweeping down from the hills’ also *sivo* ‘to debase, remove from office’, To. *hifo*, Sam. *ifo*, Mao. *iho*, Mota *siwo*, Rot. *jio*.

PEO **lase* ‘coral, lime’. Fij., Fut. *lase*, Mota *las*, Motu, Lau *lade*, Aro. *rade*, Ef. *läs*, Rot. *l&je*.

PEO *(*n*)*sepu* ‘splash, sprinkle’. Fij. *sevu* ‘throw or splash water about, make libation’, Mao. *ehu* ‘dash water out of a canoe’, Rot. *jéhu* ‘fall lightly, of rain’.

PEO *(*sei*) ‘split, tear’. Fij. *sei*, Sam. *sa/sai*, To., Mao. *hae*, Rot. *jéi*.

PEO **ke(n)su* ‘back of head’. Fij. *kesu*, Rov. *kizu*, Rot. ʔéju .

PEO **ɲu(ts)u* (PAN **ɲu(ts)u*) ‘lips, mouth’. Fij. *gusu* ‘mouth’, PPn **ɲutu* ‘lips’, Rot. *núju* ‘mouth’.

PEO *(*n*)*samu*. Mota *samw/ai* ‘useless remains, refuse’, Sam. *samusamu*, Mao. *hamuhamu* ‘to eat scraps’, To., Uv. *hamu* ‘to eat only one kind of food’, Rot. *j&mj&mu* ‘to eat sparingly’.

(b) Rotuman *j* reflects PEO *(*n*)*t* or PPn **t*:

PEO **mataʔu* (PAN **ma/taquh*) ‘to be expert’. Fij. *vaka/matau* ‘cleverly’, To. *mataʔu*, Mao. *maatau* ‘to know’, Rot. *majáu*.

PEO *(*tompu*) ‘dive, plunge’. Fij. *tobu/raka*, Rot. *jópu*.

PPn **tuli* ‘shorebird sp.’. Sam., Fut. *tuli*, Rot. *júli*.

PPn **tona* ‘excrescence’. To. *tona* ‘yaws’, Mao. ‘wart’, Rot. *jóna* ‘yaws’.

PPn **toli* ‘pick, gather’. To., Sam. *toli*, Mao. *toritori* ‘cut in pieces, separate’, Rot. *jóli*.

PEO *(*n*)*tusu* (PAN **tuZuq*) ‘to point’. Fij. *dus/i*, To. *tuhu*, Sa’a *usu* ‘index finger’, Rot. *júju*.

PEO **tasi* (PAN **tazim* ‘sharp’) ‘scrape, peel, shave’. Fij. *tasi* ‘shave’, Mao. *tahi* ‘dress timber’, Rot. *j&ji* ‘shave’.

PPn **tii* ‘*Cordyline* spp.’. To. *sii*, Sam., Mao. *tii*, Rot. *ji*.

PEO *(*ta/dawa*) ‘green’. Fij. *karaka/rawa*, Mota *ta/rave*, Rot. *ja/ráva*.

PPn **tao* ‘spear, lance’. Sam., To., Mao. *tao*, Rot. *jáo*.

4.2 PEO **p*

PEO **p* (PAN **p*, *b*) is inherited (a) directly as Rotuman *h* (b) indirectly as Rotuman *f*.

(a) Rotuman *h* directly reflects PEO **p*:

PEO **patu* (PAN **batu*) ‘stone’. Fij. *vatu*, Sa’a *hëu*, To. *fatu/kala*, Sam. *fatu*, Mao. *koo/whatu*, Rot. *hófu*.

PEO **puke* (PAN **buka*) ‘uncover’. Fij. *vuke*, Sa’a *hu[?]e*, To. *fuke*, Sam. *fu[?]e*, Mao. *huke*, Rot. *hu[?]e*.

PEO **pa(n)da* (PAN **panDan*) ‘pandanus’. Fij. *vadra*, To. *faa* (also *fala* ‘mat’), Sam. *fala*, Mao. *whara/whara* ‘*Astelia* sp.’, Rot. *háta*.

PEO **panua* (PAN **banu(w)a*) ‘land’. Fij. *vanua*, Sa’a *hënuue*, To. *fonua*, Sam. *fanua*, Mao. *whenua*, Rot. *hanúa*.

PEO **pata* ‘shelf (PAN **bataŋ*)’. Fij. *vata*, Sa’a *haa*, To., Sam. *fata*, Mao. *whata*, Rot. *háta*.

PEO **potu* (PAN **betu*) ‘to appear’. Fij. *votu*, Sa’a *hou* ‘to make known’, To., Sam. *potu*, Mao. *hotu* ‘to dawn’, Rot. *hófu*.

PEO **pitu* (PAN **pitu*) ‘seven’. Fij. *vitu*, Sa’a *hiu*. To., Sam. *fitu*, Mao. *whitu*, Rot. *hifu*.

PEO **pua* (PAN **buaq*) ‘fruit’. Fij. *vua*, Sa’a *hue/hue*, To., Sam. *fua*, Mao. *hua*, Rot. *húe*.

PEO *(*m*)*pula* (PAN **bulan*) ‘moon; to shine’. Fij. *vula*, Sa’a *hule*, Sam. *pula* ‘to shine’, Mao. *purapura* ‘twinkle’, Rot. *húla*.

PEO **ŋapulu* (PAN **puluq*) ‘ten’. Fij. *sa/gavulu*, Mao. *ngahuru*, Rot. *sa/ghúlu*.

PEO **poki* ‘to return’. Fij. *ya/voki* ‘shift, of wind’, To. *foki*, Sam. *fo[?]i*, Mao. *hoki*, Rot. *hó[?]i*.

PEO **p(e, a)i-* ‘reciprocal prefix’. Fij. *vei-*, To. *fe-*, Rot. *hói-*.

PEO **paŋa* ‘to feed’ (PAN **paNan* ‘food’). Sa’a *haŋa* ‘to eat’, To. *fanga*, Sam. *fagai/fata* ‘to feed on a raised bed’, Mao. *whaŋgai*, Rot. *hága*.

PEO **putu* ‘*Barringtonia*’ (PAN **bu(n)tun* (Goodenough 1961) ‘tree sp.’). Fij. *vutu*, Sa’a *huu*, To., Sam. *futu*, Mao. *poo/hutu/kawa* ‘coastal tree sp.’, Rot. *húfu*.

(b) Rotuman *f* indirectly reflects PEO **p*:

PEO **po[?]oRu* (PAN **baqeRu(h)*) ‘new’. Fij. *vou*, Ulw. *haolu*, To. *fo[?]ou*, Sam. *fou*, Mao. *hoou*, Rot. *fo[?]óu*.

- PEO **pana* (PAN **panaq*) 'to shoot'. Fij. *vana*, Sa'a *hana*, To., Sam. *fana*, Mao. *whana* 'kick, spring back', Rot. *fána*.
- PEO **pulu* 'body hair' (PAN **bulu*). Fij. *vulu/a*, To., Sam. *fulu*, Mao. *huru/huru*, Rot. *fúru* 'pile, nap'.
- PEO **pi(n)ti* 'spring up' (PAN **piTik*). Fij. *vidi*, To. *fisi*, Sam. *fiti*, Mao. *whiti*, Rot. *fíti*.
- PEO **puti* (PAN **putput*) 'to pluck, pull out'. Fij. *vuti*, To. *fusi*, Sam. *futi*, Mao. *huti*, Rot. *fúti*.
- PEO **pu(n)ti* (PAN **pun(t)i*) 'banana'. Fij. *vudi*, Sa'a *hutši*, To. *fusi*, Sam. *futi*, Rot. *fúti*.
- PEO **tapi* 'sweep' (PAN **ta(m)pi* 'winnow'). Fij. *tavi/a*, To., Sam. *tafi*, Mao. *tahi*. Rot. *tófi*.
- PEO *[?]*ipi* 'Tahitian chestnut'. Fij. *ivi*, To. [?]*ifi*, Sam. *ifi*, Mao. *iwi* 'stone of fruit', Rot. [?]*ifi*.
- PEO *(*n*)*sapu* 'falling water'. Fij. *savu*, To. *hafu*, Sam. *afu*, Rot. *sófu*.
- PEO **paka-* 'causative prefix'. Fij. *vaka-*, To. *faka-*, Sam. *fa[?]a-*, Mao. *whaka-*, Rot. *fáka-*.
- PEO **pa[?]a* 'split, rend' (PAN **paqat* 'chisel'). Fij. *va/sia* 'to cut yams for planting', To. *maffa[?]a* 'cracked open', Sam. *faa/si*, Mao. *waa/hi*, Rot. *fa[?]a*.
- PEO **pa[?]u* 'to tie'. Fij. *vau/ca*, To. *fa[?]u*, Sam. *fau*, Mao. *wha/whau*, Rot. *f[?]u*.
- PEO *(*m*)*pa[?]a* 'stem of ensiform leaves' (PAN **paqa*). Fij. *baa*, To. *fa[?]a*, Sam. *faa*, Mao. *whaa*, Rot. *fá[?]a* 'jelly-like food prepared from taro leaves'.

4.3 PEO **mp*

PEO **mp* (PAN **mp*, *mb*) is reflected both directly and indirectly as Rotuman *p*.

(a) Rotuman *p* directly reflects PEO **mp*:

PEO **mputo* (PAN **pusej*) 'navel'. Fij. (dial.) *buto*, To., Mao. *pito*, Sam. *pitopito* 'anus', Rot. *púfa*.

PEO **tampu* 'ritual restriction, protected by supernatural sanction'. Fij. *tabu*, To., Sam., Mao. *tapu*, Rot. *fapú/i* 'marked by taboo sign'.

PEO **tumpu* (PAN **tu(m)buh*) 'grow'. Fij. *tubu*, To., Sam., Mao. *tupu*. Rot. *fúpu*.

(b) Rotuman *p* indirectly reflects PEO **mp*:

PEO **mpule* 'cowry' (PAN **bulay* 'white'). Fij. *buli*. To., Sam. *pule*, Mao. *pure* 'bivalve mollusc', Rot. *púre*.

PEO **mpoko* 'blot out, extinguish'. Fij. *boko*, Mao. *poko*. Rot. *pokó/i* 'crush'.

PEO **mpalolo* 'balolo worm'. Fij. *balolo*, To., Sam. *palolo*, Rot. *paróro*.

PEO **mpola* ‘coconut thatch’. Fij. *bola*, To., Sam. *pola*, Mao. *pora* ‘mat’, Rot. *póra*.

(c) In the following cases there is no indication as to whether the reflection is direct or indirect:

PEO **mpulu* (PAN **pulut*) ‘gum, sap’. Fij. *bulu/bulut/i* ‘sticky’, To., Sam. *pulu*, Mao. *puru* ‘pulp’, Rot. *púlu*.

PEO **mpoŋi* (PAN **beŋi*) ‘night’. Fij. *bogi*, To., Sam., Mao. *poo*, Rot. *pógi*.

PEO **mpou* ‘post’. Fij. *bou*, To., Sam., Mao. *pou*, Rot. *póu*.

PEO **mpe(e)mpe(e)* ‘butterfly’. Fij. *beebee*, To., Sam. *pepe*, Mao. *pee/pepe*, Rot. *pépe*.

PEO **mpaa* ‘fence, barrier’. Fij. *baa*, To., Sam., Mao. *paa*, Rot. *pá*.

4.4 PEO **t*, **nt*-

PEO **t*, **nt*- (PAN **t*, *T*, *nt*-, *nT*-) are reflected (a) directly by Rotuman *f*, (b) indirectly by Rotuman *t*, and (c) indeterminantly by Rotuman *j*.

(a) Rotuman *f* directly reflects PEO **t*, *nt*-:

PEO **tolu* (PAN **telu*) ‘three’. Fij., To., Sam. *tolu*, Mao. *toru*, Rot. *fólu*.

PEO **tu[?]u* (PAN **tuquD*) ‘stand’. Fij. *tuu*, To. *tu[?]u*, Sam., Mao. *tuu*, Rot. *fú*.

PEO **tunu* (PAN **tunu*) ‘cook’. Fij., To., Sam., Mao. *tunu*, Rot. *fínu*.

PEO **tumpu* (PAN **tu(m)buh*) ‘grow’. Fij. *tubu*, To., Sam., Mao. *tupu*, Rot. *fípu*.

PEO **pitu[?]u* (PAN **bituqen*) ‘star’. To. *fetu[?]u*, Mao. *whetuu*, Sam. *fetuu*, Rot. *héfu*.

PEO **batu* (PAN **batu*) ‘stone’. Fij. *vatu*, To., Sam. *fatu*, Mao. *koo/whatu*, Rot. *hófu*.

PEO **ntuna* (PAN *(*t*)*u(n)a*) ‘eel’. Fij. *duna*, To., Sam., Mao. *tuna*, Rot. *fúna*.

PEO *(*n*)*taliga* (PAN **taliga*) ‘ear’. Fij. *daliga*, Sa’a *ēlige*, Ngg. *talinga* ‘earwax’, Mao. *taringa*, To. *telinga*, Sam. *taliga*, Rot. *faliga*.

PEO *(*n*)*taku* ‘back’. Fij. *daku*-, Mao. *taku* ‘to skirt’, Rot. *fō[?]u*.

PEO **toka* ‘to land, come ashore’. Fij. *toka* ‘to squat’, To. *toka*, Sam. *to[?]a*, Mao. *to/toka* ‘solidify, set’, Rot. *fó[?]a*.

PEO **kete* ‘belly, basket’. Fij., To., Mao. *kete*, Sam. *éfe*.

PEO **koti* (PAN **ke(t)ip*) ‘clip, cut’. Fij. *kotiv/a*, To. *kosi*, Sam. *oti*, Mao. *koti*, Rot. *ófi*.

PEO **kutu* (PAN **kutu*) ‘louse’. Fij., To., Mao. *kutu*, Sam. *utu*, Rot. *úfu*.

PEO **kumete* ‘bowl, dish’. Fij., To., Mao. *kumete*, Sam. *umete*, Rot. *uméfe*.

- PEO **kaRati* (PAN **kaRat*) 'bite'. Mota *gara*, Sa'a *ʔala*, Fij., Mao. *kati*, Sam. *ʔati*, Rot. *ʔʔfi*.
- PEO **kato* (PAN **kaTug*) 'basket'. Fij., To. *kato*, Sam. *ʔato*, Rot. *ʔáfo*.
- PEO *(*n*)*tali* (PAN **tali*) 'cord, rope'. Fij. *dali*, Sa'a *ëli*, Mao. *tari* 'a four-plait cord', Rot. *fõli* 'a belt'.
- PEO *(*n*)*tuli* (PAN **tuli*) 'deaf'. Fij. *dule* 'earwax', Mota *tul* 'earwax', To., Sam. *tuli*, Mao. *turi*, Rot. *fúli*.
- PEO **taʔo* 'cook in earth oven'. To. *taʔo*, Mao. *tao*, Rot. *fáo*.
- PEO **taʔu* (PAN **taqun*) 'year, season'. To. *taʔu*, Sam., Mao. *tau*, Rot. *fáu*.
- PEO **tuʔa* 'back, beyond'. To. *tuʔa* 'outside', Mao. *tua*, Rot. *fúa* 'edge, corner, ridge, midrib of leaf.'
- PEO **tiko* 'defecate'. Fij. *tiko* 'to squat down', To. *siko*, Sam. *tiʔo*, Mao. *tiko*, Rot. *fíʔo*.
- PEO **tuku* 'place, let go, let down'. Fij., To., Mao. *tuku*, Sam. *tuʔu*, Rot. *fúʔu*.
- PEO **taʔaki* 'to draw water'. Fij. *taki*, To. *taʔaki* 'dig up, extract', Mao. *taaki* 'take out, as an eel-trap from water', Rot. *fʔʔi*.
- PEO **tanum* (PAN **tanem*) 'bury'. To. *tonum/ia*, Mao. *tanum/ia*, Rot. *fõmu*.
- PEO **tan(a, o)* (PAN **tanaq*) 'earth, soil'. Sa'a *ano*, Rot. *fanfána*.
- (b) Rotuman *t* indirectly reflects PEO **t*, **nt*-:
- PEO **ntanipa* 'fish sp.'. Fij. *daniva*, Sam. *tanifa*, Mao. *taniwha* 'mythical water monster', Rot. *tanífa*.
- PEO **tapi* 'sweep'. Fij. *tavi*, To., Sam. *tafi*, Mao. *tahi*, Rot. *tõfi*.
- PEO **taanoa* 'bowl for kava'. Fij. *tanoa*, To. *taanoʔa*, Sam. *taanoa*, Rot. *tanóa*.
- PEO **taki* (PAN *(*t*)*aki*) 'to lead'. Fij. *taki* 'to creep up to ambush', Sam. *taʔi*, Rot. *tóki*.
- PEO **toko* (PAN **teken*) 'staff, pole'. Fij., To., Mao. *tokotoko*, Sam. *toʔotoʔo*, Rot. *tóko*.
- PEO **toʔa* 'brave'. Fij., Mota *toa* 'fowl', To. *toʔa*, Sam., Mao. *toa*, Rot. *tóʔa*.
- PEO **tuki* (PAN **TukTuk*) 'hammer, pound'. Fij., To., Mao. *tuki*, Sam. *tuʔi*, Rot. *túki*.
- PEO **ntalo* (PAN **tales*) '*Colocasia* sp.'. Fij. *dalo*, To., Sam. *talo*, Mao. *taro*, Rot. *tar/kúra, tar/téa* 'taro varieties'.
- PEO **tawake* 'tropic bird'. Fij. *tawake* 'banner', To. *tavake*, Sam. *tavaʔe*, Mao. *tawake*, Rot. *tæwæke*.
- PEO **tuʔa* 'to lean on'. Bug. *tua*, To. *tuʔa/naki* 'to rely on', Rot. *tuʔa/naki*.
- PEO **taŋa* (PAN **taiŋan* 'hand') 'bag'. Fij. *taga*, To. *tanga/i*, Sam. *taga*, Rot. *tága*.

- PPn **takai* ‘wind, bind’. To., Mao. *takai*, Sam. *taʔai*, Rot. *tákái*.
- PPn **take* ‘base, butt’. To. *take* ‘pointed end of a coconut’, Mao. *take*, Sam. *taʔe*. Rot. *táke* ‘the piece chipped off the end of a drinking nut’.
- PPn **tamaki* To. *tamaki* ‘very unpleasant’, Mao. ‘ominous’, Sam. *tamaʔi* ‘bad news’, Rot. *tamóki* ‘seriously ill’.
- PPn **tanaki* ‘gather’. To. *tanaki*, Sam. *tanaʔi* ‘overload’, Rot. *tanóki*.
- PPn **tapakau* ‘coconut leaf mat’. To. *tapakau*, Sam. *tapaʔau*, Rot. *tapakáu*.
- PPn **tataʔo* ‘to put under a weight’. To. *tataʔo*, Sam. *tatao*, Mao. *tao* ‘weigh down’, Rot. *tataʔo* ‘to conceal under something’.
- PPn **fatafata* ‘chest, upper part of body’. To., Sam. *fatafata*, Rot. *fatafáta*.

(c) Rotuman *j* indeterminantly reflects PEO **t*, **nt*- (see §4.1.):

4.5 PEO *-nt-

PEO *-nt- (PAn *-nt-, -nT-) is reflected (a) directly and (b) indirectly by Rotuman *t*.

(a) Rotuman *t* directly reflects PEO *-nt-:

PEO **pinti* (PAn **piTik*) ‘jump, spring’. Fij. *vidi*, Ngg. *vindi*, To. *fisi*, Mao. *whiti*, Rot. *híti* ‘start with surprise’.

(b) Rotuman *t* indirectly reflects PEO *-nt-:

PEO **punti* (PAn **pun(t)i*) ‘banana’. Fij. *vudi*, Sa’a *huti*, To. *fusi*, Sam. *futi*, Rot. *fíti*.

PEO **pinti* (PAn **piTik*) ‘jump, spring’. Fij. *vidi*, Ngg. *vindi*, To. *fisi*, Mao. *whiti*, Rot. *fíti*.

(c) In the following it is not possible to say whether the Rotuman reflection is direct or indirect:

PEO **muntu* (PAn **buntu* ‘block, obstruct’) ‘severed, cut short’. Fij. *mudu*, To., Sam., Mao. *mutu*, Rot. *mútu*.

4.6 PEO *d

PEO **d* (PAn **d*, *D*) is reflected (a) directly and (b) indirectly by Rotuman *r*, and (c) indirectly by Rotuman \emptyset .

(a) Rotuman *r* directly reflects PEO **d*:

PEO **tido* (PAN **ti(n)daw*) ‘look at, especially in mirror’. Fij. *tiro*, Ngg. *tiro* ‘to gaze’, To. *sio*, Mao. *tiro*, Rot. *fíro* ‘to give variety by adding another colour’.

PEO **daʔa* (PAN **(dD)aqan*) ‘branch’. Mao. *raa/kau* ‘tree’, To. *ʔa/kau* ‘tree’, Rot. *rá*.

(b) Rotuman *r* indirectly reflects PEO **d*:

PEO **tido* (PAN **ti(n)daw*) ‘to look, especially in mirror’. Fij. *tiro*, Ngg. *tiro* ‘to gaze’, To. *sio*, Mao. *tiro*, Rot. *tíro*.

(c) Rotuman \emptyset indirectly reflects PEO **d*:

PEO **dompe(e)* ‘to overhang, be suspended’. Fij. *robee*, To. *ope*, Rot. *ópe*.

PEO **didi* (PAN **diŋdiŋ*) ‘house, shelter’. Fij. *riri*, Rot. *rí*.

PEO **dudu* (PAN **DugDug*) ‘shake’. Ngg. *ruru* ‘to collect fruit’, To. *lulululu*, Sam. *luuluu*, Mao. *ruu*, Rot. *rú*.

(d) In the following forms there is no indication as to whether Rotuman *r* is reflecting PEO **d* directly or indirectly:

PEO **dada* (PAN **(dar)dar*) ‘to heat, be hot’. Fij. *rara*, To. *aa*, Mao. *rara*, Rot. *rára*.

PEO **dama* (PAN **damaR*) ‘torch, light’. Fij. *ra/rama*, To. *ama*, Sam. *lama*, Mao. *rana*, Rot. *ráma*.

PEO **(do)ŋo* (PAN **deŋaR*) ‘hear’. Fij. *rogo*, Ngg. *rongo*, Sam. *logo*, Mao. *rongo*, Rot. *rógo* ‘be notorious’.

PEO **dua* (PAN **Dewha*) ‘two’. Fij., Ngg. *rua*, To. *ua*, Sam. *lua*, Mao. *rua*, Rot. *rúa*.

PEO **maʔudi* (PAN **quDip*) ‘life, live’. Fij. *mauri/mu* ‘interjection of blessing’, Sa’a *mëuri*, Ngg. *mauri*, To. *moʔui*, Mao. *mauri* ‘soul’, Rot. *máuri*.

PEO **deŋa* ‘turmeric’. Fij. *re/rega*, To. *enga*, Sam. *lega*, Mao. *renga* ‘yellow’, Rot. *réga*.

PEO **dupe* ‘dove’. Fij. *ruve*, To. *lupe*, Sam. *lupe*, Mao. *rupe*, Rot. *rúpe-váo*.

PEO **ʔuda* (PAN **quDaŋ*) ‘lobster, crayfish’. Fij. *ura*, Ngg. *ura*, To. *ʔuo*, Mao. *koo/ura*, Rot. *úra*.

4.7 PEO **nd*

PEO **nd* (PAN **nd, nD*) is reflected (a) directly by Rotuman *t*, (b) indirectly by Rotuman *r*.

(a) Rotuman *t* directly reflects PEO **nd*:

PEO **ndanu* (PAN **(dD)anum*) ‘freshwater’. Fij. *dranu*, To. *lanu* ‘bathe’, Mao. *ranu* ‘to mix with liquid’, Rot. *tónu*.

PEO **panda* (PAN **panDan*) ‘pandanus’. Fij. *vadra*, To. *fala* ‘pandanus mat’, Sam. *fala*, Mao. *wharawhara* ‘*Astelia* sp.’, Rot. *háta*.

PEO **ndami* ‘to chew’. Fij. *drami* ‘lick’, Ngg. *ndami*, To., Sam. *lami*, Mao. *rami* ‘to squeeze’, Rot. *tómi*.

PEO **ma(n)da* ‘fermented, soft’. Fij. *madra/i*, Ngg. *manda* ‘ripe’, To. *maa*, Sam. *mala*, Mao. *mara*, Rot. *máta* ‘wet’.

(b) Rotuman *r* indirectly reflects PEO **nd*:

PEO **ndeke* ‘hollow, concavity’. Fij. *dreke*, To. *leke* ‘small room or recess’, Rot. *réke* ‘pocket of seine net’.

(c) In the following it is not clear whether the Rotuman forms are direct or indirect reflections of PEO **nd*:

PEO **ndau* (PAN **Dahun*) ‘leaf’. Fij. *drau*, To. *lau*, Sam. *lau*, Mao. *rau*, Rot. *ráu*.

PEO **(n)dano* (PAN **Danaw*) ‘lake, swamp’. Fij. *drano*, To. *ano*, Sam. *Iano*, Rot. *ráno*.

4.8 PEO **k*

PEO **k* (PAN **k*, *g*) is reflected (a) directly as Rotuman *ʔ* and (b) indirectly as Rotuman *k*.

(a) Rotuman *ʔ* directly reflects PEO **k*:

PEO **kumete* ‘bowl, dish’. Fij., To., Mao. *kumete*, Sam. *ʔumete*, Rot. *ʔuméfe*.

PEO **poki* ‘return’. Fij. *vuki*, To. *foki*, Sam. *foʔi*, Mao. *hoki*, Rot. *hóʔi*.

PPn **feke* ‘octopus’. To. *feke*, Sam. *feʔe*, Mao. *wheke*, Rot. *heʔe*.

PEO **loku* (PAN **le(ŋ)kuŋ*) ‘bend, fold’. Fij. *lok/i*, To. *loku*, Sam. *loʔu*, Mao. *roku*, Rot. *lóʔu*.

PEO **kati* ‘bite’. Fij. *kati*, Sam. *ʔati*, Mao. *kati*, Rot. *ʔáfi*.

PEO **kato* (PAN **kanTuŋ*) ‘basket’. Fij., To. *kato*, Sam. *ʔato*, Rot. *ʔáfo*.

PEO **kananse* ‘mullet’. Fij. *kanace*, To. *kanahe*, Sam. *ʔanae*, Mao. *kanae*, Rot. *ʔanósi*.

PEO **kete* ‘basket’. Fij. *kete* ‘stomach’, To., Mao. *kete*, Sam. *ʔete*, Rot. *ʔéfe* ‘stomach’.

PEO **koti* (PAN **ke(t)ip*) ‘cut, clip’. Fij. *kotiv/a*, To. *kosi*, Sam. *ʔoti*, Mao. *koti*, Rot. *ʔófi*.

- PEO **kutu* (PAN **kutu*) 'louse'. Fij., To., Mao. *kutu*, Sam. *ʔutu*, Rot. *ʔúfu*.
- PEO **kuli* (PAN **kulit*) 'skin'. Fij. *kuli*, To. *kili*, Sam. *ʔili*, Mao. *kiri*, Rot. *ʔúli*.
- PEO **puke* (PAN **buka*) 'uncover'. To. *fuke*, Sam. *fuʔe*, Mao. *huke*, Rot. *húʔe*.
- PEO **ika* (PAN **ikan*) 'fish'. Fij., To., Mao. *ika*, Sam. *iʔa*, Rot. *íʔa*.
- PEO **tiko* 'squat, defecate'. Fij. *tiko*, To. *siko*, Sam. *tiʔo*, Mao. *tiko*, Rot. *fiʔo*.
- PEO *(*n*)*taku* 'back'. Fij. *daku*, Mao. *taku* 'to skirt', Rot. *fʔu*.
- PEO **kari* (PAN **gariz*) 'to scratch'. Fij. *kari*, Sam. *ʔaʔali*, Mao. *kari* 'dig', Rot. *ʔʔi* 'root up'.
- PEO **kami* (PAN **kami*) 'first person exclusive pronoun'. Fij. *kema-* (dial.), Kwara'ae *kami*, PPn **ma(a)*- Rot. *ʔʔmi*.
- PEO **kasi* (PAN **kaskas* 'to scrape') 'bivalve shellfish'. To. *ka/kahi*, Sam. *ʔaʔasi*, Fut. *kasi* 'mussel sp.', Mao. *kaa/kahi* 'freshwater mussel', Rot. *ʔʔsi* 'cockle'.
- PEO **kiRa* 'axe'. Fij. *kia* 'club', Rot. *ʔía*.
- PEO **kinta* (PAN **kita*) 'first person inclusive pronoun'. Fij. *keda*, PPn **kita*, Rot. *ʔíta*.
- PEO **kuku* (PAN **kuku*) 'claw, nail'. Fij. *kuku*, Sa'a *ʔuʔu* 'toe', PPn **maikuku*, Rot. *ʔúʔu* 'hand'.
- PPn **kulu* (PAN **kulu(r)*) 'breadfruit'. Rot. *ʔúlu*.
- PEO **kai* (? PAN **kahiw*) 'tree, wood'. Fij. *kai* (dial.), Ngg. *gai*, Mao. *kai/kawaka*, *kai/koomako* 'tree spp.', Rot. *ʔʔi*.
- PEO * *ka, ka/en, ka/i* (PAN **ka*) 'food'. Fij. *kana*, PPn **kai*, Rot. *ʔá*.
- PEO **uku* 'wipe, wash'. Fij. *uku* 'to adorn', To., Mao. *uku*, Sam. *uʔu*, Rot. *íʔu*.
- PEO **toka* 'come ashore, land'. Fij. *toka* 'to squat', To. *toka*, Sam. *toʔa*, Mao. *to/toka* 'solidify', Rot. *fʔa*.
- PEO **aku* 'scrape out with hands'. Fij. *yaku*, Sam. *aʔu*, Mao. *aku*, Rot. *áʔu*.
- PEO **tuku* 'to place, put down'. Fij., To., Mao. *tuku*, Sam. *tuʔu*, Rot. *fúʔu*.
- PPn **faki* 'pluck, pull out'. To. *faki*, Sam. *faʔi*, Mao. *wha/whaki*, Rot. *hʔi*.
- PEO **taʔaki* 'draw water'. Fij. *taki*, To. *taʔaki* 'dig up, extract', Mao. *taaki* 'take out, as eel-trap from water', Rot. *fʔi*.
- PEO **nsoka* 'stab, pierce, husk coconuts'. Fij. *coka*, To. *hoka*, Sam. *oʔa*, Mao. *oka*, Rot. *sóʔa*.
- PEO **ko-e* (PAN **kaw*) 'thou'. Fij. *ko*, PPn **koe*, Rot. *ʔæéa*.

(b) Rotuman *k* indirectly reflects PEO **k*:

PEO **toko* (PAN **teken*) 'staff, pole'. Fij., To. *toko*. Sam. *toʔo*, Mao. *toko/toko*, Rot. *tóko*.

PEO **toka* 'come ashore, land'. Fij. *toka* 'squat', Sam. *toʔa*, To. *toka*, Mao. *to/toka* 'congeal', Rot. *tóka* 'settle down, subside'.

PPn **katea* 'hull of boat'. To., Mao. *katea*, Rot. *katéa*.

PEO **tawake* 'tropic bird'. Fij. *tawake* 'banner', To. *tavake*, Sam. *tavaʔe*, Mao. *tawake*, Rot. *tævæke*.

PEO **tuki* (PAN **TukTuk*) 'pound, hammer'. Fij., To., Mao. *tuki*, Sam. *tuʔi*, Rot. *tuki*.

PEO **tuku* 'let go, place, put down'. Fij., To., Mao. *tuku*, Sam. *tuʔu*, Rot. *túku* 'go down, become lower'.

PEO **-ʔaki* 'grammatical formative'. Fij. *-aki*, To. *-ʔaki*, Sam. *-aʔi*, Rot. *-ʔóki*.

PPn **kilikili* 'gravel'. To. *kilikili*, Mao. *kirikiri*, Rot. *kirkíri*.

PPn **kiato* (PAN **katiR*) 'outrigger boom'. To., Mao. *kiato*, Sam. *ʔiato*, Rot. *kiáta*.

PPn **kefukefu* 'brown, reddish'. To., Fut. *kefukefu*, Mao. *uru/kehu* 'blonde, of hair', Rot. *kefkéfu* 'dust, powder'.

(c) In the following it cannot be stated definitely that the forms are directly or indirectly inherited since although **k* is reconstructed, it is possible that Rotuman *k* directly reflects **ŋk*:

PEO **ko(dr)o* 'enclosed fortress'. Fij. *koro*, To. *kolo*, Sam. *ʔolo*, Mao. *koro* 'noose', Rot. *kóro*.

PPn **keu* 'move, remove'. To. *keuʔi* 'rebuff', Sam. *ʔeu*, Mao. *keu*, Rot. *kéu* 'push'.

PPn **kava* 'kava'. To. *kava*, Sam. *ʔava*, Mao. *kawa* 'bitter', Rot. *káva*.

PEO **kaso* (PAN **kasaw*) 'rafter'. Fij. *kasó*, Mao. *kaho*, Rot. *kása* 'small roof timbers resting on purlins'.

PEO **kawé* 'to fasten on with straps'. Fij. *kawe/ki* 'to bind a sail', To. *kave/i* 'handle, strap', Fut., Uv. *kare/ga* 'burden', Mao. *kawe* 'to carry by straps', Rot. *kæve*.

PPn **kia* 'neck, throat'. To., Fut., Uv., Mao. *kia*, Rot. *kiá*.

PEO **kiekie* 'pandanus'. Fij. *kiekie*, To. *kie*, Mao. *kiekie* '*Freycinetia banksii*', Rot. *kiakía*.

PEO **ko* 'grammatical particle'. Fij., To., Mao. *ko*, Rot. *kó*.

PEO **kumi* (PAN **kumis*) 'beard'. Fij. *kumi*, Rot. *kumkúmi*.

PPn **kamakama* 'crab sp.'. To., Uv., Fut. *kamakama*, Sam. *ʔamaʔama*, Rot. *kamkáma*.

PEO **kawakawa* 'fish sp.'. Fij. *kawakawa* 'yellow-finned groper', To. *kavakava* 'scavenger fish', Fut. *kavakava*, Rot. *kavkáva*.

PPn **kanapu* 'gannet'. Mao. *kanapu*, Rot. *kaŋpu*.

PEO **kimo* 'wink, blink'. Fij. *kimo/mo*, To. *kemo*, Mao. *kimo*, Rot. *kémo*.

4.9 PEO **ŋk*

PEO **ŋk* (PAN **ŋk*, *ŋg*) is reflected (a) directly and (b) indirectly by Rotuman *k*.

(a) Rotuman *k* directly reflects PEO **ŋk*.¹³

PEO **ŋkala* 'male genitals'. Fij. *qala*, Lau. *qala* 'beget', Rot. *kála*.

PEO **ŋkele* 'dirt, dirty, black'. Fij. *qele* 'earth', To. *kele*, Sam. *ʔele/ʔele*, Mao. *kerekere* 'of very dark night', Rot. *kéle*.

PEO **leŋkileŋki* 'puzzlenut tree'. Fij. *leqileqi*, To. *lekileki*, Rot. *lekiléki*.

(b) Rotuman *k* indirectly reflects PEO **ŋk*:

PEO **tiŋka* 'dart'. Fij. *tiqa*, To. *sika*, Sam. *tiʔa*, Mao. *teka*, Rot. *tíka*.

PEO **loŋki* 'inner room'. Fij. *loqi*, To. *loki*, Sam. *loʔi*, Rot. *ráki*.

(c) In the following it is not clear whether the reflection is direct or indirect:

PEO **saŋka* 'vigorous action'. Fij. *saqa* 'collide', Fut. *saka* 'dance with hand and foot actions', To. *haka* 'hand action in singing', Mao. *haka* 'a vigorous dance', Rot. *sáka* 'to display vigour'.

4.10 PEO **l*

PEO **l* (PAN **l*) is reflected (a) directly as Rotuman *l*, (b) indirectly as Rotuman *r*, and (c) perhaps indirectly as Rotuman *l*.

(a) Rotuman *l* directly reflects PEO *l*:

PEO **pili* (PAN **piliq*) 'select, choose'. Fij. *vili* 'pick up scattered things', To., Sam. *fili*, Mao. *whiri/whiri*, Rot. *híli*.

PEO *(*m*)*pula* (PAN **bulan*) 'moon'. Fij. *vula*, Sam. *pula* 'to shine', Mao. *purapura* 'twinkle', Rot. *húla*.

PEO *(*n*)*tali* (PAN **tali*) 'cord, rope'. Fij. *dali*, Rot. *fóli* 'belt'.

¹³ If PEO **l* can in fact be reflected indirectly as Rotuman *l* (see §4.10 (c)) the history of the three Rotuman forms which follow must be regarded as indeterminate.

PEO **(n)taliga* (PAN **taliga*) ‘ear’. Fij. *daliga*, To. *telinga*, Sam. *taliga*, Mao. *taringa*, Rot. *falíga*.

PEO **tolu* (PAN **telu*) ‘three’. Fij., To., Sam. *tolu*, Mao. *toru*, Rot. *fólu*.

PEO **(n)tul(ie)* (PAN **tuli*) ‘deaf’. Fij. *dule* ‘earwax’, To., Sam. *tuli*, Mao. *turi*, Rot. *fúli*.

PEO **pola* ‘spread out’. Fij. *vola* ‘to make marks, write’, To., Sam. *fola*, Mao. *hora*, Rot. *hóla*.

PEO **pale* (PAN **balay*) ‘house’. Fij. *vale*, To., Sam. *fale*, Mao. *whare*, Rot. *hále* ‘section of house thatch’.

PEO **lako* (PAN **laku*) ‘to go’. Fij. *lako*, Motu. *lao*, Rot. *láʔo*.

PEO **ʔuli* ‘to steer’. Fij. *uli*, To. *ʔuli*, Rot. *úli*.

(b) Rotuman *r* indirectly reflects PEO **l*:

PEO **pulu* (PAN **bulu*) ‘body-hair, fur, feathers’. Fij. *vulu/a*, Sa’a *hulu*, To. *fulu*. Mao. *huru/huru*, Rot. *fúru* ‘pile. nap’.

PPn **fuli* ‘to turn’. Rot. *fúri*.

PEO **kolo* (PAN **keleŋ*) ‘desire’. To. *kolo*, Mao. *koro*, Rot. *kóro*.

PEO **kuli* (PAN **kulis*) ‘skin’. Fij. *kuli*, To. *kili*, Sam. *ʔili*, Mao. *kiri*, Rot. *kíri/á* ‘leprosy’.

PEO **(n)talo* (PAN **tales*) ‘taro’. Fij. *dalo*, To., Sam. *talo*, Mao. *taro*, Rot. *tár/kúra* ‘taro variety’.

PEO **limu* (PAN **lumut*) ‘seaweed, moss’. Fij. *lumi*, To., Sam. *limu*, Mao. *rimu*, Rot. *rímu* lichen sp.’.

PEO **sele* ‘knife, cut’. Fij. *sele*, To. *sele*, Sam. *sele*, Rot. *sére*.

PEO **(n)sala* (PAN **salaq*) ‘to err’. Fij. *cala*, To. *hala*, Sam. *sala*, Mao. *hara*, Rot. *sára*.

PEO **(m)pela* ‘dirty’. Fij. *velavela* ‘nauseous’, Fut. *pela/pela*, To. *pefa* ‘pus, matter’, Mao. *pera* ‘putrefying flesh’, Rot. *pear/péra*.

(c) The following forms suggest that Rotuman *l* sometimes reflects PEO **l* indirectly:

PEO **(n)tali* (PAN **tali*) ‘cord, rope’. Fij. *tali* ‘to plait’, Mao. *tari* ‘a kind of plait’, Rot. *tóli* ‘to plait’.

PPn **kalae* ‘seabird sp.’. Rot. *kalæe* ‘bird with long legs and red beak’.

(d) If the suggestion in (c) above that Rotuman *l* can indirectly reflect PEO *l* is correct, the following forms must be regarded as indeterminate:

PEO **(n)sala* (PAN **zalan*) ‘road’. Fij. *sola*, To. *hala*, Sam. *ala*, Mao. *ara*, Rot. *sála*.

- PEO **sulu* (PAN **suluq*) 'torch'. To. *huhulu*, Sam. *sulu*, Mao. *huru* 'to glow', Rot. *súlu*.
- PEO *(*m*)*pulu* (PAN **pulut*) 'sap, gum'. Fij. *bulu/bulu/li* 'sticky'. To., Sam. *pulu*, Rot. *pul/púlu* 'sticky'.
- PEO **lima* (PAN **lima*) 'five'. Fij., To., Sam. *lima*, Mao. *rima*, Rot. *líma*.
- PEO **laji* (PAN **lajit*) 'sky'. Fij. *laji*, To. *langi*, Sam. *lagi*, Mao. *rangi*, Rot. *lógi*.
- PEO **limu* (PAN **lumut*) 'moss, seaweed'. Fij. *lumi*, To., Sam. *limu*, Mao. *rimu*, Rot. *lúmu*.
- PEO **lajo* (PAN **lajaw*) 'fly (insect)'. Fij. *lago*, To. *lango*, Mao. *rango*, Rot. *lágo*.
- PEO **laya* (PAN **layaR*) 'sail'. Fij. *laca*, To., Fut.. Sam. *laa*, Mao. *raa*, Rot. *láe*.
- PEO **lolo* 'coconut cream'. Fij., To. *lolo*, Mao. *roro* 'bone marrow', Rot. *lólo*.

4.11 PEO **s*, *ns*

PEO **s*, *ns* (PAN **s*, *z*, *Z*, *c*, *j*, *ns*, *nz*, *nZ*, *nc*, *ñj*) are reflected (a) directly, and (b) indirectly as Rotuman *s*, (c) indirectly as Rotuman *h*, (d) indirectly as Rotuman \emptyset , and (e) indeterminantly as Rotuman *j*.

(a) Rotuman *s* directly reflects PEO **s*, *ns*:

- PEO **ponse* (PAN **besay*) 'paddle'. Fij. *voce*, To. *fohe*, Sa'a *hote*, Sam. *foe*, Mao. *hoe*, Rot. *hóse*.
- PEO **nsoka* 'stab, pierce'. Fij. *coka*, To. *hoka*, Sam. *o[?]a*, Mao. *oka*, Rot. *só[?]a* 'dig, husk nuts'.
- PEO **nsakaRu* 'reef'. Fij. *cakau*, Bug. *hagalu*, To. *hakau*, Sam. *a[?]au*, Mao. *aakau* 'shore', Rot. *sa[?]áu*.
- PEO **pinsa* (PAN **pija*) 'how many?'. Fij. *vica*, To. *fiha*, Sam. *fia*, Mao. (*w*)*hia*, Rot. *his/aghúlu* 'how many tens?'.
 PEO **?unsa* (PAN **quzan*) 'rain'. Fij. *uca*, To. *?uha*, Sam., Mao. *ua*, Rot. *úsa*.
- PEO **sika* 'net needle'. Fij. *sika ni lawa*, To. *hika*, Sam. *si[?]e*, Rot. *sí[?]a*.
- PPn **siku* 'tail, end'. To. *hiku*, Sam. *si[?]u*, Mao. *hiku* 'tail of fish', Rot. *sí[?]u* 'hand'.
- PEO *(*n*)*sake* (PAN **sakay*) 'upwards'. Fij. *cake*, To. *hake*, Sam. *a[?]e*, Mao. *ake*, Rot. *sé[?]e*.

(b) Rotuman *s* indirectly reflects PEO **s*, *ns*:

- PEO *(*n*)*sala* (PAN **salaq*) 'to err'. Fij. *cala*, To. *hala*, Sam. *sala*, Mao. *hara*, Rot. *sára*.
- PEO *(*n*)*solo* 'rub, grind'. Fij. *solo*, To. *Olo* (? borrowed), Sam. *olo*, Mao. *oro*, Rot. *sóro*.

- PPn **siki* ‘to lift’. To., Mao. *hiki*, Sam. *siʔi*, Fut. *siki*, Rot. *síki*.
- PEO **sapu* ‘falling water’. Fij. *savu*, Fut. *safu*, Rot. *sófu*.
- PEO **nsudu* ‘to enter’. Fij. *curu*, To., Uv. *huu*, Sam. *ulu*, Fut. *ulu*, Mao. *uru*, Rot. *súru*.
- PPn **tusa* ‘equal to’. To. *tuha*, Sam. *tusa*, Mao. *tuha* ‘to split in two’, Rot. *túsa*.
- PEO **sele* ‘knife; to cut’. Fij. *sele*, To. *hele*, Sam. *sele*, Rot. *sére*.
- PEO **mokosoi* or **mosokoi* ‘*Cananga odorata*’. Fij. *mokosoi* also *makosoi*, To. *mohokoi*, Sam. *mosoʔoi*, Rot. *moskói*.
- PEO *(*n*)*sake* (PAN **sakay*) ‘upwards’. Fij. *cake*, To. *hake*, Sam. *saʔe*, Mao. *ake*, Rot. *sáke* ‘project, jut out’.

(c) Rotuman *h* indirectly reflects PEO **s*, *ns*:

- PEO **tosi* ‘to mark, draw a line’. Fij. *tosi*, To. *tohi*, Sam. *tosi/tosi*, Mao. *tohi* ‘cut, separate’, Rot. *tóhi*.
- PPn **siki* ‘to lift’. To., Mao. *hiki*, Sam. *siʔi*, Rot. *híki* ‘to exaggerate’.
- PEO *(*n*)*sa(n)sa* ‘to hunt, drive’. To. *haha* ‘thrash’, Sam. *sasa* ‘a whip’, Mao. *aa*, Rot. *hahói*.
- PPn **hano* ‘to brood over’. To. *hahano*, *hanono*, Mao. *anoano* ‘alarm’, Rot. *hanóno*.
- PPn **siko* ‘to juggle’. To. *hiko*, Mao. *hiko* ‘snatch’, Rot. *híko*.
- PEO **nsaʔat* (PAN **Zaqat*) ‘bad’. Fij. *caat/a* ‘to dislike’, To. *haʔa*, Rot. *háʔa*.

(d) Rotuman \emptyset indirectly reflects PEO **ns*:

- PEO **nsola* ‘health, well-being’. Fij. *cola* (dial.), Sam. *ola*, Mao., Rot. *óra*.
- PEO **wa(n)se* ‘to divide’. Fij. *wase*, To. *vahe*, Sam. *vae*, Mao. *wehe*, Rot. *váe*.

(e) In the following it cannot be determined whether the reflection of PEO **s*, *ns* is direct or indirect:

- PEO **i(n)su* (PAN **ijuŋ*) ‘nose’. Fij. *ucu*, To. *ihu*, Sam. *isu*, Mao. *ihu*, Rot. *ísu*.
- PEO **monse* (PAN **peZem*) ‘sleep’. Fij. *moce*, Saʔa *mode* ‘inattentive’, To. *mohe*, Sam., Fut. *moe*, Rot. *móse*.
- PEO **o(n)so* ‘provisions’. Fij. *oco*, To. *oho*, Sam. *oso*, Mao. *oo*, Rot. *óso*.
- PEO **nsama* ‘outrigger’. Fij. *cama*, To. *hama*, Sam., Mao. *ama*, Rot. *sáma*.
- PEO **oso* ‘tight, jammed’. Fij. *oso*, Mao. *oo* ‘enter with difficulty’, Rot. *óso*.
- PEO **su(n)su* (PAN **susu*) ‘breast’. Fij. *sucu*, To. *huhu*, Sam. *susu*, Mao. *uu*, Rot. *súsu*.

- PEO **(n)sampo* 'take hold of'. Fij. *cabo* 'to set apart, of food, etc.', To. *hapo*, Sam. *sapo* 'to catch, as of a ball', Mao. *apo* 'to snatch', Rot. *sápo*.
- PEO **(sunu) PPn *sunu* (PAN **(s)u(n)uR*) 'singe, burn'. To., Mao. *hunu*, Sam. *sunu/sunu* 'burnt land', Rot. *susúnu*.
- PEO **ma/ma(n)sa* 'dry'. Fij. *maamaca*, To. *mamaha* 'low tide', Sam. *masa* 'low tide', Rot. *mamása*.
- PEO **seu* 'rake, sweep'. Fij. *seu* 'scratch', To. *heu* 'rake', Sam. *seu* 'shave', Mao. *heu* 'shave', Rot. *séu* 'to catch with sweep of hand'.
- PEO **asi* 'tree sp.'. Fij. *yasi*, To. *ahi*, Sam. *asi*, Rot. *ósi*.
- PEO **a(n)sa* (PAN **(h)ajan*) 'name'. Fij. *yaca*, Ged. *n/ea*, Rot. *ása*.
- PEO **ma-asi* (PAN **asin*) 'salt'. Fij. *ma/asima*, To. *hami* 'coconut cream and seawater', *masima* 'salt', Sam. *sami* 'saltwater', *masima* 'salt', Mao. *maaii* 'fermented', Rot. *mósi*.
- PEO **(n)soka* 'stab, pierce'. Fij. *coka*, Sam. *soʔa*, To. *hoka*, Rot. *sóka* 'root in ground'.
- PEO **sele* 'knife; to cut'. Fij. *sele*, To. *hele*, Sam. *sele*, Rot. *séle* 'to intercept by cutting across at right angles to path of flight'.
- PPn **solo* 'descend, go down'. To. *holo*, Sam. *solo*, Mao. *horo-whenua* 'landslide', Rot. *sólo* 'sink down'.
- PEO **sae* 'slash, tear open'. Ged. *sae* 'to stab', Sam. *sae*, Mao. *hae*, Rot. *sáe* 'open out, separate'.
- PEO **saja* 'fork, crotch'. Fij. *saga*, To. *ha/hanga*, Sam. *saga* 'fin of turtle', Rot. *sága* 'thigh'.
- PEO **(n)saja* 'face towards, act'. Fij. *saga* 'strive', To. *hanga* 'to face', Sam. *saga* 'to be opposite', *aga* 'to act, do', Mao. *hanga* 'to build', *anga* 'to face towards', Rot. *sága* 'to do, act quickly'.
- PEO **sau* 'chief'. Fij. *sau*, To. *hau*, Rot. *sáu*.
- PEO **sea* 'tree sp.'. Fij. *sea/sea*, To. *hea*, Sam. *sea*, Rot. *séa*.
- PEO **sese* 'be wrong'. Fij. *sese*, To. *hee*, Sam. *se/see*, Mao. *hee*, Rot. *sése*.
- PEO **sisi* 'mollusc sp.'. To. *hihi*, Sam. *sisi*, Rot. *sísi*.
- PEO **soa* 'friend'. Fij. *soo-* 'to help', To. *hoa* 'mate, partner', Sam. *soa*, Mao. *hoa*, Rot. *sóa* 'pair'.
- PEO **suRu* (PAN **ZuR₁uq*) 'fluid, liquid'. Fij. *suu* 'broth', Sa'a *sulu*, To. *hu/hua*, Sam. *su/a*, Rot. *sú* 'coconut milk'.
- PEO **wasa* (PAN **sawaj*) 'open sea'. Fij. *wasa/wasa*, To. *vaha*, Sam. *vasa*, Mao. *waa/moana*, Rot. *vása*.

PEO **nsiwa* (PAN **siwa*) ‘nine’. Fij. *ciwa*, To. *hiva*, Sam. *iva*, Mao. *iwa*, Rot. *siva*.

PEO *(*n*)*sala* (PAN **zalan*) ‘road’. Fij. *sala* (also dial. *cal/evu*), PPn **hala*, Rot. *sála*.

PPn **siŋa* ‘to fall’. Rot. *siŋa*.

PPn **hoŋe* ‘to starve’. To. *honge*, Sam. *soŋe*, Mao. *oŋe* ‘be scarce’, Rot. *sóŋe*.

4.12 PEO **r*

PEO **r* (PAN **r*) is reflected (a) directly by Rotuman \emptyset , (b) indirectly by Rotuman *r*.

(a) Rotuman \emptyset directly reflects PEO **r*:

PEO **kari* (PAN **garis*) ‘scratch’. Fij. *kari*, Sam. *ʔaʔali*, Mao. *kari* ‘to dig’, Rot. *ʔʔi* ‘root up’.

PEO **kuru* (PAN **guruq*) ‘rumble, thud’. Fij. *kuru* ‘thunder’, To. *ta/ŋulu*, Mao. *ngu/nguru*. Rot. *ʔú*.

PEO **ʔaro/ʔopa* (PAN **qarep*) ‘love, like’. Fij. *g/arov/a*, To. *ʔalo/ʔofa*, Sam. *t/alofa*, Mao. *aroha*, Rot. *áo* ‘to seek’.

PEO **kara* (PAN **karaj* ‘coral rock’) ‘kind of rock’. To. *fatu/kala*, Sam. *ʔalaa* ‘a stone worn smooth by water’, Mao. *karaa* ‘flint’, Rot. *ʔá* ‘sharp, of edge or point’.

PEO *(*n*)*turu* (PAN **turus*) ‘post’. Fij. *duru*, Mao. *tuu/turu* ‘kneel’, Rot. *fiú* ‘knee’.

PEO **raku* (? PAN **garut* ‘to scratch’). Ngg. *ragu* ‘take a handful’, To. *la/laku* ‘eat clumsily, eat with fingers’, Sam. *laʔu* ‘clear off, carry away’, Mao. *raku* ‘scratch’, Rot. *ʔʔu* ‘scrape out with the hands’.

(b) Rotuman *r* indirectly reflects PEO **r*:

PEO **parau* (PAN **parau*) ‘vessel, fleet’. To. *folau*, Mao. *wharau* ‘canoe shed’, Sam. *folau*, Rot. *foráu* ‘to voyage’.

(c) As there is no evidence that Rotuman *r* ever reflects PEO **r* directly, the following are regarded as cases of indirect inheritance:

PEO **sere* (PAN **zerat*) ‘cord, sling’. Fij. *sere* ‘untie’, To. *hele* ‘noose’, Sam. *sele*, Mao. *here-taniwha* ‘clove-hitch’, Rot. *sére* ‘clove-hitch’.

PEO **seru* ‘comb’. Fij. *seru*, To. *helu*, Sam. *seelu*, Mao. *heru*, Rot. *séru*.

4.13 PEO **R*

PEO **R* (PAN **R*₁, *R*₂, *R*₃, *R*₄) is reflected (a) directly and (b) indirectly by Rotuman \emptyset .

(a) Rotuman \emptyset reflects PEO $*R$ directly:

PEO $*paRu$ (PAN $*baR_{4u}(h)$) ‘hibiscus’. Fij. *vau*, Ngg. *valu*, To., Sam. *fau*, Mao. *whau* ‘*Entelea arborescens*’, Rot. *háu*.

PEO $*paRi$ (PAN $*paRi(h)$) ‘stingray’. Fij. *vai*, Sa’a *hëli*, Lau. *fali*, Sam. *fai*, Mao. *whai*, Rot. *hái*.

PEO $*ʔaRu$ (PAN $*qaR_{3us}$) ‘current, stream’. PPn $*ʔau$, Rot. *áu*.

(b) Rotuman \emptyset reflects PEO $*R$ indirectly:

PPn $*toa$ (PAN $*teR_{2as}$) ‘tree sp.’. To. *toa* ‘casuarina’, Mao. *toa/toa* ‘*Phyllocladus trichomanoides*’, Rot. *tóa* ‘casuarina’.

PEO $*paʔoRu$ (PAN $*baqeR_{1u}(h)$) ‘new’. Fij. *vou*, Lau *faalu*, Rov. *vaquru/na*, PPn $*foʔou$, Rot. *foʔóu*.

(c) In the following cases it cannot be determined whether the reflection of PEO $*R$ is direct or indirect:

PEO $*suRuʔ$ (PAN $*ZuR_{1uq}$) ‘fluid, liquid’. Fij. *suu* ‘broth’, Sa’a *sulu*, To. *hu/hua*, Sam. *su/a*, Rot. *sú* ‘coconut milk’.

PEO $*meRa$ (PAN $*iRaq$) ‘reddish’. Sa’a *mela* ‘to glow’, To., Mao. *mea*, Rot. *maf/méa* ‘red-eyed’.

PEO $*uRa$ (PAN $*uR_{2at}$) ‘sinew, vein’. Fij. *ua*, Sa’a *ule/ule*, Ngg. *ula*, Sam. *uaua*, Mao. *ua*, Rot. *ua/úa*.

4.14 PEO $*ʔ$

PEO $*ʔ$ (PAN $*q$) is reflected (a) directly by Rotuman \emptyset and (b) indirectly by Rotuman $ʔ$.

(a) Rotuman \emptyset directly reflects PEO $*ʔ$:

PEO $*ʔa(n)ta$ (PAN $*qantaD$) ‘shadow’. To. $*ʔata$ ‘mark’, Mao., Sam. *ata*, Rot. *áfa*.

PEO $*ʔate$ (PAN $*qatay$) ‘liver’. Fij. *yate-*, To. *ʔate*, Sam., Mao. *ate*, Rot. *áfe*.

PEO $*ʔatu$ (PAN $*qatur$) ‘line, row’. Fij. *yatu*, To. *ʔotu*, Sam. *atu*, Rot. *ófu*.

PEO $*(ʔuta)$ PPn $*ʔuta$ (PAN $*qutan$) ‘inland’. To. *ʔuta*, Sam., Mao. *uta*, Rot. *úfa*.

PEO $*ʔunsa$ (PAN $*quzan$) ‘rain’. Fij. *uca*, To. *ʔuha*, Sam., Mao. *ua*, Rot. *úsa*.

PEO $*(ʔunap)$ (PAN $*qunap$) ‘(fish) scale’. To. *ʔuno*, Sam. *unafi*, Mao. *unah/i*, Rot. *unéh/i*.

PEO $*ʔoti$ (PAN $*qen(t)i$) ‘finished, completed’. Fij. *oti*, To. *ʔosi*, Sam., Mao. *oti*, Rot. *ófi*.

PEO **ma-(n)taʔu* (PAN **taqu*) ‘accustomed, suited’. Fij. *dau-*, To. *ma-taʔu* ‘right (hand)’, Sam. *tau* ‘particle marking habitual action’, Mao. *tau*, Rot. *ma-fáu* ‘right (hand)’.

PEO **taʔu* (PAN **taqun*) ‘season, year’. Sa’a *ëu*, To. *taʔu*, Sam., Mao. *tau*, Rot. *fáu*.

PEO **tuʔa* (PAN **tuqa*) ‘old’. To. *ma/tuʔa*, Sam., Mao. *ma/tua*, Rot. *ma/fúa*.

PEO **tuʔu* (PAN **tuqud*) ‘stand’. Fij. *tuu*, To. *luʔu/laki* ‘stand in position’, Sam., Mao. *tuu*, Rot. *fú*.

PEO **(ma-ʔanu)* (PPn **ma-ʔanu*) (PAN **qanud*) ‘be afloat’. To., Uv., Fut. *ma-ʔanu*, Sam., Mao. *maanu*, Rot. *mónu*.

PPn **muʔa* ‘front’. To., Uv. *muʔa*, Mao., Fut. *mua*, Rot. *múa*.

(b) Rotuman *ʔ* indirectly reflects PEO **ʔ*:

PEO **nsaʔat* (PAN **zaqat*) ‘bad’. Fij. *caat/a*, To. *haʔa*, Rot. *háʔa* ‘forbidden’.

PEO **-ʔaki* ‘grammatical formative’. Fij. *-aki*, To. *-ʔaki*, Sam. *-aʔi*, Rot. *-ʔóki*.

PEO **paʔu* ‘tie, bind’. Fij. *vau-ca*, To., Fut., Uv. *faʔu*, Sam. *fau*, Mao. *wha/whau*, Rot. *fǔʔu*.

PEO **paʔa* ‘to split’. Fij. *va/sia* (also *va/cia*) ‘to cut yams for planting’, To., Fut., Uv. *ma-faʔa* ‘cracked open’, *faʔa/i* ‘to stretch open’, Sam. *faa/si*, Mao. *waa/hi*, Rot. *fáʔa* ‘tear, rend’.

PEO **(m)paʔa* ‘stem of ensiform leaves’. Fij. *baa*, To., Fut. *faʔa*, Sam. *faa*, Mao. *whaa*, Rot. *fáʔa* ‘food made from taro stems’.

PPn **maʔa* ‘clean, clear’. To., Fut., Uv. *maʔa*, Sam. *ma/maa*, Rot. *máʔa*.

4.15 PEO **w*

PEO **w* is reflected (a) directly and (b) indirectly by Rotuman *v*.

(a) Rotuman *v* directly reflects PEO **w*:

PEO **waka* (PAN **waka(r)*) ‘root’. Fij. *waka*, Sa’a *waʔawaʔa* ‘wild yams’, Mao. *waka*, Rot. *váʔa*.

PPn **weka* ‘bird sp.’. To. *veka*, Mao. *weka*, Rot. *véʔa*.

(b) Rotuman *v* indirectly reflects PEO **w*:

PEO **wale* ‘ordinary, worthless’. Fij. *wale*, To. *vale*, Mao. *ware*, Rot. *vá/váere*.

PEO **wiri* ‘to twist, bore’. Fij. *wiri* ‘revolve’, Ngg. *viri* ‘bind round and round’, Bug. *viri* ‘twisted’, To., Sam. *vili*, Mao. *wiri*. Rot. *víri*.

(c) In the following forms it is not clear whether the reflection is direct or indirect:

PEO **wai* (PAN **wayeR*) ‘water’. Fij., To., Sam., Mao. *wai*. Rot. *vɔl*.

PEO **walu* (PAN **walu*) ‘eight’. Fij. *walu*, To., Sam. *valu*, Mao. *waru*, Rot. *vólu*.

PPn **wao* ‘forest’. To. *vao*, Mao. *wao*, Rot. *váo*.

PEO **waŋka* (PAN **waŋkaŋ*) ‘canoe’. Fij. *waqa*, To., Fut. *vaka*, Sam. *vaʔa*, Mao. *waka*, Rot. *váka*.

PPn **wawe* ‘quick’. To. *vave*, Mao. *wawe*, Rot. *væve*.

PEO **lawe* (PAN **lawi*) ‘feather’. Fij. *lawe*, Sam. *lave*, Rot. *lalóvi*.

PEO **wii* ‘*Spondias dulcis*’. Fij. *wii*, Sam. *vii*, Rot. *ví*.

4.16 PEO **m*

PEO **m* (PAN **m*) is (a) directly and (b) indirectly reflected by Rotuman *m*.

(a) Rotuman *m* directly reflects PEO **m*:

PEO **mata*¹ (PAN **mata*) ‘eye’. Fij., To., Sam., Mao. *mata*, Rot. *máfa*.

(b) Rotuman *m* indirectly reflects PEO **m*:

PEO **(munde)* ‘blow gently; breeze’. Fij. *mudre*, Mao. *muri/muri*, Rot. *múre*.

4.17 PEO **n*

PEO **n* (PAN **n, ñ*) is reflected (a) directly and (b) indirectly by Rotuman *n*.

(a) Rotuman *n* directly reflects PEO **n*:

PEO **ntuna* (PAN **(t)u(n)a*) ‘eel’. Fij. *duna*, PPn **tuna*, Rot. *fúna*.

PEO **tunu* (PAN **tunu*) ‘to cook’. Fij. *tunu* ‘warm up food’, PPn **tunu*, Rot. *fúnu*.

PPn **nofo* ‘to sit, dwell’. To., Sam. *nofo*, Mao. *noho*, Rot. *nóho*.

PEO **/mp/anupe* ‘caterpillar’. Fij. *banuve*, To. *ʔunufe*, Mao. *anúhe*, Rot. *niha*.

(b) Rotuman *n* indirectly reflects PEO **n*:

PEO **pana* (PAN **panaq*) ‘shoot’. Fij. *vana*, To. *fana*, Mao. *whana*, Rot. *fána*.

PPn **nofo* ‘sit, dwell’. Rot. *nofó/ʔa* ‘chair’.

4.18 PEO *ŋ

PEO *ŋ (PAN *ŋ) is reflected (a) directly and (b) indirectly by Rotuman *g*, and (c) indeterminantly by *n* when *ŋ occurs before *u.

(a) Rotuman *g* directly reflects PEO *ŋ:

PEO *paŋa (PAN *paŋa) 'to feed'. Ngg. *vanga* 'food', Mao. *whaanga'i*, Rot. *hága*.

PEO *(peŋu). Mao. *whengu* 'snort', Rot. *hégu* 'blow the nose'.

(b) Rotuman *g* indirectly reflects PEO *ŋ:

PPn *ŋaakau 'guts', Rot. *gakau* 'small intestine'.

PEO *taŋa (PAN *taŋa) 'bag'. Fij. *taga*, To. *tanga/i*, Rot. *tága*.

(c) Rotuman *n* reflects PEO *ŋ before *u, indeterminantly:

PEO *ŋu(ts)u (PAN *ŋu(s)u) 'mouth, lips'. PPn *gutu 'lips', Fij. *gusu*, Rot. *núju*.

PPn *ŋuu 'squid, cuttlefish'. To. *nguufeke*, Mao. *nguu*, Rot. *nú*.

5 Discussion

5.1 The source of the indirectly inherited component of Rotuman lexicon

It is clear that Rotuman has borrowed extensively from a related language or languages. Other things being equal, near rather than far-distant islands are most likely sources. Vanua Levu, the most northerly island of importance in the Fijis, lies 240 miles [385 km] to the south and in recent times some Fijian words have come into use in Rotuman, for there is frequent communication with Fiji, and many Rotumans are resident in Suva. However, there is little or no evidence to suggest that any of the Fijian dialects had extensive influence on the language in pre-contact times.

Funafuti, nearest island of the Tuvalu group, is 260 miles [420 km] to the north and there is some reference to contact with Tuvalu in Rotuman traditions. The rather inadequate linguistic sources for the group provide no evidence that points specifically to Tuvalu as the source of borrowing. Yet it can hardly be doubted that some part of Polynesia provided the indirectly inherited component of Rotuman. Almost every word so classified has Polynesian cognates, and the meaning correlation is usually precise. Moreover the physical traits of Rotumans imply long contact with Polynesians.

To the east and south-east of Rotuma are Futuna (238 miles [385 km]), Uvea (375 miles [605 km]), Niufo'ou (460 miles [740 km]) and Savai'i, the most northerly and westerly island of the Samoan group (636 miles [1025 km]). As noted previously the dialects spoken on Niufo'ou and Uvea group with Tongan, as opposed to Samoan and Futunan. By far the greatest number of Polynesian voyages historically attested have been from east to west, and

it would not be surprising to find Rotuman contacts in this quarter. It turns out that Rotuman traditions are definite in associating at least two occupations of their island with the Samoa–Tonga area, particularly the islands of Savai'i and Niuafo'ou.

There are several phonological points which suggest that both the Samoa–Futuna and Tonga–Uvea–Niuafo'ou areas were sources of influence on Rotuman:

- (i) Rotuman words in which *h* reflects **(n)s* indirectly (§4.11c) strongly suggest borrowing from Tongan or Uvean, the only relatively near Polynesian islands which reflect these protophonemes as *h*.
- (ii) Rotuman words in which *ʔ* indirectly reflects **ʔ* (§4.14b) suggest the same source. While Futunan also reflects **ʔ* as *ʔ* in some words at present, there is evidence that these words are loan words in Futunan too.
- (iii) Rotuman *s* indirectly reflecting **s* (§4.11b) suggests a Samoa – Futuna source.
- (iv) Rotuman *∅* indirectly reflecting **(n)s* (§4.11d) suggests a Samoa – Futuna source.

If we conclude that Tonga – Uvea – Niuafo'ou and Samoa – Futuna both contributed to the Rotuman lexicon two further points are raised:

- (v) There are no Rotuman forms indirectly reflecting **k* as *ʔ*, the present Samoan reflex. This suggests that Samoan has made the *k* to *ʔ* shift recently, a suggestion supported by the fact that it is the only language in the western Polynesian area to have made this shift.
- (vi) There are no Rotuman forms indirectly reflecting **ʔ* as *∅*, as Samoan does at present. Since Tuvaluan, Tokelauan, Niuean, and all of the outliers except Rennell reflect **ʔ* as *∅*, it is not plausible to argue that this shift too is recent in Samoa, even though the recent discovery of the Easter Island reflex *ʔ* from **ʔ* suggests that the loss of the glottal postdates the Samoa – Eastern Polynesia split. It is more likely that the lack of a zero reflex of *ʔ* in an indirectly inherited form is accidental, and related to the relative infrequency of the protophoneme.

5.2 The extent of borrowing in Rotuman

Of 328 Rotuman words with etymologies, 124 (38%) are directly inherited, 107 (33%) are indeterminable, and ninety-seven (29%) are indirectly inherited. The last figure indicates the massive nature of Polynesian influence on Rotuman, influence which has not been confined to non-basic vocabulary, for of the fifty-eight items on the 200-word basic vocabulary list which contain diagnostic reflexes fifteen (25.5%) are borrowed. If, on the grounds that they are probably directly inherited (see §4.10), twenty-eight basic words containing *l* are added to the forty-three words which are definitely in this category, the percentage of indirectly inherited words drops to eighteen, a figure which is possibly low, since we have now been less rigorous in defining the directly inherited component.

It is not unreasonable to suppose that the proportion of borrowed to inherited words is about the same in the whole 200-word list as it is in the eighty-three words with diagnostic

reflexes, and to conclude that at least 18% of Rotuman basic vocabulary is borrowed. The same reasoning and calculations applied to the total reconstructed vocabulary suggests that 43% of the recognisably Oceanic portion of Rotuman lexicon results from external (mainly Polynesian) influence.

Just what effect this has had on cognate percentages with other languages is not clear, except in the case of Polynesian comparisons, and here the expectation that they will be raised is confirmed by the following conflation of figures taken from Grace (1959), Pawley (1962) and Walsh (1963) all of which show Tongan–Rotuman and Samoan–Rotuman as sharing more cognates than Fijian–Rotuman.

Table 6: Cognate percentages among Tongan, Samoan, Fijian and Rotuman

	Rotuman–Tongan	Rotuman–Samoan	Rotuman–Fijian
100-word list	31–38	30	25–34
200-word list	25–31	26	16–22

The Samoan–Rotuman indices are from Pawley (1962) whose comparable figures for Tongan–Rotuman were 31% and 25%. No one, as far as I know, has suggested that Rotuman is actually closer to Polynesian than to Fijian, so the conclusion seems inescapable that the higher cognate percentages shared by Rotuman with Samoan and Tongan are due to borrowing.

5.3 Minor morphemes borrowed from Polynesian

The following minor morphemes (function words) were noted as borrowed by Rotuman, probably from Polynesian sources:

- (i) *ko* (PEO **ko*). This particle is prominent in Polynesia and Fiji, where it is usually called a specifying particle. In Rotuman it is a vocative particle, *ko gagaj* ‘ye assembly of chiefs’!
- (ii) *-ʔ oki* (PEO *ʔ *aki*). Borrowed from Tongan, this suffix is fully productive in Rotuman where, as in Tongan, it is suffixed to verbs to indicate cause or instrument.
- (iii) *fak(a)-* (PEO **paka*). This prefix is widespread in Oceania. In Rotuman the indirectly inherited form, which is fully productive, can be glossed ‘to resemble, to pertain to, to have the quality of’, while the directly inherited doublet *aʔ (a)-* retains the more widespread causative function. Thus *faksoge* ‘to be short of food, to starve’ but *aʔsoge* ‘to cause to be without food, to starve’.

5.4 Conclusion

Besides the identifiable PEO elements in Rotuman, which we have attempted to further define as directly or indirectly inherited, there are many English loan words borrowed over

the past 175 years. These are noted as such by Churchward (1940) in his *Rotuman grammar and dictionary*. Many words in the total lexicon remain unidentified but some of these will no doubt be later recognised as Oceanic.

There is no reason to think that Rotuman is unique among Pacific languages. Indeed it has often been asserted that the Melanesian languages contain more than one vocabulary component, usually distinguished as Austronesian on the one hand and Papuan, Aboriginal, or some such, on the other. Less frequently it has been pointed out that, as is the case in Rotuman, the Austronesian element itself may be composite. Elbert (1965) has demonstrated that there are substantial borrowed components, in part identifiable as Austronesian, in a number of Polynesian outliers. Borrowing, including perhaps indirect inheritance, may also explain the occurrence of *p*, *v* and *k*, *g* in such languages as Roviana, Bambatana, Nggela and Lau of the Solomons, and Mota of the Banks Islands, though other hypotheses need to be tested (see Haudricourt (1965) and Holmer (1965)).

In general what we know of culture history in the Melanesian area suggests a complex rather than a simple linguistic history, involving a good deal of movement in certain maritime areas, and long continued contact among speakers of related languages (e.g. in the Solomons and Vanuatu) and unrelated languages (e.g. the New Guinea coast). It would be surprising indeed if such contacts did not have substantial effects upon the languages concerned, effects which could be vitally important to comparative work, and to our understanding of Pacific prehistory. While talk of substrata and mixed languages may in fact introduce concepts which are both ill-defined and unhelpful, the multiple origins of Melanesian lexicons, if real, should be studied. Failure to examine the extent to which one language has been affected by others can lead to erroneous subgrouping. On the positive side, the identification of various components in a lexicon provides clues to linguistic migrations, an aspect of linguistics with which Malayo-Polynesianists are much concerned.

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2 ‘Necessary’ and ‘unnecessary’ borrowing

ROSS CLARK

This paper examines the English loan words in an Oceanic language, Ifira-Mele (formerly known as ‘Mele-Fila’), with a view to asking: why are they there?¹ The data are incomplete and in some ways unsystematic, as the question has only gradually begun to bother me in the course of a general descriptive and comparative study of the language. Still, I present some observations in order to raise some questions that as far as I know have not been considered before in the Oceanic context. Previous writers on loan words in various Oceanic languages (e.g. Schütz 1970, 1978; Elbert 1970; Hollyman 1962; Milner 1957; Tryon 1970; Vernier 1948) have given extensive lists of words, have classified them as to source, historical period and semantic area, and analysed the phonological transformations attendant upon borrowing. By and large, however, they have taken the culture contact of the last two centuries as a general and self-evident explanation for why the words are there to begin with.

The general linguistic literature on borrowing has been based on a somewhat restricted range of data. Most of the examples used by such writers as Bloomfield (1933), Weinreich (1953) and Deroy (1956) involve borrowing among the national languages of Europe, or into the languages of minority communities in America, whether immigrant or native. Except for the spectacular phonological restructuring of loan words in Hawaiian, Oceania has not figured in such discussions.

Ifira-Mele is one of about 100 Oceanic languages spoken in the Republic of Vanuatu. Its speech community is larger than average for the area, numbering almost 2500 people, of whom 1500 live in Mele village, where most of my work has been done. Ifira-Mele is the first language of nearly everyone in the village, and is used every day by persons of all ages, in contexts ranging from domestic intimacy to public meetings. But the presence and the

¹ This is an edited and up-dated version of the paper that first appeared in Amran Halim, Lois Carrington and S.A. Wurm, eds (1982), *Papers from the Third International Conference on Austronesian Linguistics*, vol. 3: *Accent on variety*, 137–143. Canberra: Pacific Linguistics.

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influence of English, French and Bislama² are evident at every turn. Instruction in the two elementary schools is entirely in English or French. In the church, while Ifira-Mele is commonly used in prayers, sermons and announcements (which are locally composed), Bible readings and most hymns are in English, Bislama or the neighbouring Erakor dialect of the South Efate, since no mission translations into Ifira-Mele exist. And when there is a visiting party from another village (an increasingly common event) the entire service may be in Bislama. The same switch to Bislama occurs on a variety of other occasions when visitors from outside the village are present.³ Radio Vanuatu provides several hours a day of broadcasting mainly in Bislama, but with some programmes in English and French.⁴ And, of course, the many Mele people whose daily work takes them to the nearby town of Vila (whether as domestics, labourers, office workers or simply sellers of produce in the market) must use these languages for a major segment of their lives.

Loan words of recent origin will appear in almost any sample of Mele speech over a few sentences in length, and the number in my lexical files is in the hundreds, despite a methodological bias against them.⁵ Let us first look at a random sample of a dozen of them:

<i>aeani</i>	'iron'	<i>marseni</i>	'pill, medicine'	<i>Sarerei</i>	'Saturday'
<i>fooko</i>	'fork'	<i>nakitae</i>	'necktie'	<i>suusaa</i>	'jew's harp'
<i>kakau</i>	'cacao, cocoa'	<i>peelo</i>	'bell'	<i>taatuu</i>	'tattoo'
<i>laemu</i>	'lemon, lime'	<i>raisi</i>	'rice'	<i>waea</i>	'wire'

² Bislama is the local term for the dialect of Melanesian Pidgin English which is used as a lingua franca in Vanuatu. Other dialects are spoken in the Solomon Islands and Papua New Guinea, the latter being quite well known under the local name Tok Pisin. For descriptions of Bislama see Camden (1977), Crowley (1990, 1995), and Guy (1974).

³ Except for the several hundred people of nearby Ifira Island, 'outside the village' implies a different language. It is probable that in pre-European times there was much bilingualism between Ifira-Mele and the neighbouring dialects of Efate. Although quite a few middle-aged and older people are still bilingual, this is probably due in large part to the former use of the South Efate language in church and school. It seems likely that the availability of Bislama is tending to eliminate this local bilingualism, except perhaps for those with close kin ties to neighbouring villages. Also present in Mele are a small number of people born elsewhere who have taken up residence there, mainly as a result of marrying Mele people. Unfortunately I have no data on language use in such households.

⁴ There is no regular use of vernacular languages on the radio. The only occasions on which I have heard them (aside from local string-band songs) were a short prayer in the Ifira dialect as part of a special church service, and a number of emergency messages addressed to particular areas by custom chiefs and politicians during the political crisis of 1980.

⁵ That is, one tends to assume that the word for 'spoon' or 'bicycle' will be an English borrowing, and hence not to bother asking for such 'obvious' items. Informants, too, may give answers of the form, 'Oh, we don't have a word for that—we just say *spoon* ...' or whatever. My own strong interest in comparative Polynesian problems also makes me tend to overlook this recently acquired vocabulary.

This sample is nicely representative of the corpus in a number of respects. All but one are from English (*kakau* is almost certainly French, and *taatuu* is equivocal). In most cases it is impossible to distinguish between words borrowed directly from English, and words of English origin borrowed from Bislama, although given the relative amount of knowledge of the two, Bislama has probably been much more important as an immediate source. All the words are nouns (*taatuu* can also be a verb), all are concrete (except perhaps *Sarerei*), and all relate to new things and concepts of European introduction.

This is the common and unproblematic pattern of 'cultural borrowing'. It should be noted, however, that even loans like the above are not strictly necessary. In addition to borrowing, semantic extension of existing lexical items and creation of new lexical forms from existing material (neologism) are recognised as alternative means available to every language for dealing with novelty in the world of experience. Ifira-Mele has made some use of these processes:

<i>nifo</i>	'tooth; horn (of an animal)'
<i>kanukanu</i>	'to decorate, make designs; to write'
<i>suisui</i>	'gun' (from <i>suisui</i> 'to blow [v.i.]')
<i>injini māanamu</i>	'lawnmower' (from <i>injini</i> 'engine, machine', <i>māanamu</i> 'grass')
<i>panu furufuru</i>	'carpet' (from <i>panu</i> 'mat', <i>furufuru</i> 'hairy')

But borrowing appears to be a much more common choice. By contrast Dorais (1978:22), in his study of the 'modern vocabulary' of the Quebec-Labrador dialects of the Inuit (Eskimo) language, found that neologisms accounted for roughly 77% of the total corpus, semantic extension for 16% and borrowings for only 7%. One obvious explanation that comes to mind is the much more complex derivational morphology of Inuit. But Ifira-Mele appears not to make much use even of such morphological resources as it has. For instance, there is a prefix *nii-* deriving nouns of instrument from verbs, as in:

<i>niikura</i>	'oven rake' (from <i>kura</i> 'arrange stones in oven')
<i>niikupi</i>	'throwing stick' (from <i>kupi-a</i> 'knock down (fruit) with a throwing stick')

The potential usefulness of such an affix can be seen from the fact that about 60% of the neologisms in Dorais' corpus described the function or use of the object (e.g. *qirng-uti* 'what is used for searching) telescope'). Ifira-Mele, however, appears not to have used *nii-* at all to create terms for European things. Thus it appears that structural factors alone cannot account for the choice of one mechanism over another. (This point is made by Weinreich 1953:61–62.)

The inadequacy of 'need' as an explanation can also be seen from numerous cases where an earlier semantic extension or neologism has been replaced by a borrowing. Bread, for example, was apparently originally referred to as *kuau itoga* 'foreign laplap', since in composition, method of preparation and importance in the diet it is fairly similar to the traditional Vanuatu food.⁶ This expression, however, is now obsolete, and the normal term is

⁶ 'Laplap', a word of uncertain origin, is used in Bislama as well as in local English and French to refer to 'a wide range of traditional food dishes, which are prepared by grating or slicing yam, taro, manioc, kumala, banana, breadfruit, etc., wrapping it in leaves, with or without meat, fish, greens, etc., and cooking it in hot stones in an earth oven' (Camden 1977:55).

pireete. Miller (1971) gives similar examples from Shoshoni, such as *tuuhupa* '(black soup) coffee', being replaced by *koppi*.

One can suggest a number of reasons why, in the absence of a self-conscious 'purist' movement, there should be a universal tendency to replace neologisms or extensions with loan words. In general, neologisms will be polymorphemic and hence longer than monomorphemic borrowed forms. Mithun and Chafe (1979:30) give the rather extreme example of Mohawk *iontewennata'ahstakhwa* '(one uses it for inserting the voice) telephone', cited by native speakers as evidence of the inconvenience of Mohawk for dealing with the modern world.

Extensions are also vulnerable to replacement because, by definition, they ignore a distinction which is lexicalised in the donor language. To the highly bilingual speaker, such a non-distinction may even be embarrassing: 'It's really bread, of course, but we call it "laplap"!' It may also be that increasing familiarity with, and adoption of, the new culture makes speakers more aware of differences, e.g. between bread and laplap, where previously a broad similarity had been perceived (Weinreich 1953:59).⁷

So far the examples considered have all fallen within the semantic area of recent innovations of European origin. To turn our attention to some examples outside this area immediately raises the question of what is 'new' and what is not. Despite the manifest physical differences between Europeans and Melanesians, I do not know of any cases of new body-part terms being borrowed or coined to refer to European skin, hair, eyes, etc. Such categories of material culture as 'knife' and 'house' are carried over without lexical innovation, despite important differences between the European and Melanesian versions of such things. The differences, therefore, are not a sufficient explanation when borrowing does take place. The difference between work as a social institution in European and Melanesian society, for example, is not in itself enough to account for some people's use of *wooka* instead of the indigenous word *wesiwesi*. One might speculate that *wooka* would be introduced with the specialised meaning 'work for wages', while *wesiwesi* would be applied to 'work on one's own house or garden, etc.' I do not have enough data to say whether there is any such tendency; but my (middle-aged) informants, at least, did not perceive it that way. They rather condemned *wooka* as an abusive borrowing, when a perfectly good indigenous synonym existed. Nor will the obvious differences explain why *niisara* 'broom' is now less common than *puroomu*.

Newness may be as much a new way of thinking about existing things as a new thing. The words *Niuepiritis* 'New Hebrides' and *kastomu* 'traditional culture' are frequently heard in modern discussions in Mele, but have no equivalent indigenous expressions, since there was previously no notion of a local group of islands distinguished from the rest of the world, or of traditional culture as opposed to modern ways.

⁷ One circumstance which may increase the viability of an extension is where the original referent becomes obsolete or of marginal importance relative to the new referent. Miller (1971) gives the following examples from Shoshoni: *kuicuu* 'buffalo' was extended to include 'cow'; 'cow' then became the focal meaning of the term, with the result that to specify 'buffalo' one must say *piakuiccu* 'big cow'; *?eti* 'bow' was extended to 'gun', which is now the primary meaning, with 'bow' being referred to as *huu ?eti* 'wooden gun'.

In some cases it appears that borrowing may be brought about by a concept that is not necessarily new, but has not been conveniently lexicalised in the language before. Haiman (1979:84) mentions a number of examples where Hua (spoken in the Eastern Highlands of Papua New Guinea) has borrowed an apparently 'unnecessary' word from Tok Pisin, apparently because it provides a general term where the language had previously had only a set of more specialised words. Thus *opim* (*hu*) 'open (v.t.)' covers a semantic range previously inhabited by 'a half-dozen verbs for various kinds of opening'. The same pattern appears in the Mele *waase* 'wash' and *kuuku* 'cook (v.t.)'. In both cases, culture contact not only expanded the range of techniques, but also provided a general term to go with the various specifics (e.g. *taona* 'cook in earth oven', *tuunaa* 'grill', *noopaa* 'steam', *faraeni* 'fry', etc.).

One effect of this adoption of general terms may be confusion and eventual loss of the specialised terms. Haiman (1979:85) notes that this often happens in Hua.⁸ The eventual loss of these terms would leave a later investigator with the impression that no indigenous lexical items had existed in the domain. Something like this may account for the persistence of the word *storii* 'story' in Mele. Informants claim that *atarā matua* is the proper Mele expression, but this is much more general, *atarā* meaning 'language, words, speech', and *matua* 'old'. Evidence from other Polynesian languages would lead one to expect two or three words for different types of traditional narrative, and it seems at least possible that these may have been lost, along with other specialised vocabulary, in the severe erosion of Mele's traditional culture in the last hundred years.

Some other words appear to have filled lexical gaps other than the lack of a generalising term. (Perhaps it would be less teleological to say that they seem to have taken up residence in previously uninhabited areas of semantic space.) I have been unable to elicit any indigenous Mele term translating 'learn', for which *laeni* is used. The modal *mas* 'must' conveys a sense of obligation which seems to have been difficult to express in the old language—the convenient expressions being a verb particle covering anything from imperative to statement of future plans, and a higher verb meaning 'it is good that ...'. *Impotene* 'important' seems to be a usefully specific term within areas like 'big' and 'heavy'.

Bloomfield divided all borrowing between distinct languages (that is, other than dialect borrowing) into 'cultural' and 'intimate'. Any borrowing beyond the semantic sphere of 'cultural novelties' could take place only in a situation where the donor language was socially dominant over the receptor. Nineteenth-century linguists might have been comfortable talking about the 'superiority' of the dominant language; modern writers would rather stress its 'prestige'. But if this asymmetry were sufficient as an explanation, one would expect borrowings to be randomly distributed throughout the lexicon. This seems not to be the case.

The closest thing to such a 'prestige' field-effect is the apparent clustering of loans whose content is, strictly speaking, non-novel, in areas of association with Europeans: school, wage labour, the money economy, and politics. The small sample on which this paper is mainly based includes *sapote* 'support', *joeni* 'join' and *mempa* 'member' in the organisational

⁸ Weinreich (1953:54) suggests that such confusion may take place even without actual borrowing simply through interference in the speech of bilinguals. For example, in American Yiddish, under the influence of English *go*, an original distinction between *gejn* 'go on foot' and *for* 'go by vehicle' is tending to be lost, with *gejn* replacing *for*.

sphere; *salemu* 'sell', *puuaa* 'poor' and *riiji* 'rich' in the economic. One could answer that these are all or mainly in fact new concepts, except that informants offer Mele synonyms, suggesting that at least some closely related notion existed in pre-European times. It is also probably not a coincidence that *kuuku* and *waase*, mentioned above, are among the most common domestic tasks performed by Melanesians for Europeans. The clearest example of the prestige effect, however, and one which is apparently much more widespread than Mele, is the numerals. Although Mele has a decimal number system capable in theory of reckoning at least into the tens of thousands, the indigenous numerals are rarely used beyond about five, and then mainly by older persons attempting to be formally correct. Some adolescents do not even know the higher numerals. Clearly the reason for this is the much greater European emphasis on counting and reckoning, particularly with regard to time and money, reinforced by daily teaching in the schools. These two areas, in fact, have probably always been reckoned solely in English. Certainly one says *tu kalooko* and not **rua kalooko* for 'two o'clock'. This is probably the reason why *taemu* 'time' is apparently replacing the native word *malo*, though one can still say either *temalo afa?* or *t'taemu afa?* 'what time is it?'

Above 'ten', the Mele numerals are probably also disfavoured by the 'mechanical factor' mentioned above—that of simply being longer and hence less convenient than their competitors. This factor has been exaggerated by some writers—surely the difference in length between *hitten* and *schlagen* (Clyne 1967:79) could not in itself bring about a systematic preference for the former—but a Mele expression like *mijikao eerua antuuma gafuru eeono antuuma eefaa* '264' is clearly at a disadvantage relative to *tu anreti sikisti foaa*.

A final group of words does not seem to be much like any of those previously considered, but finds parallels in many other languages. The 'connectives' *ale*, *nao* and *oraet*, roughly translatable by 'well ...', 'so ...' or 'then ...', are conspicuous in narrative, even traditional stories told by older speakers who were making a conscious effort to avoid English borrowings. Hill and Hill (1977:62) mention hesitation forms and connectives (such as *entonces* 'then', *hasta* 'until') as among the most common Hispanicisms in their Nahuatl texts; similar words ('well', 'anyway', 'you know', 'you see') are common in the speech of Clyne's (1967:75–76) German-speaking Australians. Many mysteries remain. Among my favourites are *staaji* 'start', one of the most common, for which *tuulake* appears to be a perfect semantic and grammatical equivalent; *insaiji* (Mele *iroto*) 'inside'; and *auji* 'come/go out' (Mele *tave*). Nevertheless I conclude by echoing Hainan's belief that 'the borrowing is not random and indiscriminate'. There is still a need for a convincing theory of the 'why' of borrowing, what Weinreich (1953:61) refers to as 'one of the unsolved problems of language contact'.

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3 *Borrowing into Pacific languages: language enrichment or language threat?*

TERRY CROWLEY

1 Introduction¹

Although it would be difficult to find any language in the world in which there has been no lexical borrowing, the process attracts a range of attitudes, some positive and some negative. A more positive view treats borrowing as enriching a language. Certainly, English is widely regarded as having been magnificently endowed with vocabulary borrowed from a wide variety of languages over the last thousand years or so. However, borrowing is not always viewed so positively. The influx of words of English origin, for example, is often condemned by native speakers of French, and this is reflected in the kinds of proscriptions promulgated by the *Académie Française* in France and the *Office de la Langue Française* in francophone Canada, whereby forms such as *le jumbo-jet* are recommended for replacement by genuinely gallic-looking forms such as *le gros-porteur* (lit. ‘big-carrier’).

The greater Pacific is the world’s linguistically most diverse area in terms of its genetic diversity, with its various Austronesian languages, its Australian languages (which may or may not constitute a genetic unity), as well as a wide range of ‘Papuan’ groupings in Melanesia. It is also demographically diverse, having large numbers of languages with very small speaker populations. Because of this, these languages are often seen as being particularly vulnerable to pressures from outside languages (Dixon 1991, 1997; Mùhlhäusler 1996). Many languages—particularly in Australia—have already been lost, sometimes almost completely without trace.

¹ Thanks to John Lynch for comments to an earlier version of this paper. Final responsibility for all comments and analysis rests, of course, with the present author.

Language shift is invariably preceded by a period of bilingualism. The influence of language contact engendered by societal bilingualism can usually be most readily seen in the form of lexical borrowing between languages. Because of its salience, this typically attracts a considerable amount of comment, sometimes neutral, sometimes positive, but more usually negative, especially with regard to words originating from whatever happens to be the sociopolitically dominant—and therefore threatening—language. In this paper, I propose to examine the extent to which borrowing in Pacific languages should be seen as threatening the future viability of these languages, and the extent to which it could actually be seen as enriching them, thereby potentially giving them a more secure future.

2 Borrowing and community attitudes

Where lexical borrowing is judged negatively, it seems to run up against basically two different kinds of objections from within speech communities. There may, on the one hand, be a range of aesthetic objections, perhaps because borrowings violate the traditional phonemic or phonotactic system of a language. Speakers of French, for example, may argue that *le weekend* rather than *la fin de semaine* is 'unattractive' on these kinds of grounds, i.e. it doesn't sound like a 'proper' French word (nor is it spelt like one).

Of course, the rejection of borrowings on aesthetic grounds will almost certainly have underlying sociopolitical motivations. Speakers of English do not complain about the unattractiveness (or orthographic strangeness) of forms of French origin, such as *purée*. Quite the contrary, in fact, as anybody who has been to a restaurant with pretensions to grandness will realise, with the menu liberally sprinkled with words of French origin, even where there are perfectly good traditional English equivalents.

Sociopolitical considerations are clearly involved in the attitude of European New Zealanders to the ethnonym *Pākehā*. Many Europeans strenuously reject the use of this term of Māori origin, arguing that the etymological meaning of the word is 'long white pig' or 'white slug', along with a number of other mutually incompatible sources (Bayard 1995:152–160). Although such etymological claims are quite incorrect,² the hostility that we find from some *Pākehā* towards Māori is undoubtedly reflected in the widespread rejection of this particular borrowing.

On the other hand, borrowings are sometimes condemned because they are seen as a kind of linguistic foot in the door, producing a disruption in the structural integrity of the recipient language, and possibly even leading ultimately to its complete replacement by the major donor language. While no speaker of New Zealand English would ever consider condemning the ethnonym *Pākehā* as the first stage of a takeover from English by Māori in the country, part of the prescriptive reaction against words such as *le weekend* in French is undoubtedly related to such fears.

One could argue that the more a language is perceived to be under threat from another language, the more likely it is that the speakers of the threatened language will be prescriptively resistant to an influx of words from the threatening language. For a long time,

² The correct historical origin of the word is not known with any certainty.

Māori has been a seriously threatened language with a contracting number of native speakers, belonging to an increasingly elderly group. Speakers of Māori today typically react quite strongly against the presence of words of English origin in their language, and the officially sanctioned Māori Language Commission (*Te Taura Whiri i te Reo Māori*), in one of its major tasks as lexical expanders for the Māori language in New Zealand, turns to direct lexical borrowing only as a last resort when coining new terminology. It is even attempting, by creating new words on the basis of Māori elements, to rid the language of some well-established borrowings that have been in use for over a century and a half (see Harlow, this volume).

By way of contrast, speakers of New Zealand English will quite happily refer to local flora and fauna with words of Māori origin, e.g. *rimu*, *pohutukawa* (k.o. trees), *pukeko* (k.o. bird), *weta* (k.o. insect). Even the most red-necked Pākehā will probably not be aware that *rimu* has the competing name 'red pine', and if anybody tried to use this name, I suspect that the general response would be a blank look. *Rimu* is simply the only word that most people know and use.

Many would see the Māori view of lexical borrowing as rather extreme, with speakers of other languages typically reacting to borrowings from English with much more tolerance. An informal body known as the Polynesian Language Forum (also known as *Leo Pasifika*) was established at the instigation of the Māori Language Commission in the early 1990s to facilitate the sharing of lexical solutions to the problem of the expansion of Polynesian languages into new domains, though to date only representatives of the Māori, Hawaiian and Tahitian communities have regularly met to discuss these issues.

Invitations have been extended to other Polynesian nations, and even to Fiji, to send representatives to meetings of the Forum. While some groups—e.g. Cook Islands and Rapanui—have sporadically sent representatives, most have never bothered to attend. The attitude at large in places such as Tonga, Fiji and Samoa seems to be that lexical development is not particularly important. If speakers of any of these languages come across a new concept, for which they do not have a word, they are much more likely simply to adapt an English word. While non-Polynesian Pacific societies were not included within the purview of this linguistic forum, by and large the source of new lexical items seems to be just as minor an issue for speakers of the languages of Micronesia and Melanesia.

This is not to say that people all over the Pacific do not pass prescriptive judgements about words of foreign origin in their languages. In Vanuatu, for example, people *do* make prescriptive judgements on the use of words of Bislama origin when speaking their vernaculars. For the most part, however, the only time I have heard such judgements explicitly expressed is when I am recording a vernacular text for linguistic analysis, and a speaker is perceived as having 'polluted' the 'pure' vernacular data with occasional *ad hoc* borrowings. Spontaneous speech in less monitored contexts is seldom subject to these kinds of judgements (even though such borrowings will invariably be present).

People's expressed attitudes towards lexical borrowings are often at considerable variance with their observed linguistic usage. In this regard, I will cite the words of an old man from Erromango in Vanuatu, who specifically asked to be recorded on tape in order to 'set the record straight' with regard to certain words which, he felt, had been subject to undue

influence from borrowings from Bislama. The extract is as follows (with borrowed words underlined):

*Yacamnacyogi yoconam gi nocwo
kokomlenomonki nacave.*

I want to talk about how we drink
kava.

*Yacamnaigi yacanwi hogku se gi kastom
enogkoh.*

I want to say how it was in our
tradition.

*Kokemlenomonki nacave, nogkon cumagku
'kumpai sel' o 'kumpai kap'.*

When we drink kava, some people
say 'get a shell' or 'get a cup'.

Ei, tawi ra kastom lanwis.

No, that's not in the traditional
vernacular.

Lanwis nimsin 'kaiti lou'.

The vernacular [word] for it is *kaiti*
lou.

This speaker was complaining about the widespread use of borrowed words such as *sel* 'shell' and *kap* 'cup' in relation to kava drinking, and he wanted younger people to know that there is an appropriate traditional expression which he felt ought to be used instead. However, he has himself used the borrowed word *kastom* 'tradition' (for which he could have said *nompi itetwai*) and *lanwis* 'vernacular' (instead of indigenous *nam*). In fact, in the very phrase in which he so strenuously decries the illicit use of borrowed vocabulary, he uses an entire borrowed phrase *kastom lanwis* (rather than indigenous *nam itetwai*).

3 Attitudes of linguists

Linguists generally take a far less prescriptive attitude than non-linguists towards borrowings, regarding the adoption of words of foreign origin in a language, for the most part, as a fairly harmless matter of lexical change that serves to expand the vocabulary of a language in new domains of language use (e.g. Crowley 1997:154–156; Lynch 1998:208–210). Some borrowing may not be regarded as strictly necessary in this sense, but even with seemingly unnecessary borrowings, linguists have generally not offered particularly harsh judgements (e.g. Clark 1982; Crowley 1997:157).

A linguist may also take a very different perspective to a non-linguist regarding the extent to which borrowings may represent a serious threat to the future viability of a language. Clearly, the simple absence or presence of borrowings cannot by itself point to the health of a language, otherwise English—with its massive amount of borrowed vocabulary—would have to be regarded as one of the more endangered languages around. Language threat must obviously be evaluated in terms of a whole range of interrelated considerations, including the sociopolitical and demographic position of a speech community within the broader society in which it is spoken, as well as a range of more specific considerations such as the attitudes to

the language of its speakers, and the extent to which a language does or does not receive institutional support.

However, while linguists typically express overtly non-judgmental attitudes towards borrowings in Pacific languages, there is still an element of implicit prescriptivism in much of the published lexicographical record on Pacific languages. A surprising number of dictionaries of these languages do not include entries for words such as 'money', 'kerosene' and 'car'. However, in most parts of the region today, people are totally familiar with these items, which have become central elements in their daily lives (Crowley 1993:120–121). On the other hand, published dictionaries typically do include a considerable amount of archaic and obsolescent vocabulary relating often to cultural traditions that have not been practised for many generations.

Few linguists provide any explicit explanation for the lack of lexical expressions for items of modern technology and recently introduced cultural practices, though I am fairly sure that the main reason is that such meanings are often expressed in the form of borrowings from a European language. This seems to make them something less than 'real' words in the language in the eyes of most linguists. Typically, the only time that such meanings are included in a dictionary is when a locally created form is used, rather than a borrowed form.

I should point out that I am not attributing such prescriptivism to linguists totally by inference here as I have been guilty of such practices myself. For instance, my own dictionary of Paamese (Crowley 1992) has an entry for 'money', which is expressed by the indigenous form *ahat*, originally meaning 'stone'. On the other hand, I provided no entry for 'kerosene' because the word that the Paamese use is *karsin*, which is a direct borrowing from Bislama (coming ultimately from English). In fact, in Crowley (1992:xviii–xix) I explicitly presented a number of criteria by which I excluded from my dictionary borrowed words that have been incorporated into the Paamese lexicon.

Apart from such implicit prescriptivism, most linguists seem to regard borrowing, for the most part, as both natural and relatively harmless. Occasionally, however, one finds views expressed which are at considerable variance with this position. Mühlhäusler (1996) regards lexical borrowing as a far more insidious process, threatening not only the structural integrity of languages, but, in the longer term, their very survival. His basic thesis is that the morphological, syntactic and lexical systems of Pacific languages are currently undergoing decay and homogenisation in the direction of English.

He refers to the dramatic reduction of the polysynthetic morphology of Tiwi in northern Australia among younger speakers as an example of this incipient process (Mühlhäusler 1996:286–287), and he also mentions the radical simplification that has taken place in the noun class systems of some languages (Mühlhäusler 1996:287–288). Verbs in Numbami in Papua New Guinea are required to take inflectional subject prefixes, but Mühlhäusler (1996:289) points out that verbs borrowed from Tok Pisin are exempt from this requirement, thereby threatening the integrity of the grammatical system.

These kinds of change, Mühlhäusler argues, are promoted by the incorporation of loan words which are not fully adapted to the original grammatical patterns. Such changes, he argues, will eventually lead to a situation where Pacific languages are essentially just local relexifications of European structures. In the long run, he sees most Pacific languages as

being under threat, with English likely to replace them, a view which is shared by Dixon (1991, 1997).

The problem with Mühlhäusler's stance here is that he does not cite any detailed studies showing the structural impact of borrowings on the vast majority of Pacific languages. Many languages, for example, do not treat borrowed and indigenous verbs differently, e.g. Manam (Lichtenberk 1983:621–623). In yet other languages borrowings have indeed created some new grammatical patterns, though these are not reflections of English structures, but creative indigenous responses to the need to incorporate new kinds of words into the grammatical system of the language. In the remainder of this discussion, I will describe in some detail the impact of borrowings on Sye, with which I have some personal familiarity, as a way of subjecting Mühlhäusler's views to empirically based critical evaluation.

4 Bislama borrowings in Sye

Sye is the language that is currently spoken on the island of Erromango in southern Vanuatu. In common with most other areas of Vanuatu, the English-lexifier contact language known as Bislama is widely known on the island. English or French are taught to all children in primary schools on the island, though once children complete their six years of primary education, they seldom use these languages in spoken form.

Erromango was the site of some of the earliest sandalwood stations in Vanuatu, with extensive contact with outsiders going back to the mid 1850s, and more sporadic contacts going back to as early as 1825. Bislama has therefore been in continual use on the island—and the other southern islands of Tanna and Aneityum—for longer than in most other parts of Vanuatu. Despite this, there are no signs that Bislama is likely to replace Sye, at least in the short to intermediate term.³ Young children almost invariably grow up speaking exclusively Sye, and often do not acquire a knowledge of Bislama until the ages of eleven or twelve, when they are in their later years of primary education, and they move to another island to begin their secondary education.⁴

A small amount of Bislama vocabulary has already more or less definitively replaced some indigenous Sye vocabulary. The following fairly common words have become so well established in the Sye lexicon that I was unable to elicit any precise indigenous equivalents, even from older speakers: *lat* 'body fat' (< English 'lard'), *makas* 'kava dregs' (< English 'bagasse'⁵), *vat* 'fat', *poila* 'boil (on body)'. Numerals higher than five have also been almost completely replaced with words of Bislama origin, with only a small number of older people remembering the original counting system (and then some only imperfectly).

³ This contrasts with the view expressed forty years ago by Capell (1954:107) that '... this language will possibly cease to be spoken unless an effort is made to stem the death rate'.

⁴ At the same time, if there were to be any large scale movement of people from overpopulated islands into Erromango's tempting empty spaces, or a massive infusion of outsiders associated with the logging industry, this situation could change.

⁵ This term originates from the Queensland sugar plantations of the nineteenth century, where the word was used to refer to the crushed cane.

In addition to these words, the following is a list of some frequently encountered words of Bislama origin that are clearly in the process of displacing original Sye words, though the indigenous equivalents can generally be cited by people when they make a special effort:

<u>Recent word</u>	<u>Indigenous word</u>	
<i>kel</i>	<i>nahiven nevi</i>	'girl'
<i>kauri</i>	<i>nendu</i>	'kauri'
<i>huk</i>	<i>kilkil</i>	'fish hook'
<i>naif</i>	<i>nautugo</i> ⁶	'knife'
<i>heik</i>	<i>nalumam</i>	'egg'
<i>suwit</i>	<i>ompu</i>	'sweet'
<i>kinu</i>	<i>lou</i>	'canoe'

Finally, there is a larger set of recently introduced words that are widely encountered as competing with indigenous vocabulary, though the original Sye forms are still widely used as well. Such forms include the following:

<u>Recent word</u>	<u>Indigenous word</u>	
<i>stori</i>	<i>uvuvu</i>	'story'
<i>vamle</i>	<i>nompunara-</i>	'relative'
<i>ndip</i>	<i>natmonuc</i>	'chief'
<i>poi</i>	<i>nevyarep</i>	'youth'
<i>prata</i>	<i>avenhai</i>	'brother'
<i>papa</i>	<i>nate</i>	'father'
<i>mama</i>	<i>namou</i>	'mother'
<i>stret</i>	<i>itrogko</i>	'straight'
<i>ailan</i>	<i>nompuwo</i>	'island'
<i>kava</i>	<i>nacave</i>	'kava'
<i>ompi trog</i>	<i>emlu</i>	'drunk'
<i>ompi reti</i>	<i>tavehveh</i>	'ready'

While these examples may make it appear that the indigenous lexicon of Sye is under threat from Bislama—especially since even some core cultural concepts are included—it

⁶ In Sye orthography, *g* represents a velar nasal, while *c* represents a voiced velar fricative.

should be pointed out that the direction of transfer on Erromango is by no means exclusively from Sye to Bislama. Erromangans speaking Bislama to outsiders on their own island liberally sprinkle their Bislama with vernacular words, especially—though by no means exclusively—in areas where Bislama does not have readily available lexical equivalents. We therefore find borrowings such as *nacune* ‘begin to feel the effect of kava’, *novunu* ‘small amounts of food eaten taken while drinking kava to clean mouth’, *umrip* ‘kind of local food’, as well as the names of many trees, birds and fish.

It is also clear that the influence of the vernacular on local Bislama is not restricted to the introduction of the occasional lexical borrowing, as Erromangan Bislama shows clear evidence of phonological and structural influence from the vernacular as well.⁷ When speaking Bislama, Erromangans often stress polysyllabic words on the penultimate syllable, as in Sye (Crowley 1998:17), even with Bislama words that are normally stressed on the initial syllable, or when an ordinarily unstressed epenthetic vowel appears in the penultimate syllable. We therefore frequently find differences in pronunciation, such as these:

<u>Bislama elsewhere</u>	<u>Local Bislama</u>	
<i>kálabus</i>	<i>kalábus</i>	‘prison’
<i>tóslaet</i>	<i>tosílaet</i>	‘torch’

Erromangan Bislama also exhibits a number of grammatical features that distinguish it from most other varieties of Bislama, with these features clearly reflecting substrate patterns:

- (i) Erromangans frequently make only a singular–plural distinction in their Bislama pronominal paradigms, avoiding the commonly used dual and trial forms, reflecting the lack of separate dual and trial forms in the Sye pronominal paradigms (Crowley 1998:40–44). Thus, while Bislama speakers from other islands typically distinguish *yutufala* ‘you (dual)’, *yutrifala* ‘you (trial)’ and *yufala* ‘you (plural)’, Erromangans normally use *yufala* with dual, trial and plural reference.
- (ii) The interrogative *wea* ‘where’ often appears in the Bislama of Erromangans between a transitive verb and its object, rather than appearing after the object as we would expect in the Bislama of other parts of Vanuatu. Thus, the more general pattern:

- (1) *Yu karem ston wea?*
you get stone where
‘Where did you get the stone?’

often appears as follows on Erromango:

- (2) *Yu karem wea ston?*
you get where stone

⁷ McKerras (1996:415–416) makes very similar observations about the effects of Bislama and Uripiv (from Malakula) on each other.

This again reflects a substratum pattern in which the interrogative clitic *-ya* attaches obligatorily to a transitive verb (Crowley 1998:239–240), as in the following example:

- (3) *Kik koc-va-ya nvat?*
 you 2SG-get-where stone
 'Where did you get the stone?'

While Sye has been influenced by Bislama, it is also true that Bislama has been influenced by Erromangan, which raises a very important question: which of the two languages is 'dominant' in this kind of situation? It is surely somewhat oversimplistic to point to the existence of words of Bislama origin in Sye and assume from this that Bislama must automatically be considered a threatening language.

Returning to the influence of Bislama on Sye, while forms of Bislama origin have certainly entered the Sye lexicon, very few Bislama borrowings have affected the grammatical structure of the language in any way, despite the unsubstantiated claim by Tryon (1996:181) regarding 'the replacement of a number of grammatical features in local languages by Bislama equivalents'. The only borrowings that have entered closed word classes that I have encountered are the adverbials *olpaut* (replacing *nevrer*) meaning 'anywhere' and *mas* (replacing *itogku*) meaning 'must'. It should be noted that in Sye the latter belongs to a larger subset of clause-initial adverbials rather than the closed set of verbal auxiliaries as in Bislama. Thus, contrast the following:

- (4) *Yu mas karem ston.*
 you must get stone
 'You must get the stone.'
- (5) *Mas kik k-ampai nvat.*
 must you 2SG.FUT-get stone
 'You must get the stone.'

Most borrowed verbs in Sye do not accept the inflectional prefixes required by indigenous verbs. Rather, they are preceded by the dummy verb *ompi* 'do' which 'carries' the prefixes. Thus, contrast the indigenous verb *orgi* 'hear' and borrowed *stori* 'tell story': *y-orgi* '(s)he heard' as against *y-ompi stori* '(s)he told a story'. Borrowed verbs are therefore assigned to a new open class of uninflectable verbs, which are obligatorily preceded by a dummy verb. This new construction clearly does not reflect an imported pattern. Nor is it an indigenous pattern, as speakers of the language have spontaneously created this construction.

Discussions of the impact of borrowings on indigenous structures often show little appreciation of how many borrowings are typically present in ordinary discourse in Pacific languages. While we are all quite aware that borrowings can be encountered in most kinds of discourse, and that in some kinds of discourse they are even quite prevalent, there are surprisingly few comprehensive studies providing quantitative information about the distribution of loan words in ordinary usage in Pacific languages. One would expect that if the structural impact of borrowings is to be as great as has sometimes been suggested, the proportion of borrowed to indigenous vocabulary in everyday discourse should be quite high. Not only that, but the proportion should be demonstrated to be increasing rapidly over time, with younger people borrowing much more heavily than older people.

In order to provide some kind of statistical test, I examined a total of 24 Sye narrative texts that I had recorded on tape, comprising just under 15,000 words of text in total. The overall incidence of borrowings in my sample was 2.76%, though this figure could be considered to be somewhat exaggerated because I counted repeated instances of the same word as separate tokens. For instance, in one story I recorded a total of thirteen tokens, yet this involved only three separate words: *towa* 'door' (rather than *nogun selat*), *stori* 'story' (rather than *uvuvu*) and eleven separate instances of *mama* 'mother' (rather than *namou*).

By far the largest category of borrowed items were nouns, accounting for 67% of all tokens. Given that nouns in Sye exhibit little inflectional morphology, borrowings in this word class have much less potential to disrupt indigenous grammatical patterns than would be the case in a highly inflected word class, such as verbs. Borrowed verbs, in fact, accounted for only 16.5% of borrowings, while the remaining 16.5% of borrowings came from other minor word classes (including numerals). Of borrowed nouns, the majority (54%) were additive in the sense that they expressed introduced meanings for which there has never been any indigenous form (e.g. *tipot* 'teapot', *krokotail* 'crocodile', *windo* 'window'), rather than replacive, i.e. competing with, or completely replacing, a previously existing indigenous form.

The sample was also broken down for age, with a distinction between older speakers (i.e. those in their 40s and older) and younger speakers (i.e. those in their 20s and 30s). In addition, the texts of younger speakers were divided up according to whether they dealt with traditional or modern matters, and texts dealing with modern themes were then divided according to whether they dealt with life on Erromango today, or whether they dealt with life in town or overseas.⁸ The following results emerged, with the percentages indicating the proportion of borrowings out of the total sample:

	<u>Traditional</u>	<u>On-island modern</u>	<u>Off-island modern</u>
Older speakers	1.24%	—	—
Younger speakers	1.93%	2.65%	6.16%

The higher proportion of borrowings in texts dealing with modern off-island matters is hardly surprising, given that the stories dealt with matters such as somebody's first visit to a zoo in Australia—where crocodiles and kangaroos figured prominently—and the experience of a cyclone in town, where there was discussion of power blackouts and refrigeration problems. What is particularly interesting, of course, is the fact that there is so little difference between the proportions of borrowed vocabulary when the older and younger age groups are compared. The difference between 1.24% and 1.93% is not suggestive of any major change given the difference in age between the speakers involved.

As far as grammatical morphemes are concerned, there is no evidence from my spoken corpus of Sye that any clause-internal markers have been borrowed, nor is there any evidence for the loss of any inflectional categories in the language. It should be kept in mind that Sye

⁸ Older speakers preferred to avoid producing texts dealing with anything but traditional themes, so I was unable to compare the behaviour of older and younger speakers across these three categories of texts.

has one of the more complex systems of inflectional verb morphology that I have ever encountered in any Oceanic language, yet the system shows no signs of restructuring (Crowley 1998:77–143). Not only do clause-internal grammatical morphemes show complete resistance to borrowing, but markers of subordination are all exclusively non-borrowed forms.

The language has a fairly unusual system of echo-subject prefixes on verbs to express coordination (Crowley 1998:246–262), yet there is no evidence that structural pressure from Bislama (or English) is leading to the breakdown of this category.

There is, however, one aspect of the grammatical system of Sye that does appear to have been significantly influenced by borrowings, and this involves free-form linkers of high-level constituents. I have observed fairly frequent use of forms of Bislama origin which function as discourse markers linking larger chunks of narrative text. Thus, *ale* (< French 'allez') and *okei* (< 'okay') fairly frequently mark transitions from one part of a narrative to another. I have also encountered the sporadic use of Bislama *mo* 'and' (< English 'more') as a discourse connective in this way (though never as a clausal or phrasal conjunction). It should be pointed out, however, that these borrowed discourse connectives do not replace traditional patterns of discourse linkage. Rather, they are used alongside them, so we still find evidence of the productive use of head-to-tail linkage that abounds in Melanesian narrative style.

Of course, since we are dealing with discourse strategies here, we are moving to some extent out of the traditional realm of syntax and entering the area of stylistics. That this aspect of a language's system should be relatively open to influence from another language is not surprising given the widespread observation that it is between higher-level constituents that we most frequently find evidence of code-switching in studies of bilingual behaviour (Poplack 1980).

Despite the fact that Sye is borrowing vocabulary from Bislama, arguments that Pacific languages are undergoing major structural homogenisation in the direction of English are very much at variance with the facts that I have just described for Sye. English, of course, is almost never used on Erromango outside the context of primary school classrooms, so it is unimaginable that there would be any way for English to influence the language, except perhaps indirectly via Bislama. As I have just demonstrated, since Bislama has had minimal structural impact on Sye, there is no viable vector for the introduction of English patterns into Sye grammar.

5 Conclusions

The situation that I have described for Erromango is hardly unique for Melanesia. In Paamese, for example, verbs are also required to take inflectional prefixes for a wide range of categories (Crowley 1982:129–142). Only a small number of verbs belonging to the earliest stratum of borrowings behave exactly like indigenous verbs, e.g. *kōm* 'comb one's hair'. The vast majority of borrowed verbs do not accept inflectional prefixes, requiring instead a preceding copula to carry the inflectional prefixes. Thus, contrast *ni-kōm* 'I will comb my hair' with *ni-he rīng* 'I will telephone'. The copula could originally only be followed by a noun (e.g. *ni-he asuv* 'I will be the chief') or an adjective (e.g. *ni-he mariso* 'I will be big'). With such forms, a new pattern has emerged in which the copula can now be followed by a

verbal constituent as a result of such borrowings. Thus, Paamese and Sye have both innovated structurally in order to accommodate borrowed verbs. However, they have innovated in different ways, and neither has converged in the direction of English.

It would probably be pointless to attempt a major survey of textual corpora for Pacific languages to seek out generalisations about what sorts of forms have been incorporated from other languages, as I am fairly confident that the patterns will be more or less as I have already described. Small numbers of borrowings have probably replaced some indigenous vocabulary in many languages, though in most cases the amount of vocabulary that has been lost in this way represents a very small proportion of the total lexicon.

The borrowing of grammatical items has been much more restricted, and the introduction of borrowings has generally not affected the grammatical structures of Pacific languages in any significant way. Where the grammars of Pacific languages have changed in order to accommodate borrowings, these have for the most part involved creative adaptation of indigenous patterns rather than simply incorporating English structures. The only elements of structure that seem to have been systematically affected are at the discourse level, where patterns are arguably more diffuse in any case.

Basically, what we find is that borrowed vocabulary has enabled speakers of Pacific languages to talk about things that their languages traditionally had no names for, such as teapots, days of the week and introduced flora and fauna. In this sense, then, borrowings have enriched these languages, in the same way that borrowings have enriched the English language.

To suggest—as Mühlhäusler (1996) seems to—that people should not accept borrowed vocabulary is basically to argue that Pacific languages should not be used to talk about anything except purely traditional precontact topics. This would surely be a recipe for language loss as Pacific languages would inevitably be able to be used only in a very restricted range of domains. Not only has Mühlhäusler seriously overestimated the structural impact of borrowings on Pacific languages, but he attempts to deny Pacific islanders their right to interact with the modern world through the creative use of their own languages.

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4 *Periphrasis as a verbal borrowing strategy in Epi languages*

ROBERT EARLY

While the identification of borrowings is often problematic in historical comparative linguistics, the same is not true where borrowing has occurred in the course of recent contact between a major lingua franca and a minority vernacular language which belongs to a completely different language family. In this case, it is possible to readily identify virtually all the loan words that occur, as they are all rather obvious copies from the donor language. Throughout Vanuatu and elsewhere in the Pacific, the borrowing of names for introduced items and concepts is commonplace, particularly from various specific domains like clock and calendar time, higher numerals, technology, religious terminology etc. Many loans surface as direct copies in the target language, while others may be lexically acculturated in various ways—accommodated, to varying extents, to the constraints of the already existing phonological and morphological resources of the language.

However, while all the borrowings that occur arise out of the need to respond to external factors, not all of them can be explained in terms of linguistic ‘necessity’ (Clark 1982, reprinted with minimal editing in this volume), as many borrowings actually displace already existing and apparently adequate indigenous terms. Sometimes the displaced words are genuinely old, and in other cases they are old words repackaged as loan translations, neologisms or having undergone semantic extension, but in each situation donations from intrusive languages may take over. Such modern borrowing has not been widely studied in Vanuatu, but Clark (1982), for the Ifira-Mele (Mele-Fila) language, and McKerras (1996) for Uripiv, have established the pattern as just outlined. The languages spoken on Epi Island certainly exhibit these same tendencies, and it is likely that simply listing or classifying the forms that occur in any number of Vanuatu’s 105 languages will also produce fairly similar results. Also, it is difficult to think of any explanations for ‘unnecessary’ borrowing that go beyond those given in these previous studies, although perhaps more attention could be given

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to linguistic creativity and novelty. Hercus (1992:170) explains some temporary borrowings from an Australian Aboriginal language into English in this way, considering that they occurred 'simply because they formed part of a communal lifestyle and a communal sense of humour'.

The point made in Clark (1982) is that it is not so much the 'necessary' or anticipated aspects of borrowing that are of most interest, but those that despite being 'unnecessary', and therefore unexpected, have still taken place. This paper applies this distinction a little more widely than to just the inventory of forms that occur as borrowings, and relates it as well to the strategies that languages employ to incorporate these borrowings. In particular, I shall focus on the most remarkable feature of modern borrowing into Epi languages, which is the strategy whereby verbal borrowings enter the structure of the language.

This strategy involves sources which are verbs or adjectives in the donor language, which in Vanuatu is primarily the national language Bislama (acting as vector for terms originally from the other official languages English and French). When these forms surface in Epi languages, the copy targets do not appear as verbs as might be expected, but as the second element following the copula verb in a periphrastic construction.

Periphrasis usually refers to a construction type which uses an auxiliary word of some kind (e.g. *the house of my brother*) rather than an inflected form (e.g. *my brother's house*). The term is appropriate to what is being described here because in verbal borrowings in Epi languages the copula verb is introduced as a dummy or auxiliary verb, on which the required subject inflections hang, and the borrowed verb occurs as a second free-standing element. It is not clear how this second element should be described terminologically—possibilities include: 'complement', 'comment', 'adjunct', 'modifier', 'gerund', and 'main verb', but none of these really fits well with the copy targets that occur in this construction type. The last one, 'main verb', is perhaps the most suitable, but suffers from the problem that these borrowed main verbs are structured quite differently from all the other main verbs that occur, and at best, constitute a new subclass of verbs.

The regular verbal and copula constructions in Epi languages will now be described. Following this, examples will be given showing how the latter construction is selected as the frame into which all verbal copy targets are placed. The paper concludes with further discussion about the way in which this situation may have come about. The languages identified for Epi are Lewo, Lamén, Baki, Bierebo, Bieria and Maii, following the names established in various publications by Tryon (e.g. Tryon (1976), which regarded Lamén as a dialect of Lewo, and Tryon (1996), which following Early (1994a) now regards Lamén as a separate language). All the data in this paper are drawn from primary sources, although some aspects of the Lewo material have already been described in Early (1994a).

A simple verbal clause in Epi languages is SV(O), and the verb is obligatorily marked with a person-number prefix referencing the grammatical subject, with transitive and object suffixes as required.¹

¹ The glosses used in the interlinear examples should be fairly self-evident: For instance, 1PL.EXC.S means first person—plural—exclusive—Subject etc., and 2SG.P means second person—singular—possessor. Note also that Epi languages have a pattern of verb-initial consonant alternation, whereby many verbs, but not all, have an irrealis (I) form such as, for Lewo, *ve* 'be, irrealis' or *wari* 'carry, irrealis' and a realis (R) form *pe* 'be, realis' or *p̄ari* 'carry, realis'. Verbs which do not

- (1) *Omami me-vano.* [Lewo]
 we.EXC 1PL.EXC.S-I.go
 'We will go.'
- (2) *Lala a-marau-ni lokuli.* [Lewo]
 they 3PL.S-fear-TR dog
 'They are afraid of the dog.'
- (3) *Nalo a-seni-o.* [Baki]
 they 3PL.S-eat-3SG.O
 'They ate it.'

The main function of the copula verb is in equational and identificational clauses (although these can also be expressed as verbless clauses).

- (4) *Naga Ø-pe so-mā apua tai.* [Lewo]
 he/she 3SG.S-R.be POSS-2SG.P grandparent INDEF
 'He/she is a grandparent of yours (i.e. a classificatory grandparent).'

The copula is also used to predicate states with the small numbers of adjectives that occur.

- (5) *A-pe kekereviyu madede la.* [Lamen]
 3PL.S-R.be RED.big greatly very
 'They are very big indeed.'
- (6) *Sive Ø-pe memaena.* [Lewo]
 sea 3SG.S-R.be green
 'The sea is green.'

Of these two construction types, the regular verbal clause uses main transitive and intransitive verbs inflected for subject and object, and provides a slot in which borrowed verbs might most reasonably be expected to occur. However, while there is no evident reason for their failure to do so, borrowed verbs appear to be constrained from occurring in this location. They can occur only in something like the second construction type, as the second component in a periphrastic construction following the copula verb. (Note that the accidental orthographic similarity of English *be* and Epi languages *pe/be* 'be, realis' belies the fact that they are pronounced quite differently. Epi *pe/be* is certainly not a borrowing from English.)

- (7) *A-pe rao.* [Lewo]
 3PL.S-R.be row
 'They had a row./They argued.'
- (8) *Te-ve kanselem si sa-ta viora-ena.* [Lewo]
 1PL.INC.S-I.be cancel again POSS-1PL.INC.P meet-NOM
 'We will cancel our meeting again.'

exhibit this pattern are irrealis in their root form, but can be marked with a realis prefix, often of the form *m(i)-*. Orthographic *g* is [ŋ].

- (9) *Galə lə-be mestem nkam.* [Maii]
 they 3PL.S-R.be make.mistake fire
 'They mishandled the fire (and it burnt s.t.)'
- (10) *Lə-m-ləvə lə-be uk.* [Maii]
 3PL.S-R-go 3PL.S-R.be fishing (with hook)
 'They went and fished (with line and hook).'
- (11) *Onu ne-ve transletem sa-Ø visa-na la.* [Lamen]
 I 1SG.S-1.be translate POSS-3SG.P say-NOM PL
 'I will translate his speech.'
- (12) *Me-mun wi me-pe drog* [Lamen]
 1PL.EXC.S-drink liquid/ water 1PL.EXC.S-R.be drunk
me-pe faet.
 1PL.EXC.S-R.be fight
 'We drank alcohol, we were drunk and we fought.'
- (13) *Nalo a-be franem yuvi.* [Baki]
 they 3PL.S-R.be fry yam
 'They fried some yam.'
- (14) *La-be franem nyup.* [Bieria]
 3PL.S-R.be fry yam
 'They fried some yam.'

It is recognised that the decision to analyse and write the borrowed word as a separate word is somewhat arbitrary, as there is some support for regarding the copula + borrowed verb pairing as paradigmatically equivalent to a regular main verb. The borrowing always follows the auxiliary, and the complex that results is indivisible. Also, most Epi languages have syntactic operations which help identify the boundaries of units, and when these are applied they show the close linking of the auxiliary verb and the borrowing. For example, in Lewo:

- (a) the borrowed verb occurs bounded between the first and second elements of the tripartite negative construction (Early 1994b) which define the boundaries of verb phrases:

- (15) *Pe a-pe rao re pan mam poli.* [Lewo]
 NEG1 3PL.S-R.be argue NEG2 R.to we(EXC) NEG3
 'They weren't arguing at us.'

- (b) nominalisation treats the auxiliary plus borrowed verb as a unit around which the two components of the disjunctive nominaliser are placed:

- (16) *Suri na-ve-rao-in-ena.* [Lewo]
 thing NOM.1-I.be-row-TR-NOM2
 'The thing being argued about.'

(c) the borrowed verb may take the transitive marker which usually occurs on transitive verbs:

- (17) *A-pe lanem-in omam.* [Lewo]
 3PL.S-R.be teach.TR we(EXC)
 'They taught it to us.'

(d) borrowed verbs may occur with nuclear-layer serial verbs and object suffixes:

- (18) *Mara, o-ve testem-li-a.* [Lewo]
 friend 2SG.S-I.be taste-attempt-3SG.O
 'Mate, try and taste it.'

All these factors show the close linking of the copula and the borrowed verb, but these constructions continue to be regarded as phrases mainly because there is no precedent for the copula verb to occur in a complex word-level unit compounded with some other lexical root. This decision is reinforced by stress patterns, and by established writing convention.

Regarding borrowings of nouns into Vanuatu languages, Clark (1982:138) noted that '[i]n most cases it is impossible to distinguish between words borrowed directly from English, and words of English origin borrowed from Bislama, although given the relative amount of knowledge of the two, Bislama has probably been much more important as an immediate source'. With regard to verbs however, the occurrence of the Bislama transitive marker *-em/-im/-um* makes the source of such borrowings conspicuous, as also noted by McKerras (1996:416) for Uripiv. One Uripiv borrowing given by McKerras (1996:419) is included here to show that, in that language, Bislama verbs are borrowed into the same slot as that occupied by regular verb roots:

- (19) *E-finisem.* [Uripiv]
 3SG.S-finish
 'He finished it.'

However, as we have seen, borrowing verbs in this way is almost totally proscribed for Epi languages. The only known exception is the borrowed verb *kom* 'to comb' in Lewo (which may also occur however in the periphrastic construction):

- (20) *A-kom ke vilu-la.* [Lewo]
 3PL.S-comb CONT hair-3PL.POSS
 'They are combing their hair.'

The previously mentioned studies of modern borrowing in Vanuatu (Clark 1982; McKerras 1996) have not reported strategies like the periphrastic construction found in Epi languages, but similar constructions can be found elsewhere. In particular, several South Vanuatu languages, which are classified as members of a different subgroup to Epi within Remote Oceanic (Ross et al. 1998:6) or a different high-order subgroup of Oceanic itself (Pawley &

Ross 1995:51), use an auxiliary verb to incorporate verbal borrowings, but use the verb 'to do'. The dictionary of Lenakel, Tanna, contains the entry '*ol* v. Make, do', and while the main function of this form is to be a 'copular verb in negative and certain interrogative sentences', in another use it is 'prefixed to borrowed verbs as part of the nativisation process' (Lynch 1977:91).²

- (21) *Iem-ol-sekhan kam in.* [Lenakel]
 1SG.S-do-shake.hands to him
 'I shook his hand.'

The same verb *ol* 'to do' has the same function in borrowing in the language of North Tanna (G. Carlson, pers. comm.), and Crowley (1999:93) describes the situation for Sye, Erromango, where '[b]orrowed verbs are assigned to a new open class of uninflectable verbs, which are obligatorily preceded by a dummy verb', which in this language is *ompi*, once again the verb 'to do'.

Although I am focusing on the borrowing of verbs here, it is interesting to note similarities between this and the borrowing of nouns in the Epi languages. In both cases, there are a small number of structural grids into which borrowed forms could conceivably be embedded, but they occur in only one of these. Again, in each case, this is the strategy that avoids the borrowed form having to take the usual inflections that are typical of the word class in question. With regard to nouns, the Epi languages (as typical Oceanic languages) make the well-known distinction between directly and indirectly possessed forms (or monovalent and zero-valency nouns (Ross et al. 1998:32)), and we find this is relevant in borrowing. The directly possessed inflectable forms appear to constitute a closed class, which can not be further added to with noun roots copied from Bislama, and so borrowed noun forms will always occur as indirectly possessed uninflected forms. This applies to borrowed terms which fall into the semantic domain of items which are most usually directly possessed, such as close kin terms.

- (22) *Sa-la anti Ø-mare.* [Lewo]
 POSS-3PL.P aunty 3SG.S-die
 'Their aunty (father's sister) died.'

Just as a single mechanism has been selected from among two possible candidates for the incorporation of borrowed nouns, so too for verbs. As we have seen, the periphrastic borrowing strategy provides a mechanism whereby the language avoids having to inflect borrowed forms for subject person, or to mark them for realis/irrealis mood through participation in the complicated verb-initial consonant alternation system, although there does not seem to be the same avoidance of the transitive and object suffixes. However, the fact that all the Epi languages have chosen out of two possible options to embrace the same strategy for incorporating borrowed verbs, albeit the more unexpected one, is obviously of interest.

The Epi languages are highly proximate in geographic terms, and also close to one another structurally and genetically (lowest lexical similarity is 46%, between Lamén and Bieria (Tryon 1976:155)), and it is likely that a copula verb and a copula verb phrase structure can be

² The glosses are simplified.

reconstructed for a Proto Epi prior to the present generation of languages. So what can be said about the possible origins of this borrowing strategy which is so pervasive among them? This matter is ultimately beyond the scope of this paper, but I shall make some comments.

There are three circumstances or processes which could possibly give rise to this kind of situation: shared inheritance from a common source, independent innovation, and wide-scale borrowing leading to areal diffusion.

The first has to be discounted because the divergence of Epi languages from the presumed Proto Epi will have occurred in the period before European contact, well prior to the context of in-depth association with post-contact cultures and languages which require borrowings of this scale to occur. The periphrastic borrowing strategy has existed only since this period of contact began, much later than the divergence of the Epi languages.

Secondly, while independent parallel innovation is considered a possible mechanism contributing to the verb-initial consonant alternations found widely throughout North and Central Vanuatu languages (Crowley 1991), it is not considered a plausible explanation here. The patterns of borrowing are so similar, and the use of the periphrastic construction to incorporate them is so unexpected, that it does not seem likely that each language would have independently developed this strategy.

This leaves only the third possibility, borrowing, but there are two possible scenarios here. The first involves borrowing from Bislama into Epi languages. However, while it is true that 'lingua franca [...] facilitate diffusion of terms through genetically related languages' (Brown 1996:261), Bislama lacks a copula and has no such strategy for borrowing terms from English which could have functioned as a model to facilitate the diffusion of this strategy across the linguistic area. It is therefore unlikely that the borrowing strategy in the Epi languages is a 'result of parallel acquisitions from the lingua franca' (Brown 1996:274).

The second scenario involves borrowing among Epi languages. There is no reason why the strategy of using the verb 'to be' could not have been borrowed abstractly from one Epi language to another, although it is perhaps more likely that this would begin with individual instances of actual borrowed Bislama forms. Such areal diffusion through borrowing could occur only through bilingualism, which 'constitutes the single most important factor promoting lexical diffusion across area languages' (Brown 1996:278). In post-contact societies, this 'almost always involves a lingua franca as an auxiliary language' (Brown 1996:278), but it is widely accepted that before the advent of postcontact lingua francas, traditional societies were highly multilingual in neighbouring vernaculars. This situation has been in decline for a long time now, but it could have persisted long enough for something like this postcontact borrowing strategy to travel from language to language. Another possible consideration would be the role of what Brown calls 'non-salient lingua francas', i.e. those languages which were previously lingua francas but no longer have this role. It has been suggested (by Anthony P. Grant, to Brown) that in genetically related languages 'much post-contact-derived lexical homogeneity may be related to lexical diffusion facilitated by languages which have served as linguas franche in the past, but have generally gone unrecognised as such' (Brown 1996:276–277). There is some evidence that the largest language on Epi, Lewo, may have had a role as a minor lingua franca, even before it was chosen as a mission lingua franca, although it performs neither of these functions any longer.

However, while borrowing among Epi languages seems to be the best explanation for the spread of this periphrastic borrowing strategy, it does not explain how it may have arisen in the first place. Only a single suggestion is made here, which is that the strategy originated as a calque on English/Bislama structures and, in particular, reflects the absence of a passive structure in Epi languages. This beginning may have occurred in any one language, or more than one, but the suggestion is outlined using Lewo data.

In Lewo, to say that 'a house was burned by fire', the configuration originally present in the language is:

- (23) *Kapi Ø-kekani yuṃa.* [Lewo]
 fire 3SG.S.burn house
 'Fire burnt the house.'

However, the more usual way of expressing this in English and Bislama is with the affected entity as the grammatical subject. The specification of *fire* as a semantic agent is not required in either the English passive *The house was burnt down* or the Bislama stative *Haos i bon*. Constructing the description of the situation in this way could then provide a mental schema which a Lewo speaker wishes to emulate. However, argument structures in Lewo do not allow the patient in this situation to surface as the grammatical subject, at least with the existing verbal lexicon, so there is motivation for borrowing to occur. Also, stative or attributive expressions in Lewo already use the copula verb, and this provides the preferred structural frame for the borrowing. We therefore find Lewo speakers using the following expression using a borrowing as an alternate to the form above.

- (24) *Yuṃa Ø-pe pon.* [Lewo]
 house 3SG.S.R.be burnt
 'The house was burnt down.'

On the surface, this explanation seems quite plausible, but is somewhat contentious when placed in the context of ongoing debate between Crowley (this volume) and Mühlhäusler over the effect of intrusive languages like English on the vernacular languages of the Pacific. If the above explanation is valid, then it provides some evidence for the kind of restructuring that Mühlhäusler (1996) claims is taking place in the languages of the Pacific, resulting from pressure for them to become intertranslatable with English, or in this case Bislama. On the other hand, Crowley considers that the way in which Sye incorporates verbal borrowings, almost identically to the periphrastic construction described here for Epi languages, 'does not reflect an imported pattern'. On the contrary, he considers that 'Sye speakers have spontaneously innovated a pattern based on their indigenous linguistic creativity and have not simply become slaves to the structural hegemony of English' (Crowley 1999:93).

In conclusion then, it might be too difficult to ascertain how this new clause structure type was invented on Epi to accommodate borrowed verbs. However, it is probably correct to assume that the somewhat remarkable diffusion of the same strategy in each and all of the Epi languages is due to widespread borrowing among them, with the result that it has become an areal feature.

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5 *Borrowed plants in Fiji and Polynesia: some linguistic evidence*

PAUL GERAGHTY

1 Introduction¹

In this paper I will discuss and exemplify ways that linguistics can contribute to the study of prehistory, with particular emphasis on the study of plant names borrowed prehistorically into Fiji and Polynesia. In so doing I hope to show that there is clear linguistic evidence for the introduction of many useful plants in prehistoric times, and that non-linguistic evidence also lends weight to the claim that Pacific islanders were far more mobile than has generally been believed. I also hope that this paper will go some way to demonstrating that the most valuable service provided to the study of prehistory by historical linguistics is not reconstruction per se, but the detection of borrowings that is made possible by reconstruction.

2.1 The value of reconstructed plant names

I was at the University of Hawaii during the 1970s when a number of scholars of Micronesian languages were enthusiastically compiling a Proto Micronesian word list. During

¹ Some parts of this paper are based on Geraghty (1995), which was a slightly revised version of a paper presented at the 'Linking Our Sea of Islands' conference, Department of History, University of Auckland, January 1995. I am extremely grateful to the many Fijians, far too numerous to mention, who shared their knowledge with me in the preparation of this paper, and to Professor Randolph Thaman of the University of the South Pacific, who was as ever unstintingly generous with not only his knowledge but also his library!

the course of this enormous undertaking, some irreverent wag discovered that it was possible to reconstruct a Proto Micronesian word for 'motorcar', with regular reflexes in all the relevant daughter languages (e.g. Pohnpei *sidōsa*, Woleai *sitōsa*),² even though it is patently obvious that the word is a twentieth-century loan from Japanese.

This is, I believe, a salutary lesson. It tells us to be wary of reading too much into reconstructions: just because you can reconstruct a Proto Polynesian form for a plant, it does not necessarily mean that the Proto Polynesians had that plant. Other disciplines may be able to tell us that a plant existed at a particular time and place, but linguistics usually cannot. It can only tell us, under certain conditions, what the name of that plant might have been.

To take a very simple example, the Polynesian names for the coconut (*Cocos nucifera*) point unequivocally to a Proto Polynesian reconstruction **niu*. However, if the coconut had been introduced to Polynesia a couple of hundred years ago by speakers of a language, say from Central America, in which the coconut was called *niu* or something similar, the names of the coconut in the languages of Polynesia would very likely have been exactly the same as they actually are. We are pretty sure that this did not happen, but our confidence is based on our extralinguistic knowledge of botany, archaeology, cultural associations, etc. On linguistic grounds alone, there is no way to determine whether the coconut was introduced by Proto Polynesian-speaking Lapita people three thousand years ago, or by peripatetic plant pushers from Panama one day before the first instance of a Polynesian uttering the word *niu* was recorded.³

Of course, I selected the word *niu* as an example because it contains only one consonant, and a very stable one at that. Certain other sounds are more unstable, and so likely to provide more information about the history of words containing them and the plants they refer to. Because some sounds are more likely to change than others, it is a matter of chance as to whether linguistics can identify a particular plant name as a borrowing or not. As Biggs demonstrated in his classic paper on borrowing in Rotuman (1965, reprinted in this volume), there are certain Rotuman correspondences with Polynesian languages that indicate clearly that a word containing them must be a loan from Polynesian; but there are other correspondences

² Unless otherwise stated, the sources for linguistic data are as follows: All Fijian and Proto Central Pacific from my own notes; Proto North Vanuatu [PNV], Clark (1997); Proto Austronesian [PAN] and Proto Malayo-Polynesian [PMP], Zorc (1995); Proto Polynesian [PPn], Biggs (n.d.); Arosi, Fox (1978); East Futuna (Futuna), Moysse-Faurie (1993); East Uvea, Rensch (1984); Kiribati, Sabatier (1971); Mae, Clark (n.d.); Nakanai, Chowning & Goodenough (n.d.); Niue, Sperlich (1997); Nukuoro, Carroll & Soulik (1973); Palauan, McManus (1977); Pingilapese, Good & Welley (1989); Pohnpei, Reh & Sohl (1979); Rarotongan, Buse & Taringa (1995); Rennell, Elbert (1975); Rotuman, Churchward (1940); Samoan, Milner (1966); Tahitian, Lemaître (1986); Tikopia, Firth (1985); Tongan, Churchward (1959); Tuvalu, Besnier (1981); West Uvea, Hollyman (1987); Woleai, Sohn & Tawerilmang (1976). For Tongan data, I use the older Tongan orthography of <g>, rather than <ng>, to represent /ŋ/.

³ I am also ignoring here, for the sake of illustration, the fact that *niu* has many cognates outside Polynesia.

that are non-diagnostic or equivocal, and if a word happens to contain only such non-diagnostic correspondences, there is no way to determine whether or not it is a loan word.⁴

Having sounded this note of caution, I hasten to reassure the reader that I do not propose to write a paper based exclusively on linguistic evidence. I intend to draw conclusions about the movement of some plants in the prehistoric Pacific using all sorts of data, linguistic and non-linguistic. In the interests of finiteness, I am restricting this review to some plants introduced into Fiji and Polynesia. The introduction of plants from Polynesia (and Fiji) into other parts of the Pacific is also a fascinating topic, but a detailed study will not be possible in this paper.⁵

The conclusions of this paper will be in stark contrast to Whistler (1995), who almost completely ignores borrowing as a mechanism in plant naming, partly because of his lack of understanding of the linguistic method involved, and partly because of his belief that all prehistoric Polynesians, with the partial exception of Tonga and Samoa, evolved in complete isolation. We already know from Tupaia and other navigators encountered by Spanish and British explorers in the eighteenth century that Tahitians at that time were familiar with all the islands of triangle Polynesia (except the extremities of Hawaii, Mangareva, Rapanui and New Zealand) as well as Fiji and Rotuma (Denig 1962:103, 135). Moreover the Ra'iatean navigator Tupaia indicated that his father had even greater knowledge (Beaglehole 1968:157; Denig 1962:105). Tongans told Cook of islands they knew as far as Kiribati, and we can infer from linguistic and other evidence that Tongans, or other western Polynesians, travelled to and from places as far away as Vanuatu, Pohnpei (Geraghty 1994a), the Solomon Islands and the Carolines.⁶ This study will present evidence from the study of plant names to reinforce the picture of a great deal of intentional voyaging in the prehistoric Pacific.

⁴ A good example is Rotuman *kava* 'kava, *Piper methysticum*', which could be a direct reflex of PCP (Proto Central Pacific) **qawa* (there is no clear evidence as to whether the PCP was **kawa* or **qawa*), or a loan from a Polynesian form such as Tongan *kava*. Other terms associated with the kava plant (e.g. *kafa* 'kava stem', which is the planting material) appear to be a frustrating mixture of early loans, non-loans, and equivocal forms.

⁵ Particularly numerous are those introduced from Polynesia to Rotuma. Biggs (1965, reprinted in this volume) has already noted *futi* 'banana (*Musa* spp.)', *ʔifi* 'Tahitian chestnut (*Inocarpus fagiferus*)', *tarkura* 'taro variety', *moskoi* 'perfume tree (*Cananga odorata*)', and *toa* (*Casuarina equisetifolia*). To these we can add *asi* 'sandalwood (*Santalum* sp.)', *mori* (*Citrus* spp.), *firimoto* 'wild cherry tree (*Flacourtia rukam*)', *fesi* 'hardwood (*Intsia bijuga*)', and many more. Probably of a similar order is the number of plants introduced to Kiribati from Polynesian sources, such as *aronga* (*Acalypha*), *bero* (*Ficus tinctoria*), *rauti* (*Cordyline fruticosa*), and *renga* 'turmeric (*Curcuma longa*)'. See also Geraghty (1994a) for linguistic evidence of other long-distance Polynesian plant introductions, such as sweet yam (*Dioscorea esculenta*) in New Caledonia, kava (*Piper methysticum*) and turmeric (*Curcuma longa*) in Pohnpei, and sugarcane (*Saccharum officinarum*) in Mokil.

⁶ I now believe that on Anderson's list of islands known to the Tongans (Geraghty 1994a:234), 41 Kologobeele [Lokopile] and 42 Kollokolahee [Lokolahi] refer to places in or near Guadalcanal, possibly the islands of Guadalcanal and Florida; and that 44 Mallajee [Malajiʔi] and 45 Mallalahee [Malalahi] refer to Malaita and an adjacent smaller island. There are also numerous Polynesian loan words in Solomon Islands languages, e.g. Lau *fōrua* 'outrigger canoe' (faulua), Arosi *atua* 'ghost' ('atua), and in Micronesia as far as the Carolines.

I shall now crave the indulgence of linguists reading this paper while I explain some basic concepts in historical linguistics for the benefit of non-linguists.

2.2 Reconstruction⁷

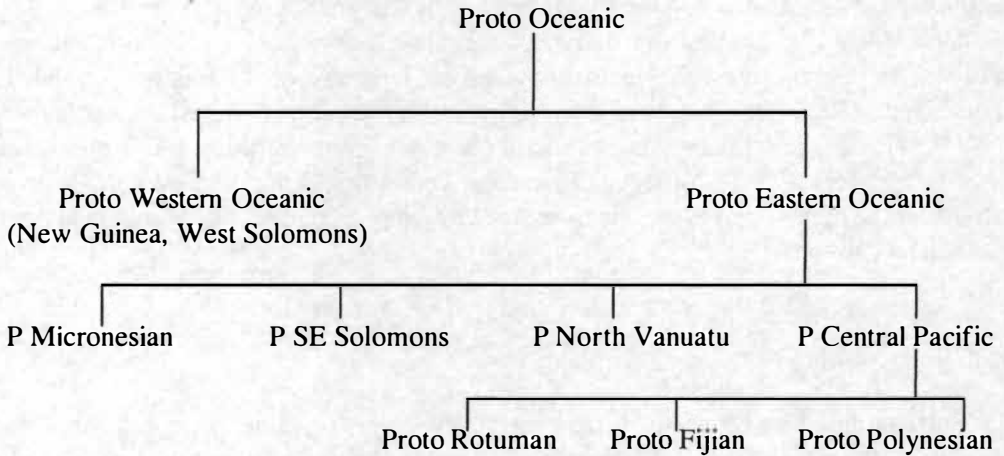
Historical linguistics is the study of how languages change over time. The fact that languages change is in itself neither particularly remarkable nor useful. What is interesting is that language change is not entirely random, a fact that has been established by noting the changes that have occurred, and those that have not, in languages with a long written history.

When this knowledge is then applied to languages which have no written history, or very little, as is the case with most Pacific languages, it is possible to *reconstruct* a hypothetical older language, a 'parent' language from which contemporary languages are descended. In much of the Pacific, this task is made considerably easier by the fact that there are many related languages, and together they provide a good body of evidence as to the form and structure of the language they are all descended from. Thus, in the Central Pacific region, by comparing the languages of Fiji, Rotuma, and Polynesia, and applying what we know of how language change works, we can reconstruct with a fair degree of certainty many words and other aspects of the language that was spoken by the ancestors of the Fijians, the Rotumans, and the Polynesians—the 'Lapita' people who are believed to have been the first settlers of Fiji some 3000 years ago. This reconstructed language is known as *Proto Central Pacific* (PCP).

2.3 Shared innovations and subgrouping

As in any family of languages, the extent of relatedness between members of the Austronesian language family varies, and is not always a function of geographical distance. Tongan, for instance, has more in common with Hawaiian, thousands of miles away, than it has with Fijian, its next-door neighbour. Linguists generally explain such apparent discrepancies by hypothesising that the languages that appear to have more in common are descended relatively recently from a common ancestor; in other words, they belong to the same subgroup of the language family. So Tongan and Hawaiian belong to the same subgroup of Austronesian, in this case Polynesian, while Fijian belongs to a different, though closely related, subgroup; and both of these subgroups are members of a higher-order subgroup. Note that one talks of 'higher' and 'lower' -order subgroups, as there are no named hierarchical orders as in Linnaean classification. A simplified and incomplete representation of the subgrouping relationships among most Pacific languages is as follows:

⁷ The following discussion of general principles is based in part on Geraghty (1994b).



Most linguists agree on the broad outlines of the above, though there has been doubt as to whether South-east Solomons belongs to the Eastern Oceanic subgroup, and indeed as to whether there is sufficient evidence at all for such a thing as an Eastern Oceanic subgroup. The languages of Southern Vanuatu and Southern Oceania (New Caledonia and the Loyalty Islands) are also clearly related among themselves and to other Pacific languages, but whether they are a subgroup of Eastern Oceanic has yet to be determined (for a recent appraisal see Lynch 1997:227–229).

Subgrouping is based mostly on the evidence of *shared innovations*—changes which the languages have in common and which are most economically explained as having been single changes in a common ancestral language. It has been emphasised that language change is not haphazard, but neither is it rigidly uniform. Within certain limits, there is arbitrariness to all language change. So if two languages have undergone the same change, that is evidence that those languages are related. The more changes they appear to have undergone in common, the less likely it is that the changes are independent of each other, and the more likely it is that the languages shared a period of common development. Of course, some changes are inherently more likely than others, and this weighting is taken into consideration in subgrouping. For example, the fact that the change of /s/ to /h/ has occurred in both Tongan and Nadrogā Fijian is, by itself, of little significance, since that particular sound change is relatively common in Pacific languages, and indeed in the languages of the world.

2.4 Reconstruction and prehistory

One way in which linguistic reconstruction has been used to draw inferences about the past is known as the *Wörter und Sachen* (German for ‘words and things’) method. This is based on the assumption mentioned at the beginning of this paper—that if a protolanguage had a word, then the speakers of that language must have been familiar with the referent of that word. While this is in itself fairly unassailable logic, the problem with this method lies largely with the status of the reconstructions themselves. As we have seen with Micronesian motor cars, it

is possible to reconstruct apparently ancient words that are not really ancient at all. Crowley (1994:87) has also pointed out that **tusi* meaning 'book' can be reconstructed for Proto Polynesian. Similarly, with regard to the parent language of the family to which Pacific languages belong, Proto Austronesian, Mahdi (1994) has shown that while words for 'iron', 'gold', 'silver' and other metals and useful plants can be reconstructed, it is highly unlikely that the speakers of Proto Austronesian had any knowledge of them—they were all introduced well after the break-up of Proto Austronesian. It is important, then, that this method be applied with great caution.

2.5 Subgrouping

Subgrouping can be useful in reconstructing prehistory since it makes the claim that languages separated from each other in a particular chronological order. For example, it is implicit in the above family-tree diagram that, while the languages of Oceania all have a common origin, the split between Western and Eastern Oceanic languages took place before the split between, say, Proto North Vanuatu and Proto Central Pacific, and that the ancestral Polynesian and Fijian (and Rotuman) languages then evolved together for a time, as Proto Central Pacific, before evolving separately. If, therefore, a word is found in, say, Eastern Oceanic and in Rotuman, then that word must also have been part of the lexicon of Proto Central Pacific, even though there is no evidence for it in Fijian or Polynesian languages. As far as I know, there is no linguistic term specifically for a word with this kind of distribution, so I would suggest 'retained lexeme' as an appropriate term.

A particularly striking retained lexeme in the Pacific is the word for the megapode, a flightless bird which buries its eggs in the sand to hatch, hence also known as the 'incubator bird'. Clark (1982:126) noted that the name for the megapode in Tonga, *malau*, is related to the names for similar birds in Vanuatu, Solomon Islands and New Guinea. Clark argued that, according to the family tree of languages above, we must reconstruct *malau* as the word for 'megapode' in Proto Oceanic; and, because there must have been an unbroken transmission of the word *malau* from Proto Oceanic to Proto Polynesian, the word must also have been part of the Proto Central Pacific language, which is believed to have been spoken in Fiji. Yet there are no megapodes in Fiji. If the linguistic subgrouping is correct, then during the Lapita period, when Proto Central Pacific was spoken, megapodes must have been present in Fiji. Shortly after Clark's observation, the archaeologist Simon Best unearthed the remains of at least two different species of megapode in Fiji, both of which became extinct soon after initial human settlement (Clunie 1984:140).

A similar example concerns the Proto Central Pacific reconstruction **lulu* 'owl'. In those Eastern Polynesian languages which are spoken where there are no owls (that is, all except Hawaiian and New Zealand Māori), the term has come to refer to a sea bird, usually the booby (*Sula* sp.). However, in New Zealand Māori, which is an Eastern Polynesian language, the referent is again the owl. While it is possible that the name for 'booby' was transferred back to the owl, and even remotely possible that owls once existed in Central Eastern Polynesia, another explanation is that there has been some Western Polynesian input into the Māori language, as has been argued by Langdon (1988a:286–287), in which case there would seem

to have been direct contact of some sort, say between Tonga and New Zealand. It is also possible that the Eastern Polynesians who colonised New Zealand were familiar with owls, and their name, from voyaging to Western Polynesia.

In a similar vein, the Hawaiian word *naio*, for the tree *Myoporum*, corresponds exactly to *ngaio*, its name in the Austral Islands, Cook Islands, and New Zealand. However the genus is absent not only in the Marquesas, whose languages subgroup with Hawaiian within Eastern Polynesian, but also in the Society Islands, where part of the Hawaiian lexicon is believed to have originated (Whistler 1995:51). The mystery of this retained lexeme however dissipates when we realise that the prehistoric Polynesians' world was far from confined to their own island group. As already noted, Tahitians in Cook's time were familiar with the Austral Islands and the Cook Islands, not to mention far more distant places such as Fiji and Rotuma. The Marquesans also have legends of voyages to and from Rarotonga to procure red feathers (Langridge & Terrell 1988:11–31) and to convey breadfruit (Handy 1930). It is hardly surprising that such well-travelled people should be familiar with useful plants—in Hawaii *Myoporum* was used as sandalwood and in house construction (Degener 1930:267–268), while in Rarotonga the flowers are used to scent coconut oil—in neighbouring island groups.

Linguistic reconstruction can also help identify 'homelands'. Archaeologists once believed that Tonga was the first part of Polynesia to be settled from Fiji, hence the Polynesian homeland, and that Samoa was subsequently settled from Tonga. Although to my knowledge no linguist challenged this view at the time, it could have been queried on linguistic grounds because there are related Samoan and Fijian words for things that are not present in Tonga and, unlike megapodes, unlikely to have been extirpated by human predation, such as *mako* (Samoan *ma²o*) 'kind of forest tree (*Trichospermum richii*)', *soaqa* (Samoan *soaʔa*) 'mountain plantain (*Musa troglodytarum*)', and *balolo* (Samoan *palolo*), 'palolo sea-worm (*Eunice viridis*)'. The discovery of early Lapita potsherds in Samoa has rendered this view obsolete (Pawley 1996:389), and it is now believed that all of Western Polynesia was settled at about the same time, and that there was a long period of continuing contact with Fiji after initial settlement.

2.6 Lexical replacement

We have been discussing until now continuity of words, and how studying such continuity can contribute to reconstruction of the prehistoric Pacific. We now turn to discontinuity. Continuity is the norm: words tend to remain the same (though their phonetic shape may be altered by sound change). Discontinuity is what happens when words do not remain the same, or when new words arise when there were none before.

Certain linguists (adherents of 'glottochronology') believe that there is a fairly constant rate of lexical replacement in all languages, at least in basic vocabulary. What is undeniable is that replacement does sometimes take place, although the motivation is seldom obvious (as will be discussed in the next paragraph), and the replacing form is usually a simple or compound word from the same language with a similar or related meaning. An example of replacement by a word with a similar meaning is PCP **vetaʔu* '*Calophyllum inophyllum*', a common large beach tree, which has been replaced in some Polynesian languages by *tamanu*, a reflex of PCP

the extreme that these fish were ever absent from Tongan waters, the question arises as to why the Tongans replaced a perfectly good native word with an exotic intruder. I believe it is connected with the fact that Fijian *soki* 'pitfall spike', from which *sokisoki* is derived, was borrowed into Tongan, along with many other warfare-related words, and that *sokisoki* was also borrowed by association.

There are other examples of unnecessary borrowing occurring as part of a complex of semantically related terms. For example, on linguistic grounds Eastern Fijian *puaka/vuaka* 'pig' is almost certainly a borrowing from Polynesian *puaka*. Yet there is no archaeological evidence for the absence of pigs in Fiji's prehistory (except perhaps at the very beginning), and neither of the two other widespread words, *qō* (from PEO **boRo*) and *vorē*, is a Polynesian loan. The reason for the borrowing in most of Eastern Fiji may be that a new pig culture was introduced from Polynesia, involving perhaps new methods of pig rearing, new varieties of domesticated pig, very high esteem of pork for ceremonies and consumption (as is the case in Tonga), and so on.

As noted above, borrowed words are most commonly 'necessary' borrowings—that is, words that are needed as labels for new things. However, when a neologism is needed, borrowing is by no means the only means of word creation, and other devices are often used, such as compounding, reduplication and semantic extension of existing words. A nice example in Fiji is *Physalis peruviana* (cape gooseberry), a common weed of wasteland and fallow gardens. It bears small tomato-like fruits which are said to be poisonous when green, but when ripe are yellow and quite sweet. While still green, the fruits are enclosed in a lantern-like case which 'explodes' when struck against a convenient hard surface, for which purpose children find their foreheads ideal.

The plant appears to be of American origin, hence the specific name *peruviana*, but it is not known when or how it arrived in Fiji. The earliest record I am aware of is in Cargill's (1836–40) dictionary of Lakeba Fijian, which defines *tukitukiyadre* as a kind of grass, and gives its Rewa equivalent as *tekilakiyadre*. Both of these names are still in use in these areas, and refer to the way children play with them, meaning something like 'striking the forehead'. Other names with approximately the same meaning are *videvideyadre* from Matuku, *toboiyadre* from Nairai, *topoiyadre* from Taveuni, *botebotelakiyadre* and *cobocoboiyadre* from Vanualevu. The explosion of the fruit, without reference to the forehead, is the basis for another widespread name, *cevucevū*, meaning 'bursting' or 'exploding', used in Gau, Ovalau, and much of eastern and northern Vitilevu. The name *botoboto*, used in northeastern Vanualevu, has the same meaning, as has the Kadavu and Beqa name *cabolo*. In the Nadroga area, names include *meamalahounatō*, *meamocanatō* and *meaboronamanu*, all of which mean 'the chicken's *boro*', where 'boro' is the name of a related plant (*Solanum* sp.) with edible leaves. It is a fairly common device to refer to a new plant by the name of a familiar plant, but with a suffix indicating it is consumed by birds or animals. Another name based on *boro* is *tinaniboro*, meaning 'mother of *boro*', presumably because it tends to be larger, used in Nakelo and Ono (Kadavu). Only one name for this introduced plant is a borrowing: *kosipeli/kosiveli*, used in much of the Rewa–Bau–Verata area of south-east Vitilevu, from the English '(cape) gooseberry'. The Tongan name, *kuusi*, has the same origin. Because *kosipeli* is also the Fijian for 'gospel', in a fine example of how tenuous the association may be when new names are coined, the name *tisaipele*, meaning 'disciple' is also found in odd parts of

Eastern Fiji. It should be noted in passing that this plant, which has been in Fiji for probably less than 200 years, has more distinct names than any other—at last count 36, and sure to rise.⁸ It is also remarkable that, while it is well known and highly regarded as a medicinal plant, not one of its names reflects its medicinal properties, while the majority of its names refer to a property—exploding on children’s foreheads—that is mentioned nowhere in the botanical literature.

2.8 Detecting borrowings

Fascinating though all aspects of word coining may be, it is necessary borrowing that is our main concern here. Probably the most important contribution of linguistics to prehistory is in identifying words that were borrowed, from which it may be inferred that their referents were transferred knowingly from one culture to another. I believe it is more important than pure reconstruction because its conclusions are usually more secure—a spurious loan word is far rarer than a spurious reconstruction. A classic study of borrowing in the Central Pacific area is Biggs (1965, reprinted in this volume), in which it was demonstrated that Rotuman has experienced extensive borrowing from at least two Polynesian languages.

Once a pair of words in related languages are observed to be phonetically and semantically identical or similar, the question arises as to whether this is due to direct inheritance from a common protolanguage, or to borrowing (also called ‘indirect inheritance’) after the break-up of the protolanguage. Borrowing can be detected in many different ways, but all boil down to one major determinant, which I will call ‘embeddedness’: the strongest argument that a word was borrowed from language A to language B is that the words sound the same and mean the same, and the putative source word is more strongly embedded in language A than the putative borrowing is in language B. For example, when Biggs (1965) argued that Rotuman *tarkur* ‘taro variety’ is a borrowing from Polynesian *talokula*, with the same meaning, the grounds for doing so were that they sound similar, mean the same (or thereabouts), and the Polynesian term is more strongly embedded, morphologically and etymologically, in its own language than is the Rotuman. In other words, the Polynesian word has a clear etymology and morphology within its own language—you can see where it came from and what it is made up of—whereas the Rotuman word has neither. If however the Polynesian and the Rotuman words are found to be equally well embedded in their respective languages, then the conclusion is that the words are genetically related, and neither is a borrowing.

This linguistic concept of embeddedness is similar to that of ‘cultural embeddedness’ which is frequently evoked in arguments for cultural diffusion. For instance, since the sweet potato is never offered in Fijian ceremonies and is never used as a clan totem (whereas yams, taro and plantains are), it can be said to be poorly embedded in Fijian culture, so possibly a relatively recent introduction to Fiji.

I will now discuss and exemplify three types of linguistic embeddedness: phonological, etymological, and morphological.

⁸ It is possible, however, that some of these names refer to the very similar *Physalis angulata* (wild cape gooseberry).

2.9 Phonological embeddedness

While it is true that loan words generally conform to the phonology of the borrowing language, it can happen, usually in situations where there is extensive bilingualism and copious borrowing, that a whole new phoneme, or sequence of phonemes, is borrowed. In contemporary English, for example, nasal vowels of French origin are often heard in words such as 'restaurant', 'rapprochement', 'chagrin', and 'soupçon'. These nasal vowels mark these words as of foreign origin. The same is true, though less obviously so, of the phoneme /ʒ/, as in 'pleasure' and 'beige'. Such phonemes may stand out as being poorly embedded in the phonological system of the language in various ways, such as their relative infrequency and, sometimes, unusual combinatory characteristics, such as the fact that /ʒ/ never occurs word-initially.

Turning to the Pacific, the Standard Fijian phonemes /f/, /j/ and /p/ are also relatively infrequent, and can be shown to occur only in loan words. The same is true of a number of the phonemes in Polynesian outlier languages that have been borrowed from their Melanesian neighbours (Clark 1994:113), and Tongan /s/ and the sequences /vo/ and /vu/—in directly inherited words, earlier *s has changed to /h/, and /vo/ and /vu/ did not occur earlier, because Tongan /v/ reflects Proto Central Pacific *w, which only occurred before non-back vowels. For Samoan, the phoneme /k/ is only found in loan words. This is not to claim, however, that all low-frequency phonemes are the result of borrowing: Rotuman /j/, for example, is relatively rare, but found almost exclusively in inherited vocabulary. In fact it directly reflects PCP *j unchanged, Rotuman being the only Central Pacific language to do so, *j having merged (largely) with /s/ in Fijian and /t/ in Polynesian (Geraghty 1986).

An example of great cultural interest in the Fiji–West Polynesia area is the Fijian word for 'kava bowl', *tānoa*, which is clearly related to Tongan *tānoʻa* with the same meaning. As I pointed out in Geraghty (1983:74–85), initial /t/ in Eastern Fijian common nouns became prenasalised (i.e. changed to /d/). The fact that this particular Eastern Fijian common noun did not undergo this change, since it is *tānoa* not *dānoa*, suggests that it is a borrowing, and Tongan *tānoʻa* is an obvious candidate for donor. So it appears that this artifact, the centrepiece of contemporary Fijian ritual, was introduced from Tonga, a conclusion supported by non-linguistic evidence (Clunie 1986:80).

2.10 Etymological embeddedness

The etymology of a word is its historical origin. It is an indication of the embeddedness of a word if it can be shown to have originated from a word in the same language. An example of this is Fijian *lokaloka* 'kind of yam', which has a plausible etymology in Fijian *lokaloka* 'purple', since its salient characteristic is its purple flesh. Since this etymological origin is not found in Futunan, we conclude that Futunan *lokaloka* 'kind of purple yam' is a borrowing from Fijian.

2.11 Morphological embeddedness

The morphology of a word is the way it can be analysed as comprising different meaningful parts, such as a base, prefixes, suffixes, and elements of a compound. As a general rule, if an identical or similar word is found in two languages, but is morphologically analysable (that is, can be broken up into meaningful parts) in only one, then the word originated in that language in which it is morphologically analysable, and was borrowed into the other.

To illustrate this principle in the Central Pacific, I will discuss sailing technology in Fiji and Western Polynesia. Clunie (1986:14–15) has claimed that the innovative sailing technique of ‘shunting’ (tacking by moving the sail from one end of the canoe to the other), and the concomitant modifications to the rig, spread to Fiji from Tonga, Uvea, and Kiribati. Although a detailed analysis of the relevant terminology has yet to be done, there is at least some linguistic evidence that does not support this theory.

Shunting, in all but the smallest canoes, requires an extra piece of wood set diagonally from near the end of the hull to the edge of the lee platform, which is used as a walkway for the person who is moving the sail, and also helps guide the sail past the central platform. In Samoa, this piece is called *vavata* (Haddon & Hornell 1975, I:243, vowel length not indicated in source), in Fijian *ivāvādā*. These terms are clearly related, but only in Fijian is the word morphologically analysable, as the base *dā* ‘tread, step on’, with the ‘causative’ prefix *vā-*, here meaning something like ‘facilitate’, and the instrumental prefix *i-*. The meaning of *ivāvādā* is therefore something like ‘instrument to facilitate stepping’. In Samoan, *vavata* has no analysable meaning, so it is most likely that the term was coined in Fiji, and borrowed into Samoa.

The same conclusion, incidentally, is warranted on phonological grounds, because Samoan /v/ does not correspond regularly to Fijian /v/. If the term had been directly inherited, then the Samoan form would show /f/ rather than /v/, or the Fijian /w/ rather than /v/; if it were a borrowing from Samoan to Fijian, the Fijian would show /t/ rather than /d/. So the Samoan word must be a loan from Fijian, on both morphological and phonological grounds. Interestingly, the forms *dā* and *vā-* are geographically restricted within Fiji, and point to the term having originated in western Fiji (which includes the Yasawa Islands) or north-eastern Vitilevu.

It is also noteworthy that the Tongan word for the step on which the mast rests, which is so designed that the mast can lean towards either end of the canoe, as is required in shunting, is also a loan from Fijian, *vugakoto*. This term is not morphologically analysable in either language,⁹ but phonological evidence (the presence of /vu/ in Tongan) points to it being a loan from Fijian to Tongan.

It is also an indication of the embeddedness of a word in a particular language if it forms part of the morphology of other words and expressions in that language. For example, the Fijian word *uvi* ‘yam’ is found in reduplications (*uviuvi* ‘kind of grass with yam-like roots and

⁹ It is just possible that it is a compound of *vuga* ‘k.o. tree (*Metrosideros* sp.)’ and *koto* ‘lie down’. The problems with this analysis are that, while *vuga* is a useful timber tree, it is not normally used in canoe construction, and there is no immediately obvious reason for the second element. Other possible explanations are that *vuga* is a reflex of PCP **vuga-* ‘upper surface, top’, which is otherwise lost in Fijian, or that the first element is *vu-* meaning ‘base’.

growth'), compounds (*wāuvi* 'vine resembling yam'), and proverbial expressions (*kana uvi katakata* 'eating hot yams', meaning speaking fast and unintelligibly), whereas the word for 'sweet potato', *kumala*, is never reduplicated, is not used in any proverbial expressions, and is found in only one compound, *wākumala* (*Ipomoea aquatica*), the referent of which is known to be a fairly recent introduction to Fiji.

Finally, languages often have syntactic classes which are impossible, or relatively difficult, for an intruder to break into, so to speak. For example, as far as I am aware, no loan word has become an English strong verb, all borrowed verbs entering the weak conjugation: the past tense of *guide* is *guided*, not **gid* (as in *hide/hid*, *slide/slid*), and that of *seize* is not **soze* (as in *freeze/froze*). Similarly for Fijian, I know of no borrowed noun that has become suffix-possessed, and only a handful of borrowed verbs that have a transitive suffix other than *-taka*. Rotuman and most Polynesian languages also typically have 'default' verbal suffixes that are applied to borrowings.

2.12 Etymological borrowing

When the sound correspondences between two closely related languages are relatively straightforward and well understood by their speakers, words may be borrowed 'etymologically', that is applying the sound changes that the speakers are familiar with. An example is Samoan *sāmala* 'hammer', which was borrowed from Tongan *hāmala* or Tahitian *hāmara* (from English *hammer*) by Samoans (or perhaps introduced by Tongans or Tahitians) who were aware that Tongan and Tahitian /h/ corresponds regularly to Samoan /s/.

The major problem that arises from etymological borrowing is that loan words appear to be phonologically embedded within the borrowing language, so become linguistically invisible as loans. They appear to be directly inherited, not loaned, in a similar way to the 'spurious reconstructions' already alluded to. This must therefore be taken into account, especially in areas such as Tonga–Samoa where such conditions are known or likely to have existed from time to time. For example, while it is true that Tongan *lagakali* and Samoan *lagaʔali* (*Aglaia* sp.) correspond correctly, and both appear to be phonologically embedded, and point to a PPN **lagakali*, the possibility of etymological borrowing means that we may in fact be dealing with a relatively recent introduction. Similarly, since archaeologists tell us that during the first thousand years of occupation of Fiji–West Polynesia, the whole area was culturally uniform, or very nearly so, it is highly likely that the language was also relatively uniform during this time (Pawley 1996), or that, if separate languages had developed, there was a great deal of bilingualism. Under these circumstances, it is unlikely that any borrowing during this period would be phonologically detectable.

On the other hand, the fact that etymological borrowing is subject to certain historical circumstances can be of use in dating loans. While it is true that during historical times Fijian /v/ has been borrowed regularly as Tongan /v/, and Fijian /s/ as Tongan /s/, it is possible that at an earlier date, when Tongans and Fijians were more often bilingual and so more aware of regular correspondences between their languages, Fijian /v/ was borrowed as /f/ and /s/ as /h/ (or /s/ that subsequently became /h/). Hence it is linguistically possible that Tongan *fahu* '(man's) sister's son' is a loan from Fijian *vasu*, as is suggested by distributional and other

evidence (Burrows 1938:152), but it must have been loaned earlier than the eighteenth century, when it would have been borrowed into Tongan as *vasu* rather than *fahu*.

Tongan *nafunafua* '(skin) rough and cracked from excessive kava drinking' (from Fijian *dravudravua* 'grey, ash-like') is another example of an etymological loan—in this case not entirely so, because although Fijian /v/ is realised as /f/, /dr/ is not realised as its etymological counterpart. In contrast with this is Tongan *navunavua* '(hair) limy, not properly washed after treatment with lime', from the same source, with the normal loan phonology found in the eighteenth and nineteenth centuries. This could be interpreted as indicating that excessive kava drinking was introduced from Fiji before treating the hair with lime, though there are other possible interpretations of the data.

3.1 Sound correspondences in Central Pacific

Since most of the data we will be dealing with are from Central Pacific languages, the main regular consonant correspondences of Fijian, Rotuman, Tongan, Futunan and Samoan are presented in Table 1 (for more details, see Geraghty 1986, 1996). PCP *l, *m, *n and *g [ŋ] are not shown since they continue unchanged in all four languages. There are some minor changes in the vowels, but they need not concern us here.

Table 1: Major Central Pacific consonant correspondences

PCP	v	b	t	d	dr	r	k	q	ʔ	w	c	s	y	#-a
Fiji	v	b	t ¹⁰	d	dr	r	k	q	∅	w	c	s	c	y
Rotuma	h	p	f	t	t	r	ʔ	k	∅	v	s	s	r/∅	g
Tonga	f	p	t/s ¹¹	t/s ¹¹	∅,l	∅,l	k	k	ʔ	v	h	h	∅	∅
Futuna	f	p	t	t	l	l	k	k	ʔ	v	∅	s	∅	∅
Samoa	f	p	t	t	l	l	ʔ	ʔ	∅	v	∅	s	∅	∅

This list of correspondences was arrived at using basic vocabulary, and so provides a baseline from which to determine loan words: if a name violates these correspondences (i.e. is not well embedded), a likely explanation is that it was borrowed. Most of these regular correspondences are illustrated in the plant names listed in Table 2.

¹⁰ The 'Fiji' here (and in Table 2) is something akin to Proto Fijian. In Standard Fijian, as in many other Eastern Fijian communalects, the changes *t* > *d*, *r* > *dr* and *c* > *s* have occurred initially in common nouns (Geraghty 1983:74–95), so for example the earlier **talo* 'taro' became *dalo* in parts of Eastern Fiji, **togo* 'mangrove' > *dogo*, etc.

¹¹ PCP **t* and **d* are reflected as /s/ before /i/ in Tongan.

Table 2: Some directly inherited PCP plant names

PCP	Fiji	Rotuma	Tonga	Samoa
aka (<i>Pueraria trilobata</i>)	yaka	gaʔa	aka	aʔa
buabua (<i>Guettarda speciosa</i>)	buabua		puopua	puapua
caca (<i>Codiaeum variegatum</i>)	caca	sasa		
damanu (<i>Calophyllum vitiense</i>)	damanu		tamanu	tamanu
doi (<i>Alphitonia zizyphoides</i>)	doi		toi	toi
drala (<i>Vitex trifolia</i>)	drala	tala	lala	lala
gia (<i>Pemphis acidula</i>)	gigia	giagia	gigie	gia
koka (<i>Bischofia javanica</i>)	koka		koka	ʔoʔa
leqi (<i>Xylocarpus granatum</i>)	leqi	lekileki	lekileki	leʔileʔi
mulo (<i>Thespesia populnea</i>)	mulomulo	mula	milo	milo
niu (<i>Cocos nucifera</i>)	niu	niu	niu	niu
qalaka (<i>Planchonella costata</i>)	qalaka		kalaka	ʔalaʔa
talo (<i>Colocasia esculenta</i>)	talo		talo	talo
togo (<i>Bruguiera gymnorrhiza</i>)	togo	fogo	togo	togo
tuva (<i>Derris trifoliata</i>)	tuva	fuha		
vadra (<i>Pandanus tectorius</i>)	vadra	hata	fā	fala
vau (<i>Hibiscus tiliaceus</i>)	vau	hau	fau	fau
vetaʔu (<i>Calophyllum inophyllum</i>)	vetau	hefau	fetaʔu	fetau
vudi (<i>Musa AAB</i>)	vudi		fusi	
vue (<i>Ipomoea spp</i>)	vue		fue	fue
vutu (<i>Barringtonia asiatica</i>)	vutu	hufu	futu	futu
yago (<i>Curcuma longa</i>)	cago	raga	ago	ago
ʔayawa (<i>Ficus prolixa</i>)	yacawa	äeva	ʔovava	aoa
ʔuvi (<i>Dioscorea alata</i>)	uvi	ʔuhi	ʔufi	ufi

Note that the plants in Table 2 are mostly either self-propagating, and so would have been present on Pacific islands, natural conditions permitting, before human settlement, or introduced by the earliest settlers. Some may have been introduced more recently, but there is no such indication in their linguistic form: as noted above, only certain phonemes exhibit different reflexes when borrowed, so detecting borrowings between closely related languages phonologically is a matter of chance, depending on what particular sounds constitute the plant name. If a name contains only one consonant, and that consonant is a highly stable one, as is the case with *niu* 'coconut', then there is usually no phonological means of determining whether or not that name is a borrowing. It is also unlikely, as noted above, that a name introduced from Fiji to Polynesia, or vice versa, in the first thousand years or so of human settlement in the Central Pacific would be phonologically detectable; so the inclusion of a plant

name in the following list of linguistically visible borrowings indicates that the plant was introduced after approximately two thousand years ago. This stricture does not, of course, apply to borrowings from outside the Central Pacific languages, such as Melanesian loans in Fiji and Micronesian loans in Polynesia.

3.2 Melanesian loans in Fiji

Terminalia catappa

As pointed out in Geraghty (1983:85) and (1990:74, 90), Fijian *tāvola* is an irregular reflex of PEO **tavoRa* (the expected form being **tavoā*), and the *l/* reflex of **R* (rather than */r/*) suggests that the word was loaned from the Solomons, though I have so far been unable to find a Solomon Island source, most of the evidence for **tavoRa* being from Vanuatu. Even more perplexing is the fact that there is a well-established PCP reconstruction for this plant with useful timber and almond-like nuts, **talice*, with regular reflexes in Polynesia and Rotuma, as well as parts of both Western and Eastern Fiji.¹² One possible explanation is that the name was introduced with a superior variety of the species, such as one of the large-kernelled cultivars with distinctive tastes resulting from intense selection on certain smaller islands (Evans 1996:22), and eventually replaced **talice* as the 'generic' name for the species over most of Fiji. Another possibility is that **talice* was originally applied to *Terminalia littoralis*, which has an even smaller kernel, and is now known by such names as *tāvola ni yalewakalou* 'tavola of the female spirit' and *jivilakwa* 'tavola with little flesh', in which case *Terminalia catappa* must have been a relatively recent introduction from the Solomon Islands. Rotuman *tavola* 'kind of tree' may be from the same source, directly or via Fiji.

Dracontomelon vitiense

It is possible to reconstruct a PCP **tawara(ʔ)u* for this fruit tree, with reflexes Fijian *tawarau* (metathesised¹³ in Standard Fijian as *tarawau*), Rotuman *favrau*, Mae *tavarau* and West Futuna *taverau* (Wheatley 1992:37). Although Smith (1985:455) indicates its presence in Tonga and Samoa, it is not listed in either Yuncker (1959) or Yuncker (1945), nor is it found in the relevant dictionaries.

The form **tawara(ʔ)u* can be analysed as **tawa* (*Pometia pinnata*) (the fruit of which it resembles) plus **ra(ʔ)u*, which is clearly related to PNV (Proto North Vanuatu) **ra(ʔ)u* (*Dracontomelon vitiense*), itself a reflex of PMP (Proto Malayo-Polynesian) **daqu* (*Dracontomelon dao*) (a very similar species) (Blust 1986), or PAn (Proto Austronesian) **daqu* (*Dracontomelon edule*).

That the PCP form is such a compound, rather than simply **ra(ʔ)u*, suggests that the plant was introduced after the original settlers of the Central Pacific had lost the memory of

¹² The form found in Tongan and Niuean, however, *telie*, is not regular, appearing to be a loan from a Nuclear Polynesian language such as Futunan, Uvean or Samoan.

¹³ Metathesis is the switching of sounds, in this case of */w/* and */r/*, and is a fairly common, if sporadic, change in the world's languages.

Dracontomelon, and was classified as a subtaxon of *Pometia*. Also indicative of relatively recent introduction is the fact that most of the Eastern Fijian reflexes, like the Tongan loan word *tānoa* ‘kava bowl’ mentioned above, have not conformed to Eastern Fijian apical prenasalisation, the only exceptions (*dawarau* and *darawau*) being found in parts of northeast Vitilevu. A further indication of a relatively recent western origin for *Dracontomelon* is the Fijian expression ‘*tei tarawau*’ (to plant *tarawau*) as a euphemism for death, as was recorded by Hazlewood (1850) and Seemann (1862:322). In traditional Fijian belief, the souls of the dead go to the west, so this expression could reflect a memory of the origin of *tarawau* in a place far to the west.

On the other hand, the form has been in Fiji long enough for it to be embedded in *tarawaukeirakakā*, literally ‘the parrot’s *tarawau*’, and similar compounds, used extensively through eastern Vitilevu and Vanualevu for the tree *Disoxylum* (PCP **maxota*), which bears an inedible fruit of similar size and shape to the *Dracontomelon*; and for it to be phonologically embedded in Rotuman, as *favrau*.

Spondias dulcis

In Geraghty (1990:76), I reconstructed PCP **uRi* as the name for this fruit plant (this was slightly in error, as will be explained below). The widespread Western Fijian name *maoli* (Geraghty 1990:91) shows a number of irregularities, one of which (/l/ from **R*) suggests it may have originated in the Solomon Islands. However, a suitable Solomon Island source for this loan has yet to be located.

Antiaris toxicaria

Perhaps worth noting in this section is a tree for which there is only non-linguistic evidence of introduction from Vanuatu or the Solomon Islands to Fiji and Western Polynesia. This is the upas tree, *Antiaris toxicaria* (Seemann 1862:334; Smith 1981:200; Clunie 1985:35–37), the latex of which was used to poison arrows. Its Fijian name recorded by Seemann, *mavu ni toga*, suggests that it may have been introduced to Fiji from Tonga, but it may be that *Tonga* was in this case a general term for any overseas place of origin. In another source, the name *mavu ni Toge* is recorded, possibly again by Seemann (Clunie 1985:36), raising the possibility that the ascribed place of origin is not Tonga, but Togē, a village near Ba in northwest Vitilevu. The plant has not been reported from Fiji since 1875, nor from Tonga or Uvea since 1852 (Whistler 1991:47).

3.3 Fijian loans in Tongan

Since the following Fijian loans appear to have progressed no further than Tonga, it is reasonable to assume that they are mostly relatively recent—occurring within the past 200 years.

Solanum melongena

The eggplant was probably a late nineteenth century introduction to Fiji (Smith 1991:13–14), brought by Indian indentured labourers who began arriving in Fiji in 1879. The Hindi name *baigan* was Fijianised as *baigani*, which in turn became Tongan *paigani*.

Bambusa vulgaris

This extremely useful type of bamboo was first recorded in Fiji in the late nineteenth century (Smith 1979:295–296), and has since spread rapidly in Fiji. One of its Fijian names is *bitunivālagi* (bamboo from overseas), in contrast to *bitu* for the indigenous bamboo (*Schizostachyum glaucifolium*). Although there is no unequivocal linguistic evidence for borrowing, I include Tongan *pitu* ‘yellow bamboo (*Bambusa vulgaris*)’ (Whistler 1995:56) here as a loan from Fijian because of the distributional evidence, and because in Futuna the same species is called *kofe fiti* (‘Fijian bamboo’).

Alpinia sp

The Fijian name *cēvuga* refers to the ornamental ginger plant *Alpinia vitiensis* (Smith 1979:209–211) and some closely related species. Tongan *tēvuga* is a ‘kind of plant, similar to the *teuila* [white flower, strong scent], but having reddish stalk, leaves and flowers’, which suggests *Alpinia purpuratum*, but Yuncker (1959:85) identifies it as the white-flowered *Hedychium coronarium* of the same family. Whatever the case, this must be a loan from Fijian on two phonological grounds: were it directly inherited, the Tongan initial would be **h*, and the sequence /vu/ only occurs in loan words.

Dioscorea alata cultivar

Fijian *dakulevu* and Tongan *takulevu* both refer to varieties of yam, for neither of which there is much further information. The Tongan must be viewed as a loan from Fijian because of the /vu/ sequence, and possibly also because the Fijian may be analysable as *daku-levu* ‘big back’.

Saccharum edule

Fiji is at the eastern extreme of the natural range of this seasonal food plant closely related to the sugar cane (Smith 1979:370–371), and the most widespread Fijian name is *duruka*. There is nothing in the Tongan name *tuluka* that marks it as necessarily a borrowing, but it is not found in Yuncker (1959), and Churchward (1959) states it to be a recent introduction.

Aglaiia saltatorum

Tongan *lagakalialeva* ‘species of lagakali plant’ (Collocott 1925) is clearly loaned from Fijian *lagakaliyalewa* (*Aglaiia* sp.), probably a variety of *Aglaiia saltatorum*, on morphological grounds. The Fijian can be analysed as ‘female *lagakali*’.

Cinnamomum and Cryptocarya spp.

Fijian *macou* refers to a number of species of *Cinnamomum* and *Cryptocarya* (Lauraceae) with aromatic bark used to scent coconut oil (Smith 1981:120–133). Tongan *motou* (*Cinnamomum pedaticervium*) (which probably refers also to other related species) is clearly a loan from Fijian on phonological grounds—were it cognate, **mohou* would be expected. The change of the first vowel (assimilation) is regular.

Polyalthia laddiana

I am grateful to Randolph Thaman (pers. comm.) for this identification of *mocelolo* ‘kind of fragrant tree’—much sung about but little seen. Tongan *motelolo* ‘kind of tree with odoriferous fruit’ must be loaned from Fijian, on the same grounds as *tēvuga* and *motou*.

Musa AAB cultivar

Fijian *mudramudra* ‘kind of plantain’ is clearly the source for Tongan *munomuna* ‘kind of plantain’, the regular Tongan reflex of Fijian /dr/ being /Ø/ or /l/.

Dendrocnide harveyii

The presence of the sequence /sa/ in the Tongan name for this nettle tree, *salato*, marks it as a loan, though it could be from either Fijian or Samoan, both of which have *salato* with the same meaning. The apparently unnecessary loaning of this name may be connected with its relative rarity in Tonga, since it is mostly confined to the island of ‘Eua.

Dioscorea nummularia

Tongan *sivoli* ‘kind of yam’ is marked as a loan from Fijian *tivoli* by the sequence /vo/.

Euphorbia fidjiana?

Tongan *totofisi* (Collocott 1925) ‘plant with dark purplish leaves, very potent in witchcraft’ is not a loan from Fijian, but its name means ‘Fijian *toto* (*Cerebra manghas*)’. The description suggests *Euphorbia fidjiana*, a member of the same family as *Cerebra*.

Cyrtosperma chamissonis

The Tongan name for this kind of swamp taro, *via* (Whistler 1995:52), is clearly a loan from Fijian *via*, which is used for both *Cyrtosperma* and *Alocasia* (the Tongan cognate would be **fia*). According to Pond (n.d.:77), it grows only on the island of Niuaotupapu. See discussion below with reference to *pulaka*, the more widespread Polynesian name for *Cyrtosperma*.

Metrosideros collina

On two phonological grounds, the presence of /vu/, and /v/ rather than /fl/, Tongan *vuga* must be a loan from Fijian *vuga*. Both refer to *Metrosideros collina*, which is now extinct in Tonga (Whistler 1991:55).

Unidentified vine

Fijian *wāvatu* (literally ‘stone vine’) refers to a number of strong vines used in the construction of houses, fish fences, fish traps etc., including *Agatea*, *Rourea*, *Connarus*, *Jasminum*, and *Faradaya*. Tongan *vavatu* ‘kind of vine used in fish traps’ must be viewed as a loan from Fijian because of the medial /v/ (rather than *f) and because only the Fijian is analysable, as *wā* ‘vine’ plus *vatu* ‘stone’.

3.4 Fijian loans in Futuna

As with the loans in Tongan, these are most likely to be fairly recent.

Callophyllum inophyllum

Linguistically, Futunan *tilo* could be either an inherited form cognate with Fijian *dilo*, or a borrowing of it, since the form is equivocal. However, given the distribution of *tilo* in Polynesia (confined to Futuna) and the fact that there is a widespread Polynesian name for this tree, **feta ŋu*, a reflex of PCP **veta ŋu* with the same meaning, the most economical hypothesis is that the Futunan is a loan from Fijian.

Aglaiia saltatorum

Fijian *lagakaliuto* is a variety of (or possibly closely related species to) *Aglaiia saltatorum*, with larger than normal fruit. It is composed of *lagakali* plus *uto* ‘breadfruit’. The *uto* in Futunan *lagakaliuto* ‘*Aglaiia saltatorum*’ has no meaning in Futunan, so the word appears to be a loan from Fijian. Compare a Samoan name for a variety of the same taxon *lagaʻali ŋulu* (Pratt 1878), where *ŋulu* is Samoan for ‘breadfruit’.

Dioscorea alata var. or *Dioscorea rotundata*

Fijian *vurai* is a variety of *uvi* (yam) which matures in six months (rather than the usual nine or so), has a distinctive pumpkin-like shape, and firm white flesh. In many respects it answers to the description of *Dioscorea rotundata* (Weightman 1989:72), though this species has not previously been reported in the literature for Fiji (except for a very brief mention in Harwood 1938:9), and indeed was only introduced to Vanuatu in historical times, its home being West Africa. Although acknowledged to be a modern introduction in some parts of Fiji, it seems to have been present since at least recent prehistoric times, its point of origin being the district of Votua, on the coast near Ba in northwest Vitilevu. There a story is told of it being the gift of a leprous stranger in gratitude for his being looked after by the people of Votua, which he told them they would find growing on his grave. The name *vurai* is said to be abbreviated from *vuraibulu* meaning ‘emerged from the underworld’.

The *vurai* was recorded as early as 1836–40, when the Methodist missionary David Cargill included it, defined simply as a ‘sort of yam’, in his Lakeba (Lau) dictionary. In 1849, another Methodist missionary, James Calvert, wrote thus on Wednesday 21 March: ‘I set off about noon towards Bulu [chiefly village of Ba]. The sun was painfully strong. The road was very good, being dry. I passed a flat of yams I suppose 1¼ mile[s] long. It was the largest quantity

of yams planted together I had seen. They looked exceedingly well. I was delighted with the sight. The name of the yam is Vurai—It is peculiar to Ba—& will be ready to dig in two months. In four months after that they will have ready their ordinary regular yams of Fejee. In four months after that their kawai [*Dioscorea esculenta*]*—*which they now live upon. The vurai yams are set on the same spot for several successive years—which is not the case with yam-setting in Fejee generally’.

Futunan *vulai* ‘kind of yam’ (Burrows 1936) is clearly a loan word from Fijian *vurai* on phonological grounds, the expected cognate being **fulai*.

3.5 Fijian loans in Western Polynesia

The following plant names of Fiji origin are found more generally in Western Polynesia. It is a reflection of Fiji’s external relations of recent centuries that it has loaned words exclusively to Tonga and Futuna, but not, as far as I have been able to ascertain, to Uvea or Samoa.

Dioscorea alata cultivars:

Fijian *lokaloka* ‘kind of yam with purple flesh’ is considered to be the source for Tongan *lokoloka* ‘kind of purple yam’, East Uvea *lokaloka* ‘kind of yam’, Futuna *lokaloka* ‘kind of purple yam’, and also Rotuman *roakroka* ‘kind of yam with red flesh’, on etymological grounds, *lokaloka* being also the Fijian word for ‘purple’. A variety of this yam (or perhaps simply an unusually shaped specimen), *lokolokamagavalu*, is mentioned in a Tongan legend as being found in Pulotu, the home of the souls of departed chiefs (Gifford 1924:153), a mythical place which I believe to be based on Matuku in Fiji (Geraghty 1993).

Fijian *tabu(w)ani* may be the source for Tongan *tapuane* and Futuna *tāpuani*, all varieties of yam for which no further details are available. It is just possible that it is a loan from Polynesia to Fiji, since the correspondence of Fijian /b/ to Polynesian /p/, though not found in nineteenth-century loans, may have occurred earlier. On the other hand, the word may be morphologically analysable in Fijian, since *tabu-* is a common prefix meaning ‘not, un-’, and *wani* means ‘tied’.

Fijian, Tongan, Uvea and Futuna all show *voli* as a variety of yam. The sequence /vo/ marks this word as of Fijian origin.

Hibiscus (Abelmoschus) manihot

This very nutritious green vegetable is *bele* in Fijian, *pele* in Tongan, Samoan, and Niue. It has a plausible etymology only in Fijian, *bele* meaning ‘soft leaf’.

Centella asiatica

This small herb with medicinal properties is known as *totodro* throughout Fiji, and its Polynesian names are: Tongan *tono*, Niue *tono*, Uvea *tono*, Samoan *togo*. The apparent Samoan change to /g/ is a recent product of n/g confusion, Pratt (1878) having recorded *tono*

in the nineteenth century. The correspondence of Fijian /dr/ to Polynesian /n/ is a clear sign of a loan from Fiji.

Entada phaseoloides

This very useful vine—it provides medicine, a supply of fresh water, a means of hauling logs, skipping ropes, scare lines for fishing, etc.—is best known in Fiji as *wālai*, but is also called *wāicibi*, on account of its equally useful seeds, which are known as *icibi* (*wā* means ‘vine’). Futuna *vātipi*, with the same meaning, must be judged to be a loan from Fijian on both phonological and morphological grounds, as also Tongan *sipi* on phonological grounds, though it would seem to be an ‘unnecessary’ one, the vine occurring naturally as far east as the Cook Islands. Tongan and Futunan *vālai* also look like loans from Fijian *wālai*, and Yuncker (1959:131) and Whistler (1995:56) both identify Tongan *vālai* as *Entada*, but its definition in Collocott as ‘a creeping plant used in basket manufacture and for lashings’ (it can be so used, but other uses are more important), and in Futunan as ‘grosse liane peu résistante’ would appear to cast some doubt on this identification.

3.6 Fijian loans elsewhere in Polynesia

Cananga odorata

This is a kind of perfumed flower tree, also with a useful timber, sometimes known as ylang-ylang. Its natural range extends maybe as far east as the Solomons (Smith 1981:37–38). In Fijian it is known as *makosoi* and *mokosoi*. Its Polynesian names include Tongan and Uvean *mohokoi*, Futuna *mosokoi*, Samoan *mosoʔoi*, Niue *motooi*, Tahitian *motoʔi*, and Rarotongan *mataʔoi* or *motoʔoi*. The Fijian *mokosoi* and the Tongan and Samoan forms correspond perfectly (allowing for metathesis), which means that there is no phonological evidence for borrowing; but it must be recalled that sometimes borrowing is phonologically undetectable. Niue *motooi* and Rarotonga *motoʔoi* are both however irregular, and can only be explained as loans from either Samoan or Tahitian. Tahitian *motoʔi* shows two phonological irregularities: /t/ corresponding to /s/ in the other languages (one would expect Tahitian /h/ in an ‘inherited’ word), and the apparent loss of the last /o/. Borrowing can account for both of these irregularities. Tahitian changes *s to /h/, so has no /s/, and regularly borrows /s/ as /t/. Furthermore, a recent sound-change in Tahitian has been to copy vowels from the left to the right of glottal sounds, i.e. /h/ and /ʔ/ (glottal stop), so that a word such as /taʔi/ ‘cry’ has come to be pronounced [taʔai] (Ward 1993:39). Thus a word heard as [mosoʔoi] would be interpreted phonemically as /motoʔi/, as if the third /o/ were merely a copy of the second. If we refer to the historical record, we find indeed that Pétard (1986:162) states that the tree was an eighteenth-century introduction to Eastern Polynesia.¹⁴

¹⁴ Robert Langdon (pers. comm.) informed me that there is documentary evidence for the introduction being as recent as the mid nineteenth century, and it is indeed absent from Davies’ usually fairly comprehensive dictionary of 1851.

As for the origin of the tree within the Central Pacific area, morphological analysis points to Fiji. The word *makosoi* can be analysed as *mako* + *soi*, where *mako* means 'Cyathocalyx sp.', a forest tree belonging to the same botanical family (Annonaceae) as *Cananga odorata*. There are a number of native species of *Cyathocalyx* named *makosoi* (Smith 1981:24–25) which could have given their name to *Cananga*. Alternatively, the name could have been coined for *Cananga* and then passed on to the related *Cyathocalyx* species. One meaning of *soi* is 'cut', referring perhaps to the fact that the flower of the *makosoi*, culturally its most important part, is divided into long thin strands. Support for this analysis is afforded by the Cakaudrove (Eastern Fiji) name for the five-leaved yam *Dioscorea pentaphylla*, *iviso*, which appears to be derived from an earlier **uviso*, composed of *uvi* 'yam' plus *soi* 'cut', appropriate because the leaf, unusually for a yam, is not whole but divided into five or seven long thin leaflets.¹⁵

Spondias dulcis

As noted above, PEO **uRi* has been reconstructed for this fruit tree (Geraghty 1990:76), but a widespread Western Fijian name for it (*maoli*) appears to have been loaned from a Solomon Island language. I now realise that this reconstruction should be **ʔuRi*, an initial glottal stop being required on the evidence of Nakanai (New Britain) *huri* and Proto North Vanuatu **ʔuRi-si* (my own reconstruction). Careful scrutiny of the Polynesian and Rotuman names shows irregular developments. PEO **mauRi* 'left-handed' is reflected in PCP as **mauī* (lengthening possibly regular), which becomes Fijian *mawī* and PPn **mauī*. Given this pattern, one would expect PEO **ʔuRi* to yield Fijian *wī*, as it indeed does, but the anticipated PPn ***ʔuī* is not found. This suggests that the Polynesian forms (Tongan *vī*, Samoan *vī*, Tahitian *vī* etc.) were loaned from Fijian. The same may also be true of Rotuman *vī* (*Spondias dulcis*), and perhaps also Pingilapese *wī* 'kind of tree with fruit resembling the star fruit', though this could be a description of *Barringtonia asiatica*, which is *wī* in Pohnpei—depending on whether the resemblance is in taste or in shape.

3.7 Micronesian loans in Polynesia

Artocarpus altilis

Much has been written on the importance of the breadfruit in certain Pacific islands, and the circumstances of its introduction to Polynesia (e.g. Ishikawa 1987; Langdon 1989; Marck n.d.; Ragone 1991). I have also drawn attention to the large number of names for breadfruit that can be theoretically reconstructed to Proto Eastern Oceanic level, including **kulu*, **maRi*, **baReko* and **betav* (Geraghty 1990:89). Two of these can also be 'reconstructed' for Proto

¹⁵ However, the apparent Polynesian cognate of this form, PPn **soi*, refers not to *Dioscorea pentaphylla* but to *Dioscorea bulbifera*, which is closely related but does not share the distinctive leaf structure. This raises the possibility that *soi* here means 'peel' (as it also does in Fijian), since the bulbils and roots of *Dioscorea bulbifera* are peeled before being washed or cooked for consumption. It is for this reason that *Dioscorea bulbifera* is known in Western Fiji as *saracivi*, from *sarau* (*Dioscorea esculenta*) and *civi* 'peel'.

Polynesian, **kulu* and **mei*, a circumstance that usually means that at least one of them is spurious. My reading is that **mei* is indeed a loan word, and **kulu* may be one too.

As noted in Geraghty (1990), agreements in Micronesia and Southern Vanuatu point to PEO **maRi* (which may well be spurious as to time depth). The Polynesian reflexes of this item all show an irregular development in the first vowel, to **mei*. A possible source for this form is Pingilapese *mei*, which shares the raising of the first vowel. As pointed out by Langdon (1989:309–311), it is striking that *mei* is found only in Tonga, Futuna, Tuvalu and some outliers in Western Polynesia, and only in the Marquesas and Mangareva in the East, suggesting the introduction of breadfruit (or perhaps superior varieties and/or associated cultural items) from Tonga to the Marquesas, an idea strongly supported by the Marquesan word for fermented breadfruit, *mā*, which is almost certainly a loan from Tonga.

The other PPn reconstruction for breadfruit, **kulu*, is more widely distributed both within and without Polynesia, and looks in many respects like a bona fide PPn word. However, a note of caution is in order. While it is tempting to say that PPn **kulu* is an impeccable reflex of PCP **kulu*, we should bear in mind that we as yet understand little of the development of vowels in Proto Polynesian. Since /u/ often fronts to /i/ (e.g. **bulu* > **pili* ‘stick, adhere’, **kuli* > **kili* ‘skin’, **mulo* > **milo* (*Thespesia populnea*), **ʔulo* > **ʔilo* ‘maggot’, **vulo* > **fīlo* ‘twist’, **turu* > **turi* ‘knee’), it would be well to have a better understanding of the conditions governing this fronting before stating that **kulu* is a perfectly regular development.¹⁶

Cyrtosperma chamissonis

As already noted, this large swamp taro is known in Tongan as *via*, a name loaned from Fijian. Elsewhere in Polynesia, the name is derivable from **pulaka* (Futuna,¹⁷ Uvea, Tuvalu *pulaka*, Samoa *pulaʔa*, Rarotonga *pūraka*); *pulaka* is also used in some islands of Lau in eastern Fiji. As pointed out in Geraghty (1990:57, 89), this form is an irregular development with respect to PEO **buRaka*, the expected Polynesian reflex being ***puaka*, and is most likely to be a loan from a Micronesian language, such as Woleai *bulaga*. It is irregular also in Micronesian languages, and seems to have been borrowed from Nakanai *bureka* ‘kind of elephant-ear taro’ or Palau *brak* ‘giant swamp taro’, or a related form.¹⁸ The similarity of

¹⁶ This fronting appears to have continued after the breakup of Proto Polynesian; cf. PPn **hui* ‘bone’ > PNP **iwi*, PPn **kui* ‘blind’ > PNP **kiwi*.

¹⁷ The first record of *Cyrtosperma* in Polynesia was made by le Maire in 1616, whose Futunan vocabulary included *pulaka* glossed as ‘cheese’ (Kern 1948:222, 231; Pond n.d.:104–105). The cooked root does indeed resemble cheese in colour and texture. In Tahiti, where it is a modern introduction, it is called *maʔota* (Pétard 1986:100; Whistler 1995:52). I do not know the etymology of this name, but it looks rather like a reflex (irregular) of PPn **maʔota* (*Dysoxylum* sp.), a tree famous for its strong smell. Seemann (1865:303–304) claims that the *Alocasia* plant omits a nauseous smell, and that *Cyrtosperma* is in every respect a similar species; but no other sources comment on its smell, nor has anyone yet complained about the ones in my garden.

¹⁸ Some Micronesian terms for the *Alocasia* swamp taro, such as Woleai *file*, also show irregularities suggesting that they are relatively recent loans (Geraghty 1990:89).

names across the Pacific, incidentally, was first pointed out by Barrau (1963:3, 6), who was however not aware that the sound correspondences point to a post-aboriginal introduction.¹⁹

In Fiji, there is some traditional support for its being introduced. A legend from Noco, part of the Rewa river delta, which is the only part of Fiji where it is (or rather has been) a staple food, ascribes its origin to the nearby island of Beqa. A simplified version of this legend is published in Reed and Hames (1967:220–221). For both mangrove delta and atoll environments, *Cyrtosperma* would have been a godsend, since unlike most other staples it tolerates saline groundwater (Parry 1977:13).

3.8 From out of the East?

Much has also been written about the possible prehistoric introduction of plants from the American continent, such as *Solanum repandum* to the Marquesas and westward as far as Fiji (Whistler 1991:49), *Gossypium barbadense* (cotton) to the Marquesas and Society Islands (Langdon 1982), *Manihot esculenta* (manioc, tapioca) to Rapanui (Easter Island) (Langdon 1988b), *Sapindus saponaria* (soapberry) to Rapanui and other islands of central Eastern Polynesia (Langdon 1996), and *Lageraria siceraria* (gourd) to all of Eastern Polynesia (Whistler 1900; Burtenshaw 1999).

Only one plant of American origin is claimed to have a name that is also of American origin: *Ipomoea batatas* (sweet potato, *kumala*, *kumara* etc.). As far as I am able to judge with no knowledge of American languages, the arguments seem to be convincing, including the suggestion by Rensch (1991) that there is evidence for at least two separate introductions, the common Eastern Polynesian name *kumara* deriving from Peru and/or Ecuador, and the Hawaiian name *ʻuala* from northern Colombia.

3.9 From out of the West?

Intsia bijuga

This famous tree of Fiji–West Polynesia has a very durable timber. In Southern Lau, where most of Fiji's traditional carpenters reside, *vesi* is the most highly esteemed of all timbers, the name of which inspires 'an image of all that is fine, strong and permanent. It is stated to be the 'best' wood, for, although *cau* [*Casuarina equisetifolia*] is known to be tougher and *bau* [*Planchonella pyrulifera*] to grow larger, *vesi* is regarded as the carpenter's wood *par excellence*. Its straight grain, strength, durability and resistance to cracking make it a pleasure to work and although it occurs in other parts of Fiji, none seems to compare with the quality of the island *vesi* from Kabara and Vulaga in Lau' (Hooper 1982:53).

¹⁹ Rotuma and Kiribati also have identical names for *Cyrtosperma*: *papai*. If we accept a Micronesian route for *Cyrtosperma* to the Central Pacific, it is more likely that the Rotuman is a loan from Kiribati than vice versa.

Its name has been reconstructed as PCP **vesi*, based on Fijian *vesi*, Tongan *fehi*, East Futuna *vesi*,²⁰ East Uvea *fehi*, and Tikopia *fesi* (unidentified tree, but the description is compatible). I know of no cognates in Oceania, but a plausible cognate is found in Western Austronesia: Buli (Halmahera) *besi*, Sea Dayak *besi*, Malay *besi* etc., all meaning 'iron' (for more related forms, see Mahdi 1994:175–176 and Tryon 1995 3:363–364). Since Western Austronesian /e/ regularly corresponds to Central Pacific /o/, not /e/, *vesi* appears to have been borrowed, though when, how, why and from which particular language is impossible to say. It is noteworthy that there are, to my knowledge, no cognates of this form between Western Austronesia and Fiji. The Samoan name is *ifilele*, which is believed to apply also to *Pongamia* (R. Thaman pers. comm.). Since this means 'flying ifi' (where ifi refers to *Inocarpus edulis*, the Tahitian chestnut), it would indeed be appropriate for *Pongamia*, since its seeds are very light and are blown about in the wind, which suggests that the name was originally applied to *Pongamia* and later transferred to the similar *Intsia bijuga*.

The *vesi* tree is found throughout the rugged interior of certain limestone islands of Southern Lau, and in coastal areas in many other parts of Fiji (Smith 1985:132–134). In most respects it appears to be well integrated into the local culture, being used as a totem and found in many place names, and it is also linguistically well embedded. So it is not a tree one would suspect of being recently introduced. There are, however, certain other facts that suggest that it may have been introduced at a relatively remote date. In Rotuma, its name *fesi* is clearly a Polynesian loan. In only one of the outlier languages, Tikopia, is a name related to *vesi* found. In the others, as far as I have been able to determine, the name for this tree is borrowed from Melanesian languages (Emae and Mele *kimau* from Tongariki *nakimau* or *nakumau* (Gowers 1976; Wheatley 1992)), or is a compound (Rennell *isi?atua*, from *isi* (*Inocarpus edulis*) 'Tahitian chestnut' plus *?atua* 'spirit, god'), or is of obscure origin (West Uvea *kai*). This suggests that *vesi* was not known to the Polynesians who settled most of the outliers.

Further suggestive linguistic evidence is provided by the fate of the oldest reconstruction for *Azelia bijuga*, Proto Malayo-Polynesian **qipil*. If this tree were found all the way from Indonesia to Western Polynesia, as it is now, when the first settlers arrived, one would normally expect the name to survive. However, the furthest east this name survives is in Roviana, in the Western Solomon Islands, where the name is *ivili*. While it is true that lexical replacement is always possible, the fact that the name **qipil* shifted to a similar species (*Inocarpus edulis*, Tahitian chestnut) in the Central Pacific (as indeed it did in parts of Papua New Guinea) is at least suggestive of loss of the referent.²¹

²⁰ The initial /v/ rather than /f/ would normally indicate a loan from Fijian, but here it is equivocal, since **f* > *v* is a regular development before /s/ in Futunan (e.g. **fusu* > *vusu* 'punch', **fasi* > *vasi* 'split'). The same change appears to have occurred in the northern outlier languages of Sikaiana, Luangiua, and Takū, an observation which presents a challenge to current thinking that they are most closely related to Tuvalu (Clark 1994:111).

²¹ In Geraghty (1990:75), I reconstructed PEO **toRa* as the name for *Intsia bijuga*, based on forms with that meaning in Palauan and Vanuatu, as well as Rotuman *foa* 'coconut grater', Fijian *toa* 'heartwood' and PPN **toa* '*Casuarina equisetifolia*, ironwood'. I now believe that 'heartwood' is a more likely meaning for this reconstruction.

In Kabara, where it grows more prolifically than anywhere else in Fiji, it is said to have been introduced by the founding ancestor of the present inhabitants from Oloi, a place near the contemporary villages of Cautatā and Vatoa in Tailevu, Vitilevu (Hocart 1929:210). According to Mariner (Martin 1817:359), it was introduced to Tonga from Fiji, and Seemann (1865) believed it was not native to Fiji, but an aboriginal introduction.

Morinda citrifolia

In Geraghty (1993), I argued that red parrot feathers (*kula*) were an important commodity in early Fiji–West Polynesia trade, and that war over the control of this trade led to a major population movement, perhaps around 1000 BP, from eastern Fiji to most parts of Polynesia (excluding Rapanui), introducing the name *togafiti* meaning ‘ruler’ or ‘landowner’, and the concept of Pulu or Fanuakula as an ancestral land. The name for these red parrot feathers appears to have been **kura*, the full range of meaning being something like: ‘red, (skin) light brown; kind of red-feathered bird; ornamental red feathers’. I proposed that this derived from POC (Proto Oceanic) **kurat* ‘Indian mulberry’ (*Morinda citrifolia*), the connection being that the roots of this tree produce a red dye. In Fiji and Polynesia, its reflexes often also carry many of the connotations of ‘gold’, being associated with wealth and power. I noted however that there was another POC reconstruction for the same tree, **ñoñum*, and speculated that perhaps **ñoñum* was the name of the plant, and **kurat* the name of the dye produced from it.

This speculation is now supported by evidence from Mahdi (1994:192–193), who noted that a number of non-Austronesian languages of North Halmahera in East Indonesia show forms such as Ternate *guraci* ‘turmeric’ (*Curcuma longa*), Tidore *kuraci* ‘yellow’, and Tidore *guraci* ‘gold’, which are the source of loans in certain South Halmaheran languages, such as Buli *guraci* ‘gold’. The formal correspondence of these forms with **kurat* is perfect. Mahdi adds that the Ternate/Tidore region of North Halmahera was the centre of the ancient spice trade, being until just a few centuries ago the only place in the world where cloves grew, and that North Halmaheran loans (including the word for ‘king’) are also found in Austronesian languages around the Gulf of Papua, indicating that ‘North Halmaherans also played an active role in maritime trade in and from East Indonesia over relatively large distances at various, and perhaps also unexpectedly early times’. Given the wealth and power of the North Halmaherans, and that fact that South Halmaherans borrowed from them the word *guraci* ‘gold’, it seems quite possible that the same word was also loaned into languages in their New Guinea sphere of influence, and provided the source for the word **kurat* that then replaced reflexes of **noñum* as the word for *Morinda citrifolia* as far east as Fiji and Rotuma.

Broussonetia papyrifera

The paper mulberry plant, from which the best bark cloth is made, has been the subject of some discussion, particularly regarding its origin, Langdon (1989:313–317) claiming that it was introduced directly to Polynesia from Southeast Asia between 1000 and 1500 years ago. In my view, the linguistic evidence is equivocal. I cannot agree with Langdon’s claim (1989:313–314) that a multiplicity of names in Western Polynesia necessarily reflects its relatively late introduction into the area. Neither can I agree with Matthews (1996:117–118) that ‘linguistic evidence indicates that the prehistoric speakers of Proto Polynesian made tapa’.

This appears to be another instance of too much faith being put in reconstructions: as with

motorcars in Micronesia, so with tapa in Polynesia. The fact that reconstructions can be made is in itself no guarantee of antiquity. Until more data becomes available and a more detailed study can be made, the question remains open.

3.10 A non-borrowing?: *Piper methysticum*

Regarding the introduction of kava, Crowley (1994:94) argues as follows: 'The fact that Fijian does not share a cognate with the languages of Northern and Central Vanuatu suggests that perhaps kava also spread to Fiji after the initial settlement of these islands from Vanuatu'. This tentative statement has been seized on by Visser (1994:313) and turned to something far more assertive: 'The linguistic evidence does not support a very early introduction of kava in Fiji'. As noted above, while lexical retention is the norm, replacement is a not uncommon occurrence, so even if Fijian **ʔaqona* (which can be analysed as meaning 'intoxicating thing') did replace Vanuatu **maloku*, this says nothing at all about the date of introduction to Fiji. In any case, the Proto Eastern Oceanic name appears to have been **(kq)awa* (PPn **kawa*, Arosi *ʔawaʔawa*), so that both the Vanuatu and Fijian names are innovative, and neither tells us anything about the date of introduction of the plant. Since Polynesia retains the PEO name, the most likely scenario is that it was introduced with the first settlers of Fiji–Polynesia, who spoke Proto Central Pacific, and subsequently changed in Fijian to **ʔaqona*; though it is, as noted above, linguistically impossible to distinguish between a PCP word and one introduced in the first thousand years or so of occupation.

On the other hand, it does seem that PCP and PPn **kawa* meant 'fish-poison', cf. Nadroga (Western Fiji) *kawa* 'fish-poison tree (*Euphorbia?*)', Lautoka (Western Fiji) *kawa* 'fish-poison vine (*Derris* sp.)', Tongan *kavahaha* 'kind of leguminous creeper used as a fish poison', Nukuoro *kavaausu* 'fish-poison tree (*Barringtonia asiatica*)', West Uvea *kava* (*Derris trifoliata*), and PPn **kawa-susu* 'a shrub (*Tephrosia* sp.) used to poison fish'. This raises the possibility that the name **kawa* for *Piper methysticum* originated as a semantic extension in the Central Pacific region, in which case we must view as borrowings not only the Arosi (Solomons) *ʔawaʔawa* (in line, perhaps, with the Polynesian loan words cited above in footnote 6), but also the similar names found in the Admiralty Islands and New Guinea, as has indeed been proposed by Crowley (1994:95–100).

A final cryptic note: in 1616, Schouten recorded the Niuatoputapu name for kava as 'acona' (misprinted as 'acoua'), which clearly represents *akona*, corresponding to Fijian *yaqona* (Pond nd:74–75). Phonologically, this could be either a loan or an inherited word. I have no idea why *akona* should have been used rather than the expected *kava*, but duly record the fact for future consideration.

4 Conclusion

I hope I have shown that there is linguistic evidence for intentional human transportation of many plants in Fiji and Polynesia, sometimes over considerable distances, in prehistoric times. Bearing in mind that I have not conducted a systematic search, deliberately setting aside

introductions from Polynesia and almost totally neglecting the outliers,²² and that many loan words are linguistically invisible, plant introductions may well have been far more extensive than is suggested by the evidence in this paper.

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²² A systematic study of plant names in the outliers could be extremely useful in determining what plants were present in Western Polynesia when the outliers were settled. Although lexical replacement does occur, the chances of it occurring independently in different outlier languages are of course slim, so the more outlier languages fail to reflect a particular PPn ‘reconstruction’, the more likely it is that that reconstruction is spurious. A case in point is *fesi (*Intsia bijuga*), discussed above. There are many other likely candidates, such as *lagakali (*Aglaia* sp.), *seasea (*Syzygium corynocarpum*), *koli (*Syzygium neurocalyx*) and *mapa (*Diospyros* sp.).

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6 *From lowlands to islands: Dutch loans in Polynesia*

PAUL GERAGHTY AND JAN TENT

[The Polynesian islands] share in common the fact that the first European language they came into contact with was the English brought first by Captain Cook, spread by whalers and traders and later consolidated by missionaries. (Romaine 1991:623)

1 Introduction

The purpose of this paper is twofold.¹ First, we will present evidence that, contrary to claims such as the above, the honour of being the first European language to contribute to Polynesian vocabularies falls not to English, but to Dutch, the language of some of the earliest European explorers of the Pacific.² We will demonstrate that at least six words, possibly seven, that have been considered indigenous are in fact early Dutch loan words. Three, possibly four, of these words originate from either Le Maire's 1616 visit to Niuatoputapu and Futuna, or Tasman's 1643 visit to Tonga, the other three from Roggeveen's 1722 visit to the Tuamotus. Secondly, the subsequent spread of some of these loan words over a very large geographic area provides additional evidence of the extent of Polynesian inter-island voyaging before Cook.

¹ This paper is based on 'Early Dutch loanwords in Polynesia' *Journal of the Polynesian Society* 106(2):131–160 (June 1997), and 'More early Dutch loanwords in Polynesia' *Journal of the Polynesian Society* 106(4):395–403 (December 1997). An abridged version of the first paper, entitled 'The linguistic legacy of early Dutch explorers in Polynesia', also appeared in *Leuvense Bijdragen* 85(2):347–369 (1996). We are grateful to Robert Langdon, whose response to the first paper (Langdon 1998) provided much useful information on *tuluma* and prompted us to reconsider our position.

² There is, however, a possibility that the honour may fall to the Spanish: for the argument that Marquesan *peto* 'dog' was borrowed from Spanish *perro* 'dog' (see Geraghty 1997).

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2 Historical background

In the sixteenth and into the seventeenth century, the European exploration of the South Pacific was almost entirely the domain of the Spanish (Mendaña 1567–69, Mendaña-Quiros 1595–96, Quiros 1605–06, Torres 1606–07). This began to change, however, in the early years of the seventeenth century when the Dutch ventured into the South Pacific in search of new markets and the Great Southland. The most significant of the Dutch expeditions were those of Jacob Le Maire and Willem Corneliszoon Schouten in 1615–17, Abel Janszoon Tasman and Franchoys Jacobszoon Visscher in 1642–43, and Jacob Roggeveen, Corneliszoon Bouman, Roelof Rosendaal and Jan Koster in 1721–22. There were a number of other Dutch expeditions during this period (Jacob Mahu and De Cordes 1598–1600, Oliver van Noort 1598–1601, Joris van Spilbergen 1614–17, Jacob l’Hermitte 1624–25), but none of these ventured south of the Line.

2.1 The voyage Jacob Le Maire and Willem Corneliszoon Schouten, 1615–1617

Le Maire and Schouten’s objective was to legally circumvent the monopoly of the *V.O.C.* (*Vereenigde Oost-Indische Compagnie* ‘United Dutch East India Company’) by finding a new passage into the Pacific. This company, which had been formed only in 1602, had exclusive rights to trade with the East by way of the Cape of Good Hope and the Straits of Magellan. Other Dutch companies and individuals were thus forbidden to send ships to the East via these routes.

Schouten was the skipper of the *Eendracht* (‘Unity’, ‘Concord’), a 220-ton vessel with a crew of 65. The *Hoorn* (named after Schouten’s birthplace) was a 110-ton vessel with a crew of 22, skippered by Jan Schouten, Willem’s brother. Le Maire was the ‘President’ (i.e. in overall control) and the supercargo of the expedition.

They set sail from Texel on 14 June, 1615. The *Hoorn* was accidentally burnt on 19 December whilst being beamed on Coninx Eylandt (Kings Island) in the Rio Deseado, and its crew had to be accommodated on the *Eendracht*. On 24 January 1616, this now appropriately named ship made its way past the southern tip of the South American continent, which they named Cape Horn. The expedition then headed north. On 1 March they sighted the island of Juan Fernandez, but could not land due to the lack of wind and the strong Humbolt Current.

The *Eendracht* then headed north-west and then west into uncharted South Pacific waters, sighting previously unexplored islands and often making contact with their inhabitants. Wherever they went, Le Maire’s men traded many items for coconuts, bananas, greens, fish, pigs and chickens. The following sketch, based on the journals of Le Maire and Schouten (Engelbrecht and van Herwerden, eds 1945; Schouten 1968 [1619]) and Aris Claeszoon, the chief merchant of the *Hoorn* (Claeszoon 1646), indicates the length of stay in different parts of Polynesia, and the goods that aroused interest, or were traded or presented as gifts. The Dutch words for such goods are also included in the hope that, as more material on Polynesian languages becomes available, researchers may be able to identify more loan words than we have been able to.

Pukapuka (Tuamotu), 10 April. The Dutch found that the people of this island showed much desire for iron (*yser*), so much so that they would have pulled the iron nails (*spijckers*) and bolts (*bouten*) out of the ship if they could have. They were given two or three nails and beads (*coralen*), with which they were very pleased.

Takapoto and Ahe (Tuamotu), 15–16 April. Brief landings were made on each of these islands. A few items were presented as gifts on Takapoto; and on Ahe, they obtained water and greens without making contact with the inhabitants.

Tafari (Tonga), 10–12 May. On the first day, Le Maire sent some men with baubles ashore to ‘honour’ the women. The following day, the Tongans stole a small barrel (*vaetjen*) that was lowered down the side of the ship. They were presented with nails and other goods. Again, the islanders were very thievish, stealing everything they saw, pulling out nails, taking bullets (*cogels*), and pulling a knife (*mes*) out of the galley boy’s hands cutting his fingers badly. One Tongan took a small copper ink-well (*coperen inckt-cokerken*), whilst another took a mattress (*bultsack*), pillow (*oorcussen*), and a type of raincoat (*bolckvangher*) and then jumped into the sea. Another seized the plumb (*diep-loot*) from the helmsman.

On the final day, Le Maire’s men traded one nail and two single strings of beads (*snoerkens met coralen*) for five coconuts each. The headman of Tafari was shown a comb (*cam*) and a mirror (*spiegelhel*) which he coveted, but they were not given to him. Instead, he was given ‘a fathom’ (6ft/1.8m) of linen (*vaem lijnwaets*), an axe (*bijl*), and two bunches of beads. The Dutch also traded some fishhooks (*vishoecken*) with him.

Niutoputapu and Niuafou’ou, 13–14 May. Le Maire mentions only that items were traded and the islanders presented with gifts.

Futuna and Alofi, 21 May–2 June. Much trade was conducted during the two-week stay at these islands. On the first day, the islanders were given some beads and nails, and were very thievish. The next day, the Dutch traded nails and beads for coconuts, bananas, fish, pigs and chickens. They also traded a knife, a small pair of scissors (*scheercken*), some beads, as well as one nail and a small string of beads for a large fish.

On 24 May, Le Maire’s men went ashore and presented the islanders with beads, burning-glasses (*brant-spieghels*), a glass chain (*glase ketting*) and a cap (*mutse*). The king was given a shirt (*hemt*). All manner of items were traded. The king was also presented with a small copper bowl (*coperen beccken*), a quantity of white beads and some radish seed (*radijs zaet*). A man who presented the Dutchmen with a pig was given a knife, a nail and some beads. Some of the islanders who came aboard were shown elephants’ tusks (*oliphants tanden*), watches (*horlogien*), bells (*bellen*), mirrors, and pistols (*pistoolen*), and were presented with various items. The king was further given a pewter spoon (*tinne lepel*), a glass chain, some beads, a small hammer (*hamerken*), a burning-glass, more beads, gold thread (*goudtraet*) and sequins (*lovertjes*). The Dutch sailors also played on drums (*trommels*) and trumpets (*trompetten*), much to the delight of the islanders.

On 29 May, the king was given a bell, two knives and some other trifles. The next day, the islanders were given beads, an axe, two knives, copper bowls (*coper beckens*) and rings (*ringen*), which were divided among those who had brought pigs to the ship. Then, on 31

May, some islanders were shown through the galley and the rest of the ship. Each was 'honoured' with a bunch of beads, a knife, a comb, and some nails, and the noblemen among them each received an extra nail.

2.2 The voyage of Abel Janszoon Tasman and Franchoys Jacobszoon Visscher, 1642–1643

Tasman was commissioned by the *V.O.C.* to make a voyage of exploration to the Great Southland. His two ships the *Heemskerck* (named after a Dutch town), with a crew of 60, and the *Zeehaen* ('Sea rooster'), with a crew of 50, left Batavia on 14 August 1642. On 19 January 1643, after a voyage of some five months, during which he sighted Tasmania and the two main islands of New Zealand, Tasman's ships came upon one of the islands of the Tonga group, which he named Pijlstaert. The next day, two other islands were sighted, Tongatapu, which Tasman named Amsterdam, and 'Eua, which he named Middelburgh. The following account is based on Tasman's journal, edited by Posthumus Meyjes (1919).

Tongatapu, 21–23 January. On 21 January, three men in a canoe approached Tasman's ships. The Dutch threw them a piece of linen (*lijnwaet*), and a piece of wood to which were tied two large nails, a small Chinese mirror (*chinees spiegeltien*), and a chain of Chinese beads. Another canoe approached and its occupants were given a Chinese mirror, a knife, dungaree (*dongrij*), two nails and a rummer (i.e. large drinking-glass) of wine (*romer/roemer wijn*). The Tongans poured out the wine and took off with the rummer. Other canoes approached and coconuts were exchanged for nails. A chief came on board and was presented with a knife, a mirror and a piece of dungaree. The skipper's pistol and a pair of slippers (*muijlen*) were stolen, but later returned.

When the Dutch went ashore, other items presented or traded were: a serving dish (*schaffschootel*), a piece of copper wire (*cooperdraet*),³ more nails, beads, dungaree, knives, a piece of linen, and a piece of old sail cloth. The Tongans were shown tobacco, but had no knowledge of its use. On 22 January, a cannon was fired which frightened the Tongans. The leader of a group of islanders who boarded the ship was presented with a shirt, a pair of breeches (*brouck*), a mirror and some beads. The Dutch sailors played on violins (*violons*), a trumpet and a German flute (*duijtsche ffluijt*).

Nomuka (Tonga), 25 January. The Tongans were presented with nails, for which they had a strong desire, a mirror, a knife and a small flag (*vlaggeken*). Once again, the islanders were very thievish and stole whatever they could. On two occasions a pike (*pieck*) was stolen. Tasman stayed until 1 February. No other mention is made of gifts.

³ This particular item prompts us to speculate about the origin of Tongan and Futunan *ukamea* 'iron, metal', Samoan *u'amea* etc., since copper wire could be conceived of as a line (*uka*) of reddish colour (*mea*), and the word could have been subsequently generalised to cover other forms of metal. However, since the term had previously been recorded in Futuna by Le Maire and Schouten (Engelbrecht & van Herwerden 1945, vol 1:134), copper wire must have either drifted to Futuna before then, or been given by European visitors of whom there is no extant record.

2.3 The voyage of Jacob Roggeveen and Corneliszoon Bouman, 1721–1722

In 1721 the *West Indische Compagnie*, in recession and seeking new trade openings, sponsored Jacob Roggeveen in an expedition aimed at discovering the Great Southland by way of Cape Horn. The company provided and fitted out three ships: the 32-gun *Den Arend* (presumably named after Jacob's father (Mulert 1911:3) who had proposed such a voyage of discovery and trade to the *W.I.C.* back in 1673–75) with 111 hands, skippered by Jan Koster; the *Thienhoven* (named after a Dutch town), with 24 guns and 80 hands, under Corneliszoon Bouman; and the *Africaensche Galeij* (African Galley), with 33 hands, under Roelof Rosendaal. Roggeveen was the 'President' of the expedition. They sailed from Texel on 1 August 1721. The following account is based on the journals of Roggeveen (Sharp 1970) and Bouman (Mulert 1911).

Rapanui, 5–12 April. After visiting Juan Fernandez for refreshment, the expedition headed north-west into unknown parts of the South Pacific Ocean. On 5 April 1722 (Easter Day), Rapanui was sighted, which Roggeveen named Paesch Eylandt (Easter Island). Both Roggeveen and Bouman describe the people of Rapanui as being very thievish, taking all manner of things from the ships. Roggeveen makes no mention of trading items or presenting gifts to the islanders. However, Bouman remarks that an islander who boarded his ship was given a small mirror, a glass of brandy, and a piece of sail cloth (*zeyldoek*) to cover his nakedness. The men of the *Thienhoven* also played the violin for him. Bouman relates that the islanders had no knowledge of iron, steel, or other metals, weapons, or any other item shown them, which included small scissors (*schaartjes*), needles (*naalden*), beads and mirrors. No other items are mentioned by either Roggeveen or Bouman. The Dutch left after a week, and sailed north-west towards the latitudes where Le Maire and Schouten had traversed the Pacific.

Takapoto (Tuamotu), 19 May. The expedition arrived at Takapoto in the Tuamotus, where the *Africaensche Galeij* ran aground on the south-eastern side of the atoll during rough weather. She had on board most of the expedition's food that was still in good condition, all of which was lost. An attempt was made to salvage as much clothing, bedding and personal belongings as possible by hauling it in sloops over the reef, across the lagoon and over to the western (lee) side of the atoll where *Den Arend* and *Thienhoven* were anchored. Much of what was salvaged, however, was lost in rough seas or had to be left on the eastern beach of the atoll.

Before the two remaining ships left Takapoto on 21 May, five men deserted, and refused to leave the island. These included the *Thienhoven's* quartermaster, Baltus Jansse, two other sailors from the *Thienhoven* and two from *Den Arend* (Poort 1991:69–70, Mulert 1911:111). Nothing is known of the fate of these five men, though Spate (1983:224) speculates that they may have 'survived long enough to reach Anaa (150kms south), and are perhaps responsible for the wooden cross seen on that island by Tomás Gayangos in 1744'. Beaglehole (ed., 1968:557n) reports that in 1769 Joseph Banks recorded a Tahitian tradition of some crew of a European ship being stranded and massacred on a 'small Island adjacent', but believes that the massacre refers to the 'fatal brush with the people of Makatea in the following month' (see next paragraph).

Makatea (Tuamotu), 2 June. Roggeveen's two remaining ships arrived at Makatea where they were able to obtain greens to combat scurvy, but had to leave in a hurry after a skirmish in which a number of islanders and two Dutchmen were killed.

Manua group (Samoa), 14 June. Off Tau, Roggeveen's ships were greeted by two or three canoes, the occupants of which traded some coconuts for some rusty nails. Later, off the island of Nuu, a few strings of beads were traded for some coconuts and flying fish. Roggeveen (Sharp 1970:152) notes that a young woman in a canoe had 'a string of oblong blue beads' around her neck, and 'asked the Mate by signs if he had any such, pointing to the said string'. Sharp (1970:153n.) speculates that the beads could be of European manufacture and could have come from the Tongan islands visited by Le Maire and Schouten, and Tasman.

This seems very plausible, for it is most unlikely that Polynesians ever manufactured blue beads (Janet Davidson, pers. comm. 26/2/1999). Blue pigment occurs very rarely in natural form. Most commonly, it is a compound of copper, but even where copper occurs (as in New Guinea and on Bougainville) local people probably never used it for colouring. The only case where blue was used prior to European contact was among the Lakalai of the central north coast of New Britain, who used a fungus found on taro leaves, as blue face paint. This colouring was naturally ephemeral. Blue pigments were extremely rare in so-called 'primitive' art around the world, before European pigments became available (Anne Chowning, pers. comm. 10/3/1998).

3 Languages on board

The names of items traded or presented as gifts catalogued above are taken from officers' journals, but there may have been different names and pronunciations in the spoken languages used on board. Before presenting evidence for possible Dutch loan words, we will discuss what potential donor languages are likely to have been spoken by the officers and crew on these voyages.

Unfortunately, there are very few extant muster-rolls of the period (Herman Ketting, pers. comm. 28/7/95), and they very often omit crew members' place of origin. Nevertheless, it is well known that the crews on board Dutch ships in the seventeenth and eighteenth centuries often included non-Dutch speakers—Emmer (pers. comm. 27/4/95) estimates about 40%—and those on board who were Dutch often came from diverse dialect areas within the Dutch Republic (Slot 1992:20).

Other authorities put the Dutch component at rather more. Ketting (pers. comm. 28/7/95) reports that 77% of the crews of the 4th *V.O.C.* Fleet to the Dutch East Indies, which sailed in 1599, came from the provinces adjoining the *Zuiderzee* (i.e. North and South Holland, Utrecht, Gelderland, Overijssel and Friesland). In 1635, 51% of the crew of five *V.O.C.* ships came from the areas around the *Zuiderzee*—26% from Amsterdam, 13% from North Holland, Utrecht, Overijssel and Friesland. Playford (1996:42) has also established that 80% of seamen aboard two *V.O.C.* ships (the *Zuytdorp* and the *Belvliet*) on a voyage from Vlissingen (Zeeland) to Batavia in 1711–12 were Dutch. However, Dutch nationals comprised less than 40% of the soldiers on the *Zuytdorp*. All in all, it seems that most of crew members on Dutch ships in the seventeenth and eighteenth centuries were Dutch. A similar situation aboard Le

Maire's, Tasman's and Roggeveen's ships is indicated by what we have been able to piece together from the journals of these explorers and other relevant documents.

Resolution (b) of the *Resolutiën van Gouverneur-Generaal en Raden van Indië* (Resolutions of the Governor-General and Councils of India) of 2 and 4 November 1616 (Engelbrecht and van Herwerden 1945:213–214) is a list of payments owed to some of the crew of the *Eendracht*. It contains 27 names, all of which are Dutch. This suggests that a high proportion of the complement of the *Eendracht* were Dutch.

The Memorie van de betaling door de Bewindhebbers der V.O.C. in Zeeland aan de gerepatrieerde bemanning der 'Eendracht' (Memorandum of the payments by the Administration of the V.O.C. in Zeeland to the repatriated crew of the 'Eendracht') of 1617 (Engelbrecht and van Herwerden 1945:215) lists almost the entire crew of the Hoom who came to the East Indies as passengers aboard the *Eendracht*. The list comprises 20 Dutch names, all identified as having joined the ship either from Zeeland or Amsterdam. It excludes the skipper, Jan Schouten, who had died en route. Therefore, the Hoom's crew of twenty-two was made up of at least 95% Dutchmen. It should also be remembered that captains tended to recruit from their own areas, and that both Schouten and Le Maire were from the province of North Holland. We suggest, therefore, that a large proportion of Le Maire and Schouten's crews spoke the Hollands dialect.

We have not been able to discover much of the make-up of Tasman's crews, though the officers were mostly Dutch. Tasman came from Lutjegast in Groningen, but was living in Amsterdam by the age of twenty-eight (Posthumus Meyjes 1919:i–ii). Visscher, Tasman's pilot and adviser, was born in Vlissingen (Zeeland). The *Zeehaen's* skipper, Gerrit Janszoon, was from Leiden, and its chief merchant and supercargo, Isaak Gilsemans, was from Rotterdam (both in South Holland). The skipper of the *Heemskerck*, Yde T'Jercxsoon Holman, was born in Jever (Oldenburg, north-western Germany). The origins of the *Zeehaen's* first mate, Hendrik Pietersen, and quartermaster, Cornelisz. Joppen, and the *Heemskerck's* second merchant, Abraham Coomans, are unknown.

Of Roggeveen's crews we have been able to discover little more. Roggeveen came from Middelburg (Zeeland) and Bouman from Oostzaner Overtoom (North Holland). The origins of Jan Koster, skipper of *Den Arend*, and Roelof Rosendaal, skipper of the *Africaensche Galey*, are unknown to us. The *Uittreksel uit de Monsterrolle van de Thienhoven* (Extract of the Muster-roll of the *Thienhoven*) (Mulert 1911:130) contains only six names. The rest of the crew are identified by their on-board position or occupation. Apart from the skipper, Bouman, the muster-roll lists: Willem Willemsen Espeling (first mate) from Amsterdam (North Holland); Cornelisz. Mens (second mate) from Medemblik (North Holland); Barend Sanders (third watch) from Wismar (northern Germany); Martinus Keerens (ensign) from Wessem (Limburg); and Jan Rijkse Appeldoorn (sergeant) from Hardewijk (Gelderland, on the coast of the Zuiderzee and on the border of the Hollands-speaking dialect area).

The final sentence of the muster-roll is significant, however. It reads: 'The crew largely consisted of foreigners namely, French, Germans and Danes'. One of the Germans was Carl Friederich Behrens, from Rostock (Mecklenburg, northern Germany), the corporal of the soldiers on board *Den Arend* (Mulert 1911:9).

Several other seamen are specifically identified in Bouman's journal. These are: Pieter Jonasse, from Tönning (Schleswig Holstein, northern Germany) who drowned at Takapoto

(Mulert 1911:109); an ordinary seaman from *Den Arend*, by the name of Martinus van Gelder, from Amsterdam, who was sentenced to stay behind on the island of Saint Sebastian for drunkenness and threatening others with a knife (Mulert 1911:24); and a trumpeter, Johan Samuel Hantoen, from Breda (North Brabant), who died of scurvy (Mulert 1911:104). Finally, Mulert (1911:8) mentions Jacob van Groeneveld (no origin given), the first mate on *Den Arend*, and a Philip Hendrix van Straalsund (no origin given) who was killed on the island of Juan Fernandez.

Apart from some of those already mentioned, Roggeveen (Sharp 1970) identifies ten crew members, most of whose names appear to be Dutch.

Of the twelve crew for whom we do know the place of origin, three were from Germany, but more significantly, seven originated from areas that spoke *Hollands* or *Zeeuws* (the dialect of Zeeland) which are quite similar. The high proportion of Dutch names at officer level is also significant, for it would probably have been these mainly *Hollands/Zeeuws*-speaking men who traded with the Polynesians or presented them with gifts. In doing so, they may have handed over not only trinkets, but new lexical items as well.

With a large proportion of ships' crews originating from foreign countries, what language was spoken on board? In his book about Dutch sea-shanties between the seventeenth and nineteenth centuries, Davids (1980) draws the conclusion that the *lingua franca* on Dutch ships was Dutch (i.e. probably *Hollands*). However, we need to draw a distinction between the language of commands and that used by the seamen amongst themselves. Ketting (pers. comm. 11/9/95) is of the opinion that in the seventeenth and eighteenth centuries commands were given in Dutch, but that the foreign seamen often used their mother tongue and that someone had to act as interpreter.

And what of the five Takapoto deserters? What are their places of origin? All we are told (Mulert 1911) is that they were the *Thienhoven's* quartermaster, Baltus Jansse (from Amsterdam), and four others (two each from the *Thienhoven* and *Den Arend*). After his desertion, it is quite likely that Baltus would have been eager to maintain his status and authority. If so, it would have been he who exerted the most influence socially, and perhaps linguistically. Once again, then, the *Hollands* dialect is indicated.

4 Dutch loan words

The officers' journals provide abundant evidence that many novel goods were traded, presented or shown to the people of Tonga, Futuna, Rapanui and the Tuamotus by the early Dutch explorers. Moreover, the five sailors who deserted Roggeveen's expedition may have stayed long enough to make contributions to the vocabulary of the Tuamotus, and possibly even further afield. However, although novel items typically provide a strong motivation for linguistic borrowing, we have found no evidence so far that the Dutch word for any of the items mentioned in the journals was borrowed into a Polynesian language. Typically, names for such items are either extensions (e.g. *fao* 'nail' < 'dowel (pin)') or relatively recent loans from English or French.

We will argue, nonetheless, that at least six, perhaps eight, Dutch words were borrowed during this period. Two of the loan words refer to containers, and although they were not

specifically mentioned in the accounts as being traded or presented to Polynesians, they must have been used on board, and may have contained some of the items that changed hands. Their distribution suggests they originate from either the Le Maire or Tasman expeditions. Five other loan words refer to implements, four of which have quite restricted distributions which suggest that two of the words originate from Tasman's visit to Tonga, and the other two from Roggeveen's five Takapoto deserters. The final loan word, a vulgarism, is confined to Tuamotu and Tahiti, which also suggests the Takapoto deserters as its source.

4.1 A word for 'box'

The ongoing Proto Polynesian word list *Pollex* (Biggs 1995) includes the reconstruction **pusa* 'box'. It is our contention that the reflexes of this apparent protoform all derive ultimately from Dutch *bus~bos* 'box, cylindrical container, canister'.

Bus~bos is derived from Middle Dutch *busse* or *bosse*, with cognates in Middle Low German *busse*, and Old High German *buhsa* < Vulgar Latin *buxis* (hence French *boîte*) < Greek *pixis* 'wooden box' (de Vries & de Tollenaere 1991). The *bus* variant is originally from Flemish and Hollands (the dialect of the provinces of North and South Holland) (Berteloot 1984:67; Pieter van Sterkenburg pers. comm. 23/1/1996). After the Middle Dutch period (twelfth to sixteenth century), *bus* gradually became the form used in Dutch in general (Pieter van Sterkenburg pers. comm. 23/1/1996).

The authoritative Dutch dictionary the *Woordenboek der Nederlandsche Taal* (vol. III, I, 1902:1924–1925) states that *bus~bos* in olden times was the name for all sorts of containers, including those which are now usually called something else, for instance a little box in which medicines are stored. However, later on it became particularly associated with a container that is taller than it is wide, which is its current meaning. The *Woordenboek* does not state when this narrowing of meaning took place.

Van Winschooten's 1684 dictionary cross-references *bos* and *bus*. *Bos* is defined as 'something in which an item is placed to protect it from being damaged'. The entry under *bus* reads: 'BUS, of Doos, zie Bos'. This entry is significant as the gloss 'of Doos' ('or box') indicates that *bus~bos* still had its wider meaning of box in general in the late seventeenth century.

The Dutch lexicographer van Sterkenburg (pers. comm. 23/1/1996) holds that up until the eighteenth century the two meanings of *bus~bos* ('box' and 'cylindrical container or canister') were used concurrently, with the more general meaning of 'box' appearing to be more common. From the eighteenth century onwards the narrower, and present, meaning becomes predominant, with the general meaning being lost. The original meaning of *bus* (a box in general) is retained in the Modern Dutch words *brievenbus* 'letter-box' and *postbus* 'post-office box'.

The term is also etymologically linked to *bus~bos* meaning 'gun, pistol' or 'cannon' (cf. Dutch *buks* 'air-rifle', English *blunderbuss* < Dutch *donderbus*, French *obus* 'artillery shell' and *arquebuse* 'gun, hook-cannon', and German *Büchsenlauf* 'gun/rifle barrel'). Both Le Maire and Schouten make reference to *Bosse cruyt* or *Bos cruyt* 'gun-powder' (lit. 'gun spice')

in their journals (Engelbrecht & van Herwerden 1945:57, 175).⁴ From about the mid-sixteenth century *bus* was also used to refer to the metal casing (i.e. 'bush') around the axle-hole of a wheel (de Vries 1971:96).

The only reference we have found to *bus~bos* ('box') by any of the explorers is in Le Maire's journal. On 7 January 1616, after losing his ship the *Hoorn* at Port Desire, some 250 miles north of the Straits of Magellan, Le Maire wrote a letter telling of their arrival there, and put it in a container fixed to a pole which was then erected on the beach of Conincx Eylandt (Kings Island). The word used for the container is *busken*, a diminutive form of *bus*, to which Le Maire then adds '*of cokerken*' ('or small tube'). While it is possible that Le Maire was just offering a synonym, if van Sterkenburg is correct in his assertion that the two meanings of *bus~bos* were concurrent in Holland until the eighteenth century, then Le Maire was probably using the gloss to ensure correct interpretation of the shape of the container.

Fifty-four years later, on 13 March 1670, Captain John Narborough found the *busken*, and described it in his journal as a 'latten [thin sheet metal] or tin Box' (Narborough 1969 [1694]:36).

Although the explorers' journals make no other references to *bussen~bossen*, evidence for their use aboard Dutch ships of the period comes from a recent discovery in Western Australia. In June 1712 the *V.O.C.* ship *Zuytdorp* was wrecked on the West Australian coast between Kalbarri and Shark Bay. In April 1990 an expedition to Wale Well (approx. 50 kms north of the *Zuytdorp* wreck-site) was mounted by Dr Philip Playford to try to find evidence of *Zuytdorp* survivors. Some 20 metres from the well, a beautifully preserved elliptical brass tobacco-box lid (10.5 x 8.5 cm) (i.e. the lid of a *bus~bos*) was found (see Figure 1.). It is inscribed with the name of the town Leyden, together with an idealised depiction of the town. In all probability, the lid comes from the *Zuytdorp* (Phillip Playford pers. comm. 28/7/1996; Playford 1996:214–215).

⁴ It is also possible that Dutch *bus* 'gun, pistol, cannon' may be the source of such Eastern Polynesian forms as the Marquesan *puihi*, Tahitian *pupuhi* and Rarotonga *pupu'i*, all meaning 'gun'. We have not pursued this possibility because there is a plausible alternative etymology: Proto Polynesian **pusi* 'blow air from the mouth'.

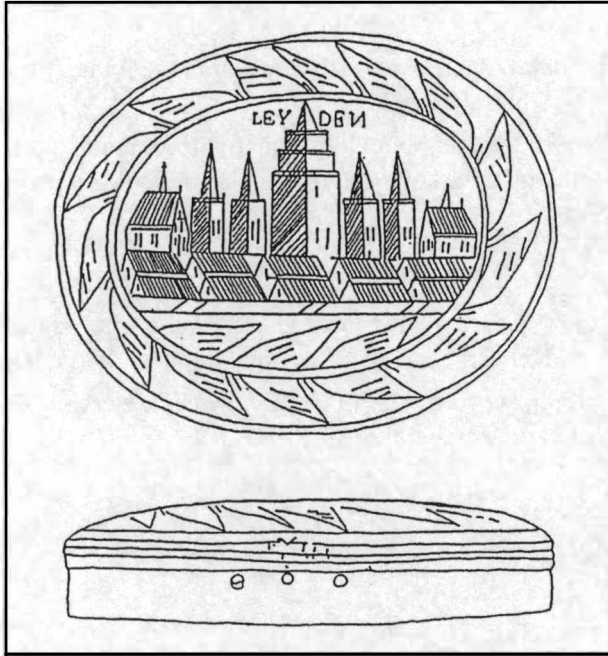


Figure 1: Brass tobacco-*bus-bos* lid from the *zuytdorp*, found at Wale Well (Western Australia).

The current distribution of the Polynesian *pusa-puha* is:

Tonga:

Anderson 1773 (Lanyon-Orgill 1979:63) *Buhā* [the last letter also bears an acute accent] 'a round Box'.

Mariner c.1810 (Martin 1818) *Booha* 'A box; a chest'. *Boohavy* 'a cask, a liquor-box'.

Churchward (1959) *puha* 'box, case, coffin; barrel (of beer etc.); post-office box, spectacle case'.

Niue:

McEwen (1970) *puha* 'box, case, coffin'.

Sperlich (1997) *puha* 'box, case, coffin, wardrobe'.

East Uvea:

Bataillon (1932) *puha* 'caisse, malle, boîte, commode [crate, trunk, box, chest of drawers]'; *puhavai* 'baril [barrel]'.

Rensch (1984) *puha* 'caisse, boîte, barrique, tonneau, malle, coffre; moule (en maçonnerie) [crate, box, cask, barrel, trunk, chest; mould (in stonework)]'; *puha mate* 'cercueil [coffin]' [...].

East Futuna:

Grézel (1878) *pusa* 'caisse, malle, meuble, armoire, coffre [crate, trunk, piece of furniture, cupboard, chest]'; *pusavai* 'barrique, tonneau [cask, barrel]'.

Moyse-Faurie (1993) *pusa* 'malle [trunk]'; *pusa vai* 'réservoir d'eau [water container]'; *pusa mate* 'cercueil [coffin]'.

Samoa:

Pratt (1911 [1862]) *pusa* 'box, coffin'; *pusa'apa* 'case'.⁵

Newell (1893) *pusa/puha* 'box'.

Milner (1966) *pusa* 'box, chest, trunk'.⁶

Mele-Fila:

Biggs (1975) *puso* 'box'.

Biggs (1995) no data.

Marquesas:

Dordillon (1931–32) *puho* 'cage, cabine, petite chambre, panier [cage, cubicle, small room, basket]'.

Zewen (1987) *puho* 'coffre, cage [chest, cage]'.⁷

⁵ These entries are found only in the English–Samoan section. Pratt seems to have listed loan words in this way, which suggests that he may have considered *pusa* to be a loan word; but it is not among 'A list of some foreign words in use among the natives' (Pratt 1911:103–104). Even more curious, the first edition (1862) lists both *pusa* and *puha*, which may indicate that the word was introduced from Tonga, and that both the Tongan and Samoanised pronunciations were then current; later editions list only *pusa*. Newell may simply have followed Pratt (1862).

⁶ In his lexicon of loan words in Samoan, Cain (1986:162) cites *pusa* only in the compound *pusa'aisa* 'icebox, refrigerator', regarding *pusa* as a Samoan word, but *aisa* as an English borrowing. Murray and Wesselhoeft (1991:110) seem to have misinterpreted Cain's entry and list *pusa* 'box' as an American English loan word probably introduced into Samoan by the United States military or Peace Corps. They give no account of how *pusa* is derived from 'box', or any evidence of its putative American origin.

⁷ The final vowel in *puho* is irregular; however, Marquesan vowels do seem to have undergone many irregular changes (Mark n.d.:20–21).

Tuamotu:

Stimson and Marshall (1964) *piha* '(modern) room, partitioned place'; *puha*, *puiha* (Hao) 'water container of 2–4 hollowed logs lashed together'; *puha* (Anaa) 'small wood or stone cubicle for confining children till maturity; box, casket'; (Vahitahi) 'carved box with lid for sacred red-feather plume of god'.

Mangareva:

Tregear (1899) *puha* 'chair without back'.

Tahiti:

Bougainville 1768 (Lanyon-Orgill 1979:241): *Picha* 'coffre [chest]'.

Anon [Magra?] 1771 (Lanyon-Orgill 1979:23): *Pear* 'A box'.

Foster/Anderson 1773–4 (Lanyon-Orgill 1979:105) '*Pēēha* 'Chest'; *Pēēha* 'Quiver for holding arrows'.

Davies (1851) *piha* 'box, chest, room'.

Jausen (1987) *piha* 'chambre, coffre, cercueil [room, chest, coffin]'.

Rapanui:

Fuentes (1960) *piha* 'room, apartment'. [This form is noted, though it is almost certainly a recent loan from Tahitian.]

Manihiki and Rakahanga:

Buck (1932) *puiha*, *turuma* 'round wooden box 10" dia at bottom, 8" top, 9" high, 10 short legs, with lid, cord, and lugs. Only one seen, introduced from Tokelau'.

Rarotonga:

Savage (1962) *pia* 'something constructed of wood or other material that has four sides and bottom or floor, lid or ceiling or roof, such as a box, chest, trunk, room, or coffin [...]', *piakura* 'receptacle for sacred objects'.

Buse and Taringa (1995) *pi'a* 'Box, or any box-like container, e.g. crate, chest, case, drawer, cage, hive, coffin; room, compartment; rectangular section of land, square, check in pattern'.

Note that no form was found in Pukapuka,⁸ the northern and southern outliers (Nukuoro, Kapingamarangi, Rennell-Bellona, West Futuna, West Uvea), or the extremities of Eastern

⁸ Pollex records '*pia.*: Box, trunk, chest (Mta)' as a possible reflex. Since PPn *s is regularly realised as Pukapuka y, e.g. *iyu* 'nose' < PPn *isu, this form is likely to be a borrowing from Tahitian or another Cook Islands language.

Polynesia (Hawaii, Rapanui, New Zealand Māori⁹). The single apparent reflex in the central outliers (Mele-Fila *puso*, Biggs 1975) is suspect on two counts: the unexpected final vowel, and the fact that it is not listed in Biggs (1995).

4.1.1 Linguistic correlations

According to Donaldson (pers. comm. 2/9/1993) the pronunciation of *bus* has not changed since the seventeenth century. The vowel <u> is variously transcribed as [y], [ʌ] (Donaldson 1983:48), [ü], [ə] (Hermkens 1971:29), or [œ] (Simpson 1994:1073). The transcription adopted here will be /ø/—the IPA symbol for a half-close front rounded vowel, or Cardinal Vowel #10.

All authors agree that the vowel is short and rounded. Hermkens (1971:30, 31, 32) describes the vowel as being a half-close front vowel, but notes that other authors regard it as mid-central with possible front realisations, or equate it to [ə]. Using F₁ and F₂ frequency data of *ABN* (*Algemeen Beschaafd Nederlands* 'General Cultured Dutch') speakers from Koopmans-van Beinum, Daan et al. (1985:31) depict /ø/ as a half-close central vowel. On the other hand, van Loey (1959:104) classifies it as a close central vowel. Hermkens (1971:30) summarises the chaos aptly by saying that all texts differ in their descriptions of the Dutch vowel system, that the boundaries between front, neutral (central) and back are not clearly defined, and that no vowel can be given an absolute value, as there are many articulatory variants. This is certainly borne out in the descriptions of /ø/.

Given the phonetic value of the vowel /ø/ (be it rounded half-close front or rounded half-close/close central), it is not easy to see how the tonic vowels in *pusa-puha* are derived from *bus*, since the Polynesian vowel is a short close back vowel. The only phonetic features the two vowels have in common is length and rounding. The match thus far does not look all that convincing.

However, we indicated above that *bus* has a dialectal variant, *bos*,¹⁰ and it is here that we may find the solution to the problem. Of course it is not possible to give a flawless reconstruction of the seventeenth-century linguistic situation; the differences among regional varieties were considerable and have been poorly described. Nevertheless, we can arrive at quite a plausible, if cautious, hypothesis.

Hermkens (1971:34) notes that in an earlier stage of Dutch, there were two <o> sounds: a half-close form [ó], and a half-open form [ɔ] or [ð]. The phonetic distinction between them is still maintained by some speakers, though for most speakers of *ABN*, the distinction has been lost (van Loey 1959:94; Hermkens 1973:25; Donaldson 1983:136). Nevertheless, Donaldson (1983:48) observes that '[d]epending on the phonetic environment, some speakers of Dutch distinguish between an open and more closed pronunciation of *o* (i.e. *hòk* and *bók* [...]) but

⁹ *Pollex* lists New Zealand Māori *kōpiha* 'pit for storing potatoes or taro' as cognate. While there are parallel instances of prefixation of /kō-/ , e.g. *kōura* 'crayfish' <PPn *'ura, the meaning discrepancy casts doubt on the relatedness of this item.

¹⁰ *Bos* also has other meanings: (a) 'bush/forest/wood', (b) 'bunch (of bananas/beads etc.)'. Both of these meanings are used in the journals of Le Maire, Schouten, Tasman, and Roggeveen.

north of the Meus and Rhine, at any rate, there is an ever-growing tendency to favour the more open vowel, as the difference is not phonemic. Thus a falling together of once distinctly separate vowels has occurred among some speakers'.

The difference in the two pronunciations of /o/ is partly due to their different origins (i.e. from <o> or <u>); in some cases the variation is phonetically determined, the close [ó] always being heard before nasals and after labial consonants (van Loey 1959:94; Donaldson 1983:136). The vowel in the *bos* variant in the seventeenth century would therefore have been the close variety, since it follows a labial consonant. This vowel is phonetically closer than the half-open [ɔ] to the Polynesian short close back vowel /u/. It is likely then that *pusa~puha* is derived from *bos* rather than *bus*.

The question that arises now is, did the men on board Le Maire's and/or Tasman's ships use *bos* or *bus*, or both?

Berteloot (1984:map 62 'bus/bos') clearly shows that in the thirteenth century *bos* and *bus* were used concurrently in Zeeland, South Holland and North Holland, with a preference for *bos* in North Holland. These are, as we have seen, the provinces from which a good proportion of Le Maire's men, and the officers on Tasman's and Roggeveen's ships, originated.

For further evidence we call upon Afrikaans, where <u> appears as <o>, e.g. *konst* (Mod.D. *kunst* 'art'), *mos* [sic]¹¹ (Mod.D. *mus* 'sparrow') (Donaldson 1983:136). Afrikaans developed from Dutch to become a distinct language from the mid-seventeenth century, when the Cape was colonised by large numbers of speakers of the Hollands dialect, and is in some respects closer to the Hollands of the seventeenth century than modern Dutch is (Brachin 1985:139). Accordingly, the preference of Afrikaans for <o> rather than <u> in words such as the above may derive from a similar situation in seventeenth-century Hollands.

Yet further evidence is provided by spellings adopted by at least three famous seventeenth-century Dutch writers, all of whom were concerned with linguistic matters, and actively strove to use the Hollands dialect in their writings (Brachin 1985:20). For instance, Vondel (1587–1679) uses *plonderen* (Mod.D. *plunderen* 'to plunder'), and Bredero (1585–1618) and Huygens' (1596–1687) use *konst* (van Loey 1959:94–95).

Finally, Le Maire, Schouten and Tasman use <o> rather than <u> in a number of words, including: *Bos kruyt~Bosse cruyt* (Mod.D. *buskruit* 'gunpowder'),¹² *gecrolt* (Mod.D. *gekruld* 'curled'), *drock* (Mod.D. *druk* 'busy'), and *connen* (Mod.D. *kunnen* 'can, able to'). Tasman is inconsistent in his spelling of the word 'double', using both *dobbele* and *dubbele* (Mod.D. *dubbele*). Interestingly enough, both Le Maire and Tasman consistently use *locht* (Mod.D. *lucht* 'sky, air') in their journals, whereas Bouman uses *lught* throughout his. This may reflect the <o> to <u> change in progress.

So, it is likely that *bos* and *bus* were used concurrently, with a preference for *bos*, by the men on Le Maire and Tasman's ships.

¹¹ The form *mos* is incorrect, it should read *mossie* (Bruce Donaldson pers. comm. 26/4/1995).

¹² Given the etymological link between *bus* 'box' and *bus* 'gun' (and hence *buskruit*) it is significant that Le Maire and Schouten use *o* in *bosse cruyt*, since it suggests they also used the *bos* pronunciation in the word for 'box'.

Having resolved the problem of the apparent lack of vowel correspondence, we will now turn to the nativisation of *bos*~*bus* as *pusa*~*puha*. This is easily explained. Since no Polynesian language has a /b/, this sound is regularly adapted as /p/, the closest corresponding Polynesian stop (the reflex *puha* occurs in languages that do not have /s/). The paragogic vowel in *pusa*~*puha* is the result of conforming to the open syllable structure of Polynesian languages.¹³

There are some reflexes of *pusa*~*puha* which unexpectedly display an unrounded close front tonic vowel. They are *piha* (Tuamotu), *piha* (Tahiti), *puiha* (Manihiki and Rakahanga), and *pi'a* (Rarotonga), and are restricted to the eastern Pacific. How can we account for their irregular form?

Although the <u~i> alternation is common (if sporadic) in eastern Polynesia, there is another plausible, if less likely, explanation. We mentioned above that the use of *bus* over *bos* in general Dutch gradually increased after the sixteenth century. By the time of Roggeveen's expedition in 1722 it would be reasonable to assume that *bus* would have been quite well established. If the five deserters in Tuamotu used this form rather than *bos*, they could well have been the source for an independent reborrowing of *bus* in that part of the Pacific. The vowel of *bus* would have been either rounded half-close front or rounded half-close/close central. In either case, the closest corresponding Polynesian vowel would be /i/. Similarly, Donaldson (pers. comm. 2/9/1993) has pointed out that modern Dutch *bus* (the abbreviated form of *autobus*) has been borrowed into Indonesian as *bis*.

The box below summarises the nativisation of seventeenth century Dutch *bos* as Polynesian *pusa*~*puha*.

<i>bos</i>	→	<i>pusa</i> ~ <i>puha</i>
/b/	→	/p/
/ɔ/ [ũ]	→	/u/
/s/	→	/s/~/h/
	+	paragogic /a/

4.2 Another word for 'box'

The word *tuluma*, with meanings including 'small container', has also been noted in the Proto Polynesian word list *Pollex* (Biggs 1995), but assigned neither gloss nor level. We believe that *tuluma* is borrowed from Dutch *trommel*, meaning a metal box for storing a variety of items, with a loose or hinged lid, generally distinguished from a *bus* in that its height does

¹³ The choice of vowel is not, of course, entirely arbitrary, and it may yet be used to argue for initial borrowing in one Polynesian language rather than any other. However, our preliminary survey of vowel choice in other early loan words suggests that whatever patterning there may have been has been confused by inter-island borrowing and by 'borrowing' (or rather 'loaning') by non-native speakers, especially missionaries. It is also possible that the plural form, *bussen*~*bossen*, was borrowed, in which case the final vowel is as expected, Polynesian /a/ being the closest vowel to Dutch [ə].

not exceed its width (*Woordenboek der Nederlandsche Taal* vol. 17, p.3117). *Trommel* also means ‘drum (musical instrument)’, and is used as such in Le Maire’s journal. A *trommel* can be of any shape—square, rectangular, elliptical, and very often round.

The current distribution of *tuluma* is:

Samoa:

Pratt (1862, 1911:352) *tulula* ‘basket to keep oil-bottles in’.¹⁴

Milner (1966) *tunuma* ‘cylindrical container (hollowed out from a block of wood and used for storing tattooing implements)’ and ‘a case for tattooing instruments’ (Pratt 1911 [1862]).¹⁵

East Uvea:

Rensch (1984) *tuluma* ‘petit coffre de pêche en bois dans lequel on garde les hameçons et les lignes de pêche [small wooden fishing box for storing fishhooks and lines]’.

Pukapuka (Cook Is.):

Beaglehole and Beaglehole (1991) *tuluma* ‘plaited envelope-like container for fishhooks and other valuables’.

Tokelau:

MacGregor (1937) *tuluma* ‘elliptical covered container, primarily to carry fishing gear in canoes, also carried over shoulder in reef fishing, and for storage containers in house’.

Office of Tokelau Affairs (1986) *tuluma* ‘waterproof wooden box of traditional design carved of *kanava* (*Cordia subcordata*)’.

Fakaofu: Hale (1968 [1846]) *tuluma* ‘box, bucket’.

Tuvalu:

Koch (n.d.) *tuluma/faoga* ‘lidded wooden box, used in houses and kitchens for various small objects, but primarily for fishermen’s hooks and lines while at sea. Larger chests of this kind (up to 60cm deep) were used for skirts and headrests during long voyages [...] still made and used at Nukufetau’.

Vaitupu: Hale (1968 [1846]) *tuluma* ‘box, bucket’.

¹⁴ May be related, though the <*m*> to <*l*> change is irregular.

¹⁵ The /*n*/ rather than /*l*/ is unexpected, but not unusual in Polynesian languages; cf. Tongan *nima* ‘five’ < **lima*.

Kiribati:

Sabatier (1971) *turuma/tiruma* 'ancient basket with lid, small tin or box with lid closing tightly'.¹⁶

Manihiki and Rakahanga:

Buck (1932) *puiha, turuma* 'round wooden box 10" dia at bottom, 8" top, 9" high, 10 short legs, lid, cord, lugs. Only one seen, introduced from Tokelau'.

Given that the word appears to have been recently introduced to Kiribati and Manihiki and Rakahanga, its earlier distribution was confined to East Uvea, Samoa, Pukapuka, Tokelau, and Tuvalu.

The following mostly East Polynesian forms are noted:

Tahiti:

Davies (1851) *turuma* 'a place in the outside of the back part of the native houses, where all refuse was cast, a sort of dung-hill; but was sacred, and no one ought to walk over it'.

Rarotonga:

Savage (1980); Buse and Taringa (1995) *turuma* 'ghost, apparition'.

Pukapuka:

Beaglehole and Beaglehole (1991) *tuluma* 'grave'.

New Zealand:

Biggs (1995) *turuma* 'ritually restricted place; latrine'.

These data suggest PEP **turuma* (or PNP if the Pukapuka form is not a loan) meaning something like 'pit, grave'. We believe this to be unrelated to the *tuluma* form under discussion, though perhaps connected with East Uvea *tānuma* 'grave' and related forms.

4.2.1 Linguistic correlations

There is little difficulty in accounting for the derivation of *tuluma* from *trommel*.

- The epenthetic <u> and the paragogic <a> are the result of once again conforming to the open syllable structure of Polynesian. The epenthetic vowel /u/ is the result of

¹⁶ The phonology makes it clear that this is a loan from a Polynesian language, presumably its close neighbour Tuvalu.

vowel harmony with the tonic vowel, which is close because of the following nasal (see above).

- The nativisation of <r> as <l> is due to the fact that none of the languages concerned contrast /r/ and /l/.
- The final consonant is lost (rather than being supported by a paragogic vowel, as with /pusa/ from /bɔs/) because it is preceded by an unstressed vowel.

The box below summarises the nativisation of seventeenth-century Dutch *trommel* as Polynesian *tuluma*.

<i>trommel</i>	→	<i>tuluma</i>
/t/	→	/t/
	+	epenthetic /u/
/r/	→	/l/
/ɔ/ [ũ]	→	/u/
/m/	→	/m/
/ə/	→	/a/
/l/	→	∅

4.2.2 A Hawaiian connexion?

Langdon (1998) has provided much additional information on *tuluma* and proposed that both the artefact and its name were introduced to Tokelau in 1830 by Hawaiian castaways. While we find plausible the argument that Hawaiians were shipwrecked in Tokelau in 1830, we cannot agree that they introduced either the *tuluma* or its name.

Our case for the Dutch origin of the *tuluma* is now considerably strengthened by the inclusion of the form from East Uvea, which we previously overlooked, so that the problem of its spread to Tokelau and beyond from the islands visited by the Dutch explorers is now largely resolved.

Regarding the shape of these containers, Langdon points out that they are ‘generally taller than they are wide’, whereas with Dutch *trommel* the reverse is generally true. Our view is that two ‘generally’s allow a great deal of latitude; that in any case both are very often round; and that the change in relative height may well have been a result of scarcity of large-girth trees on atolls.

On the other hand, Langdon has failed to point to a specific Hawaiian artefact that might have been the model for *tuluma*, merely referring to ‘neatly carved wooden bowls and dishes, some with lids’, nor has he cited a Hawaiian word that could have been the source for the word *tuluma*. Finally, we find the proposed etymology (a non-existent compound of Hawaiian *tu* ‘stand’ and *luma* ‘douse, duck; upset, tumble, as in the surf’) totally implausible on phonological, morphological and semantic grounds, and a clear case of clutching at straws.

4.3 A word for 'axe'

We believe the following Eastern Fijian and Rotuman forms are derived from the seventeenth-century Dutch *bijleken* /beiləkən/ (or perhaps *bijlken*) 'small axe', and that they originate from either the Le Maire and Schouten or the Tasman and Visscher expeditions:

Eastern Fiji:

Richardson 1811 *bellico* 'a chissel [sic]'; *bellico ouboonah* 'a plane iron' (Schütz 1985:576).

Endicott 1829 (1923:73) *Par'-lee-Co* 'Chizzel [sic]'.¹⁷

Oliver 1831 *bellico* 'chisel' (Schütz 1985:606).

Cargill et al. (n.d.) [c.1840] *veleko* 'a chisel'.

Hazlewood (1850) *veleko* 'a chisel, the primitive idea seems to be that of sharpness, or beauty; as the polished part of an edged tool is called a kena veleko'.

[Hunt and Hazlewood] (1856: Exodus 32:4) *veleko* 'graving tool'.

Neyret (1935) *veleko*, *veleveleko* 'the polished part of a tool; hence the iron of an axe or tool'.

Capell (1968 [1941]) *velekō* 'the polished part of a tool, so in modern use the steel of a tool'.

Geraghty (n.d.) [c.1985] *velekō* 'kind of adze with the narrowest concave blade' (used by the traditional carpenters in the Kabara area of southern Lau).¹⁸

Rotuma:

Churchward (1940) *ver'ō* 'steel blade, steel'.

We know axes were carried on board their vessels because the logbooks of Le Maire, Schouten and Claesoon (Le Maire's chief merchant) mention that an axe was given to the chiefs of both Tafahi (Northern Tonga) and Futuna (Engelbrecht & van Herwerden 1945:57, 72, 184; Claesoon 1646:91). Furthermore, each of the manifests of Tasman's ships (the *Heemskerck* and the *Zeehaen*) includes the entry: 50 *bijltges* '50 small axes' (Posthumus

¹⁷ 'When it came to exchanging trading goods for the native labor necessary to obtain the beche-le-mer—the principal article of trade in the islands—a common chisel made by the blacksmith on board from old hoop iron could be bartered for a day's labor. To earn a chisel the islander must leave his hut early in the morning, sail fifteen to twenty miles to the reef and then work knee-deep in the water for six to eight hours gathering the beche-le-mer, a species of sea-snail; after which he must carry his spoil to the ship—and all for a barrel-hoop chisel! The trading goods most esteemed in the Fijis at that time were iron tools, knives, scissors, whale's teeth, beads and trinkets, but especially muskets, pistols and ammunition.' (Endicott 1923:8–9)

¹⁸ Note that in all of the Fijian sources except Geraghty, marking of vowel length is absent or inconsistent.

Meyjes 1919:158, 159). Although Tasman's logbook makes no specific mention of axes being given to or traded with the Tongans during his stay at Tongatapu and Nomuka, it is not unreasonable to assume that they were, since he had them on board his ships and there was a prolific trade in local foodstuffs for European cloth, trinkets, tools, and utensils.

Moreover, on Dutch ships of the seventeenth century, the diminutive form of the word *bijl* (or its older form *bijle*, which was still very common during the first half of the seventeenth century)¹⁹ had two referents: 'axe' and 'ship's carpenter'. Under the entry for *bijl*, the authoritative dictionary of the Dutch Language, the *Woordenboek der Nederlandsche Taal* (Vol II, 2:2619), notes: 'Bij overdracht: scheepstimmerman, dikwijls in het verkl. bijltje' ('By transfer: ship's carpenter, often in the diminutive *bijltje*'). This suggests that the *bijl* (or *bijltje*~*bijleken*) was a common tool in a ship's carpenter's tool-kit, and might well have been presented to the Tongans. Many contemporary illustrations depicting ships' carpenters show them working with a *bijl*. In the illustration below, a shipwright is seen using such a *bijl* [axe]. (Engraving by Jan Luijken in *Human industry*, Amsterdam 1694.)



¹⁹ For instance, Le Maire uses *een bijle* (Engelbrecht & van Herwerden 1945:72) when listing items that were presented to the kings of Futuna and Alofi. And in the Old Testament of the 1637 *Statenbijbel* (i.e. the States' General Bible—a Bible whose language was designed not to favour the Dutch of one regional dialect over another) 'axe' appears as *bijle*.

Before we explain how we believe *velekō* is derived from *bijleken~bijlken*, we need to outline some aspects of the development of the Dutch diminutive suffix.

In the first half of the seventeenth century the Dutch Language (and especially the Hollands dialect upon which Modern Standard Dutch is based) was very much in a state of flux. One of the many, and very rapid, changes that occurred during this period was the palatalisation of the Middle Dutch diminutive suffix *-ken* /-kən/ to *-tje(n)* /-tə(n)/²⁰ variously spelt as: *-tje(n)*, *-tgie(n)*, *-tje(n)*, *-tie(n)*, *-ge(n)*, *-je(n)*, and *-ie(n)* (van Loey 1959:229; Weijnen 1956:23, 51). The co-existence of the velar and palatal diminutive forms is attested by their many instances in the logbooks of Le Maire, Schouten, Claeszoen, and Tasman. And as the following list shows, both forms were used concurrently:

Le Maire, Schouten and Claeszoen:

bladeken and *blaetjens*²¹ 'small leaf/leaves' (Mod. D. *blaadje(s)*)

bosken and *bosjens* 'small bunch(es)' (Mod. D. *bosje(s)*)

coraelkens, *coraeltjes*, *coraeltjens*, *coraeltiens*, and *coraelgens* 'small beads' (Mod. D. *kraaltjes*)

dorpkens and *dorpjens* 'small villages' (Mod. D. *dorpjes*)

drommelkens and *trommeltjen* 'small groups' and 'small drum' (Mod. D. *drommeltjes* and *trommeltje*)

huyskens and *slackenhuysjen* 'small houses' and 'small snail-shell' (Mod. D. *huisjes* and *slakkenhuisje*)

mutskens and *mutsgen* (a measure of liquid, 1 *mutske* = 0.15 litre—Claeszoen uses both forms, Le Maire uses *mutskens* exclusively, and Schouten *mutsgen*)

praeuken and *praeutjen* 'small proa' (a Malay sailing boat) (Mod. D. *prauwtjes*)

scheepken and *scheepjen* 'small ship/boat' (Mod. D. *scheepje*—Le Maire and Schouten use both forms within a few lines of each, and Claeszoen uses each of the two forms twice within 9 lines!)

tacxken and *tackjens* 'twig(s)' (Mod. D. *takje(s)*)

vaetkens, *vatekens* and *vaetjens* 'small barrels' (Mod. D. *vaatjes*—the latter two forms are used within a few lines of each other in Le Maire's logbook)

Tasman:

eijlandeken and *eilantjens* 'small island(s)' (Mod. D. *eilandje(s)*)

praeukens, *praeutien* and *praeutjens*

windeken and *windetjen* 'a breeze' (Mod. D. *windje*)

²⁰ In casual speech, there is almost always elision of the final nasal, reducing the ending to [ə].

²¹ The -s ending indicates a plural form.

In Table 1, we summarise the use of the two diminutive suffixes by the four diarists. It shows that Le Maire favours neither form while Schouten and Claeszoon favour the innovative *-tje(n)* form only slightly more than *-ken*. Tasman, on the other hand, uses *-tje(n)* almost twice as much as *-ken*.

Tasman's preference for the palatalised form may be indicative of the rapid change from *-ken* to *-tje(n)*. The almost thirty-year stretch between the Le Maire and Tasman expeditions is, of course, an extremely short period—ordinarily not long enough to reveal any significant linguistic change. However, according to Daan (pers. comm. 9/5/1997) this period was marked by an unprecedented rate and degree of linguistic change, so that the change in the use of the diminutive form during that thirty-year interval is not unlikely.²²

Table 1: Frequency of use of the diminutive suffixes *-tje(n)* and *-ken*

Source texts	Diminutive suffix		
	<i>-ken</i>	<i>-tje(n)</i>	Total
Le Maire's logbook (1615–17)	39 (50%)	39 (50%)	78
Schouten's logbook (1615–17)	21 (45%)	26 (55%)	47
Claeszoon's logbook (1615–17)	24 (47%)	27 (53%)	51
Tasman's logbook (1642–43)	13 (36%)	23 (64%)	36
Totals	97 (46%)	115 (54%)	212

Although we have not found any instances of the form *bijleken* (or *bijlken*) in any of the explorers' journals, we are nonetheless confident that these forms were current because of the well-known pervasiveness of the diminutive in Dutch, which is evident in the examples above. Furthermore, we note that Le Maire and Claeszoon use the phonologically analogous *belleken* /*beləkə(n)*/ 'small bell'.

Incidentally, a number of languages of New Britain show a form *vele* meaning 'iron or steel adze' (Goodenough 1997:291). We tentatively suggest that this may also be a loan from Dutch *bijl* or *bijle*, possible via an Indonesian language.

4.3.1 Linguistic correlations

Although Fijian and Rotuman are not Polynesian languages, they nevertheless have a very rich history of Polynesian borrowing, especially from Tongan (Biggs 1965²³; Geraghty 1983:99–102). The absence of recorded reflexes in the languages of west Polynesia (the area visited by Le Maire and Tasman) may well be a lexicographic accident, especially since the

²² It seems that only eighty years after Tasman's journal (1642–43) the palatalisation from *-ken* to *-tjen~-tien* was complete. Bouman's journal (1722) (Mulert 1911) has 35 diminutives, all of which are palatalised.

²³ Reprinted in this volume with some editing.

word has such a specialised referent and would be of relatively rare occurrence.²⁴ It is also possible that the word has become obsolete with the decline of traditional crafts and tools. All things considered then, it is most likely the word was loaned into a Polynesian language and thence into Eastern Fijian and Rotuman.

There is relatively little difficulty in accounting for the realisation of *bijleken* (or *bijlken*) as *velekō* /'vele ko:/:

<i>bijleken</i>	→	<i>velekō</i>
/b/	→	/v/
/ɛi/	→	/e/
/l/	→	/l/
/ə/	→	/e/
/k/	→	/k/
/ə/	→	/o:/
(/n/)	→	Ø

- Since Polynesian languages do not have [b], the closest corresponding sound would be /v/ (phonetically [β]) or /p/. Although in all known Polynesian loan words [b] is rendered as /p/, these are all loans from the last two centuries. Phonetically, Polynesian /p/ and /v/ are 'equidistant' from [b], therefore *a priori* there is no reason to prefer one over the other, and the Polynesian realisation of [b] as /p/ may well be a convention of relatively recent origin.
- The pronunciation of the diphthong <ij> in early seventeenth-century Dutch was quite complex (Weijnen 1956:19–20). During the first few decades of the century, the long vowel <i> [i:] was diphthongised to <ij> [ɛi], which was attested in about 1620 (Brachin 1985:17). There were then three co-existing pronunciations: the modern Dutch [ɛi], the middle Dutch monophthong [i:], and an intermediate form [ɛⁱ] (with a vowel colour somewhere between Cardinal Vowels 2 [e] and 3 [ɛ]) (Cor van Bree pers. comm. 26/2/1997; Hermkens 1973:30–31; Weijnen 1956:19). The pronunciations were regionally determined—in more remote areas the monophthong would be heard, whereas in important cities, such as Amsterdam and The Hague, one would have encountered the intermediate form or the diphthong in 'polished' speech. That there was some variation in the pronunciation of <ij> is exemplified by Tasman's spelling of the month *Juni* 'June' as *Iunij*, and in two entries in the *Zeehaen*'s manifest (Posthumus Meyjes 1919:158, 159) where we see modern Dutch *ijzeren* [ɛizərə(n)] 'iron'(ADJ.) appearing as *isere* [isərə] in *25 gesorteerde isere pannen* '25 assorted iron saucepans', and modern Dutch *oliefant* [olifant] 'elephant' appears as *olijphant* [olɛifant] in *19 olijphantstanden* '19 elephant tusks'. By the end of the century [ɛi] was largely used

²⁴ Outside the cluster of small islands of Kabara, Vulaga, Ogea and Namuka in southern Lau, the word *velekō* is now totally unknown in Fiji. Even within this area many individuals do not know the word. Hans Schmidt (pers. comm.) also reports that it is unknown in Rotuma.

throughout central Holland (Amstelland with Amsterdam, and Rhineland with Leiden and The Hague). Since the crews on board Dutch ships of the period were mostly speakers of the Hollands dialect, <ij> probably had either the [ɛⁱ] or [ɛi] pronunciation which gave rise to the vowel /e/ in the first syllable of *velekō*. Similar loan phonology can be seen, for instance, in the following English loan words in Tongan (T) and Fijian (F), where the English rising diphthong /eɪ/ is rendered as /e/: 'Epeleli (T), Epereli (F) < 'April'; Mē (T), Mē (F) < 'May'; keke (T & F) < 'cake'; pepa (T), veva~pepa (F) < 'paper'.

- The derivation of the second syllable of *velekō* is unproblematic whether the donor word was *bijleken* or *bijlken*. In the former, /ə/ would be rendered as /e/. For the latter, since no Western Polynesian language (with the partial exception of Tuvaluan) tolerates consonant clusters, the Dutch consonant cluster [-lk-] in *bijlken* needs to be modified by the insertion of an epenthetic vowel. In this case the epenthetic vowel mirrors the preceding stressed vowel, which appears to be a common pattern (cf. Fijian *bēleti* < English 'belt', Futunan *velevete* < English 'velvet', Tongan *olovete* and *polota* < English 'velvet' and 'bolt').
- The fact that the onset of the final syllable is /k/ indicates that the source word was *bijleken* rather than *bijlten*, for which **veletō* would be expected.
- The final vowel of *velekō* is at first glance somewhat unexpected given the /-kə(n)/ ending of the donor word. However, since Polynesian languages do not have /ə/, the quality of the final vowel is understandable, because Polynesian /e/ and /o/ are not only equidistant from [ə], but also the same height. The choice between /e/ and /o/ is, therefore, quite arbitrary. On the other hand, the length of /o:/ is certainly unexpected since the Dutch [ə] is short. However, if /o:/ were realised as a short vowel, the primary stress in the word (which is penultimate in most Polynesian languages) would be assigned to the epenthetic /e/ (hence **veléko* /ve'leko/), which is the reverse of the stress pattern of the Dutch donor word /'beil(ə)kən/. The lengthening of the final vowel is, therefore, a strategy necessary to retain the stress assignment of the donor word.

The following box illustrates the correspondences between Polynesian and Rotuman:

Polynesian		Rotuman
<i>velekō</i>	→	<i>ver'ō</i>
/v/	→	/v/
/e/	→	/e/
/l/	→	/r/
/e/	→	∅
/k/	→	/'/
/o:/	→	/o:/

The Rotuman form, *ver'ō*, is not what would be expected from a direct loan from Dutch. However, since Rotuma has a history of heavy borrowing from Polynesian languages we

propose that *ver'ō* is a Polynesian loan. The realisation of Polynesian /l/ as Rotuman /r/ is regular (Biggs 1965:402–403). The loss of the medial unstressed vowel is also a common occurrence (e.g. *manpusi* < Fijian *manipusi* 'mongoose', *firimoto* 'wild cherry tree' < Tongan *filimoto* 'k.o. tree', Futuna *filimoto* 'k.o. tree, *Flacourtia rukam*', or Samoan *filimoto* 'k.o. tree, *Flacourtia rukam*'). Although Polynesian /k/ is usually realised as Rotuman /k/ (Biggs 1965:399–401), it is possible that the word was loaned from Samoan where /k/ has been reflected as /ʔ/ since at least Cook's time and probably much longer (Hovdhaugen 1986:314–317) or via Vanualevu in Fiji where the same change appears to have taken place well into prehistory (Geraghty 1978:53–54).

4.4 A word for 'design tablet'

In his authoritative survey of tapa (bark cloth) manufacture in Fiji and Polynesia, Kooijman (1972:Table F) notes that tablets with relief designs, which are placed beneath the tapa to produce a design when a dye is rubbed on the surface, are found only in Fiji and West Polynesia, and nowhere else in Polynesia, or indeed the Pacific. These design tablets are usually rectangular and made of either a slab of wood with the design carved on one or both sides, or coconut midribs or sinnet sewn to the base of pandanus leaves, coconut fibre, or strips of mangrove wood. We believe that they may have been first made in imitation of similar metal objects brought by the early Dutch explorers, and that the name for these artefacts is also of Dutch origin.

The current distribution of *kupeti* is:

Fiji:

Capell (1968) *kuveti* 'a large frame on which masi [tapa] is marked; dail. *kupeti*'.
Kooijman (1972:61) *kuveti* 'design tablets made of leaf and wood'.

Tonga:

Churchward (1959) *kupesi* 'Stencil-like contrivance used in making patterns on tapa cloth. It is placed under the cloth, and the colouring matter is rubbed or dabbed on top, on the same principle as in making a rubbing of a coin'.

Kooijman (1972:307–313) *kupesi* 'design tablet'.

East Uvea:

Rensch (1984) *kupesi* 'planche formé de fils d'écorce d'arbre à pain et de nerures de feuille de cocotier cousues sur des feuilles de pandanus assemblées les unes aux autres, servant à imprimer le *gatu* [tablet made of breadfruit bark fibres and coconut midribs sewn onto pandanus leaves joined together, used in printing bark-cloth]'.

Kooijman (1972:252–254) *kupesi* 'design tablet'.

East Futuna:

Moyse-Faurie (1993) *kupeti* ‘matrice pour dessiner les motifs du “siapo”; motif de dessin en relief pour le “siapo” (nerures des feuilles de cocotier collées ou enfilées sur le “siapo”) [matrix used in decorating bark-cloth; relief design motif for bark-cloth (coconut midribs glued or sewn onto bark-cloth)]’.

Kooijman (1972:259) *kupeti* ‘design tablet’.

Samoa:

Milner (1966) ‘*upeti* ‘tablet (formerly made of pandanus leaf with a raised pattern, but now usually of wood with an incised pattern) used for rubbing designs on bark-cloth’.

Kooijman (1972:219–220) ‘*upeti* ‘rectangular design tablet’.

All the above can be derived regularly from an earlier **kupeti*. The phonology of the Fijian form shows it to be a loan from a Polynesian language, and indeed Thompson (1940:200) and Kooijman (1972:359; 1977:119) both state that the Fijian design tablets, which are restricted to the Lau Islands, the closest part of Fiji to Tonga, are clearly of Tongan origin.

As the Dutch source of these forms we propose *kopertje* ‘small copper plate bearing a design’. The word and its meaning are not actually attested, but there are some grounds for inferring its existence. The Dutch word *koper* ‘copper, brass’ is well attested. Its English cognate *copper* is recorded as having also applied since the seventeenth century to ‘a plate of copper on which a design is engraved or etched’ (*OED*). We believe that Dutch *koper* may also have had this meaning, and that it had a diminutive form *kopertje*. It may seem rather unlikely that these tools of the printer’s trade would have been carried around by Dutch explorers in the South Pacific, but they may have been brought along as novelties. It is also possible that the term could have been applied to various artefacts such as saucers or box-lids with a relief design, such as that illustrated in Figure 1 of this paper. We suggest, then, that a person or persons travelling with Tasman or Le Maire and Schouten showed islanders how to make a rubbing of such a plate or artefact, and that *kupeti* were subsequently manufactured to serve the same purpose. The use of *kupeti* has indeed been likened to brass-rubbing (Troxler 1977:38). This proposal also explains the rather unexpected distribution of *kupeti*, being confined to Western Polynesia and only later spreading to Fiji.

4.4.1 Linguistic correlations

There is relatively little difficulty in deriving *kupeti* from *kopertje*:

- The realisation of Dutch /o/ (phonetically realised as [o.]) as Polynesian /u/ is slightly irregular (Polynesian /o/ would normally be expected), though such a change in an

unstressed vowel is not totally unexpected.²⁵ It is also perhaps pertinent to note that Mariner (Martin 1818, II:278–279, vocabulary) recorded the first vowel as /o/ ('*cobechi* the leaves of the *paoonga* dried and embroidered with the fibres of the cocoa-nut husk, so as to form an instrument for imprinting *gnatoo*'). However, although his recording of vowels was generally true, there are a few instances where he appears to have misrecorded /u/ as /o/, e.g. *polotu*, for *pulotu* and *kopenga* for *kupenga*.

The change in vowel length (from [o.] to [u]) is not altogether unexpected as vowel shortening in foreign loans occurs intermittently, as the following English loans in Fijian illustrate: *kapetā* < *carpenter*, *fosepi* < *forceps*, *mofia* < *morphia*, '*oketa* < *orchid*.

- The <r> in *kopertje* occurs as the final element of an unstressed syllable. In normal casual speech, the /r/ in this position is very often elided or receives a very weak articulation. It is therefore not surprising that /r/ is not realised in the Polynesian *kupeti*.
- The realisation of the diminutive suffix *-tje* /tjə/ as /ti/ seems at first sight somewhat aberrant, for not only is *-tje* phonetically realised in casual Hollands speech as [t̚ + schwa] (where the /t/ and /j/ have coalesced into the voiceless palatalised stop [t̚]), but there is also a seeming lack of correspondence between the final vowels—/ə/ > /i/. The two problems are resolved in a single explanation. In eighteenth-century Tongan (and presumably Uvean), /t/ before /i/ was palatalised. It is not known when the change to [t̚] occurred, but most likely it had been in place for some hundreds of years. If it was in place in the seventeenth century, which we believe it was, it would explain the realisation of /ə/ as /i/, because the Tongan (and Uvean) phonotactics were such that no vowel other than /i/ could occur after [t̚], which is equivalent to Dutch [t̚].

<i>kopertje</i>	→	<i>kupeti</i>
/k/	→	/k/
/o/	→	/u/
/p/	→	/p/
/ə/	→	/e/
/r/	→	∅
/t̚/	→	/t/
/ə/	→	/i/

²⁵ The vowel /o/ often receives a slightly diphthongal realisation in the Hollands dialect—the end of its articulation receiving an offglide to the position of /u/ (Booij 1995:6).

4.5 A word for 'bowl'

Another possible Polynesian loan word from Dutch is *kumete* 'wooden bowl', which can be derived, on clear semantic and phonological grounds, from Dutch diminutive *kommetje* 'small bowl' (cf. §4.4.1 *kupeti* < *kopertje*). Some of the reflexes of *kumete* are as follows:

<p>Fiji:</p> <p>Capell (1968) <i>kumete</i> 'a wooden bowl; Vanua Levu and Ra word for <i>tanoa</i>.' Thompson (1940:187) <i>kumete</i> 'wooden bowl'.</p>
<p>Rotuma:</p> <p>Churchward (1940) '<i>umefe</i> 'bowl, basin, cup ..., plate ..., collection-plate, dish, jug, dipper, etc.; small short-legged table used at meals by chiefs only; (by metonymy) chief'.</p>
<p>Tonga:</p> <p>Churchward (1959) <i>kumete</i> 'kava bowl'. Thompson and Thompson (1992) <i>kumete</i> 'a kava bowl.'</p>
<p>Niue:</p> <p>Sperlich (1997) <i>kumete</i> 'traditional wooden bowl'.</p>
<p>East Uvea:</p> <p>Rensch (1984) <i>kumete</i> 'bassine; tout contenant en forme de cuvette, auge' [pan; any basin-shaped container, trough].</p>
<p>East Futuna:</p> <p>Moyse-Faurie (1993) <i>kumete</i> 'récipient allongé en bois (sert a préparer l'amidon, le lait de coco, le curcuma, etc.); petite embarcation' [long wooden container used in making starch, coconut-milk, turmeric etc.; small boat].</p>
<p>Samoa:</p> <p>Milner (1966) '<i>umete</i> '(polite) wooden bowl used for cooking purpose'.</p>
<p>Pukapuka:</p> <p>Beaglehole and Beaglehole [1991] <i>kumete</i> 'wooden bowl'.</p>
<p>Tokelau:</p> <p>Office of Tokelau Affairs (1986) <i>kumete</i> 'large wooden bowl'.</p>

Tuvalu: Jackson (1994) <i>kumete</i> 'local basket; local bowl used for preparing food'.
Kapingamarangi: Lieber and Dikepa (1974) <i>gumade</i> 'large wooden bowl used for pounding food'.
Nukuoro: Carroll and Soulik (1973) <i>gumedi</i> 'bowl (wooden)'.
Rennell: Elbert (1975) <i>kumete</i> 'wooden food bowl'.
Tikopia: Firth (1985) <i>kumete</i> 'wooden bowl, of various type'.
Mae: Clark (n.d.) <i>kumete</i> 'wooden food platter'.
Ifira-Mele (Mele-Fila): Biggs (1975) <i>kumete</i> 'wooden bowl'.
West Uvea: Hollyman (1987) <i>kumete</i> 'bol, auge' [bowl, trough].
New Zealand: Williams (1985 [1844]) <i>kumete</i> 'wooden bowl or trough'.
Hawaii: Pukui and Elbert (1986) 'umeke 'bowl, calabash, circular vessel as of wood or gourd'.
Marquesas: Dordillon (1931–32) <i>umete</i> 'malle, caisse, coffre' [trunk, box, case].
Mangareva: Tregear (1899) <i>kumete</i> 'bowl, trough, kneading trough'.
Tuamotu: Stimson and Marshall (1964) <i>kumete</i> 'wooden bowl, trough, dish'.

<p>Tahiti:</p> <p>Davies (1851) '<i>umete</i> 'wooden dish used for various purposes, chiefly to hold food'.</p>
<p>Rarotonga / Cook Islands:</p> <p>Savage (1980 [1962]) <i>kumete</i> 'a wooden bowl or trough which is made in various sizes and shapes, generally from wood of the tamanu or tou trees. The natives of the islands still make them for domestic purposes.'</p> <p>Buse and Taringa (1995) <i>kumete</i> '(wooden) bowl'.</p>
<p>Mangaia:</p> <p>Christian (1924) <i>kuete</i> 'a trough or canoe-shaped oblong wooden vessel used for pounding and preparing food'.</p>

As is evident from the above, this word is widespread in Polynesia, being found in many outliers and in two of the extremes of the 'triangle', Hawaii and Aotearoa (New Zealand), though not the third, Rapanui (Easter Island).

Possible external cognates are Mota (Vanuatu) *wumeto* 'a wooden bowl, used for stone-boiling', and Kiribati *kumete* 'a kind of wooden mortar trough, hollow, empty, concave, thin, ravenous, hungry'. These, along with the Fijian reflex, which is confined to Lau and eastern Vanualevu, seem very likely to be loan words of Polynesian origin. If the Rotuman is also a loan from Polynesia, it must predate the layer of Polynesian loans that was identified by Biggs (1965), since it does not share in their phonology. This is not entirely implausible, since at least the change from *t to /f/ was still in progress during the nineteenth century, Hale (1968 [1846]:469–478), for example, recording consistently a voiceless dental fricative in 1840. It is quite possible, therefore, that previous loans into Rotuman, say before the eighteenth century, were adapted phonologically in a different way from those identified by Biggs.

Apart from *kumete* having a plausible Dutch source, and referring to an item of material culture, there are some linguistic reasons for suspecting this word to be a borrowing rather than inherited from Proto Polynesian. The Samoan reflex, '*umete*', is marked in Milner's dictionary as being 'polite'; that is, it belongs to a particular register in which it is used as a substitute for another word (*týnoa faimea'ai*) of more general use. While there is no certainty as to the origins of words used in this register, Churchward (1951:155) has speculated that some of them may be of non-Samoan origin, and *matau*, the polite word for 'axe', could well be a loan word from Fijian. The parallel register in Tongan contains at least two loan words from English: *uaifi* 'wife' and *husepýniti* 'husband'.

In addition, at least two of the reflexes exhibit loan phonology. In Marquesan, the direct reflex would be **kumete*, whereas the actual reflex '*umete*' suggests a loan, probably via Tahiti. In Mangaia (Cook Islands), the reflex *kuete* shows unexpected loss of medial /m/, a feature shared with *kuala* 'sweet potato', an item that is undoubtedly a loan, because of the relatively recent arrival of this cultivated plant from South America (Yen 1974:329). A third Mangaian item sharing this loss, *ko'ani* 'a cork', is of indeterminate origin (Christian 1924).

Nevertheless, the extent of the spread of this word within Polynesia and beyond is in most respects greater than that of any of the Dutch loan words hitherto identified. There are two possible conclusions. One is that the resemblance in form and meaning between Polynesian *kumete* and Dutch *kommetje* is due to chance. The other is that the spread of the word *kumete* is a true indication of the extent of inter-island communication in the seventeenth century. Given that the earlier loan word *kumala* 'sweet potato' also spread to the extremes of the triangle and well beyond (Yen 1974:339–347), we feel the second conclusion is perhaps a little more plausible.

4.6 A word for 'shovel'

The following is a set of forms we believe are derived from the seventeenth- and eighteenth-century Dutch *schop* /skɔp/~sɣɔp/ 'shovel':

Hawaii:

Pukui and Elbert (1986) *kope* 'rake, shovel, dredge; to rake, scratch, scoop, as of a canoe paddle'.

Tuamotu:

Stimson and Marshall (1964) *kope* 'kinds of small scoop net for fishing'.

A possibly related form with extended meaning is:

Rarotonga:

Savage (1980 [1962]) *kope* 'to collect, to subscribe, to donate, to give a donation in money or other things'.

Buse and Taringa (1995) *kopekope* 'gifts brought to a mourning'.

The following terms may also be related:

Marquesas:

Mosblech (1843) *opeope* 'lier ensemble v. *ope* [to tie up/bind together]'.

Tahiti:

Lemaître (1986) *ope* 'pelle, bêche; pelleter [shovel, spade; to turn with a shovel, shovel]'.

Jaussen (1987 [1969]) *ope* 'pelle [shovel]'.

Tuamotu:

Stimson and Marshall (1964) *ope* 'to scoop, gather up in the hands; of small loose objects or folds of cloth'.

The five men who deserted after Roggeveen lost his ship the *Africaensche Galej* on Takapoto (Tuamotu) in 1722 are probably the source of this loan word. An attempt was made to salvage as much as possible of its cargo and the crew's personal belongings, but most of what was salvaged was lost in rough seas or had to be left on the eastern beach of the atoll. Before Roggeveen's two remaining ships left Takapoto, five men deserted, and refused to leave the island. The five would have had a fairly good supply of equipment and provisions, and it is not unreasonable to assume that spades and shovels were among these goods.²⁶

4.6.1 Linguistic correlations

The derivation of *kope* from *schop* is relatively uncomplicated:

<i>schop</i>	→	<i>kope-ope</i>
/s/	→	∅
/k/~/χ/	→	/k/
/ɔ/	→	/o/
/p/	→	/p/
	+	paragogic /e/

- The simplification of the consonant cluster <sch> /sk/~/sχ/ to /k/ is consistent with Polynesian loan phonology (cf. Tahitian *totini* < English 'stocking'; Hawaiian *kula* < English 'school').
- The digraph <ch> in seventeenth-century Dutch had two co-occurring pronunciations: [k] and [χ]. Either of these would have been realised as Polynesian /k/.
- Up until relatively recently, Dutch <o> (/ɔ/) had two allophones: [ū] and [ɔ] (Donaldson 1983:48); The [ū] allophone occurred before nasals and after labial consonants, whereas the [ɔ] allophone occurred elsewhere (van Loey 1959:94; Donaldson 1983:136). The vowel in *schop* would, therefore, have been [ɔ], which would be unambiguously rendered as /o/ in Polynesian.
- The paragogic vowel in *kope* is, of course, the result of conforming to the open syllable structure of Polynesian languages.

²⁶ Quiros specifically mentions his crew taking spades and crowbars to dig for water on Hao in the Tuamotus in 1606 (Markham 1904:200).

4.7 A word for 'needle'

We believe Tahitian *narreeda* /*narita*/ 'needles' (Forster-Anderson 1773—Lanyon-Orgill 1979:118) was also introduced by the Roggeveen deserters and derives from the Dutch *naald* /*nalt*/²⁷ 'needles'.

We know that Roggeveen carried needles on board his ships as Bouman's journal mentions that needles were shown to the people of Rapanui: 'Zy hadden geen (kennis) van yzer, staal of andere mineralaen, nogh wapenen, ook van genigh dingh, dat wy haar vertoonde. 't sy van welk (ook) schaaftjes, naalden, coralen, spiegeltjens en meer andere zaken.' ('They had no (knowledge) of iron, steel or other metals/minerals, nor weapons, nor of anything else we showed them. Which included scissors, needles, beads, mirrors and other things.') (Mulert 1911:91).

4.7.1 Linguistic correlations

There is little difficulty in accounting for the derivation of *narita* from *naald*:

<i>naald</i>	→	<i>narita</i>
/n/	→	/n/
/a/	→	/a/
/l/	→	/r/
	+	epenthetic /i/
/t/	→	/t/
	+	paragogic /a/

- The first two sounds of *naald* are unambiguously rendered as the first syllable of *narita*.
- Tahitian has no /l/, the closest corresponding sound being /r/. This, together with the epenthetic /i/, furnishes the second syllable.
- The final syllable of *narita* is unambiguously derived from the final voiceless dental stop in *naald* with the addition of the paragogic vowel to conform to the open syllable structure of Tahitian.

Parallel examples to this loan phonology are the following two Afrikaans loan words in Fanakalo (a Zulu-based English pidgin with approximately 5% of its vocabulary derived from Afrikaans): *naliti* 'needle' < *naald*, and *toliki* 'interpreter' < *tolk* (Bold 1986),²⁸ and the Mangarevan (*ka'u*) *tirita* < English 'silk' (Rensch 1994:479).

²⁷ In word final position, voiced stops become voiceless.

²⁸ We are grateful to Dr Anthony Paul Grant (University of Saint Andrews, Scotland) for drawing our attention to these examples.

4.8 A word of 'wanton lust'

Poort (1991:71) cites an unnamed person with a declared knowledge of Polynesian languages who was 'struck by the fact that in the Reko Tumu, the language of the Tuamotus, there appear a number of words of obvious Dutch origin, and many of them have to do with the so-called 'wanton lust' of those left behind sailors [of Roggeveen's 1722 expedition].' Poort does not list these words, but they are given in personal correspondence to Poort from Kalsbeek, the self-professed Polynesian etymologist. Three of the words can, for various reasons, be discounted as genuine Dutch loan words.²⁹ The remaining form is the following:

Tuamotu:

Stimson and Marshall (1964) *pupa* (Takume) '(beast) copulate'; (Amanu) 'tremble, thrill, as during orgasm'.

Tahiti:

Foster/Anderson 1773 (Lanyon-Orgill 1979:115) *wa'bubba* 'jolting r...g'.³⁰

Davies (1851) *pupa* 'cold shivering at onset of disease; desire other sex'.

Lemaître (1986) *pupa* 's'accoupler, avoir des rapports sexuels [to couple (mate), to have sex/sexual relations]'.

We believe that *pupa* is probably derived from one of the following three vulgar Dutch expressions for 'to copulate', all of which were current during the seventeenth and eighteenth centuries: *pompen*, *poppen*, *poepen* (*Woordenboek der Nederlandsche Taal*, vol. 12, part 2, pp.3235, 3459; Heestermans et al. 1980:52, 150, 154). Van Sterkenburg (pers. comm. 23/1/1996) explains that *poepen* is derived from *poppen*. We also believe that the five sailors who deserted the Roggeveen expedition in Takapoto in 1722 are a plausible source for this term. Indeed, Roggeveen was in no doubt as to the prime reason for their desertion, writing that 'it is known to them that the island is inhabited, and being driven by drunkenness and wanton lust to have bodily intercourse with the women of the Indians, they will surely be killed' (Sharp 1970:125).

The limited geographical extent of the word *pupa*, in contrast to *pusa~puha*, *kumeti* and to a lesser extent *tuluma*, calls for comment. Firstly the borrowing of *pupa* took place at a much later date, which means that it has had less time to spread. Also, by the time it was borrowed (i.e. 1722) Polynesian voyaging was already on the decline. Furthermore, whereas *pusa~puha*, *kumeti* and *tuluma* in some cases refer to introduced items, so are 'necessary borrowings', and

²⁹ These are: *manihini* 'guest, visitor', *reka* 'experience sexual consummation', and *viki* 'wet with seminal matter', which Kalsbeek derives from Dutch *marinier* 'marine/sailor', *lekker* 'nice, delicious, pleasant', and *vieken* 'to copulate', respectively.

³⁰ Here 'r...g' probably denotes *rogering* 'to copulate with (a woman)' (Grose 1971 [1811]; Ayto & Simpson 1993; Partridge 1972). The first syllable *wa* represents the Tahitian preverbal aspect marker /ʷa/.

are needed as long as their referents are in use, *pupa* is an unnecessary borrowing for which many synonyms no doubt already existed.

4.8.1 Linguistic correlations

There is little difficulty in accounting for the derivation of *pupa* from *pompen*/*poppen*/*poepen*:

- The tonic vowel in both *pompen* and *poppen* follows a labial, and in *pompen* it also precedes a nasal, so in all instances <o> will be a close back vowel.
- If *pupa* is derived from *pompen*, the deletion of <m> is simply a case of cluster reduction, once again a requirement of Polynesian syllable structure.
- With *pupa* <poepen> the correlation is even stronger, as <oe> is also a short close back vowel, essentially identical to the Polynesian /u/ vowel.
- As mentioned above, the {-en} morpheme is usually pronounced without the final nasal—thus, *pompen* /pompə/, *poppen* /popə/ and especially *poepen* /pupə/ ‘translate’ almost identically into *pupa*.³¹

<i>pompen</i> → <i>pupa</i>	<i>poppen</i> → <i>pupa</i>	<i>poepen</i> → <i>pupa</i>
/p/ → /p/	/p/ → /p/	/p/ → /p/
/ɔ/ [ū] → /u/	/ɔ/ [ū] → /u/	/u/ → /u/
/m/ → Ø	/p/ → /p/	/p/ → /p/
/p/ → /p/	/ə/ → /a/	/ə/ → /a/
/ə/ → /a/	(/n/) → Ø	(/n/) → Ø
(/n/) → Ø		

Since a large proportion of Roggeveen’s men were foreigners, many of them Germans and Danes (Mulert 1911:130), it is also conceivable that one or more of Baltus Jansse’s fellow Takapoto deserters were of German or Danish origin. The German and Danish cognates of *pompen*—*pumpen* and *pumpe* respectively—could also be the source of *pupa*.

5 Acceptance and spread in Polynesia

In a paper of limited scope it is impossible for us to trace minutely the spread of the proposed borrowings within Polynesia, but we will present here a sketch of what may have happened, and discuss the implications for the extent of inter-island voyaging in Polynesia.

³¹ The Brabant dialects’ *pompen* is also pronounced with the short close back vowel /u/ (L. Draye pers. comm. 4/10/1996).

We have argued above that the borrowing of *pusa~puha* 'box' took place during the voyages of either Le Maire and Schouten in 1616 or Tasman in 1643, since these are early enough dates to account for the tonic vowel being back rather than front. Altogether, Le Maire and Schouten spent two contact days in the Tuamotus, five in northern Tonga, and two weeks in Futuna, while Tasman spent four days in southern Tonga. The balance of probability is, then, that the word was borrowed initially in Tonga or Futuna. From there, it must have spread to Eastern Polynesia, as far as the Marquesas (but not Hawaii) and Mangareva (but not Rapanui).³²

Kumete 'wooden bowl' also probably originates from the same voyage, in view of its very extensive spread through almost all of Polynesia; as to why it appears to have been carried even further than *pusa*, one can only speculate. Both *tuluma* 'small container' and *kupeti* 'design tablet' also seem to have spread from Futuna, though neither has made it as far as Eastern Polynesia. In the case of *kupeti*, the explanation may lie in tapa manufacture being a woman's craft, whereas most long-distance voyages would have been made by men.

Regarding *pupa* 'copulate', the nature of the word and its restricted distribution (Tuamotu and Tahiti) point strongly to it originating from the men who deserted from Roggeveen's expedition in the Tuamotus in 1722. We have already suggested that its restricted distribution may be due to its having been an unnecessary borrowing, and to the fact that interisland voyaging was in decline in the eighteenth century.

Recent years have seen an accumulation of evidence for extensive prehistoric voyaging by Polynesians. The situation at the time of Captain James Cook has been reassessed in a study of the list of islands known to the Tongans collected by Anderson in 1777 (Geraghty 1994). This study indicates that Tongans had knowledge of islands as far away as Kiribati, and may have also known of Eastern Polynesia. The chart drawn by Cook and his men under the direction of the Ra'iatean navigator Tupaia has been variously interpreted, but it is indisputable that it indicates knowledge of islands as far away as the Marquesas to the north (but not Hawaii), the Tuamotus to the east (but not Mangareva or Rapanui), the Australs and the Cook Islands to the south (but not New Zealand), and Fiji and Rotuma to the west (Denig 1962).

Tupaia alluded to the even more extensive knowledge and experience of his father, and there are other indications that voyaging was in decline by Cook's time. The Marquesans, for instance, travelled only within their own group, but had legends of visits to such distant places as Hawaii and Fiji (Denig 1962:109). The sweet potato, now believed to have been introduced from South America by Polynesians some time between 500 and 1000 AD (Irwin 1992:81, 100), spread even to the extremities of Polynesia, along with its South American derived name, *kumara*. Some time after 1000 AD, a group of people originating in Eastern Fiji spread throughout the Polynesian triangle, with the exception of Rapanui (Geraghty 1993:370); and there is evidence, mainly linguistic, that Western Polynesians once voyaged as far as Vanuatu and Pohnpei in Micronesia to procure red feathers (Geraghty 1994:243-245).

³² Regarding the *piha* variant, found in Rarotonga and Tahiti (whence it spread to Tuamotu and Rapanui), we have speculated above that it *may* have been a reintroduction by the deserters from Roggeveen's expedition, based on the *bus* form rather than *bos*, though it is not impossible that irregular fronting occurred. The meaning 'room' appears to be an early nineteenth-century Tahitian innovation.

Given this extent of voyaging in the Pacific, the claim that the words *pusa* and *kumete* spread from Western to Eastern Polynesia, and in the case of *kumete* also to the furthest outliers to the west, seems well within the bounds of reason.

With regard to evidence for long-distance voyaging in eastern Polynesia, the presence of *kope* in Hawaii suggests that Hawaii was still in contact with the Tuamotus in the early eighteenth century.

Finally, an observation on the element of chance in historical lexicography. If Anderson had not noted *nareeda* in Tahiti in 1773, we would never have known about this particular loan word. The contemporary Tahitian word for 'needle' is *nira* < English 'needle'. We wonder how many other early loans from Dutch (or possibly Spanish) sources may have since been lost and replaced with loan words from English or French.

6 Conclusion

The seventeenth century was the Dutch Republic's Golden Age. It was a great power, not only economically but also culturally, with many foreign students attending Dutch universities. The linguistic impact of Dutch upon some of the languages of Europe, although nowhere near as significant as that of French, German or English, was nevertheless noteworthy. Dutch loan words in English, for instance, include: 'beleaguer' < *belegeren*, 'brandy' < *brandewijn*, 'cruise' < *kruisen*, 'dock' < *dok*, 'easel' < *ezel*, 'landscape' < *landschap*, 'ledger' < *ligger*, 'onslaught' < *aanslag*, 'sketch' < *schets*, and 'yacht' < *jacht* (Brachin 1985:23; Jespersen 1962:141).

The influence of Dutch upon the languages of other parts of the world was mainly confined to those in the Dutch colonies. The two outstanding examples are, of course, Indonesian and the totally new language that developed in the Cape colony, Afrikaans. Among the languages which have received a more modest contribution from Dutch, we may now list a number of the Polynesian languages.

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Personal communications

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7 *Borrowing and its alternatives in Māori*

RAY HARLOW

1 Introduction

While there is no denying that languages differ extremely widely in status, in the numbers of their speakers, in the cultures of the societies which speak them, even in the size of their vocabularies, it is a well-founded axiom of the modern study of human languages that they are equal in certain inherent respects. In particular, all languages, despite superficial differences in structure, are capable of expressing the same range of structural meanings; what some language may lack in, say, complexity of inflectional morphology is made up for by exploitation of other structural devices, such as particles or syntactically significant word order. In terms of their vocabularies, they all provide equally appropriate resources for their speakers to configure their world and communicate about it, and are all equally capable of adapting to whatever new demands are placed upon them.

The changes in vocabulary occasioned by such adaptation can take a variety of forms, of which borrowing, the central topic of this book, is only one. Others include calquing, semantic shift of various kinds, creation of new word forms by the means made available by the morphology of the language, even coinage *ex nihilo*.¹ Which of these devices are used in the adaptation of a language's vocabulary to meet new challenges depends on a variety of conditions. Trivially, for instance, borrowing can occur only when there is a lender language from which to borrow! We should note, however, already here that while contact with a lender is a necessary condition for borrowing to occur, it is by no means a sufficient condition.

This paper will review the development of the vocabulary of Māori as it adapted to new demands placed upon it at three stages of its history. All three stages have in common that the

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language found itself pressed into providing fairly quickly the means of communicating in a new environment, but differ markedly in other circumstances. These three stages are the arrival and settlement of Polynesians from the Tropics in temperate New Zealand, the confrontation beginning in the late eighteenth century with European culture and technology, and the Māori 'renaissance' of the past twenty years.² I want to make some points about each period in turn, and then to review in a final section the actual forms which adaptation took.

2 The initial settlement period

New Zealand was first settled some 1000 years ago from tropical Eastern Polynesia. All the linguistic, archaeological and traditional evidence points to this conclusion.³ In particular, Māori subgroups most closely with the languages of the Cook Islands (except Pukapukan), Tahitian, and the dialect chain of the Tuamotu archipelago as the Tahitic subgroup of Central Eastern Polynesian.⁴ The environment to which the ancestors of the modern Māori brought their Tahitic language differed markedly in a variety of ways from that of the homeland of the subgroup. Among the adaptations which the first Polynesian arrivals thus had to make was the naming of those aspects of the new environment which differed from what they were familiar with. This paper will not be so much concerned with the details of what was renamed as with the devices employed in this lexical change, and the reader is referred to two papers by Biggs (1991 and 1994b) for a view of the range of vocabulary involved. In the absence of written records of the language at this stage, all such studies necessarily involve the comparison of attested Māori vocabulary from later sources with reconstructions of vocabulary for a range of prehistoric stages. Invaluable in this work is the ongoing project in Polynesian comparative lexicon, POLLEX (Biggs and Clark 1996), which takes the form of a computer file, available on request from the Department of Applied Language Studies and Linguistics at the University of Auckland. The version I use dates from April 1996 and contains over 4200 items and reconstructions of vocabulary for all levels of the Polynesian language family.

Unlike the two other periods of adaptation to be mentioned here, this settlement stage did not bring the language which was to become Māori into contact with any other language. There was no indigenous language which could act as a substratum, so that borrowing was ruled out as a possible source of the new vocabulary needed. Many of the Māori traditions relating to the settlement of New Zealand refer to peoples found by settlers on their arrival.⁵

² Benton (1991) contains a brief summary of the history of Māori from its Polynesian origins up to the present, touching on some of the processes we look at below.

³ There are myriad references for this topic. Let two suffice here: Davidson (1981) and Sutton, ed. (1994), especially Sutton's own preface to the latter.

⁴ The present view of the interrelationships of the Polynesian languages is based on the subgrouping presented in Pawley (1966, 1967) and Green (1966). Modifications of this subgrouping have been suggested by Howard (1981), Wilson (1985) and Marck (1997). On the relationship of Rarotongan, Tahitian and Māori, see Biggs (1994a).

⁵ For these 'canoe' traditions, see Simmons (1976).

To the extent that these stories represent folk memories of the actual historical process of Polynesian settlement, they probably refer either to movements of peoples within New Zealand later than the original settlement, or to multiple settlement of New Zealand from Eastern Polynesia; for the archaeological record and, so far as we can tell at present, the Māori language show none of the signs that are usually associated with the encounter of migrant settlers with an earlier, established indigenous population.

This is not to say that the Polynesian settlement of New Zealand was necessarily the result of a single vessel carrying one original group.⁶ I have argued elsewhere that there is some slim linguistic evidence of exclusive connections between some of the dialect areas of New Zealand Māori and specific languages in Eastern Polynesia (Harlow 1994; see also Biggs 1994a). Such connections are consistent with the idea of multiple settlement of New Zealand from Eastern Polynesia. In this connection, it is interesting to observe the following. As we shall see, and as Biggs (1991, 1994b) has detailed, a major device employed in the adaptation of Māori at this early period was the application of inherited words to new referents which were perceived to be related to the meaning no longer required. Now, if some of the attested differences between Māori dialects are due to independent migration of slightly differing Eastern Polynesian languages to different areas of New Zealand, one could anticipate finding differing responses to the new environment using the same inherited vocabulary. That is, one could expect to find reflexes of the same Eastern Polynesian words reapplied to different referents. This does not seem to have occurred at all widely. The bulk of the items discussed in Biggs (1991, 1994b) show no dialect variation in form or referent, as if the adaptations he describes occurred once and were subsequently spread throughout New Zealand. A few items among the plant names he deals with do show some regional peculiarities, and only two of these can plausibly be regarded as differential adaptation of inherited terminology:

1. Williams' (1971) Dictionary contains the item '*pakiraki* n. A tree', and attributes the word, without citing a source, to the South Island dialect of Māori. Biggs' (1991) list of reconstructed plant names and their New Zealand reflexes also contains this word and connects it with a protoform **pakilaŋi*, though he does not commit himself to naming a protolanguage of which this would be a lexical item. Indeed, according to POLLEX, reflexes of this word have a bizarre distribution, occurring only in South Island Māori and in Sikaiana and Takuu, Polynesian Outliers in the Solomons! Neither Williams nor POLLEX identifies the tree designated by *pakiraki* in South Island Māori; however, a clue here is the form *pikiraki*, which occurs in a number of works by Herries Beattie (see especially 1994:207, 305), who calls it a red mistletoe. If, as seems likely, these forms are the same word, they provide a nice example of folk etymology: *piki* means 'climb, ascend', *raki* (= North Island *rangi*) 'heaven', giving a name for a tree which strives towards the sky. *Pakiraki* is not susceptible of such a clear 'explanation'.
2. Among the examples cited by Biggs (1991) is the adaptation of **kafika* 'Malay apple'. Biggs gives as Māori reflexes *kahikatea* 'Podocarpus excelsum', *kahika* 'id., *Metrosideros excelsa*', and *kahikaatoa* 'Leptospermum scoparium'. The first and third

⁶ On this issue, see papers in Sutton, ed. (1994).

forms illustrate the use of modifying suffixes in the creation of new terms for unknown flora, while the second form is an instance of straight semantic shift. Herries Beattie (1994:38) cites the use of the form *kahika* for the white pine as a South Island word for which the Northern dialects use *kahikatea*. The occurrence however of *kahika* in this sense in songs⁷ stemming from Tūhoe, Ngāti Porou and Te Whānau-ā-Apanui, all tribes in the East of the North Island, marks the word as being more generally of the Eastern dialect group.⁸ In the Far North of the North Island, the term *kahika* is used for another tree, *Metrosideros excelsa*, called *pōhutukawa* elsewhere (Biggs 1989:73). Both terms are inherited.

3. *Hinahina* 'a tree, *Melicytus ramiflorus*' is a form with a similar distribution. Herries Beattie (1939 [1990]:157) records it as the South Island name for the tree called *māhoe* in the North. Williams (1971) assigns it to Ngāti Porou (East Coast North Island), but the only example of its use given there is from a South Island text collected from the island Ruapuke at the extreme South of the South Island. Accepting that *hinahina* is a word of Eastern dialects which corresponds to *māhoe* in other areas,⁹ the interesting aspect of this case is that both words are inherited. Both have cognates in Hawaiian, and in the case of *māhoe*, possible connections in Samoan and Niuean.¹⁰

Tantalisingly, Herries Beattie (1994:38) gives a few other examples of allegedly differing terminology for North and South Island Māori, and says, 'and so on through scores of instances'. With the exceptions of the term for 'white pine', to which I have referred, and *pipi*, whose etymological meaning seems to have been fairly generic for 'small shell-fish', the only examples given involve terms for which POLLEX and other sources reveal no etyma. North Island *kuaka* 'godwit' is contrasted with South Island *poaka* 'id.' (*kuaka* being a variety of muttonbird in the South and *poaka* a name for pied and black stilts in the North), and *piopio* is glossed as 'thrush' for North Island dialects and as a 'morepork owl' in the South. Though the differences in meaning and form are real, the fact that these forms have no discernible cognates outside New Zealand, yet show similarity of form and meaning, suggests that they are the result of single instances of coinage with subsequent spreading and meaning shift in the South.

Leaving for later the discussion of the adaptations made during this period, this section has tried to 'set the scene' for the first of the stages referred to above. Whatever the facts of early settlement, the adaptation of the vocabulary to name the new environment seems to have taken

⁷ Ngata (1928): song 161.7, song 191.12; and Ngata and Te Hurinui (1970) song 2221.38, song 2251.8.

⁸ The dialect of the South Island belongs clearly with those of the Eastern North Island, as against those of the West and North of the North Island. See Biggs (1989) and Harlow (1979).

⁹ Biggs (1991:71) labels the word 'eastern dialects'.

¹⁰ POLLEX **maafoe* and **sinasina*.

place initially¹¹ in a uniform way without benefit of language contact. The adaptations therefore were all based on inherited and inherent resources of the language itself.

The same applies to development of vocabulary after initial settlement and confrontation with the new environment, its flora, fauna, climate, geography and size. Cultural changes since first settlement necessitated adaptation of vocabulary. Biggs (1994b) details developments in canoe terminology, showing the reapplication of inherited words to the modified vessels which developed for New Zealand conditions. Other areas where rich terminology developed include the naming of varieties of greenstone and kumara.

3 Contact with Europeans

Despite the short visit of Abel Tasman in 1642, effective contact between Māoris and Europeans did not begin till Cook's arrival in 1769. From then on, European, especially British, involvement in New Zealand grew continuously through the presence of whaling and sealing crews, missionaries, settlers and so on, until by later in the nineteenth century the Māoris were a minority in their own country.¹² Throughout this period, which can usefully be regarded as having extended until only some thirty years ago, Māori had to adapt so as to be able to handle the huge array of new items and ideas introduced by this contact.¹³ These range from all the paraphernalia of Christianity, through European technology and trade, to some of the more negative sides of contact: disease, misuse of alcohol, and the musket.

Throughout this period, as can be expected, borrowing was the major device exploited in this adaptation, though by no means exclusively. The major study of borrowing in Māori (Duval 1995), which looked at over 300 publications from the period 1815 to 1899, identified over 2500 distinct items. However, there are problems associated with the identification of borrowed items. Many of the sources of information on Māori from the early contact period cannot be relied on to give a true picture of the development of the language in this respect. On the one hand, word lists such as Thomas Kendall's¹⁴ and John Boulton's¹⁵ were intended to record indigenous words, and would not include whatever perceptibly English words were already in use among Māori speakers. We know that, from a fairly early stage, jargon versions of both English and Māori were used for interethnic communications (Clark 1990). Both of these forms of speech showed pidgin-like simplification of grammar, but also lexical

¹¹ With the exception of the *hinahina~māhoe* case and of the differing uses of *kahika*, the examples point to some later shifts and coinages differing by region.

¹² See for instance papers by Owens, Gardner and Dalziel in Oliver (1981). Salmond (1991 and 1997) are excellent on all aspects of early contact.

¹³ As new technological (wireless > *waerehe*), social (pension > *penihana*) and political (Labour > *Reipa*) terms were incorporated into the language, essentially the same processes, chiefly borrowing, were used right from the beginning of this second period.

¹⁴ See Kendall (1815 [1957]) and the very similar though not identical list furnished by Kendall for Nicholas (1817 vol. 2:327–352).

¹⁵ Most accessible in Starke (1986:109–114).

mixing, so that in conversation between Māori and Pākehā supposedly conducted in Māori, use of English words was not uncommon. Clearly such words would not be expected to appear in contemporary word lists of Māori. Nor however would we probably want to regard such use of English words within the jargon as necessarily instances of borrowing into Māori.

On the other hand, much early text in Māori, certainly published text, was of missionary origin, especially biblical, catechistic and liturgical material (Williams 1975), and later of political and administrative origin.¹⁶ In documents of both kinds, writers struggled to express in Māori concepts from these areas which were quite foreign, and in doing so introduced vast numbers of words from European sources, adapted to Māori phonology.¹⁷ Perhaps the most blatant example of this is to be found in the translation into Māori of some English law commissioned by Governor Gore Browne in 1858 (*The laws of England*), in which many technical terms of English law are translated using 'transliterations'¹⁸ of the English original. In recognition that the result is bound to be unintelligible to speakers of Māori, these 'transliterations' are printed in italics and a glossary of virtually 100 of such terms, from *akihana* 'action' to *wheroni* 'felony' is appended. In fairness, it must be said that some of the terms in this list, such as *āpiha* 'officer', *hāmene* 'summons', are still in use and were thus not nonce borrowings for the purpose of the translation. Most of the French and Latin 'loans' gleaned by Duval (1992) from Roman Catholic materials have proved similarly ephemeral.

These two types of early source on Māori thus either underreport (word lists) or overreport (material produced by Pākehā, or attestations of Māori jargon) the extent of borrowing, and one must look to text spontaneously produced by Māori themselves in order to judge the extent and type of borrowing which occurred. Unfortunately, there is virtually nothing in this category for the earliest period, the status of 'earliest surviving Māori writing of significant size' being claimed for the account by Renata Kawepō Tama Ki Hikurangi of his journey with Bishop Selwyn in 1842–43.¹⁹ Shortly after this date, one begins to find text produced by Māori on their own traditions and culture.²⁰ A particularly fascinating text records the memories of Te Horetā Te Taniwha, who died in 1853, but who as a young boy witnessed the arrival of Cook's *Endeavour* in 1769. This text exists in two versions, both first published in White (1888:105–113). From this time on, texts by Māori abound, especially as Māori-

¹⁶ Not least in this category are the *Declaration of Independence* of 1835 and *The Treaty of Waitangi* of 1840, on both of which see Orange (1987). Appendices to Orange's book contain the texts of these two documents.

¹⁷ Duval's (1995) research shows that nearly all new items of vocabulary introduced during the period he studied (1815–99) were introduced by English-speaking Pākehā.

¹⁸ The term 'transliteration' properly refers to the transcription of a word originally written in one writing system (e.g. the Greek alphabet, or Japanese syllabary) into another (e.g. the Roman alphabet). However, it has long been the practice in talking about Māori to refer to loans from other languages as 'transliterations'.

¹⁹ Hogan (1994) provides an accessible edition of the text along with translation and commentary.

²⁰ For example, by Grey's informant, Te Rangikāheke, see Curnow (1985), and by Matiaha Tiramōrehu, see Tiramōrehu (1987).

language newspapers, some produced by Māori themselves, appear.²¹ Texts of this kind show more reliably the language as used by Māori for Māori readers.

As is to be expected, there is some evidence of differential adaptation by Māori to the ideas and referents introduced to them through contact with Europeans. There are a number of cases where new referents are accommodated in Māori by different borrowings or different devices in different areas. A few examples:

1. The most notorious example is perhaps the word for 'cat', which is variously *ngeru* (< 'smooth, soft'), *naki* (< 'glide, move with an even motion'), *poti*, *puihi* (both < 'pussy'), and *tori*;
2. 'sugar' is generally *huka*, whose phonological similarity to 'sugar' is reinforced by the existence of *huka* 'foam'; however, in the south, the term *puareka* (< *pua* 'flower, seed, foam', *reka* 'sweet') is recorded (Harlow 1987 *s.v.* *puareka*);
3. *paipa* (< 'pipe') is now the usual word not only for a '(tobacco) pipe' but increasingly also for 'cigarette' (at the expense of the form *hikareti*); *kai paipa* (*kai* 'eat'²²) is now the usual word for 'to smoke (tobacco)'. However, early sources from different places variously attest *tini* (South Island; Harlow 1987 *s.v.* *tini*), and *pohee-pohee* (evidently *puhipuhi*; Northland; Nicholas 1817, vol. 2, 338).
4. The modern loans *hāte* 'shirt' and *tarautete* 'trousers' are already found in Renata's text of 1842–43 (Hogan 1994). However, Southern sources dealt with the need for such words in other ways: *kokomo*, a word inherited from at least Proto Central Eastern Polynesian,²³ for 'shirt' (Harlow 1987 *s.v.* *kokomo*, where cognates are given); *wharekūhā*, an innovative compound of *whare* 'house' and *kūhā* 'thigh' (Harlow 1987 *s.v.* *uareama*).

As part of a study of Māori regional variation I published in 1979, I asked eight acquaintances who spoke different North Island dialects to fill in an extended Swadesh 200-list. It was striking that in no case was the list completely free of loans, and even more striking how dialects differ with respect to the extent of borrowing even in lists of basic vocabulary. The lists with fewest loans had only two such items in 228 words, that with most had 18. Richard Benton (pers. comm.) is of the opinion that in fact much of the difference between Māori dialects nowadays is due to different rates of inclusion of loans. On the other hand, it must be pointed out that a few such loans figure in virtually all lists: *hēki* 'egg' and *mīti* 'meat' occurred in seven of the eight lists, *putiputi* 'flower' (supposedly from 'pretty-pretty') in six, and *kaute* 'count' in five.

²¹ For a good, short account of Māori publishing in New Zealand, including newspapers, see Garlick (1998:15–27).

²² Actually, *kai* extends further along the continuum of 'consume by mouth' than does English 'eat'; in Māori one can 'eat beer', for instance.

²³ Apparently, this word also occurred in the Tūhoe dialect of Māori last century in the sense 'put on (a garment or shoes)', Te Haumihiata Mason (pers. comm.).

As with the first stage (§2 above), discussion, with examples, of not only the actual loans made but also the other types of adaptation found in this period will be found in §5 below. For the moment, we turn to the third of the periods of change which have confronted the Māori language since its installation in New Zealand.

4 The Māori renaissance

Whatever the impact of contact with English on the shape of the Māori language, the symbiosis which began in the late eighteenth century, and which was arguably a relatively stable diglossia until perhaps 50 years ago, has led to massive language shift from Māori to English.²⁴ On the basis of an extensive survey carried out in Māori communities between 1973 and 1978, it was estimated that at that time there were some 70,000 native speakers of the language and a total of perhaps 115,000 people who could understand the language easily (Benton 1981:15). While these figures look healthy enough in absolute terms, they were in fact cause for great concern, since the survey showed that knowledge of Māori was restricted to a minority of those who would class themselves as ethnically Māori, and that knowledge of Māori is concentrated in older age groups. The tendency already evident in this survey was confirmed by a second major survey conducted in 1995 by *Te Taura Whiri i te Reo Māori* (The Māori Language Commission) and published in 1998 by *Te Puni Kōkiri* (The Ministry of Māori Development). This study arrived at the result that there are now only some 10,000 people who enjoy 'high' or 'very high' fluency in Māori (Te Puni Kōkiri 1998:34).

In part because of the perception of this trend, but also because of a growing interest in and concern for Māori issues of all kinds,²⁵ a number of initiatives were begun in order to try to ensure the survival of Māori. Recognising that the natural transmission of Māori within the family was in very large part broken, The Department of Māori Affairs promoted the foundation of 'The Language Nest', *Te Kōhanga Reo*, a Māori language preschool, in which children are brought up in an environment which is Māori not only linguistically, but also culturally. The first such preschool was opened in 1982, and by 1994 there were over 800 throughout the country catering for some 14,000 children.²⁶

Despite assurances from the Department of Education that the public education system would be able to accommodate children progressing from this monolingual Māori background, it was not long before some of the *kōhanga* felt the need to retain their children past school age in order to continue their education in a Māori environment. This led to the foundation in 1985 of the first *Kura Kaupapa Māori*, a primary school teaching the whole curriculum required by the Government but in a Māori context and through the medium of Māori. In the meantime, this sort of initiative has attracted Government approval and funding,

²⁴ Very useful accounts of the factors and processes involved in this shift can be found in Benton (1981) and Te Puni Kōkiri (1998).

²⁵ Popular movements such as 'The Māori Renaissance' are often hard to date precisely. However, the Land March of 1975, a demonstration against the continuing alienation of Māori land, may perhaps be regarded as an icon of the beginning of this movement.

²⁶ URL <http://www.kohanga.ac.nz>.

and by July 2002 there were 61 such schools catering for some 5200 pupils. A few of the schools had extended as far as the final year of high-school education.²⁷

At the same time, a claim was brought before the Waitangi Tribunal²⁸ arguing that the language was one of the treasures whose continued possession was guaranteed to the Māori under the Treaty of Waitangi. The Tribunal accepted this argument and recommended action to the Crown in the areas (*inter alia*) of the official status of Māori, education in Māori, and broadcasting in Māori. The Government's response was the introduction of the Māori Language Bill, which became law in 1987. This Act made Māori 'an official language of New Zealand',²⁹ allowed any party to most judicial and quasi-judicial proceedings to speak Māori in the proceedings, and founded *Te Taura Whiri i te Reo Māori*, part of whose statutory function is to promote Māori as a living means of communication.

The Commission quickly came to the view that a significant part of its role would lie in the area of driving lexical expansion in Māori. The increased use of Māori not only in education, but in legal proceedings, in government publications and in broadcasting, placed new demands on the language's resources; the language was now to be used in domains and for purposes for which it had not previously been used.³⁰ This situation has led to a considerable amount of deliberate work by the Commission³¹ and other agencies³² in the creation of vocabulary. As an indication of the scope of this activity, Keegan (n.d.) reports that the lexical database maintained by the New Zealand Council for Educational Research in order to coordinate the various strands of lexical expansion contained over 21,500 items in May 1998.³³

²⁷ URL:
<http://www.minedu.govt.nz/index.cfm?layout=document&documentid=6882&indexid=6848&indexparentid=5611>.

²⁸ The Waitangi Tribunal was founded under the Treaty of Waitangi Act 1975 to hear claims of alleged infringement of the Treaty of Waitangi (1840) by the Crown and to recommend settlements to the Crown. On The Treaty of Waitangi, see Orange (1987). On the Tribunal see URL www.waitangi-tribunal.govt.nz.

²⁹ The formulation perhaps suggests the existence of other official languages, but in fact Māori is the only language which has this status *de iure*. English is of course *de facto* an official language.

³⁰ Or rather, in many cases, not used for a long time. Māori had been used in legal proceedings, government publications and education to lower levels in the nineteenth century. However, as will be seen, the devices used then to equip the language with the requisite technical vocabulary were no longer acceptable.

³¹ The Commission's activities in this area led to incidental publication of vocabulary in booklets and through its newsletter, *He Muka* (Te Taura Whiri 1987–), but particularly, to the production of two editions (Te Taura Whiri 1992, 1996) of a consolidated listing of its neologisms.

³² In particular but by no means exclusively, individuals and committees charged with the preparation of curriculum statements for the teaching of language, mathematics, science and technology curricula through the medium of Māori.

³³ The database may be searched at: www.nzcer.org.nz/search/kimikupu.htm.

The adaptation of Māori taking place in this third period is occurring in a completely different environment from that which obtained in the second period. Consciously held positive attitudes towards the value of the language and the desirability of its retention have probably never been higher. At the same time, there is very widespread awareness of the precariousness and fragility of its position.³⁴ These factors, coupled with the general rise in concern for Māori issues, especially for Māori identity, self-determination and culture, have produced a very strong puristic approach to language planning, especially among younger people and second-language learners of Māori.³⁵ This purism is manifest as a rejection of loans from English as a means of further vocabulary expansion. As well as this proscription of borrowing from English, this purism has extended so far as to try to eliminate loans from English already well established in the language. This has taken the form on occasion of the reintroduction of terms which were or must have been in the language previously. For instance, *panana* 'banana' has been replaced in the Commission's publications by *maika*, a 'borrowing' from modern Polynesian languages or a resurrection of Proto Central Eastern Polynesian **maika*, depending on your view. Similarly, though English names for the months of the year, e.g. *Hānuere* 'January', *Hūrae* 'July', etc., were borrowed relatively early, precontact Māori culture operated with lunar months and there are several attested sets of traditional terms. The Commission suggested the resurrection of a particular set³⁶ and its adjustment so as to fit the Gregorian calendar, e.g. *Kohitātea* 'January', *Hōngongoi* 'July'.

Other attempts to replace established loans involve neologisms, e.g. *kawe-reo* 'carry-language' for borrowed *waea* 'telephone' (< 'wire'). The Commission has also proposed a set of terms for the days of the week to replace the English names borrowed quite early. Typical of this set is the word for 'Tuesday', *Rātū*, in which *rā* means 'day', and *Tū* is the shortened form of the name *Tūmatauenga*, the personification of warfare. The form is thus a calque on Romance words such as French *mardi* 'day of Mars'.

The explicit purism against direct borrowing from English as a means of extending the Māori vocabulary for wider domains of use is accompanied by another phenomenon which can also be seen as a type of purism. This is an insistence that 'Māori' words in English should be pronounced 'correctly'. What is meant by this is that words of Māori origin in English, many place names, but also a considerable number of other lexical items, particularly

³⁴ This is not to imply that there was no conscious concern for the maintenance and development of Māori before this time. Sir Apirana Ngata, for instance, frequently refers in the 1920s and 1930s to the desirability of maintaining the language, and to the need for the Māori vocabulary to be enriched by 'the interplay between local and foreign cultures' (Ngata 1986, vol. 2, 191 letter of 27 July 1931). See also Ngata (1986, vol. 1, 165, 182, and 1986, vol. 3, 199).

³⁵ The existence of this purism is immediately obvious to anyone involved in Māori language activities today, though there has been no research into the phenomenon. None of the surveys carried out in recent years (see Te Puni Kōkiri 1998) addresses the question. See Harlow (1993a, b). See also *Te Taura Whiri i te Reo Māori* 1987-, issue 5:45 for Spring 1992: 'Some say, "What is wrong with borrowing English words, as in the old days?" Younger people would not approve of this, and since it is through them that the language will survive, we have followed their view' (tr. RH). This is the nearest thing to a published policy in this area that the Commission has produced.

³⁶ Simultaneously urging Māori speakers to start using terms originally used in their own dialects.

flora and fauna, and terms for Māori cultural concepts, should be pronounced using (something approximating) Māori phonology. That is, there is a puristic imperative among many speakers of Māori, 'Thou shalt not borrow Māori words into English'; thou shalt codeswitch instead.³⁷ Here however the motivation is quite different; borrowing from English into Māori is disallowed because this weakens and compromises Māori: borrowing from Māori into English (with progressive phonological adaptation) is disallowed because this dishonours Māori.

Ironically, this purism has not extended to warding off other influences of English. Precisely because of the reawakening interest and commitment to Māori during this recent period, the number of people speaking the language for whom it is a second language, acquired, as it were on top of English, is radically higher than in previous periods, when native speakers predominated. The interference of English in this group's acquisition of Māori thus represents a factor in the shape of the Māori language as widely used and heard today. While this is not reflected in lexical borrowings, it is arguably evident in one phonological change and in some examples of idiom and detail of syntax.

In Māori, all combinations of a vowel plus a second vowel of higher tongue position within words constitute diphthongs. Thus, /ae/, /ai/, /ao/, /au/ and so on are all phonemically distinct diphthongs. There seems to be a merger occurring currently between two such diphthongs which were originally distinct. /au/, pronounced [əʊ], contrasts with /ou/, pronounced [ɔʊ], in pairs such as *hau* 'wind'~ *hou* 'new'. In the speech of many second-language learners of Māori, even if of high competence, these are both realised as [əʊ]. An explanation for this is perhaps to be found in the fact that in New Zealand English both [əʊ] and [ɔʊ] occur, but as allophones of /au/, the latter pronunciation occurring, as in many other varieties of English, before //.

Interference from English can be observed also in syntax. Generally, the complements of transitive verbs in Māori are marked by the prepositions *i* or *ki*. In two cases however one increasingly hears *mō* 'for' used instead. These two cases are the complements of *tatari* 'wait' and *tono* 'apply', where the use of the benefactive preposition in lieu of the regular object markers is clearly due to the model of English 'wait for, apply for'.

Not every type of NP can take the object marker *i* or for that matter any preposition, in particular, NPs introduced by the non-specific article *he* cannot. This means that in older Māori grammar, NPs starting with *he* cannot be used as the object of verbs. In order to express something like 'they built a house' in Māori, one would say *I hanga whare rātou*, incorporating the object into the verb itself, something like 'they house-built', or use the passive: *I hangaia e rā tou he whare* 'Was built by them a house'. In neither of these is the expression *he whare*, which comes closest to the English 'a house', used as the object of the verb 'build'. Nowadays however the construction *I hanga rātou he whare* is widely used, even by very good speakers. That is, in imitation of the freedom of English non-specific NPs in English to act as the object of a verb, a change is taking place in Māori to allow *he* NPs the same freedom.

³⁷ This prohibition extends also to morphology: 'Māori' nouns used in English should not take a plural /z/, because Māori has no suffixal plural formation.

A similar imitation of English can be seen in examples of the use of the verbal markers *ki te*. This marker introduces a verb when used as the non-finite complement of say a verb of wishing or as a non-finite clause of purpose:

- (1) *I pīrangi a Mere ki.te kai kōura.*
 T/A want ART Mere INF eat crayfish
 'Mere wanted to eat some crayfish.'
- (2) *I haere mai rātou ki.te whakatō kūmara.*
 T/A go hither they INF plant kūmara
 'They came in order to plant kūmara.'

A consequence of these usages has been the identification of *ki te* with the 'to' of English infinitives and its use in other constructions where English has 'to' plus verb. In particular, where an infinitive is the subject or predicate of a sentence, as in English 'To err is human' or 'His job is to sweep the path', one increasingly finds erroneous use of *ki te* in Māori.

Thus, for older:

- (3) [*Ko tana mahi*]_{SUBJ} [*he tahi i te huarahi*]_{PRED}
 TOPIC his job ART sweep OBJ the path

one hears:

- (4) *Ko tana mahi ki te tahi i te huarahi.*

Returning now to the matter of terminology, it is unfortunate that, at least at the earlier stages of this period, there was little or no coordination of such development; much of the early work, particularly in curriculum areas, was undertaken independently in different places. This has resulted in there being several instances where different Māori terms are in use for the same English idea, and even similar Māori terms used to correspond to different English words. For instance, the lexical database (see footnote 33) lists 'impact', 'effect', 'concept', 'idea', 'notion', 'theory', 'construct' as English words for which *ariā* has been used by a variety of sources. The use of *ariā* as 'abstract' (i.e. summary of say an article) is also widespread though not listed in the database. Conversely, 'diploma' is variously translated as *tiwhikete*³⁸ (which also corresponds to and is a borrowing of 'certificate'), *tītohu* and *pōkairua*.³⁹

5 Borrowing and its alternatives

Biggs (1991:67–68) points out that there are 'basically three ways in which people innovate names. First, a totally new word can be coined [...]. Second, a word can be borrowed from another language [...]. Third, a new meaning can be assigned to an old word

³⁸ Ngata (1993), *s.v. diploma*.

³⁹ These last two respectively from *Te Taura Whiri i te Reo Māori* (1996) and (1992). On their formation see §5.

[...] a modifier may be added [...].’ As Biggs says, in fact, creation of new words completely *ex nihilo* is uncommon. The nearest one can find to it in Māori are onomatopoeic formations such as *korukoru* ‘turkey’, perhaps *heihei* ‘chicken’ (Biggs 1991:67–68), possibly *piopio* mentioned above, ‘thrush’ in North Island dialects and ‘morepork owl’ in the South, and other names for birds which lack etymologies.

Far and away the most lexical innovations in Māori, from all three periods under discussion, are due to borrowing and to adaptation of existing resources within the language. However, these two cannot be kept rigorously apart as distinct processes. On the one hand, through the chance similarities which exist between languages, there are cases where a lexical item (as a form and meaning pair) is manifestly recent, yet could be either a borrowing of an English word or an adaptation of an existing Māori word (probably aided by the perceived similarity with the corresponding English item). Three examples spring to mind:

1. *huka* ‘foam’ adapted early to the meaning ‘snow’ which was needed in New Zealand, though unknown in the tropics, has added the meaning ‘sugar’ in recent times. The form *huka* is what one would expect ‘sugar’ to become on being borrowed into Māori, even in the absence of the existing form;
2. *kura*, the usual word for ‘school’ in modern Māori, is formally what one would expect if the English item ‘school’ were to be borrowed, yet the word already existed in Māori in the sense ‘knowledge of *karakia*⁴⁰ and other valuable lore’ and in the compound *whare kura* ‘house + *kura*’, effectively the school where such lore was taught;
3. *puru* is used in modern Māori as the equivalent of English ‘put’. Older Māori vocabulary, like modern German, provided words meaning ‘to place in a certain position’, e.g. ‘to lay down’, ‘to stand’, ‘to insert’, but lacked a word of the generality of English ‘put’. *Puru*, meaning originally ‘a bung, plug, to insert, to plug up’ has had its meaning extended to cover that of ‘put’. Or is it that *puru* is a borrowing of ‘put’? In favour of the former interpretation is the fact that English /t/ is rarely⁴¹ otherwise adapted as Māori /r/ in unambiguous borrowings. Nonetheless, the existence of ‘put’ could well have been the reason that *puru* and not some other word underwent the semantic change.

On the other hand, at least some exploitation of existing resources to extend vocabulary is informed by contact with English. There are numerous examples of extension of meaning, so that an existing word covers the meaning of a particular English word. There are numerous calques in which the elements are Māori, but the combination and meaning follow a foreign model.⁴² There are even isolated instances of words which are hybrids in the sense of incorporating both adapted and borrowed material. Two examples of this are:

⁴⁰ ‘Incantation, spell’

⁴¹ For one instance of this, see *parete* ‘potato’ in the list below of Renata’s loans.

⁴² For examples and discussion of these two types of development, see below.

1. *huripara* 'wheelbarrow', in which *-para* is clearly from 'barrow', but *huri* 'turn' has replaced the first element of the compound by folk etymology.⁴³
2. the term *tūtohu* 'diploma' referred to above. This appears for the first time in the second edition of the Māori Language Commission's list of new words (Te Taura Whiri 1996), and consists of *tū-* from 'diploma' plus *tohu* 'sign', now regularly used (especially in the compound *tohu mātauranga* 'sign, knowledge') for 'qualification'.

In some of the deliberate creation and definition of new vocabulary, there is evidence of a principle that if there is an English word, there must, therefore, also be a distinct Māori word. That is, a (partial) goal in some of this work is to render the vocabulary of Māori isomorphic with that of English. An example of this can be seen in the vocabulary being propounded for the idea of assessment. At pains to distinguish in Māori whatever is felt to be the real difference between 'review', 'evaluate' and 'assess',⁴⁴ the New Zealand Qualifications Authority⁴⁵ sets down these equivalences:

'review' = *arotake*;
 'assess' = *aromatawai*;
 'evaluate' = *aromātai*.

All three words are modern compounds involving as their first element the verb *aro* 'to face towards sth.', and as their second, respectively *take* 'matter, cause', and *matawai* and *mātai*, two words for 'look closely'. Not only does this proposal ignore the existence of indigenous words such as *titiro*, *tātari*, *whakamātautau*, which all have related meanings (respectively 'look at', 'strain, sift', 'examine, make trial of'), suggesting the attitude that the (semi-)technical status of the English words prevents the use of ordinary language equivalents in Māori, but it introduces contentless distinctions into the vocabulary. The Māori Language Commission however cheerfully reports actual usage, whereby *whakamātautau* (in addition to the meaning 'examine, examination'), *tātari*, and *arotake* correspond equally well to any of the three English words.

The final type of example to mention here as illustrating that even adaptation of existing lexical resources is often informed by influence from English involves cases of English homophony. *Te Taura Whiri* (1996) provides two good examples:

⁴³ See Kearns (1990:70). The alternative is to take *huri* as a phonological adaptation of 'wheel', but this necessitates a convoluted derivation which almost rivals the famous demonstration that {go}+{past} becomes /went/ by rules independently motivated for English!

⁴⁴ All in the sense of 'look carefully at something (say, a piece of work by a pupil or an institutional structure) and state findings including a judgement'. Not included are the special meanings of, for instance, 'evaluate' as to derive the value of a formula, or 'review' as in to review a book.

⁴⁵ See the NZCER database s.v. examine, assess, evaluate. URL: www.nzcer.org.nz/search/kimikupu.htm.

1. 'Subject' as a division of a curriculum is translated as *marau*, originally 'subject of talk'. On the basis of the equation *marau* = 'subject', this Māori term is also given as the equivalent of the English grammatical term 'subject'.⁴⁶
2. *Tapuhi*, a verb meaning 'to nurse, carry in the arms, cherish' is not only listed as the equivalent of the English verb 'to nurse (as in care for the sick)', but also pressed into service for the noun 'nurse'. Such zero-derivation of agent-nouns from verbs is unusual in Māori.

These remarks notwithstanding, it is convenient now to consider the devices used during the three periods of development sketched above under the headings of borrowing of foreign forms and adaptation of native resources.

5.1 Borrowing

As mentioned above, borrowing as a device for coping with new circumstances is significant only in the second period, the confrontation with Pākehā culture, institutions and goods. During this period, very considerable numbers of primarily English words entered the language, with a very few items drawn from other languages as well.⁴⁷

Part of borrowing in any language is of course the adaptation of the loans to the phonology of the borrowing language. Māori, like most Polynesian languages, has a very limited phoneme inventory, and very simple phonotactics. Without going into further detail, the following summaries are sufficient for the purposes of this paper:

1. Māori consonants: /p, t, k, m, n, ŋ, f, w, h, r/, which are spelt using the corresponding letters, except for /ŋ/ and /f/, which are spelt respectively 'ng' and 'wh'.
2. Māori vowels: /i, e, a, o, u/. There is a phonemic distinction between long and short vowels, usually spelt by marking phonemically long vowels with a macron.
3. Māori syllable structure: (C)V(V(V))

It should be clear from these brief statements that whole sections of the English phoneme inventory have no direct equivalent in Māori; voice is never distinctive in Māori, sibilants are completely absent, there is only one liquid. Further, Māori phonotactics do not allow consonant clusters or final consonants. There is nothing really surprising about the way loan words are 'nativised', given these aspects of Māori phonology:

⁴⁶ Grammatical terminology is unfortunately one of the areas where a combination of lack of coordination and deliberate neglect of work already done has led to competing sets of terminology.

⁴⁷ The few still in use include *ture* 'law' (< Hebrew *torah*), adjusted as also in Tahitian because *tora* means 'erect penis'; *nākahi* 'snake' (< Hebrew *nagash*), *wīwī* 'French' (< *oui oui*) and *miere* 'honey' (< French *miel*). Some documents of Roman Catholic provenance contain other French and some Latin loans, though how far these can count as having really entered the language is debatable. See above and Duval (1992).

1. voiced stops collapse with voiceless ones (though English /d/ often surfaces as Māori /r/): *pēke* 'bank, bag'; *kuihi* 'goose'; *tihema* 'December', but also *kāri* 'card', etc.
2. sibilants⁴⁸ are primarily represented by /h/, but the affricates are sometimes adapted as /tʰ/,⁴⁹ occasionally /r/ (for English /dʒ/): *hāhi* 'church'; *hōiho* 'horse'; *penihana* 'pension'; *tiamana* 'German, chairman', *hori* 'George', etc.
3. Māori /r/ does for English /l/, as well as for some /d/ and /dʒ/: *reta* 'letter'; *miraka* 'milk', etc.
4. Consonant clusters are either split up by means of epenthetic vowels or simplified by the loss of all but one of the consonants: *aihi kirīmi* 'ice cream', *miraka* 'milk', *perehipitūriana* 'Presbyterian' exemplify the use of epenthetic vowels; *kōtimana* 'thistle (< Scotsman)', *poutāpeta* 'post office', *pēke* 'bank' show simplification of clusters.
5. English final consonants are accommodated by having a supporting vowel added: *raiti* 'light'; *pāmu* 'farm'; *pere* 'bell', etc.

Kearns (1990) provides a very good overview of these processes within the context of her discussion of loans as evidence for the presence of the feature [+high] in the Māori phoneme /h/. Hers is one of the very few publications which specifically deal with loans in Māori. The only other one of which I am aware in which the shape of loans is used to argue a point about Māori phonology generally is Schütz (1985), which argues for a foot-based account of stress in Māori by studying the stress patterns of longer loans. Ryan (1972) also deals with the processes of adaptation of English words to Māori phonology, and, as indicated above, Duval (1995) provides a full catalogue of foreign items found in nineteenth-century Māori text. Otherwise, there are only a few selective lists of loans to be found in, for instance, Williams (1971:501–507) and Baker (1941:86–92).

The rest of this section on borrowing will consist primarily of a list of the loan words found in the Renata text of 1842–43 referred to above (Hogan 1994). As already argued, these can confidently be regarded as having truly been borrowed into Māori, as opposed to more ephemeral, nonce loans in some other types of document. In fact, with very few exceptions, the words of this list are still part of the modern Māori vocabulary. The list, while by no means exhaustive of all loans made in the nineteenth century, provides a good picture of the types of word borrowed, and a framework for discussion of particular examples.

5.1.1 *Loans in ko te haerenga o renata (Hogan 1994)*

aikiha 'handkerchief'.

⁴⁸ See Kearns (1990).

⁴⁹ Māori /tʰ/ has a palatalised allophone before /i/, which in turn is often shortened to [j] before a stressed vowel. Thus a string like /tiaki/ is phonetically rather like the 'cheque' of which it is the 'nativised' form.

hapa ‘communion, i.e. Eucharist’ (from English ‘Supper’). Much Christian terminology was borrowed early, the ‘communion’ referred to here being the Eucharist. The term *hāhi* ‘church’ itself (the institution is meant), the words for clergy of different orders, *pīhopa* ‘bishop’, *pirihi* ‘priest’, *minita* ‘minister’ and myriad others. However (§5.2) many instances of new applications of inherited resources are also found.

hararutu ‘arrowroot’. This item is to the best of my knowledge otherwise unattested. Certainly it occurs in none of the lexicographical materials available.

hāte ‘shirt’. Newly introduced articles of clothing are universally designated by loan words. In addition to the *hāte*, *hū*,⁵⁰ *koti*, *taraute* found in this text, one can quote examples like *tōkena* ‘sock (< stocking)’, *poraka* ‘frock, jersey’, *neketai* ‘tie’, and so on. The only terms of modern dress for which non-borrowed items are regularly used are ‘hat’ *pōtae* and ‘belt’ *tātua*.

hereni, *herengi* ‘shilling, money’. This item is a good illustration of two aspects of the fate of English words borrowed into Māori:

1. Variation in spelling (and thus, presumably, phonemic shape). In the case of a number of loans, including for instance *Mane* ~ *Manei* below, small variations in the outcome of phonological adaptation can be seen.
2. Extension of meaning beyond that of the English source. Once borrowed, words of course develop a life of their own independent of the source of the borrowing. Other examples in this text are the use of *wiki* as a verb meaning ‘to pass Sunday’ and *parāoa* (< ‘flour’) for ‘bread’. The development by loan words of meanings other than that of the source may be taken as a sign of completed incorporation into the borrowing language. Another nice example is *tāriana*, originally ‘stallion’ but now used more frequently for ‘boar’ and as a complimentary term for a young man of a certain prowess.

hū ‘shoe’.

kāho ‘cask’.

karaihe ‘looking glass’.

kēna ‘can’.

koti ‘coat’.

kuki ‘cook n.’.

⁵⁰ In some regions, esp. the South Island, a flax sandal called *pāraerae* was used, but this term seems never to have been applied to shoes of the European type.

Mane, Manei 'Monday'. The days of the week were early borrowings because of the missionary introduction of the seven-day week and the importance to them of Sunday. Borrowed names for the months of the Gregorian calendar have similarly been in use in Māori from the early 19th century, though see above for modern developments in this area.

minita 'minister'.

moni 'money'.

paraikete 'blanket'.

parakuihi 'breakfast'.

parāoa 'bread' (< 'flour'). A number of introduced food items are named using borrowed terms. *Miere* (from French *miel*) 'honey' has already been mentioned; *pihikete*, *raihi* also occur in this text. Within a few lines of one of his uses of *parāoa*, Renata uses *taro* 'taro' in the same sense. This is something often encountered in Māori, that both a borrowed term and an adapted inherited term are found in concurrent use. Another example from this text is provided by *pēti*, used to refer to the inflatable bed brought by Bishop Selwyn from England, and used at one point of the journey as a boat! The same object is also referred to by Renata as a *moenga*. This word is made up of the verb *moe* 'to sleep' and the nominalising suffix *-nga*, and thus means originally 'a place to sleep'.

parete 'potato'. This is the only other loan in this text which seems not to have survived. It occurs again in Mohi Tūrei's (1911) discussion of words for 'potato'. Apropos, there are a very large number of words recorded in Māori lexicons and glossed as '(variety of) potato'. Williams (1971) alone lists well over 50 items glossed in this way, from *akaraupō* to *waiararo*.

pēti 'bed'.

pihikete 'biscuit'.

pīhopa 'bishop'.

poti 'boat'. Although Māori had terms for water craft, *waka* 'canoe', *kaipuke* 'ship', this item, *poti*, as a designation for the European 'boat', as in ship's longboat, dinghy and so on, seems to have been a very early loan, being the only loan used (as opposed to mentioned) in the first of Horetā's accounts of Cook's arrival. See above §3 and White (1888:105–113).

pouaka 'box'.

raihī 'rice'.

taraute 'trousers'.

tēneti 'tent'.

tina 'lunch' (from 'dinner').

tupeka 'tobacco'.

wiki 'week n., pass Sunday vi.'

As this list reveals, most borrowing occurred, as one would expect, to handle new institutions and material goods; the words were acquired along with knowledge of the referent. This was the norm for the expansion of vocabulary which characterised the second period, that during which Māori came to terms with the introduction of Pākehā culture and the continuing shared development experienced in the nineteenth and earlier twentieth century.

Before leaving discussion of borrowing, it should be pointed out that though in this period the typical borrowing was in response to introduction of a new concept, and the typical response to the introduction of a new concept was a borrowing, there are cases both of borrowings without this motivation and of new concepts being named by adapted inherited forms.

A few loans, some still to be heard in modern Māori, seem to have been introduced more out of play than necessity. They tend to be restricted in geographic distribution, and are sometimes shibboleths for their home dialect. For instance, fluent Māori speakers from parts of Northland will use *nō* [no:], from English 'no', to answer a question in the negative. Another, similar example is the word *pīki* 'big', which seems to have been borrowed in the expression *pīki whara* 'big fellow', almost an exclamatory designation for a man of some size. From that loan, *pīki* has entered the very small class of modifiers in Māori which precede their heads:⁵¹ *he pīki raruraru* 'a big problem'. Use of this particular form is restricted to very colloquial styles and often excites amusement for speakers of dialects where it is not usual.

On the other hand, some of the most salient aspects of the new culture with which the Māoris came into contact in the late eighteenth/early nineteenth century are named by adaptations of inherited vocabulary. The term for muskets and more generally for guns has been *pū*, an adaptation of *pū* 'tube, pipe', since the earliest times; it appears in a French list dating from 1772 (Salmond 1991:426). Similarly, the word which Horetā (White 1888:105–113) uses for the nails which were so important as gifts and trade items on first contact, *whao* 'chisel', is already recorded in lists stemming from Cook's visits (Salmond 1991:292).

Although much of the Māori terminology of Christianity is borrowed, some of the key concepts are adaptations, such as *tapu*, which retains until today its older meaning of 'ritual restriction', but quickly had its meaning extended to cover the English 'holy'.

⁵¹ A very general rule of Māori phrase structure is that modifiers follow heads, thus *he whare nui* 'a house big = a big house'. However, *pīki* is not unique in preceding its head; a very few other modifiers also do so, e.g. *āta* 'carefully', as in *āta haere* 'go carefully'.

5.2 Alternatives to borrowing

Just as the previous section could not hope to cover all there is to say about borrowing in Māori, so this section will content itself with presenting a few examples of the major types of adaptation of existing lexical material. Unlike borrowing, which is found really only in the second of the periods we are discussing, adaptation is found at all stages of the history being traced here. Indeed, apart from a few *ex nihilo* formations,⁵² the various types of adaptation of inherited resources are the only means of vocabulary expansion available in the first and third periods, for in the former case, there was no lender language, and in the latter, purism rules out borrowing.

Under the broad heading of adaptation, we can distinguish a variety of different but overlapping processes. Firstly, the formal adaptation of inherited forms may involve no change of form, simply a shift of meaning, or it may involve the creation of new forms by means of the morphological devices Māori has at its disposal. These are affixation, reduplication and compounding. Secondly, what motivates the particular association of form and new meaning may be simply perceived physical resemblance, metaphorical associations, or even calquing—that is, following a foreign model.

5.2.1 Formal adaptation

Biggs (1991, 1994b) gives good examples of all types for the first period, particularly in the naming of the new flora encountered on arrival in New Zealand: Māori words such as *kahika*, *māhoe*, *hinahina* referred to above exemplify retention of an inherited form with a shift of meaning to a new referent.

The derivation of new forms by (a combination of) the devices mentioned can be seen as a recognition that the new referent is not identical with, but similar in some way to the referent of the inherited form:

kawakawa ‘*Macropiper excelsum*’ is a reduplication of **kawa* ‘*piper methysticum*’, which does not grow in New Zealand.

kōwharawhara and *pūwharawhara* ‘*Astelia banksii*’ are words formed by both affixation (*kō-* and *pū*) and reduplication of **fara* ‘*pandanus*’, similarly not found in New Zealand.

kahikatea (a compound of inherited **kafika* ‘*Malay apple*’, see above, and *tea* ‘adj. clear, white’) designates the white pine.

The same range of formal devices can be observed in the new form-meaning pairs which have arisen during the third period.⁵³ Shifts of meaning for existing words can be seen in

⁵² See above. I know of none in the second or third periods, and identifying any from the first period involves *argumentum ex silentio*.

⁵³ See Harlow (1993a, b), Keegan (n.d.).

examples like *tuarā* ‘back’ in rugby from ‘back’, part of body; the specialisation of terms whose original designations were different types of basket: *kōnae* ‘file (paper or computer)’; *pūkoro* ‘pocket, condom (*pūkoro ure (ure ‘penis’)*)’; *pūtea* ‘fund, budget’; *oro* ‘sound’ pressed into service for ‘phoneme’.

However, it has been the creation of neologisms by the methods already mentioned that has dominated the modern expansion of vocabulary. Reduplication can be seen in examples such as: *pāpāho* ‘media’ from *pāho* ‘broadcast’, itself a specialisation of the original meaning ‘be noised abroad’; *kōpaepae* ‘compact disc’, from *kōpae* ‘disc, diskette’, specialised from ‘circular’; and *tautauira* ‘sample’ from *tauira* ‘pattern, example’.

Affixes, usually prefixes, have been used to derive new forms with specialised meanings: *pūoro* ‘music’ by affixation of *pū-* to *oro* ‘sound’; *hāpono* ‘prove’ from *pono* ‘true’. Compounds, some formed on analogy with existing forms in Māori, some as calques on foreign models, and some as lexicalisations of the productive head + modifier pattern found in all phrase types in Māori, abound: *rorohiko* ‘computer’ from *roro* ‘brain’, *hiko* ‘spark, thence electricity’; *tapumati* ‘finger print’ (from *matimati* ‘finger’) on analogy with existing *tapuwae* (*wae* ‘leg, foot’) ‘footprint’; *pōkairua* ‘diploma’ from Greek *di-ploma* ‘a paper folded in two’ (*pōkai* ‘fold’, *rua* ‘two’); *totomā* ‘leukaemia’ from Greek *leukos* ‘white’ and *haima* ‘blood’ (*toto* ‘blood’, *mā* ‘white’).

5.2.2 Semantic shift

As mentioned, the shifts of meaning which can be seen in the various types of exploitation of inherited resources have a range of motivations. Biggs (1991, 1994b) shows that the shifts and new formations in names for flora have to do with perceptions of physical similarity between the inherited referent and the one newly encountered in New Zealand. Physical similarity of a sort is also behind the names (over a dozen in Williams 1971) for different types of jade. The exploitation of and trade in greenstone was an important economic activity among precontact Māori tribes, and a variety of types of greenstone are distinguished terminologically. Some, such as *kawakawa*, glossed as ‘a dark variety of greenstone’, or *karaka* ‘a variety of greenstone, opaque and dark-green’ are also plant names transferred to the stone because of the colour. Others, like *tangiwai* (from *tangi* ‘weep’, *wai* ‘water’) ‘a transparent variety of greenstone’, and *kahotea* (*kaho* ‘rafters’, *tea* ‘clear’, the compound meaning ‘having only the battens on the roof’, to describe the state of a house, say under construction or in disrepair) ‘variety of greenstone having light-coloured streaks in it’, are transfers due to perceived features of texture.

Although many introduced foodstuffs are named by means of borrowings (see above), some are referred to by means of inherited words whose original referent is felt to be similar to the new foodstuff. The use of *taro* for ‘bread’ has already been referred to, and another instance is the term *parareka* for ‘potato’.⁵⁴ *Para* is the short form of the word *paratawhiti*, which refers to a large fern cultivated for its edible rhizome, and *reka* is ‘sweet’, a comment of the relative pleasantness of the taste of the two foods.

⁵⁴ See Tūrei (1911), who gives a nice account of the naming process which led to this and other potato names.

Perceived similarity, but conceptual rather than physical, accounts from many other examples, especially in the area of Christian terminology: *tapu* has already been referred to, and the same sort of process led to the consistent use of *karakia* 'incantation, spell, charm' for 'service (of worship)'.

Other examples are perhaps more metaphorical. Wilson (1996) derives *kawa* 'a class of ceremonies' from **kava* 'Piper methysticum', which was and is used in tropical Polynesia (Samoa, Tonga and so on) and elsewhere, especially Fiji and Vanuatu, for ceremonies of various kinds. The plant is not found in New Zealand, but the term survived and was shifted from the plant itself to a set of circumstances reminiscent of the plant's use in the homeland. A sort of metonymy can be seen in an early term⁵⁵ for a flintlock musket. *Ngutu parera* means literally 'duck's bill' but was used to refer to this type of weapon, presumably because of the shape of the lock. Renata's (Hogan 1994) use of *kāpura* 'fire' for 'tinderbox' represents another metonymic transfer of meaning from fire to its source.

Like all languages, Māori adapts to meet the needs of its speakers. Borrowing is just one of the devices available for this purpose. This paper has attempted to sketch the different challenges faced by what became the Māori language since its arrival in New Zealand and to exemplify the responses to these challenges.

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⁵⁵ It occurs in the Kendall list; see Kendall (1815) and Nicholas (1817).

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8 *Origin-oriented names of borrowings in New Caledonia*

JIM HOLLYMAN

Origin-oriented names are those which give or purport to give the origin or source of the item bearing the borrowed name. In *Wörter und Sachen* terms, the name followed the item, so *chou de Chine* and *Chinese cabbage* are names for a variety of cabbage originating in China and introduced into Europe.

This simplistic view of origin-oriented names conceals a complex set of meanings, for example, the name may indicate:

- the place of introduction:¹ CAC *jali chêt lui* ‘taro clone introduced at Saint-Louis’;
- the person who introduced it: FRE *herbe de Greslan* ‘grass, *Echinochloa colonum*’ introduced in 1870 by E. de Greslan;
- the place where first found: *herbe de la pointe Chaleix*, a ‘silky blue grass’, *Dichanthium sericeum*, first found at Chaleix Point’;
- the regular users: FRE *persil chinois* ‘coriander or cilantro’, *Coriandrum sativum*, a standard item in Vietnamese (Indochinois) cuisine.

However, the point of this study is not motivation, but the pattern of origins, and the reasons for the incorrect origins implied by some of these names.

¹ BEL – Belep; CAC – Caaàc; CAW – Caawac; DEH – Drehu (Lifu); ENG – English; FWA – Fwai; FRE – New Caledonian French; JAW – Jawe; KUM – Kumak; NEG – Nengone (Mare); NMI – Nemi; PIJ – Pije; YAL – Nyelâyu.

I

In a study of FRE plant names (Hollyman 1993), two frequencies of occurrence were recorded, one reflecting the totality of uses irrespective of currency, the other noting only current usage. The regions credited with providing the origin-oriented names, the two frequencies of use, and the resulting rankings, were as follows:

Pacific ²	036/024	1/1
Southeast Asia & Far East	035/018	2/2
Central & South America	019/118	3/3
Indian Ocean	013/005	4/4
Europe	007/003	6/5
North America	004/002	7/6
Equatorial & South Africa	010/001	5/7
Middle East	002/001	9/8
North Africa	003/000	8/-
Totals	129/062	

A similar study of FRE animal names of all kinds (air, land, sea) (Hollyman 1995), produced the following results:

Pacific	030/019	1/1
Southeast Asia & Far East	015/005	2/2
Indian Ocean	002/000	6/-
Europe	013/002	3/4
North America	003/003	5/3
Equatorial & South Africa	005/000	4/-
Totals	068/029	

There are of course substantial reasons for some of the differences between these two lists:

- Various animals have regional variants, and often the variant region is part of the name: *Perna caliculus*, the 'green-lipped mussel' is called both *moule verte* and *moule verte des Philippines*;
- Birds of the Cuculidae family include the *coucou de Nouvelle-Zélande*, *Eudynamis tahitensis*, which migrates between Tahiti and New Zealand; and the *coucou des Iles*, *Cacomantis p. pyrrhophanus*, recorded from the Tasmania–Australia–New Guinea area through New Caledonia and Vanuatu to Fiji.

We do not of course have to believe what these names imply, and indeed they are not infrequently mistaken. Thus of the four FRE names for a blue spur shrub (Labiatae), *Plectranthus amboinicus*—*aromate des Martiniquais*, *aromate des Javanais*, *thym antillais*,

² The term Pacific excludes the extensive references to local New Caledonian origin.

thym martiniquais—only the second is a reasonably accurate guide to the plant's Indonesian origin. One significant point is that the origin-oriented name may be mistaken as to the prime origin, but accurate as to the proximate origin. Thus *Circus*, a genus of cosmopolitan harriers with representatives in the Old World and the New, has a regional representative, *C. a. approximans*, called the *busard australien* 'Australian buzzard' although its area extends from Fiji and Tahiti down to Norfolk, the Kermadecs and the Chathams.

This last kind of example provides a further name which will take us into the centre of my interest. *Samanaea saman* is a tree native to tropical America introduced as FRE *bois noir de Haiti*. The name has been modified to *bois noir de Tahiti* because, like the timber of *Samanaea*, the timber of the local *bois noir* (*Albizia lebbek*) darkens with age. But why Tahiti instead of Haiti? Clearly because the former was much more familiar than the latter.

In fact when plant names are looked at as a group, 71/42 out of the total 129/062 (55%/68%) imply a Pacific or Southeast Asia – Far East origin. With animal names, 45/24 out of 68/29 (66%/83%) do the same. While this is not surprising in terms of the number of plants and animals which do originate in these areas, other explanations are needed where the origin-oriented name is a misnomer or a mistake, as with *violette du Japon*, *Saintpaulia* sp., the African violet of Australian and New Zealand English.

The fact is that the sources of the exotic and the new are radically different in geographical terms from those encountered in European linguistic history, and these new parameters have to be recognised. New Caledonia has had close relations of one kind or another with Australia, New Zealand, Norfolk Island, Fiji, Vanuatu and Tahiti in the Pacific, and with Japan, Indonesia, Vietnam and China in Southeast Asia and the Far East.

We may with reason take Tahiti as a typical example of Pacific exotic. There are six different vines called *lianes de Tahiti*:

- *Allamanda cathartica*, known as *liane de Tahiti*, *liane jaune*, *liane jaune de Tahiti*, *liane Tahiti*, *monette jaune*, *alamanda*. It is in fact a native of Guiana.
- *Allamanda violacea* (incorrectly so identified), known as *liane de Tahiti*, *liane Tahiti*, *liane Tahiti violette*, *alamanda*. Its origin is unknown.
- *Solanum seforthianum*, var. *disjunctum*, known as *liane de Tahiti*, *liane pomme de terre*. It is a native of Brazil.
- *Thunbergia mysorensis*, known as *liane de Tahiti*, *grandes gueules*, *liane de Noel*, *liane lampion*, *sabot de Noel*, *thunbergia*. It is a native of India.
- *Antigonon leptopus*, known as *liane de Tahiti*, *antigone*, *liane corail*, *vigne vierge*. This vine comes from Mexico.
- An unidentified vine with coral red flowers lasting three weeks, and called *liane de Tahiti*, *liane de corail*. Its origin is unknown.

Japan, though not as well favoured as Tahiti, nevertheless can figure as the main source of Asian exotic:

- *Allium tuberosum*, known as *ail du Japon*, is indeed from Japan.
- *Impatiens sultanii*, known as *balsamine du Japon*, is from Zanzibar.

- *Eugenia brasiliensis*, known as *cerisier du Japon* and as *cerisier du Bresil*, is indeed from Brazil.
- *Pentas lanceolata*, ssp. *cymosa*, var. *carnea*, and ssp. *quartiniana*, var. *alba*, are from Arabia.
- *Phlox du Japon* is unidentified and of unknown origin.
- *Saintpaulia* sp., is called *violette du Japon*. As has been mentioned above, it is of African origin.

Origin-oriented terms are sometimes difficult with birds, because of their migratory patterns. What must be realised, however, is that those very migratory patterns offer a choice: the long-tailed cuckoo is a native of New Zealand and of Island Polynesia, and as mentioned above it migrates between New Zealand and Tahiti. The New Caledonian French chose to call it *coucou de Nouvelle-Zélande*. Other birds may cover a wide area, may in fact be termed cosmopolitan, and this again offers choice: *Tyto alba*, the common barn owl, is known everywhere except temperate Asia, but has become known as FRE *hibou de Ceylan*.

One of the most interesting birds is the mynah, *Acridotheres tristis*. Its standard range is from Afghanistan and Russian Turkestan to India and Sri Lanka, and it has been widely introduced into Southeast Asia and Australasia. This has given rise to a series of proximate origin-oriented names: FRE *merle des Philippines*, *martin de Bourbon*, *merle des Moluques*, with its farcical deformation, *merle des mollusques*, which reveals a clear lack of geographical and ornithological knowledge.

Phalacrocorax m. melanoleucos, the 'little pied cormorant', is native to Australasia (including New Caledonia and New Zealand), yet its origin-oriented name is FRE *canard japonais*. This is because of the custom, attributed to the Japanese, of training it to catch fish which its trainer then obliges it to disgorge for his benefit. Some orientations, then, have cultural rather than purely geographical significance.

II

External relations of the Kanak inhabitants of New Caledonia in pre-European times were very limited, earlier stages of their migrations being generally forgotten. But relations were maintained between the Loyalties and Central and Southern Vanuatu, and these have left traces in the languages of Mare and Lifu.³ The latter in particular maintained matrimonial and trade relations with the island which the Lifuans called Kiamu—Aneityum, which also had relations with Tas, the area around Epi. So we find the following origin-oriented names, the occasional one of which spread to the mainland:⁴

- DEH *wakiamu*, NEG *kiamu* 'banana clone';
- DEH *tasuo* 'clone of yam (*Dioscorea alata*)'; CAC *ta-chuo* 'red-fleshed clone of sweet potato'.

³ Most of the information in this section is from Lenormand (1998) and Dubois and Capell (n.d.).

⁴ We may note that these names usually indicate an immediate or proximate origin.

Probably also before European contact, the Beleps assumed a role as introducers of new yam and sweet potato clones:

- DEH, NEG *belep* clones of *Dioscorea alata*;
- CAC *paa-velep* clone of *Dioscorea pentaphylla* (*paak*);
- abandoned clones of sweet potato: CAC, JAW *belep*, KUM *beelep*.

There was also contact with Fiji, the earliest known being about the time of first European contact:⁵

- CAC *phejuê* (< FRE *fidjien*) 'large white-fleshed clone of *Dioscorea alata*'; *phejuê miia* 'clone of *D. alata* with red skin, white flesh'.

Later, after European contact, when teachers from the Loyalties were used to evangelise parts of New Guinea, we find:

- DEH, NEG, NMI, PIJ *papua* 'clone of *D. alata*'; this spread to the Beleps and the mainland: BEL *papwa*, YAL, KUM *pwapua*.

Now that the international horizon has expanded, origin-oriented names become standard for many new introductions:

- *Ipomoea batatas*, the sweet potato: clones with pink flesh: CAC *japone*, CAW *chapone*; with different colours: CAC *japone kari* (yellow), *japone miia* (red), *japone phuulo* but no external source for these is known; CAC *amerikana* clone with yellow flesh and red skin. It seems probable that these uses of *japone* and *amerikana* for exotic clones are in line with French usage.
- New Caledonia had at least two native species of banana of the *Eumusa* series: CAC *phwexac* and *muujic*. These were different from the species introduced from Samoa by the missionaries and teachers. So the Samoan ones received origin-oriented names: CAC *chamua*, YAL *chamoa*, JAW, coastal NMI *saamua*, inland NMI, FWA, PIJ *saahmua*, etc. In CAC *chamua* took on an extra role as designation of the little-known seeded and inedible banana *chamua po karoon*.
- *Piia zebroid* for the introduced *Xanthosoma* sp. parallels the FRE name, *taro des Hébrides*. The fuller name, *taro des Nouvelles-Hébrides*, is less common and generally restricted to botanical usage.

III

In New Caledonia, origin-oriented names, whether in European or Oceanic usage, reflect most importantly (i.e. rather more than actual origin) the parameters of exoticism as determined by the administrative, commercial, exchange and cultural relationships the islands

⁵ An Auckland entrepreneur named Fitzgerald tried in 1849 to found a beche-de-mer fishery in the north with Fijian labour (Douglas 1971:161–164).

have developed with their more distant neighbours, in particular Tahiti and Japan. The parameters of exoticism are radically different from those current in Europe.

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9 *The legacy of Futuna's Tsiaina in the languages of Polynesia*

ROBERT LANGDON

The island of Futuna, 240 km north-east of Vanualevu, Fiji, has always been virtual *terra incognita* to most Pacific scholars, especially English-speaking ones. Like its nearest neighbour, Wallis Island, otherwise Uvea, Futuna has been in the French sphere since French Marist missionaries established themselves there in 1837. Wallis and Futuna jointly have been both a protectorate and a colony of France. They have had the status of a French overseas territory since 1961. Most of the literature on them is naturally in French. Until fairly recently, the only way to reach them was by ship (Douglas and Douglas 1989:621–627).

In the circumstances, *not* to know about the Tsiaina of Futunan tradition and *not* to suspect their influence on the prehistory of Polynesia and its languages has been a normal condition.

Tsiaina is Futunan for 'China'. On Futuna the term describes a group of supposedly Chinese castaways who are said to have been wrecked in prehistoric times on the now-uninhabited island of Alofi that is separated from Futuna by a narrow strait. The Tsiaina thereafter played a prominent role in Futunan political and cultural affairs. They were eventually overthrown in a popular uprising. There are at least six recorded versions of the Tsiaina tradition. They give the impression that the reign of the Tsiaina was quite short. In reality, the evidence presented in this paper suggests that it lasted for a goodly period—several generations, at least. Certainly, the Tsiaina left a significant legacy in the language and culture of Futuna that was also carried to other islands. To appreciate this, one must first know what the various versions of the Tsiaina traditions claim.

A Frenchman, Emile Boisse, and an Englishman, Edward A. Liardet, wrote the first two versions in 1874 (Harms 1990). Boisse was a midshipman in the French naval vessel *L'Hermite*, which was wrecked on Wallis Island on 29 June 1874. He spent several days on Futuna after being sent there in a boat to seek help. In the following year, he published an article about Samoa, Tokelau, Wallis and Futuna in which he acknowledged that much of his

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information had come from the French missionaries serving in those islands. In writing of Futuna, Boisse referred to reputed Tongan visits in prehistoric times, and added (author's translation):

A more certain, more extraordinary visit is that of the Chinese as it has left some traces. At a very remote period, some Chinese arrived at Futuna where they multiplied rapidly. They taught the Futunans the art of making bark cloth superior to that of all the other islands. (Harms 1990:19–20)

Liardet, who evidently visited Futuna at much the same time as Boisse, wrote about the reputed Chinese in a letter from Levuka, Fiji, on 2 December 1874. A 'curious circumstance' concerning the Futunans, he said, was that many of them were 'descended from Chinese'. About 200 years earlier, about 20 Chinese had reached Futuna, having 'escaped probably from shipwreck in a boat'. Although the islanders were then cannibals, they had treated the castaways well and they, in turn, had taught the islanders 'several useful arts'. Liardet went on:

[S]ome of their works in masonry still remain a memorial to them and the fine designs painted on their tappa [sic] testify to the improvements the natives attained from these immigrants to their shores. The tendency however of a superior people for the ascendancy proved in this case most disastrous to the Chinese, who, having conspired to assume the government of the islands became the victims consequent on their plot being discovered and were all massacred in one night, by order of the chiefs. It is now only about forty years since they wore pigtailed and this period is identical with the advent of the French Roman Catholic Missionaries [...]. (Harms 1990:18–19)

James Lyle Young, a well-respected trader, wrote a third account of Futuna's 'Chinese' during a visit to the island in the schooner *Daphne* in April 1875:

[...] there is a most interesting fact in connection with Futuna which illustrates the manner in which South Sea Islands have been peopled by natives of the groups from a great distance and in the teeth of the prevailing winds and currents.

I refer to the legend which they have here of a Chinese (Query: Japanese?) junk having arrived here many years ago with several persons aboard. They had been drifted off from their own land and after a length of time at sea finally made Futuna. It appears that contrary to custom, these persons' lives were spared and they resided for a length of time on the island and married among the people. The natives at last found that they multiplied very fast, and fearing that they might some day become more numerous than themselves, they, with true Pacific policy, killed them all off. This story might seem to be a myth were it not for the fact that the natives here manufacture native cloth marked with a very beautiful and peculiar pattern, which is unknown in any of the neighbouring groups, and which they assert was first introduced by the crew of the junk aforesaid. (Young 1875–77)

The only other account of Futuna's 'Chinese' known to have been written before the American anthropologist Edwin G. Burrows published his *Ethnology of Futuna* in 1936 was the work of Sir Joseph Carruthers, a one-time Premier of New South Wales. He had not been to Futuna and his account, published in 1933, was based on information obtained from several Europeans who had lived there. According to Carruthers, the 'Chinese' landed from a 'large

junk' that was blown off course in a typhoon 'in or near the China Sea'. This had occurred 150 to 200 years earlier. The 'Chinese' had been 'many'—'probably about 100'. They had remained on the island, had intermarried with Futunan women, and had left behind 'a half-breed progeny with slant eyes and a Chinese cast of features'. These features were 'quite marked and self-evident to anyone visiting Futuna'. On Wallis Island, such features were 'not at all pronounced', except in a few cases.

The Chinese immigrants [Carruthers added] ... made themselves useful and agreeable to the natives of Futuna. Coming from a race of born agriculturists, they taught the natives better agriculture. Also as clever boat builders and carpenters and joinery workers they improved the native race in this class of work. They also could read and write — or at least some of them could — and they explained this to the natives and left examples of their character writings.

But all this contributed to the later undoing of the Chinese ... [Eventually] the common people ... rose up and massacred them to the last man, sparing off their offspring, however. (Harms 1990:20–21)

In his ethnology, Burrows (1936:54–55) published a version of the Tsiaina tradition that was a composite of accounts given to him by the Father Superior of Futuna's Marist mission, three long-term European traders, and two chiefly Futunans, Tu'i Asoa and Tu'i Agaifo. The latter was of the 'Tsiaina kindred'. One of Burrows' informants claimed that the 'Chinese' had reached the island about 350 years earlier. However, the Futunans could not link their arrival with the reign of any king. Their first landing place had been in the district of Sa'avaka on Alofi. Tu'i Asoa put their numbers at about 100, but two of the Europeans said 300 and 400. The 'Chinese' were said to have dug a well or cistern at Asau in Sa'avaka. According to Tu'i Agaifo, Asau was a 'Chinese' name. A similar well in the district of Alofitai was also attributed to the immigrants. Such wells had not been known on Futuna until this time.

Tu'i Agaifo said that, from Alofi, the 'Chinese' had gone to Ifoga, near Vele, which they renamed Fale Pule. The son of their chief fell into a well that they dug there and they filled it with rocks to make a grave for him. From Ifoga, the immigrants went to Tavai. Some informants said that, wherever they went, they struck a gong and judged by its resonance whether the place was suitable for settlement or not. However, Tu'i Agaifo claimed that this detail was not authentic. On the other hand, Tu'i Asoa said that several of the island's place names were 'Chinese'. Poi had replaced Pelenoa; Tamana had formerly been Langivusi; Tufuone was formerly Fatulaika; Pouma was formerly Pousi; and Fikavi had replaced a name that had been forgotten. Like most previous writers, Burrows said that the making and decoration of a superior kind of bark cloth was attributed to the Tsiaina. He added that whether they became dangerously strong or took too many Futunan women, the Futunans had eventually turned against them and massacred them.

The French archaeologist Daniel Frimigacci and three collaborators published yet another version of the Tsiaina tradition in 1987.¹ It reiterates many details of the earlier versions but adds others. It claims that after the 'Chinese' landed on Alofi, they dug wells at Sosoni and

¹ This version of the legend is also published in Frimigacci, Keletona, Moyses-Faurie and Vienne (1995).

fought with the people of Vaika. From Alofi, they went to Kolotai on Futuna, where more wells were dug. In going from Vele to Pelenoa, Tamana, Pouma and Tuatafa, they built irrigated taro fields 'since they knew the art of finding water'. Tuatafa was their name for a place previously known as Amatuku. Finally, the Chinese went to Fiua, formerly Maota. Wherever they went, they carried a small wooden drum, or *lali*, which they beat each time they reached a village. If it was resonant, they settled there. At a place called Lalotalie, 'Under the *talie* (*Terminalia catappa*) tree', they built a magnificent residence for their chief, Tu'i Agaifo. The 'Chinese' then had good relations with the island's king, who lived at Tapulakaia. However, one day—after an incident that Frimigacci et al. describe at length—a battle broke out at Lalotalie between the people of Tapulakaia and the Tu'i Agaifo's guards. It ended in the massacre of the entire 'Chinese' community except for one man and his wife who took refuge on the hill called Olokimoa, above present-day Nasaleti. No one was ever able to find them again and 'that was the end of the story of the Chinese and of Tapulakaia' (Harms 1990:24–25).

As will have been noted, certain details in two or more of the six versions of the Tsiaina tradition are constant:

- (1) the immigrants landed on Alofi;
- (2) they dug wells on their arrival;
- (3) they travelled about beating a wooden gong or drum, *lali*, to decide where to settle;
- (4) they altered place names;
- (5) they intermarried with the islanders and multiplied;
- (6) they introduced improved methods of making and marking bark cloth;
- (7) they introduced better agricultural methods; and
- (8) they were finally overthrown in a massacre.

None of the constant details is unbelievable. On the other hand, no faith can be placed in the widely varying claims about the number of castaways or the approximate date of their arrival at Futuna. Nor, of course, can it be accepted that they were Chinese or that they actually came from China. As Burrows (1936:55) commented, Tsiaina could have become part of the Futunans' tradition only if 'some Englishman [had] told them so'.

One does not have to seek far for a likely explanation for the Chinese element in the tradition. It almost certainly originated with a local man, Keletaona, who served in British and American whalers for about ten years in the 1820s and 1830s. Bishop Pompallier installed him as Futuna's king in 1842. In that capacity, Keletaona was on hand when Father Isidore Grézel, Futuna's first lexicographer, landed on the island from the French ship *Bucephale* in November 1843. One may readily imagine that he became one of Grézel's principal informants. The *Bucephale*'s commander described him as 'more learned' than any of his countrymen, while another French visitor of several years later recorded that he spoke English (O'Reilly 1964:13–16; Burrows 1936:41–43). Keletaona himself was of the 'Tsiaina kindred'. Hence, the notion that he himself and other Mongoloid countrymen were descended

from people who came from China may well have been sown in his mind during his seafaring days in British and American ships.

The Tsiaina were evidently well-entrenched in Futunan tradition when the first missionaries arrived in 1837. This is suggested by two virtually identical definitions of the word *mō* in the first Futunan and Uvean dictionaries. The Futunan dictionary, compiled by Grézel (1878) between 1843 and 1871, defines *mō* as 'espèce de cochon trapu que l'on dit de Chine' ('squat kind of pig said to be from China').² The Uvean dictionary, compiled by Bishop Bataillon (1932) between 1837 and 1877, has the same definition except that *gras* 'fat' replaces *trapu* 'squat'. The word *mō*, meaning a 'fat, squat or short-legged pig' is also known in the languages of Fiji, Rotuma, Tonga and Samoa.³ It first appeared in the Tongan-English dictionary of the Reverend Samuel Rabone (1845). By contrast, pigs described by the generic Polynesian term *puaka* are long-snouted, leggy and razor-backed (Burrows 1936:23; Langdon 1975:319). The *puaka* pig was present in both Western and Eastern Polynesia at the time of European contact; the *mō* is found only in the Western Pacific and is undoubtedly a more recent arrival.

The word *mō* is evidently a reflex of either Proto Oceanic **mboRo* or Proto Austronesian **beRek* 'pig' (Lynch 1991). This leaves little doubt that Futuna's Tsiaina were not Chinese. The first reconstruction is based on terms for pig in languages of Papua New Guinea, Vanuatu and the Solomons; the second on those in Southeast Asian languages. As there are no other Futunan linguistic clues relating to *mō*, the origin of the word itself cannot be resolved on linguistic grounds. On the other hand, no Melanesian community is known that could have supplied Futuna with prehistoric immigrants whose descendants could be looked on in later years as Chinese. So Southeast Asia, with its many people of Mongoloid stock, must have been the homeland both of the *mō* pigs and of the people who brought them to Futuna.

Mongoloid people have straight hair. So one would expect the Futunans to have a term for it. And they do: *sika* or *sikasika*. On Uvea, such hair is called 'ulu *hikahika*; in Tongan, it is 'ulu *hika*. In Samoa, straight hair is described by an unrelated term, *sē'ea*, which presumably means that such hair did not arrive there with immigrants from Futuna. On the other hand, all four languages have cognate terms for slightly wavy hair: Futunan, Uvean *kopa*, Tongan *hika-kopa*, and Samoan 'opa. On Nukuoro, a Polynesian outlier in the Caroline Archipelago, *gobagoba* means 'bushy (of hair)'. No other reflexes of **sika* or **kopa* describing hair occur in Polynesia. However, while **kopa* is thought to derive from Proto Malayo-Polynesian **kembaj* 'wavy', no apparent Southeast Asian relative of **sika* has yet been found.

² The *ō* in *mō* is long in Rotuman, Samoan, Tongan and Uvean, and is assumed to be long in Futunan although it is not so marked by Grézel (1878) or Moyses-Faurie (1993). However, Moyses-Faurie does have *mō* 'mumps', as in Tongan and Uvean. According to a Tongan informant, the faces of people afflicted with mumps look like those of *mō* pigs.

³ Unless otherwise indicated, the sources of lexical data used in this paper are: *Fijian*: Capell (1968), Hazlewood (1914); *Futunan*: Grézel (1878), Moyses-Faurie (1993); *New Zealand Maori*: Williams (1971); *Nukuoro*: Carroll and Soulik (1973); *Rapanui*: Englert (1978), Fuentes (1960); *Rennellese*: Elbert (1975), Elbert, Kuschel and Taupongi (1981); *Rotuman*: Churchward (1940); *Samoa*: Newell (1911); Milner (1966); *Sangirese*: Steller and Aebersold (1959), Sneddon (1984); *Tongan*: Churchward (1959).

Straight-haired Tsiaina were politically dominant on Futuna when the Dutch expedition of Schouten and Le Maire visited it in 1616. An account of the expedition by Le Maire, published in 1618, speaks of the king having one long plait on the left side of his head and of his nobles having two. The account also contains an engraving depicting the king and one of his nobles, as well as several other islanders with short, frizzy hair. The king was evidently sovereign of Sigave, one of Futuna's two main districts. The other district is Alo. The island of Alofi was then inhabited and the people of both were often at war (O'Reilly 1963:69–72; Kirch 1994:18–19).

A 118-word vocabulary that Le Maire compiled contains the words *herico* = *ariki* 'king' and *latou* or *latau* 'chief' (O'Reilly 1963:72–80). The first, now spelled *aliki*, is pan-Polynesian, and was undoubtedly in use when the Tsiaina arrived in Futuna. The second, which would now be written *latu*, is a reflex of Proto Austronesian **datu* 'chief, ruler, prince' (Wurm and Wilson 1975:34,115) and was evidently introduced by the Tsiaina. Reflexes are still found in Fijian *rātū* 'honorific particle and title of rank, before names of males who are chiefs' and Samoan *lātū* 'person in charge of an undertaking'. It also occurs in the Tongan surname *Lātūkefu*. On Futuna, *lātū* is now obsolete, having presumably fallen out of use after the Tsiaina were overthrown some time after 1616 and before the coming of the missionaries. This naturally raises two questions. How long before 1616 did the Tsiaina reach Futuna? And how did they get there? For the time being, the second question seems easier to answer than the first.

The Tsiaina, it seems, could only have reached Futuna directly from Southeast Asia during an exceptional El Niño year when meteorological conditions favoured an involuntary, west-to-east voyage. The fact that, according to tradition, they dug a well at Sa'avaka, Alofi, immediately on landing, supports this proposition.

Studies undertaken since the exceptionally severe El Niño of 1982–83 have shown that the phenomenon causes long periods of anomalous westerly winds. At such times, floods and hurricanes are experienced in some parts of the Pacific and severe droughts in others. An important atmospheric condition associated with El Niño is the southern oscillation. This is a large-scale exchange of air between the eastern South Pacific and the equatorial Indian Ocean around Indonesia. When the oscillation occurs, the trade winds weaken and the warm seawater carried towards Southeast Asia in normal trade-wind conditions begins to surge back along the equator towards South America. It travels as a wave-like motion, taking about 60 days to reach the Peruvian coast (Gross 1983; Langdon 1984).

A voyage in apparent El Niño conditions that seems to have closely paralleled that of Futuna's Tsiaina took place in 1780–81. It carried the Spanish ship *Princesa*, under the command of Antonio Mourelle, from the Philippines to Tonga. Mourelle was in the Philippines in December 1780 when he was ordered to take urgent dispatches to the Viceroy of Mexico. It was the wrong season of the year for him to follow the normal galleon route north of the Hawaiian Islands. So he headed south. He lost sight of the Philippines on 8 December and later passed close to the Admiralty Islands, the St Matthias Group and Ontong Java Atoll. The people of St Matthias, he noted, were suffering the effects of a severe drought. He also recorded that there was no wind by day, but fresh breezes from the north-north-west to the north-east by night which made it impossible to steer 'any course but east'. On 26 February 1781, Mourelle reached the Tongan island of Fonualei, which he called

Armagura 'Bitterness' because no water was to be found there. Nine days later, after a voyage of 78 days and without having set foot on land, he anchored in Vava'u desperately short of water. Like the Tsiaina, one of his first tasks was to dig wells and within days he had all the water he could carry (Landín Carrasco 1971:273–295).

The tradition that the Tsiaina dug a well at Sa'avaka is confirmed by the existence of the well itself. Burrows (1936:126), who visited it, described it as being six metres deep and 2.4 metres in diameter, surrounded by a circle of stones. Several others attributed to the Tsiaina are also extant (Manaud 1983:97). One, at a place called Sosoni, bears the Futunan name for well. Futunan *sosoni* is possibly related to *senep* 'spring, well' in the Palawan language of the Philippines (Tryon 1995:2:54). But no cognates in the sense of 'well' exist in other Polynesian languages. On the other hand, *hohoni* means 'a coconut shell water container' in both Tongan and Uvean.

The tradition that the Tsiaina went about Futuna beating a drum or gong called *lali* to determine where they would settle suggests that the Tsiaina introduced both the instrument and its name to that island. At the time of European contact, the *lali* was known on both Futuna and Uvea as well as Fiji. Missionaries later took it to Tonga, Samoa, Tokelau⁴ and other islands because its resonant tones, audible over long distances, made it ideal for calling the islanders to church.

The word *lali* 'drum' was first recorded in Fiji in 1809–10 (Davies 1925:155). The earliest accounts of it on Futuna and Uvea date back to the early 1830s (Angleviel 1989:117). In 1848, a French missionary, François Palazy (1895) described being awoken by a *lali* on Futuna that was suspended from the gallery of the church. To him, it had 'the sound of a Chinese bell' and proved to be 'an enormous wooden bell or drum, hollowed out in the form of a trough' and beaten by a big wooden club.

In the light of other evidence presented in this paper, the *lali* and its name seem likely to have reached Fiji with Futunan castaways. The Lau Islands, lying south-south-west of Futuna, have long been recognised as a halfway house between Polynesia and Melanesian Fiji. The missionary Thomas Williams (1884 [1858]:13), who served in Fiji from 1840 to 1853, noted that although differences of colour, physical conformation and language combined to separate the Polynesians and Melanesians, the line of demarcation tended to be blurred in Fiji. There, many 'distinguishing peculiarities' seemed to meet and blend, betokening a 'confluence of the two races'. In Lau, Asiatic peculiarities were marked, but they died away as one went westward, giving place to such as were 'decidedly African, but not Negro'. The anthropologist A.M. Hocart (1929:5) said much the same. To him, the Lauans were a cross between the Negroid Fijians and Polynesians. Their hair ranged from fuzzy to wavy, or even straight, and the eyes of many had 'a slight Mongolian appearance'.

In Fiji, the preferred timber for the making of *lali* is *vesi* (*Intsia bijuga*). It is exceptionally hard. The botanist Berthold Seemann described it as virtually indestructible (Parham 1972:99–101). *Intsia bijuga* is also called *vesi* on Futuna. In Tongan, it is known by the

⁴ In 1841, Horatio Hale of the United States Exploring Expedition reported seeing 'a trough-like drum' on pre-missionary Fakaofu, one of the three Tokelau atolls. It was like some seen earlier in Tonga (Langdon 1998:25). However, as all *lali* were and are of similar appearance, it cannot be assumed that it came from Tonga.

cognate term *fehi*, but the Samoans call it *ifilele*. It apparently does not grow on Uvea. In many Southeast Asian languages, *besi* or a cognate means 'iron' (Tryon 1995:3:363). This suggests that the Tsiaina called it *vesi* on Futuna because its timber was as near to iron in hardness as anything they could find there.

The limestone islands of Lau are favoured habitats for *Intsia bijuga*. One of these is Namuka, where, according to Rod Ewins (1986:144), a specialist in Fiji's material culture, it 'grows naturally in the dense, vine-shrouded forests'. Namuka, Ewins adds, is 'important as the Lauan centre for the male craft of carving *lali*' and is also famous for the 'unsurpassed *masi* bark-cloth of its women'.

No certain cognates of *lali* have been found in any Southeast Asian languages. But in Sangirese, the language of the Sangir Islands between northernmost Sulawesi and southern Mindanao, a small drum is called a *lala* (sic). This is especially noteworthy because the Sangirese term for 'open sea, ocean' is *tagaloan*, which recalls Tangaloo, 'the name of a pagan god', as Grézel put it in his Futunan dictionary, and 'one of the great deities of Polynesia, the Lord of the Ocean', according to Edward Tregear (1891:468). The anthropologist E.S.C. Handy (1927:324), in his study of Polynesian religion, expressed the view that Tangaloo was associated with 'a group of seafaring Polynesian immigrants' who reached Polynesia long after it was first settled. Yet if Tangaloo was a late comer, Handy wondered why his name was more widely known in Polynesia than that of any other of the greater gods of the area. 'A satisfactory answer', he thought, was that Tangaloo was 'the patron and ancestor of a group of skilled mariners' who, as traditional history showed, had 'voyaged from Samoa and the Society Islands to every part of the Pacific'.

Like Tangaloo, the *lali* was apparently known in New Zealand in pre-European times, but not in other islands of Eastern Polynesian speech. The earliest clue suggesting this is in the third (1871) edition of Williams' New Zealand Māori dictionary, where *rari*, a verb (note the long *i*), is defined as 'to make an uproar'. An illustrative sentence follows: *Ka rari tera te tamariki*.

The fifth edition of the dictionary (Williams 1917) contains many new words and meanings, including two new definitions under *rari* 'to make an uproar':

1. 'Disturbance, uproar. Whakarongo rawa atu ki te nge, ki te rari [note short *i*], ki te *nganga*'.
2. 'Some instrument used as an alarum or gong'.

The late appearance of the second definition leaves little doubt that that particular usage was confined to an isolated speech group such as the Tuhoë, who lived in the rugged country inland from the Bay of Plenty. Their language and culture were little known until the ethnologist Elsdon Best worked among them at the turn of the century. In the preface to the dictionary (Williams 1917:viii), Best is described as the most important contributor of new words both in volume and character. However, it is not known whether the definition 'some instrument used as an alarum or gong' was one of his contributions.

The only published description of a New Zealand drum reminiscent of a Fijian or Futunan *lali* is that of a Māori war gong dating back to the mid-19th century. Its author, the historian Arthur S. Thomson (1859:1:132), said the gong was about 12 ft long, 'not unlike a canoe in

shape' and 'suspended by cords from an elevated stage'. When struck by a wooden mallet, it 'emitted a sound heard in still weather up to twenty miles off'.

The tradition that the Tsiaina introduced new methods of making and marking bark cloth to Futuna is substantiated both ethnographically and linguistically. Burrows (1936:233–234) pointed out that the people of Eastern Polynesia had only one method of making bark cloth at the time of European contact; the Futunans and Uveans had two. In the Hawaiian, Society, Marquesas, Cook and Austral Islands, felting the bast into a single sheet by beating was the only method practised. In Tonga and Samoa, the only method was to paste one sheet over another. In Futuna and Uvea both methods were used. These facts, plus a Futunan claim that pasting was the more recent method, left Burrows in no doubt that felting was the original Polynesian method; that it had been entirely superseded in Tonga and Samoa; and that in Futuna and Uvea, the two methods had been retained side by side.

Burrows noted that the west–east cleavage in methods of making bark cloth coincided with a cleavage in the marking of it. Freehand decoration was obviously the original method as this was used in both Western and Eastern Polynesia. However, painting designs on the cloth by means of a matrix made of leaves was confined to Western Polynesia. This, therefore, was possibly a Tsiaina innovation.

In Futunan, Uvean, Tongan and Lauan (Troxler 1972:87), the matrix is called *kupeti*; in Samoan, *'upeti*; and in standard Fijian, *kuvesi*. On Futuna, the *kupeti* was made of two layers of leaves of the *fala sola*, a variety of pandanus with fairly large leaves (Burrows 1936:189). In Tongan, this pandanus is called *falahola*, clear evidence of borrowing because all other varieties or species of pandanus are known in Tongan (and in Uvean) as *fā*. The medial *l* has been lost. Cognates of **kupeti* are unknown in Eastern Polynesian languages.

Another apparent Tsiaina lexical innovation in Futunan relating to bark cloth is *kaumafute* 'paper mulberry tree when stripped of its bark'; compare Uvean *kaumafute*, Samoan *'aumafute* and Tongan *mokofute*, with the same gloss. The aberrantly metathesised Tongan form is also evidence of borrowing. As with **kupeti*, cognates of **kaumafute* are unknown in the languages of Eastern Polynesia—with one notable exception. In Rapanui, the language of Easter Island, *mahute* means both 'paper mulberry tree' and 'bark cloth', according to recent dictionaries. However, when the German naval ship *Hyäne* visited the island in 1883, its commander, Wilhelm Geiseler (1995:68), recorded that both the tree and 'the first step in preparation, the peeling-off of the rind', were referred to as *mahute*.

The last cultural innovation of the Tsiaina specifically referred to in the tradition about them is that they brought improved agricultural practices to Futuna. Frimigacci and his associates recorded that these related to wetland taro cultivation (Harms 1990:25). This is a feature of life in the Sigave district of Futuna that was evidently carried from there to Fiji and to other Western Polynesian islands. Although the practice is also known in some of the Hawaiian Islands and on Mangaia (Kirch 1994:251–287), there is no trace of the Futunan vocabulary relating to it in the languages of those islands and it seems to have had a different origin.

On Futuna, an irrigated taro field is called *vūsiga*. In defining that term, Grézel said that such fields were best because they lasted longer than those created on dry land. He also said that a ditch alongside a swamp where taro was planted was called *kau ano*. As Kirch (1994:133) has pointed out, Futunan *vūsiga* seems to be a combination of two lexemes, *vūsi*

and the place designator *ga*. This is suggested both by the place name Langivusi mentioned in Burrows' version of the Tsiaina tradition and the cognates in other languages. On Uvea, *fui* signifies the garden islands, usually rectangular, that are built on its swampy, low-lying coastal flats for taro cultivation. They are separated from each other by ditches called *kau ano*, in which water circulates from neighbouring seeps and springs (Kirch 1978:171). In Fijian, *vuci* is the parallel term. Hazlewood's 19th century definition is: 'a taro bed: more properly, low wet ground capable of growing taro'. In Samoan, *fusi*, *taufusi* and *taufusiga* mean 'patch of ground irrigated for the purpose of growing taro'. The latter two words also signify 'swamp, marsh'. On Rennell Island, *husi* means 'swamp, especially wet-land taro patch'. On Nukuoro, *husi* signifies a swamp or taro bog. There is no cognate in Tongan presumably because conditions in many Tongan islands are not suitable for wetland taro cultivation.

Cognates of Futunan *vūsiga*, or at least of *vūsi*, occur in both New Zealand Māori and Rapanui. In Māori, *hūhi* merely means 'swamp', which possibly indicates that the people who carried the word to New Zealand also did not take taro. Like *rārī* 'gong-like instrument', *hūhi* first appeared in the 1917 edition of Williams' dictionary. In Rapanui, the cognate form *vuhi* means 'pond, small lake' and also 'to dirty oneself', an easy thing to do during taro cultivation. In this respect, it is significant that one of Easter Island's crater lakes is called Rano Kau, a name cognate with Futunan and Uvean *kau ano* 'taro ditch', which also occurs in Uvean as *ano kau*. Rano Kau's lake is overgrown with reeds. In 1785, a member of the La Perouse expedition climbed into the crater and reported that 'the marshy area' was 'edged with the finest banana and [paper] mulberry plantations' (Dunmore 1994:72). The islanders were still growing crops there in much more recent times (Metraux 1940:7, 12, 155, 158, 160).

In a comparative study of Rapanui, the present writer and the linguist Darrell Tryon argue that it is an amalgam of three languages: Futunic, Tahitic and American Indian. The Futunic element was evidently carried by drift voyagers from Futuna to Ra'ivavae in the Austral group. Later, Tahitic-speakers from Ra'iatea, Society Islands, reached Ra'ivavae, where a hybrid Futunic/Tahitic language was created through intermarriage with their predecessors. This language was eventually carried on to Easter Island, where further intermarriage with members of an aboriginal American Indian community led to the development of a tri-hybrid language—the Rapanui of today (Langdon and Tryon 1983:49–64).

A direct migration to New Zealand from the Lau group some time after Futunan castaways of Tsiaina origin had settled there could explain the presence of such words as *rārī* 'gong-like instrument' and *hūhi* 'swamp' in New Zealand Māori. Many other Māori words with cognates only in Western Polynesian languages and sometimes Fijian have been identified (Langdon 1988:252–254, 286–287). They seemingly belonged to the language of the *tangata whenua* 'people of the land' who occupied New Zealand when migrants from Eastern Polynesia arrived there in the early 16th century, according to the present writer's *San Lesmes* theory.

The fact that a few words and practices that can be specifically linked with Futuna's Tsiaina were carried as far afield as New Zealand, Easter Island, Rennell Island and Nukuoro as well as to the nearer islands of Uvea, Tonga, Samoa, Rotuma and Fiji leaves no doubt that the arrival of the Tsiaina on Futuna was a long time ago. The question is: how long?

After intensive research into Futunan agricultural practices, the archaeologist Patrick Vinton Kirch (1994:242–243) claimed that pondfield irrigation began ‘about the middle of the first millennium AD’. However, prehistoric developments noted in the Central Pacific by other archaeologists suggest that this date may be too early. They say that towards the end of the first millennium, mounds begin to appear in the Futuna–Uvea–Tonga–Samoa region as foundations for houses and other buildings. In Tonga, especially, elaborate grave sites also become part of the local culture. Two other types of mound have been identified: one used for snaring wild pigeons, the other as a resting place at pleasant spots along routes regularly used by travellers. A unique monument on Tongatapu is the Ha’amonga ’a Maui. This is a huge trilithon comprising two upright coral pillars four metres apart connected by a third six metres long, resting horizontally in deep mortises cut into the tops of the pillars (Poulsen 1977).

The mounds and more elaborate structures of Tonga and elsewhere are thought to reflect a complex, stratified society with a centralised and authoritarian government. Only in such a society could the production of the necessary surplus have been organised to allow large-scale undertakings. In Tonga, the new era coincides with the rise of the Tu’i Tonga, the sacred kings of that archipelago. Another apparent development of that time was the creation of an honorific vocabulary used in addressing chiefs.

In a study of the honorific language of the Central Pacific, the Uruguayan linguist Olaf Blixen (1966, 1967, 1969) found obvious links between the terms used by speakers of Uvean, Tongan and Samoan. But only ‘a residue’ of them existed in Futunan. As Blixen (1967:5–6) had apparently not heard of the Tsiaina, he concluded that the 19th-century missionaries had tried to democratise Futunan society by eliminating the ‘reverent distinctions’ that had once been used in addressing chiefs. However, this study has surely shown that this is unlikely: the Futunans almost certainly eliminated the distinctions themselves when the Tsiaina were overthrown.

In summary, Futuna’s Tsiaina tradition merits much more serious scholarly attention than it has had so far. For linguists, the tradition offers an interesting challenge in that it suggests that many words that have been reconstructed to Proto Polynesian are actually borrowings of much more recent date. Hence, a task for the future is to see whether Tsiaina borrowings can be readily separated from the original Polynesian vocabulary. Another is to try to determine where the borrowings came from.

One thing seems certain: the Tsiaina came from a place where society was stratified, where honorific language was used, and where both wetland taro cultivation and the making of bark cloth from the paper mulberry tree were practised. Some of the evidence presented here indicates that the Tsiaina homeland was in Southeast Asia, and two items point specifically to the Sangir Islands. Other evidence also favours those islands: their geographical location, the seafaring prowess of their people, the existence of a stratified society and an honorific language (Hickson 1889:193, 198–203; Grimes and Maryott 1989). Yet it is puzzling that no cognates for a number of Futunan terms mentioned in the paper have been found in Sangirese; or perhaps they have not been recognised.

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10 *'Don't take my word for it': two case studies of unexpected non-borrowing*

JOHN LYNCH

1 Introduction

Prolonged or intensive contact between people of different cultures very often leads to lexical (and other) borrowing, at least in one direction. Within the Pacific, sandalwood stations and plantations provide one kind of context in which multilingual contact took place—and which indeed helped give rise to a stable creole which is still spoken in much of Melanesia—while colonisation was another situation in which borrowing was highly likely (though here the contact was often, or predominantly, bilingual rather than multilingual).

In this paper, however, I want to investigate two situations in which, although one would expect a certain degree of borrowing to have taken place, virtually no words moved from one language to another. These are the negligible influence of the languages of the Loyalty Islands and southern Vanuatu on Bislama, and of German on Samoan. I will show that social attitudes and competitive sources of vocabulary were the major factors in the lack of borrowing.¹

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2 Bislama and the Tafea/Loyalties languages

Some of the earliest prolonged and intensive contacts with outsiders in Melanesia took place in the Loyalty Islands (as well as the Isle of Pines) in New Caledonia and in the southern islands of Vanuatu (now known as the Tafea Province), and a significant proportion of plantation and sandalwood labourers and ships' crew were recruited from these areas. Despite their numbers, the languages of Tafea and the Loyalties have made a negligible contribution to the Bislama lexicon.²

2.1 History of labour recruitment and other contacts

Sandalwood expeditions began in the 1820s, and sandalwood stations opened in the area under discussion in the middle of the nineteenth century. These stations operated from 1844–72 in Aneityum, 1847–63 in Tanna, 1854–64 in Erromango (all in Tafea) and 1856–61 in Ouvéa in the Loyalties, and all employed labour from a number of different islands:

Sandalwooders had, from the beginnings of the trade, freely employed Melanesians away from their homes for extensive periods. Tan[n]ja seems to have gained its reputation as an excellent source of 'labour' very early in the trade. [...] Paddon always had a number of workers from other islands on his station at Aneityum. (Shineberg 1967:190).

Labour recruitment, which was to have a marked effect on the development of Melanesian Pidgin, began in the early 1860s. Basically, the recruiters began in the south of Melanesia, recruiting initially from the Loyalty Islands and from Efate and the islands of the Tafea Province in Vanuatu, before moving increasingly northwards into northern Vanuatu, Solomon Islands and Papua New Guinea. The major destinations were the plantations of Fiji, Samoa and Queensland and the nickel mines of New Caledonia, though some labourers also went to Hawai'i and French Polynesia—and, of course, in later years to plantations within Melanesia itself.

For the period 1864–75, for example, 7352 ni-Vanuatu were recruited to work on plantations in Fiji. Of these, we know the island of origin of 2125: 1118 from Tafea (mainly Tanna), 1007 from elsewhere in Vanuatu (Siegel 1987:55). If we assume that those of unknown origin were in roughly the same proportion, this would mean that probably 3500–4000 of the 7352 ni-Vanuatu labourers in Fiji were from Tafea. Similarly, we know that by the 1880s there were about 2500 ni-Vanuatu in New Caledonia, and these were mainly from Tanna, although there was a considerable number from Efate. Although the recruiters moved northward, they returned to Tanna from about 1890–1912, recruiting both men and women (Dorothy Shineberg, pers. comm.).

So Tannese particularly were prominent among the labourers recruited in Bislama's formative years, and Loyalty Islanders were prominent as ships' crew. Their sheer weight of

² I will not be concerned here with the two Polynesian Outlier languages Futuna-Aniwa in Tafea and Fagaueva on Ouvéa, but rather with the non-Polynesian languages of the islands of Erromango, Tanna and Aneityum in Vanuatu and with the Iaii, Drehu and Nengone languages in the Loyalties.

numbers would suggest that their languages would have had some influence on the emerging creole. But, as will be seen below, that influence has been negligible.

2.2 Tafea/Loyalties lexical items in Bislama

Crowley (1990:145–178) lists over 160 words in Bislama which have a Vanuatu origin—i.e. which derive from one or more indigenous Vanuatu languages. The only Bislama words which have a Tafea origin are the following, which represent less than 3% of the Melanesian content of Bislama.

Table 1: Tafea words in Bislama

Form	Meaning	Source
<i>kasi</i>	(term of address) to a Tannese person	Lenakel <i>kasi</i> ‘term of address between equals’
<i>lavlaven</i>	greeting to a Tannese person	Whitesands <i>laplapən</i> ‘morning’ (cf. <i>lapən</i> ‘night’)
<i>names</i>	expression of surprise	Lenakel <i>n-am-es</i> ‘you-CONTINUOUS-copulate’
<i>nandae</i>	k.o. tree, <i>Myristica fatua</i>	Sye <i>nande</i> (= /nanre/)
<i>piak</i>	1. term of address to a Tannese person 2. exclamation for immunity in <i>lelu</i> (chasing game)	Lenakel, Whitesands <i>p^wiak</i> ‘my older same-sex sibling’
<i>yanganen</i>	expression of surprise, delight or pleasure [only commonly used by people from Tanna]	Whitesands <i>iaŋanən</i> ‘his penis’

Crowley (1990:167) further states that ‘there are no words of Melanesian origin from Loyalties languages in Bislama’. However, there does appear to be one: *yosi* ‘expression of admiration or surprise’, which is also found with the same meaning in New Caledonian French, and which derives ultimately from Drehu (Lifou) *iosi* ‘vagina’. Crowley (1990:73–85) discusses the considerable influence that early Melanesian Pidgin had on the languages of the Loyalty Islands. That speakers of Iaa, Drehu and Nengone also spoke Bislama is incontestable.

2.3 Some explanations

Why then are there so few Tafea and Loyalties words in Bislama, given the large numbers of Tannese and Loyalty Islanders involved in the sandalwood industry and the labour trade?

2.3.1 Phonological 'difficulty'

The explanation may lie in the nature of the phonologies of these languages. Below, for example, are phonemes of Iaai (Ozanne-Rivierre 1984:12–13):

	<i>p</i>			<i>t</i>	<i>t̥</i>	<i>tʃ</i>	<i>k</i>		<i>i</i>	<i>ü</i>		<i>u</i>
<i>b^w</i>	<i>b</i>			<i>d</i>	<i>d̥</i>	<i>dʒ</i>	<i>g</i>		<i>e</i>	<i>ø</i>	<i>ə</i>	<i>o</i>
<i>w</i>	<i>ɸ</i>	<i>f</i>	<i>θ</i>	<i>s</i>		<i>ʃ</i>	<i>x</i>	<i>h</i>	<i>æ</i>		<i>a</i>	<i>ɔ</i>
<i>w̥</i>	<i>β</i>		<i>ð</i>						+ length			
<i>m^w</i>	<i>m</i>			<i>n</i>	<i>ŋ</i>	<i>ɲ</i>	<i>ŋ</i>					
<i>m̥^w</i>	<i>m̥</i>			<i>ŋ̥</i>	<i>ŋ̥</i>	<i>ɲ̥</i>	<i>ŋ̥</i>					
				<i>l</i>								
				<i>l̥</i>								

Phonotactically, Iaai is not much more 'difficult' than Vanuatu languages which have contributed vocabulary to Bislama: a word may end in a consonant, but basically the only permitted word-medial clusters are those in which the first member is a nasal. Phonologically, however, non-Polynesian Loyalties languages would sound 'strange' indeed to most Melanesian and Polynesian ears.

Tafea languages too are viewed by speakers of other Vanuatu languages as 'hard to pronounce'. Although the phoneme inventories are not nearly as complex as that of Iaai (for example), and not particularly unusual in comparison with other Vanuatu languages (apart perhaps from phonemic /ə/ in Tanna and /θ/ in Anejoŋ), the phonotactics are quite different from many of these northern and central languages. As a result of various historical vowel-deletion rules, initial and final consonants and consonant clusters occur frequently. Ni-Vanuatu who come from languages with predominantly open syllables would thus find such words difficult to pronounce.

Table 2 shows a number of vernacular words in Bislama which derive from one or more central or northern Vanuatu languages, together with their cognates in one or more Tafea and Loyalties languages. (Square brackets enclose forms which are probably not cognate.)

One possible explanation, then, is that where there were competing alternatives the phonologically 'simplest' was the one chosen; and the languages which have contributed most to Bislama (Nakanamanga and those of Ambae-Maewo-Pentecost) fit this description (Crowley 1990:168). Phonotactically, open syllables were preferred over closed syllables and single consonants over clusters. Phonologically, words with 'unusual' phonemes (like the Iaai retroflex and voiceless sonorant consonants and the front rounded vowels) were also avoided. This is not unexpected: it is part of the pidginisation process—finding the 'lowest common

denominator'. Crowley (1990:170) seems to concur with this view, at least as far as the Tanna languages are concerned:

Vocabulary from Tannese languages could also have entered Beach-la-Mar under these circumstances, but it did not. [...] the absence of vocabulary from Tannese languages could be due to the widespread perception among ni-Vanuatu even today that the languages of Tanna are 'hard'.

Table 2: Tafea/Loyalties cognates of Melanesian vocabulary in Bislama

Bislama	Tafea cognate	Iaai cognate	Meaning
<i>dalingan</i>	Lenakel <i>nəp^wəŋ-telŋən</i> , Anejoŋ <i>intijjan</i> (with 3SG suffix)	<i>kəŋen</i>	ear
<i>nabakura</i>	Sye <i>poŋur</i> , Anejoŋ <i>inpeye</i>		k.o. tree, <i>Calophyllum</i> sp.
<i>nabangga</i>	Sye <i>npaŋ</i> , Lenakel <i>nepək</i>	<i>bæk</i>	banyan
<i>nakavika</i>	Lenakel <i>nəkəvək</i>	<i>əxəiə</i>	Malay-apple, <i>Eugenia malaccensis</i>
<i>nambuton</i>	Lenakel <i>nəprəŋən</i> (with 3SG suffix)	<i>bibiken</i>	navel
<i>namele</i>	Anejoŋ <i>nam^woj</i>	[<i>ivekə</i>]	cycad, <i>Cycas circinnalis</i>
<i>nasiko</i>	Anejoŋ <i>neθey</i>	<i>dʒidʒi</i>	kingfisher, <i>Halcyon</i> sp.
<i>natalie</i>	Lenakel <i>telh</i> [<i>teʃ</i>], Anejoŋ <i>intejeθ</i>	[<i>waemahaɪ</i>]	k.o. tree, <i>Terminalia catappa</i>

2.3.2 Social attitudes

Crowley (1990:170) also raises another possible obstacle to borrowing, to do with social attitudes towards the speakers of these languages rather than with articulatory difficulties:

Another explanation perhaps relates to prestige. I have not found any references in contemporary sources to the attitudes of the Tannese and the Efatese labourers towards each other, but today the Tannese in Vanuatu are often looked down on by people from the islands to the north. [...] Thus, perhaps Tannese words could simply have been considered 'unworthy'.

An examination of the meanings of the Bislama words which derive from these languages might support this thesis. Of the Tafea words listed in Table 1, all except *nandae* 'k.o. tree,

Myristica fatua' could be classified as marginal vocabulary: they consist of exclamations and interjections, some of them restricted in use to or by Tannese. The fact that three of the seven loans from Tafea/Loyalties languages—*names*, *yanganen* and *yosi*—are in fact obscene or tabu words in the source languages might reinforce this view. Dorothy Shineberg (pers. comm.), however, is of the view that, at least in the nineteenth century, Tannese were feared for their superior sorcery rather than looked down upon.

Speakers of early Bislama from islands outside Tafea seem to have been very reluctant to take on vocabulary from the Tafea languages. This seems to have been due to attitudes to the languages themselves (too 'hard'), or to the speakers of those languages (too 'primitive' or too 'dangerous').

3 Samoan and German

Milner's (1993) *Samoan dictionary* (xlv–xlvi) lists various abbreviations used in entries, among them etymological abbreviations like E = English, G = Greek and H = Hebrew. Nowhere is there mention of German as a source of borrowed words, and Samoan academics and other educated Samoans routinely maintain that there are *no* words of German origin in Samoan, despite long contact between Samoans and Germans and despite the fact that German has contributed vocabulary to other Pacific languages.

3.1 German influence on other Pacific languages

At one time or another in the nineteenth and early twentieth centuries, Germany had commercial, missionary and/or colonial interests in New Guinea, Samoa, Nauru, parts of the Federated States of Micronesia, the Commonwealth of the Northern Marianas, Belau, and the Marshall Islands. This involvement ceased after World War I, when other colonial powers took over Germany's former colonies.

German vocabulary was borrowed into most of the languages whose speakers were in contact with Germans, although 85 years after the withdrawal of the German colonisers some of the earlier German loans have been replaced with words from English or other sources. Tok Pisin is perhaps the best known case. Mühlhäusler (1979:202ff.) presents 'almost 150 items of German origin ... listed in various dictionaries and vocabularies compiled after the termination of German control [which] indicates a fair degree of institutionalisation of these loans'. Many of these are no longer in current use, or even recognisable to modern-day Tok Pisin speakers. But the fact remains that German had considerable influence on the vocabulary of early Tok Pisin; and there still are a number of words of German origin in very common use in modern Tok Pisin, like *gumi* 'rubber, something made of rubber', *beten* 'pray' and *rausim* 'get rid of'.

Marshallese is another Pacific language which has borrowed quite a number of words from German, like the following which are still in current use and which refer to everyday concepts (Abo et al. 1976):

Table 3: Some German loans in Marshallese

Marshallese	Meaning	From German
<i>jeep</i>	shake hands to make a promise	<i>geben</i> 'give' (as in <i>sich die Hände geben</i>)
<i>kapel</i>	fork	<i>Gabel</i>
<i>komja</i>	senior government official	<i>Kommissar</i>
<i>kumi</i>	small rubber tube	<i>Gummi</i> 'rubber'
<i>ṁaak</i>	money	<i>Mark</i> unit of currency
<i>ṁalen</i>	write, draw	<i>malen</i> 'paint, portray'
<i>tōbak</i>	tobacco	<i>Tabak</i>

3.2 German loans in Samoan³

Samoa experienced the common Pacific phenomenon of visiting trading ships, and indeed the beachcombers seem to have been the first to introduce a kind of Christianity (Meleisea 1987:12). John Williams, of the London Missionary Society, established more formal Christianity in 1830, and the French Marists arrived in 1845. Foreign settlement increased in the 1840s and 1850s, and both the British and Americans set up consulates at this time. The German commercial presence dates from the mid-1850s with the establishment in Samoa of the firm of Godeffroy und Sohn.

'Internal instability and external involvement in island affairs continued as Britain, Germany, and the United States established treaties with the islands' Samoan government to protect trade and military rights in 1878–79' (Bunge & Cooke 1984:445). The conflict between the metropolitan powers continued despite the Treaty of Berlin and the Tripartite Convention of 1889, until in 1899 Britain renounced its interests and, in the following year, the islands were partitioned between the United States and Germany. While the United States has maintained its control over eastern Samoa, German rule over the western islands lasted only until 1914, when New Zealand took over the administration until what was then called Western Samoa achieved independence in 1962.

Cain (1986) lists over 2500 loan words in Samoan. Many of these are Samoanisations of biblical personal and place names, names of towns in Europe, etc. The bulk of the remainder come from English. Indeed, he lists only fifteen from German (though there are two more which are probably mis-identified as coming from English), and more than half of these are obsolete. Here is the list, in three categories; in category 1, in addition to the German source I have shown the modern equivalent (in all cases from English).

³ Much of the information in this section derives from Bunge and Cooke (1984) and Meleisea (1987). I use the term Samoa to refer to what today is the independent state of Samoa (until recently Western Samoa) and the US territory of American Samoa.

Table 4: German loans in Samoan

Samoan	Meaning	From German
1. Obsolete (according to Cain 1986)		
'amepose ~ 'amepusa	anvil	Amboss (> anivalo)
'ametimani	bailiff, official	Amtmann (> peilifi)
kakao	cocoa	Kakao (> koko)
'ofisia	officer	Offizier (> 'ofisa)
'Oreta	Easter	Ostern (> 'Êseta)
poseta	post (noun)	Post (> meli)
salā	salad	Salat (> sālali)
2. In current use (according to Cain 1986)		
fēnika	pfennig	Pfennig
fumfa	be of no account, worthless, unprofitable	Fünfer '5 pfennig coin'
hela	trivial matter	Heller 'farthing'
kaisa	emperor	Kaiser
kaisalika	imperial	kaiserlich
kaisarina	empress	Kaiserin
3. Misidentified by Cain (1986)		
maiesitete	majesty	Majestät
maka	Mark (unit of currency)	Mark

Let me comment first on category 3. The form *maka* meaning 'Mark (unit of currency)' almost certainly comes from German, although *maka* with the meaning '(to) mark' is of English origin. Both Cain and Milner identify *maiesitete* as coming from English 'majesty', but German *Majestät* seems a much more likely source, explaining both the first *i* (< German *j*) and the second *t* in the Samoan form.⁴

Of the obsolete forms, Ioane Lafaai (pers. comm.) recalls seeing the term 'ametimani' being used in reference to an early New Zealand official, but the others seem to be well and truly obsolete, and indeed have been replaced by forms of English origin. The same, however, could also be said for most of the terms in category 2, with the following exceptions:

⁴ The form *salā* 'salad' in category 1 in Table 4 may not derive from German *Salat* but from French *salade*, with stress (reinterpreted as vowel length) on the second syllable. There has been a small amount of French influence in Samoan as well.

- (i) *fumfa* which, despite its unusual phonotactics, is still in current colloquial use;
- (ii) the term *kaisa* which refers to the leader of a village group which comes to another village to perform a play or concert (Tasi Malifa, pers. comm.); and
- (iii) those that are homophonous with personal names (Fenika, Sala, Kaisa).

We are left then with a very few words of German origin which are current in Samoan (*fumfa*, *kaisa* and *maiesitete* being the only serious cases), and all of these could be considered as marginal vocabulary in one way or another—unlike the examples in Table 3 of German loans in Marshallese or the list of German loans in Tok Pisin.

3.3 German versus English in Samoa

Although German commercial interests remained strong for a period of sixty years up to World War I, and although Samoa was a German colony for the later part of that period, English-speaking missionaries dominated the religious and educational affairs of the islands. It was these missionaries who were involved in the translation of the Bible and the introduction of literacy, as well as in grass-roots education. This necessitated the introduction of modern vocabulary, and it was to their English missionaries rather than their German colonial 'masters' that Samoans looked for these new words.

On the other hand, the attitude of Solf, the first German governor, was rather different. The relationship between coloniser and colonised was a paternalistic one. Solf did indeed aim at promoting Samoan language and customs; but he also believed that the German language and culture would be too difficult and too 'advanced' for the Samoans, and was irrelevant in that environment. Thus the German administration carried on in Apia, issuing ordinances in Samoan, while the English-speaking missionaries carried on their work in the villages, using a level of linguistic intercourse that facilitated the transfer of English words into Samoan (Ioane Lafoai, pers. comm.). It would appear that this difference in colonial philosophy and practice is the major explanation for the paucity of German loans in modern Samoan.

4 Conclusions

The two cases which I have documented here are cases where borrowing might have been expected to take place, but did not—at least not on the scale which one might have expected. In the case of Bislama and the Tanna languages, it appears as if linguistic factors—phonological difficulty—were at least partly responsible, though social attitudes may also have been a factor. In the case of German and Samoan, it seems that social factors were of prime importance. In both cases, of course, there was an alternative source or sources for the introduction of necessary vocabulary.

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11 *Initial nasal clusters in Eastern and Western Austronesian*

G.B. MILNER

Dyen (1965:294) refers to the growing inventory of Proto Austronesian phonemes to which he has himself made a notable contribution. His readiness to posit additional phonemes, however, is not matched by a marked disposition to call into question the structure of the Proto Austronesian morph. On the contrary he has stated in the same paper that any attempt to revise that basic concept (formulated by Dempwolff 1934–38) would prove to be more destructive than constructive (Dyen 1965:294).

The present paper is an attempt to show that, far from adding to Dempwolff's already formidable inventory, further progress in Austronesian comparative studies is more likely to be accomplished if a resolute attempt is made to reduce rather than to increase the number of reconstructed proto-phonemes by any method which can be shown to be in accord with the evidence available, whether that evidence be old or new.¹ The present writer is aware that in this field considerable boldness is required to make up for the wealth of information concerning the entire Austronesian field such as perhaps only a Dempwolff could ever have mastered, in spite of (or perhaps owing to) his never having had electronic devices to assist him. Nevertheless this conference (see footnote 2) would not have served its purpose had it not presented an occasion to advance non-traditional theories. The point of view which is set out in the present article is based partly on a fairly careful re-examination of the evidence

¹ I should like to take this opportunity of expressing my thanks to Professor E.J.A. Henderson, who saw the original draft of this article and suggested certain alterations. I am also grateful to Professor N.M. Holmer (1965), whose contribution to the second volume of *Indo-Pacific Linguistic Studies* provided the stimulus for this article, as well as to Dr W. Milke, who when he first read it sent me a number of helpful comments. [This is an edited version of the paper that first appeared in *Lingua* 14:416–430 (1965).]

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which was already available to Dempwolff, and partly on the experience of work in descriptive linguistics since 1946, with special reference to Fijian (for Melanesian) and Samoan (for Polynesian).

Teeuw (1965) has rightly deplored the relative neglect of Western Austronesian (i.e. Indonesian) comparative linguistics in more recent years in favour of Northern Austronesian (i.e. Formosan) and Eastern Austronesian (i.e. Oceanic) studies. However, given the dearth of fresh discoveries concerning Proto Austronesian origins in the Western Austronesian area, he would probably be the first to agree that the investigation of little-known or unknown languages in the peripheral regions should not be neglected. The continued use in the 1960s of terms such as the 'RLD' and 'RGH' sound laws, which were first formulated in the 1880s, rather underlines the relatively small amount of progress made in Indonesian, as opposed to Austronesian, comparative studies.

To someone like the present writer, whose approach to Austronesian linguistics is from the point of view of the Oceanic region, this apparent tendency to underestimate the importance of 'peripheral' languages is reminiscent of Dempwolff's reluctance to accept Oceanic linguistic data on the same basis as evidence from Indonesian languages, and is hard to understand. Far from being regarded as questionable or irrelevant, the linguistic evidence of peripheral areas has, surely, been generally regarded in Indo-European studies as being of special importance, in that it was likely to have preserved in a fragmentary state archaic features which had disappeared from more central areas.

This article therefore represents an attempt to see whether certain features of peripheral languages can be used to make a fresh examination of the Proto Austronesian morph and of certain features of its phonetic structure.

As Milke (1961) reminds us, it was Kern (1886) who discovered that the Proto Austronesian (PAN) palatals had double reflexes in Samoan and Fijian, namely sometimes Samoan *s*, Fijian *s* and sometimes Samoan \emptyset (zero), Fijian δ . This knotty problem proved to be particularly refractory for Dempwolff, who at the end of his life finally proposed a solution based on morphophonemic rather than on purely phonetic considerations. In doing so he reversed Kern's verdict (as well as the opinion that he had once held himself), and he left a considerable number of anomalies unaccounted for, notably a large number of doublets (*Nebenformen*) in Polynesian languages. Besides Milke, others have made attempts to solve this problem, particularly Grace (1959:19–23) and Haudricourt (1965:326–328) in his contribution to the first volume of these studies. The present writer has also touched on the problem of doublets (Milner 1963a).

Haudricourt, who uses arguments based on phonetic considerations, comes to a conclusion which is identical with that reached by Milke, who had not only turned to a New Guinea language (Graged) for further evidence, but also made use of statistical techniques. That conclusion is as follows. In opposition to Dempwolff, who at the end of his career regarded Fijian δ and Samoan *s* as the reflexes of the PAN oral (i.e. non-prenasalised) palatal consonants, but Fijian *s* and Samoan \emptyset as the reflexes of the palatal nasal clusters, Milke and Haudricourt see a stronger correspondence on the one hand between Samoan *s* and Fijian *s* and on the other between Samoan \emptyset and Fijian δ . Whereas, however, Haudricourt still regards the first pair as being reflexes of nasal clusters and the second pair, of non-prenasalised consonants, Milke (1961:175) states that he cannot find any firm evidence of a positive

correlation between his Proto Oceanic (POc) reconstructed *s* and *z* phonemes and presence or absence of nasalisation in palatal clusters. He is therefore unable to give an explanation for the origin of the difference between **s* and **z* (1961:175).

Thus, nearly eighty years after the publication of Kern's monograph, almost total deadlock still appears to prevail. If this state of affairs is to be remedied at all, it may be necessary to call into question certain basic assumptions which may not have been properly examined.

First, then, what was the evidence Dempwolff utilised and how strong was it? It will be remembered that the decisive factor for him was that, since nasal clusters did not occur in final position in Proto Indonesian (PIn), Fijian *ð* and Samoan *s* must be regarded as the reflexes of oral (i.e. non-nasalised) consonants. But what of the rest of his evidence? The present writer has made a fresh count of all the Fijian and Samoan lexical items quoted by Dempwolff in the third part of his monograph as instances of reflexes of PAn palatals, and the results are given below. Where both forms of a doublet are mentioned, they have each been counted as one.

Table 1: Reflexes of PAn palatals in Samoan and Fijian (Dempwolff)

Proto Austronesian palatals	Number of reflexes			
	(i)		(ii)	
	In accordance with expectation		Contrary to expectation	
	Fijian	Samoaan	Fijian	Samoaan
(a) <i>d' t' g' or k'</i>	<i>ð</i> : 43	<i>s</i> : 41	<i>s</i> : 33	\emptyset : 23
(b) <i>nd' nt' ŋg' or ŋk'</i>	<i>s</i> : 6	\emptyset : 4	<i>ð</i> : 2	<i>s</i> : 4

If we combine the suggestions made by Milke and Haudricourt, without introducing fresh evidence, we obtain the result which has been summarised in the following table. It will be seen that it is identical with Table 1 but for the switch of the second column (Samoaan) to the fourth column (Samoaan) and vice versa.

Table 2: Reflexes of PAn palatals in Samoaan and Fijian (Milke and Haudricourt)

Proto Austronesian palatals	Number of reflexes			
	(i)		(ii)	
	In accordance with expectation		Contrary to expectation	
	Fijian	Samoaan	Fijian	Samoaan
(a) <i>d' t' g' or k'</i>	<i>ð</i> : 43	\emptyset : 23	<i>s</i> : 33	<i>s</i> : 41
(b) <i>nd' nt' ŋg' or ŋk'</i>	<i>s</i> : 6	<i>s</i> : 4	<i>ð</i> : 2	\emptyset : 4

It will be seen that if we are to retain Dempwolff's starred consonants as well as the bulk of his PAn vocabulary, the suggestions made by Milke and Haudricourt do not seem to solve the problem.²

In two articles published since 1961 (Milner 1963a & b) the present writer has indicated that doublets could sometimes be explained by the large influx of loan words and interdialectal borrowings, especially in the area of Fiji, Tonga and Samoa, where extensive cultural and lexical interpenetration can readily be seen to have followed in the wake of both peaceful and war-like contacts. This suggestion cannot, however, account for all doublets, even within the Fiji, Tonga, Samoa area alone. Indeed a close examination of Dempwolff's starred PAn vocabulary supplemented by knowledge (obtained at first hand) of the semantic counterpart of starred lexemes reveals that not infrequently the connection between superficially divergent lexemes may have been overlooked, with the result that a number of superfluous starred morphs may have been set up.

Some of these protodoublets (or even prototriplets) Dempwolff quite clearly set up deliberately in order to reconcile what he judged to be otherwise irreconcilable reflexes, for instance:

ha(ŋ)g'av: day, sun (60)³

a(n)dav:⁴ ditto (II)

ha(ŋ)g'i: kin, blood relation (60)

a(ŋ)g'i: ditto (12)

t'inay: light (154)

t'ijay: ditto (154)

pəd'am: shut one's eyes (116)

pə(n)ɬəm: ditto (116)

dáun:⁴ leaf (39)

(dɬ)avən: ditto (41)

ɬahən: ditto (42)

In other cases, however, it is doubtful whether he realised that he was in actual fact setting up protodoublets or pseudo protodoublets. Thus:

t'u'al: lever (155)

Fij. *ɬua*: stick (used) to raise a fishnet (no Sam. reflex)

t'uvan: digging stick (159)

Sam. *sua*: turn the ground over (no Fijian reflex)

To anyone who has actually seen a digging stick in use, the semantic connection between a lever and a digging stick will be obvious. Moreover these two derivations ignore the Fijian:

² During the session of the Conference [on Linguistic Problems of the Indo-Pacific Area, held in London in 1965] devoted to mathematical methods in linguistics, Milke commented on these tables and made the observation that they were not significant at the 10% level, and that this would tend to show that the relationship of PPn */s/ and */h/, and of Fijian /s/ and /ð/ to Dempwolff's starred oral and prenasalised palatals was a purely random one.

³ These page references are to Dempwolff *Vergleichende Lautlehre des Austronesischen Wortschatzes: Austronesisches Wörterzeichnis*.

⁴ In these examples I have omitted the soft onset (*weicher Vokal-Einsatz*) and the soft offset (*weicher Vokal-Absatz*) indicated by [˘], but I have given it when as a '*weicher Zwischensatz*' it occurs intervocalically.

sua-ka ‘to stab, pierce or spear’ (while retaining hold of the weapon) given by both Capell (1941) and Hazlewood (1850).

With only Pratt’s dictionary (1911 [1862]) at his disposal, however, Dempwolff cannot be blamed for not having realised that Sam. *sua* in addition to: ‘turning the ground over’, also means: ‘to lever’ or ‘prize something up’, which seems to reinforce the correspondence proposed. We would therefore have:

PAn *t’* > Fij. *s* and Fij. *ð* and PAn *t’* > Sam. *s*

The following other instances of pseudo protodoublets are also suggested:

<i>d’uluk</i> : insert (49)	Sam. <i>sulu</i> : stick into
<i>t’uļup</i> : penetrate (158)	Fij. <i>ðuruðuru</i> : entry
	Sam. <i>sulu</i> : press into
	<i>sulufaʔi</i> : take refuge
	<i>ulu</i> : enter

For Fijian, moreover, Hazlewood also gives *sulu-ta* ‘to put the hand into a basket without opening it’ (not mentioned by Dempwolff), and Capell has *suru-ya* ‘to repair a mat (by inserting new strands into it)’, so that we have:

PAn *t’* and PAn *d’* > Fij. *ð* and Fij. *s*
 PAn *t’* and PAn *d’* > Sam. *s* and Sam. \emptyset

It also seems likely that the following two lexemes are ultimately connected:

<i>put’uh</i> : innermost leaf (124)	Fij. <i>vuso</i> : youngest or middle-most leaves of the coconut, tail end of spear, smaller end of thing.
<i>putag’</i> : navel (123)	Fij. <i>viðoviðo</i> : navel
	Sam. <i>uso</i> : umbilical cord

to which one can add: Sam. *uso* ‘sibling’ and Sam. *uð* ‘friend’, which would give:

PAn *t’* > Fij. *s* and Fij. *ð* PAn *t’* > Sam. *s* and Sam. \emptyset

Then there is the strong likelihood of a correspondence between:

<i>pat’añ</i> : pair (115)	Sam. <i>masañ-a</i> : twins (for which no Fij. or Sam. reflexes are given)
<i>d’ə(ŋ)kal</i> : span (47)	Fij. <i>saña</i> : crotch: <i>i-saña</i> : tongs
<i>t’aña</i> : stand apart, bifurcate (148)	Fij. <i>mbasaña</i> : branch
	Sam. <i>saña</i> : fins (sic) of turtle
	Sam. <i>sasaña</i> : bottle-rack

These three protollexemes are also perhaps connected with two others reconstructed by Dempwolff:

ajap: open the mouth (15) (no Fij. or Sam. reflex given), and

kabaj: forking, bifurcation (85) (this last only if the possibility of a metathesis is confirmed, e.g. (?)*kajap*).

At first sight it may seem a little strange to seek a semantic connection between spans, twins, tongs, turtle flippers and branching, but it is fairly certain that all these and related concepts are subsumed under the concept of bifurcation. (The connection between the thumb and small finger of the hand outstretched to measure something and the flippers of a turtle will be obvious to those familiar both with turtles and measurements in spans.) Other Fij. and Sam. words (some of which were available to Dempwolff but which he did not utilise) reinforce this connection. Thus there is Fij. *ɔaŋa* 'span' and Fij. *saŋa* 'thighs' (according to Hazlewood 'so called because they branch off from the body'), crotch, and also Sam. *aŋa* 'span'. These proposed etymologies can be summed up in the following formula:

PAn *t'* and *d'* > Fij. *ɔ* and Fij. *s*

PAn *t'* and *d'* > Sam. *s* and Sam. *∅*

So far we have confined ourselves mainly to information which was already at the disposal of Dempwolff for both Samoan and Fijian and which he may or may not have utilised. Since the publication of the third part of [Dempwolff's] *Vergleichende Lautlehre* in 1938, however, Capell's *New Fijian dictionary* appeared in 1941 and the present writer has had the opportunity since 1955 of compiling an entirely new Samoan dictionary.

He has been struck by the large number of doublets occurring in both Fijian and Samoan which represent palatal and retroflex articulations in PAn. It will be seen (Milner 1963b) that the same situation obtains in the case of the reflexes of PAn retroflex articulations in Sam. and Fij. as has been outlined above for palatals, that is to say one may have *r* and/or *ndr* in Fijian and *l* and/or *∅* (occasionally *ʔ*) in Samoan. The two problems are in fact almost exactly similar and further examples of these ambivalent correspondences will now be given:

Table 3: Reflexes of palatal articulations

Fijian	Samoan
(a) Medially	
<i>uđu-na</i> : draw out, unsheath, withdraw	<i>usu-i</i> : stick, thrust
<i>usu-maka</i> : thread through, as a rope through a hole	<i>ũ</i> : reed
<i>vuđi</i> : low, wet ground suitable for growing taro	<i>fui</i> : water something
<i>vuđilevu</i> : swamp	<i>fui</i> : steep, soak in water
(?) <i>vusi</i> : trouble, sorrow, hard work	(<i>tau</i>) <i>fusi</i> : swamp
<i>vuso(-ya)</i> ': effervesce; foam, froth	<i>uso</i> : pith
<i>vuđu-ya</i> : (of water) make turbid, muddy by stirring up)	(?) <i>oā</i> : lather; be frothy, bubble
<i>vasi-a</i> : scrape off crusts of roasted yams; split, esp. firewood	<i>fasi</i> : beat, kill, slash
<i>vađi-a</i> : cut yams in pieces (for planting)	(<i>fa</i>) <i>fai</i> : scrape (with a shell scraper)
(b) Initially	
<i>đai-ta</i> : have sexual intercourse	<i>sai-tia</i> : bind (up)
<i>sai</i> (or <i>saisai</i>): kind of throw-spear or arrow with a number of prongs bound together	<i>saisai-tia</i> : tie up
	<i>āi</i> : sew, esp. sew two seams together
<i>đeu-ta</i> : carve on wood	<i>eu</i> : dab off, flick away
<i>seu-ta</i> : scrape like a hen (looking for food)	<i>seu</i> : steer (with an oar), mix a liquid, intercept a bird with a hand-net
<i>đoko-ta</i> : be tied, fastened, caught, entangled, joined etc.	<i>o'o</i> : be reached, completed, achieved etc.; germinating coconut (i.e. the 'milk' of which has 'thickened, seized up')
(<i>so</i>) <i>soko</i> : (of liquids) thick (mixed too thickly)	<i>so'o</i> : be joined, connected
<i>sokosokota</i> : ditto	
<i>sova</i> : bird's nest; kind of large round basket	<i>ofaŋa</i> : nest
	<i>sofa</i> : collapse
<i>sana</i> : try hard to do something; be engaged in something, be in earnest	<i>sana</i> : get on with, attend to something
	<i>aŋa</i> : face up to, attend to
<i>solo-ta</i> : rub: rasp: dry oneself	<i>olo</i> : rub; grate, grind
	<i>solo</i> : wipe (esp. one's body with a towel)

Other examples of doublets associated with palatal articulations in PAn were given in the paper presented at the 1961 study group (Milner 1963a) and need not therefore be reproduced here.

As for PAn retroflex articulations, with the evidence made available since 1941, a number of other entries can be added to Dempwolff's list of Fijian and Samoan reflexes. These swell the number of his ambivalent correspondences as the following table will show (retroflex consonants in PAn seem to be less productive than palatals and fewer examples of 'three-legged' and 'four-legged' correspondences have been found):

Table 4: Reflexes of retroflex articulations

Fijian	Samoa
(a) Medially	
<i>vondre</i> : grasshopper	<i>fue</i> : creeper: fly-switch
<i>vure</i> : (of water) spring up	
(b) Initially	
<i>ndranu</i> : sweet water (not salt)	<i>lanu</i> : colour (wash)
(<i>vei</i>) <i>ndranu-mi</i> : place where salt and sweet water meet	(<i>fa? a</i>) <i>lanu-mia</i> : wash off salt in fresh water
	<i>anu</i> : spit etc.
<i>ndrala</i> : <i>Erythrina ovalifolia</i> (and <i>indica</i>)	<i>lala</i> : <i>Desmodium</i> (a shrub)
<i>rara</i> : <i>Erythrina indica</i> (both trees)	
<i>ndravu</i> : ashes	<i>āfu</i> : wither; be heated for cooking
<i>ndravuisiNa</i> : (of land) sunburnt parched	
<i>ravu</i> : slaughter, smite	<i>lafu(lafuā)</i> : (of ground) be barren
<i>ravo</i> : warm up food on live embers	
<i>tiro-va</i> : look at oneself in a mirror, peep	<i>tio</i> : (of eye and body movements) be sharp, lively
	<i>tilotilo</i> : look, glance

Other examples of this type of correspondence occurring medially will be found in Milner (1963b:628).

In his 1961 article Milke expressed the belief that the regularity of correspondence which it was not possible to find between individual Oceanic languages and PAn, might nevertheless be established between groups of individual Oceanic languages with the object of reconstructing at any rate more firmly based POc phonemes. He gave as an instance Fijian *s*, Samoan *s* and Graged *s* (or *d*) on the one hand, and Fijian *ḍ*, Samoan *∅* and Graged *∅* on the other, and, having obtained mathematical support for his belief, he set up two POc phonemes **s* and **z*, the reflexes of which are claimed to be consistent in Oceanic languages but which need not necessarily always agree with Dempwolff's PAn consonants. Milke's **s* and **z* at

least have the merit of being applicable to initial as well as medial consonants, but even so it is very difficult to share his belief that regularities of correspondence could be established in that manner, as Table 5 will indicate.

Table 5: Some reflexes of POc palatals

	Graged	Samoan	Fijian	Sa'a	Rotuman	Tongan
(a) Medial						
sleep	<i>moi</i> ⁱ⁾	<i>moe</i>	<i>moḏe</i>	<i>mode</i> ⁱⁱ⁾	<i>mose</i>	<i>mohe</i>
(of container etc.)	<i>mamas</i>	<i>masa</i>	<i>mamaḏa</i>	<i>mamata</i>	<i>mamasa</i>	<i>maha</i>
dry; (of reef)						
bare, awash (at low tide)						
(b) Initially						
miss; mistake; be wrong	<i>sala</i> (or <i>pala</i>)	<i>sala</i>	<i>ḏala</i>	<i>tala</i>	<i>sara</i>	<i>hala</i>
road, path	<i>dal</i>	<i>ala</i>	<i>sala</i>	<i>tala</i>	<i>sala</i>	<i>hala</i>
outrigger	<i>sam</i>	<i>ama</i>	<i>ḏama</i>	<i>sama</i> ⁱⁱⁱ⁾	<i>sama</i>	<i>hama</i> ^{iv)}
bad, wicked; forbidden	<i>alan</i> (or <i>salan</i>)	<i>sā</i>	<i>ḏā(ta)</i>	<i>taʔa</i>	<i>-saʔa</i>	<i>hā(sia)</i>

ⁱ⁾ to be unwilling, disinterested;

ⁱⁱ⁾ listless, faint of heart;

ⁱⁱⁱ⁾ (of canoes etc.) abreast of one another;

^{iv)} note also *ama* 'windward side' (i.e. outrigger side) of canoe etc.

I have tried elsewhere (Milner 1963b) to show that as regards doublets, consonants in Oceanic languages which are reflexes of PAN retroflex consonants behave precisely in the same way whether they occur medially or initially, and I drew the conclusion that for the protolanguage from which both Fijian and Samoan are derived (i.e. Dempwolff's *Urmelanesisch* and Milke's *Proto-Ozeanisch*) one was forced to posit an optional feature of prenasalisation in *initial* as well as in medial consonants.

It now seems clear that the evidence available from doublets in Fijian and Samoan which are correlated with PAN palatal consonants reinforces this suggestion.

That being so, can one expect to find any evidence of optional prenasalisation in the case of bilabial, alveolar and velar initial consonants in those two languages? That is to say, before one can be quite certain that the initial prenasalisation of the stops was general in POc, one should also be able to identify initial doublets in the case of bilabial, alveolar and velar consonants, at any rate in Fijian, where the reflexes are *mb* and *v*, *nd* and *t*, *ŋg* and *k* respectively, and perhaps in Samoan—if only in the case of the two separate reflexes for the bilabials (*p* and *f*). The alveolars and the velars having only one reflex each (*t* and *k* respectively) in Samoan, no doublets are to be expected there.

The following table sets out some of the evidence obtained from an examination of the Fijian and the Samoan dictionaries with those possibilities in mind:

Table 6: Fijian and Samoan doublets showing prenasalisation of non-palatal initial consonants

(a) Fijian bilabials	
<i>beti-a</i> : pluck fruit	<i>bono-ta</i> : block, stop; dam up
<i>veti-a</i> : pluck fruit	<i>vono-ta</i> : inlay; make panels (as for a plank-built canoe)
<i>bora-ta</i> : prohibit, speak angrily	<i>butu-ka</i> : stamp, tread upon
<i>vora-ta</i> : resist a command, oppose, withstand	<i>vutu-ka</i> : pound (as with a pestle)
	<i>kari-a</i> : scrape
	<i>qari-a</i> : graze, scrape
(b) Fijian alveolars	
<i>dago-na</i> : trunk (of body or tree)	<i>daro-ya</i> : prevent, prohibit
<i>tago-na</i> : interval, section (esp. between nodes of bamboo or sugarcane)	<i>taro-va</i> : hinder, prevent
<i>dede-ku</i> : spread out, open (hand, fish etc.)	<i>dibi-na</i> : hip; thigh; pelvis
<i>tete-va</i> : spread, stretch out (e.g. branches of a tree)	<i>tibi-ka</i> : bend sharply, fold, thatch
<i>(vaka)deme-na</i> : do something slightly, strike lightly, pamper a child	<i>doa</i> : heartwood of a tree
<i>teme-ka</i> : eat sparingly, like a sick man, take small bites	<i>(ulu)toa</i> : weighted head of a dart (<i>tiqa</i>)
	<i>duki-a</i> : make a noise under water (to drive fish into the net)
	<i>tuki-a</i> : beat or knock with fist, hammer
(c) Fijian velars	
<i>qasi-a</i> : strip off (leaves or shell or bark)	<i>qilo</i> : hollow in a tree (filled with water)
<i>kasi-a</i> : shed bark; pluck off pandanus leaves	<i>kilo</i> : low place, ravine, hollow
	<i>ququ-na</i> : hoof of an animal
	<i>kuku-na</i> : nail of finger or toe
(d) Samoan bilabials	
<i>pō</i> : slap, swat, clap	<i>fatu</i> : heart, seed, core
<i>(fo)fō</i> : massage	<i>patu</i> : swelling, lump
<i>fole</i> : look pale, ill, anaemic	<i>fulu</i> : feather, fur, down
<i>(po)pole</i> : be worried, anxious	<i>pulu</i> : coconut husk
	<i>fui-fui</i> : keep together
	<i>pui-pui</i> : surround, fence off

With all this evidence before us, I now wish to put forward the thesis that the optional prenasalisation of *initial* consonants as a phonetically distinctive feature⁵ (as opposed to homorganic prenasalisation by accretion⁶ or substitution⁷ as a morphophonemically distinctive feature), was at one time general in Austronesian languages and was not restricted to Oceanic languages only.⁸

Until now, to my knowledge, no words of Sanskrit origin have been discovered in Oceanic languages. It follows that since they are directly descended from languages which split off from the parent stock before Sanskrit loan words began to appear in Austronesian, Oceanic languages must be regarded as being, in one sense, of considerable antiquity. Moreover, since over large areas Oceanic cultures appear to have remained almost untouched by European or Asian influences until the Renaissance or even much later, there is a *prima facie* expectation that these languages will have preserved archaic features which were once common to the entire Austronesian area and which have all but disappeared from the centre of it. Moreover it is also possible that because of their peripheral and isolated situation they have not participated in changes that took place in the more central areas subsequent to the time when the speakers of Oceanic languages first settled upon the islands of the Western Pacific.

As a case in point there is the widespread feature of homorganic nasalisation by accretion or substitution in Indonesian languages, which has morphophonemic or, to use a more traditional term, grammatical functions. This is of course not Oceanic.⁸ The question arises therefore whether Oceanic languages have lost this feature, or whether it is a relatively late development in which as peripheral languages they have not participated.

It seems, to say the least, arguable that the following situation is more than a coincidence: on the one hand the Eastern (Oceanic) languages frequently have prenasalised stops occurring *initially* as well as *medially*, prenasalisation being often a phonetically distinctive feature⁵ in both positions. On the other hand in the Western (Indonesian) languages prenasalisation of the stops only occurs *medially* as a phonetically distinctive feature, and where initial it occurs as a morphophonemic feature not limited to the stops but often also affecting other consonants. It is therefore reasonable to suppose that at a very early date throughout the entire Austronesian area there was (as there still is frequently in contemporary Oceanic languages) the possibility of a phonemic distinction between prenasalised voiced stops in free distribution and non-prenasalised voiceless stops also in free distribution. Subsequently, however, in the central part of the linguistic area, i.e. in that now occupied by Indonesian languages, in *initial*

⁵ That is to say prenasalisation by accretion (though *not* by substitution also, as in the Dempwolffian use of the word *Pränasalisierung*) and as the phonetic realisation of a phonemic (as opposed to a morphophonemic) distinction.

⁶ *Nasaler Zuwachs*.

⁷ *Nasaler Ersatz*.

⁸ Since this paragraph was written Milke has reminded us that in Jabêm homorganic prenasalisation by accretion seems to have functions which can at least partly be described as morphophonemic. The validity of the above statement therefore needs to be examined. Alternatively this might provide another way of defining more precisely the boundary between Western and Eastern Austronesian.

position the prenasalised stops ceased to be in free distribution. The reason for that change is that the nasal component had become a grammatically conditioned (as opposed to a phonetically unrestricted) distinctive feature, through a process of accretion to (or substitution for) the corresponding homorganic oral articulation. Later this feature may, by analogy, have spread to other consonants besides the stops. Such a development could well, given the geographical distribution of Austronesian languages, not have affected Oceanic languages, and might account for the fact that the initial and medial consonants of the latter behave alike.

Now if such a thesis is to be upheld, there should be at least one other peripheral area where the occurrence of prenasalised initial consonants is not always governed by morphophonemic principles.

This requirement is met in Madagascar, where as Dempwolff (1934–38, vol. 2, pp.92–95) shows in the case of Hova (Merina), there is not only a tendency for the Hova reflex of a PAN medial nasal cluster to be aberrant (§105 *f* and *g*), but there is also a tendency to prenasalise initial consonants in contexts which cannot be accounted for by reference to the regular morphophonemic processes which Hova shares with other Western Austronesian languages.

In particular Dempwolff shows that the Hova reflexes of certain PAN initial consonants are undoubtedly reduced nasal clusters, though he is unable to offer a satisfactory explanation for this (§105 *h* and *i*). Despite the evidence of Hova, added to that of Melanesian and Polynesian, he could not bring himself to reconstruct optionally prenasalised initial consonants on the ground that these never, or hardly ever, occurred in any other Indonesian language.⁹

As Dahl (1951) recalled in his comparative work, Malagasy is relatively 'younger' in the sense that the approximate period of the settlement of Madagascar by speakers of Austronesian languages can be fixed. It seems clear that this must have happened long after the settlement of the islands of the Western Pacific, as evidenced by the fact that Hova (Merina) has many words of Sanskrit origin. It is possible therefore that if the point of view advocated in this paper is correct, in its treatment of initial consonants Malagasy may represent a chronologically intermediate stage between Oceanic and Indonesian languages.

Considerations of space and time make it impractical to work out in detail the consequences which would logically follow the adoption of the view advocated in the present paper, but it seems clear that it would be possible to simplify the already extremely unwieldy structure of PAN consonants which the latest discoveries in Formosa threaten to complicate even further. Haudricourt (1965) has shown some of the ways in which this simplification could be achieved. Is it likely, for instance, that we shall always have to look upon Dempwolff's *mb* ≠ *mp* ≠ *b* ≠ *p* as immutable and fixed for all time?

Finally this approach may even offer a way of solving some of the problems which have been subsumed under such terms as 'the RLD law', 'the RGH law' etc. which, as Teeuw has reminded us, still await a solution. Thus the distribution of isoglosses for initial *r*, *l* and *d* in

⁹ The relevant passage in the second part of Dempwolff's (1934–38) work (*Vergleichende Lautlehre des austronesischen Wortschatzes: deduktive Anwendung*, 95 §105, i), deserves to be quoted in full: 'Die Anlaute des UIN., die im Ho(va) mit reduzierten Nasalverbindungen auftreten, werden hier überhaupt nicht zu fakultativen Nasalverbindungen ergänzt, da man eine Nasalverbindung der Anlaute nur im Ho. sonst aber in kaum einer anderen indonesischen Sprache (wohl aber in melanesischen und polynesischen) antrifft.'

Indonesian languages might conceivably be explained by reference to the various ways in which different languages have preserved what was originally an initial nasal cluster and which now only survives intact in a relatively 'obscure' language such as Fijian where, for instance, 'leaf' is *ndrau*, 'blood' is *ndrā*, 'ashes' is *ndravu*, 'lake, pond' is *ndrano* and 'twins' is *ndrua* (complementing *rua* 'two'). It is true that 'hear' is *roŋo*, but there is a strong indication that it is complemented by *ndroŋa-* as in *ndroŋandroŋā* 'hoarse', and in *ndroŋandroŋa wale* 'cry oneself hoarse, grieve, mourn'. Compare for instance Dempwolff's *dəŋəɣ* ('hear', 39, Fij. *roŋo*) and [*dɔ*]əŋəŋ ('be bewildered, stunned; be dumb; mourn', 41, Sam. *faʔaloloŋo* 'be silent') which, taken together, may also represent a pseudo protodoublet.

It should be noted, incidentally, that in Fijian *ndr* represents a prenasalised rolled consonant, without any trace of an anaptyctic vowel between the postalveolar contact and the roll. It may be argued therefore that there is greater likelihood that where other languages have *d* or *r* corresponding to Fijian *ndr*, *d* and *r* are the reflexes of different components of what was once a single articulation (as it has remained in Fijian), rather than that the Fijian *ndr* should represent a kind of haplology of a disyllabic group.

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12 *Borrowing in Samoan*

ULRIKE MOSEL

1 Introduction

Over the last two centuries the Samoan lexicon has been expanded by numerous words borrowed from Fijian, Tongan, Tahitian, English, German, Biblical Hebrew, Classical Greek and Latin. But as the following paper focuses on sociolinguistic factors in the process of borrowing in present-day Samoan, we will concentrate on English borrowings and give only a short overview of borrowings from other languages.

In Samoan, the process of borrowing may be spontaneous, or may be monitored to varying degrees. In spontaneous borrowing, English words are often not adapted, but more or less pronounced as in English, but when they become part of the Samoan lexicon, especially when they are used in the written language, English consonants and vowels are replaced by Samoan ones, and the syllable structure becomes (C)V. This phonological adaptation, however, shows some irregularities which can only be explained as being sociolinguistically motivated. In planned borrowing particularly, the phonological adaptation is influenced by sociolinguistic factors. Samoan grammar is, on the whole, not affected by borrowing. In our data, we only found one innovation, i.e. the development of a small class of adjectives which are derived from loan words by use of a borrowed suffix.

The data on which this investigation is based come from earlier works on borrowing in Samoan (Milner 1957; Cain 1986; Hovdhaugen 1986), field notes I took in 1997, 1998 and 1999, newspapers (*O le Savali*, *Savali*, *The Samoa Observer*, *Samoana*, *Puletini Samoa*, *The Weekly Samoa Post*) and my discussions with Samoan teachers while compiling a Samoan grammar for teachers (*O le Kalama o le Gagana Samoa*) during four visits in 1997–99 (Mosel et al. 1999), and drafts of a monolingual Samoan dictionary for students (Mosel et al. 2000).

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2 The sociolinguistic background

2.1 Samoa

The Samoans have been in contact with Europeans, the *pālagi*, on a regular basis since the arrival of the missionaries of the London Missionary Society in 1830. In 1900, Samoa was divided between Germany and the United States of America. The German part, Western Samoa, was annexed by New Zealand in 1914 and became independent in 1962. Today the state of Western Samoa has about 160,000 inhabitants (the 1991 estimate), of whom 21% live in or near the capital of Apia, while American Samoa, which will not concern us here, counted about 41,000 inhabitants in 1985 (Hennings 1996:53). There are also considerable Samoan minorities in New Zealand, Australia, Hawaii and California. In every Samoan village you will find some people who have stayed in an English-speaking country for some time.

2.2 The use of the Samoan language in public and in the media

The official languages of the State of Western Samoa are Samoan and English, but the Samoan language is demonstratively given priority over English. The local news of the government-controlled Samoan television, *Televise Samoa*, is always first broadcasted in Samoan and then in English, while international news is relayed from New Zealand and Australia. In addition, it is also possible to receive two bilingual television programs from American Samoa. The radio programs are in Samoan and English. When politicians speak on official occasions where both Samoans and expatriates are present, they give their speeches first in Samoan and then in English.

There are several Samoan and bilingual newspapers in Samoa, the number of which is constantly changing. While the governmental paper *Savali* prints Samoan articles on the front page, the opposition paper, *The Samoa Observer*, publishes news, editorials and letters to the editor in Samoan further to the back of the paper. At least three monolingual Samoan weekly papers, *The Weekly Samoa Post*, *Puletini Samoa* and *Samoana*, are imported from New Zealand.

2.3 Samoan and English in the educational system

English is taught as a second language from year 3 to year 6, and then from year 7 on used as the language of instruction, while Samoan remains a school subject until year 13. Although there is no compulsory education, 90% of the children attend 8 years of primary school. Until recently the literacy rate was believed to be between 92 and 97% (Baldauf 1990:260; Hennings 1996:190). This, however, seems to be a myth. The Project Implementation Document of the Western Samoa Primary Education Materials Project (1997:25), which is a joint enterprise of the Samoan and Australian governments, states that 'literacy and numeracy skills in both Samoan and English are low', which is ascribed to the lack of student textbooks and rote learning.

In accordance with the curriculum, the Primary Education Materials Project produces student textbooks in Samoan and English for mathematics, science, social science, English and Samoan, and in addition a Samoan grammar written in Samoan for teachers and a short monolingual dictionary for students. This means that on the basis of the existing teachers' manuals and the current actual language use in the classrooms, terminologies for all the above-mentioned subjects need to be developed. At this stage (1999) the terminologies have not been completely unified. Not unexpectedly, the terminologies of mathematics and science contain a considerable number of loan words, as we will see in a later section.

3 The *T*- and the *K*-language: two phonological registers of Samoan

The Samoan language has several registers, the most remarkable division being that between the *T*- and the *K*-language. These names came into use because the /t/ of the *T*-language is consistently replaced by the /k/ in the *K*-language. Other names are *tautala lelei* 'good language' and *tautala leaga* 'bad language', but these names are now rejected by the Curriculum Development Unit because 'there is nothing bad about the *K*-language' (language panel meeting at the Curriculum Development Unit, August 1998). Another distinction is that the *K*-language lacks the phoneme /n/, which it systematically replaces with /ŋ/ represented by <g> in the Samoan orthography, which will be used in all examples here. The marking of glottal stops and vowel length is more often than not missing in written Samoan, but the Department of Education decided in 1998 to consistently indicate vowel length and glottal stops in education materials. In this paper quotations from printed texts will be given in the original orthography.

Table 1: Consonantal phoneme inventories of *T*- and *K*-language

<i>T</i> -language				<i>K</i> -language			
p	t	(k)	ʔ	p		k	ʔ
f v	s		(h)	f v	s		(h)
m	n	ŋ		m		ŋ	
	l(r)				l(r)		
(k, h, r only in borrowings, h in borrowings and the exclamation <i>halu!</i> 'go!')				(h only in the exclamation <i>halu!</i> 'go!')			

Examples (1) and (2) illustrate the differences between the *T*- and *K*-language:

- (1) *Tapuni le faitato'a!*¹
 shut ART door
 'Shut the door!'
- (2) *Kapugi le faikoko'a!*
 shut ART door
 'Shut the door!'

The opposition between the two registers, which has wrongly been described as the opposition between a formal and a colloquial style by some authors,² cannot be interpreted as diglossia in the sense of Ferguson (1959), as the *K*-language is used on very formal occasions such as kava ceremonies. Rather 'the opposition between the two registers must be seen in cultural or socio-historical terms' (Duranti 1990:5). While the *T*-language is used in contexts of mainly non-Samoan origin, the *K*-language is used in speech situations which are associated with the *fa'a-Samoa*, i.e. the indigenous culture, including casual talk among friends and within the family. The table below lists the occasions on which the *T*- and the *K*-language are used respectively; similar categorisations are given by Duranti (1981:165–168; 1990), Milner (1966), Mosel and Hovdhaugen (1992), Ochs (1988:56–58) and Shore (1982:267–283).

Table 2: Fields of use of *T*- and *K*-language

<i>T</i> -language	<i>K</i> -language
Songs and poems (also those from pre-Christian times).	
Written language, language of instruction at school.	(Exception: direct speech in modern literature).
All Christian ceremonies and prayers.	All traditional ceremonies.
Speeches in Parliament and during European style ceremonies, as for instance the speeches of the Prime Minister, or the Minister of Education at the opening of the new campus of the National University.	Speeches at meetings of the village council (<i>fono</i>).
Radio, television (including interviews).	(Exception: direct speech in radio plays).
(Occasionally used by very few people in casual conversation).	Casual talk.
With Europeans.	

¹ Abbreviations in the interlinear morphemic translation: ART – article, CONJ – conjunction, EMPH – emphatic particle, PL – plural, POSS – possessive preposition, PRES – presentative preposition, TAM – tense-aspect or mood marker.

² Milner (1966), Hovdhaugen (1986).

Depending on the context, speakers freely change between the *T*- and the *K*-language. Thus, I observed at the Department of Education that the members of the language panel conducted their discussions about Samoan grammar in the *T*-language during panel meetings, but immediately switched to the *K*-language when we had a coffee break. Similar experiences have been reported by other linguists (Duranti 1990). There is also some variation among individual speakers; some Samoans use the *T*-language on the phone because they think they are better understood, or even in casual conversations, others hardly ever use it outside church and have difficulties speaking it spontaneously.

The stratification of the *T*- and the *K*-language suggests that the *K*-language is strongly associated with 'Samoanness', while the *T*-language is reserved for those aspects of the Samoan culture which were introduced by the *pālāgis* (Duranti 1990:5; Shore 1982:281–282). This assumption is supported by the observation that public opinion holds that it is not appropriate for a *pālāgi* to speak the *K*-language, but paradoxically, if a *pālāgi* actually speaks the *K*-language, Samoans, especially close friends, might approve of it, commenting 'she is now speaking like us'.

The origin of the dichotomy between the *T*-language and the *K*-language has been discussed since the last century. Hovdhaugen (1986), who has thoroughly studied the 19th century sources, comes to the conclusion that the *K*-language must have developed between 1777 and 1830 and that the *T*-language was chosen as the church language because the first missionaries used Tahitian as a mission language before they learned Samoan (Hovdhaugen 1986:320–322). Once the *T*-language was chosen and accepted as the appropriate variety to be used in the context of mission activities, including education and literacy, the *K*-language became a sociolinguistic marker of pre-Christian Samoan traditions and a symbol of Samoan as opposed to western values. When the *K*-language spread, the language of poetry and songs was not affected because the recitation of poetry and the singing of songs are formal speech events (Moyle 1988:15).

4 A short history of borrowings in Samoan

Since the first missionaries came to Samoa in 1830, Samoans have had regular contact with Europeans and borrowed hundreds of English words. But there is also some evidence that the first English words came earlier through the intensive contact with the Tongans, because a few English loan words have /ʔ/ rather than /k/ or /g/, which is in accordance with the sound correspondences between Tongan and Samoan (Hovdhaugen 1986):

- (3) 'oti 'goat' < Tongan *kosi* < **koti* < Engl. *goat*
tapā'a 'tobacco' < Tongan *tapaka* < Engl. *tobacco*³

The same process of adaptation occurred with Tongan loans which were borrowed from Fijian:

- (4) 'ulo 'pot' < Tongan *kulo* < Fijian *kuro*

³ Other possible borrowings from Tongan are 'apa 'tin, can, sheet metal' < Tongan *kapa* < English *copper*, 'amoti < Tongan *kamosi* 'trigger of a gun' (Cain 1986:12).

If these words had been borrowed later, the /k/ probably would have been retained as in all the other words which were introduced by the missionaries and other Europeans. Such a word is perhaps *saka* 'boil' which seems to have been borrowed from Fijian *saga* (Milner 1966:197).

A few words were also borrowed from Tahitian by the LMS missionaries, who had previously worked in Tahiti, the headquarters of the London Missionary Society in the South Pacific since the beginning of the 18th century. Since Tahitian /h/ corresponds to Samoan /s/ and Tahitian /r/ to Samoan /l/, these words show /s/ instead of /h/, and /l/ instead of /r/.

- (5) *solofanua* 'horse' < Tahitian *horofenua* (Milner 1957:56), *pua'ahorofenua* (Davis 1851:205)⁴
samala 'hammer' < Tahitian *hamara* < Engl. *hammer* (Milner 1957:58), *hamera* (Davis 1851:Appendix)
peleue 'coat' < Tahitian *pereue* (Davis 1851:195)

When translating the Bible, the missionaries also borrowed many words from Latin and Greek, and a few from Hebrew (Cain 1986), some of which were perhaps indirectly borrowed via Tahitian, others directly like *kiona* 'snow', which would have been **siona*, had it been borrowed from Tahitian.

- (6) *kiona* 'snow' < Greek *chiōn* 'snow' (Tahitian *hiona*, Davis 1851:Appendix)
'auro 'gold' < Latin *auro* 'gold' (Tahitian *auro*, Davis 1851:Appendix)

The short German rule in Samoa (1900–1914) left only few traces in today's language (see Lynch's article in this volume), but there were more borrowings in use during that time, for example

- (7) *ameposa* 'anvil' < German *Amboss* (Pratt 1911:99)
ametimani 'bailiff' < German *Amtmann* (Cain 1986:12)
Kaisa 'emperor' < German *Kaiser* (*O le Savali* No.1, Setema 1905)⁵
Kaisalika 'imperial' < Germ. *kaiserlich* adj., (*O le Savali* No.1, Setema 1905)
Kaisarina 'empress' < German *Kaiserin* (Neffgen 1904:58)

5 Phonological adaptation of loan words

Not only common nouns, verbs, adjectives and adverbs, but also proper names are adapted to the inventory of phonemes and the phonotactic rules of the written and spoken Samoan. When tourists make friends with Samoans, they immediately get their names 'Samoanised', even if they do not speak a word of Samoan. For example:

⁴ The origin of *horofenua* is unclear; it could be related to *horo* 'run' and *fenua* '(cultivated) land' and literally mean 'plantation runner', accordingly *pua'ahorofenua* could literally mean 'pig running in plantations'.

⁵ Note that the Bible has *Kaisara* (*O le Tusi Paia*, *Luka* 2, 1).

- (8) Fred > *Feleti*
 Claudia > *Kalautia*

Even in school books and newspapers proper names of celebrities are adapted.

- (9) Kennedy > *Keneti* (Samoan reader for year 7)
 Robert Louis Stevenson > *Ropati Lui Sitivenisone*
 John Williams (first missionary in Samoa) > *Ioane Viliamu*

This adaptation of proper names is a manifestation of language maintenance. Recently introduced technology is regularly given Samoanised names in written and monitored spoken language. For example:

- (10) *televise* 'television'
telefoni selula 'cellular telephone'

The loan word *telefoni selula*, which was used in advertisements in 1997 when the first mobile telephones were imported, was no longer in use in 1999 but had been replaced by *telefoni fe'vea'i* 'telephone being carried to-and-fro'. If the author of a newspaper article is not sure that the reader will recognise the meaning of the adapted word, he writes the original English words in brackets behind the Samoanised word. For example:

- (11) *O le lepela*⁶ (*leprosy*) *ua na o se ma'i e*
 PRES ART leprosy TAM only ART illness TAM
*pei lava o isi mai.*⁷
 like EMPH PRES other illness

Leprosy is now only an illness like other illnesses. (*Savali* 10.7.98, p.12)

This strategy is also applied for loan translations and recent coinages. For example:

- (12) *se fa'ata fa'alapopo'a* (*microscope*) *o loo i se fale suesue*⁸ (*laboratory*)
 ART mirror enlarge.PL TAM in ART house research
 a microscope (lit. 'a mirror enlarging things') that is in a laboratory (lit. 'research house') (*Savali* 10.7.98, p.12)

In spontaneous speech, however, people do not always use such Samoanised loan words or coinages. Instead of *televise*, for instance, people usually say *tivī* 'TV', as in *matamata tivī* / *makamaka kīvī* 'watch TV'. Nobody objected when in the first drafts of the new Samoan grammar the word *tivī* was used in the chapter on registers, but it had to be replaced by *televise* when language purists complained that *tivī* was an English word and not suitable for a Samoan grammar.

When we started work on the monolingual dictionary for students at the Curriculum Development Unit in March 1997, it was clear that we needed a genuine Samoan name for this

⁶ Probably not an English, but a German loan word; compare German *Lepra*.

⁷ In the Samoan standard orthography, which is compulsory for education materials since 1999, this would be written as ... *ua na'o se ma'i e pei lava o isi ma'i*.

⁸ In standard orthography: *se fa'aata fa'alāpopo'a olo'o i se fale su'esu'e*.

book. The loan word *tisionare* (Milner 1966:355) was not accepted, whereas the Samoan word *tusi lomifefiloi* was not suitable for a monolingual dictionary because it literally means 'book of mixed printing' and refers only to bilingual dictionaries. After some debate, the language panel decided on *utugagana*, lit. 'language container', which was coined by Agafili Tuitolova'a and soon accepted by other language experts and language committees. In spontaneous speech, however, I seldom heard this word; more often people used the English word *dictionary* in its English pronunciation. In Apia, Samoans frequently use English words or even use whole phrases, for example *last weekend*, *at the front desk*, so that the borderline between spontaneous borrowing and code switching becomes blurred. This language mixing, which is not due to a lack of Samoan words, contradicts the otherwise consistent Samoanisation of all kinds of expressions, including names.

To conclude, monitored speech leads to the phonological adaptation of loan words, while in spontaneous conversation people freely use English words with their English pronunciation. The only written context where numerous non-adapted English words occur are advertisements in the monolingual Samoan papers from New Zealand. A typical advertisement of this kind, which is from a car dealer, contains the following phrases (*Samoana* 18.8.98:42):

- (13) *trade in ma le tupe tiposi laititi*
 [trade in] and ART money deposit small
 trade in and low deposit
- (14) *laisene learner*
 learner licence
- (15) *faigofie le finance*
 easy ART finance
 easy to finance
- (16) *3 tausaga guarantee*
 three-year guarantee
- (17) *maua pau mo e cas a latou taavale*⁹
 get discount for those cash POSS 3PL car
 discount for those who pay cash for their cars

5.1 The phonological adaptation of English /t/, /d/, /k/ and /g/

As described above, there are two phonologically distinct registers in Samoan, the *T*-language and the *K*-language. The /t/ and /d/ of English loan words are normally represented by /t/ in the *T*-language, but by /k/ in the *K*-language.

- | | | |
|---------------------------|------------------------|------------------------|
| (18) English /t/ or /d/ > | <i>T</i> -language /t/ | <i>K</i> -language /k/ |
| <i>teapot</i> | > <i>tipoti</i> | <i>kipoki</i> |
| <i>diacon</i> | > <i>tiākono</i> | <i>kiākogo</i> |

⁹ In standard orthography *maua pa'ū mo ē cash a lātou ta'avale*.

English /k/ and /g/, however, are represented as /k/ in both the *T*- and the *K*- language:

- (19) English /k/ or /g/ > *T*- and *K*-language /k/
coffee > *kofe*
computer > *komipiuta, komupiuta*
goose > *kusi*

Pratt's first edition of the Samoan–English dictionary (1862, as quoted in Milner 1957) lists a number of loan words containing /k/, for example *suka* 'sugar', *silika* 'silk'. Only 'vinegar' and 'compass' contain /t/ instead of /k/. While 'vinegar' is nowadays *vineka*, the form *tapasā* 'compass' has been retained.

- | | | |
|----------------|---------------------|----------------------|
| (20) English | Samoan (Pratt 1862) | Samoan (Milner 1966) |
| <i>vinegar</i> | > <i>vineta</i> | > <i>vineka</i> |
| <i>compass</i> | > <i>tapasā</i> | = <i>tapasā</i> |

Speakers who do not have much practice in using the *T*-language sometimes make hypercorrections in loan words. For example:

- (21) *Teriso* instead of *Keriso* 'Christ' (observed by Hovdhaugen (1986:326))
tofe instead of *kofe* 'coffee'

The rule that English /t/ is preserved in the *T*- language is not always followed. Even in the governmental newspaper *Savali* exceptions are found:

- (22) *training* > *koleni* (*Savali* 7.3.97), also attested as *toleni* in the *T*-language
contract > *konekalate* (*Savali* 7/3/97), *konekarate*

While the second 'k' in *konekalate*, which should be /t/, can be explained as the result of assimilation, the /k/ in *koleni* can only be explained by the fact that *koleni* is a frequently used word in the spoken language and that the journalist was not aware of its etymology.

As for the adaptation of English /d/, we find similar exceptions as with /t/, only some of which can be attributed to assimilation:

- (23) English /d/ > *T*- and *K*-language /k/
video > *viko* (never spoken or written as **vito*)
delivery > *kiliva* (also *tiliva*)
screwdriver > *sikulukalaiva* (Iamafana & Choon 1997:34)
desk > *kesi* (field notes, also Cain 1986:74)
order > *oka* (field notes, also Cain 1986:128)

In written Samoan the non-adapted form *video* is found in the compound *lipine video* 'video tape', which contrasts with *lipine kaseti* 'cassette tape' (*lipine* > Engl. *ribbon*).

- (24) *Lipine video mo le maketiina o lau pisinisi.*
 tape video for ART marketing of your business
 Video tapes for the marketing of your business. (*The Weekly Samoa Post* 3/8/1998, p.16)

- (25) *Ua maua nei lipine kaseti a Pat Mamaia.*
 TAM get now tape cassette POSS Pat Mamaia
 We now have cassette tapes by Pat Mamaia. (*Samoana* 18/8/1998, p.33)

The word *oka* is also found in advertisements:

- (26) *Specials. Maua le pau¹⁰ faapitoa pe a tele lau oka.*
 [Specials] get ART discount special CONJ TAM big your order
 Specials. Get a special discount when your order is big. (*Samoana* 18/8/1998, p.27)

In contrast, there are no words with *t* in the *K*-language. Even in proper names /t/ is changed to /k/, for example *Feleti* 'Fred' > *Feleki*, *Keneti* 'Kennedy' > *Kegeki*.

The irregular change from English /t/ and /d/ to /k/ in the *T*-language, for example *video* > *viko*, can perhaps be explained as being motivated by sociolinguistic factors. In the *K*-language, which has become a symbol of Samoan identity, all dental stops are replaced by velar stops. When English loan words which originally have /t/ or /d/ retain this Samoan /k/ in the *T*-language, they sound (or look) less English. Therefore, it might well be that Samoan speakers and writers choose to retain this /k/ in the *T*-language in order to underscore that these words have been fully integrated into the Samoan language. The use of *oka* in the advertisement quoted above seems to be a case in point.

5.2 The phonological adaptation of English /r/ and /l/

Originally, Samoan did not have /r/. Loan words which in the source language contain /r/ show variation in their adapted form. In Pratt (1862, quoted in Milner 1957), /r/ is changed to /l/ in loan words from Tahitian, but retained as /r/ in loan words from Hebrew, Latin and Greek (see Cain 1986 for numerous examples).

- (27) *paelo* 'bucket' < Tahitian *paero* (Davis 1851:179)
solofanua 'horse' < Tahitian *pua'ahorofenua* (Davis 1851:205)
'āuli 'to iron' < Tahitian *'auri* 'metal' (Davis 1851:Appendix)
mōlī 'lamp' < Tahitian *mori* 'oil, lamp' (Davis 1851:147)
- (28) *'auro* 'gold' < Tahitian *'auro* (Davis 1851:Appendix) < Latin *aurum*
ārio 'silver' < Tahitian *'ario* (Davis 1851:Appendix) < Greek *argyros*

Today we find variation between /r/ and /l/ in many loan words, the preferred option being /r/ in the *T*-language, and /l/ in the *K*-language.

- (29) *Christmas* > *kirisimasi* / *kilisimasi*
Robert > *Ropati* / *Lopati*
kerosine > *karasini* / *kalasini*

But there are some loan words which consistently retain the /r/ in both the *T*- and the *K*-language and others which change the /r/ to /l/ even in the *T*-language. Typical examples for

¹⁰ In standard orthography *pa'u*.

the first type are words relating to Christianity and European concepts (30), while the second type is represented by words of various semantic fields as for instance sport, cooking and other Samoan everyday activities (31).

- | | | |
|------|--|------------------------------------|
| (30) | <i>Christ</i> | > <i>Keriso</i> (* <i>Keliso</i>) |
| | <i>Christian</i> (Latin <i>Christianus</i>) | > <i>kerisiano</i> |
| | <i>prophet</i> | > <i>perofeta</i> |
| | <i>tourist</i> | > <i>turisi</i> |
| | <i>nature</i> (Latin <i>natura</i>) | > <i>natura</i> |
| (31) | <i>rugby</i> | > <i>lakapī</i> (* <i>rakapī</i>) |
| | <i>fresh</i> | > <i>felesi</i> |
| | <i>curry</i> | > <i>kale</i> |
| | <i>gravy</i> | > <i>kaleve</i> |
| | <i>rubbish</i> | > <i>lāpisi</i> |

The variation found in the adaptation of English /r/ leads to the hypothesis that the retention of /r/ in loan words marks them as special words relating to Christian or other European concepts, i.e. words which do not belong to the traditional Samoan culture. In contrast, words which signify things that belong to the Samoan everyday life or, as in the case of rugby, even have become an important part of the Samoan culture, are adapted to the Samoan phonological system, so that /r/ is changed to /l/. This hypothesis is supported by the way the language panel discussed the choice of borrowed grammatical terms (see below).

5.3 The phonotactic adaptation of loan words

The Samoan syllable structure is (C)V. When loan words are adapted, consonant clusters are resolved by the addition of epenthetic vowels and/or the deletion of consonants. Consonant clusters at the beginning of a word are resolved by the addition of a vowel, whereas, in word-final position, consonant clusters are substituted by one consonant plus vowel (CV). Thus word initial *pre-* and *pro-* become *pere-/pele-* and *poro-/polo-* respectively, while final *-ent* and *-ance* become *-(e)ne/- (e)ni*.

- | | | |
|------|--------------------|---------------------|
| (32) | <i>president</i> | > <i>peresitene</i> |
| | <i>preposition</i> | > <i>peleposise</i> |
| | <i>professor</i> | > <i>porofesa</i> |
| | <i>element</i> | > <i>elemeni</i> |
| | <i>talent</i> | > <i>taleni</i> |
| | <i>balance</i> | > <i>paleni</i> |
| | <i>allowance</i> | > <i>'alauni</i> |

The quality of the additional vowels is determined by stress patterns and the vowels and consonants in adjacent syllables. An epenthetic /i/ is inserted into word-initial consonant clusters starting with /s/, while other clusters like /pr, pl, kr, kl, gr, gl, fr, fl/ are split by a vowel of the same quality as the vowel of the following syllable, for example *sipuni* 'spoon', *sitaili* 'style', *sikafu* 'scarf', *peresitene* 'president', *porofesa* 'professor', *polokalame* 'program',

piliki 'brick', *karama/kalama* 'grammar', *kirikiti* 'cricket', *kalapu* 'club', *felesi* 'fresh', *falai* 'fry'. Some exceptions are *purinise* 'princess', *perofeta*, *kaleve* 'gravy', *kelū* 'glue', *kulimi* 'cream'.

In the middle of a word, /u/ breaks up the cluster /mp/ after a stressed syllable in the original English word, for example *hamupeka* 'hamburger', *kamupani* 'company', *siamupini* 'champion', otherwise it is /i/, for example *sosipeni* 'saucepan', *koniseti* 'concert'. Exceptions are *aposetolo* 'apostle' and *sovaleni* 'sovereign'. Epenthetic vowels preceding a stressed syllable show assimilation, for example *apalai* 'apply', *amapasa* 'ambassador', *komipiuta* 'computer'.

The vowels added in word-final position show much greater variation. After /p/ and /m/ we usually find /u/, for example *sitapu* 'step', *kalapu* 'club', *pamu* 'pump', *pomu* 'bomb'; exceptions are *kelope* 'globe', *siepi* 'shape', *sikolasipi* 'scholarship', *pāma* 'palm-tree'. After /k/ the most frequent vowel is /a/, for example *loka* 'lock', *poloka* 'block', *sioka* 'chalk', but note the exception *siaki* 'check' and the fact that /a/ is also found in *pusa* 'box', *losefa* 'Joseph' and *kapeta* 'carpet'. Otherwise the added vowel is /i/, for example *kegi* 'gang', *maketi* 'market', *tipoti* 'teapot', or it is assimilated to the vowel of the preceding syllable, for example *afa* 'half', *kasa* 'gas', *sefe* 'safe', *sifi* 'shift', *polo* 'ball', *futu* 'foot'. In a few cases the vowel is /u/ after /f/, for example *sikafu* 'scarf'. As is evident from these various conflicting rules and their exceptions, it is extremely difficult to formulate rules for predicting the quality of the additional word-final vowel.

Words which would become homophonous through adaptation can be disambiguated through the choice of different epenthetic vowels. For example:

- (33) *jam* > *siamu*
germ > *siamā*

In some cases, a word is borrowed twice in different shapes and meanings:

- (34) *tapasā* 'compass (used for navigation)'
komepasi 'compass (used for drawing circles)' (Mosel et al. 2000)

Long English words are often abbreviated. If, for instance, the first three or four syllables are sufficient to identify the word, the fourth or the fifth syllable is dropped. For example:

- (35) *avocado* > *avoka*
association > *asosi*
electricity > *eletise*

6 Grammatical adaptation

In Samoan, the order of constituents in compounds is head plus modifier. This order is usually adhered to. For example:

- (36) *Koluse Mumu* 'Red Cross'
kamupani inisiua 'insurance company'

However, the English order of modifier plus head is retained when English compounds are borrowed as a single unit. For example:

- (37) *filimakeri* 'flea market'
netipolo 'netball'
pasiketipolo 'basketball' (Cain 1986:139)

While the Samoan lexicon originally did not distinguish between verbs and adjectives,¹¹ there are a few loan words ending in *-ka* which have to be classified as adjectives, as they are exclusively used in attributive function.

- (38) *atomika* 'atomic', as in *pulu atomika* 'atomic bomb', < *pulu* 'bullet', *atomi* 'atom' (Mosel et al. 2000)
metirika 'metric', as in *fua metirika* 'metric measure' (Mosel et al. 2000)

A similar borrowed adjective was in use in German times:

- (39) *kaisalika* 'imperial', as in *Malo Kaisalika* 'imperial government' (*O le Savali* 1905), < *kaisa* 'emperor'; borrowed from German *kaiserlich*

This means that borrowing has led to a new, though only marginal, word class in the Samoan language.

7 Planned borrowing in the Primary Education Materials Project

While working for the Primary Education Materials Project at the Curriculum Development Unit of the Department of Education of the Western Samoan Government, I had the opportunity to observe how people discussed borrowings in the two subject areas of mathematics and Samoan grammar. In mathematics, they decided to use the terms already in use in the teachers' manuals and in the classroom. Consequently, some loan words have varying phonological forms, which are all listed as headwords in the dictionary (Mosel et al. 2000). With regard to the adaptation of English /r/, we find both /r/ and /l/. The reason for the difference is not quite clear. Those words which also occur in everyday language like *selo*, *tikerī/tikelī*, *kalama*, and *kulupu* tend to have /l/ instead of /r/; *palaleli* seems to be a case of assimilation.

- (40) *'alei*, *'arei* 'array'
'eria 'area'
metirika 'metric'
numera 'number'
palaleli 'parallel'
perimita 'perimeter'
pirisemi 'prism'

¹¹ The few words which we classified as adjectives in Mosel and Hovdhaugen (1992:74), i.e. the words derived by *fa'ale-*, are full words which can be used predicatively (pers. comm. Agafili Tuitolovaa).

<i>puramita</i>	'pyramid'
<i>selo</i>	'zero'
<i>tapesima, talapesima</i>	'trapezium'
<i>tikelī, tikerī</i>	'degree'
<i>kalama</i>	'gram'
<i>kulupu</i>	'group'

Selection of grammatical terms was more difficult. In contrast to mathematics, grammar up until this time had not been taught systematically; furthermore, the terminology used in the teachers' manuals and two widely distributed Samoan books on the Samoan language was inconsistent (Larkin n.d.; Le Tagaloa 1996¹²). For example, the term '*upu fa'asino*, lit. 'pointing word', covers articles, prepositions, the combination of prepositions and articles, demonstratives and negatives (Le Tagaloa 1996:48–51). These types of words definitely constitute different word classes (Mosel & Hovdhaugen 1992), but being used to this inappropriate terminology, teachers had problems understanding why these word classes needed to be distinguished. Furthermore, from the very beginning the grammar was seen as a means of standardisation with a high symbolic value, so that the selection of each new term required careful consideration.

However, there are also a few useful old terms which were introduced at the turn of the century or even earlier and which are still in use (my earliest source is Neffgen 1904:54):

(41) <i>fuai'upu</i>	'sentence'
<i>vaueli</i>	'vowel'
<i>konesane</i>	'consonant'
<i>veape</i>	'verb'
<i>nauna</i>	'noun'
<i>soāveape</i>	'adverb' (lit. 'verb companion')
<i>soānauna</i>	formerly 'adjective', now 'attribute' (lit. 'noun companion')
<i>suiinauna</i>	'pronoun' (lit. 'noun representative')
<i>'upu numera</i>	'numeral' (lit. 'number word')

Other terms had to be invented. Wherever it seemed reasonable, the authors of the new grammar created Samoan expressions, for example

(42) <i>fui'upu nauna</i>	'noun phrase' (lit. 'bundle or cluster of nouns')
<i>fui'upu veape</i>	'verb phrase' (lit. 'bundle or cluster of verbs')

As there was no term for article and particle, I suggested *atikela* and *patikela*, but both terms were rejected as inappropriate because the ending *-ela* sounded like swear word. Therefore, *article* became *atikale*, and *particle* became *patikale*. Similarly, my attempt to Samoanise the term *preposition* as *peleposione* failed. Again, the argument was that it did 'not sound good', as *-sione* brought to mind the name *Sione* 'John' (but note that there are other loan words ending in *-sione*, as for example *penisione* 'pension'). The grammar team suggested *peleposione*, which shows the same kind of adaptation as *television*:

¹² Note that Larkin and Le Tagaloa are the same person.

- (43) television > *televisē*
 preposition > *peleposise*

In contrast to the more tolerant mathematicians who did not mind variation between /r/ and /l/, the language panel decided to consistently change English /r/ into /l/ in loan words. Consequently, when someone suggested replacing the term *peleposise* by *pereposise* 'preposition', the panel opted for *peleposise* because 'it sounded more Samoan'. For the same reason, *kalama* 'grammar' was preferred to *karama*, and the simultaneous use of *kalama* and *karama* in Le Tagaloa (1996) was criticised. This preference supports the hypothesis that the adaptation of English /r/ as /l/ is considered as a marker of Samoanness.

The language committee agreed that loan words should be used wherever it was difficult to find a corresponding Samoan expression. When in 1998 the grammar was discussed at a 'grammar meeting' with a group of thirty representatives from various kinds of schools and the National University, some participants rejected the whole book (*Te'ena, te'ena, togi i le lāpisi!* 'Reject, reject it; throw it into the rubbish!'). Their main objections were that the book contained 'too many new things', that well-established terms like *'upu fa'asino* were abandoned (see above), and that there were 'too many English words'. The committee members argued that especially in the area of science, mathematics and technology the Samoan language had already adopted many loan words; that these loan words were internationally accepted terms; that loan words do not do any harm to the language; and that it would be easier for the children to learn these international terms from the start, because they had to learn them anyway when learning English. These arguments, however, could not convince those who thought that the Samoan grammar book should be as purely Samoan as possible. Therefore, most English loan words were replaced by new terms which were coined by a committee of school inspectors:

- | | | | | |
|------|-------------------|------------------|-----------------------|--|
| (44) | <i>atikale</i> | 'article' | > <i>muānauna</i> | lit. 's.th. preceding the noun' |
| | <i>motale</i> | 'modal particle' | > <i>momo'o</i> | lit. 'desire' |
| | <i>nekativi</i> | 'negative' | > <i>tete'e</i> | lit. 'rejection' |
| | <i>patikale</i> | 'particle' | > <i>malamala</i> | lit. 'chips (of wood), small pieces (of fish)' |
| | <i>peleposise</i> | 'preposition' | > <i>faasinonauna</i> | lit. 's.th. indicating (the function of) the noun' |
| | <i>peletikate</i> | 'predicate' | > <i>tala'aga</i> | lit. 'explanation' |
| | <i>posesivi</i> | 'possessive' | > <i>fāiā</i> | lit. 'relation' |

Some people wanted to replace even the title of the book *O le kalama o le gagana Samoa* 'The grammar of the Samoan language' by *O le fau o le gagana Samoa* 'The structure of the Samoan language'. But in the end the word *kalama* was retained as it was regarded as a well-established term.

8 Concluding remarks

The preceding investigation shows that the acceptance of loan words and the way in which they are adapted are determined by several factors:

1. The speech situation or genre of text:
Non-adapted English words are predominantly found in spontaneous speech and advertisements in monolingual Samoan newspapers from New Zealand.
2. The concept denoted by the loan word:
Words associated with Christianity and other typical European concepts (for example *natura*) retain /r/, while others adapt it to /l/.
3. The subject area:
While the Samoans easily accept English loan words in the terminology of mathematics, they are less tolerant when it comes to grammar. Furthermore, the adaptation of mathematical loan words shows variation, which is not accepted in the adaptation of grammatical terminology.

The Samoans are well aware of the immense influx of English borrowings (and the influence of Anglo culture in general) and have developed several strategies to counteract it:

1. the consistent phonological adaptation of loan words in monitored speech and written language;
2. the use of /k/ instead of English /t/ in English loan words in the *T*-language, which disguises the English origin of these words; and
3. the replacement of loan words by new coinages.

The fact that long English words are rigorously abbreviated (for example *asosi* 'association') suggests that these words were first borrowed in the spoken language and that the Samoans do not care for regular formal correspondences between the original English words and their Samoan counterparts in the written language. The discussions about the grammatical terminology showed that the form of adaptation is not only determined by sound correspondences, but also by appropriateness in terms of associations with other words.

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13 *The spice of life: borrowing and Fiji's Indian languages*

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1 Introduction¹

The indenture system introduced by European colonialisation in the nineteenth century resulted in the displacement of over a million people from the Indian subcontinent, who were scattered to the far corners of the earth, from the Caribbean to the Indian Ocean, from Africa to the South Pacific (Siegel 1988:1). Indenture brought into contact different peoples—the labourers, the indigenous inhabitants, the European colonists—giving rise to complex phenomena of cultural, including linguistic, change.

In Fiji over 60,000 indentured labourers, or *girmitiyas*, arrived between 1879 and 1916. Various phenomena of dialect and language contact ensued, from the development of a new, unique variety of Hindi, now called *Fiji Bāt* or 'Fiji Hindi', to new patterns of bi- and multilingualism. In this paper I examine one aspect of the current sociolinguistic situation in Fiji which is a consequence of the language contact brought about by indenture—borrowing—taking as a point of departure the Indian languages spoken in Fiji today.

The major languages brought into contact in Fiji were the Indian languages spoken by the *girmitiyas*, the colonial language English, and the Austronesian language of the indigenous people, Fijian. Indian languages include not only Fiji Hindi, the language now used by nearly all Indo-Fijians (also called 'Fiji Indians'), but also three Dravidian languages—Tamil, Telugu, and Malayalam—spoken by small numbers of descendants of indentured labourers from South India. Language contact led to influences which have gone in nearly all possible

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directions: Indian languages borrowing from, and being donors to, English and Fijian, as well as the Dravidian languages borrowing from Fiji Hindi.

This complex pattern of contact raises some of the issues that are perennial in the study of borrowing: the difficulty of establishing the vector of borrowing and of dating some loan words; whether some borrowings are 'unnecessary'; what borrowing—and sometimes the absence of borrowing—tells us about cultural change; and the often fraught distinction between borrowing and code switching.

2 The languages of Fiji

The major languages of Fiji are Fijian, Fiji Hindi, and English. Fijian and Fiji Hindi have the largest numbers of native speakers, as Fijians make up slightly over half the population and Indo-Fijians slightly under half. English is used primarily as a second language, in particular as the only official medium of instruction after the first three years of primary school, as a commonly used lingua franca between native speakers of different languages, and as the predominant language of the media. A number of other languages are spoken by small communities (e.g. Rotuman, Kiribati, Tuvaluan, Gujarati, several Chinese languages and dialects). Of those, only Tamil, Telugu, and Malayalam will be considered here.

Of the 60,000 *girmitiyas* brought to Fiji between 1879 and 1916, three quarters were recruited in North India and transported from Calcutta. In 1903 labourers started being recruited also from the South, through the Madras depot, and these *girmitiyas* from South India eventually made up a quarter of all indentured labourers to Fiji (Lal 1983). The majority of those recruited in North India were speakers of varieties of Hindi, nearly all of which were dialects of Bihari or of Eastern Hindi (Siegel 1987:138–144). Many immigrants are also likely to have known the lingua franca of North India, Hindustani. Siegel argues that the language which developed on Fiji's plantations during indenture was a koiné, the result of contact between speakers of related varieties of Hindi and Hindustani.

The majority of labourers recruited in South India spoke Dravidian languages—unrelated to Hindi, a member of the Indo-European family. By the time these Dravidian speakers started arriving, twenty-five years after their North Indian fellow immigrants, the Hindustani koiné was firmly established on Fiji's plantations. From the start South Indians were a minority among the *girmitiyas* in Fiji, so that they were the ones who had to adapt and learn the plantation language, however reluctantly. In addition the use of Dravidian languages was covertly discouraged by the European overseers, who preferred to continue having a single lingua franca (Siegel 1987:161–162). It is no surprise that in these circumstances the Dravidian languages soon started being displaced. Fiji Hindi is now a language shared by all Indo-Fijians. For descendants of South Indians the shift to Fiji Hindi has been massive, as the results of a sociolinguistic survey show (Mugler 1998). The vast majority do not know the language of their India-born ancestors, a small number have a passive knowledge of it, and most of the few who can speak it are far more fluent in Fiji Hindi, which has become the dominant language of the community. Tamil, Telugu, and Malayalam nonetheless are still spoken in Fiji, albeit by small and ever dwindling numbers of speakers. An analysis of recordings in the three languages suggests that, along with losing speakers, they are also

displaying signs of structural attrition (for details, see Mugler and Lal 1995, 1999 on Tamil; Mugler and Vijayasarithi 1997 on Telugu; and Mugler and Saratchandran Nair 1997 on Malayalam).

3 Borrowings into Indian languages

3.1 Dravidian languages

The three Dravidian languages have borrowed from the languages they have come in contact with in their new environment, namely Fiji Hindi, English, and Fijian, in order of numerical importance. The numerous loan words from Fiji Hindi are an indication of the pressure that the Dravidian languages have been subject to since their speakers reached Fiji's shores.

3.1.1 Borrowings from Fiji Hindi

The most common borrowing from Fiji Hindi is the ubiquitous and versatile *acchā*, which can be glossed sometimes as 'good', 'okay, all right, fine'. With a rising intonation, *acchā* can function as a confirmation request ('okay?', 'all right?') or as an expression of mild surprise ('really?'). It is present in all three of Fiji's Dravidian languages.

It is not always easy to identify borrowings from Fiji Hindi in the Fiji varieties of Dravidian languages, since Dravidian languages in India themselves have incorporated a substantial number of loan words from Hindi as well as from Sanskrit. For instance, *bāsa* 'language', found in Fiji Tamil, was once used in the Tamil of India. It has long been archaic there, however, and is more likely to have been borrowed by Fiji Tamil from Fiji Hindi. Other cases are more straightforward, involving words of Hindi origin which are found in the Dravidian languages of Fiji but are absent from the varieties used in India, such as: *band* 'closed, stopped', *kalās* 'finished', *keti* 'farm' (Fiji Tamil); *ekdam* 'absolutely', *siksa* 'education' (Fiji Malayalam); *barābar* 'sufficient', *bimāri* 'sickness', *lekin* 'but', *rāstā* 'road' (Fiji Telugu).

The pronunciation of loan words from Fiji Hindi is adapted to the phonology of the Dravidian languages, the most noticeable feature being the non-aspiration of aspirated stops (Dravidian languages do not have stop aspiration). So, for instance, Fiji Hindi *khalās* 'finished', *kheti* 'farm', *kharāb* 'bad', are realised in Fiji Tamil with [k] rather than [k^h]. Similarly, in Fiji Malayalam, *ekdam* 'absolutely', is realised with the obligatory on-glide of Malayalam, as [ʔekdam].

Many nouns borrowed from Fiji Hindi are 'Dravidianised' with the noun class suffix *-am* (as are nouns borrowed from Hindi or Sanskrit into the Dravidian languages in India)—for example Fiji Telugu *dēram* 'duration' < Fiji Hindi *dher*.

Sometimes the phonological shape of a loan word or its meaning is the clue to its Fiji Hindi origin. The word *dyānam*, from Sanskrit, means 'knowledge' in this sentence in Fiji Tamil:

- (1) *Tamiḷḷe dyānam varadulla avugaḷukku*
 ‘They do not know Tamil.’ (lit. They do not get knowledge in Tamil.)

But in Indian varieties of Tamil the form of that Sanskrit loan word is *nānam* and its meaning ‘meditation’. In the Fiji Tamil word, both the initial cluster *dy-* of Hindi and the meaning indicate that it is more likely to have been borrowed from Fiji Hindi and nativised with the normal Dravidian nominal suffix *-am* than to have been inherited from Indian Tamil and then undergone phonological adaptation and a semantic shift.

Another example is Fiji Malayalam *siksa*, another word of Sanskrit origin, also found both in the Malayalam of India and in varieties of Hindi—including Fiji Hindi. But the primary sense of *siksa* in Indian Malayalam is ‘punishment’, while in Hindi it is ‘education’. This is the meaning intended in this Fiji Malayalam sentence:

- (2) *accanamamā ṛnalla matairi siksa koṭṭuttu*
 ‘Our parents gave us a good education.’

The argument that *siksa* came into Fiji Malayalam via Fiji Hindi may be strengthened by the fact that it is used in the same sense by second-language learners of Malayalam whose first language is Hindi (Saratchandran Nair 1994).

Other examples of the influence of Fiji Hindi semantics can be illustrated with the following idioms in Fiji Telugu, each of which is a collocation unknown in varieties of Telugu in India:

- (3) *vivaha samskaram* ‘marriage ceremony’
 (4) *dhanyavādamulu iccunanu* ‘to give thanks’
 (5) *kṣāma ceyyaandi* ‘to pardon, forgive’
 (6) *bajanam pādatāru* ‘to sing bhajans’ [Hindu devotional songs]

In the Telugu of India, *samskara* means ‘funeral rites’, while in (3) it is used in the more general Hindi sense of ‘rite, ritual, ceremony’.

In (4), instead of the verb *telupū* (‘to tell’) of Indian Telugu, we have Telugu *icci* (‘to give’), so that the idiom is a calque of Fiji Hindi *dyanyavad dena*.

Another calque is (5), lit. ‘to do/make pardon’, as in Fiji Hindi *sama* (or *maf*) *karna*. Here the verbaliser *incu* of Indian Telugu (*kṣamindamḍḍ* ‘to pardon’) is replaced by the Telugu verb *cestaru*, which is semantically equivalent to the very productive *karna* ‘to do’ of Fiji Hindi.

In (6), Indian Telugu would have *cestaru* ‘to do’ rather than *pādatāru* ‘to sing’, since *bhajans* among Telugu speakers in the state of Andhra Pradesh involve dancing, while when singing is involved, *kirtana*, rather than *bajana*, is used. Similarly, the verb *sep* ‘to tell’ (a dialectal variant of Standard Telugu *ceppu*) appears in the context of reciting *mantras*, instead of Indian Telugu *tsaduvu* ‘to read’. This is probably influenced by Fiji Hindi, where both *parhe* ‘to read’ and *bole* ‘to tell’ can occur in the context of bhajans.

3.1.2 Borrowings from English

A fairly large number of words of English origin have found their way into the Dravidian languages of Fiji. A few examples are *class, meeting, high school, English*, in Malayalam; *fast, mistake, fees*, in Tamil; *doorstep, town area, medical, family*, in Telugu; *doctor, government, master, hospital, committee*, in all three. All words of English origin which occur in the Dravidian languages of Fiji are also found in Fiji Hindi and are likely to have been borrowed from Fiji Hindi rather than directly from English, further evidence of the dominance of Fiji Hindi among descendants of South Indians.²

As with loan words from Fiji Hindi, in some cases phonological adaptation supports the view that words of English origin have been borrowed by the Dravidian languages from Fiji Hindi, rather than having come directly from English or been inherited from the Indian varieties.

Let us take as an example *school*, which occurs both in the Tamil of Fiji and that of India. In Indian Tamil it is realised as [skul], but in Fiji Tamil as [iskul], with the prothetic vowel which obligatorily precedes [s] + stop clusters in Fiji Hindi.

The Dravidianising ending *-am* which, as we have seen, is often suffixed to nouns borrowed from Fiji Hindi, is sometimes extended to words of English origin, such as in Fiji Telugu *dizainam* ‘design’. This appears to be rare, however. Perhaps this particular word is perceived by speakers as a bona fide Fiji Hindi word, so to speak, with its English origin not recognised.

Another clearly indirect borrowing via Fiji Hindi is *girmiṭ* ‘indenture’, from English ‘agreement’, a word unknown in either the Dravidian languages or the Hindi of India. (But see more on *girmiṭ* below.)

3.1.3 Borrowings from Fijian

Few Fijian borrowings appear in the data, reflecting perhaps some skewing of the topics discussed. Nonetheless, in the Fiji Telugu recordings, for instance, we find *koro* ‘village’, *kāibītī* ‘Fijian’, *nangonā* ‘kava’. As in the case of words of English origin, these Fijian words are all also present in Fiji Hindi, which again is likely to be the proximate source of borrowing.

Each of these words illustrates a different kind of adaptation—semantic, grammatical, and phonological—adaptations which support the argument about indirect borrowing. While in Fijian *koro* is the general term for ‘(traditional) village’, in Fiji Hindi it means specifically ‘Fijian village’ and is not extended to any rural agglomeration of dwellings inhabited by other communities.³ Conversely, *kāibītī*, from the Fijian noun *kaiviti* ‘Fijian person/people’ (lit.

² Many of these words are also found nowadays in the speech of educated speakers of Tamil, Telugu, or Malayalam in India. But this is a fairly recent development, and in Fiji these borrowings occur in everyone’s speech, regardless of their level of education.

³ In Fiji an Indo-Fijian rural community is called *gāō* in Fiji Hindi and in English a ‘settlement’. A ‘settlement’ can also be a Fijian rural community which is not a traditional village. This is called *rikotiko* in Fijian.

'native inhabitant of Fiji') is also used as an adjective, in the context of the Fijian language, for instance. These adaptations are identical to those undergone by these Fijian words as they were borrowed into Fiji Hindi. As for *nangonā*, the word for kava (*Piper methysticum*, a mildly narcotic plant), it has been borrowed in its Fiji Hindi form, with the definite article of Fijian incorporated (< Fijian *na yaqona*).

3.2 Fiji Hindi

Borrowings in Fiji Hindi have been described by Pillai (1975), Moag (1979), and in particular Siegel (1987, 1992a), whose lists of English and Fijian loan words are the most comprehensive. Here I want to review the evidence and revisit the issue of the vector of borrowing and dating of some English loan words, and the motivation for borrowings from Fijian.

3.2.1 Borrowings from English

In his discussion of the numerous English loan words present in Fiji Hindi, Siegel (1992a:103–107) traces the history of borrowing and identifies several major periods, each associated with different semantic domains. During the indenture period there was an influx of words associated with previously unknown aspects of plantation life (e.g. *astabal* 'stable', *kantāp* 'sugarcane flower' < *cane top*), some of which—such as *astabal*—have since been lost (see Siegel 1987:278–279 for a comprehensive list). Loan words for new objects also were borrowed by Fiji Hindi 'early in its development' (Siegel 1992a:104), such as *plet* 'plate', or *lorī* 'truck' (< *lorry*). Nearly all vocabulary related to post-indenture technology comes from English—from automobiles, radio, and television, to the more recent computers and videos. Finally, the spread of education after World War II, through the medium of English, has coincided with a new influx of loan words. These are most common in urban varieties of Fiji Hindi, probably because English is increasingly used in urban areas, particularly as a lingua franca among different ethnic groups. These recent borrowings have not however replaced their Hindi equivalents, which also continue to be used (e.g. *rāit* 'correct' < *right*, and *ṭhik*, *lak* 'luck' and *takdīr*).

Siegel also illustrates the various processes at work in these borrowings, such as semantic shift (e.g. *moṭar* 'car' < *motor*-[*car*]), restriction (e.g. *maṣṭa* 'male teacher' < *master*), and expansion (e.g. *buk* 'book, magazine, pamphlet' < *book*). He lists the many phrasal verbs which the very productive verb *kar*- 'to do', combined with English verb roots, has contributed to Fiji Hindi, both early on (e.g. *boil kar*- 'boil', *cek kar*- 'check') and more recently (*help kar*- 'help', *mis kar*- 'mix'). Siegel identifies two domains where English loan words have gradually replaced their Hindi equivalents, numbers and colour terms: numbers over twelve are now nearly always English loans, while words of Hindi and English origin are both used for basic colour terms (e.g. *reḍ* and *lāl*, *blū* and *nīlā*). He also comments on words which have two forms, an older one, probably from the indenture period, and a newer one, closer in pronunciation to English (e.g. *burūs* and *bras*, 'brush', *sakis* (< *circus*) and *filam*,

both meaning 'film, cinema'⁴). Siegel mentions a number of words which were borrowed from English for what must have been familiar items, in spite of the availability of Hindi equivalents (e.g. *āpul* 'apple', for *seb*, *rūm* 'room', for *kamrā*). He speculates that the items found in Fiji were perhaps perceived as different from those in India, which is plausible for material objects. Why the Hindi words for the four points of the compass should also have been replaced is intriguing, though. These may well turn out to be 'unnecessary' loan words, or perhaps the motivation behind their borrowing has not yet been discovered. I will return to some of these words.

Now that we have had this brief overview of English loan words in Fiji Hindi, I want to examine the oldest layer identified by Siegel, those 'from the indenture period'.

Elsewhere, Siegel (1992b:119) suggests that some Fiji Hindi words of English origin 'may have been coined in other plantation countries and may have been part of a more international Plantation Hindustani'. He mentions *kulambar* 'overseer' (< *call number*), *sukhlāi* 'replacing dead plants with new', (< *supply*), and *dīpū* 'depot', the first two also being found in Trinidad Bhojpuri—the second as *suplāi*—, while *dīpū* is also found in Suriname (Siegel 1992b:119). In fact, *depot*—there is no indication of its pronunciation—also appears in Trinidad Bhojpuri (Mohan & Zador 1986:307). Siegel (1988) goes slightly further in his introduction to a volume on overseas Hindi, in which he notes that varieties of transplanted Hindi share a number of unique features—including some of the loan words just cited, along with *girmiṭ* itself—and speculates (1988:15) that this 'may suggest a common origin in India rather than parallel development', although he cautions (1988:16) that other factors may explain these shared characteristics, such as spread from one colony to another by labourers and/or overseers, or the influence of Bazaar Hindustani.

In the same volume Mesthrie (1988:159), in his study of lexical change in South African Bhojpuri, cites items related to 'the business of indenture', such as *Kalkatīā* 'one who had embarked ship at Calcutta', *kūlī* in the new sense of 'a field worker' rather than the old sense of 'porter', *jahājī bhāū/bahin* 'a co-passenger to one's new colony' (lit. 'a ship's brother/sister'), and the English loan words *girmiṭ* and *girmiṭyā*. He concludes: 'That these must have already been in use prior to their departure from Calcutta is suggested by the fact that they were in use in most of the colonies at some stage or other'.

Earlier in the discussion, Mesthrie (1988:159) goes further:

Of course, borrowed items of vocabulary were not new to incoming indentured migrants. Indic languages have a long history of playing host to words from various sources — Dravidian languages, Persian, Arabic and European languages, chiefly English. The North Indian villagers setting out for the colonies already had in their linguistic repertoire some words from English: *bakas* 'box', *gilās* 'drinking glass', *ṭesan*, 'station', *rel* 'rail', *dipī* 'deputy', *kalekṭar* 'tax-collector', *tamākū* 'tobacco', etc.

Later Mesthrie (1988:162) also lists *rel* 'rail', *rel-gāri* 'train', *moṭar* 'motor vehicle' as having been in use in Indian Bhojpuri prior to migration. Of these, *gilās*, *moṭar*, and *tamākū* appear in Siegel's (1987:278–279) list of loan words 'from the indenture period'. And

⁴ Older speakers of Fiji Hindi (roughly, those over 60) tend to use *sakis*. In the past few years, young people, probably under the influence of the plethora of American programs on television, have started also using *movie*, which in turn may eventually displace *filam*.

bākas—now used with a pronunciation closer to English—is included in Hobbs' (1985:127) dictionary. Except for *kalekṭar*, the other terms are also used in Fiji Hindi. The pronunciation *ṭesan*, rather than the newer *iṣṭesan*, is used by older speakers. Elsewhere, Mesthrie mentions *anṭi* 'older female relative or friend' and *kazin brada/kazin sista* 'male/female first cousin' (Mesthrie 1990:349), both also used in Fiji Hindi.

Although Mesthrie does not cite any source for these loan words from English in the speech of North Indians, his hypothesis that they had been borrowed before indenture is certainly plausible. English has had a presence on the subcontinent since at least 1600, with the establishment of the East India Company. The use of English was spread initially through the Company's trading factories in the seventeenth century (Surat in 1612, Madras in 1639–40, Bombay in 1674, and Calcutta in 1690), and the establishment by missionaries of schools at the beginning of the eighteenth century provided an additional path of diffusion (McArthur 1992:504–505). This is also when Indian languages, and in particular Hindi and Hindustani, started contributing loan words to English: *dungaree* (first recorded instance in the *OED*, 1613), *loot* (1669), *bungalow* (1676), *shampoo* (1762), *dinghy* (1794), *thug* (1810), *gymkhana* (1861). Conversely, loan words have been common in Indian English since the sixteenth century (McArthur 1992:506). It is likely that the parallel process of borrowing English words into Hindi or Hindustani would also have started early in the history of English in India. Indeed Singh (1995:87) notes that most Indic loan words in English 'pre-date the emergence of Khari Boli as a literary dialect [i.e. Standard Hindi] or are learned borrowings from Sanskrit.'

In his discussion of the development of Fiji Hindi, Siegel (1987:155–159, 193–196, 1988:12) argues that, alongside the various regional dialects and subdialects of Hindi, two other North Indian speech varieties went into the making of the koiné which developed on Fiji's plantations: Hindustani, the lingua franca of North India and urban centers in India, and in particular its basilectal end, Bazaar Hindustani. India has a long tradition of internal migration, and in the North there is evidence of people moving from place to place searching for work, confirmed by the fact that many immigrants to Fiji were recruited outside their home districts (Lal 1983:65–67). Internal migrants in North India would have acquired a knowledge of the Hindustani lingua franca—famously called by Tinker (1974:52) 'the language of the emigration traffic'—and since most of the *giritiyas* were uneducated, the variety they were most likely to know was Bazaar Hindustani, according to Siegel. He attributes to the probable influence of Bazaar Hindustani a number of features of Fiji Hindi, including the following, which are shared by other varieties of overseas Hindi: the present-tense copula *hai/he*, the noun and pronoun pluraliser *log*, and distinctive lexical items such as *māāg-* 'want' and *khalās* 'finished'. I would like to argue that a number of loan words from English also may have come into Fiji Hindi via Hindustani, and some in particular from Bazaar Hindustani.

The most detailed description of Bazaar Hindustani—and Siegel's major source of evidence—is Chatterji (1972 [1931]). Although Chatterji does not discuss loan words as such, he mentions a few borrowings from English in his description of phonology: *haspatāl* 'hospital', *ardāli* 'orderly', *ṭikaṭ* 'ticket', *dagdār* 'doctor' (1972:225). Elsewhere in his grammatical sketch we find *māstar* 'teacher' and *iskul* 'school' (1972:233). Other borrowings from English appear in some of the texts he appends to his article (1972:244–256). An 1867

Bengali newspaper notice contains *dibizan* 'division', *nambar* 'number', *holding nambar* 'holding number', and *kelem* 'claim'. Other texts, from 1916, include *hoṭel* 'hotel', *kaṭlēt* 'cutlet', *hāf-sūl* 'half-soles', *kālij* 'college', *Jisū* 'Jesus', *kāptēn* 'captain', *lāt* 'lord', *jel* 'jail', *bāskil* 'bicycle', *bakas* 'box', *iskul* 'school', and the intriguing *koken* 'cocaine' (1972:251–256). Nearly all these words occur or used to occur in Fiji Hindi (only *ardāli*, *holding nambar*, *kaṭlēt*, *hāf-sūl*, *lāt*, and *koken* seem absent). More generally, Chatterji's data is evidence that there were English loan words in Bazaar Hindustani.

Another interesting work is *The Mālim Sāhib's Hindustāni* (Willson 1939), a handbook for young naval officers 'who wish to acquire the low Hindustani spoken by native crews, coolies, servants and longshoremen generally round the coast of India' (1939:front cover). This variety of Hindustani, which is 'in common use both ashore and afloat', is referred to by its author as 'Bazaar Bat' (1939:preface, no page number) and the description fits Bazaar Hindustani. The first edition of that book was published in 1920 (Michael Shapiro, pers. comm.), so the language described must have been used, at the latest, towards the end of Fiji's indenture period, although some features may be much older. The handbook contains an impressive lexicon, which abounds in English loan words. Besides a fairly large number of technical nautical terms (e.g. *compass*, *winch*, *guy*, *derrick*, *tweendeck*, *captain*, *bridge*), there are a number of general lexical items, such as *doctor* 'doctor', *hospital* 'hospital', *boot* 'boat', *number* 'number', *minnit* 'minute', *apple* 'apple', *boil* 'boil', *botli* 'bottle', *brūs* 'brush', *iskrū* 'screw', *keli* 'kettle', *police wallah* 'policeman', *sōp* in *sāft sōp* 'soft soap', *try kerner* (i.e. *karna*) 'try'.⁵ All of these also exist in Fiji Hindi and are listed in Hobbs (1985), and *kampani* 'company' is also listed by Siegel. Besides *try kerner*, there are three other phrasal verbs with *kar-*: *scrāp kerner* 'to scrape', *tāt kerner* 'to tighten', and *wipe kerner* 'to wipe'. It seems that *kar-* was productive in absorbing English loan words into phrasal words already in Bazaar Hindustani—another feature also found in other varieties of overseas Hindi, such as Trinidad Bhojpuri (Bhatia 1988:191) and South African Bhojpuri (Mesthrie 1988:164).⁶ And while the lexicon does not contain the *iṣīma* of early Plantation Hindustani in Fiji, it does list *iṣīm* 'steam'. The word *tanki*, glossed as 'tank, cistern', also appears, as it does in Fiji Hindi (as both *ṭānkī* and *ṭenk* in Hobbs (1985), again a case of an older form and a newer one). The word is included in Siegel's list of English loan words from indenture, but according to the *OED* English *tank* is more likely to be a loan word from an Indian vernacular than the other way around (first recorded instance 1616; see also Yule & Burnell 1996 [1886, 1902]).

As for English loan words in general Hindustani and Hindi, Bhatia (1967) notes that English first spread in India through Bengal, Bihar, Orissa, Madras, Bombay, then into the interior of Hindi-speaking areas, and that the first effect was on Bengali, then Hindi, through Bengali. The spread of English in India accelerated sharply after the first war of independence in 1857, when the northern kingdoms came under British power. The

⁵ Willson's transliterations are idiosyncratic, with many words spelled as in English, while in others he has attempted to give a more 'phonetic' spelling. Consonants realised as retroflexes are not indicated.

⁶ Singh (1995:90) claims that Hindustani has borrowed 'virtually no verbs' from English, this being in part explained by the productivity of the verbalising particles *kaarnaa* and *honaa* (Singh 1995:104, fn. 2).

development of transport and communication helped, with the first railways appearing in 1853–54 and the first main roads in 1843–53. It is reasonable to assume that, besides spreading English and English loan words in general, these developments promoted the borrowing of words like *moṭar* and *rel* related to transport itself. Words like *captain*, *company*, *council*, *gazette*, *acting*, *lord*, *India*, *notice*, *governor*, *license*, *government*, among others, are found in the first two newspapers in both Bengali and Hindi (1818 and 1826). Bhatia also cites two theses on the influence of English on Hindi at the end of the nineteenth century, one, dated 1893–98, is on ‘Hindi before Bharatendu’,⁷ the other is a 1950 study of the influence of English on Hindi language and literature from 1870 to 1920. Finally, among Bhatia’s list of over a hundred English loan words in the novels of Prem Chand (1904–38) are the following, also found in Fiji Hindi: *doctor*, *police*, *motor*, *jail*, *minute*, *station*, *deputy*, *school*, *government*, *college*, *governor*, *hospital*, *ticket*, *rail*, *company*, *master*, *number*, *bottle*, *captain*, *glass*, *box*, *bicycle*. Of the ten novels included as sources of data, seven were published prior to 1930.

There must have been a good deal of overlap between English loan words in dialects of Hindi, in the lingua franca Hindustani, and in the basilectal Bazaar Hindustani. If Bhatia is right and many English words were first borrowed into Bengali, would they have been borrowed in turn into Hindustani first, perhaps through Bazaar Hindustani, and some perhaps then into regional dialects of Hindi? Might some loan words into Fiji Hindi have come directly from the regional dialects and subdialects of Hindi that went into the making of the Plantation Hindustani koiné, while others perhaps came through Hindustani and/or Bazaar Hindustani? With greater access to studies of Bazaar Hindustani and of English loan words in pre-indenture Hindi/Hindustani, it might be possible to date loan words more precisely and to tease out the vector of borrowing.

3.2.2 Borrowings from Fijian

Fijian’s contribution to the lexicon of Fiji Hindi, as shown by Siegel (1992a: 103) has been primarily in the domains of local flora and fauna (e.g. *ūbī* ‘yam’, < *uvi*, *dākuā*, ‘kauri tree’, *wālū* ‘Spanish mackerel’, *kuītā* ‘octopus, squid’), other tropical items unfamiliar to the early girmitiyas, who were mostly from temperate areas of India (*bīlimbīlī* ‘bamboo raft’, *ānuānū* < *yanuyanu* ‘island’, *bode* < *voce* ‘oar’, *dakāu* < *cakau* ‘reef’), and objects or concepts relating to Fijian culture (*meke* ‘Fijian dance’, *moto* ‘spear’, *tāmbūā* < *tabua* ‘whale’s tooth’, *lālī* ‘slit gong’). According to Siegel, these words were borrowed into Fiji Hindi on small plantations where Indian labourers worked side by side with Fijian and other Pacific Island labourers and where the lingua franca was Fijian or Pidgin Fijian. Here again then, the path of borrowing may have been indirect, from Fijian to Pidgin Fijian to Fiji Hindi. Siegel also notes that Hindi *kar-* is just as productive with Fijian as with English borrowings (e.g. *kerekere kar-* ‘to request, ask a favour’,⁸ *lobo kar-* ‘to bake in a pit oven’ < *lovo*, *sevusevū kar-* ‘to make a

⁷ The writer and poet Bharatendu Harishchandra (1850–85).

⁸ *Kerekere karo* is often translated as ‘begging’, as in Siegel (1987:273). This gloss seems to have been inherited from early translations of the Fijian term by Europeans who did not fully understand

customary presentation of kava', *talānoā kar-* 'to sit around telling stories'). The major features of phonological adaptation are the realisation of the Fijian approximate [β] as [b] (*uvi* > *ūbī* 'yam'), of [ð] as [d] (*cakau* > *dakāu* 'reef'), and of the prenasalised voiced velar stop [ᵑg] as a voiced nasal consonant [ŋ] (*māmāngī* < *māmāqī* 'miserly', *mātāngālī* < *mataqali* 'extended family'). A number of nouns have been borrowed with the definite article of Fijian fused (*naibī* < *na ivi* 'Fiji chestnut', *nangonā~nengonā* < *na yaqona* 'kava', *nakāi* < *na kai* 'freshwater clam', *nangio* < *na qio* 'shark').

One particularly significant domain is that of kava drinking, which is of great spiritual, ceremonial, and social importance in Fijian culture and has been adopted enthusiastically by Indo-Fijians as a social custom, to the extent that kava (or 'grog') drinking has become a central part of Indo-Fijian culture. Reproduced below are the loan words associated with kava listed by Siegel (1992a:103), some with my slightly modified glosses:

<i>nangonā, nengonā</i>	< <i>nayaqona</i>	kava
<i>bīlo</i>	< <i>bilo</i>	half coconut bowl for drinking <i>yaqona</i>
<i>kānikānī</i>	< <i>kanikani</i>	dry, scaly skin caused by excessive <i>yaqona</i> drinking
<i>kasou</i>	< <i>kasou</i>	very drunk
<i>kosā</i>	< <i>kosa</i>	dregs
<i>lewenā</i> ⁹	< <i>lewena</i>	stem of the kava plant
<i>wākā</i>	< <i>waka</i>	root of the kava plant
<i>tākī</i>	< <i>taki</i>	serve <i>yaqona</i> (used as a command)

There is also *sevusevu karo*, already mentioned.¹⁰ The words *tānoa* 'yaqona bowl' < *tānoa*, *mādā* < *maca*, an exclamation by fellow drinkers when a person has finished drinking a *bilo* of *yaqona*, and *dībīdībī* 'yaqona stem slices' < *civicivi*, have also been borrowed (Paul Geraghty, pers. comm.).

I am tempted to add to this list *talānoā(karo)*, since 'sitting around telling stories' typically happens when people are sitting around the 'grog bowl', and *talanoa* is indeed a central element of kava drinking.

It is interesting that two kinship terms, *tabāle* < *tavale* 'brother-in-law: wife's brother' and *kārūā* < *karua* 'wife's sister's husband' have been borrowed. They are used most often (the second, only) as terms of address. Both words seem to be used primarily as part of a joking register (Roshila Singh, pers. comm.), as they can be indeed in Fijian, since joking is

the system of rights and obligations of exchange among the Fijians. Fijian *kerekere* is glossed as 'to request' in Geraghty (1994), and Siegel (1992:103) elsewhere gives the meaning of the Fiji Hindi phrasal verb as 'ask for the possession of another'. This is closer to the mark, though unnecessarily awkward, I think. In *ham ek choṭaa kerekere kare māāṅta*, for instance, a close translation would be 'I want to make a small request' or 'I want you to do me a small favour'.

⁹ Also realised as *lāwenā*.

¹⁰ Although kava drinking among Indo-Fijians is social and does not involve a formal ceremony (other than some ritual hand-clapping), a *sevusevu* can of course be mentioned by Indo-Fijians in the context of a Fijian ceremony, in which they can on occasion be participants. Indeed Indo-Fijians have been known to present a *sevusevu* in fluent Fijian.

traditionally part of these kinship relationships, the basis of the joke being that if I call you my *tavale*, I am indirectly claiming your sister as my wife (Pio Manoa, pers. comm.).

Other terms referring to persons include *mārāmā* 'woman, wife', *turāngā* 'man, usually an important man', *kāilomā* 'part-European' (i.e. person of mixed descent, usually European and Fijian), *kāibālāngī* 'European' (i.e. Caucasian, or 'White') *kāibīti* 'Fijian'. One such item, not listed by Siegel, is *kāimandarāsī* '(descendant of) South Indian' < *kāi* 'person, native inhabitant', and *Madrasī* 'Madras' (in the pre-independence sense of the Madras Presidency, which covered most of South India).

Another small but significant semantic field includes exclamations, such as the greeting *būlā*, the polite form *tulou* (also as *cilou* < *tilou*) 'pardon me', and the interjection *sā*, expressing surprise. One could add other interjections, such as *oilei*, which can express surprise or sympathy, *so* and *sombo*, exclamations of disapproval, and *isa*, which can convey longing, nostalgia, and general sentimentality.¹¹

Of the 125 or so Fijian loan words listed by Siegel (1987:272–277), all but about fifteen fit into the semantic fields listed above—including a separate list of over forty terms relating to marine life. Many of the fifteen remaining words have negative denotations: *bādū karo* < *vacu* 'to punch, with fist', *bimbā karo* < *veiba* 'to quarrel', *budesā* < *vucesā* 'lazy', *dālā* < *cala* 'error', *kailā maro* 'shouting, making noise', *kātakāta* 'angry' (lit. 'hot'), *lāmusonā* < *lamu sona* 'very frightened', *lengā* < *leqa* 'problem, esp. financial', *māmāngī* < *māmāqī* 'miserly'. Perhaps using a loan word softens the negative meaning conveyed. Similarly, the borrowing *bukete* 'pregnant' may function as a euphemism. Another possible explanation is that some of these loan words may be used because what they denote is seen as typical of Fijians. While quarrelling and being lazy indeed fit the stereotype, being miserly is a far more common stereotype Fijians have about Indo-Fijians. Maybe it is such a common accusation indeed that the word, through sheer frequency of use towards Indo-Fijians, has made its way into their language (as it has in Fiji English).

3.2.3 Borrowings from Dravidian languages

From our discussion about the sociolinguistic history of Dravidian languages in Fiji, it should not be surprising that they appear to have contributed exceedingly few loan words to Fiji Hindi. The most common of these may be the formal greeting and leave-taking *namaskāram*—while its synonym *dāsnam* is rarely used now. The only domain in which there has been any significant—if very limited—borrowing is kinship terms. In her Fiji Hindi–English dictionary, Hobbs (1985) flags words 'used primarily by South Indians' and all the words that carry this tag (except for the two greetings mentioned above) are kinship terms: *attā* (< Telugu) or *atte* (< Tamil and Malayalam) 'aunt: father's sister', *chūtī* (< Tamil) 'aunt:

¹¹ Perhaps the meaning of *isa* is best explained through examples of its use: one can say *isa* when a relative or friend is leaving—especially if it is for a long time—and one is sad to see him or her go. One can also say *isa* when the friend returns and one is happy to have been reunited. If you want to exclaim on the incredible cuteness of a baby, I recommend *isa*, which has the perfect connotation of sentimentality verging on maudlinness.

mother's sister', *pāṭi* (< Tamil) 'grandmother', *tātā* (< Tamil) 'grandfather'. To this short list we can add *akka* (< Tamil, Telugu, Malayalam) 'older sister'. Hobbs also identifies as South Indian *bhābhī* (sister-in-law: brother's wife or husband's sister) and *māmā* (uncle: mother's brother or sister's husband) and *māmī* (aunt: mother's brother's wife), but these are in fact used by all Indo-Fijians.

These few Dravidian kinship terms have not replaced (other) Fiji Hindi equivalents however, but are used alongside them. They are used primarily among descendants of South Indians, and as such function as identity markers, but other Indo-Fijians seem to have at least a passive knowledge of them, and some use them when conversing with people of South Indian origin.¹² It is well known that kinship terms are a domain in which lexical variation reflects different facets of the identity of Indians and overseas descendants of Indians. In Fiji, Muslims, just like descendants of South Indians, have distinct words for some kinship relationships, while most kinship terms are common to all speakers of Fiji Hindi.

The only other loan word I am aware of is the negative *ille* (< Tamil), which apparently is sometimes used jokingly, as in the phrase *paisa ille* 'no money' (Veena Khan, pers. comm.). Although *ille* seems to be fairly rare, the use of borrowings for humorous purposes (as with the two Fijian kinship loans mentioned above) is common to many communities in Fiji—and elsewhere—and we will come back to it.

While the Dravidian languages have borrowed substantially from Fiji Hindi, borrowing in the other direction has been negligible. This essentially one-way traffic is a reflection of the sociolinguistic history of Indian languages in Fiji, and in particular of the late arrival of speakers of Dravidian languages, a quarter of a century after their North Indian fellow *girmityas*, and of their minority position ever since.

Subsequent to the koineisation which led to Plantation Hindustani, Siegel (1987:163–183) argues that in the development of Fiji Hindi there was also pidginisation, which took place when speakers of languages unrelated to Hindi had to use the plantation lingua franca: Fijians, other Pacific Islanders, but in particular the indentured labourers who were speakers of Dravidian languages. Siegel (1987:183) himself wonders why, if Dravidian languages had an input in the Pidgin Hindustani on plantations, they seem to have contributed no lexical items. Fear of ridicule may have been a reason, he speculates. There is evidence for that and certainly, many descendants of South Indians are still teased today about their 'accent' in Fiji Hindi—essentially a result of the non-aspiration of aspirated stops, which is a stereotypical feature of 'South Indian' Fiji Hindi. It would have been far easier during indenture, to avoid ridicule, to drop lexical items than to add a series of phonemes to one's repertoire. The absence of aspirated stops in the speech of South Indian *girmityas* was also, in comparison with the general Plantation Hindustani of Fiji, a loss of distinction—a simplification typical of the pidginisation process which led to the formation of Pidgin Hindustani. The near absence of loan words from Dravidian languages also is a reflection of their unequal relationship with

¹² According to Paul Geraghty (pers. comm.), this is similar to the situation among Fiji descendants of labourers from the Solomon Islands and Vanuatu (then the New Hebrides) who know longer speak their ancestors' language but have retained some kinship terms, such as *apu* 'grandfather' < Filafou (Vanuatu), and *nenā* 'grandmother' among the descendants of Solomon Islanders now living in Wailoku (Suva).

Fiji Hindi from the start. The fact that those few kinship terms which have survived are restricted to use by, and to some extent, with and about, descendants of South Indians, supports Siegel's suggestion that Dravidian speakers during indenture, to avoid ridicule, may have consciously avoided distinctive vocabulary 'in talking to outgroup members'.

4 Borrowings from Indian languages

4.1 Fiji Hindi into English

Fiji Hindi has contributed a fair number of loan words to Fiji English, which Tent describes (this volume). As Tent observes, the vast majority refer to objects or concepts typical of Indian culture, in particular religious terms and food. Here I will mention only a few examples, including a small number not listed by Tent, and comment on some of these loan words. One of the most common is the exclamation *acchā* 'good, okay, fine', as a confirmation request (okay?) and—perhaps less frequently—in its other sense of 'really?' (marking surprise).

Some loan words are religious terms, such as *pūjā* 'prayer', *bhajan* 'devotional song', *ḍīwalī* 'Hindu festival of lights', and *tulsi* 'sweet basil'.¹³ While these words relate to Hinduism, other loans relate to Islam, such as *Ramzan* 'Ramadan, the Muslim fast', *maulvī* '(priest)'.¹⁴

Another important semantic field is food, both raw and cooked, and here spices and sweets figure prominently (*sarso* 'mustard seeds', *hardi* 'turmeric', and the sweets *barfi* and *gulāb jāmun*). Also featured are savoury snacks (*sāmosā*, *bhujā*) and different kinds of bread (*roti*, *puri*). Among the spices and herbs, *dhaniā* 'coriander', *jīrā* 'cumin', are known only by their Fiji Hindi names, and speakers of Fiji English are not normally aware of the English equivalents, which attests to the complete assimilation of these loan words. The same is true of the vegetables *bhindi* 'okra' and, perhaps to a slightly lesser extent, *baigan*, whose English equivalents *aubergine* and *eggplant* seem to be known to very few.

Other terms relating to Indian culture include items of clothing like *sāri* and *choli* 'blouse worn with a sari', *dhoti* (now obsolescent and used only in reference to the past, since the garment is no longer worn) and *dhobī* 'washerman or -woman', originally a caste name.¹⁴

The word *sangam* is not from Fiji Hindi but from Tamil. It is perhaps the only Dravidian loan word into English, via Fiji Hindi. Although its original meaning is 'association', in Fiji it refers only to the Then Ikya Sanmarga Sangam, a South Indian cultural organisation, and as such should perhaps not even be counted as a genuine loan word, but simply a proper noun.

The Fiji Hindi loan words most directly linked to the 'business of indenture' are *sardār* now used as 'foreman' or '(sugarcane cutting) gang leader', and possibly *bhai*, *bhaiya* and

¹³ Sweet basil is a sacred plant among Hindus, hence its classification under 'religious terms'. Its culinary use is not known in Fiji.

¹⁴ The Indian caste system traditionally did not travel well, since Hindus believed that one lost caste crossing the ocean's 'black water' or *kālā pānī*. There are only marginal remnants of the caste system in today's Fiji (see Jayawardena 1971; on the loss of caste terms, see Siegel 1992a:95–96).

bahini ‘friend’ (lit. ‘brother’ and ‘sister’), through their use in the expression *jahājī bhāī/bahin* noted above, along with *girmīṭ* and its derivative *girmīṭiya* (both unrecognisable to nearly all speakers of Fiji Hindi as loan words from English). These and other Hindi loan words in Fiji English, as Tent notes, are used in the English of other former plantation colonies which had Indian indentured labourers, and indeed some are common to general English. As has been mentioned, some of these words indeed were borrowed into English as early as the beginning of the seventeenth century, long before indenture in Fiji. The most likely scenario is that the words which were borrowed by Fiji English were introduced through the Indian presence since indenture. Would anyone have had cause to talk about *bhajans* or *puri* in Fiji before the Indian labourers arrived? Yet I am intrigued by the possibility that some of these loan words (for example *ghazal*, *curry*, *paisa*, *kedgerie*) may have been used by Europeans, perhaps especially those familiar with India.¹⁵

4.2 Fiji Hindi into Fijian

As is the case for Fiji Hindi loan words in English, most words that Fijian has borrowed from Fiji Hindi relate to Indo-Fijian culture. Indeed, many of the loan words borrowed into English and Fijian are the same. Out of a list of over 160 Fiji Hindi loan words which I culled from the Fijian monolingual dictionary (*iVolavosa* 1999), the most frequent semantic field represented, with over thirty items, is food: *baigani* < *baigan* ‘eggplant’, *aluā* < *halwā* ‘a kind of sweet’, *bidi* < *bindhi* ‘okra’. Among these, spices again figure prominently: *meti* < *methī* ‘fenugreek’, *sarasō* < *sarso* ‘mustard seed’, *aradī* < *hardi* ‘turmeric’, *zira* < *jēra* ‘cumin’. There are also a number of religious terms: *ḍiwali* ‘the Hindu festival of lights’, *ḍia* < *ḍiya* (Diwali) candle’, *aqarabati* < *agarbatti* ‘incense’, *molovī* < *maulvi* (Muslim) priest’; and words for other cultural objects or concepts: *sari* ‘sari’, *dolaki* < *ḍholak* ‘a kind of (musical) drum’, *kulidādā* ‘a game (played with two sticks)’, *piala* ‘enamel bowl’, *pala* < *pāl* ‘mat (made of sacks sewn together)’, and *Fizibat* < *Fiji bāt* ‘Fiji Hindi’. The interjection *are*, which can express surprise or anger, has also been borrowed, adding to the already rich repertoire of Fijian exclamations.

Some of the Fiji Hindi words related to indenture have made their way into Fijian, such as *saratari* < *sardār* ‘overseer’, and *qirimiti* (< *girmīṭ* < *agreement*) itself. The issue of the vector of borrowing arises again with respect to Hindi loan words which have also been present in English for a long time, such as *guru* ‘guru, religious teacher’, or *kari* ‘curry’. For this last, Fijian has also borrowed *tarakari* < *tarkāri*, more likely to have been borrowed directly from Fiji Hindi, while *karivouta* is more likely to have been borrowed directly from English ‘curry powder’ than to be a loan-blend. Interestingly, *muluki* < *muluk* ‘place of origin’, one of the words which may have come into Fiji Hindi from Bazaar Hindustani (e.g. Chatterji 1972:244, 256), is glossed in the Fijian Dictionary as ‘*nakoro*’, ‘home

¹⁵ Another intriguing issue is the possible contribution of loan words from Indian languages through the presence of ‘Fiji’s first Indian settlers’ (Clunie 1984), Bengali-speaking lascars from the Malabar coast (in the modern Indian state of Kerala) at the beginning of the nineteenth century. (Thanks to Paul Geraghty for this reference.)

village/ancestral village'. According to Siegel (1987:195), in Fiji Hindi *muluk* refers to India, and it does have that specific meaning among the few remaining India-born girmitiyas—similarly *muluki/mulukin* is used in Natal for men/women who originated from the same district in India (Mesthrie 1990:348). The Fiji Hindi word is far less common nowadays, but when it is used by Fiji-born Indo-Fijians, it refers to their home place in Fiji, so the general meaning 'place of origin' remains alongside the specific one. In Fijian, *muluki* does not have the restricted meaning of 'India' or even of 'place of origin of Indo-Fijians', but is used as an equivalent of *nakoro*, with this same general meaning, and can just as well refer to the home village of a Fijian (Paul Geraghty, pers. comm.). The word *muluki* is also used in the same teasing, slightly derogatory sense of Fijian '*nako*' (<*nakoro*), 'country bumpkin, yokel', both when used about Indo-Fijians, where it can refer specifically to people 'from the old country' (India), and about rural Fijians (Pio Manoa, pers. comm.).

Over a third of the loan words from Fiji Hindi listed in the Fijian Dictionary are flagged as belonging to a joking register (*veiwali*). These are mostly high frequency words (in Fiji Hindi) including verb forms in which the imperative *-o* suffix has been fused, as in Pidgin Hindustani (Siegel 1987:173–180). Examples of verbs are *ao* 'come', *baito* < *baitho* 'sit', *banao* 'make', *bolo* 'speak, talk', *dinimaro* > *dīnmāro* 'to waste time', *pio* 'to drink'. Other loans include *paidar* 'to walk around' (< *paidar* 'on foot'), *paisā* 'money', *nāsā* 'drunk', *muruqā* < *murgā* 'chicken'. We have already seen the jocular use of borrowings—a common linguistic phenomenon—with the use of Fijian *tavale* and *karua* in Fiji Hindi, and Dravidian (Tamil) *ille* in Fiji Hindi *paisa ille*. Siegel (1995) shows how these words, used by Fijians among Fijians, signal joking on the part of the speaker, thus marking the informality of the situation and solidarity with the listener. Joking in Fijian culture is characteristic of certain kinship relationships, such as between *tavale* (see above) or people belonging to communities which are related through connections in the remote past and have the same ancestral gods (*tauvū*). Fiji Hindi words can be used in these joking contexts, where they function as teasing insults—perhaps implying that the addressee has 'Indian' characteristics. The appropriation of Fiji Hindi words thus serves to extend in a particularly creative way the joking register of Fijian, a register with which Fijians fulfil kinship obligations.

The theoretical implications of this use of Fiji Hindi words in the joking register of Fijian are spelled out in detail by Siegel and I will merely touch upon them here, though they are far-reaching. If we compare these words with the other, 'normal', borrowings from Fiji Hindi, it is difficult to distinguish between the two categories on linguistic grounds, since the same kinds of phonological and morphological assimilation appear to take place. Yet while 'normal' borrowings from Fiji Hindi are felt by Fijian speakers to be fully part of Fijian, who are unaware of their Fiji Hindi origin—as is customary in the historical process of borrowing—the 'joking words' are clearly perceived as being Fiji Hindi—indeed they have to be in order for the 'joke' to work. Hence Siegel refers to the phenomenon as code-switching, yet many Fijians who 'code-switch' in this way do not actually know the 'code', i.e. Fiji Hindi. It is likely that some linguists would reject the notion that a speaker can switch into a language he/she does not know, yet Siegel argues that his data demonstrates that monolingual speakers can indeed switch, and therefore that bilingualism is not a prerequisite to code-switching.

The twists and turns of arguments about the distinction between borrowings (in the diachronic sense of assimilated loans or the synchronic sense of unintegrated forms used by bilinguals), code-mixing, and code-switching seem to have run into a theoretical dead-end, and the data on the Fijian joking register exposes especially clearly some of the limitations of current models. It seems to me that some of these weaknesses are inherent to what Singh (e.g. 1997:16) has called 'the monolingual view of multilingualism', which essentially still tends to view monolingualism as the norm and bi- and multilingualism as the exception in need of explanation, while debates on the measurement of bilingualism and classifications of speakers into 'full bilinguals', 'semi-speakers', and similar categories continue to throw more heat than light. That such views are flagrantly inadequate in the context of the South Pacific or India should not tempt us to any claim of exceptionalism for these parts of the world—on the periphery of current paradigms. It is far more likely that it should be read as an indication of their general inadequacy. Perhaps Khubchandani's (1997) notion of 'grassroots' multilingualism will prove more fruitful, and we await investigations of the dynamics of multilingual situations which do not ignore the creativity of speakers in using the language resources in their environment, or the 'joy of languaging' (Singh, ed. 1997:16).

5 Conclusion

Any movement of people is a movement of culture, and borrowing has been one of the linguistic consequences of indenture in Fiji. The presence of the *girmityas* has had an impact on all the languages brought into contact in their new environment. The criss-crossing of borrowings, particularly between Fijian and Fiji Hindi, and the domains affected—hitherto unknown flora, fauna, and features of the landscape, the cultures of the immigrants and of the indigenous people—are evidence of the mutual impact of the two communities. That *nangonā* drinking should have become such a central part of Indo-Fijian culture, and that Fijians can talk about *qirimiti*, the founding event of the Indo-Fijian community, are significant aspects not only of linguistic but of cultural change.

The unequal strength of borrowing between Dravidian languages and Fiji Hindi, with a fairly large number of loan words from Fiji Hindi into the Dravidian languages but an almost complete lack of borrowings from Dravidian languages into Fiji Hindi (or English or Fijian, for that matter), reflects the power relationship which has marginalised Dravidian languages since the beginning of their history in Fiji and has led, among most present-day descendants of South Indians, to the loss of the languages of their ancestors. The indirect route taken by both Fijian and English loan words—via Fiji Hindi—also attests to the dominance of Fiji Hindi among the few remaining speakers of Dravidian languages.

As for English words in Fiji Hindi, it seems that both the dating of loan words and the vector of borrowing can be refined. It is likely that a fairly large number of English loan words pre-dated indenture, and that there were different layers of pre-indenture borrowings. Some loan words are likely to have been borrowed in and around recruiting centres themselves and on ships—this is after all where the process of koineisation started—particularly those which deal with 'the business of indenture' itself and are common to varieties of overseas Hindi in the indenture colonies (*kulubar*, *dīpu*, *girmit*), at the same

time as Hindustani words like *Kalkatiā* and *jahājī bhāī/bahin* would have been coined. More general words found in ex-colonies, such as *suklāi ~suplāi*, may have been borrowed earlier. When a specific word was borrowed and from which source remains to be determined. It is difficult at this point to say which loan words may have come directly from the various dialects and subdialects of Hindi spoken by the immigrants, which from the lingua franca Hindustani which was undoubtedly known to many, or more specifically from the basilectal Bazaar Hindustani. But it is clear that Bazaar Hindustani, which Siegel has argued had a role in the making of the koiné, did contain a substantial number of English loan words, and that it is likely to have contributed some to the koiné which led to the formation of Plantation Hindustani and eventually of Fiji Hindi. Although this does not solve the puzzle of vector and date, it may at least throw a different light on the borrowing of words such as *āpul* 'apple'. Whether this really was an 'unnecessary' borrowing may remain open to debate, but it is likely that the reason why it is present in Fiji Hindi instead of the perfectly adequate Hindi *seb* is that, like many other 'English' loan words, it was actually borrowed not in Fiji, during or after indenture, and not from English, but in India, before indenture, from some variety of Hindi/Hindustani. If this is the case, the term 'English loan words', for a number of words of English origin in Fiji Hindi, is a bit of a misnomer which obscures the rich and tangled history of the vector of borrowing.

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14 *English loan words in Fijian*

ALBERT J. SCHÜTZ

1 Introduction

Looking at the multilingual Fiji of today, reflected in the vocabulary of Standard Fijian by borrowings from English and Hindi, one is tempted to imagine an earlier time when Fijian was untouched by the linguistic effects of sandalwood traders, missionaries, or indentured workers.¹ But although the language picture might have been somewhat simpler in pre-

¹ At the time I wrote the first version of this paper (1978), it was a surprise to find that items in my file on loan words in Fijian dated as far back as 1967. At that time, having noticed the scarcity of loans in Capell's (1941) dictionary, I was fortunate to have Ratu Rusiate T. Komaitai's help in searching through Fijian language newspapers to supplement the dictionary. Later, the list was greatly expanded through work on the Fijian Dictionary Project, largely by Erelia Nayacakalou, but with help from Saimone Nanovu, Tevita Nawadra, and Jemesa Robarobalevu. It was Robarobalevu who developed the criteria used for including a word. In order to cull out nonce forms, he kept a tally of the number of times a word was used. Five appearances resulted in a move from temporary to permanent status.

During the thirty-five years that separate the conception and birth of this article in its present form, it made some preview appearances: first, as part of the introduction to *Spoken Fijian* (Schütz and Komaitai 1971); next, as a chapter of *The languages of Fiji* (Schütz 1972); next, as a talk to the University of Michigan's Linguistics Department in 1973; and finally as one of three articles in *Fijian language studies: borrowing and pidginisation*, Bulletin of the Fiji Museum No. 4, 1978. The varying contents of these preliminary presentations reflect the development of an idea. The heart of the first draft is a chart showing consonant and vowel correspondences from English to Fijian. The third draft concentrated on the non-random patterning of 'added' vowels. And the focus of the last two versions of the paper is the interpretation of stretches of English speech into the appropriate phonological units of Fijian, especially a higher-order unit called the measure, first proposed in Schütz 1976.

Granting agencies that helped support much of my work on Fijian are Raymond Burr's American-Fijian Foundation, the American Council of Learned Societies, the National Endowment

contact times, it is unlikely that one could pick a date and suggest that at that time Fijian was a homogeneous language untouched by any borrowings at all. Present evidence suggests that such a situation is unlikely. First, the extent of linguistic diversity within Fiji indicates a long history of variation. And although the geographical obstacles of ocean, rivers, or mountains separate many communities, it is clear that some degree of communication persisted in spite of these difficulties.

One way to communicate across boundaries—to be familiar with a number of dialects—was reported fairly early by the missionary John Hunt (1843):

[...] many of those who are in the habit of visiting that place [Lakeba] know something of the Lakemba dialect, and will often use many words which they know will be understood by a person at Lakemba. There are linguists [that is, polyglots] in Fiji as well as in other countries. Many of the chiefs can speak two or 3 dialects. One of us lately made a tour round the large island called Navitilevu, and was much surprised to find that all round it the chiefs understood the Rewa and Bau dialects sufficiently to be well understood.

It follows then that there was ample opportunity for words to move about from community to community within Fiji.

The neighbouring islands outside Fiji also contributed to change. Writers from the early nineteenth century reported that Tongans made visits to the Lau islands (and, to a lesser extent, Lauans to Tonga). For example, it was by working with a Fijian in Tonga that the missionaries David Cargill and William Cross (1835) were able to produce a four-page Fijian primer before they left Tonga. And when they did arrive at Lakeba Island in the Lau Group, they found a large colony of Tongans trading for Fiji timber and learning Fijian boat-building techniques.

This continued contact had an effect on the language in Lau. The sources available for that area—Cargill (1839a, b) in the nineteenth century, and Hocart (1929), Thompson (1940), and Geraghty (1983) in the twentieth—show a number of words almost certainly from Tongan.² There may be many more, but in similar cultures, with little written evidence and few phonological clues, it can be difficult to distinguish between borrowings and shared forms.³

for the Humanities, and the University of Hawai'i. I should like to express my gratitude to all these sources for making this work possible.

I should also like to thank those people mentioned earlier for their diligent searching through the stacks of newspapers that added to our file of loan words. For their cooperation in providing a recording of very high quality, my thanks to Tevita R. Nawadra, Saimone Nanovu, and the Fijian Broadcasting Commission. For their advice with both the form and the content of the paper, I am grateful to Paul Geraghty and Apenisa Seduadua. And for arranging to have the 1978 version of the paper scanned so that it would not have to be retyped, thanks to Joseph O'Mealy of the College of Languages, Linguistics and Literature, University of Hawai'i at Mānoa. Finally, in the spirit of Ecclesiastes 18:16 ('So is a word better than a gift. '), I should like to thank Dr L.I. Verrier for his encouragement and his gifts of words.

² Jacqueline Tanny Fa'anunu combed through all these Lauan sources for linguistic data, making a card file of Lauan words.

³ For a detailed discussion of this problem, see Geraghty (1983:98–102, 190–191, 395–419).

In contrast to these borrowings from related languages, most loan words from English stand out clearly,⁴ and it is these words that form the data for this paper. The following sections sketch the early history of the borrowings, describe their phonological form (especially the adaptations necessary to match a new word to the basic phonological units available), and examine the effect these borrowings have had on the Fijian language.

2 Historical background

As the eighteenth century drew to a close, so did Fiji's long isolation from the world beyond its closest neighbours. Tasman, Cook, Bligh, Barber, and Wilson had passed through various parts of the group over a span of 150 years, but they had had little contact with the Fijians. It was not until early in the new century that European items began to make their way into Fiji, at first as debris from shipwrecks. Waterhouse (1866:22) reported that from these victims of the treacherous Fijian reefs came such wonders as 'pieces of broken plates and a variety of buttons'—the first heralds of the arrival of the European and his goods.⁵ And since there was more European contact with Tonga than with Fiji at this time, it is likely that some goods entered Fiji through trade with Tonga (Paul Geraghty, pers. comm. 1999).

At about the same time, the discovery of sandalwood in Fiji amplified contact with the outside world. At the height of the meteoric trade, shipowners turned enormous profits, and news of the success reached ports as widely scattered as Calcutta, Port Jackson, and Salem (Im Thurn & Wharton 1925:82). According to Waterhouse's (1866:24) historians, the trade produced such items of European origin as 'a quantity of knives and hatchets, a pig 'twelve feet long,' a pair of geese, a large monkey, and [...] a cat'.

But the linguistic effects of these first imports were not recorded until somewhat later. On 23 May 1810, the *Active* sailed from Salem, Massachusetts, William Putnam Richardson commanding. Some time during 1811 Captain Richardson collected a word and phrase list of about three hundred items, terms that ranged from the practicality of collecting wood to the esoterica of scatology. Somewhere between these extremes appear names for three items of foreign origin:

<i>matou</i> [matau]	iron ⁶
<i>Goro ni pappelange</i> [kuro ni papālagi]	an iron pot
<i>An takie</i> [a dakai]	a Musket

⁴ Of course, there is always a danger of mistaking an indigenous word for a borrowing, just because of an accidental similarity of form. For example, folk etymologists, unaware of cognates in such related languages as Tongan and Nguna, have for years claimed that Fijian *kolī* 'dog' was borrowed from English *collie*. The similarity of Hindi *kan* to Fijian *kana*—both 'eat'—has given rise to a similar proposal.

⁵ Waterhouse was, however, vague about his sources, so it is difficult to know how much to believe.

⁶ The Fijians, like the Hawaiians (Cook 1784:264 and Fornander 1880:168–169), may have known of the existence of iron from its having washed ashore on driftwood.

From these forms, we see that indigenous Fijian words took on new meanings. *Matau* originally meant 'stone adze'; *kuro ni papālagi* could be translated as 'foreign pot' (domestic pots were ceramic); and *dakai* meant 'bow'.

As the sandalwood trade declined, so did most of the commercial motives for visiting Fiji. But scientific ones took their place. In 1827, the French corvette *L'Astrolabe* passed through the Fijian archipelago, stopping long enough for one of its scientists, Joseph P. Gaimard, to collect a word list of nearly 300 items (Dumont d'Urville 1834). Standing out among indigenous words is the translation for *fumer*: *ouvou tabaka*.⁷ Later, the form *tavako* was solidly based on the Standard English model, but in this first citation, the source seems to be an alternate pronunciation: *tabacca*. *Ouvou* was also changed later, for the Fijians eventually associated tobacco with items having primarily edible characteristics, thus translating *smoking* as *kana tavako*—that is, 'tobacco-eating'. But working backwards through the gauze of Gaimard's transcription, we respell *ouvou* as *uvu*, and find that smoking was first interpreted as 'tobacco-blowing'.

The introduction of another common loan word at about the same time presents something of a mystery. At first glance, the account seems straightforward. In August 1834, Capt. J.H. Eagleston of Salem sailed to Tahiti, accompanied by a favourite of his from Rewa—Cokanauto, rechristened 'Phillips' in honour of Eagleston's employer. While in Tahiti, Eagleston purchased six head of two-year-old cattle. When he returned to Rewa, he presented two of these to Phillips, and in his journal (23 August 1834) described his naming of these gifts. He wrote:

Having some little difficulty in expressing [the] name of each to the natives I classed the two in one, and called them Bula Ma Cow, which was very readily taken up by the natives whose curiosity was centred on the strange and wonderful Kie Papa louge Bula Ma Cow [kai Papālagi bulamakau] [...] Morning put the cattle for Phillips on board of a double canoe with two men to look after them, and dressing him up in a suit of clothes, ornamented with his swabs on his shoulders, and sword by his side, accompanied by his wife and the King [Roko Tui Dreketi], he left to crase [sic] the heads of all Raver [Rewa] with the sight and landing of [the] first Bula Ma Cow ever introduced among the Feejees.

Ernest S. Dodge (1965:98) considered the story plausible enough to include in his sketch of New England influence in the Pacific (while mistakenly identifying Phillips/Cokanauto as a Bau chief). However, in the well-known narrative of the wreck of the *Glide* in 1831 (three years before the date of Eagleston's journal entry), by William Endicott (1923:66–67), we find the following account of the author's polite manoeuvring to avoid a taste of *vuaka balavu*—cooked human flesh.

I made an excuse for not eating it, by saying that it had been kept too long after it was killed, before it was cooked, it being about thirty-six hours. The King replied, it was not half so long as you white men keep your bullam-a-cow! meaning salt beef, a name derived from bull and cow, by American seamen. Salted meat was considered by them the most unhealthy and loathsome food that could be eaten, and was the means of creating a strong prejudice against the whites for their eating it.

⁷ Waterhouse (1866:23) reported that tobacco was growing in Fiji before European contact.

Although this account was written some years after the events described, it is unlikely that Endicott picked up the term later, for the voyage he described was his last. Thus, Eagleston's claim to have introduced the term may not stand up.

T.R. Nawadra (pers. comm. 1977) has suggested a more reasonable hypothesis on the origin of the word. It hinges on Tongan contact with Fiji and the *ma* of the term *bulumakau*, which does not relate to 'and' in Fijian (*kei*) but perhaps to the Tongan equivalent (*mo*). Since the early recorders of these languages were often unsure in their transcription of unstressed vowels, *mo* could very well have been written as *ma*. The etymological trail, therefore, might lead from English *bull and cow* to Tongan *pulu mo kau* and finally to Fijian *bulumakau*.

Throughout this early period of trading and scientific exploration, the limited nature of the contact between cultures kept the number of English borrowings to a mere trickle, as it were. The first missionising attempt—the London Missionary Society's assignment of three Tahitians to Fiji—did not produce much in the way of English borrowings, for John Davies's (1825) primer contains only one: *Jehova*. But in 1835, the Wesleyan Methodist Missionary Society, by sending two European missionaries to Fiji, opened a floodgate of new words.

It was not just the presence of the missionaries David Cargill and William Cross that made the difference. True, as long-term residents, they had greater contact with the Fijians than did most traders and explorers. But in the early part of the century there were a number of beachcombers—deserters, shipwrecked sailors, and the like—whose combined total years in the group would have greatly exceeded those of the first missionaries. Instead, it was the nature of their work that affected the language. In their translation of the Bible, they were not limited to introducing names for concrete objects of trade, but had to include a great number of new words for abstract ideas and Biblical items that no Fijian had ever seen nor was ever likely to.

The first printing in Fijian actually used by the people there⁸ shows the beginning of the great number of religious terms to be introduced. Because *A vosa vaka Viji i manda* was not only a primer but a catechism as well, it used the following borrowings:

<i>Jihova</i>	Jehovah	<i>heli</i>	hell	<i>emeni</i>	amen
<i>Jisu Karaisi</i>	Jesus Christ	<i>hevani</i>	heaven		
<i>Atama</i>	Adam	<i>tevolo</i>	devil		

If Fijians today accuse the 1850 translation⁹ of the Bible of tasting of papaw (Cammack 1962:14), from *batimaoli* 'papaw (papaya) eater' (an epithet applied to inhabitants of those Lauan islands not blessed with fertile land and reduced to eating papaws), they might think that this first catechism had papaw as a main ingredient. Not only do the native Fijian words

⁸ It is unlikely that Davies's primer, referred to earlier, had much of an effect on the Fijian people, even if they did see it. The Tahitians who ended up in Fiji were said never to have learned Fijian.

⁹ The translation in use today dates from 1899 (New Testament) and 1902 (the complete Bible), although according to Paul Geraghty (pers. comm. 1999), the changes from the earlier versions were minimal. Another translation of the New Testament was published in 1931.

used underscore the Lauan and Tongan sources (such as *gaue*¹⁰ for 'work'), but the borrowings as well reflect those languages. Especially characteristic of Tongan is the use of the letter *h*, which Fijian uses only in the Nadrogā area. The letter *j* is the result of a sound pattern that exists in both Tongan and Lauan: a change in the position and manner of articulation (palatalisation) of /t/ before /i/. The sound in Tongan underwent an unusually rapid change to [s]; Lau still has the [tʃ] that the early missionaries wrote as *j*.

Another item from the list above, *hevani* for 'heaven', is a borrowing in the best sense of the word, for it was eventually given back and replaced with a Fijian word *lomālagi* 'sky'.

Once in Fiji, Cargill, who had a university education that most likely included classical and modern languages, began compiling a dictionary of what he called 'Feejeean', but which can more accurately be labelled the language of Lakeba Island (Cargill 1839b). After three years, his dictionary contained '5000 or 6000 words', according to his reckoning, and included the following borrowings:

<i>agelosi</i>	angel	<i>facigi</i> ¹¹	farthing	<i>Farisi</i>	Pharisee
<i>fiki</i>	fig	<i>prisoni</i> ¹²	prison	<i>profisai</i>	to prophesy
<i>profiti</i> ¹³	a prophet	<i>peni</i>	pen	<i>peni kacu</i>	lead pencil
<i>peni vatu</i>	slate pencil	<i>palesi</i>	palsy	<i>papataiso</i>	baptise
<i>Pasova</i>	Passover	<i>pusi</i>	cat	<i>sipi</i>	sheep
<i>vinika</i>	vinegar				

By this time, the orthography was fixed, and the missionaries advised against using *b* and *d* for new words spelled with those letters in English. Cargill, who was mainly responsible for the new spelling system, explained why (1839a:16):

This arrangement [the use of single letters for compound sounds] affects the orthography of some of the foreign words which it is indispensably necessary to introduce into the Feejeean language. Thus, — *p* is employed to express the sound of the English *b*, and *t* that of *d*; e.g. the word *papitaiso*,¹⁴ to baptise [...] if written with a *b* would be pronounced by the natives *mbapitaiso*: *Tevita*, — *David*, — if the *d* were retained would be *Ndevinda*.

But aside from matters of spelling, which words were 'indispensably necessary' to introduce? For example, although the 1899 edition and current edition of the Bible use *na tu i*

¹⁰ The Tongan form is *gāue*. Naturally, vowel length is not marked for the Lauan form, but Fijian does not permit a long vowel in that position unless the word is pronounced in two measures, *gā.ue*, which is unlikely.

¹¹ Cargill did not mark long vowels. 'Farthing' was most likely pronounced *fā.cigi*, 'Pharisee' *fara.sī*, and so on. The full stops in *fā.cigi* and *fara.sī* mark boundaries between measures (accent units), a notion that is discussed in §3.1.

¹² The *pr*-spelling may reflect fast pronunciation (see the section on measures), but not the system of the language. Later, Cargill separated the consonants with a vowel.

¹³ This word shows that Cargill coined the word in the face of local practice, for the phonetic sequence [ti] does not occur in Lakeba, except in such loans as *tī* 'tea'.

¹⁴ Note that the vowel in the second syllable is different from that in the list from Cargill's dictionary.

cake (*na atu i cake*, lit. 'chain [of islands] above) for 'east', an early translation of twelve chapters of Matthew, printed in March 1838, used *isiti*. Later in the same year (27 December), the missionaries of the Fiji District took a critical look at how they introduced words, and tried to establish more rigid criteria:

Quesⁿ. — On what principles shall we regulate the introduction of Foreign words?

Ans^r. No Brother shall be at liberty to introduce a foreign word into the language, unless in cases of obvious necessity; for example, — when the native language does not furnish a word or phrase to express the idea. But in cases of indispensable necessity every Brother shall have a discretionary power to introduce words from any language that may seem to him most suitable to the genius of this language, subject however to the instructions in the translation department [...].

Cargill himself took care not to introduce foreign words when the meaning of an existing word could be expanded, or appropriate compounds made. For instance, whereas the Tongan translators had chosen to borrow *Sāpati* for 'Sabbath', in the first Fijian catechism Cargill showed restraint by using *Siga Tambu* (*Siga Tabu*, lit. 'sacred day'). Evidently, there was little such restraint in the Tongan Mission. Cargill, still concerned with translation matters there, wrote (16 August 1838):

Another practice prevails in that group [Tonga], — which if persisted in will ultimately destroy the simplicity of the language and render many portions of the Word of God utterly unintelligible to the Natives; I allude to the immense number of English words which are introduced into the language. Such is the number of foreign words which are constantly introduced, that when a new book is printed it is impossible for a native to understand it without an English interpreter. This appears to me an evil of no common magnitude. It is absolutely necessary to introduce some words into the Tonga language, but to introduce such words as brother — sister — husband — wife — door & a host of others, and unceremoniously to cashier the native nouns which every child understands, is in my opinion an unwarrantable liberty. The other day — a very intelligent local preacher said while conversing about one of the epistles, — 'My mind is pained because our language will be spoiled, & we shall not be able to understand the word of God: — When Misa _____ goes away, will not some other Missionary give us another edition of the sacred book in our own language?'

This conflict between borrowing and building from existing words continues to the present, as lexicon committees for various Pacific languages debate over new vocabulary.

2.1 Inflicted forms, or early linguistic imperialism

By the middle of the nineteenth century, Fiji was not yet overwhelmed by European goods, but certainly enough articles of foreign origin had been introduced to affect the language. The sandalwood trade had relied on goods for payment, and by this means axes, nails, razors, and chisels had made their way into Fijian use. For all practical purposes, the notorious Charles Savage introduced firearms and dollars to Fiji. Port fees were paid in goods and later in dollars, and provisions had to be secured in the same way. From the time of their arrival to the early 1840s, the Wesleyans paid for their keep through a barter system, and the goods

introduced are well documented; an early letter to London asked for (among other items): axes, spades, hatchets, chisels, iron pots, frypans, saucepans, knives, razors, gimlets, calico, slates, pencils, beads, lamps, and handsaws (Schütz 1977a:93n). The missionaries and their families also used plates, trousers, dresses, and liquor (teetotalism had not yet taken hold). Some of these items could have been expressed in Fijian by making compounds (much later the form *waqa-vuka*, lit. 'flying boat', was used for 'aeroplane') or expanding the meaning of an existing word (*kuro*, mentioned earlier, took on the meaning of metal, as well as ceramic pot), but others must have inspired borrowing.

In 1850, the Mission Press at Viwa printed the Reverend David Hazlewood's *A Fijian and English and an English and Fijian dictionary* (1872). Included in the work are 169 words from English, a figure that appeared moderately progressive until I looked more carefully at the nature of the words. At first, it seemed odd that Hazlewood recorded the Fijian equivalent of the names of gems: *ruby, sapphire, emerald, diamond, onyx, crystal, and topaz*. Further anomalies led to a more thorough check with a Bible concordance, which showed that of the 169 borrowings, 124 were words used for Bible translation. The 48 remaining include names for months and days of the week, leaving 29 words; removing *vaka-popo* 'papal' leaves 28, and these include 'Fijianised' forms for *turkey, stadia, ferret*, and other items of dubious use in Fijian culture. The remainder include some forms that are still used today, such as *vusi* 'cat', *iī* 'tea', and *peni* 'pen, penny'.

Some of the choice items from the larger list—words that appear in a biblical concordance—are forms for *hemlock, Pharisee, phylactery, Hyssop, jasper, cherubim, and cubit*. Indeed, the first Fijian dictionary was a tool for translation, largely a reflection of the missionary rather than the secular community.

Although James Calvert edited an 1872 edition of the dictionary, Arthur Capell revised it much more extensively in 1941. By this time, its readership had changed, for in comparison to the number of civil servants, commercial employees, and other residents who might use it, the number of non-Fijians working directly with the Church was relatively small. The revision did not, however, reflect this shifting emphasis. Granted, some of Hazlewood's blatantly useless forms (such as the gem names listed above) were removed, but one can still find entries such as:

aluka, a leech; from Hebrew *alukah*, used in Bible, Prov. 30, 15 (Capell 1941).

A word for *wireless* or *market* might have been more relevant, but neither appears.

In addition to the dubious selection of loan words in Capell's revision, the number (about 250) falls far short of expectation. Unfortunately, subsequent editions in 1957, 1968, and 1973 introduced no new words from English, and as a consequence, it is impossible for a student of Fijian to translate a newspaper with the aid of this dictionary.

3 Phonological patterning

One might compare borrowed words (when unaffected by considerations beyond the spoken language) to the naive transcriptions that early travellers made, in which words from 'exotic' languages were written as the writers interpreted them—in terms of their own

languages. These orthographies generally maintained the necessary phonological contrasts in their own language,¹⁵ but were underdifferentiated or overdifferentiated with respect to contrasts in the target language (Pike 1947:141–142).

To describe borrowing in another way, we might say that Fijian speakers give a broad transcription to the English words they hear. Just how broad this transcription is depends on how closely what the Fijian speaker hears matches the analyst's description of the phonetics of English. In some instances, the match is fairly close. For example, it is well known that English /k/ assimilates to the advancement of the following vowel. Evidently such assimilation is common in many languages, and Fijian is no exception. Scott (1948:740) described the distribution for Fijian /k/: 'Palatograms for *ki* show a "wipe" that may extend as far forward as a line joining the centres of the second molars on either side; [...] and for *ko* and *ku* there is no median wipe'. In addition, Fijian has no palatal stop with which the English [k^ç] might be associated. Therefore, there is a high degree of regularity in the Fijian form of English words with *k*. But what if Arabic is the borrowing language? Then, English [k^ç] would be associated with one Arabic sound, [k^ʔ] with another.

In the phonological system of English, /k/ represents more than a phonetic norm; it also represents a number of contrasts or oppositions. The first one that comes to mind is the contrast with /g/, a contrast with fairly high functional load. It is this part of the system that Fijian borrowing ignores, for it has nothing to do with the Fijian contrast of /k/ versus /q/. Thus we find some English words with /g/ borrowed as Fijian /k/, and others as Fijian /q/, with a tendency for /q/ in initial position. Records show that the early missionaries tried to avoid the prenasalised stops in borrowings, except to reflect English consonant clusters in medial position. Cargill wrote (1839a:16): 'It is better, therefore, in all foreign words which are introduced into the Feejeean language, to write p to express the sound of b, and t that of d, than to mutilate words and incur the language with an uncouth jargon'.

English vowel contrasts are also dissolved; we find that Fijian *pepa* can mean either 'paper' or 'pepper'. Fijian has the means to keep such forms apart; **peipa* versus *pepa* might satisfy an English phonologist. But /e/ versus /ɛ/ is an English contrast, not a Fijian one.

Because of the nature of borrowing between languages, the rules deriving the phonological shape of borrowed forms from the phonetic shape of the model ought to resemble, in some ways, those explaining sound correspondences between earlier and later forms of the same language. Moreover, we can posit a principle for the relationship between the forms: PHONETIC SIMILARITY. That is, we assume that a newly coined Fijian word should sound as much like the English model as possible, but still fit within the Fijian system.

This assumption is based on a particular situation: that the English words are taken over by Fijian speakers. But when Bible translation was at its height—from 1835 to 1850—most of the words seem to have given, rather than taken. The term the missionaries themselves used, 'introduced', is appropriate for this period, for at that time they dictated not only which words were borrowed, but to some extent their phonological shapes as well. As evidence, note Cargill's injunction against interpreting English *b* or *d* as Fijian *b* or *d*. More recent loan

¹⁵ Exceptions can be found throughout the English spelling system: e.g. *th*, which ignores the contrast between /θ/ and /ð/; and *ng*, which wreaks the same havoc on /ŋ/ and /ŋɡ/.

words show that the restriction has held for these sounds in medial positions, but not for initial position.

Thus, it is likely that during the short period when the missionaries were coining great numbers of words for Bible translation, the following conditions held. The coiner started with a phonological unit from his English system, and selected (from his imperfect understanding of the Fijian system)¹⁶ a phonetic unit that, in his judgment, was closest to the English one. When Fijians were the principal borrowers, the situation was reversed. In other words, Fijian borrowers have certain contrasts, combinations, and units available in their language, and they interpret (perhaps hear?) the English models within the framework of their own system. Thus, the relationships can be described as follows: the Fijian borrowers interpret, for example, the English sounds: [i^y], [i^v], [ɪ], [ɪ^v]¹⁷ as Fijian /i/. This study tries to describe the phenomenon from the second point of view.

However, many studies of the phonological patterning of loan words concentrate on segmental phoneme-to-phoneme correspondences, similar to contrastive analyses for second-language teaching (e.g., Elbert 1970; Pukui & Elbert 1957; Tryon 1970; Whiteley 1967). In these studies, the correspondences are usually straightforward and can be predicted fairly accurately by metaphorically holding the two systems up to the light to see where they match and where they differ. However, this approach necessitates at least two additional sets of rules: first, one to explain any epenthetic and paragodic vowels, and then another to match the accented units of the new form to those of the model. Curiously, many previous studies have ignored this second obligation. As cases in point, none of the sources just listed gives rules for accent placement.

This study, however, starts closer to the other end of the phonological hierarchy and discusses borrowings first from the point of view of accent units.

3.1 Prosodic fit: measure for measure

In contrast to the current tendency to ignore accent when dealing with loan words, Hazlewood (1872:4) was explicit in his warning against carrying English accent patterns over into Fijian:

On account of this tendency of the language to a penultimate accent, the natives accent most of the trisyllabic and polysyllabic proper names which are introduced differently from us, and we must either accent introduced names differently in native from what we do in English, or do violence to a prominent feature in the language: as, Joséfa, not Jósefa; Wiliámi, not Wíliami.

¹⁶ Although Hazlewood's understanding of the language was obviously admirable, he was somewhat insecure in his analysis of the sound system. We must remember that the orthography was Cargill's and Cross's contribution; Hazlewood (1872:2) would have complicated the system by adding more symbols. For example, he thought that *k* and *q* each represented two sounds.

¹⁷ The symbols here reflect vowel lengthening before voiced consonants, a pattern that occurs in many, but not all, varieties of English.

But Hazlewood was not entirely accurate in his examples. Each of them *can* be accented on the first syllable, so long as another syllable is accented as well: *Jō.séfa* and *Wīli.ámi*.¹⁸ These forms come as close as they can to the accent patterns of the model without 'doing violence' to the system. This matching of accented units in the borrowing to those in the model, called here 'prosodic fit', is best described for Fijian by dealing not with individual consonants and vowels, or with syllables, but with a larger unit that is determined by accent. We call that unit here the MEASURE. The musical analogy is intentional, for two properties associated with musical measures—accent and rhythm—are just as closely associated with Fijian speech measures. Note the musical definition (Hughes 1954:635): 'The unit of rhythm, corresponding to the metrical foot and including the notes between two bars; each measure has one and only one major accent.'

The measure provides a limited number of boxes, as it were, into which the parts of a new form can fit. And although the possibilities are reasonably varied, no matter what the accent pattern of the English model, Fijian will not permit, within a measure, such sequences as the following:

- two short accented syllables in succession,
- a long syllable in penultimate position,
- a long unaccented syllable, or
- three short unaccented syllables in succession.

Such restrictions on sequences of syllables are the main argument against describing correspondences—or accent in general—in terms of segmental phonemes alone. Fijian matches English accent, then, by making use of the various types of measures available. There are four main options—these main shapes:

1. 'Cṽ
2. 'CVCV

and each of these preceded by an unaccented syllable:

3. CV'Cṽ
4. CV'CVCV

Although syllables with a consonant onset are favoured,¹⁹ vowel sequences do (infrequently) occur across syllable boundaries. Thus, each consonant in the four types is optional, and the number of specific types of measures is increased. Any combination of measures can occur. However, when a long accented syllable is followed by a short

¹⁸ Phonetically, the accents turn out to be somewhat different. When each word is said in isolation, it turns out to constitute a phrase in itself, and phrase prosody emphasises the last measure. Thus the effect here is a secondary accent followed by a primary one.

¹⁹ Fijian does not adhere quite as closely to CVCV sequences as the Reverend William Heighway (1932:31) thought: 'It is a very soft language and pleasant to hear owing to its strong partiality for vowels, indeed every second letter in all the words of the language is a vowel'.

unaccented one, the long syllable may shorten (while retaining its accent). If this happens, the following syllable—whatever its morphological affiliation—becomes part of this newly formed measure. This practice of syllable shortening in such a position accounts for the lack of (word-) penultimate long vowels and explains the discrepancy between the morphological structure of, for example, *sē + ni kau* ‘flower (lit. ‘flower of tree’)’ and its prosodic structure in normal speech: *seni.kau* ‘flower’.

In summary, an English word is reinterpreted in Fijian as one or more measures. Ideally, an accented syllable in the borrowing corresponds to an accented syllable in the model, but the same situation does not hold for unaccented syllables. Thus, the data suggest that it is not important that the number of Fijian syllables match the number of English syllables, but that Fijian measures correspond somehow to the English accented units.

The following sections shows English words interpreted first, as a single Fijian measure, and next, as a series of measures.

3.1.1 Words heard as one measure

In this section, the headings show first the English, and then the Fijian syllable structure.

1. CV → C \bar{V}

An English open monosyllable (such as one ending in [i^ʔ], [e^ʔ], [aə], [o^w], or [u^w]) is interpreted as a Fijian measure ending in a long vowel. Although examples for syllables ending in any of the vowels can be found by breaking down longer forms, the data contain relatively few monosyllables:

<i>tī</i>	tea, ti	<i>rē</i>	re	<i>kī</i>	key	<i>mī</i>	mi	<i>pī</i>	wasp
<i>fā</i>	fa	<i>vō</i>	po	<i>sō</i>	sol	<i>dō</i>	do	<i>lā</i>	la

2. CVG → CVV

For English open monosyllables ending in a centring offglide (after any vowel other than [a]), that off-glide is interpreted as *a*, resulting in a Fijian disyllable:

<i>pea</i>	pair, pear	<i>dia</i>	deer, dear	<i>sea</i>	share
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3. 'CVCV → CVCV

The most obvious models for Fijian measures of this pattern are English disyllables without consonant clusters, accented on the first syllable.

<i>leca</i>	leather	<i>oki</i>	hockey	<i>loli</i>	lolly	<i>pati</i>	party
<i>mita</i>	metre	<i>pawa</i>	power	<i>loya</i>	lawyer	<i>pepa</i>	paper, pepper
<i>ota</i>	order	<i>pauta</i>	powder	<i>lori</i>	lorry		

The same type of measure is based on English CVNCV, with NC = [mb], [nd], [ŋg], and [n(d)ɾ]. This series of English consonant combinations is similar to the phonetic realisations of Fijian *b*, *d*, *q*, and *dr*. The data contain only three examples:

<i>naba</i>	number	<i>meba</i>	member
<i>maqo</i>	mango		

Additional examples can be found with not the same, but similar, correspondences:

<i>akaude</i>	account	<i>vedelē</i>	ventilator	<i>volodia</i>	volunteer
<i>tarabu</i>	trump	<i>keba</i>	camp	<i>veba</i>	vamp

4. CVC → CVCV

An English monosyllable ending in a consonant is also interpreted as a disyllabic measure. The final consonant of the English model is interpreted as the final unaccented and reduced syllable of the measure. Since the accented syllable is slightly longer and not reduced, the prosodic fit is close.

<i>nave</i>	nerve	<i>laini</i>	line	<i>nasi</i>	nurse	<i>pasi</i>	pass
<i>noca</i>	north	<i>polo</i>	ball	<i>noti</i>	note	<i>peni</i>	pen
<i>lusi</i>	lose	<i>rigi</i>	ring	<i>lota</i>	lord	<i>rosi</i>	rose

One phonetic feature of the final syllable of a disyllabic measure brings the new form even closer to the model: certain syllables are so reduced that their phonetic manifestation is merely a lengthened consonant. For example, *lusi* 'lose' can be [lus̩].

The appearance of *laini* in the list above indicates that it is pronounced as a disyllabic measure and hence that the sequence *ai* is realised as a diphthong. However, it is possible in slower speech to produce *laini* as a trisyllabic measure (Schütz 1976:88).

5. CV'CV → CVCV̄

Examples of single words in this category are rare, since the pattern is unusual in English.

<i>basā</i>	bazaar	<i>qitā</i>	guitar
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6. CV'CVCV → CVCVCV

An English trisyllable, without consonant clusters and with the second syllable accented, is interpreted as a trisyllable measure:

<i>karate</i>	karate	<i>pateta</i>	potato	<i>maniwa</i>	manure
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(Incidentally, *manure* is one of those English words for which the number of syllables is open to question.)

7. 'CCV(C)V → CVCVCV

English forms of this shape are interpreted as trisyllable measures, with the first syllable of the measure representing the first English consonant. The prosodic fit is close, because the syllables corresponding to single consonants in the model are the unaccented syllables in the measure, which are reduced and shortened. Certain syllables in this position (to be discussed later with respect to 'naturalness') can be reduced to the extent that they become (phonetically) lengthened consonants. In the following list, *ai* and *au* are such syllables. In a similar kind of reduction, *ti* and *pu* can occur as [t̩] and [p̩].

<i>sipana</i>	spanner	<i>sitima</i>	steamer	<i>sitaile</i>	style
<i>sipai</i>	spy	<i>peleni</i>	plan	<i>vuloa</i>	floor
<i>sipiti</i>	speed	<i>tiripu</i>	trip	<i>sitila</i>	steel
<i>sitaba</i>	stamp	<i>tarabu</i>	trump	<i>sunuka</i>	snooker

An English disyllable accented on the second syllable (with that syllable closed) is also interpreted as a trisyllable measure, with a close prosodic fit. The shape is unusual in English, and the data provide only two examples:

<i>ratuni</i>	ratoon	<i>baluni</i>	balloon
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3.1.2 Words heard as combinations of measures

An expected kind of sequence of measures in borrowings is that resulting from English compounds or derived forms, clearly divisible into two units.

<i>pigi.pogo</i>	ping-pong	<i>fō.mani</i>	foreman	<i>waji.meni</i>	watchman
<i>aisi.kirimu</i>	ice cream	<i>bā.meni</i>	barman	<i>diko.nesi</i>	deaconess
<i>ova.sia</i>	overseer	<i>bā.meti</i>	barmaid	<i>wā.lesi</i>	wireless
<i>soya.pini</i>	soybean	<i>bō.soni</i>	boatswain		

But are Fijian borrowers aware of such morpheme divisions? Most likely not, in the early days of borrowing, but nowadays—because many more Fijians understand English—they probably are. Still, as with smaller units, the morphemes need not be known to the borrower.

Because the Fijian words have phrase accent on the last measure (at least when a word is pronounced in isolation), the overall accent pattern is the opposite of that of the English compounds. Nor are the subtle accent differences between English compounds and adjective–noun combinations reflected in Fijian. Note the following contrast:

<i>oli.seli</i>	wholesale	<i>bereki.keba</i>	break camp
<i>olo.dei</i>	holiday	<i>jivu.situ.eti</i>	chief steward

Fijian has no mechanism for accenting the forms in the first column differently from those in the second.

Finally, compounds or phrases are not distinguished in any way (save, occasionally through writing) from other longer forms. The majority of measure combinations are based simply on forms whose phonological shapes require more than one measure:

<i>basi.kete</i>	basket	<i>bisi.kete</i>	biscuit
<i>joke.liti</i>	chocolate	<i>tarau.sese</i>	trousers

And because the final measure in each word corresponds to an unaccented syllable in the model, the prosodic fit is not as close as it is in the previous examples.

Implicit in this discussion of prosodic fit is a possible hierarchy of desirable features:

- a. An English accented vowel results in a Fijian accented vowel.
- b. An English unaccented vowel results in a Fijian accented vowel.

- c. Added vowels are not accented.
- d. Added vowels are not lengthened (and hence, are not accented).

We have already seen, in the examples just above, that it is not always possible to satisfy all these conditions. The next section shows that in spite of the restrictions on the types of syllables that can occur in succession, there are several ways that a Fijian borrowing can come close to the English prosodic form.

3.1.3 Approximating a prosodic match

The introduction to the section on prosodic fit mentioned that certain syllable types cannot occur in succession, proposing that adjustments had to be made to avoid such successions. The following discussion treats several ways of approximating a close prosodic fit in spite of these restrictions.

1. Longer forms, especially those with an uneven number of syllables, offer the potential for alternate measure divisions, dependent upon accent placement. We assume that one choice sounds closer to the English model than the other. Take, for example, the word *estimate*, borrowed as *esitimetī*. If the accented syllables were not indicated, the word would provide two possibilities for accent units: *esitī.metī* and *esi.timetī*.

The first is unacceptable, because the accent in the first measure falls on a syllable with an added vowel, *si*. The second has two advantages: the appropriate syllables are accented, and now *si*, as an unaccented syllable, can be weakened until it is merely a slightly lengthened consonant. In terms of the hierarchy suggested above, conditions (a) and (c) are met.

2. In some words a vowel is lengthened to attract the accent. For example, in the borrowing for 'dance', the form **danisi*, without an accent on *da*, would not be appropriate, because of condition (a). Nor would **dani.sī*, because of condition (c).
3. Some words show that a syllable has been lengthened not to match an accented syllable in the model (condition (a)), but to avoid violating condition (b). For example, the word *editor* cannot be borrowed with what would seem the closest fit: a short accented syllable followed by two short unaccented ones. And *edita*, with the second syllable accented (*edīta*), is not prosodically close to the English model. The form can be improved, however, by changing it into two measures, thus requiring lengthening either the first or the last syllable. The former solution would produce **ē.dita*, placing an accent on *di*, which corresponds to an unaccented syllable in the model. The form that was chosen is *edi.tā*, which, if not entirely appropriate (*eti.tā* would have avoided [nd]), at least provides the best accent pattern for the first two syllables. The accent on the last syllable is, from an outsider's point of view at least, unfortunate, but there is no way of producing a closer prosodic fit with the phonological units that are available. As with the previous example, conditions (a) and (c) are met.

Such final-vowel lengthening is common for English words ending in *-r* (or [ə]) in many New England and British English dialects):

<i>doke.tā</i>	doctor	<i>moto.kā</i>	motorcar	<i>mini.sitā</i>	minister
<i>dai.reki.tā</i>	director	<i>palasi.tā</i>	plaster	<i>reji.sitā</i>	register

In other words, a vowel has been lengthened to attract the accent away from an added vowel or one that corresponds to an unaccented vowel in the model.

Examples showing no compensatory lengthening are *ovisa* 'officer' and *siliva* 'silver'. In the first, conditions (a) and (b) are violated. In the second, all three are violated; only condition (b) is met in the final syllable.

The existing form, *dā.nisi*, is as close a prosodic fit as possible. In the second, although a syllable with an added vowel is accented, the long vowel in the first syllable allows it to match the accent in the model.

Other examples are:

<i>kō.vana</i>	governor	<i>bē.leti</i>	belt
<i>bō.nisi</i>	bonus	<i>dā.seni</i>	dozen

4. There are many examples showing that a prosodic mismatch has been avoided by simplifying a consonant cluster. Some examples are:²⁰

<i>bani</i>	band	<i>tosi</i>	toast	<i>sā.tini</i>	sergeant
<i>koula</i>	gold	<i>tuisi</i>	twist	<i>pamu</i>	pump
<i>desi</i>	desk	<i>beqa.ravu</i>	bankrupt	<i>itini</i>	agent
<i>sisi.veni</i>	sixpenny	<i>Komu.nisi</i>	Communist	<i>lai.seni</i>	license
<i>dai.mani</i>	diamond	<i>koni.taraki</i>	contract	<i>fereni</i>	friend
<i>kē.misi</i>	chemist	<i>koro.tini</i>	quarantine	<i>koni.feredi</i>	conference
<i>isi</i>	east	<i>isi</i>	yeast	<i>kō.vula</i>	corporal

In these data, the following simplifications were the most common:

Type			Occurrences
<i>nd, nt</i>	→	<i>n</i>	5
<i>st</i>	→	<i>s</i>	5
<i>ld</i>	→	<i>l</i>	2
<i>sk, ks</i>	→	<i>s</i>	2

The first three types in the list (plus some lone examples, such as *mp* → *m*, *ns* → *n*, *n(t)s* → *d*, *nt* → *t*) show that homorganic clusters have been simplified. Another pattern revealed is that a cluster of continuant plus stop frequently loses the stop.

²⁰ Some of these clusters, particularly such homorganic ones as *nd* and *st*, are also reduced in many varieties of English: the last consonant might be dropped, or at least be lenis in its articulation. Perhaps this was the case with *bani* 'band'; if not, one wonders why **badi* was not the resultant form. There are at least three possible reasons. First, the word might have been borrowed first into a variety of Fijian that palatalises *di*. Next, the model might have already simplified the final consonant cluster. Finally, in indigenous words of one morpheme, *bvdv* is not allowed.

The discussion in this section has shown that regardless of the accent pattern of an English donor, only certain patterns are permitted in Fijian. These patterns are dependent on the phonological unit into which the phonetic material can fit. At the prosodic level, this unit is the measure. Thus, the patterning of accent in English loans emphasises the importance of the measure in the phonological structure of Fijian.

3.2 Syllables and the distribution of added vowels

From a linguist's point of view, there is nothing unexpected about an English syllable of the shape CV being interpreted as the same shape in Fijian. It is of interest, however, to note another source of Fijian CV syllables: English consonant clusters or word-final consonants. Many of the examples already given show that vowels have been inserted or added to insure that all Fijian syllables are open. But how are these vowels chosen?

Many descriptions of English loan words in languages with a CV structure have treated an added vowel as the result of either paragoge or epenthesis. For Fijian, however, separate terms are not necessary, for a vowel must end a syllable whatever its position in a word. The important question with respect to an added vowel is this: is the choice of vowel random or patterned?

If we continue to view borrowing as interpreting a stretch of English phonetic material into Fijian phonemic units, there must be something in that material to produce the impression of a syllable-final vowel in all instances. Scott (1948:737–738) may have viewed borrowing that way. He did not discuss either type of added vowel but wrote simply: 'Since there are no [syllable-] final consonants, English words taken into Fijian must be built up syllabically in much the same sort of way as they are in Japanese'. Continuing from this point of view, I suggest that each English consonant that is not followed by a vowel is interpreted as a Fijian CV syllable.

Support for such a proposal is provided by the different distributions of the five vowels after different consonants. There is a tendency for certain syllables to predominate. Tables 1 and 2 show this tendency—first in absolute numbers, then in percentages. (The data are only those syllables that have been formed by adding vowels.)

Table 1: Distribution of added vowels after individual consonants
(number of occurrences)

	i	e	a	o	u	Total	%
p	11	11	11	2	3	38	5.43
t	49	38	11	3	3	104	14.86
k	25	13	21	8	1	68	9.71
b	3	2	4		3	12	1.71
d	19	5	1			25	3.57
q	2	3	2			7	1.0
v	4	4	3	2	17	30	4.29
c	3	1	3			7	1.0
s	135	8	2	3	4	152	21.71
j	7					7	1.0
m	8	2	3		15	28	4.0
n	122	5	4	1		132	18.86
g	11			2		13	1.86
f	1	2	3	1	1	8	1.14
r	2					2	0.29
l	26	11	15	12	3	67	9.57
Totals	428	105	83	34	50	700	
	61%	15%	12%	5%	7%	100%	

Table 2: Distribution of added vowels after individual
consonants (percentages)

	i	e	a	o	u
p	28.9	28.9	28.9	5.3	7.9
t	47.1	36.5	10.6	2.9	2.9
k	36.8	19.1	30.9	11.8	1.5
b	25.0	16.7	33.3		25.0
d	76.0	20.0	4.0		
q	28.6	42.9	28.6		
v	13.3	13.3	10.0	6.7	56.7
c	42.9	14.3	42.9		
s	88.8	5.3	1.3	2.0	2.6
j	100				
m	25.6	7.1	10.7		53.6
n	92.4	3.8	3.0	0.75	
g	84.6			15.4	
f	12.5	25.0	37.5	12.5	12.5
r	100				
l	38.8	16.4	22.4	17.9	4.5

From the tables, we can form the following generalisations:

1. The distribution of the vowels in this set is markedly different from that of the vowels in a Fijian text; see Table 3 (Cammack 1962:36):

Table 3: Ratio of vowel occurrences in a text

Vowel	% of vowels	% of all segments
/i/	18.87	10.5
/e/	10.02	5.6
/a/	43.66	24.2
/o/	14.87	8.3
/u/	12.56	6.9
Total	99.98	55.5

(In other words, the vowel /i/ accounts for 18.87% of all the vowels in a text, and 10.5% of all the segmental phonemes.)

The difference between the high textual frequency of *a* and its low frequency as an 'added vowel' is especially significant (see Table 1).

2. Certainly, the most frequently occurring vowel in the set is *i*. And if it were not for the strictures against the syllables *ti* and *di* in early borrowings (in some dialects, these syllables were palatalised to [tʃi] and [ndʒi]), the percentage for *i* would be even higher. Combining *ti* and *te* in Table 2 would raise the percentage from 47.1 to 83.6; combining *di* and *de* would raise it from 76 to 96.

In short, the percentages for *i* following apical stops, fricatives, and nasals are noticeably high.

3. The letter *u* occurs most frequently after the labials *v* and *m*. But what of the occurrences of *u* after the other labials—*p*, *b*, and *f*? Here the data must be examined more carefully, and in rather the reverse order. We see that *u* does not appear at all after *n*, *r*, *j*, *d*, *g*, *q*, and *c*. After *k*, there is only one occurrence, and in that word, *kuwaya* 'choir', it precedes a *w*. After *s*, there are four instances, three of which have *u* as the main (not added) vowel, and the fourth followed by *w*. After *t*, there are three examples, all of which are preceded by *u*. And after *l*, two of the three examples have a preceding *u*. In other words, the use of *u* as an added vowel after consonants that are not labials can usually be explained by the presence of other nearby rounded elements.
4. In a study of English loan words in Tongan (Schütz 1970), the patterns *ka* and *lo* for added vowels turned out to be significant. In Fijian, both *k* and *l* are followed more often by *i* than by the other vowels. But again from the opposite point of view, *a* shows a higher incidence of occurrence with *k* than with any other consonant, as do *o* and *u* with *l*.

In summary, the following syllables show an affinity between a particular consonant and vowel:

ti, di, ji, si, ni, mu, vu, ka, lo, la

I suggest that when each of these consonants (in English) is not followed by a vowel, its release is usually heard as a particular vowel, and that the combinations above belong to a class called NATURAL SYLLABLES.²¹

3.2.1 *Phonetic considerations*

The hypothesis that English consonant phones are interpreted as Fijian CV syllables is supported by the patterns discussed above. For a possible explanation of the patterning, we look at the phonetic nature of the segments, particularly at the possibility that the release of a consonant in a natural syllable might be perceived as a particular vowel.

Although the division of sounds into consonant and vowel seems to be classic and universal, it is also misleading. We tend to forget that phonetically, consonants and vowels form not a dichotomy but a continuum, for they share certain characteristics. These shared features can be examined from several points of view: articulatory, acoustic, and perceptual.

1. In articulatory terms, note the similarity of tongue position for the production of alveolar/dental stops and fricatives, and the high front vowel [i]. In other words, as [t], [s], and [d] are released, the tongue is already high and front. Thus, little jaw or tongue movement is required in the transition from consonant to vowel.

Next, the bilabials share a number of features with [u]. In terms of height, less distance is involved in the move from the consonant to a high vowel. As for advancement, for [β], the nature of the constriction and airflow requires that the apex of the tongue be lowered, leaving *vu* as the most natural syllable possible. Finally, the bilabials and [u] share the phonetic features of lip protrusion, which shows in the photographs produced in a phonetic experiment with a native speaker of Fijian, conducted at the University of Hawai'i at Mānoa (Harris 1977).

As another example, the dorso-velar position of *k* might allow a lower tongue position; hence, the greater number of examples of *ka*. This point was criticised by Ross Clark (1980:127), but I maintain that it has some validity. For example, Charles F. Hockett (1995:35, note 6) supported Jakobson's 'association of the three consonants [p t k] respectively with the three vowels [u i a]' with this statement: 'I think the reason for my favourable reaction is not acoustic but articulatory: by kinesthetic feedback, I feel an involvement of the lips in [p] and [u], of the front part of the tongue in [t] and [i], and of the back part of the tongue in [k] and [a]'.

2. In acoustic terms, Jakobson, Fant, and Halle (1965:27–28) divided both consonants and vowels into the categories COMPACT versus DIFFUSE. Sounds falling into the compact class are open vowels and the English consonants [k g ʃ ŋ]. The diffuse category includes close vowels and [t d s n p b f m]. Thus, the association between the constituents of several natural syllables—*ti, di, si, ni, ka, mu*—is somewhat clarified.

²¹ I am not entirely satisfied with this term, and would welcome suggestions for a more appropriate one. In particular, no connection should be inferred between this label and Natural Phonology.

An explanation in these terms alone might not suffice, but it adds support to other observations, particularly phonetic ones, as suggested by Hockett (above).

3. Related to the perceptual point of view is the range of the vocalic character of continuants and the release of stops. As a theoretical example, note the [a]-like quality of [x], as opposed to the [i]-like quality of [ʃ] or the release of [t].

3.2.2 Phonological considerations

One natural syllable, *ji*, is the result of the Fijian phonological system, in addition to possible phonetic similarities between consonant and vowel. In the phonology of Lauan Fijian (the source of many early borrowings), [tʃi] is an allophone of /t/. Thus *[ti] was not permitted, and English [tʃ] and [dʒ] were both borrowed as Fijian *ji*. Take the name *Jone* 'John', for instance. The first missionaries were unaware of the systematic link between [tʃ] and /t/ (complementary distribution), and spelled new words not with *ji*, but with *j* alone. But based on external evidence, I suggest that *Jone* was probably pronounced in Lau as [tʃíóne],²² a trisyllabic measure with a reduced vowel in the first syllable, as it still is by speakers in some areas (Paul Geraghty, pers. comm. 1978).

For some other syllables, such as *ti*, *si*, *mu*, and *vu*, phonological and phonetic considerations work hand in hand. Phonetically, *i* and *u* are vowels of the lowest sonority, but even so, they are not automatically reduced in all languages. However, as mentioned earlier, Fijian allows their reduction in unaccented positions in the measure (especially at the end of a word), thus permitting what is structurally a CV syllable based on an English consonant, to appear phonetically as a lengthened continuant, or an obstruent followed by a voiceless vowel.

3.3 Segments

In Fijian, a syllable can be defined in functional terms: how it fills a position within a measure (Schütz 1976:93). It is more common, however, to define a syllable in terms of form. Since the potential number of syllables in Fijian is unwieldy, we will separate them into their components—vowels and consonants.

3.3.1 Vowels

The statement that Fijian has a five-vowel system is correct so far as it goes, but it represents only one point of view. If we look for a frame that allows the widest range of vowel occurrences (comparable to English monosyllables, which allow us to find contrasting stressed syllables), we find that it is the accented syllable of the CVCV measure. There can occur in this position (after the consonant) not only the five simple vowels—*i*, *e*, *a*, *o*, *u*—but also seven diphthongs—*ai*, *au*, *ei*, *eu*, *oi*, *ou*, *iu*.

²² Compare this with Tongan *Sione* (pronounced earlier as [tʃíóne]).

I have chosen not to add another frame, CV:, to include the long vowels. For all borrowings, even the reflexes of such English monosyllables as *kī* 'key' and *tī* 'tea', the long vowel can be interpreted as a prosodic device either to attract the accent or to produce a word that satisfies the requirement that a content form be at least bimoraic—that is, contain minimally a long vowel or a diphthong.

Table 4 shows the Fijian reflexes of English stressed syllabics. The first grouping lists those sometimes interpreted as simple vowels (by the IPA, for example), even though phonetically some of them are actually diphthongs. The second grouping deals with those traditionally treated as diphthongs.

Table 4: Fijian reflexes of English stressed syllabics

English	Fijian	English	Fijian
iy	i	east	isi
ɪ	i	inch	idi
ey	e	matron	mete.reni
	ei	chain	jeini
æ	e	brandy	beredi
ɛ	e	bet	beti
a	a	drama	drama
æ	a	bank	baqe
ʌ, ə	a	butter	bata
ow	o	coat	kote
	ou	gold	koula
ɔ	o	August	Oko.sita
uw	u	lose	lusi
yuw	u	union	uni.oni
	iu	new	niu
ay	ai	pint	paide
	ae	file	faele
aw	au	account	akaude
	ou	powder	pouta
	ao	pound	paodi
oy	oi	point	poidi

In the simplest terms, the system works this way. The five Fijian vowels are used to represent those English sounds not treated as diphthongs except in the narrowest sense. That is, English [ey] is most often heard as Fijian /e/, [iy] as /i/, [ow] as /o/, and so on. The data, and the table, show a few examples of vowels of this type interpreted as Fijian diphthongs: *rei.yoni* 'rayon', *sousi.olo.jī* 'sociology', *koula* 'gold', and *sitei.seni* 'station'. And even some of these examples are questionable; the *i* in *rei.yoni* is superfluous (or else the *y* is), and *sitei.seni* has an alternate form, *sitē.seni*.

Note that Fijian does not use \bar{i} vs. i , \bar{e} vs. e , and \bar{u} vs. u to represent [iy] vs. [ɪ], [ey] vs. [ɛ], and [uw] vs. [ʊ]. This practice serves as added evidence that, in borrowings, vowel length in Fijian is mainly a prosodic feature.

Those English sounds traditionally treated as diphthongs, such as [ay] and [oy], are realised in Fijian as vowel clusters, with i and u serving as the second element (interpreting English [y] and [w]). Occasionally e and o serve as the second element rather than i and u . These vowel clusters function as diphthongs: that is, the first element is accented no matter what its position in the measure. Within this type, borrowings with ae and ao ²³ are interesting, since these sequences do not occur in indigenous Fijian words except across morpheme boundaries (Geraghty & Pawley 1981). Although recent borrowings with those sequences are very few in number, their very existence shows that perhaps the former restrictions are growing weaker.

The correspondences just discussed hold for English accented syllables. For unaccented ones,²⁴ the picture is much less clear. One reason is that there is considerable variation in the model. Whatever the exact phonetic nature of an individual unstressed English vowel, it will generally fall somewhere in the central unrounded area, a phonetic space that is relatively unfilled for Fijian. Rounded vowels are apparently considered undesirable for representing English unstressed vowels; those examples that do exist seem to be copy vowels or spelling borrowings. This restriction leaves i , e and a available; of those, e is used most frequently, with i a close second. There are many fewer examples with a . This patterning comes as no surprise; in my idiolect of English, the unaccented vowel in most of the examples is [ɪ] rather than [ə].

3.3.2 Consonants

Although, as mentioned earlier, it is not hard for Fijian borrowers to find a consonant fairly close to the phonetic shape of the English consonant they hear, there are very few consonants for which the relationship between the model and the borrowing is straightforward. Perhaps Fijian l in loan words almost exclusively represents English [l], and a similar relationship may hold for Fijian r and English [ɹ]—at least before the nucleus of the syllable. But in most areas of the consonant system, complexities abound.

Take m and n , for instance. Looking at borrowing from one direction only, the relationship seems simple: most instances of /m/ and /n/ in the data derive from English [m] and [n]. But because Fijian voiced stops are prenasalised, medial Fijian b and d in borrowings are related not only to English stops in those positions (p , b ; t , d), but to English [m] and [n] as well.

The following discussion treats some of the more complex relationships.

²³ Perhaps because these sequences are rare, there is some disagreement about whether or not they are diphthongs. I suspect that the matter varies from speaker to speaker.

²⁴ There are, of course, two types of unaccented syllables in loan words: that discussed in this paragraph, i.e., that corresponding to an unaccented CV sequence in ENGLISH; and that containing an added vowel (which should be unaccented for the most desirable prosodic fit).

1. The labial stops and fricatives. Standard Fijian is somewhat unusual for the asymmetry in its stop system (that is, the system we would propose for 'unborrowed' words):²⁵

(p)	t	k
b [mb]	d [nd]	q [ŋg]

The stop *p* appears in many varieties of Fijian spoken in Lau, Taveuni, and parts of Vanua Levu, and now is used readily for borrowings by what we might call innovative speakers; e.g. *peni* 'pen'. Conservative speakers use *v* [β]: *veni*. Of course, in many older borrowings, such as *veleti* 'plate', *vini.vō* 'pinafore', *vō.kete* 'bucket', and *vurusi* 'brush', the *v* has become established, for it is unlikely that many speakers associate those words with English at all. Whatever the associations, one does not hear **pini.fō*. The list of indigenous fricative phonemes also presents a skewed line:

	s
v [β]	c [ð]

However, *f*, also used in Lau, was freely used by the missionaries in their early borrowings. As a result, some English words with [f] are borrowed with *f*; others with *v*.

As the quotation from Cargill shows (§2 above), the missionaries who introduced words into the language did not favour using Fijian *b* for anything other than English [mb]. For this reason, words with English [b] were borrowed with Fijian *v*: for example, *tavako* 'tobacco'. But in words that were either borrowed later, or introduced into the language by Fijian speakers, it seems to have become acceptable to use Fijian *b* for English [b] at the beginning of a word; the data show thirty-two examples of *b* in that position, as opposed to four examples of *v*. The prohibition against using it in medial position still holds. In spite of the voicing match, the preceding [m] takes the form too far away from a phonetic match, so *p* or *v* has to serve in that position: *lepa* 'labour', *kalavo* 'club'. Examples like these, combined with others such as *kā.basi* 'compass' (for it might have been something like **komu.pasi*), underscore the suggestion that voicing is not deemed especially important for producing a close phonetic match.

Thus the variables of phonetic similarity, social variation (with respect to accepting introduced sounds such as *p* and *f*), mode of introduction (natural, 'bestowed', or via Tongan), position in the word (initial versus medial), and the standardisation of certain forms simply through the passage of time produce the complex relationships shown in Figure 1.

²⁵ Paul Geraghty (pers. comm. 1999) suggests that this is one feature in which Standard Fijian and Bauan differ. Here, Standard Fijian refers to the lingua franca that was spoken before European contact, not to the one chosen by the missionaries.

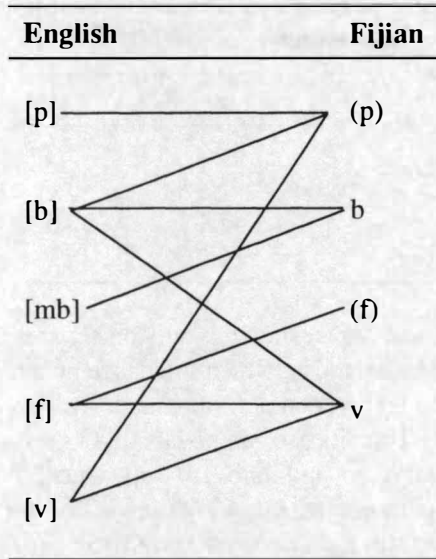


Figure 1: Relationship between English and Fijian labial stops and fricatives in borrowings

2. The dental/alveolar stops and fricatives and alveopalatal affricates. If the first missionaries to Fiji had gone directly to Bau instead of spending time first in Tonga and then in Lau, many loan words would have a different appearance than they now have. Besides a probable absence of *f* and *p*, it is likely that *j* too would not have been introduced, for that symbol is a direct result of the palatalisation that occurs prominently in Tongan and many Fijian languages²⁶ (especially Lauan). As already mentioned, the Lauan orthography used in the 1830s overdifferentiated /ti/ as *ji* (e.g. *Fiji*) but underdifferentiated /di/ by writing it too as *ji* (e.g. *jina* /dina/ 'indeed'). Including *j* in the alphabet allowed, then, English [tʃ] and [dʒ], as well as [ntʃ] and [ndʒ] to be borrowed as *j*.²⁷

Another effect of the palatalisation of *t* was to eliminate *ti* and *di* as potential syllables with which to interpret English [ti, tɪ, di, dɪ]. Such a loss was not insignificant; *i* is very highly favoured as an added vowel after the other alveolar consonants (*s* and *n*). Since [ti] and [di] were not available for Lauan, one might expect *te* and *de* as substitutes. Although Standard Fijian has no such prohibitions, and now *ti* and *di* can serve freely, Table 5 shows that there is a residue of the pattern that was necessary for Lauan:

²⁶ On Vitilevu, for example, isoglosses for palatalisation of /t/ include a large part of the island, mainly Bā, parts of Nadrogā-Navosa, all of Serua and Namosi, and a part of Naitasiri (Schütz 1962:52–53).

²⁷ As discussed in §4.1, a recent revision of the orthography eliminated the underdifferentiation of *j* by introducing *z* for [ndʒ].

Table 5: Percentage of *i* and *e* as added vowels following alveolar/dental consonants

	<i>i</i>	<i>e</i>
s	88.8	5.3
n	92.4	3.8
t	47.1	36.5
d	76.0	20.0

The alternation between *ti* and *te* just shown is only one example of the complexity of the system that exists in Standard Fijian today, which still has remnants of borrowing patterns that held for Lauan over 160 years ago. As *ti* and *di* were made available as units, *j* was removed, at least as an indigenous unit. Thus its use can be labelled as innovative.

The conflict between conservative and innovative speakers has continued to the present. Tevita R. Nawadra reported (pers. comm. July 1974) that in Tailevu Province (which includes Bau), among the older generation, *j* is still pronounced [ti]: *Jone* ‘John’ is [tione]. Some spellings still reflect the Lauan palatalised syllable: *Jiosefa* ‘Joseph’, *jieke* ‘check’. These words, with their alternate spellings *Josefa* and *jeke*, are among a significant number of doublets, most of which hinge on the presence or absence of the innovative consonants *p*, *f*, and *j* (rather than *v*, *b*, *di*, and *ti*), or the use of *j* (rather than *ji*). Figure 2 shows the complex relationships among these sounds:

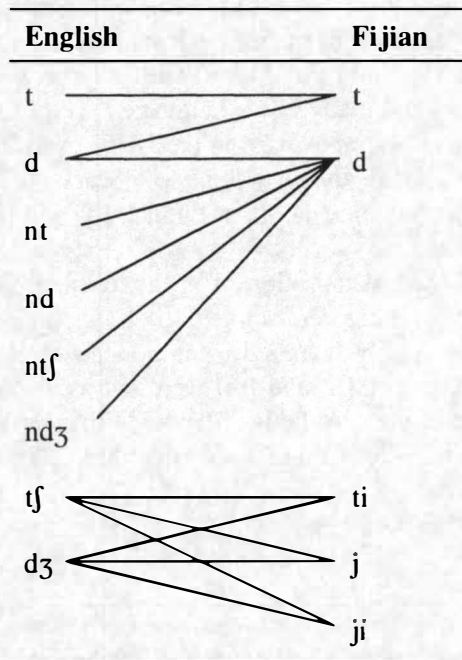


Figure 2: Alveolar/dental stops and alveopalatal affricates

3.4 Other considerations, or why the rules don't always work

It should be clear from the preceding sections that the 'rules' inferred from the data show tendencies rather than hard-and-fast patterns. For example, although natural syllables make up nearly 60 % of the examples of Fijian syllables corresponding to English consonants, what of the exceptions? They fall into a number of categories—some based on phonological considerations, others not. Similarly, the vowel and consonant correspondences deduced cover most, but not all, the examples. And we have already seen that accommodating the accent pattern of an English word must operate within the structure of the measure or sequences of measures. In this section, I attempt to sort the mismatches into categories.

3.4.1 Simplification of consonant clusters

Section 3.1.3 (part 4) showed words with consonant clusters that had been simplified, thus allowing a closer prosodic match. Most of the examples are of homorganic clusters that have been reduced, such as:

sani.pepa sandpaper *dai.mani* diamond *posi* post

(However, it is also possible that the model was heard with the cluster already simplified, since this is a common feature of English casual pronunciation.)

Not all of the examples, however, contain homorganic clusters:

desi desk *beqa.ravu* bankrupt

Nor are all homorganic clusters simplified; counterexamples are:

simede cement *sē.kodi* second

Some words have alternate forms, with and without simplification:

wesi, weseti west *paodi, paudi, vaoni, vaudi* pound

3.4.2 Copy vowels

Many syllables other than those defined earlier as 'natural' add vowels that echo, or copy, a sound in the model. For example, Table 1 shows 135 instances of *si*, but only 4 of *su*. Those 4 are:

sutu.weti steward *suwiti* switch
*suku.ea*²⁸ square *sunuka* snooker

²⁸ In faster speech (see Tamata 1994), this form occurs as one measure. The *kue* sequence sounds like one syllable: *kwe*.

In each example, the consonant cluster in the English model is followed by a rounded vowel or consonant. Thus, the *su* syllable in the Fijian form seems to anticipate the approaching rounding, taking precedence over the natural syllable, *si*.

The set of *k* syllables contains a similar example. The only instance of *ku* is in *kuwaya* 'choir'; the syllable in question precedes a *w*.

The eight examples of *ko* all show copy vowels:

<i>buloko</i>	block	<i>Ō.kosi.vote</i>	Oxford	<i>Oko.tova</i>	October
<i>koko.roti</i>	cockroach	<i>koroko.taile</i>	crocodile	<i>Mai.koro.nisia</i>	Micronesia
<i>korosi</i>	cross	<i>kaloko</i>	clock		

All the *ko* syllables are either preceded or followed by an *o*-syllable that corresponds to an /o/ or /ɔ/ syllable in the English model.

The *ke* set is less clear-cut. A ratio of 7:4 holds for examples with and without copy vowels:

<i>jeko</i>	check	<i>keke</i>	cake	<i>Kere.kori</i>	Gregory
<i>Make.reta</i>	Margaret	<i>neke.tai</i>	necktie	<i>sita.rake</i>	strike (~ -ki)
<i>joke.liti</i>	chocolate	<i>joke</i>	jug	<i>seke.riteri</i>	secretary
<i>doke.tā</i>	doctor	<i>(rē.seni).jake</i>	(raisin)jack		

A clearer picture emerges for *lo*:

<i>polo</i>	ball	<i>Molota (Molo.tā?)</i>	Malta
<i>Mono.tiri.olo</i>	Montreal	<i>rā.folo</i>	raffle
<i>desi.molo</i>	decimal	<i>sā.bolo</i>	sample
<i>rolo</i>	roll	<i>simolo.pō.kisi</i>	smallpox
<i>mā.polo</i>	marble	<i>sitolo</i>	stall
<i>Mē.toro.polo</i>	Metropole	<i>tauna.olo</i>	town hall

Each one of the *lu* set, only three items in all, copies another -*u* syllable in the form:

<i>fulu.sitovu</i>	full stop	<i>tau.welu</i>	towel	<i>kulu.tā</i>	coal tar
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All five ratios (with and without copy vowels) for the *l*-set are as follows:

<i>li</i>	10:15
<i>le</i>	5:5
<i>la</i>	3:12
<i>lo</i>	12:0
<i>lu</i>	3:0

The *t* set shows examples of *o* and *u* as copy vowels:

<i>para.sutu</i>	parachute	<i>Mē.toro.polo</i>	Metropole	<i>sutu</i>	suit
<i>salutu</i>	salute	<i>nai.toro.jini</i>	nitrogen		

The one example of the *d* set other than *di*²⁹ or *de* is *Madarasi*³⁰ 'Madras', which shows *a* as a copy vowel.

For the *b*- syllabary, *bi* and *be* show copy vowels:

<i>biriki</i>	brick	<i>bereki</i>	brake	<i>qabi.ligi</i>	gambling
<i>Birisi.beni</i>	Brisbane	<i>beredi</i>	brandy		

Three of the four *ba* examples show copy vowels:

<i>baraca</i>	brother	<i>sitaba</i>	stamp	<i>barasi</i>	brush
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All the members of the *g*- set show copy vowels:

<i>Igi.ladi</i>	England	<i>qabi.ligi</i>	gambling	<i>piqi</i>	pink
<i>Wā.sigi.toni</i>	Washington	<i>wigi</i>	wing	<i>sivi.rigi</i>	spring
<i>pigi.pogo</i>	ping-pong	<i>rigi</i>	ring	<i>wele.digi</i>	welding
<i>Wē.ligi.toni</i>	Wellington	<i>Ogo.Kogo</i>	Hong Kong		

The examples above are meant to illustrate that there is evidence that copy vowels play an important part in the choice of certain Fijian syllables to represent an English consonant. But only a few clear patterns emerge.

3.4.3 Alternating forms

Just as there are pairs of alternates like *vaivol/paipō* 'pipe', reflecting the variation between conservative and innovative forms, there are also pairs that alternate between the choice of vowel in the syllables that represent English consonants. Note the following:

<i>kirimi/kirimu</i>	cream	<i>tani/tane</i>	ton
<i>porō.fesa/parō.fesa</i>	professor	<i>tauna.olo/tauni.olo</i>	town hall
<i>Tū.site/Tū.siti</i>	Tuesday		

The first pair in particular seems to point out the conflict between two processes: representing an English consonant by a natural syllable, or choosing a syllable that contains a copy vowel.

3.4.4 Spelling borrowings

Many words that appear in Fijian language newspapers, especially foreign place names, show the signs of hasty transliteration and seem to be based more on spelling than on sound. Often, they are merely nonce forms, coined for the occasion and then discarded. But even so,

²⁹ We have already discussed the palatalisation in certain areas that made *di* impossible for early borrowings.

³⁰ An odd form, apparently partially the result of the influence of spelling. **Mata.rasi* would have been a choice closer to the model, or one with the prenasalised *dr*: **Madras*.

they show the power of the printed word, and the effect of that odd coincidence: five vowel letters for English and five vowel phonemes for Fijian.³¹

An interesting example of relying on the appearance, rather than the sound, of a word is *apa.ceiti* 'apartheid'. Here, the *-t + h-* of the model must have been interpreted as a unit: *th*, and hence as Fijian *c*.

A frequent misinterpretation involves English written *u*, which in unstressed positions often represents [i] or [ə]. The following examples show that the borrower relied on spelling rather than pronunciation:

alu.mini.umu aluminium *Beli.jiumu* Belgium

Written *u*, when representing a stressed vowel, presents another kind of discrepancy, for it reflects English [yu] regularly in initial position (that is, there are no words beginning in [u-]) and—for certain dialects—after some consonants. Although Fijian **yu* does not occur, *iu* would have been acceptable. But Fijian newspapers show the following spellings:

<i>Kupa</i>	Cuba	<i>Komu.nisi</i>	Communist	<i>uni.fomu</i>	uniform
<i>uniti</i>	unit	<i>uni.vesi.tī</i>	university	<i>Mū.niki</i>	Munich
<i>uni.oni</i>	union				

Current pronunciations, however, do not always match the spellings. The translation of *Cuba* is now pronounced *Kiuba* or *Kiupa*, and with the exception of *Komunisi*, the remaining words are sometimes pronounced with glides in spite of their spelling.³²

In the following words the [yu] is reflected in both the spelling and the pronunciation, showing a dialectal feature of the model:

<i>sitiu</i>	stew	<i>niu.kilia</i>	nuclear
<i>niusi.veva</i>	newspaper	<i>Niu Siladi</i> ³³	New Zealand

But the correspondence is not regular; some forms do not reflect the glide after the consonant:

<i>Tū.siti</i>	Tuesday	<i>jivu situ.eti</i>	chief steward
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One form, *Niumea* 'Nouméa', shows the progression of a pronunciation from French through Commonwealth English to Fijian. Or does it result from analogy with *Niu Siladi* and other such forms (Paul Geraghty, pers. comm. 1978)?

A common type of spelling borrowing is that which includes a *b*, *d*, or *q*, even though the consonant it represents in the model is not preceded by a nasal:

³¹ Discounting long vowels, of course.

³² G.B. Milner (pers. comm. 1978) suggested that perhaps such initial *yu*-pronunciations were produced by preceding the loan word with the preformative *i-* prefix. Paul Geraghty (pers. comm. 1999) cited the example *nai unifomu* 'the uniform'.

³³ Note that the form, written as two words, reflects the English spelling (Paul Geraghty, pers. comm. 1999).

<i>Kobe.lenisi</i>	Koblentz	<i>Mada.rasi</i>	Madras	<i>Oli.udu</i> ³⁴	Hollywood
<i>Kiu.beka</i>	Quebec	<i>Rodi.sia</i>	Rhodesia	<i>Folo.rida</i>	Florida
<i>olo.dei</i>	holiday	<i>Iraki</i>	Iraq		

Some such forms—e.g. *edi.tā* ‘editor’, *kabi.nete* ‘cabinet’, *viniqa* ‘vinegar’—have become standard; only a spelling reform or a prescriptive dictionary could establish **eti.tā*, **kapi.nete*, and **vini.kā*.

Whereas most examples of *r* after vowels (in spelling, that is) are borrowed as simply the vowel, or the vowel plus *a* (because of the *r*-less model), some *r*'s appear (a few in what are probably nonce forms, but others in established forms): *kā.retī*³⁵ ‘cart’, *Esiteri*³⁶ ‘Esther’. For the latter, **Esi.tā* would have been closer to the model.

Certain groups of words have little in common except that they seem to be partial or total images of the written forms:

<i>Europe</i>	Europe	<i>lawa</i> ³⁷	law	<i>koala</i>	coal
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Others seem based on mispronunciations or nonstandard models—*Fili.paini* ‘Philippine’—or on Australian or New Zealand English—*Ate.laite*³⁸ ‘Adelaide’, *lemo.naiti* ‘lemonade’

3.4.5 Morphological reanalysis

Rather like English *an orange* (in which the *n-* of the noun was cut off and reattached to the article preceding it), at least a few forms have undergone morphological recutting. **Napi.kini* ‘napkin’ was interpreted as two morphemes: *na pikini*, with *na* as the definite article. Other examples (in some communalects) are *iloni* ‘nylon’ and *daweā* ‘underwear’. An example of the reverse is *nawa* ‘hour’. A similar pattern exists for proper names: ‘Obediah’ became *o Petaia* (*ope.taia*), with *o* marking proper noun phrases.³⁹

³⁴ The absence of *w* may reflect the restriction against the syllable *wu* in Fijian.

³⁵ Perhaps instead from ‘carriage’.

³⁶ Could some of the Biblical forms, such as *Esi.teri*, *Jori.tani*, *Mā.rika*, and *pari.lē* have been introduced by early translators who did not speak *r*-less dialects of English? Cargill, for example, was a Scot.

³⁷ Capell identifies *lawa* as an English loan word, but it might possibly be from an indigenous *lawa*, with the meanings of ‘net’, ‘taken in ambush’, ‘accuse on suspicion’. Paul Geraghty (pers. comm. 1999) suggested that the form is from Tongan *lao* ‘law’, marked as an English borrowing in Churchward (1959). He added that a Lauan writer from ca 1865 wrote ‘law’ as *lao* and described it as a new introduction by Ma’afu and the Tongans (Carey, n.d.). Other authors who use *lao* ‘the law of Ma’afu’s government’ are: KolinioWaqā of Lakeba, Lote Seru of Lakeba, and Lemeki Batiri of Vanuabalavu.

³⁸ Perhaps this was based on the spelling, or a combination of the spelling and the pronunciation.

³⁹ These examples of recutting serve as evidence that the noun markers are indistinguishable from other syllables when their position in the measure requires accent. In other words, they are not

Fiti 'feet' is an example of an English irregular plural that was borrowed; *fute* 'foot' also exists. In another example, 'file', a prefix keeps two meanings apart: *i-faele* (the tool), *faele* (for papers).

Some of the examples of the simplification of English final consonant clusters given earlier might be instead instances of interpreting *-s* as a marker of plural. If so, the borrower analogised from his/her knowledge of English morphology. Examples are *kasi.tamal/kasi.taba* 'customs', *lai.seni* 'license'.

3.4.6 Influence from Tongan

Many unexpected forms may owe their shape to an indirect route from English to Fijian: through Tongan as an intermediary. The history of European influence in the region shows that in matters both sacred and secular, foreign ideas and goods often entered Fiji via Tonga. Although documentation is scarce, the words themselves may serve as evidence. For example, *tēvoro* 'devil' may have been borrowed into Fijian through Tongan *tēvolo*. Although the *r* is somewhat unexpected, Tongan /l/ has a variant, occurring between vowels, that is similar to the Fijian *r* (in its tapped, rather than trilled, form). On the other hand, the word is part of the lore connected with the Tahitian missionaries mentioned earlier. For example, A.M. Hocart (1929:185) wrote that it was 'evidently imported by the Tahitian missionaries'. But the lore is unsupported by written records, for it seems unlikely that *tēvoro* was ever used in Tahitian. Not only current Tahitian dictionaries, but also those of the period (Davies 1851),⁴⁰ give *tiapolo* or *diabolo* [Gr. *diabolos*] for 'devil'. But Hocart's statement is ambiguous. Perhaps the Tahitians introduced not a Tahitian, but a Tongan, version into Fijian, making the expected change from *l* to *r* as they did it.

In the following list, several of the examples hinge on the Fijian form not showing the expected consonant, especially one that would match a nasal-stop cluster in English. Others simply show unexpected sounds, which happen to match the Tongan forms.

ENGLISH	TONGAN	FIJIAN	Expected FIJIAN form
sandpaper	<i>sani.pepa</i>	<i>sani.veva</i>	* <i>sadi.veva</i> ⁴¹
cabinet	<i>kapi.neti</i>	<i>kabi.nete</i>	* <i>kavinete, kapinete</i>
cupboard	<i>kō.pate</i>	<i>kō.vate</i>	* <i>kā.vate</i>
Monday	<i>Mō.nite</i>	<i>Mō.niti</i>	* <i>Mode</i> (cf. <i>olodei</i> 'holiday')
pump	<i>pamu</i>	<i>pamu</i>	* <i>pabu</i>
pound	<i>pāoni</i>	<i>vaoni</i>	<i>vaudi</i> (which is an alternate form)

clitics like certain particles that occur after the base (and hence, phrase-final and thus always measure-final).

⁴⁰ Although the 1851 date is somewhat after the period in question, the introduction (p. vi) explains that the dictionary was ready for the press twelve years earlier, and that version was a revision of a much earlier work, the printing of which was long delayed by orthographical arguments.

⁴¹ As discussed in note 20, the model may have been pronounced without the [d].

shilling	<i>silini</i>	<i>silini</i>	* <i>siligi</i> (for both TONGAN and FIJIAN)
watch	<i>uasi</i>	<i>uwati</i>	<i>wati</i> (which is an alternate form)

Still, proposing a Tongan source for these words is only supposition, for there are other possible explanations for their form as well.

4 The influence of borrowings on the language

As suggested earlier, when two phonological systems meet head-on through borrowing, we expect new forms to be as phonetically close to the model as possible. However, the sounds of the model, in passing through the phonological filter of the borrowing language, are often substantially changed. Hawaiian provides an extreme example; generally English /t, d, θ, ð, k, g, s, z, ʃ, ʒ, tʃ, dʒ/ are all borrowed as Hawaiian /k/ (Pukui & Elbert 1957:xvii). Although the consonant systems of English and Fijian are a good deal more similar, borrowing still provides cases in which the phonetic match does not seem close. An example is *veni* 'pen', which we might perceive as somewhat odd, since English treats /p/ and /v/ as distinct.

More striking is what happens to English consonants that are not followed by a vowel, for their reflex in Fijian is a syllable of the shape CV. Here, the end of the former example shows that reflex: *veni*.

But *veni* shows only regular changes in the form of a *word*. What about changes to the phonological system of the borrowing *language*? Changes to the English system effected by the influence of Norman French are well known. In that particular linguistic encounter, English was confronted with a plethora of additions to its lexical store. With respect to numbers, the impact of English on Fijian has been much less than that of French on English. The data for this paper include fewer than 800 words, exclusive of proper names. In spite of that relatively low number, the words have brought about changes.

We shall discuss here the parts of the Fijian phonological system that have changed, and—conversely—those that have not.

4.1 Flexibility

Loan words from English have added three consonants to the Standard Fijian inventory: *p*, *f*, and *j*. But they have been only gradually accepted. As an illustration, take the previous example, *veni*. That form is found in early word lists. Now we find alternating forms *veni* and *peni* (along with other such pairs as *vevalpepa* 'paper' and *vaivolpaipo* 'pipe'), and although some older forms such as *vini.vō* 'dress' (from 'pinafore') and *tavako* 'tobacco' are firmly established with *v*, newer words are borrowed with *p*: *tepi* 'tape' is not likely to be **tevi*, except perhaps for very conservative older speakers.

With respect to frequency, *p* is a front-runner in the line-up of new consonants. In one list of borrowings, words that begin with *p* account for seventy items, compared with sixteen and twenty-four for *f* and *j*. One reason for the relative ease of assimilation of *p* might be a covert approval of phonetic symmetry within the phonological system. Accepting the new sound produces this system:

p	t	k
b	d	q

But perhaps this sound was easily added to Standard Fijian because it appears (outside English borrowings) in other languages/dialects of Fijian—for example, Lau and parts of Vanua Levu (Schütz 1963:67–68; Geraghty 1983:98–99). Over a century ago it seemed a popular affectation for young scholars. Lorimer Fison wrote: ‘The introduced *p* bids fair to drive out the *v* from the Bau Fijian. I have striven in vain with my students—they persist in writing *pale* for *vale* in spite of innumerable scoldings’ (Codrington 1885:202n).⁴²

In 1850, David Hazlewood discussed another newcomer in his dictionary: ‘The Fijian has no F. A few words from the Tonga language, having F, are commonly used in the Lau Dia[lect]. It is used also in words introduced, as Filimoni, parofita’ (Hazlewood 1872:41). As late as 1941, in his revision of the Fijian–English dictionary, A. Capell (1941:77) wrote: ‘[...] [*f*] is usually changed into *v* by the Fijians, and it is better to write a *v*’.

For the current situation, Capell’s advice is too conservative. As with *p*, older *f* words alternate with *v*: *fivalviva* ‘fever’, *fikalvika* ‘figure’. Newer borrowings do not alternate: *fulu.taimi* ‘full-time’, *fī.limu* ‘film’.

In terms of the phonetic symmetry of the consonant system, it is difficult to find a reason for adding *f*, for within the set of fricatives there is no set of voiceless–voiced contrasts like that within the stop system. Also, speakers do not seem to try to match the articulation of *v* by pronouncing *f* as a bilabial. But (as pointed out in the dictionaries), *f*, like *p*, already existed in the Lauan languages, not only in words that seem to be borrowed from Tongan, but indigenous ones as well (Schütz 1963:67–68; Geraghty 1983:99).

A third consonant addition is *j* [tʃ], which entered the language by a circuitous route: from Tongan (as an allophone of /t/, now written and pronounced *s*), and through Lauan Fijian. Except for Horatio Hale, early analysts were not aware of the allophonic nature of indigenous *j*, so wrote such words as /dina/ and /tini/ as *jina* and *jini*. In Standard Fijian, which does not palatalise those sounds, *j* is used exclusively for borrowings, such as *jā.kete* ‘jacket’ and *jamu* ‘jam’. In §3.2.2 it was pointed out that *j*, as originally used, actually referred to two sounds: [tʃ] and [ndʒ]. However, the Institute of Fijian Language and Culture now uses *z* for the voiced sound.

Of the three introduced consonants, only *p* contributes to phonetic symmetry. All three, however, were already part of the overall phonological pattern of Fijian, at least at the phonetic level. This arrangement suggests that the availability of a sound within the total system of Fijian was the most important criterion for its being added to the phonological system of Standard Fijian.

But the matter is not quite so simple, for other available sounds would also have been useful in borrowed words. Even though parts of Nadrogā use *h*, and a wider area uses *kw*, and

⁴² Paul Geraghty suggested (pers. comm. 1999) that such a practice was a spelling problem based on the fact that at the time many of these students were taught to write by Tongan catechists, who wrote *p* for *b* and *v*, and *t* and *k* for the Fijian voiced equivalents.

gw,⁴³ Standard Fijian still chose to borrow ‘hockey’ and ‘hotel’ as *oki* and *ō.tela*, and ‘guava’ as *quawa*. Similarly, although areas in Rā and Vanua Levu use the glottal stop, speakers of Standard Fijian still refer to the Tongan historical figure Ma’afu as Mafu. Is there a reason for rejecting these particular consonants?

Perhaps selecting some consonants, while rejecting others, reflects the attitudes of speakers of Standard Fijian toward the sounds of other Fijian languages. Hale (1846:367–368) revealed some linguistic attitudes in Fiji when he reported that it was ‘on the eastern side of Viti-levu, and particularly in *Rewa* [that] the language is said by the natives to be spoken in its greatest purity’. One sound was singled out as a ‘faulty’ pronunciation: the glottal stop. As for sounds from the Western varieties of Fijian, a speaker from Bau told me that those languages ‘sounded like Hindustani to us’. His attitude could explain the exclusion of *h* and the labiovelars in borrowings. It seems, then, that the sounds outside Standard Fijian but still within the total Bau–Rewa–Lau area have been acceptable, and those from other varieties less so.

A much more subtle change in the phonology involves the easing of certain restrictions on the types of syllables that can occur in succession within morphemes. For example, there are no indigenous morphemes of the shape *bVqV* except for the place name *Beqa* (Geraghty 1973). Yet, ‘bank’ has been borrowed as *baqe*. And was the *n* in the early form *sitō.kini* ‘stocking’ the result of the restriction against *kVgV*? If so, perhaps that restriction no longer holds, for one can now hear *sitō.kigi* (T.R. Nawadra, pers. comm. 1975).

4.2 Stability

A casual glance through the Fijian–English dictionary (Capell 1941) shows that certain *y*- and *w*-syllables do not occur; indigenous words include only *ya*, *wa*, *we* and *wi*. With respect to spelling at least, these restrictions seem to have held for borrowed words as well. ‘Yacht’ was borrowed as *iota*, or *ota*, not **yota*. ‘Yeast’ is *isi*, not **yisi*. One might have expected **wovu*, not *wavu* for ‘wharf’, or **woji.mani*, not *waji.mani* for ‘watchman’. But for the *y*-set at least, a wider distribution may be on its way. There is a discrepancy between the *u*-spelling and the *iu*-pronunciation of such words as *uni.vesi.tī* ‘university’ and *ū.ria* ‘urea’. Unaccented *i* and *u*, when not preceded by a consonant, tend to lose their syllabicity and—depending on their position—eventually function as glides (Pawley 1973; Dahl 1973:18; Schütz 1977b:17). Such changes are now reflected in the *y*-spelling (only before *a*) in words like *taya* ‘chop it’ and *koya* ‘he, she’. It remains to be seen how soon their consonantal pronunciation before other vowels is reflected in the spelling system.

But one phonological pattern shows no sign of yielding to pressures from the outside. As we noted earlier, Hazlewood realised that, in spite of the accent pattern of an English word, its Fijian form had to be accented on the penultimate syllable, ‘or do violence to a prominent feature in the language’. Although oversimplified in this description, the phenomenon has not

⁴³ The sound systems in Western Fiji also include *gw* [ŋw], but this phonetic sequence occurs only across syllable boundaries in English. However, if a word like *ringworm* should have to be borrowed, *gw* is ready and waiting.

changed. All borrowed words are composed of the same units as are indigenous words: one or more measures.

In other words, English words are reinterpreted in Fijian as one or more measures. Ideally, an accented syllable in the borrowing corresponds to an accented syllable in the model, but the same relationship does not hold for unaccented syllables. This suggests that it is more important to match Fijian and English accent units than syllables.

The examples in the preceding sections show that although four different measure shapes are available (giving a fair chance of matching English accented vowels with Fijian accented ones), there are certain patterns in English that cannot be matched in any way, such as three unaccented syllables in succession. In each case, it is the English accent pattern that has given way, and the Fijian measures that have remained unchanged.

A corollary to the immutability of measures is the tenacity of the requirement that syllables end with vowels. Occasionally, the rule is tested. A few years ago the editor of one of the Fijian language newspapers suggested in an editorial that the extra vowels in borrowings be dispensed with. When he wrote *mista* rather than *misita* (pronounced *misi.tā*), readers still pronounced the word (in reading, at least) as if the vowel were still in the underlying form, and 'the idea never caught on' (Ratu Luke Vuidreketi, pers. comm. 1972).

However, such attempts at spelling reform are like viruses that lie dormant for a time only to crop up again. In mid 1977, some members of a Fijian language committee proposed that the borrowing for 'ministry' be spelled *ministri*, arguing that such was the pronunciation. The form itself is interesting. It seems to be based on an acceptable (that is, not deviating from the usual pattern) form: *mini.sitā* 'minister'. The *si* in unaccented position in the measure is reduced, so that the phonetic effect is a lengthened [s̄]. Thus (disregarding the syllabicity of the *s*) a consonant cluster is produced similar to that in the model. But for 'ministry', an extra consonant—and hence an extra syllable—is necessary, and an attempt to fit the longer word into a measure pattern similar to that of *mini.sitā* produces an irregular form: **mini.sitirī*. In this form, it is the second measure that is the culprit, for no such shape exists in Fijian.

Still, this conservatism applies mainly to the written language. (And it must be remembered that most of the data for this paper come from written sources, mainly newspapers.) What about borrowings from the spoken language? Here, the phonotactic rules followed so rigorously in the data cited so far begin to give way. Recent drafts of *iVolavosa Vakaviti*, a monolingual Fijian dictionary, show such forms as *kes*h 'cash', *komishn* 'commission', and *tucbrash* 'toothbrush'—all violating the strictures against consonant clusters or syllable-final consonants. (As for the question of whether the measure shapes of conservative speech are maintained, it is difficult to tell, since they are not marked.)

Paul Geraghty (pers. comm. 1999) reports that currently the major source for English borrowings is Fiji English, which has its own phonology. Still, there is no reason why borrowings from this source should be more prone to deviate from conservative Fijian phonotactic structure than those from other English dialects. However, since a number of vowel contrasts are neutralised and certain consonant clusters simplified (compared with those in Standard English dialects), the correspondences between the donor and borrower systems would be different from those described in the present study.

According to Geraghty's lexicographic research, the examples above are only a small sample of borrowings with similar shapes, so there is no doubt of their existence. The difficult question is how to interpret them. There are several possibilities.

One is that these words have been completely assimilated into Standard Fijian, and as a result we must reconsider its phonology, not only with respect to segmental phonemes, but to phonotactics and accent units as well.

Another is that these borrowings are marked as foreign words. If this is the case, they might be comparable to the German or French expressions I use in an English context. Such words contain vowels and consonants that do not occur elsewhere in my idiolect: [x], [ö], [ü], and nasalised vowels, for example. Another example comes from German, especially in the eighteenth century. At this time, educated speakers made extensive use of French words and phrases in their speech. An authentic French pronunciation was *de rigueur*; assimilating the pronunciation to German phonetics would have been *déclassé*.

Still another is that several styles and dialects are being recorded. As another example from my own idiolect, I have a glottal stop as an allophone of /t/, in at least two environments. But only in certain styles. I use it in casual conversation, but not in more formal contexts, such as lectures, interviews, or singing.

Finally, it is possible that the spelling being developed for such forms is more phonetic than phonemic. It would be interesting to conduct spelling experiments with various speakers to see how they might interpret the new forms.

5 The latest word⁴⁴

Some borrowings carry a built-in chronometer: *vini.vō* 'dress (from *pinafore*)' and *bele.bō.tomu* 'bellbottoms' evoke different periods, as do *omu.burū* 'home-brew' and *bā.meti* 'barmaid', *tara.lalā* (from *tralala*, and now the name of a dance still popular in the villages) and *tuisi* 'twist', or *peni.vatu* 'slate pencil' and *tereni.sisi.tā* 'transistor'. The second members of these pairs are only a few of the many new words coined in the past few decades. The influx of foreign goods, ideas, and customs constantly adds to the vocabulary. For example, the proliferation of duty-free shops in the larger towns, concentrating on electronic gear, has affected not only the tourist, but the resident as well. *Wā.lesi* 'wireless' now has a competing form, *reti.ō*. Ads in Fijian-language newspapers present the consumer with equipment that will handle *peleti se tepi* 'discs (from 'plate') or tapes'. Some terms appear in their original, unadapted form:⁴⁵ *stereo*—or, in ads for powdered milk—*glucose* and *vitamin D*. A sports story may describe an event as *wastetime*. For many new borrowed terms, the models themselves appear in parentheses after the Fijian form, just to make sure that the reader understands.

⁴⁴ These words might have been the 'latest' in 1978, but not in 1999. I have not tried to rewrite the section, since except for some samples from *iVolavosa Vakaviti*, I have not had access to new data for the past twenty years.

⁴⁵ T.R. Nawadra used the term *talaci* 'transplanted' for these words.

Foreign observers may find some borrowings quaint: *nō-mani* 'broke', *ipu.ipu.rē* 'hip-hip-hooray', *kono.voe* 'serial sex-act' (from the WWII convoys—one after another), *oni* 'bee', *dē.nioni* 'honey (lit. 'bee excrement)'), *maidia* 'my dear', or *kini.viki* 'guinea pig'. Perhaps unrecorded in writing, but reported to the Fijian Dictionary Project in 1974⁴⁶ was something like *vaka-cegi.saloti-taka* 'thank someone' (from 'thanks a lot').

With independence in 1970 came a surge of new words, mostly connected with the government: as the Colonial Government was replaced, so were many of the official positions connected with it. Those remaining were rechristened in Fijian, at least in theory if not in usage. On an official list, 248 terms appear, the majority of which are translations rather than borrowings. However, some of the translations are rather cumbersome. That for 'ombudsman' is a case in point. Perhaps not realising that the word is a fairly recent and (I think) unfamiliar borrowing itself in English, the makers of the list proposed a borrowing and an alternate translation: *omu.basi.mani*⁴⁷ and *Dauvakasala Tu Vakaikoya me dikeva na Leqa ni Lewe ni Vanua* 'Independent Adviser to scrutinise problems of the citizens'. Another example of an unwieldy translation is that for 'librarian': *Vakatawa ni Vale ni wilivola* 'Guardian of the reading-house'.

Among the borrowings, that for 'Prime Minister' is interesting because the stages that it went through are documented. Members of a language committee (appointed by the Secretary for Foreign Affairs) first decided on *Paraimi Mini.sitā*, which is based more on spelling than on pronunciation (the final *-m* of 'Prime' and the initial *m-* of 'Minister' coalesce in normal speech). The next form suggested was *Parai Mini.sitā*, but the first word in the phrase seemed awkward to those who knew English. The solution was to write the form as one word: *Parai.mini.sitā*. Meanwhile, with the philosophy that public servants should not object to being labelled as such, Parliament translators suggested a Fijian word, *talai* 'servant' for 'minister' and *Talai.levu* 'Chief Servant' for 'Prime Minister'. In 1972, the translators were still using the latter form, while the newspapers and the radio used *Parai.mini.sitā* (Ratu Luke Vuidreketi, pers. comm.).

A change begun in Fiji in the 1970s and bound to affect a small segment of the vocabulary was the adoption of the metric system. Just as the words for *sixpence*, *shilling*, and *pound* have been pushed into the background by *sede* and *dola*, so will perhaps the words for *inch*, *foot*, *yard*, *chain*, *mile*, *acre*, *stone*, *ounce*, and *pound*.

This section, of course, is one that ends with an ellipsis, for words continue to enter the language. The current 'latest word' reigns only momentarily, soon to be supplanted by the next arrival. And it has been twenty-five years since I gathered most of the data used for the phonological sections of this paper. One observation is possible, however: it is difficult to predict what words will enter the language, or why they do so. 'Need' is sometimes cited as a motive, and it is a sensible one for certain items. But who can explain, when the word *tabaka* 'press it' already exists, why the *bāmeni* says he must *paresi-taka* the keys of the cash register?

⁴⁶ By Dr L.I. Verrier.

⁴⁷ This form is an example of a spelling borrowing and a temporary lapse on the part of the coiner. The *E mb* could have been represented by *F b*. In a later list, the form was changed to *ō.basi.mani*, resulting in a closer prosodic fit.

6 A final (?) word

Just as with the inherited vocabulary, each newcomer to the Standard Fijian lexicon has its own history, and—because it is a recent one—a history better documented than that for an indigenous word. But a study of borrowings does more than tell us individual histories.

First, it allows us to make hypotheses about the Fijian perception of English sounds. The evidence points toward the interpretation of English consonants (other than those before vowels) as Fijian CV syllables, with the choice of vowel being partially dependent on the vocalic character of the release of an obstruent, or on that of a continuant as a whole.

Next, it allows us to view features of the phonological system from a different standpoint. For example, the patterning of accent and vowel length in borrowings brings into sharper focus the importance of the measure as a unit in the phonological system.

Finally, it shows that some parts of the phonological system have been susceptible to change, and others resistant. But how resistant? New borrowings spelled with consonant clusters and final consonants pose interesting questions. Are the spellings, in structural linguistic terms, phonetic or phonemic representations of the language? If the former, how should the underlying representations be spelled? If the latter, does this mean that Fijian's CV structure has given way? These are questions for the observer to try to answer as Fijian continues to enrich its vocabulary with borrowed words.

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15 *Borrowing in Niuean*

WOLFGANG B. SPERLICH

1 Introduction¹

An investigation into borrowing in Niuean can be conveniently broken down into two eras:

- The prehistoric and pre-European era
- The contact, missionary and modern era

The first of these is closely linked with Niue's culture history, which gives rise to the question of what affinities Niuean has with other Polynesian languages. While a number of linguistic experts in this field (Elbert 1953; Pawley 1966, 1967; Clark 1976, 1979) have demonstrated quite clearly that Niuean is a Tongic language, there remains some doubt as to the 'complete' picture, as expressed by Clark (1979:264):

Niuean, as a number of features of its phonology and grammar clearly show, is an offshoot of the same major branch of the family as Tongan. However, there are various peculiarities suggesting that the linguistic history of Niue may be more complex than the simple Tongan colonization of a previously uninhabited island.

The complexity referred to is the suspicion that there is also some Nuclear Polynesian (Samoan) inheritance, and that there may even be some evidence of East Polynesian influence. The most extreme positions taken in the past are those by Smith (1902–03) and McEwen (1970) who argue for what in modern linguistic parlance would be called a Samoan and an Eastern Polynesian substratum respectively. This article will look into these and some other claims in some detail, culminating in the suggestion that very little linguistic evidence exists to support any of these claims.

¹ Several informants helped to establish the points made in this investigation, and particular thanks go to Atapana Siakimotu for Niuean, Tavale Tanuvasa and Auleli'o To'o for Samoan and Sione Tu'itahi for Tongan.

The era of contact and missionisation offers more secure evidence for borrowing, notably that of considerable Samoan influence in the Niuean Bible. The fact that Niue and the Cook Islands together fall under New Zealand administration adds to the possibility of borrowing from Aitutaki and Rarotonga. Wider travel of Niueans (including kidnapping of Niuean labour) also gives rise to possible borrowing from more diverse sources. Last but not least the oncoming onslaught of English has its beginnings in this era. The modern era is notable for the influence of English (via New Zealand) education on Niuean. Add to that the modern media of radio, TV and video (and lately the Internet), and heavy borrowing from English may undermine Niuean to such a degree that it may disappear. Language ecology issues will be touched upon here.

2 Niuean language origins: the substrata myth makers

As indicated above, we will not engage here in an argument as to whether or not Niuean is fundamentally a Tongic language. All the available linguistic evidence suggests it is. Nevertheless, as all ethnologists-cum-linguists have noted to date, Niueans distinguish between the northern part of Niue called *Motu*, and the southern part called *Tafiti*. While it may be natural to speculate that this is a clue for two migrations and linguistic divisions, it is of course equally valid to speculate on the opposite, i.e. one linguistic migration that subsequently split into two regional dialects (or simply gave different names to different parts of the island, a common enough practice). S. Percy Smith (1902–03) set out to ‘prove’ the former. This ‘irrepressible colonial bureaucrat-cum-amateur ethnologist’ (Ryan 1998) proceeded to promote a Samoan substratum myth that would influence all those who came after (including indigenous historians like Talagi (1982)).

While it is not my purpose to debunk this myth in detail, I would like to point out just a few fallacies in Smith’s argument, mainly by showing that the ‘evidence’ can equally be used to support an opposing scenario.

- Niuean culture history gives as ancestral homelands the following: *Fonua-galo*, *Tulia*, *Tonga* and some other islands; Smith in his considerations ignores the ‘other islands’, does away with *Fonua-galo* as ‘lost land’ and with *Tonga* as ‘foreign, south, ship’ and dwells on *Tulia*, a place name on Savai’i, hence evidence of Samoan ancestry. Given that Smith provides English glosses for *Fonua-galo* and *Toga*, he could have done the same for *Tulia* which means ‘unwanted’ in Niuean, and as such is not a bad fit for the legend that the culture heroes who first came to Niue were in fact ‘unwanted’ in their own islands (see Pulekula in Smith 1903); for argument’s sake *tulia* can also be derived via Tongan *tu* and *liia*, at least based on Churchward’s (1959) relevant dictionary entries.
- The absence of tattooing in Niue is attributed to an erstwhile Samoan migration because Samoans for some time in their history did not have tattooing, it being introduced to them by the Tonga-fiti people. Contemporary Samoan historians (Tavale 1997) tell us however that tattooing in Samoa has always existed along with Tongan and Fijian tattooing traditions; the island of dispersal for Samoan tattooing traditions is

said to be Manu'a. My theory as to why there is no Niuean tattooing tradition (there is nevertheless a common Niuean word for it, *tātatau*) is that the migrants were dissident Tongans (from Vava'u) who eschewed such hierarchical status symbols; the lack of suitable flora for making dyes may be another cause.

- The following names are declared by Smith to be of ancient Samoan origin, while I would claim that some may be recent imports via Samoan missionisation and general travel: *Hamoā* (Samoa), *Matafele*, *Havaiki* (Savai'i), *Tutuila*, *Vaea*, *Tuapa*, *Avatele*, *Tafiti* (Samoan for 'Fiji'—a claim not supported by any Samoan dictionary or my Samoan informants) and *Lakepa* (same as *Lakemba* in Fiji). Leaving aside *Lakepa*, which Smith seems to derive from Fijian rather than Samoan, let us look at the rest: *Hamoā* in Tongan is *Ha'amoā*; *Matafele*, a contemporary place name in Apia, occurs in Niuean as a slang word for 'loose behaviour' but is not found in Tongan; *Havaiki* as the mythological homeland of Eastern Polynesians has rarely been associated with Samoan Savai'i, and anyway Taumoevolau (1996) has made a convincing case that the word can be derived from Tongan also; the base *tuila* in *Tutuila* is also extant in Tongan, as is *vaea* (for *Vaea*) 'to come apart'; *Tuapa* can be based on Samoan *tu'apa* 'faraway, cliff' or *tuāpā* 'outside'—no cognates found for Niuean or Tongan; *Avatele* can be derived from Niuean *ava* 'channel' and *tele* 'to move like a crab' and as such is a descriptive place name (a similar case can be made for Tongan).

Tafiti—generally glossed as 'stranger, distant land' for Niuean—deserves special attention because it is the famous counterpart to *Motu*. Since Smith claims that the *Tafiti* people are of Tongan ancestry, one would have to argue that the supposedly Samoan *Motu* people named the southern part of Niue '*Tafiti*' (which Smith wrongly claims to mean 'Fiji' in Samoan) subsequent to its invasion from Tonga—a somewhat implausible argument. In addition one would ask why it was named after 'Fiji' (Smith even suggests that the Tongans invading were those who had previously occupied parts of Fiji)—when in fact *tafiti* is a perfectly good Tongan (and also Samoan) word meaning 'struggle, somersault'. Interestingly the Niuean *Tafiti* is entered in POLLEX as a possible CE witness (also noted as such by Clark 1979) to *Tahiti* 'stranger, distant land, etc.', and as such more of a witness of some Rarotongan/Aitutakian influence (which is not implausible per se—and will be dealt with in this article below—but unlikely in this context of Tongans occupying the southern part of Niue). To me it makes equal sense (neither are convincing arguments) to interpret *Tafiti* in the first place as 'struggle' (i.e. Tongan invaders struggling with more established settlers) and the word itself acquiring a secondary meaning on the *Motu* side as 'strangers/inlanders from a foreign/distant land'. The supposed dualism of *Motu* vs. *Tafiti* as emphasised by Smith and subsequent commentators has in fact a much less dramatic background in Niuean culture history (even as told by Pulekula in the Smith volume). *Motu* according to tradition is the place of first landfall on the north-eastern coast (the expected landfall when coming from Vava'u in Tonga). Here the narrow reef is flat but the absence of channels makes landing very risky, involving riding a wave onto the reef (several European shipwrecks in this area attest the treacherous waters along this coast). Nevertheless arrivals with no prior knowledge of the island would have to risk such a landing, and indeed the whole coastline of the northern half of the island affords very few safe landing sites. An eventual exploration of the island by

early settlers who arrived via the *Motu* side would have realised that the southern part of the island has quite a number of much safer landing sites, and while it may be idle to speculate, it would make sense that return voyages would have communicated such navigational know-how to other prospective arrivals (such as the later Tongan migrations and invasions via *Tafiti*). So while there is a geographical dualism with regard to landing sites, reinforced by culture stories which tell of 'southern' warriors who get into trouble and defect to the northern *Motu* parts, it seems to me there is no linguistic or cultural dualism, other than dialectal differences that are a natural result of geographical differences, and as the geographical differences are small, the dialectal differences are also small, notwithstanding claims by Smith to the contrary.

Loeb's (1926) anthropological account of Niue is an uncritical continuation of Smith (1902-03) even though he noted that only 'minor differences appear in the [...] languages of the two ends of the island'. These two works together then shaped the cultural and linguistic perception of Niue well into the 1960s when J.M. McEwen, as resident commissioner and noted amateur linguist, undertook to write his *Niue Dictionary* (published only in 1970). In his introduction he advances an even more amazing theory than Smith did:

Although the vocabulary generally resembles Tongan there is an appreciable number of words which are absent in Tongan, but which are shared with Samoan, with Eastern Polynesian, or with both. Although the basic pronouns follow Tongan [...] Niue has no preposed pronouns as in Tonga and Samoa and the range of pronouns is much nearer to that of the Eastern Polynesian languages. It may be that the original language of Niue was closer to the Eastern languages, but it has been strongly influenced by successive Tongan incursions [...] (McEwen 1970:viii).

We might refer to this as the Eastern Polynesian (and a bit of Samoan) substratum theory. Let us examine the evidence cited. While in the first instance it is noteworthy that Niuean only has the one set of pronouns characteristic of Eastern languages, the loss of the parallel emphatic set (so called by Krupa 1982) in Niuean is part of a natural trend inherent in the pronoun system of PPN that leads ultimately to the Eastern pronominal system. (If anything this development would put Niuean into a similar time depth to the Eastern languages, a suggestion borne out by archaeological data which suggest first settlement around 0-500 AD). Furthermore as McEwen (1970:viii) notes also, Niuean preserves the preposed pronoun in the first person singular. The possessive set also is reminiscent of the 'older' Samoan/Tongan system in that Niuean has a preposed and postposed set of possessives (although the differences are minimal).

The next set of McEwen's evidence is worth citing in full:

An interesting phenomenon in Niue, which may indicate the merging of two Polynesian streams, is the habit of using two synonyms as a compound expression. For example, *hako* (Samoan *sa'o*) and *tika* (the East Polynesian word) are normally used together as *hako-tika*, meaning straight or correct. Either word may be used alone. Other examples are *fia-manako*, *fa-mahani*, *liu-foki*, *ola-moui*, and so on. Similarly, where a word has an elided *l* in Tonga the same form usually occurs in Niue, but frequently the form with the *l* is also retained, often as an exact synonym and sometimes with a slight modification of meaning. Examples are *ikiiki/likiliki*, *mui/muli*, *maona/malona*, *akau/lakau*, and many more. In other cases an East Polynesian form co-exists with a

“Tongic” form, such as *hinei/konei*, *hina/kuna*. Although the west Polynesian word *lelei* (good) is known in Niue, the word almost universally used is *mitaki*, cognate with Cook Islands *meitaki*, Tahitian *maita* 'i, Hawaiian *maika* 'i, etc. In some cases East Polynesian words not used in common speech are used in respectful language, e.g. *haele*, to come or go (common words *hau*, *fano*, *o*); *vae* or *ve*, foot (common word *hui*).

In the first place there is no ‘habit’ in Niuean of forming compounds from two synonyms; it is a marked formation that can equally be explained as a language-internal strategy to derive emphatic (superlative) word forms (found in many languages, for example in the English expression *straight as straight can be*). Regarding the specific example of *hako-tika*, *hako* is a perfectly common Tongic word, while *tika* is more interesting because it appears to be an Eastern Polynesian word as noted in POLLEX (in Niuean it only means ‘spear, dart’ and not ‘correct, straight’ as suggested by McEwen, hence the compound *hako-tika* corresponds to a ‘straight as a spear’ simile). However even Loeb (1926) wrote that the *tika* (spear throwing) sport is common enough in all of Polynesia, and indeed an examination of Western Polynesian languages shows this to be true. An examination of Churchward’s (1959) Tongan Dictionary reveals that *sika*, *pasika*, *tasika* are Tongan words with a very similar meaning (*sika* ‘dart’) and indeed Churchward notes the Fijian equivalent *tiqa*, all of which puts paid to the Eastern Polynesian reconstruction. Equally in the Samoan dictionary (Milner 1966) we find *ti’a* ‘dart’; in the Pukapuka dictionary (Salisbury n.d.) *tika* appears as ‘dart’; and from Beaglehole and Beaglehole (1938) it appears that the *tika* is indigenous to Pukapuka (a Samoic language) rather than being a recent import from Rarotonga. In fact from the detailed description of the *tika* in Beaglehole and Beaglehole (1938) it appears to be remarkably similar to the Niuean *tika*, and can thus be taken as one of the few possible items of evidence of a Pukapuka–Niue connection, as proclaimed in Pukapuka culture history (Beaglehole and Beaglehole 1938) and also cited by Talagi (1982) who adds the mysterious note that ‘some Niuean words and kinship terms seem [...] to have their origin in Pukapukan’. None of my Niuean informants have been able to substantiate this though (hence *tika* remains the only clue).

Let us look now at the other ‘doublets’ McEwen cites as being evidence of the merging of East and West: *fia-manako*, *fa-mahani*, *liu-foki* and *ola-moui*. *Fia* occurs as Tongan *fie* and *manako* as Tongan *manako*, and both have pretty much the same meanings as in Niuean. The Niuean compounding is yet another example of an emphatic formation whereby *fia* ‘want, desire’ and *manako* ‘wish, want’ combine to yield ‘insist’. Next *fa-mahani*: *fa* (a particle marking habitual aspect) is the same as Tongan *fa’a*, and *mahani* ‘habit, custom’ is reflected by Tongan *maheni*, again with very similar meanings, and yet again the compounding can be explained as an emphatic formation meaning ‘constantly, without fail’. A very similar case can be made for *liu-foki*. In the case of *ola-moui*, contemporary Niuean informants say this compound is obsolescent (separately the words are still in common use) and in any case both words appear in Tongan (*moui* as *mo’ui*). In sum, none of these forms can be counted as evidence for Eastern or Western Polynesian substrata.

Next in line are the doublets which differ only in their retention of /l/, namely *ikiiki/likiliki*, *mui/muli*, *maona/malona*, *akau/lakau*, and many more. While the ‘many more’ is an exaggeration in my view, let us ask what the explanation for this phenomenon may be. Let us look at the last example, also cited by Clark (1979), whereby *lakau* is seen as evidence for

Nuclear Polynesian (Samoan *laa'au*) influence (PPn **ra'akau*, **r > 0* in Tongan and Niuean, while **r > l* in Samoan and mainly **r > r* in Eastern Polynesian). For a start Niuean *akau/lakau* is not a doublet in the sense of being spelling variations (reflecting different origins), but rather they mean different things, i.e. *akau* 'tree' and *lākau* 'shrub', and it can be shown that *lākau* is a derivation of *la* 'branch' (PPn **ra'a*) plus *(a)kau* 'tree', thus a compound in which 'branches of a tree' acquires the meaning of 'shrub, small tree'. Interestingly PPn **ra'a* changes to Tongan *va'a* 'branch' which would suggest **r > v* (in addition to **r > Ø*)—and as such might have to be added to Clark's (1976) Polynesian Consonant Correspondences. But what about the other examples cited by McEwen? The doublet *ikiiki/likiliki* 'small' is indeed noted as a variation (possibly dialectal) in Sperlich ed., (1997), but interestingly enough the same doublet exists in Tongan, with *likiliki* occurring only in compounds. *Mui/muli* is not a real doublet: *mui* is a local noun 'behind' while *muli* is a common noun 'last measure of something'. While semantically related and possibly both deriving from PPn **muri*, this cannot be considered as strong evidence of a direct Samoic influence (i.e. pre-Tongic) until a clear pattern emerges. PPn **r > Ø* for Niuean and Tongan may well have various exceptions, especially as the change **r > l* is a natural change that occurred in most other Polynesian languages. One can argue that Tongan has a similar pair *mui/muli*, with *mui* being synonymous with the Niuean *mui*, while the Tongan *muli* is glossed as 'foreign, outside' and as such not outside the semantic scope of *mui* 'behind'. This leaves *maona/malona*: here McEwen specifically attributes *maona* to the Motu 'dialect' (which McEwen denotes as the Eastern Polynesian dialect) and *malona* to the Tafiti 'dialect', but we still find a near synonym in Tongan, *malona* (but no variant **maona* which would be expected according to the **r > Ø* rule). What does this tell us? Perhaps an independent Niuean tendency to elide // in certain environments, but again no strong evidence that it constitutes either Samoic or Eastern Polynesian inheritance. Certainly McEwen's contention that Niuean keeps the // as a doublet form, whereas Tongan does not, cannot be substantiated.

This leaves McEwen's final point about Niuean having another set of doublets, namely those of Eastern Polynesian – Tongic form as in *hinei/konei*, *hina/kuna*, *haele/hau*, *fano*, *o*, *vae*, *ve/hui* plus the special case of *mitaki*. With the demonstrative forms *hinei/konei*, *hina/kuna* we are on thin ice as these doublets are in fact language-internal to both Niuean and Tongan (the *k*- forms are derived via the nominal predicative marker *ko*) and are by no means synonymous. Even less convincing is the assumption that *hinei* and *hina* are related to Rarotongan/Aitutakian (which would be the logical Eastern Polynesian connection if there was one). And while forms of *haele* and *vae* do occur everywhere in Eastern Polynesian, these two words are by no means uncommon in Tongan and in Nuclear Polynesian generally. This leaves *mitaki*: and indeed here we cannot but argue that it is an Eastern Polynesian import (EP **maitaki*) even though there is a Tongan form also, namely *mā'itaki* 'favourite wife or concubine'; given the sound change from the EP [ai] or [ei] to Niuean [i] one can assume that the import is not recent. It remains a mystery to me how such a common word can be replaced by a borrowing from a source that at best is extremely sporadic, but as a parallel one might consider English *sk*- borrowings from Scandinavian which are few in number but include the basic word *sky*. See below however for another possible explanation for *mitaki* being a more recent import.

In conclusion there seems little linguistic evidence that Niuean has either a Samoic or Eastern Polynesian substratum. This is not to deny that Niue had contact with these linguistic communities, but none seems to have impacted on Niuean in a way that would allow us to speak of a substratum. Sporadic borrowing may however be witnessed in the EP derived *mitaki* item (though the case that this is of a later era will be discussed below). Given the extreme geographical isolation of Niue, one would indeed expect only a minimum of borrowing. The relative proximity of Tongan speakers (via Vava'u) as prime settlers of Niue is in accord with linguistic analysis of Niuean as a purely Tongic language.

3 Contact, missionary and modern era

The anthropology of history of early European contact by Captain Cook and subsequent missionisation has been exhaustively documented by Ryan (1994). Quite clearly with the western LMS headquarters in Samoa there was considerable exchange between Niue and Samoa, both through Samoan missionary teachers in Niue and Niueans being trained in Samoa. The very first missionary encounter (1830) saw John Williams take/kidnap two Niueans who eventually returned to Niue via the Society Islands (the site of the first LMS mission) and Niuean traditional folklore has it that one of them brought back the *tala mitaki* 'the gospel' (Ryan 1994) and as such we might speculate that '*mitaki*'—rather than being a Rarotongan/Aitutakian import—comes from further afield in the East, and furthermore since this import changed Niue forever, the very word associated with it, '*mitaki*', came to replace the Tongic *lelei*. However the return of these two Niueans had no effect in converting anyone and it was another 16 years before a converted Niuean, Peniamina, came back to Niue from Samoa and started the process in earnest. He carried with him his 'Samoan Christian books' (King 1909). Peniamina was followed in 1849 by the first Samoan teacher, Paulo (and his wife). More Samoans followed by the 1850s and Paulo is said to have been a keen translator of religious texts into Niuean (Ryan 1994). The first resident palagi missionary, the Reverend W.G. Lawes, arrived in 1861, and by then practically the whole of Niue was converted to Christianity—in linguistic terms perhaps to Samoan Christianity. Subsequently the Lawes brothers (the Reverend W. George Lawes was replaced in 1872 by his brother Frank who 'ruled' until 1910) established a virtual theocracy and some of the Samoan missionary methods became part of village and national political organisation. The noted amateur linguist-cum-missionary George Pratt, while stationed in Samoa and primarily interested in the Samoan language, had in the meantime also compiled the first ever Niuean vocabulary (1861) and by 1876 he had written a Grammar and Dictionary of Niue. The first complete New Testament in Niuean had made its appearance in 1866, fresh from Pratt's editorial desk (Pratt actually spent nearly a year in Niue to help the translation process along).

On the secular front the labour trade with Samoa (and later with the rest of the Pacific) commenced: in 1868 a trader took some 80 Niueans to work on Samoan plantations (Talagi 1982). Those who returned would have picked up enough ordinary (i.e. secular) Samoan to possibly introduce Samoan words into common Niuean (see below).

Given this history one would expect considerable Samoan influence, at least on the church language used in Niue (and given that this type of borrowing is common in all Oceanic

languages, I will refrain from presenting any of the innumerable examples that can be found in the Niuean Dictionary). While subsequent linguistic developments show a willingness by Niueans to Niueanise (i.e. resist borrowings), the church language has always been considered sacrosanct, in both Samoan borrowings and bad translation into Niuean. On the other hand the influence of Samoan on common Niuean is perhaps less than one would expect: some biblical sayings in Samoanised English, terms related to Niue's political organisation (see below), and a few other borrowings. First we will consider the church-derived terms and then those which may result from general intercourse. All items are compared to possible Tongan cognates to determine the relative likelihood of borrowing from Samoan.

- Two items which are said (Talagi 1982) to derive from Samoan church custom, but are now fully Niueanised, are *fagai* 'to feed, offering, gift (especially to the pastor on a weekly basis)' and *poa* 'offering, gift, donation (especially to a pastor on an annual basis)'. They can be derived from Samoan *fafaga* and *foa'i* respectively (with same meanings); the sound changes would attest to a considerable time depth of the borrowing; however, as the Niuean *poa* also has a possible cognate in Tongan *foaki*, so the Samoan derivation is less secure in this instance.
- A further item, *fono*, also noted by Talagi as being of Samoan origin, has huge implications for the political organisation of Niue; originally denoting 'village meeting' where church elders discuss and organise village affairs, the *fono* concept was eventually extended to a national level and has since become the cornerstone of Niuean political life; while the Samoan *fono* is very much matai based, the absence of a chiefly system in Niue meant that the *fono* concept was entirely new and gave total power to the church elders appointed by the Lawes brothers; to this day virtually all members of the *fale fono* (the Niuean Parliament) have strong church connections and the various political allegiances resemble Christian denominations rather than political parties; *fono* also appears in Tongan with the same meaning but seems to have much less political force than in Samoa and subsequently in Niue, hence it is less likely that the term was borrowed from Tongan, i.e. that *fono* is a Tongic word.
- The Niuean prefix *fai-* 'make, have, possess, collect' is given an extended meaning by adding the Samoan meaning of endearment/respect when attached to kinship (and related) terms, such as:

faiioga 'dear teacher', *faifigona* 'dear in-laws', *faimahakitaga* 'dear sister (of a male)', *faimatua* 'dear parent', *faitehina* 'dear younger brother/sister'

In all instances the word without the prefix *fai-* denotes the same core meaning less the endearment/respect factor. The borrowing may originally have been confined to church language (e.g. 'dear Lord, dear Father') and later extended to kinship generally; *fai-* in Tongan operates in a very similar manner to Niuean minus the 'endearment' meaning, hence strong evidence that this was imported from Samoa.

- McEwen (1970) notes that Samoan is responsible for the increasing use in Niuean of the grammatical marker *-ina*, which formerly was very rare. This verbal suffix can change an active verb into a passive/ergative category, although most incidences of this nature are lexicalised; an example is *iloa* 'to know', *iloaina* 'to be known'. However,

it should be noted that in Tongan the *-ina* suffix plays a similar role, so McEwen may exaggerate the Samoan influence.

- As English missionaries introduced cricket and other sports to the islands, a term for the ‘umpire’ was needed early on; this is *fakamatino* in Niuean, from the Samoan *fa’amasino* ‘a traditional mediator in disputes’. The sporting term later was replaced in Samoa by *laufali*, again demonstrating considerable time depth for this borrowing; Tongan for ‘umpire’ is *fakamaau* and appears unrelated to the terms in Niuean and Samoan.
- *Malaga* ‘travel party’, the concept of going overseas on a mission ship, whaler or trader, also derives from the same word in Samoan (also still with the same meaning); while *malanga* is also a Tongan word, it seems to have a somewhat different meaning (but not totally unrelated).
- *nua* ‘horse’ is derived from the Samoan *solofanua* (which itself has an interesting etymology, explained as ‘the thing/animal that goes past the plantation very quickly’); the Tongan for ‘horse’ is *hoosi*.
- An early trade item, missionary and otherwise, was the twisted tobacco stick, and the Niuean term for it, *tai*, derives from the Samoan *ta’ai*; Tongan *ta’ai* has an unrelated meaning (*tapaka* is the common term).
- The Samoan fine mat ‘*ie tōga* must have been part of the early Samoan missionaries’ imported household items, and such mats are now simply known as *tooga* in Niuean; Tongan *tooga* has a similar meaning but is considered archaic (not entered in Churchward 1959, but listed in POLLEX).
- A couple of botanical imports from Samoa are the *sagasaga* (*Coix lacryma-jobi*) and the *vaofefe* (*Mimosa pudica*). Both words are the same in Samoan; the Tongan terms are *hana* and *mateloi* respectively.
- Niuean *pato* ‘duck’, found also only in Samoan, Tongan, Fijian and Tokelauan, and of supposed Spanish origin (POLLEX), could have arrived either way.
- Of questionable origin is *tulula* ‘a monstrosity, old rusty vehicle of any sort’, which some speakers claim to derive from the same Samoan word (but where the meaning is ‘a very long paddle boat’); no comparable Tongan word was found.

While the early missionary influence from Samoa did not altogether cut out Niue’s closest (linguistically and culturally) neighbour, Tonga (boats could sail a Samoa–Niue–Tonga route or variations thereof), there developed a relationship with New Zealand which would cut Tonga out of the picture completely. The British annexed Niue in 1900 and soon after Niue, together with the Cook Islands, was given over to New Zealand. Samoa in the meantime was given to the Germans and thus cut off from Niue. New Zealand took to the task with considerable enthusiasm and established a regular shipping service between New Zealand ports, Rarotonga, Aitutaki and Niue. This triangular relationship persists to this very day even though Niue had protested long ago about being lumped together with Rarotonga (the New Zealanders relented on paper but not in reality). This relationship opened the way to a number

of new possibilities for linguistic borrowing: from Rarotongan, from New Zealand Māori, and last but not least from New Zealand English. Let us look at these sources in turn.

While pre-European contact with Rarotonga, and more particularly Aitutaki, has always been a possibility, there is very little evidence that contact was long enough to occasion borrowing in either direction. In addition to *mitaki*, for which we did not really offer any convincing explanation, there are only a few other items, and they point to more recent borrowing occasioned by the New Zealand–Rarotonga–Niue relationship:

- The well-known Rarotongan quilting art form (itself introduced by missionaries as ‘needlework’) called *tīvaivai* has been exported to many other Pacific Islands including Niue, where it is well known linguistically, and also produced locally, but perhaps with less artistic merit than in Rarotonga.
- The Rarotongan *pāreu* ‘colourfully printed wrap-around’ also made its way to Niue together with a sound change $r \rightarrow l$, yielding *pāleu*.
- The word for ‘sheep’ is *māmoē*, probably derived originally from Tahitian via Rarotongan, but since it made its way to Samoan too (but not to Tongan), the question of direct versus indirect borrowing cannot be resolved easily.

The New Zealand connection with Niue occasioned quite a few Māori to settle in Niue (quite apart from large numbers of Niueans migrating to New Zealand and/or travelling back and forth between the two places) who did of course learn to speak Niuean, unlike the small number of very influential New Zealand palagi migrants, many of whom struggled with Niuean even after a lifetime living in Niue. When Niue adopted the New Zealand school curriculum lock, stock and barrel, it also inherited the Māori language option for the School Certificate examination, which was taken up by many Niuean students in preference to other subjects, partly because it was easier to learn and also because there were quite a few Māori speakers on the island with whom they could practise. This occasioned quite a few Māori words being adopted into Niuean, prominent amongst which are:

- *pāua* ‘a shellfish’, *taniḡā* (from *taniwha*) ‘sea monster’, and the popular greeting *kia ora*

Finally, another regional loan is *sapi* ‘women’s underpants, elastic’ from Tongan *sapi’i* ‘pull up/down, kick with top of the foot or instep’, likely dating back to only recent times when traffic between Tonga and Niue increased again (Royal Tongan Airlines has been operating the only flights from Niue to Auckland via Tonga for some years now).²

This leaves the large number of English loan words, which apart from very recent imports via TV, video and radio, are transliterated to fit the Niuean phonemic inventory. This process can be used as a clue for relative time depth of borrowing: the Niuean allophonic rule of /t/ → [s] before /i, e/ is applied to English loan words only when they have been in Niuean for a long time, as for example:

² The connection between Niue and Tonga has never been cut off completely. As is the tradition in Polynesia, land was set aside in Tongatapu for Niuean settlers and visitors, and vice versa for the Tongan community in Niue. The same arrangement between Niue and Samoa obtains to this day.

English *tea* → Niuean transliteration *ti* where /t/ is pronounced as [s]

as opposed to a more recent import

English *TV* → Niuean transliteration *tīvī* where /t/ is pronounced as [t]

The Niue language dictionary (Sperlich, ed. 1997) lists some 518 borrowings, the vast majority of which are of English origin. This number may look insignificant beside the total of some 10,000 Niuean entries; however, the onslaught of English now leaves no time for any integration into Niuean (via transliteration or Niueanisation/translation) and English simply takes over as a first language. I have argued elsewhere (Sperlich 1996) that this process endangers the Niuean language as a whole, and I have also shown how the need for fast translation into Niuean has caused some highly marked syntax patterns to become commonplace only because they better fit the English idiom. As mentioned above, early on in the history of English contact, Niueans would Niueanise, i.e. find quite ingenious Niuean equivalents for English words, even words for concepts/objects quite unknown to Niueans. The often quoted examples are:

vakalele 'aeroplane' (lit. 'canoe that flies')

mama pala 'tuberculosis' (lit. 'damp lungs')

mata afi 'match' (lit. 'fragment of fire')

It is imperative that Niuean fend off the English take-over and show some French resistance. But unlike the French, Niueans are in no position to do anything about the looming bankruptcy due to excessive borrowing.

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16 *Lexical borrowing in Fiji English*

JAN TENT

1 Introduction¹

The linguistic situation in Fiji is unique and complex. Of the three major languages spoken in Fiji (Fijian, Fiji Hindi and English),² English is the first language of only a tiny section of the population ($\pm 1 - 2\%$). Yet its influence on the lives of Fiji's people is very significant. Over the last 200 years, its role has evolved from being merely a source language for foreign loan words to a de facto official language, the major language of government, administration, the judicial system, and commerce; the major, and sometimes the only, medium of instruction in the education system; and an important lingua franca among people with different first languages.

English is also the main language of the media. Of the eight national radio stations, two broadcast exclusively in English, whilst three broadcast in Fijian and three in standard Hindi. There are four local privately operated radio stations—three broadcast exclusively in English whilst the other is mixed Fijian–English. Commercial television was introduced in 1991, and almost all programmes, including the local news and locally produced programmes, are in English. Advertisements are also in English, with an occasional one in Hindi or Fijian. Advertisements in Hindi, though not all that common, are more frequent than those in Fijian,

¹ This is an abridged version of the paper 'A profile of the Fiji English lexis', *English world-wide*, vol. 22, No.2, 2001. I should like to thank Paul Geraghty and France Mugler for supplying me with examples and citations of Fiji English usage, and for commenting on an earlier version of this paper.

² Fijian is characterised by a great deal of regional diversity, with about 300 communalects, a communalect being 'a variety spoken by people who claim they use the same speech' (Geraghty 1983:18). I use 'Fijian' here as a cover term for these communalects.

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since some are imported from India, while Fijian advertisements have to be produced locally. The linguistic situation with regard to television is constantly evolving, however. For instance, interviews in Fijian or Fiji Hindi are becoming more common in the local news telecasts, whether of political figures or ordinary citizens in the street. Initially, such interviews were either voiced over or subtitled in English, but in recent years more and more stretches of interviews have been left in without any translation. There are now also two half-hour weekly chat programmes in Fijian and Hindi, and a non-commercial television station broadcasting in the Nadi area which has a high proportion of programmes in Fijian and Hindi. Finally, there are three daily tabloid newspapers (all of which are in English) and three weeklies (two in Fijian and one in standard Hindi).

While English is a *de facto* official language in most of the Pacific, nowhere is it used as a lingua franca to a greater extent than in Fiji. This is partly due to the country's unique mix of languages and peoples. Its population consists mainly of two groups—indigenous Fijians and Fiji Indians. The Fiji Indian population is currently estimated at 44%, and Fijians at 51% (Fiji Bureau of Statistics 1998). English is often used as a lingua franca between these two groups and with the smaller groups of Chinese, Europeans, part-Europeans,³ and other Pacific islanders. However, many part-Europeans know Fijian, as do many Fiji Indians, especially in the rural areas. Conversely, many Fijians know some Fiji Hindi, particularly in the sugarcane belt, on the western side of the main island of Vitilevu and in the north of the second largest island of Vanualevu, where these two communities often work side by side.

English, however, tends to be used as a lingua franca to a greater degree in urban areas, where it is used to varying extents in the workplace. Thus, while it is only *one* of the languages people with different mother tongues use to communicate, English serves as a lingua franca in Fiji to a far greater extent than anywhere else in the Pacific.

Apart from this greater extent of usage, the English of Fiji distinguishes itself from other varieties of Pacific English by the significant contribution Hindi has made on its lexis. In this respect Fiji English shares many of the characteristics of the Englishes spoken in many former British colonies to which Indian indentured labourers were sent, e.g. South Africa, Mauritius, British Guiana, and Trinidad. However, what sets it apart from these varieties is its extensive Fijian lexis. Fiji English is, therefore, a unique and distinctive regional variety of English.

2 The vocabulary of Fiji English: a background

During the British colonial era, English was transplanted to all of Britain's settlements and colonies. Lexical borrowings, mainly from indigenous languages in response to local needs and conditions, naturally varied from colony to colony and were usually not absorbed into the English spoken back in the mother country. Furthermore, internal changes in the vocabularies of the English spoken in the colonies were made in response to differing influences, conditions and needs arising from the unique circumstances in each location. The degree of isolation of each colony also played a role in the rate of change and the growth of difference

³ People of mixed Fijian and European descent.

between the various colonial Englishes. The vocabulary of the English spoken in Fiji is a direct result of all these forces.

As the following excerpts from two of Fiji's national daily English language tabloid newspapers (the *Fiji Times* and *Daily Post*) illustrate, the vocabulary of Fiji English is as distinctive as that of any other regional variety of English.

Entertaining the crowd were Masimasi Musical club from Sabeto with *bhajans*, Gupta and party from Saru providing music on *dhol* [sic] and *tasa* and a 125 [sic] year old *girmitya*, Janki, from Navau, Ba sang a traditional song. (*Fiji Times*, 19/5/1992)

Farmers who have been astrayed must consider once again to unite with the National Farmers Union as to stand against all unfair practices on them. (Letters to the Editor, *The Fiji Times*, 3/5/1994 p.6)

Diwali is a time to celebrate, to wear fine clothes, jewellery, look beautiful and display the most expensive or most colourful firecrackers. It's also a time when Hindus countrywide share their traditional sweets like halwa, gulgula, bhajia, gulab jamun and many others. (*Fiji Times*, 20/9/1997 p.30)

"When I make *kokoda* I like adding a lot of salads [sic]. I use *dhania*, hot chillies, two coconuts for the *lolo*, some celery, capsicum and spring onions." (Shamima Ali in *Sunday Times*, 9/11/1997 p.34)

In plain English this country is broke *sa sivia na dinau*. (Mirza Nimrud Buksh, *Sunday Post*, 30/11/1997 p.4)

There would be a huge onboard magiti cooking in the middle of the cargo-hold, with customers sitting on mats, swiping grog in between jumping up to join a tuiboto round the cabin, accompanied by a string band in the cockpit. (Robert Keith-Reid, *Daily Post*, 14/6/1997 p.17)

Reserve Bank: "You gang been open the safe and leave it like that and everybody take the money or what? How come the money gone?" [...]

NBF [National Bank of Fiji]: "Yeah man. Trues God, *malik kasam, bulului*, cross my heart and hope to die, we been open it. That's the open door policy the Government been want." (Netani Rika in, 'Weekend' supplement in *Fiji Times*, 23/3/1996 p.5)

The kind of code-switching seen in these specific examples is commonplace.⁴ It occurs daily in articles and reports in Fiji's tabloids, and may be observed in most conversations in all domains of English usage. The kind of code-switching we see in Fiji English consists of instances of what D'Souza (1992:221) calls 'culture-related code-[switching]'. This kind of code-switching is a result of English having to function in 'un-English' contexts and 'does not have the [lexical] means to do so unless it depends on local linguistic resources'. In other

⁴ I shall not enter into a discussion on the differences between code-switching and code-mixing. Much has been written since the 1970s on the subject, and the matter remains contentious. Some researchers maintain that the distinction between the two is crucial (e.g. Kachru 1983; Sridhar & Sridhar 1980), whilst others (e.g. Tay 1989) assert that the distinction cannot be made. For the sake of simplicity, I shall follow Holmes (1992:50) and confine myself to the term 'code-switching' as '[c]ode-mixing suggests the speaker is mixing up codes indiscriminately or perhaps because of incompetence, whereas [...] switches are very well-motivated in relation to the symbolic or social meanings of the two codes'.

words, English is 'borrowing' from Fijian and Hindi in order to deal with uniquely local matters and events.

As well as adding a local flavour to their writings, the frequent switching between English and Hindi/Fijian by the satirists Buksh, Rika and Reid is also used to add humour. The recurrent switching of codes triggers particular associations in the minds of readers, and follows the common practice among Fijians of delivering humorous, sarcastic or ironic comments by code-switching from Fijian to Hindi (Siegel 1995). This practice has led to the development of a special joking register in Fijian, which has become so much part of a Fijian's repertoire that of the 175 odd Hindi entries in the monolingual Fijian dictionary,⁵ 41% have the usage label *veiwali* 'joking' attached to them. Most of these pertain to words describing actions and concepts that have Fijian equivalents, and thus may be considered what Clark (this volume) terms 'unnecessary' borrowings.

Little has been written about the vocabulary of Fiji English, and what has been written comprises little more than catalogues of distinct lexical items or expressions. No systematic study of the structure and sources of the Fiji English lexis has ever been carried out. The following discussion and analysis of the Fiji English lexis is based on a corpus of words and expressions I collected between January 1991 and late 1999.

2.1 Previous studies of Fiji English vocabulary

Only a handful of publications catalogue or mention distinct Fiji English lexical items. The most comprehensive of these is Siegel's list (an appendix to his study of plantation pidgins in Fiji) of Fijian words used (without an English gloss) in the *Fiji Times* and the Fiji Colonial Secretary's Office correspondence during the plantation period between 1865 and 1916 (Siegel 1987:264–267).⁶ Many of the entries in my corpus correspond to ones found in Siegel's list. Siegel's book also contains another appendix listing Fiji Hindi loan words in Fijian, and Fijian loan words used in Fiji Hindi. Once again, many of these are used in Fiji English today and are included in my corpus. Finally, Siegel has a catalogue of 65 lexical items (6 English, 36 Fijian, 23 Fiji Hindi) in his 1989 paper outlining the development and characteristics of English in Fiji.

In 1984, the University of the South Pacific sociologist, Mike Monsell-Davis, compiled a small corpus of 37 slang expressions (Monsell-Davis 1984) as part of a study of unemployed street boys in Suva. Most of the expressions are English neologisms or English items that have undergone semantic shift. Although many of the items in his inventory are still currently used in what might loosely be termed the 'general slang' known to many speakers of Fiji English, some are now obsolete, whilst others are restricted to the vernacular of street youths.

Other studies, discussions and commentaries that briefly mention or allude to the lexical characteristics of Fiji English are: Arms (1975), Kelly (1975), Moag and Moag (1977), Geraghty (1977), and Thomson (1999), each of which cite only a handful of lexical items judged to be idiosyncratic to Fiji English.

⁵ Compiled by Paul Geraghty and his team at the Institute of Fijian Language and Culture, Suva.

⁶ Fijian loan words in Fiji English are almost always from standard Fijian.

2.2 The compilation of the corpus

A corpus of Fiji English lexical items was compiled between January 1991 and late 1999. Lexical items cited by the studies just mentioned formed the basis of the corpus. To these many more examples from contemporary acrolectal to basilectal Fiji English from both written and oral sources were added.

The written sources comprised:

- stories and articles from the local print media⁷
- club and school newsletters
- personal letters and letters to the editors in the local print media
- university students' essays, assignments and examination scripts
- hand-written and printed notices and signs
- advertisements in the local print media
- locally published plays and novels that attempt to incorporate features of Fiji English

The oral sources comprised:

- samples from conversations I either overheard or personally participated in with a wide range of speakers of Fiji English
- 70 one-hour long (on average) recorded interviews with monolingual English-speaking part-Europeans
- English-language television and radio news broadcasts, commentaries, advertisements, and community announcements

The corpus contains 686 distinct pieces of lexical information arranged under 521 headwords, 89 secondary headwords and run-ons, as well as 74 initialisms and acronyms. The secondary headwords generally consist of simple compounds or collocations.

3 The vocabulary of Fiji English

The following discussion is a brief profile of attested lexical borrowings in Fiji English. It presents an overview of the various loan categories of items in the corpus and their sources. For reasons of space, not all borrowings in the corpus are cited.

⁷ These include the tabloid newspapers: the *Fiji Times*, the *Sunday Times*, the *Daily Post*, the *Sunday Post*; *Wansolwara* (the laboratory newspaper published by journalism students at USP); the *USP Bulletin*; and monthly magazines and journals published for the local market: *The Enquirer*, *Fiji Magic*, and *The Review*.

3.1 Fijian loans

It is not surprising that Fiji English should contain a large number of Fijian loans. Apart from the borrowings from Hindi, Fijian loans are perhaps the most conspicuous and nationally specific group of words in the Fiji English lexis.

Only minimal linguistic contact is needed for lexical cross-fertilisation to occur between languages. For instance, Tent and Geraghty (this volume) have shown that a number of Dutch loan words spread through Polynesia after contact between the early Dutch explorers LeMaire (1616), Tasman (1642) and Roggeveen (1722), and the inhabitants of Samoa, Tonga and the Tuamotus amounting to between a few days to just under 14 days.

Apart from personal and place names, and glossaries of words and sentences that appear in a number of eighteenth-century mariners' journals and logbooks (e.g. Cook-Anderson in 1777, d'Entrecasteaux in 1793), the first Fijian words embedded in English prose are found in the narratives of Samuel Patterson (in 1808) and William Lockerby (in 1809). There are eighteen Fijian words, proper names and phrases scattered throughout Patterson's narrative, and some 93 throughout Lockerby's (Schütz 1985:567–571), many of which form part of the lexis of Fiji English today.

After David Cargill and William Cross established the first Wesleyan mission in Fiji in 1835, it did not take long for their diaries and correspondence to include Fijian words. This is where the nativisation of Fijian words into English really begins. Cargill's writings include such common loans as *tanoa*, *vesi*, *koro*, *masi*, *tabu*, *vasu*, *Tui*, *dalo*, *Ratu*, *waka*, *yaqona*, *bure*, and *tamata lialia* (Schütz 1977), all of which are part of current Fiji English. Since then, of course, many more Fijian words have entered the English of Fiji.

It is perhaps worth pointing out here also that the *Oxford English Dictionary* contains five Fijian words: *bure* 'hut, house' (also in the *Macquarie Dictionary*),⁸ *ivi* 'Tahitian chestnut, *Inocarpus fagiferus*, Leguminosae', *Ratu* 'honorific title for males of high rank', *sulu* 'a sarong, wrap-around', and *yaqona* 'kava'.⁹ *Yaqona* (more widely known as kava) has enjoyed quite a bit of international attention in recent years by international pharmaceutical companies. Its perceived calming and relaxing effects upon those who drink it have promoted some intensive research into its medicinal properties and chemical composition. As the following citation from the *Fiji Times* (27/5/1999, p.17) illustrates, *yaqona* has not only become part of international pharmacological nomenclature, but has obtained an anglicised spelling as well:

KAVA: FIJI'S VIAGRA?

Dr Ali, a member of the team working on the Kava Project, said at least six lactones have been identified in local kava.

"We have discovered and isolated six major kava-pyrone namely Kavain, Methysticin, Dihydrokavain, Dihydromethysticin, Yanganonin and Desmethodyyanganonin," he said.

"In addition to the six major kavapyrones, we have also identified 12 other components."

⁸ The *OED* even boasts a highly anglicised the pronunciation of *bure*—[bju: rei].

⁹ The *OED* also contains Tongan word *tabu* 'taboo', but acknowledges the Fijian cognate.

On August 7, 1999, *The Sydney Morning Herald* ran in its weekly travel supplement a feature on holidaying in the South Pacific. The following Fijian words were used: *sevusevu* (glossed and in italics), *bula* (glossed and in italics), *meke* (glossed and in italics), and *bure* (unglossed and in roman font, also used are: 'bures', and 'bure-style').

Approximately 38% of my Fiji English corpus are loan words from Fijian. Most of these are 'necessary' loans (Clark, this volume), because of the need to name uniquely Fijian objects, concepts, or customs. Such borrowing may best be described as 'cultural borrowing' (Bloomfield 1933). However, there are also a number of Fijian loans that refer to items which already have existing English names, and may perhaps be seen as 'unnecessary' borrowings. These include: *kana* 'food; to eat', *kasou* 'drunk', *koro* 'village', *leqa* 'a problem', *loloma* 'love', *oilei!* an exclamation of surprise, *sa!* an exclamation of surprise or disapproval, and *yaya* 'stuff, things, belongings'. Interestingly, even English-speaking expatriates who have been in Fiji for only a short time soon use many of these Fijian words in preference to their English equivalents, especially *koro*, *loloma*, *oilei*, and *yaya*. Although such items have English equivalents, their unique Fijian connotations act as a powerful force in encouraging their use. The desire not to be recognised as a neophyte may be another contributing factor in their rapid adoption into the English of expatriates.

Fijian names for flora and fauna are also generally preferred to their widely known English counterparts. This is especially so for edible flora and fauna. Examples include: *baka* 'banyan tree, *Ficus obliqua*, Moraceæ'; *dri* or *loli* 'sea-cucumber, bêche-de-mer, *Holothuridae*'; *kanace* 'mullet, *Mugil* spp.>'; *kumala* 'sweet potato'; *salala* 'mackerel, *Rastrelliger kanagurta*'; *saqa* 'trevally, *Caranx* sp.>'; *walu* 'kingfish, *Scomberomorus commerson*').

As most of the examples listed thus far show, lexical items most prone to borrowing are commonly those that belong to the so-called 'open' class words (i.e. nouns, verbs, adjectives). Items belonging to the 'closed' classes (pronouns, prepositions, conjunctions etc.) are less likely to be adopted into another language. As my lexicon shows, nouns are, undoubtedly, the most frequently borrowed class, comprising 52% of all Fijian and Hindi loans (see also Haugen 1950), as they denote novel objects, materials, and concepts and therefore fill lexical and cultural gaps. Of course, the skewed distribution of borrowings from the various lexical classes is also a reflexion of the overall sizes of the classes concerned—nouns being the class with the largest number of members, whilst the class of prepositions or conjunctions presents considerably fewer members. However, it also seems reasonable to expect that the grammatical class of borrowed words will also depend on the nature of the sociolinguistic context in which the borrowing takes place. Accordingly, the borrowing of adverbs, pronouns, articles, intensifiers, particles, exclamations, interjections, and affixes is well attested in bilingual communities (Bynon 1977:231). The borrowing of such items is possible only in situations of intense linguistic exchange since it presupposes the cross-linguistic equation of syntactic patterns, whereas mere borrowing of open class items requires only a minimal degree of bilingualism. Since there is a high degree of English–Fijian, English–Hindi and Fijian–Hindi bilingualism in Fiji, there has been cross-borrowing and calquing of closed class items into all three languages.

Fijian loans in Fiji English may be broken down into a number of general categories. The first consists of names for inedible flora (generally the names of trees and herbs): *baka*,

buabua 'k.o. tree', *cibi* 'k.o. seed', *dakua* 'k.o. tree', *damanu* 'k.o. tree', *dogo* 'k.o. tree', *kavika* 'k.o. tree', *tiri* 'k.o. tree', *uci* 'k.o. tree', *vesi* 'k.o. tree', *via* 'swamp taro', *voivoi* 'pandanus leaves', *yaka* 'k.o. tree'. These comprise about 10% of Fijian loans. About another 10% of Fijian loans are taken up by names of edible flora (generally vegetables and fruits). Among them are: *bele* 'k.o. vegetable', *bu* 'green coconut', *dalo* 'taro', *duruka* 'k.o. vegetable', *ivi* 'Tahitian chestnut', *lumi* 'k.o. seaweed', *ota* 'k.o. edible fern', *rourou* 'taro leaves', *uto* 'breadfruit', *uvi* 'yam', *vudi* 'plantain'.

The next group of loan words derives from Fiji's fauna. The majority of these (7%) name edible fauna, specifically seafood. The most common are: *balolo* 'k.o. annelid', *dri* (*loli*), *kai* 'k.o. shell fish', *kaikoso* 'k.o. shell fish', *mana* 'mangrove lobster', *nuqa* 'k.o. fish', and *qari* 'mangrove crab'. Only two borrowings refer to non-edible fauna, both of which are names of indigenous parrots: *koki* 'red-breasted musk parrot, *Prosopiea tabuensis*', and *kula* 'collared lory, *Phigys solitarius*'.¹⁰

Prepared foods or dishes and beverages comprise a small group of items (3%). They include: *kokoda* 'k.o. raw fish dish', *lolo* 'coconut cream', *vakalolo* 'k.o. sweet pudding', and *yaqona*.

General (or miscellaneous) nouns, adjectives, and verbs form the largest group of borrowings (27%). These include: *bilo* 'coconut shell cup', *bilibili* 'bamboo raft', *bure* 'thatched hut or house',¹¹ *drua* 'twin-hulled canoe', *kanikani* 'k.o. skin disease', *kerekere* 'to cadge', *kuro* 'cooking pot', *kutu*¹² 'louse', *lali* 'k.o. drum', *lialia* 'fool; foolish', *lovo* 'pit/earth oven', *maqimaqi* 'sinnet', *masi* 'tapa cloth', *rara* 'village green', *salusalu* 'garland', *sasa* 'k.o. broom', *solu* 'k.o. fundraising event', *sulu* 'sarong', *tabua* 'whale's tooth', *talanoa* 'chat session', *tanoa* 'kava bowl', *teitei* '(vegetable) garden', *vude* 'k.o. popular music', and *vulagi* 'guest, stranger'.

¹⁰ No doubt there would be many more among Fiji's small birdwatching community.

¹¹ This word was probably one of the first Fijian borrowings into English; its first recorded use in English (though glossed simply as 'house') was probably in Cargill's Rewa diary of 15 July 1839 to 27 July 1840 (Schütz 1977:173). Over time *bure* narrowed its meaning in English from simply 'house' to 'a traditional Fijian house, a house made of traditional materials'. It is also variously used to refer to 'a hut, small house', and now with the mushrooming of tourist resorts all over Fiji 'a small self-standing guest house at Fiji resorts'. In Fijian, however *bure* never meant 'a house made of traditional materials'. In Fijian, a *bure* means a men's house or dormitory, and can be constructed of traditional materials, corrugated iron, timber, concrete blocks, anything. Today, many Fijians are not aware of the difference between the Fijian and English meanings of *bure*. The word has been borrowed from Fijian into English (where it obtained its new meaning), and then back into Fijian again, with the new meaning. (Paul Geraghty, *Daily Post*, 29/3/1997 p.16)

¹² *Cootie* 'a body louse' is a very common slang term used in American English with and by children. The *OED*, *Webster's Third New International Dictionary* and the *American Heritage Dictionary* suggest it was derived from Malay *kutu* 'a biting parasitic insect; louse'. The *OED*'s and *Webster's* earliest citations are dated 1917. However, the word was used around 1835 by an American bêche-de-mer trader in Fiji, John H Eagleston (n.d.). Its origin may, therefore, be Fijian. I thank Paul Geraghty for alerting me to this early use of *cootie*.

The next largest category of loans (20%) involves items that name Fijian customs, cultural concepts, events and practices. These include: *lakalaka* 'k.o. dance', *loloma* 'gift, token of love', *magiti* 'feast', *meke* 'k.o. dance', *polotu* 'k.o. hymn', *qoliqoli* 'traditional fishing grounds', *reguregu* 'condolence gathering', *sevusevu* 'presentation of gifts', *tevororo* 'devil', *vakacirisalusalu* 'k.o. ceremony', *vakamalolo* 'k.o. dance', *vasu* 'sister's son; a part-European', and *vu* 'ancestor god'.

There is a very distinctive class of loans that encompasses Fijian sociopolitical terms and titles (12%), among these being: *bose* 'meeting council', *matanitu* 'political federation of vanua', *mataqali* 'kin group', *Taukei* 'land owners', *tikina* 'district', *tokatoka* 'enlarged family unit', *turaga* 'chief', *vanua* 'region', *Vola ni Kawa Bula* 'Fijian Register', *yavusa* 'kinship group', *Adi* 'title', *Ratu* 'title', *Ro* 'title', *Roko* 'title', and *Tui* 'title'.

A small, but important and quite emblematic, category of borrowings are what might best be described as discourse particles (or formulae). These include: *bula* 'hello', *moce* 'good-bye, good night', *talo mada* 'serve the yaqona', *vinaka* 'thank you', *io* 'yes', *tilou~jilou* 'excuse me', and *yadra* 'good morning'. These comprise approximately 4% of borrowings from Fijian.

Finally, perhaps the most colloquial of all the Fijian loans are the ubiquitous exclamations and interjections (6%). The speakers of Fiji English are ardent users of such formulae, especially the exclamatory approbations used to call out to a good-looking male or female (equivalent to a wolf whistle or 'hubba-hubba!'). These exclamations clearly belong to Fiji English slang and are ephemeral. Over the past forty years, a series of these exclamatory approbations have enjoyed widespread popularity. Each expression has a limited life span lasting between five to ten years; they are listed here in approximate chronological order of their currency:

- *kashine!* (1950s–1960s) [< Fijian *ka* 'thing' + *shine*]
- *nice bola!* (1960s–1970s) [Most likely < Fijian *bola* 'coconut-leaf basket', 'bag']¹³
- *barewa!* (1970s–1980s) [< Fijian *bā rewa* 'might it be possible?']
- *au la'o!* (1980s–1990s) [< Fijian 'I go']
- *uro!* (1990s) [< Fijian 'fat'. Especially the fat of pork, which is considered by Fijians to be the most delicious part of the meat]

SEXUAL harassment is no joke. Many may not realise it but making a pass with words such as *uro* is a form of sexual harassment. (*Daily Post*, 28/8/1999)

Common interjections borrowed from Fijian include the following:

- *oilei!* An exclamation expressing surprise, pain, sympathy etc.
- *sa!* An exclamation of surprise or disapproval.

¹³ Thomson (1999:151), however, gives the etymology of *bola* as 'a Fijian invention with an enjoyable proximity to "balls"'. Thomson's explanation is highly unlikely and must be considered a folk etymology.

- *se!* An exclamation expressing disbelief—‘Surely you’re pulling my leg!’, ‘Come off it!’ (usually said with a wry smile).
- *so!* An exclamation expressing disapproval or hurt.
- *sobo!* An exclamation expressing disapproval or sympathy.

Given that Fijian and Hindi have co-existed with each other for some 120 years, it is not surprising Fijian words have also been borrowed into Fiji Hindi. Siegel (1987:272–277) lists 125, most of which are names for natural species or Fijian customs for which no equivalent Hindi name exists. Notwithstanding this, there are still quite a few (approximately 33%) voluntary or ‘unnecessary’ borrowings. A detailed and systematic study of Fijian loans in contemporary Fiji Hindi has a yet to be conducted—no doubt such a study would unearth many more Fijian loans. Forty-six percent (58/125) of the Fijian loans listed by Siegel are also to be found in my Fiji English lexicon.

3.2 Hindi loans

The introduction of Indian indentured labourers into Fiji between 1879 and 1916 to work on sugarcane plantations was accompanied by the introduction of various languages from the subcontinent, including dialects of Hindi, Tamil, Urdu, Gujarati, Telegu, Kanada, Punjabi, and Malayalam. The Indian labourers not only changed the cultural character of Fiji, but also added to the richness and complexity of the country’s linguistic make-up. The majority of indentured labourers, or ‘giritiyas’ as they called themselves, were, however, Hindus from northern India who spoke a number of dialects of Hindi (Siegel 1987). The mixing or amalgamation of these dialects resulted in a koiné, now known as Fiji Hindi, which served as the lingua franca among giritiyas from differing linguistic backgrounds. This koiné developed rapidly and probably originated among the first generation of Fiji-born Indian children (Siegel 1987:203). The following comment by W.J. Hands (1929:18) demonstrates that by 1929 Fiji Hindi was firmly established and had all but displaced the other languages of the Indian subcontinent: ‘A form of Hindustani, hardly recognised by the newcomer from India, is becoming the common language of Hindu and Tamil alike’. It is from this koiné that 16% of my Fiji English corpus is derived.

Given the sources for my corpus, it must be understood that it has a distinct urban bias, and this may be one of the reasons for the relatively small number of Hindi loans. Anecdotal evidence suggests more Hindi loans are found in rural Fiji English (and rural Fijian), especially in the sugarcane growing areas where Indo-Fijians predominate. Many of these loans have to do with the sugar industry.

Most Hindi loans in Fiji English are, like the Fijian borrowings, cultural loans—terms referring to food and Indian culture and religion. There are also a number of ‘unnecessary’ loans, the most well-known of which are *paidar* ‘to walk’ and *paisa* ‘money’ [*< paisā* ‘1/100 of a Rupee’]. *Paisa* is especially a popular term for money among Fijians. All varieties of Pacific Englishes have a rich assortment of indigenous borrowings, but what marks Fiji English off more than anything else from these other varieties are its Hindi borrowings.

The largest group of Hindi borrowings deal with food, the most common of which are the names of vegetables and spices: *baigan* 'eggplant', *bhaji* 'k.o. vegetable', *bhindi* 'okra', *dhania* 'coriander', *haldi* 'tumeric', *jeera* 'cumin seed', *saijan* 'horseradish', *sarso* 'mustard seeds', and *tulsi* 'basil'. These items make up approximately 12% of all Hindi loans in the corpus. Names of prepared foods and dishes (including sweets), and ingredients are equally well-known, and comprise 31% of Hindi loans—considerably more the comparable group of Fijian loan words. These include: *achar* 'k.o. relish', *ata* 'k.o. flour, sharps', *barfi* 'k.o. sweet', *bara* 'k.o. savoury', *bhuja*, 'k.o. snack', *gulab jamun* 'k.o. sweet', *gulgula* 'k.o. sweet', *halwa* 'k.o. sweet', *jalebi* 'k.o. sweet', *kedgerree* 'k.o. rice dish', *lakri* 'k.o. sweet', *puri* 'k.o. deep-fried bread', *roti* 'k.o. unleavened bread', *samosa*, *sawai* 'k.o. desert', *seo* 'k.o. savoury', and *suji* 'semolina'.¹⁴

Religious and cultural loans also form a significant group within the corpus of Hindi loans (21%): *agarbatti* 'incense stick', *bhajan* 'Hindu devotional song', *dhiya* 'small clay lamp', *Diwali* 'Hindu festival of lights', *ghazal* 'k.o. song', *katha* 'prayer ceremony', *Khalsa* 'Sikh community', *mala* 'garland', *panchayat* 'village-based advisory body', *puja* 'Hindu religious rite', *Sanatan* 'orthodox Hindu movement', *Sangam* 'South Indian association', and *sangh* 'association, assembly'.

General (or miscellaneous) nouns, adjectives, and verbs make up the largest group of Hindi loans (32%), and include: *babu* 'mate', *bhaiya* 'brother; friend', *choli* 'sari blouse', *chor* 'thief', *chuma* 'to kiss', *dhoobi* 'washerman/woman', *ganja* 'marijuana', *kisan* 'farmer', *no ghar* 'destitute', *pagala* 'fool', *paidar* 'to go on foot', *paisa* 'money', *pak-pak* 'too much talk', *pan-pan* 'sniff methylated spirits', (*tin*) *pani* 'k.o. game', *piala* 'small bowl', *sirdar* 'foreman', *tawa* 'iron plate for cooking', and *turup* 'k.o. card game'.

Hindi exclamations, interjections and discourse particles are not used as much as Fijian ones in Fiji English. They comprise 4% of Hindi borrowings: *acha* 'okay' and *nai sake* 'wow, unreal!'

Given India's pre-eminence among Britain's former colonies, it is not surprising that there are a considerable number of words of Hindi origin listed in the *OED*. Twenty-seven of the Hindi loans in my corpus (33%) are listed in the *OED*, they are: *achar*, *atta*, *babu*, *bhajan*, *chamar*, *dhoobi*, *dhoti*, *ganga*, *ghazal*, *ghee*, *halwa*, *kedgerree*, *Khalsa*, *kisan*, *paisa*, *pakora*, *panchayat*, *puja*, *punkah*, *puri*, *sahib*, *samaj*, *samosa*, *sirdar*, *tawa* and *tulsi*.

3.3 Other foreign loans

Apart from Fijian and Hindi loan words, Fiji English has a small number of borrowings from general Polynesian, Tongan, and one possibly from Cantonese. The general Polynesian loans include: *kava*, *mahimahi* 'golden trevally, dolphin fish', *Coryphaena hippurus*, *mana*

¹⁴ Some of these (as well as items from other lexical groups) are quite well known in the core Englishes, e.g. *ghee*, *kedgerree*, *roti*, *samosa*, *sahib*, *sangh*, *Diwali* etc., some of which have found their way into monolingual English dictionaries. However, these items enjoy much more currency in English-speaking societies where a significant Indian population is found, than in ones where ethnic Indians comprise a numerically insignificant section of the population.

'supernatural power', (*pa*)*palagi* 'white person, European', *tapa* 'mulberry-bark cloth', and *tamure* 'k.o. dance'.¹⁵ It is interesting to note that *kava* and *tapa* are often more commonly used in Fiji English (even by Fijians) than their Fijian equivalents *yaqona* and *masi*.¹⁶ This is exemplified by the use of *kava* in the *Fiji Times* article cited above, and in the following extracts from the *Daily Post*:

Ratu Sir Kamisese said that the excessive consumption of kava affected the people mentally and physically. The Lau paramount chief said he did not see the reason why people drink so much kava because they knew themselves the after effects to their body and mind. (*Daily Post*, 13/8/1999)

Ratu Nawalowalo said the kava industry contributes about \$93 million to the Fiji economy every year from export and local sales. "There is no other agro-based commodity, apart from sugar, to be at the same level as kava," Mr Nawalowalo said. (*Daily Post*, 8/9/1999)

Currently, Jack's [Handicrafts] specialises in creating wooden handicrafts, wood tanning, picture frames and clocks made from *tapa* and other items which are 100 percent local products. (*Daily Post*, 15/9/1999)

A verification of the use of *tapa* over *masi* is found in an article on holidaying in Fiji that appeared in *The Sydney Morning Herald's* (7/8/1999) travel supplement article mentioned above. Here *tapa* (glossed but in roman) is used instead of *masi*. Since the author of the article took pains to use Fijian words where appropriate, he most likely would have used *masi* (with an appropriate gloss) if this were indeed the word that he was generally exposed to. Either the author used *tapa* believing it to be a genuine Fijian word, or thought his readers would be more familiar with it.

Many Tongan words have found their way into Fijian, especially the Fijian communalects spoken in Fiji's eastern islands. Some of these have found their way into Fiji English: *polotu* 'a Tongan style hymn sung in Fijian', *tanoa* 'carved wooden kava bowl', *talanoa* 'chat session', *lakalaka* 'k.o. dance'.

In the late 1990s the approbatory exclamation *cheche* or *che che* found some popularity among the Fijian and part-European speakers of Fiji English. Whether or not its use will become more popular and ultimately replace the currently ubiquitous *uro*, only time will reveal. It most likely originates from the Cantonese dish *Che Che Chicken*. In mainstream Cantonese, *che che* is an onomatopoeic expression mimicking a sizzling sound. The dish

¹⁵ With the exception of perhaps *tamure*, these loans are via New Zealand English (Paul Geraghty, pers. comm.).

¹⁶ Another foreign loan word favoured over its Fijian equivalent is *cassava* [< Haitian via English]:

At six o'clock, the village men march off to their dalo, cassava and yaqona plantations while the women prepare breakfast. (*Fiji Times*, 28/7/99 p.18).

Soko and fellow villager Jone Rarawa have been planting cassava, bele, dalo and yams at the vacant crown land for over six years. (*Daily Post*, 13/10/1999)

includes chicken pieces, liver, ginger and spring onion served in a small pot just taken off the fire. When served, the chicken should still be sizzling in the pot.¹⁷

3.4 Calques

Calques (or loan translations) have proven to be quite a rich and colourful source of additions to the Fiji English lexis. Most of these derive from Fijian lexemes or phrases. They include the following:

- *always* An adverbial that marks the simple (habitual) pres. tense [*< Fijian dau*]¹⁸
- *bye* A greeting used in passing, equivalent to ‘Hello’ [*< Fijian moce* ‘good-bye’, which is used in this way]
- *just* A restrictive and moderative subjunct meaning ‘only, just; nevertheless, all the same, yet, but, however, but only, except...’ used as suffix with nouns, pronouns or verbs [*< Fijian gā*]
- *pointer* ‘index finger’ [*< Fijian idusidusi* ‘index finger’ *< dusi* ‘to point’]
- *pull (up)* ‘to harvest (in reference to root crops)’ [*< Fijian cavuta* ‘pull up, harvest (*tavioka, dalo, yaqona*), i.e. root crops that are harvested by pulling them out of the ground’]
- *they-two* 3DUAL pronoun [*< Fijian rau*]
- *us-two* IDUAL EXCLUSIVE and INCLUSIVE pronoun ‘us two’; our two’ [*< Fijian keirau, kedaru*]
- *vacant* Used to refer to a house or premises, of which the occupants are out [*< Fijian lala* ‘empty, vacant; no-one at home’]
- *where you going?~where to?* A greeting made in passing, equivalent to ‘Hello’, ‘Hi’, or ‘How are you?’ [*< Fijian o (nī) lai vei*]
- *you-people / you-gang* 2PL pronoun [*< Fijian kemudou, kemunī*]
- *you-two* 2DUAL pronoun [*< Fijian kemudrau*]

The colloquial Fiji English adverbial *go-go-ga* [go-go-ŋa] is best described as a hybrid calque—combining both English and Fijian lexical components. It is an adverbial with a

¹⁷ The two exclamatory approbations *uro* and *cheche* mirror the old and commonly used metaphor in Fijian of sex as food. For instance, the primary meaning of *kusima* in Fijian is ‘crave for fish or seafood’, but it often also means ‘to lust after’.

¹⁸ The analogous adverbial groups *all the time* and *every time* ‘always’ may be extensions of this calque.

meaning roughly equivalent to 'and then ...' or 'finally ...', and derives from the Fijian *lako-lako-ga* 'after a while'.¹⁹

There are a number of very common calques in Fiji English that have ambiguous etyma. The first is *big father/small father* 'father's elder brother/father's younger brother'. Are these calques from the Fijian *tama-na levu* lit. 'father-big' and *tama-na lailai* lit. 'small father' or from Hindi's *baRaa bappaa* lit. 'big father', or Bhojpuri's *barka-baba*? Whilst the term *big father* is also recorded occurring in South African Indian English (Mesthrie 1992a:145, 1992b), *small father* is also recorded as occurring in the form *smolpapa* 'father's brother' in Bislama (Crowley 1995). It is not unreasonable to assume the terms are calqued from both Fijian and Hindi, given such kinship terms are fairly common in many languages.

A similar problem is encountered with the ubiquitous use of *one* as an indefinite article. Many languages use the primary numeral as an indefinite article. Among these languages are Fijian and Hindi (Fijian *dua*, Hindi *ek*).²⁰ Its use in Fiji English most likely has its origins in both Fijian and Hindi.

Finally, the common past tense marker *been* could well be a calque from the Fijian preposed past tense marker *ā*. However, the use of *been* as a past tense marker is also attested in Hawaiian English (Carr 1972:122; Tsuzaki 1969), South African Indian English (Mesthrie 1992b), and Melanesian Pidgin English.²¹

3.5 Reborrowings

A phenomenon not often reviewed, let alone recognised, in the literature is one that may be best described as 'reborrowing'. As the term suggests, this occurs when a word from language *x* is borrowed into language *y*, where it becomes nativised (and often undergoes a semantic shift). In due course, and with continued intimate contact between the two languages, the word may be re-introduced into the donor language *x*. An excellent example of this phenomenon is *bure* (see fn. 11).

In Fiji English there are quite a number of English–Fijian reborrowings, i.e. English words that were borrowed by Fijian, became phonologically and morphologically nativised, and were subsequently introduced back into the local English. Most of these words also underwent some shift in meaning after they became nativised in Fijian. The resulting semantic shift is a natural and powerful motivation for them to be reintroduced into English. English–Fijian reborrowings include:

¹⁹ Compare Bislama's *gogo*, an iterative postverbal modifier with the meaning 'on and on', which is used in a similar fashion (Crowley 1995:86).

²⁰ Its use as an indefinite article is also attested in Melanesian Pidgin English, Hawaiian English and pidgin English (Carr 1972:142), and Bahamian English (Holm & Shilling 1982).

²¹ Melanesian Pidgin English (MPE) was introduced into Fiji by returned Fijian labourers or imported labourers during the plantation period (1864–1916). Although it was not widely or extensively used, it was nevertheless known to some extent (Siegel 1987). Fiji English shares several grammatical features as well as lexical items with MPE. It is, therefore, possible MPE is the source of these features.

- *boso* A vocative used to address males whom the speaker considers to be socially superior; or a term of address used to ingratiate oneself to a male in the hope of securing a favour [< Fijian < English *boss*]
- *ciriveni* 'miserly' [< Fijian < English *threepence*]
- *gallon~galen* 'a container for liquids' [< Fijian *qaloni* 'a container for liquids' < English *gallon*]. This term is also current in Fiji Hindi
- *karasi* 'marijuana' [< Fijian < English *grass*]
- *koki* 'red-breasted musk parrot, *Prosopiea tabuensis*' [< Fijian < Australian English *cocky*]
- *panikeke* 'lesbian adj., n.' [< Fijian < English *pancake* i.e. stacked on top of one another like pancakes] Monsell-Davis (1984:4) records its meaning as a *ménage à trois*. In Fijian, however, *panikeke* refers only to sexual intercourse]
- *sapo* 'briefs' [< Fijian *sapo* 'briefs' < English *supporter*]
- *topasi* 'a rubbish collector, a night-soil collector, a scavenger' [< Fijian < Indian English *topas* < Portuguese *topaz*]

The etymology of *topasi* is interesting and is well worth a brief explication. The word *topas* was used in India to refer to a person of mixed Black and Portuguese descent, and was often applied to a soldier, or a ship's scavenger or bath attendant, who was of this class (*OED*). Yule and Burnell ([1903] 1994) maintain the *topas* on board a ship was the sweeper, who was frequently a dark-skinned or half-caste claimant of Portuguese descent. The term is now archaic in Indian English. In his history of the Fiji indenture period, Naidu (1980:9–10) describes the organisation and conditions of the Indian indentured labourers' sea-passage from India to Fiji. This description indicates the origin of the term in Fiji English:

A female nurse was employed [on the emigrant ships] to take care of the women. There were others as well working under the Surgeon-Superintendent whose duties ranged from cooking (bhandaries) and managing the emigrants (the sardars) to tailoring, hair-dressing and sweeping (topazes). The division of labour helped to meet the day to day needs of the microcosmic world of the emigrant ship.

An account by girmitiya Totaram Sanadhya (1973, cited in Naidu 1980:27) gives a very clear portrayal of the word's use on board the ships that carried the girmitiyas to Fiji:

[...] As soon as morning broke one of the officers chose some of us to work, some to watch and some to do 'topas' job. The officer said to the topas workers, 'you do your work now'. The volunteers asked, 'What work?' Then they were told to clean the faeces of those on board. So many pleaded. But they were beaten and then forced to clear faeces. Throughout the ship you could hear the voices yelling, 'Trahi, trahi — save me, protect me!' [...]

The term found currency in Fiji, was adopted into Fijian, underwent phonological nativisation as well as a semantic shift, was reborrowed by Fiji English, and as the following citation from the *Fiji Times* illustrates, is still very much in vogue:

It means putting the peanut shells from the packet you brought [sic] from old Ram Sami at the bus stand into the bin, so that it doesn't have to be picked up by Setareki, the *topasi* from SCC [Suva City Council]. (*Fiji Times*, 28/6/1997 p.23)

The expression *mokusiga* 'to hang about, do nothing' (lit. *moku* 'kill' + *siga* 'day') may be best classified as a reborrowed calque. It was originally a Fijian calque of the English expression *to kill time*, but has since become a very popular expression in contemporary colloquial Fiji English.

Finally, there are two English–Hindi reborrows: *girmit*²² 'the indenture period' from *agreement (of indenture)*, and *trup* or *turup* 'k.o. card game' from *trump*.

3.6 Borrowings from Indian English and/or 'Colonial' English

A number of Fiji English vocabulary items have their origins in either Indian English or what I have termed 'Colonial English' (the English that was common among British colonial administrators and bureaucrats). All of these borrowings observed in Fiji English are also attested either in varieties of Indian English, or in the Englishes spoken in other former British colonies, e.g. Singapore, Malaysia, South Africa.

Apart from the expression *cousin-brother/sister* 'first cousin'²³ (which is used almost exclusively by Indo-Fijians) all other Indian English loans listed below are used by all speakers of Fiji English.

- *bluff* 'to lie, to insist that something is true, knowing it to be false; a lie; untrue'. Also attested in Indian English (Nihalani et al. 1989), Singapore English (Lugg 1984:8; Tongue 1974:66), Malaysian English (Tongue 1974:66), and South African Indian English (Mesthrie 1992b).
- *compound* 'the fenced or enclosed area of land around a house or group of buildings'. Also in PNG English, Malaysian English, and Singapore English.
- *grass cutter* 'man who mows lawns for a living'. Also in Indian English (Yule & Burnell [1903] 1994; Lewis 1991).
- *pak-pak, (too much)* '(too much) talk' [< Indian English *bak* 'to talk too much; to chatter' < Hindi *baknā*. (Yule & Burnell [1903] 1994)]. Also in South African Indian English (Mesthrie 1992b), where its attested form is *bak-bak*.
- *schooling* 'go to/attend school'. The *OED* marks this usage as 'rare'. Also in Indian English (Nihalani et al. 1989), Singapore English (Lugg 1984:13; Tongue 1974:76),

²² The term also occurs in South African Indian English and Mauritian English. The derivative *girmitiya* (an Indian indentured labourer) can have a pejorative meaning in South African Indian English (Mesthrie 1992b:19). In Fiji, however, the *girmitias* are highly revered.

²³ Cited in Trudgill and Hannah (1982:11), Kachru (1983:118), and Nihalani et al. (1989) as an Indian English expression, and Mesthrie (1988:10, 1992a:145, 1992b) as an expression in South African Indian English.

Malaysian English (Tongue 1974:76), South African Indian English (Mesthrie 1992b), and Bahamian English (Holm & Shilling 1982).

- *stay* 'to live, reside' Also in Indian English (Nihalani et al. 1989), Singapore English (Lugg 1984:19; Tongue 1974:73), Malaysian English (Choo 1984:44; Tongue 1974:73), Nigerian English (Awonusi 1990:34), and Bahamian English (Holm & Shilling 1982). This usage is also attested in Scottish English (Trudgill & Hannah 1982:86–86; *OED*), Irish English (*OED*), and American English (*OED*). Although *stay* forms part of the lexis of these varieties of English, it is almost certainly an Indian English 'immigrant' as far as Fiji English is concerned.
- *auntie/uncle* A term of address for any adult female/male older than the speaker. Also in Indian English (Nihalani et al. 1989; *OED*), Singapore English (Eng 1984:22–23; Tongue 1974:65), Malaysian English (Tongue 1974:65), and South African Indian English (Mesthrie 1992b).

Apart from Indian English, *alphabet* 'a letter of the alphabet' (Trudgill & Hannah 1982:106; Nihalani et al. 1989) also belongs to the lexis of Malaysian and Singapore English (Tongue 1974:62; Platt 1982:396), and South African Indian English (Mesthrie 1992b, 1993:13), Hawaiian English (Carr 1972:121), and Bislama (Crowley 1995). Indeed I have heard this use by university students from all over the South Pacific. It is difficult to know whether this expression found its way into Fiji English via Indian English, via Melanesian Pidgin English, or is an inherent feature of L2 English and/or New Englishes.

The origin of the final item, *wash* (*film*) 'to develop film, photographs', is also unclear.²⁴ However, its attested use in Bislama (Crowley 1995), Malaysian English (Choo 1984:47; Imm 1984:63) Singapore English (Platt, Weber & Ho 1984:102), and Nigerian English (Platt, Weber & Ho 1984:102), suggests it may have its origins in Colonial English.

3.7 Borrowings from other Englishes

The following group of Fiji English expressions are English words which are most likely borrowed from Australian and American English.

It is interesting that Fiji's proximity to Australia and New Zealand, not to mention its historic, economic and social ties to these two nations, has not led to more lexical borrowing from these two significant varieties of English. Indeed, I have not been able to identify any distinctively New Zealand English borrowings in Fiji English (apart from those Polynesian words introduced via New Zealand English), whilst among the numerous transparently Australian English loans to be noted are:

- *bowser* 'petrol pump' [also in New Zealand English]
- *lolly* 'a sweet'
- *stubby* 'a small squat beer bottle; the contents of such a bottle'

²⁴ Perhaps it is a calque on Fijian *sava* 'wash; develop'.

- *koki* 'red-breasted musk parrot, *Prosopiea tabuensis*' [< Fijian < Australian English *cocky*]
- *roll* 'a single cigarette' [most likely < *rollie* < *roll your own*]

"This [the banning of selling cigarettes to minors] will put an end to the culture of parents sending their children to the local shop to get a few rolls," he [Leo Smith, Minister for Health] said. (*Fiji Times*, 16/8/1997 p.34)

Although *truck* is often, if not usually, used to refer to heavy vehicles for carrying goods, the British English *lorry* is also regularly used. Occasionally it is used in Fiji English to refer to a bus. This is a reborrowing from Fijian *lori* 'truck; bus', and in some places it is the usual word for bus in Fijian. Originally buses were just lorries with benches in the back (Paul Geraghty, pers. comm.).

Association President Umesh Chand said 50 per cent of the 500 lorries were not operating because the owners could not afford the charges. [...] A mill employee said a few lorries were in the mill yard. [...] Although harvesting was in full swing in many sections in the mill area, which includes Seaqaqa, many gangs were without lorries. (*Fiji Times*, 28/5/1999, p.5)

Since the introduction of television in 1991, American English appears to be enjoying a boost in its influence on the Fiji English lexis. American serials are extremely popular among Fiji's younger generation, a fact that is exemplified by the increase of American English colloquialisms and slang in their speech. Some that are in current use include: *bro*, *check it out*, *dude*, and *home boys*.

There are also a number of expressions that appear to have entered Fiji English via American English well before the introduction of television, some as far back as World War II or earlier. During World War II large numbers of US troops were stationed in Fiji. Their legacy is quite a rich array of Americanisms that are still very much current in Fiji English. I have provisionally attributed the following group of items to American English, partly on the grounds that most do not appear to be prevalent in most other varieties of English; I recognise of course that some may well be derived from other sources.

- *fix* 'to fuck; to arrange a sexual partner for someone' [? < *fix* [someone] up 'to secure a date for someone; to secure a prostitute for someone' (Wentworth & Flexner 1960)] Also attested in Bahamian English (Holm & Shilling 1982).
- *fix up* 'to assault, to give someone a hiding or belting' [? < *fix* 'to beat up' (Wentworth & Flexner 1960)]
- *flip-flops* 'rubber or plastic sandals held loosely on the feet by a V-shaped straps passing between the first and second toes and over either side of the feet'. (Otherwise known as *thongs* in Australian English and *jandals* in New Zealand English). Since *flip-flops* is also the term used in Britain, it may well have entered Fiji English via British English.
- *gone* 'drunk' [< *gone* 'drunk' (Wentworth & Flexner 1960)] Also attested in Australian English—*far gone* 'extremely drunk' (*Macquarie Dictionary of Australian Colloquial Language*), so this may well be its source.

- *jacked, (to get)* ‘to get into trouble’ [? < nineteenth century American English *jack up* ‘to reprimand a person’ *arch.* 1895 (Wentworth & Flexner 1960)]
- *jack water / raisin jack* ‘a home-made alcoholic brew of sugar, yeast, water and flavouring’ [? < *jack* ‘simple luxuries, such as sweets and tobacco’ (Wentworth & Flexner 1960); cf. *apple jack*]
- *kill* ‘an instruction / imperative to finish a cigarette / drink / food etc. quickly; an offer to do so—I’ll *kill it for you* meaning *I’ll finish it for you*’ [? < *kill* ‘to drink or eat of any specified amount of liquor or food (1833); to drink or eat the last portion’ (Wentworth & Flexner 1960)]
- *push (poo-poo)* ‘to sodomise’ [? < *push* ‘to have sexual intercourse’ (Wentworth & Flexner 1960)] Bislama’s analogous *puspus* ‘to copulate, have sexual intercourse [rare]’ (Crowley 1995) may also have its origins in American English.
- *sure shot* ‘assured’ [? < *sure-fire* ‘unfailing; certain of winning applause’ (Wentworth & Flexner 1960)]
- *toke* [tok] ‘marijuana’ [< *toke* ‘a drag of a cigarette or a joint’ (Wentworth & Flexner 1960)]
- *wind pie* ‘nothing, nothing to eat’ [? < *wind pudding* ‘nothing to eat’ (Wentworth & Flexner 1960)]

3.8 Hybrids

Hybridisation is a term used by Kachru (1975:62) for lexical collocations or compounds that comprise items from more than one language. Given Fiji’s multilingual nature, it is not at all surprising to find such constructions in Fiji English. They are typically composed of two free morphemes, but may also comprise a bound morpheme or particle affixed to a free morpheme. Examples of the latter in Fiji English include:

- *bilibili-a-thon* ‘an annual *bilibili* race on the Sigatoka River’ [< Fijian *bilibili* ‘bamboo raft’]
- *maloser* [maluza] ‘a hopeless person with no future prospects’ [< Fijian *ma* (particle compounded with some words forming nouns and adjectives of state or condition) + *loser*]

The majority of Fiji English hybrids, however, are composed of English and Fijian free morphemes. Compounding of Hindi and English elements also occurs, though much less often. I have encountered only one Fijian–Hindi hybrid used in Fiji English—*taukei puja* ‘pouring the first cup of *yaqona* onto the soil to appropriate the *taukei ni vanua* (local god), done by Fiji Indians in imitation of the Fijian custom’ [< Fijian *taukei* ‘land owner’ + Hindi *puja* ‘a religious rite, prayer’].

The head of a hybrid is typically a noun accompanied by a modifying noun, adjective, or adverb. As the following examples illustrate, the head and modifier may be derived from any of the three languages involved:

- *bula shirt* 'an open-necked short-sleeved shirt with tropical design'
bula man 'a tout'
bula smile 'a welcoming smile'
- *full kasou* 'totally/completely drunk'. [*<* Fijian *kasou* 'drunk']
- *lovo food* 'food cooked in a *lovo*' [*<* Fijian *lovo* 'pit or earth oven']
- *know-ga, school-ga, choke-ga, things-ga, we-ga, you-ga* etc. [*<* Fijian *gā*, a limitative and moderative adverbial particle meaning 'only, just; nevertheless, all the same, yet, but, however, but only, except ...']
- *malua fever* 'The habit or proclivity to put things off'. Compare *mañana*. [*<* Fijian *mālua* 'later']
- *nice bola!* An exclamatory approbation called out to a good-looking / well dressed person / thing' [*<* Fijian *bola* 'bag, case, box']
- *off-taka* 'to switch off a light, appliance, device etc.' [*<* Fijian *taka* transitive verb marker]
- *talanoa session* 'a chat, informal talk; a story telling session' [*<* Fijian *talanoa* 'to chat']
- *talasiga area-country* 'grassland' [*<* Fijian *talāsiga* 'grassland']
- *chota peg* 'a small nip/serve of liquor' [*<* Hindi *chhotā* 'small' + *peg* 'a dram, drink']
- *gang sirdar* 'a cane-gang boss/foreman' [*<* Hindi *sirdar* 'a foreman, overseer'] As the following citation shows, the gang sirdar is not necessarily an Indo-Fijian:
A harvesting gang sirdar was given a suspended jail sentence for fraudulently converting more than \$2000 in canecutters' pay to his personal use. Akariva Tiniciwaciwa, 60, sirdar of the Waimaro Gang Number 43 of Seaqaqa pleaded guilty to a charge of fraudulent conversion before magistrate Maika Nakora in Labasa Court. (*Fiji Times*, 30/6/99 p.10)
- *no ghar* 'destitute, homeless' [*<* Hindi *ghar* 'house']
- *piala cut* 'a pudding-bowl haircut' [*<* Hindi *piala* 'a small enamel bowl used for drinking *yaqona* or tea']
- *pura cut* 'completely / totally drunk' [*<* H *pūrā* 'complete, total']

There are also three hybrid reduplications in the corpus, i.e. hybrid compounds whose two elements have the same or very similar meaning. These are:

- *bure house* 'a Fijian-style house made from traditional materials'

- *sasa broom* ‘a short hand-held broom made from the dried ribs of coconut palm fronds’ [< Fijian *sāsā* with the same meaning]
- *tanoa bowl* ‘a large carved wooden bowl with four or more legs used for infusing *yaqona*’ [< Fijian *tānoa* with the same meaning]

These items seem to have the pragmatic function not only of characterising things unique to Fiji, but also of emphasising this uniqueness. Hence, a *bure house* is not just any house, but a Fijian-style house made from traditional materials, a *sasa broom* is just not any broom, but a Fijian-style broom, and a *tanoa bowl* is not just any bowl, but a carved wooden bowl with a specific Fijian design made for a specific purpose, and has specific significance in Fijian and Fiji culture.

4 Conclusion

The structure, development and nativisation of the lexis of Fiji English is much the same as that of any other variety of English. What sets it apart from other varieties are, of course, the individual lexical items and expressions. And like any other variety of Pacific English, it has nativised a substantial number of indigenous words. What sets Fiji English apart from other Pacific Englishes is its Hindi word stock. As my corpus shows, Fijian has had more than twice the numerical impact on the vocabulary of Fiji English Hindi. This is not surprising because Hindi has been an ingredient in this amalgam only since 1879. Moreover, it is only natural that Fijian words predominate in the local sociocultural, biological, botanical and geophysical nomenclature because it belongs to the host country. These loans were well established in the English of Fiji before the introduction of Hindi. As the table below shows, Hindi’s contribution to the Fiji English lexis has mainly been in the areas of food, culture, and religion.

Table 1: Fijian and Hindi loans in FVE

Category of loan	% Fijian	% Hindi
A. Inedible flora (trees and medicinal herbs)	10	—
B. Edible flora (vegetables, fruits, herbs and spices)	10	12
C. Inedible fauna (birds)	1	—
D. Edible fauna (mainly seafood)	7	1
E. Prepared foods and beverages	3	30
F. General/miscellaneous nouns, adjectives and verbs	27	32
G. Culture and religion (customs, concepts, events and practices)	20	21
H. Sociopolitical terms	12	—
I. Discourse particles and formulae (greetings etc.)	4	1
J. Exclamations and interjections	6	3

Hindi's contribution to the Fijian lexis follows this pattern and is considerably less than that of English. *Na ivolavosa vakaviti* (the Fijian Dictionary Project), which has been compiling a monolingual Fijian Dictionary since 1974, has to date about 175 Hindi loan words among its almost 30,000 entries (0.58%). Most of these refer to food, and the names for general items and concepts associated with Indian culture and religion. However, as I mentioned above, 41% of these Hindi loans have the usage label *veiwali* 'joking' attached to them—most of which pertain to words describing actions and concepts that have Fijian equivalents.

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