

POLYNESIAN SOCIETY

Its aim is to promote the scholarly study of  
and other Pacific Island peoples and cultures.

me TE ATA-I-RANGI-KAAHU  
WHARU  
N, R. HARLOW, M. MELEISEA,  
M. MUTU, A. PARSONSON,  
NS, D. G. SUTTON  
TAUMOEFOLAU  
E RAWIRI  
NING, JUDITH HUNTSMAN  
DUREAU  
O

NT OF MAORI STUDIES,  
Y OF AUCKLAND

ty is by application and is granted on the approval  
ainable from the Secretary.

ip receives notice of election from the Secretary,  
ayment of the current year's subscription becomes  
, including free copies of the Journal. Thereafter,  
January 1 each year. Annual membership fees are  
land members, NZ\$40.00 for overseas members.  
re NZ\$60.00 both within New Zealand (including  
entitled to a 50% discount (maximum tenure three

, is restricted to those who have been members of  
e reached 60 years of age.

ies, Office of the Society  
Department of Maori Studies

ersity of Auckland,  
g 92019, Auckland,  
ew Zealand

# THE JOURNAL OF THE POLYNESIAN SOCIETY

---

Volume 106

DECEMBER 1997

Number 4

---

*Editors*

ANN CHOWNING  
JUDITH HUNTSMAN

*Review Editor*

CHRISTINE DUREAU

*Editorial Assistants*

FRANK LICHTENBERK  
DOROTHY BROWN

Published quarterly  
by the

Polynesian Society (Inc.), Auckland, New Zealand

MORE EARLY DUTCH LOANWORDS IN POLYNESIA

PAUL GERAGHTY

*Institute of Fijian Language and Culture*

JAN TENT

*University of the South Pacific*

In our paper "Early Dutch Loanwords in Polynesia" (Geraghty and Tent 1997), we demonstrated that three words which have been considered Polynesian are, in all likelihood, Dutch loanwords dating from the South Pacific voyages of Le Maire and Schouten (1615-1617), Tasman and Visscher (1642-1643), and Roggeveen and Bouman (1721-1722). Since then, new evidence has come to light, and in this short paper we argue for three additional loanwords, all names of tools or implements, and hence items very likely to be necessary loans.

A WORD FOR 'AXE'

We believe the following Eastern Fijian and Rotuman forms are derived from the 17th century Dutch *bijleken* /bɛiləkən/ (or perhaps *bijlken*) 'small axe', and that they originate either from the Le Maire and Schouten or from the Tasman and Visscher expeditions.

EASTERN FIJI:

Richardson 1811 *bellico* 'a chissel [sic]'; *bellico ouboonah* 'a plane iron' (see Schütz 1985:576).

Endicott 1829 (1923:73) *Par'-lee-Co* 'Chizzel [sic]'.<sup>1</sup>

Oliver 1831 *bellico* 'chisel' (see 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* (King James '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).<sup>2</sup>

ROTUMA: Churchward (1940) *ver'ō* 'steel blade, steel'.

We know that axes were carried on board their vessels because the logbooks of Le Maire, Schouten and Claeszoon (Le Maire's chief merchant) mention that an axe was given to the chiefs of both Tafahi (Northern Tonga) and Futuna (Engelbrecht and van Herwerden 1945:57, 72, 184; Claeszoon 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 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 17th century, the diminutive form of the word *bijl* (or its older form *bijle*, which was still very common during the first half of the 17th century)<sup>3</sup> 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, 1903:2619), notes: "Bij overdracht: sloopstimmerman, 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, one of Willem Barentsz.' ship's carpenters is seen using a *bijl* in the building of a house in which to winter on the island of Nova Zembla.

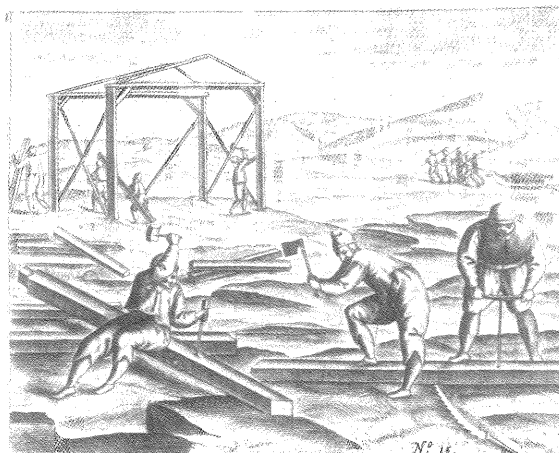


Figure 1: Willem Barentsz.' ship's carpenters constructing a house on Nova Zembla, 1596 (de Veer 1646).

le, steel'...

vessels because the logbooks of (chief merchant) mention that an (Tonga) and Futuna (Engelbrecht 1646:91). Furthermore, each of (and the *Zeehaen*) includes the (Loves 1919:158, 159). Although (axes being given to, or traded (Nomuka, it is not unreasonable (board his ships and there was a (trinkets, tools and utensils.

the diminutive form of the word (common during the first half of the (carpenter'. Under the entry for (language, the *Woordenboek der* (Loves), notes: "Bij overdracht: (By transfer: ship's carpenter, (the *bijl* (or *bijltje*~*bijleken*) was (might well have been presented (picturing ships' carpenters show (one of Willem Barentsz.' ship's (house in which to winter on the



ecting a house on Nova Zembla,

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 17th 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, linguistic changes that occurred during this period was the palatalisation of the Middle Dutch diminutive suffix *-ken* /-kən/ to *-tje(n)* /-tʰə (n)/,<sup>4</sup> variously spelt as: *-tge(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, Claeszoon and Tasman. And as the following list shows, both forms are used concurrently.

## LE MAIRE, SCHOUTEN &amp; CLAESZOOM:

- bladeken* and *blaetjens*<sup>5</sup> '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*)  
*dorpken* 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*)  
*mutsken* and *mutsjen* (a measure of liquid; 1 *mutske* = 0.15 litre — Claeszoon uses both forms, Le Maire uses *mutsken* exclusively, and Schouten *mutsjen*) *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 other, and Claeszoon uses each of the two forms twice within nine 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*)

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*.

| Source Texts                  | Diminutive Suffix |                | Total |
|-------------------------------|-------------------|----------------|-------|
|                               | <i>-ken</i>       | <i>-tje(n)</i> |       |
| 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   |

Table 1: Frequency of use of the diminutive suffixes *-ken* and *-tje(n)*.

Tasman's preference for the palatalised form may be indicative of the rapid change from *-ken* to *-tje(n)*. The almost 30 year stretch between the Le Maire and the 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, and hence, the change in the use of the diminutive form during that 30 year interval is not unrealistic.<sup>6</sup>

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* /bɛlɛkə(n)/ 'small bell'.

#### *Linguistic correlations*

Although Fijian and Rotuman are not Polynesian languages, they nevertheless have a very rich history of Polynesian borrowing, especially from Tongan (Biggs 1965, 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 word has such a specialised referent and would be of relatively rare occurrence.<sup>7</sup> 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 that 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*/beleko:/.

diminutive suffixes by the four  
while Schouten and Claeszoon  
re than *-ken*. Tasman, on the

| Diminutive Suffix | Total |
|-------------------|-------|
| <i>-tje(n)</i>    | 78    |
| 39 (50%)          | 78    |
| 26 (55%)          | 47    |
| 27 (53%)          | 51    |
| 23 (64%)          | 36    |
| 115 (54%)         | 212   |

*-ken* and *-tje(n)*.

indicative of the rapid change  
in the Le Maire and the Tasman  
ordinarily not long enough to  
according to Daan (pers. comm.  
d rate and degree of linguistic  
ative form during that 30 year

form *bijleken* (or *bijlken*) in  
confident that these forms were  
the diminutive in Dutch, which  
e that Le Maire and Claeszoon  
) 'small bell'.

languages, they nevertheless  
pecially from Tongan (Biggs  
ed reflexes in the languages  
and Tasman) may well be a  
s such a specialised referent  
o possible that the word has  
d tools. All things considered  
o a Polynesian language and

for the realisation of *bijleken*

| <i>bijleken</i> |   | <i>velekō</i> |
|-----------------|---|---------------|
| /b/             | → | /β/           |
| /ɛi/            | → | /e/           |
| /l/             | → | /l/           |
| /ə/             | → | /e/           |
| /k/             | → | /k/           |
| /ə/             | → | /o:/          |
| /n/             | → | ∅             |

Since Polynesian languages do not have [b], the closest corresponding sound would be /v/ (phonetically, [β]) or /p/. Although in all known Polynesian loanwords [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 17th century Dutch was quite complex (Weijnen 1956:19-20). During the first few decades of the century, the long vowel <i> [iː] was diphthongised to <ij> [ɛi], which was attested in about 1620 (Brachin 1985:17). There were then three co-existing pronunciations: the Mod. D. [ɛi], the Mid. D. monophthong [iː], and an intermediate form [ɛ<sup>i</sup>] (with a vowel colour somewhere between Cardinal Vowels 2 [e] and 3 [ɛ]) (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 Mod. D. *ijzeren* [ɛizərə(n)] 'iron' (ADJ.) appearing as *isere* [isərə] in *25 gesorteerde isere pannen* ['25 assorted iron saucepans'], and Mod. D. *oliefant* [olifAnt] 'elephant' appears as *olijphant* [oleifAnt] in *19 olijphantstanden* ['19 elephant tusks']. By the end of the century, [ɛi] was largely used throughout central Holland (Amstelland with Amsterdam, and Rhineland with Leiden and The Hague). In our earlier paper (Geraghty and Tent 1997), we established that the crews on board Dutch ships of the period were mostly speakers of the Hollands dialect, so it was probably either the [ɛ<sup>i</sup>] or the [ɛi] pronunciation that gave rise to the vowel /e/ in the first syllable of *velekō*. Similar loan phonology can be seen, for instance, in the following English loanwords 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/. In

the latter, since no Western Polynesian language (with the partial exception of Tuvaluan) tolerates consonant clusters, the Dutch consonant cluster [-lk-] in *bijlken* would need 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 *bijljen*, 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 final vowel /o:/ 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* /ʔβeleko/), 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 are the correspondences between Polynesian and Rotuman.

| POLYNESIAN    |   | ROTUMAN      |
|---------------|---|--------------|
| <i>velekō</i> |   | <i>ver'ō</i> |
| /v/           | → | /v/          |
| /e/           | → | /e/          |
| /l/           | → | /r/          |
| /e/           | → | ∅            |
| /k/           | → | /ʔ/          |
| /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 1965:402-03). The loss of the medial unstressed vowel is also a common occurrence (e.g., *mānpusi* < Fijian *manipusi* 'mongoose', *firmoto* 'wild cherry tree' < Tongan *filimoto* 'k.o. tree', Futunan *filimoto* 'k.o. tree', *Flacourtia rukam*', or Sāmoan *filimoto* 'k.o. tree', *Flacourtia rukam*'). On the other hand, Polynesian /k/ is usually realised as Rotuman /k/ (Biggs 1965:399-401), but it is possible that the word was loaned from Sāmoan, where /k/ has been reflected as /ʔ/ since at least Cook's time and probably much longer (Hovdhaugen 1986:314-17), or via Vanualevu in Fiji, where the same change appears to have taken place well into prehistory (Geraghty 1978:53-54).

## A WORD FOR 'SHOVEL'

The following is a set of forms we believe are derived from the 17th and 18th century Dutch *schop* /skɔp/~/sxɔp/ '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'.

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']'. Jausen (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 Galey* on Takapoto (Tuamotu) in 1722 are probably the source of this loanword. An attempt was made to salvage as much as possible of the ship's 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.<sup>8</sup>

*Linguistic correlations*

The derivation of *kope* from *schop* is relatively uncomplicated.



|              |   |                 |
|--------------|---|-----------------|
| <i>schop</i> | → | <i>kope~ope</i> |
| /s/          | → | ∅               |
| /k/~/x/      | → | /k/             |
| /ɔ/          | → | /o/             |
| /p/          | → | /p/             |
|              | + | paragogic /e/   |

The simplification of the consonant cluster <sch> /sk~/~sx/ to /k/ is consistent with the phonotactics of Polynesian loan phonology (cf. Tahitian *totini* < English 'stocking', Hawai'ian *kula* < English 'school').

The digraph <ch> in 17th century Dutch had two co-occurring pronunciations: [k] and [x]. Either of these would have been realised as Polynesian /k/.

Up until relatively recently, Dutch <o> (/ɔ/) had two allophones: [u̥] and [ɔ] (Donaldson 1983:48). The [u̥] 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.

#### A WORD FOR 'NEEDLE'

We believe that Tahitian *narreeda* /narita/ 'needles' (Forster-Anderson 1773, cited in Lanyon-Orgill 1979:118) was also introduced by the Roggeveen deserters and derives from the Dutch *naald* /nald/ 'needle'.

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) schaatjes, naalden, coralen, spiegeljtjens 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).

#### Linguistic correlations

There is relatively little difficulty in accounting for the derivation of *narita* from *naald*.

|              |   |                |
|--------------|---|----------------|
| <i>naald</i> |   | <i>narita</i>  |
| /n/          |   | /n/            |
| /a/          |   | /a/            |
| /l/          |   | /t/            |
|              | + | epenthetic /i/ |
| /t/          |   | /t/            |
|              | + | paragogic /a/  |

The first two sounds of *naald* are unambiguously rendered as the first syllable of *narita*.

Since Tahitian has no /l/, the closest corresponding sound is /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.

A parallel example to this loan phonology is found in the following two Afrikaans loanwords in Fanakalo (a Zulu-based English pidgin with approximately 5 percent of its vocabulary derived from Afrikaans): *naliti* 'needle' < *naald*, and *toliki* 'interpreter' < *tolk* (Bold 1986).<sup>10</sup>

#### CONCLUSION

Our investigations have now produced six likely early Dutch loanwords in Polynesia. They are:

*pusa~puha* 'box' < *bos~bus* (Geraghty and Tent 1997).

*tuluma* 'small container; lidded round/elliptical box' < *trommel* (Geraghty and Tent 1997).<sup>11</sup>

*pupa* 'to copulate' < *pompen, poppen, poepen* (Geraghty and Tent 1997).<sup>12</sup>

*velekō~ver'ō* 'chisel, polished part of a tool, adze' < *bijleken~bijlken* 'small axe'.

*kope~ope* 'shovel; to scoop' < *schop*.

*narita* 'needle' < *naald*.

In Geraghty and Tent (1997) we argue on the basis of their geographical distribution that *pusa~puha* and *tuluma* originated from the Le Maire and Schouten expedition, whereas *pupa* originated from the voyage of Roggeveen. A similar argument can be applied to the three loanwords that have been discussed in this paper. Figure 2 suggests that *velekō~ver'ō* be attributed to Le Maire and Schouten, or to Tasman and Visscher, but *kope~ope* and *narita* to Roggeveen.

With regard to evidence for long distance voyaging in eastern Polynesia, the presence of *kope* in Hawai'i indicates that Hawai'i was still in contact with the Tuamotus in the early 18th 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 loanword. 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 loanwords from English or French.

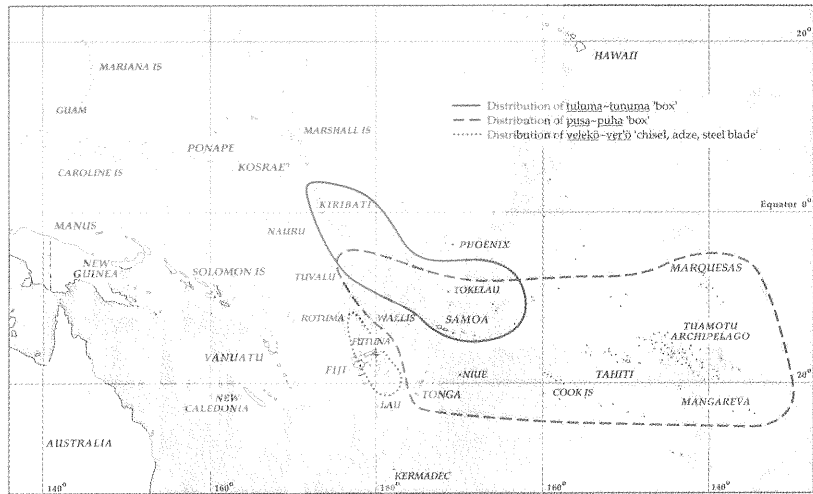


Figure 2: Geographical distribution of loanwords attributed to the expeditions of either Le Maire (1615–1617) or Tasman (1642–1643).

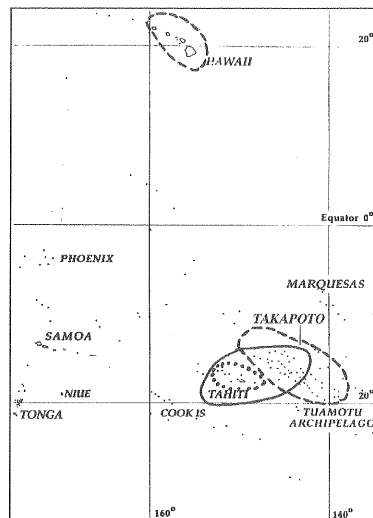
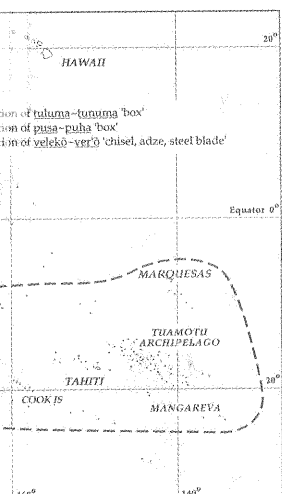


Figure 3: Geographical distribution of loanwords attributed to the Roggeveen expedition (1721–1722).

— Distribution of pupa 'copulate'  
 - - - - - Distribution of kope 'shovel'  
 ..... Distribution of narita 'needle'



tributed to the expeditions of  
( ).

geographical distribution of  
tributed to the Roggeveen  
1721-1722).

Distribution of pupa 'copulate'

Distribution of kope 'shovel'

Distribution of narita 'needle'

#### ACKNOWLEDGEMENTS

We wish to acknowledge that this research was financially supported by the University of the South Pacific (URC Grant No. 6153-1221-70766-00), Professor Subramani (Head, Department of Literature and Language, University of the South Pacific) and Professor Konai Thaman (Head, School of Humanities, University of the South Pacific).

We wish to express our most sincere thanks to Dr Bruce Donaldson (University of Melbourne) for his advice and assistance during our research for this study, and both to him and to his wife for their hospitality during a study visit to the University of Melbourne by Jan Tent in January 1997. Our thanks also to Professor Andrew Pawley and his wife for their hospitality during a study visit to the Australian National University and the National Library of Australia, Canberra, in July 1997.

Our thanks also to Professor Cor van Bree (Rijks Universiteit Leiden) and Dr Jo Daan (former Director of the P.J. Meerten Institute voor Dialectologie, Naamkunde en Volkskunde, Koninklijke Academie voor Wetenschappen en Kunst, Amsterdam) for assisting us with information on Dutch phonology in the 17th and 18th centuries, and etymologies of various Dutch words; Kay Dancey (Cartography Unit, Research School of Pacific and Asian Studies, Australian National University) for the preparation of the maps; and the National Library of Australia, Canberra, for allowing us to reproduce plate 15 from de Veer (1646).

#### NOTES

1. "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)
2. Note that in all of the Fijian sources except Geraghty marking of vowel length is absent or inconsistent.
3. For instance, Le Maire uses *een bijle* (Engelbrecht and 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 or reflect the Dutch of one regional dialect over another) 'axe' appears as *bijle*.
4. In casual speech, there is almost always elision of the final nasal, reducing the ending to [ə].
5. The -s ending indicates a plural form.
6. It seems that only 80 years after Tasman's journal (1642-1643) the palatalisation

- from *-ken* to *-tjen~-tien* was complete. Bouman's journal (1722) (Mulert 1911) has 35 diminutives, all of which are palatalised.
7. Outside Rotuma and the small islands of Kabara, Vulaga, Ogea and Namuka in southern Lau, the word *velekō* is now totally unknown in Fiji and Polynesia.
  8. Quiros specifically mentions his crew taking spades and crowbars to dig for water on Hao in the Tuamotus in 1606 (Markham 1904:200).
  9. In word final position, voiced stops become voiceless.
  10. We are grateful to Dr Anthony Paul Grant (University of St. Andrews, Scotland) for drawing our attention to these examples.
  11. Since our previous publication, we have found two other reflexes: Sāmoan *tunuma* 'cylindrical container (hollowed out from a block of wood and used for storing tattooing implements)' (Milner 1966) and 'a case for tattooing instruments' (Pratt 1911 [1862]); and Fakaafo [sic] (Tokelau) and Vaitupu (Tuvalu) *tuluma* 'box, bucket' (Hale 1968 [1846]:362). The Sāmoan reflex (which has irregular /n/ < /l/) helps bridge the gap noted in Geraghty and Tent (1997) between the current distribution area and Futuna, the probable point of origin.
  12. Since our previous publication, we have found another early reference to the Tahitian *pupa: wa'bubba* 'jolting r....g' (Foster-Anderson 1773, cited in Lanyon-Orgill 1979:115). Here 'r....g' probably denotes *rogering* 'to copulate with (a woman)' (Grose 1971 [1811], Ayto and Simpson 1993, Partridge 1972). The first syllable *wa* represents the Tahitian pre-verbal aspect marker /ʔua/.

## REFERENCES

- Ayto, John and John Simpson, 1993. *The Oxford Dictionary of Modern Slang*. Oxford: Oxford University Press.
- Biggs, Bruce, 1965. Direct and indirect inheritance in Rotuman. *Lingua*, 14:383-415.
- Bold, John Daniel, 1986. *Fanakalo Phrase Book and Dictionary*. Cape Town: J.L. van Schalk.
- Brachin, Pierre, 1985. *The Dutch Language: A Survey*. Trans. Paul Vincent. Leiden: E.J. Brill.
- Capell, Arthur, 1968 [1941]. *A New Fijian Dictionary*. 3rd edition. Suva: Government Printer.
- Cargill, David *et al.*, MS. n.d. [c. 1840]. *Fijian Dictionary*.
- Churchward, C. Maxwell, 1940. *Rotuman Grammar and Dictionary*. Sydney: Australasian Medical Publishing Co.
- Claeszoon, Aris, 1646. Australische Navigatien, ontdekt door Jacob le Maire ende Willem Cornelisz. Schouten inde Jaren 1615. 1616. 1617. In [Isaak Commelin (ed.)], *Begin ende Voortgangh vande Vereenighde Nederlandtsche Geoctroyeerde Oost-Indische Compagnie*, deel II. [Amsterdam?: s.n.]
- de Veer, Gerits, 1646. Derde Schip-vaert van W. Barentsz. om 't Noorden nae China. Kort verhaal van de derde, ende aller-wonderbaerlijcxste, seldsaemste, jae te voren noyt dier-gelijcke, achter Noorweghen, Moscovien ende Tartarien om, naer Cathay ende China ghedaen, uyt de name ende weggen des Eerbaren Raeds

- Journal (1722) (Mulert 1911)
- Vulaga, Ogea and Namuka in known in Fiji and Polynesia. axes and crowbars to dig for (1904:200).  
 eless.  
 sity of St. Andrews, Scotland)
- two other reflexes: Sāmoan in a block of wood and used (6) and 'a case for tattooing [sic] (Tokelau) and Vaitupu (6):362). The Sāmoan reflex is noted in Geraghty and Tent Futuna, the probable point of
- another early reference to the person 1773, cited in Lanyon-rogering 'to copulate with (a 1993, Partridge 1972). The al aspect marker /ʔua/.
- Dictionary of Modern Slang.
- n Rotuman. *Lingua*, 14:383-
- Dictionary. Cape Town: J.L.
- Trans. Paul Vincent. Leiden:
- rd edition. Suva: Government
- ary.
- ar and Dictionary. Sydney:
- ekt door Jacob le Maire ende 6. 1617. In [Isaak Commelin ende Voortgahghe Nederlandtsche Indische Compagnie, deel I. [Amsterdam?: s.n.]
- Donaldson, Bruce C., 1983. *Dutch: A Linguistic History of Holland and Belgium*. Leiden: Martinus Nijhoff.
- Endicott, William, 1923. *Wrecked Among Cannibals in the Fijis; A Narrative of Shipwreck & Adventure in the South Seas*. Salem: Marine Research Society.
- Engelbrecht, W.A. and P.J. van Herwerden (eds), 1945. *De ontdekkingsreis van Jacob le Maire en Willem Cornelisz. Schouten in de jaren 1615-1617, journalen, documenten end andere bescheiden*. Vols I and II. 's-Gravenhage: Martinus Nijhoff.
- Geraghty, Paul A., 1978. Fijian dialect diversity and foreigner talk: The evidence of pre-missionary manuscripts. In Albert Schütz (ed.), *Fijian Language Studies: Borrowing and Pidginization*. Bulletin 4:51-67. Suva: The Fiji Museum.
- 1983. *The History of the Fijian Languages*. Honolulu: University of Hawai'i Press.
- n.d. [c. 1985]. Unpublished field notes.
- Geraghty, Paul and Jan Tent, 1997. Early Dutch loanwords in Polynesia. *Journal of the Polynesian Society*, 106:131-60.
- Grose, [Francis], 1811. *Lexicon Balatronicum: A Dictionary of Buckish Slang, University Wit and Pickpocket Eloquence*. London: C. Chappel.
- Hale, Horatio E., 1968 [1846]. *United States Exploring Expedition During the Years 1838, 1839, 1840, 1841, 1842 Under the Command of Charles Wilkes, U.S.N. Vol. 6 Ethnography and Philology*. Ridgewood, NJ: The Gregg Press.
- Hazlewood, D., 1850. *A Feejeean and English and an English and Feejeean Dictionary*. Vewa [Viwa, Fiji]: Wesleyan Mission Press.
- Hermkens, H.M., 1973. *Handelingen bij de studie van de Nederlandse taalkunde, bestemd voor studenten en leraren. Vierde deel — Inleiding tot het zeventiende-eeuws*. 's-Hertogenbosch: L.C.G Malmberg.
- Hovdhaugen, Even, 1986. The chronology of three Sāmoan sound changes. In Paul Geraghty, Lois Carrington and S.A. Wurm (eds), *FOCAL II: Papers from the Fourth International Conference on Austronesian Linguistics*. Pacific Linguistics C-94. Canberra: Australian National University, pp.313-31.
- [Hunt, J. and D. Hazlewood (transl.)], 1856. *Ai Vola Tabu* [Fijian Bible]. Vewa [Viwa]: Fiji Wesleyan Mission.
- Jaussen, Tepano, 1987 [1969]. *Dictionnaire de la langue tahitienne*. (6<sup>e</sup> édition, revue et augmentée.) Papeete: Société des Etudes Océaniques.
- Lanyon-Orgill, Peter A., 1979. *Captain Cook's South Sea Island Vocabularies*. London: The author.
- Lemaître, Yves, 1986. *Lexique du Tahitien Contemporain*. Paris: Orstom.
- Markham, C., 1904. *The Voyages of Pedro Fernandez de Quiros, 1595 to 1606*. London: Hakluyt Society.
- Milner, George B., 1966. *Samoan Dictionary*. London: Oxford University Press.
- Mosblech, Boniface, 1843. *Vocabulaire océanien-français et français-océanien des*

- dialectes parlés aux îles Marquises, Sandwich, Gambier, etc. d'après les documens recueillis sur les lieux, par les missionnaires catholiques et les ministres protestans, et particulièrement d'après les manuscrits du R.P. Mathias, auteur des lettres sur l'océanie.* Paris: J. Renouard et Cie.
- Mulert, F.E. Baron (ed.), 1911. *Scheepsjournaal, gehouden op het schip Tienhoven tijdens de ontdekkingsreis van Mr. Jacob Roggeveen, 1721-1722.* Middleburg: J.C. & W. Altorffer.
- Neyret, Jean-Marie Fr., 1935. *Fijian-English and English-Fijian Dictionary.* Typescript, 4 Vols. Cawaci, Fiji.
- Partridge, E., 1972. *Dictionary of Historical Slang.* London: Penguin Books.
- Posthumus Meyjes, R. (ed.), 1919. *De reizen van Abel Janszoon Tasman en Francoys Jacobszoon Visscher ter nadere ontdekking van het zuidland in 1642/3 en 1644.* 's-Gravenhage: Martinus Nijhoff.
- Pratt, George, 1911 [1862]. *Pratt's Grammar and Dictionary of the Samoan Language.* Apia: Malua Printing Press.
- Pukui, Mary Kawena and Samuel H. Elbert, 1986. *Hawaiian Dictionary.* Honolulu: University of Hawai'i Press.
- Savage, Stephen, 1980 [1962]. *A Dictionary of the Māori Language of Rarotonga.* Suva: Institute of Pacific Studies, University of the South Pacific.
- Schütz, Albert J., 1985. *The Fijian Language.* Honolulu: University of Hawai'i Press.
- Stimson, J.F. and D.S. Marshall, 1964. *A Dictionary of Some Tuamotuan Dialects of the Polynesian Language.* Salem, Massachusetts: Peabody Museum and The Hague: Het Koninklijk Instituut voor Taal-, Land- en Volkenkunde.
- van Loey, A., 1959. *Schönfeld's Historische Grammatica van het Nederlands.* Zutphen: W.J. Thieme & CIE.
- Weijnen, A., 1956. *Zeventiende-eeuws Taal.* Zutphen: W.J. Thieme & CIE.
- Woordenboek der Nederlandsche Taal*, 1903. Vol. II, 2. 's-Gravenhage & Leiden: Martinus Nijhoff.