

INSTRUCTOR'S MANUAL

for

Historical Linguistics: an Introduction

Third Edition

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The Polynesian languages of the Pacific form a subgroup of the Oceanic branch of the Austronesian family of languages. (1) What are the sound correspondences found in these data? What sound do you reconstruct for the proto-language to represent each sound correspondence set? (2) What sound change or changes have taken place in each of these languages? (3) What is the best reconstruction (proto-form) for 6, 16, 20 and 32? Show how your postulated sound changes apply to each of these to produce the modern forms. **NOTE that not all sounds of the proto language are represented in these cognate sets with their sound correspondences. For example, in one not represented clearly here, Tongan has Ø corresponding to / or r of the other languages (reflecting what is usually reconstructed as *r of Proto-Polynesian), distinct from the set in which Tongan has / corresponding to / or r in these sister languages (reflecting Proto-Polynesian */). This distinction will not be clearly visible in the data presented in this exercise.** NOTE: <'> = [?].

	<i>Māori</i>	<i>Tongan</i>	<i>Samoan</i>	<i>Rarotongan</i>	<i>Hawai'ian</i>	<i>gloss</i>
1.	tapu	tapu	tapu	tapu	kapu	'forbidden', 'taboo'
2.	pito	pito	—	pito	piko	'navel'
3.	puhi	puhi	—	pu'i	puhi	'blow'
4.	taha	tafa 'edge'	tafa	ta'a	kaha	'side'
5.	tae 'trash'	ta'e	tae	tae	kae	'excrement'
6.	tanata	tanata	tanata	tanata	kanaka	'man, person'
7.	tai	tahi	tai	tai	kai	'sea'
8a.	kaha	kafa	'afa	ka'a	'aha	'strong'
8b.	ma:rohi-	ma:lohi	ma:losi	ma:ro'i	—	'strong'
9.	karo	kalo	'alo	karo	'alo	'dodge'
10.	aka	aka	a'a	aka	a'a	'root'
11.	au	'ahu	au	au	au	'gall'
12.	uru 'tip of weapon'	'ulu	ulu	uru	ulu 'centre'	'head'
13.	uhi	ufi	ufi	u'i	uhi	'yam'
14.	ahi	afi	afi	a'i	ahi	'fire'
15.	φa:	fa:	fa:	'a:	ha:	'four'
16.	φeke	feke	fe'e	'eke	he'e	'octopus'
17.	ika	ika	i'a	ika	i'a	'fish'
18.	ihu	ihu	isu	(puta-)i'u 'nostril' (puta 'hole')	ihu	'nose'
19.	hau 'wind' (hauku: 'dew' [-ku: 'showery weather'])	hau	sau	'au	hau	'dew'
20.	hika	—	si'a	'ika	hi'a	'firemaking'
21.	hiku 'fishtail'	hiku	si'u	'iku	hi'u	'tail'
22.	ake	hake	a'e	ake	a'e	'up'

	<i>Māori</i>	<i>Tongan</i>	<i>Samoaan</i>	<i>Rarotongan</i>	<i>Hawai'ian</i>	<i>gloss</i>
23.	uru	—	ulu	uru	ulu	‘enter’
24.	maŋa	maŋa	maŋa	maŋa	mana	‘branch’
25.	mau ‘fixed’	ma’u	mau	mau	mau	‘constant’
26.	mara ‘marinated’	—	mala	mara	mala	‘fermented food’
27.	noho	nofo	nofo	no’o	noho	‘sit’
28.	ŋaru	ŋalu	ŋalu	ŋaru	nalu	‘wave’
29.	ŋutu	ŋutu	ŋutu	ŋutu	nuku	‘mouth’
30.	waka	vaka	va’a	vaka	wa’a	‘canoe’
31.	wae	va’e	vae	vae	wae	‘leg’
32.	raho ‘testicle’	laho	laso	ra’o	laho	‘scrotum’
33.	rou ‘long forked stick’	lohu	lou	rou	lou	‘fruit-picking pole’
34.	rua	ua	lua	rua	lua	‘two’

(1) What are the sound correspondences found in these data? What sound do you reconstruct for the proto-language to represent each sound correspondence set?

Sound correspondences and reconstruction:

	<i>Māori</i>	<i>Tongan</i>	<i>Samoaan</i>	<i>Rarotongan</i>	<i>Hawai'ian</i>	<i>Proto-Polynesian</i>
1	p	p	p	p	p	*p
	In cognate sets 1.-3.					
2	t	t	t	t	k	*t
	In cognate sets 1., 2., 4.-7., 29.					
3	k	k	’	k	’	*k
	In cognate sets 8a.-10., 16.-17., 20.-22., 30.					
4	ϕ	f	f	’	h	*f-
	In cognate sets 15.-16.					
5	h	f	f	’	h	*-f-
	In cognate sets 4., 8a., 13., 14.					
6	h	h	s	’	h	*s
	In cognate sets 3., 8b., 18.-21., 32.					
7	m	m	m	m	m	*m
	In cognate sets 8b., 24.-26.					
8	n	n	n	n	n	*n
	In cognate set 27.					
9	ŋ	ŋ	ŋ	ŋ	n	*ŋ
	In cognate sets 6., 24., 28.-29., 34.					
10a	r	l	l	r	l	*l
	In cognate sets 8b., 9., 12., 23., 26., 28., 32.-33.					
(10b	r	Ø	l	r	l	*r
	In cognate set 34.)					
11	w	v	v	v	w	*w
	In cognate sets 30.-31.					

	<i>Māori</i>	<i>Tongan</i>	<i>Samoan</i>	<i>Rarotongan</i>	<i>Hawai'ian</i>	<i>Proto-Polynesian</i>
12	Ø	ʻ	Ø	Ø	Ø	*ʔ
	In cognate sets 5., 25., 31.					
13	Ø	h	Ø	Ø	Ø	*h
	In cognate sets 7., 11., 33.					
14	i	i	i	i	i	*i
	In cognate sets 2., 3., 7., etc.					
15	a	a	a	a	a	*a
	In cognate sets 1., 4., etc.					
16	o	o	o	o	o	*o
	In cognate sets 2., 8b., 9., etc.					
17	u	u	u	u	u	*u
	In cognate sets 1., 3., 12., etc.					

(2) What sound change or **sound changes** have taken place in each of these languages?:

In Māori, Samoan, Rarotongan, Hawai'ian

1. *ʔ and *h > Ø /V__ V (in Sound Correspondences [= SC] 12, 13)
(ʔ and *h* were retained only in Samoan)

In Māori

2. *f > h /V __ V (in SC 5)

In Hawai'ian (and Rarotongan)

3. *f > h (in SC 4, 5)

In Māori, Tongan, Hawai'ian (and Rarotongan)

4. *s > h (in SC 6)

In Tongan and Hawai'ian

5. *k > ʔ (in SC 5)

In Māori and Rarotongan

6. *l > r (in SC 10a)

Note that with only one cognate set for 10b, in which Tongan has Ø corresponding to *l* or *r* in the other languages, there is not much you can say. However if additional data were added, you might be able to formulate better hypotheses about how to explain this. For example, if we add Tongan *hūu* 'enter' to cognate set 23., the SC would have to cognate sets exemplifying it. This SC is generally held to represent Proto-Polynesian **r* and to be in contrast with that of SC 10a, representing **l*. The Proto-Polynesian word in 23. is reconstructed as **huru*.

In Tongan, Samoan, Rarotongan

7. *w > v (in SC 11)

For the correspondence set reconstructed with **w*, it might be suspected that it was originally **v* (under majority wins) which changed to *w* in two of the languages. However, in terms of directionality, *w* > *v* is more common than *v* to *w*. Actually, it may be that the *w* had [β] (a bilabial fricative) as an allophone in most of these languages.

In Rarotongan

8. $h > ʔ$ (in 4, 5, 6)

This assumes that in Rarotongan $*f$ and $*s$ went through an intermediate state in which $*f$ and $*s > h$, shared with other languages, and then later in its independent history Rarotongan h (from all sources) $> ʔ$.

In Hawai‘ian:

9. $*t > k$ (in 2)

10. $*ŋ > n$ (in 9)

In Māori

11. $*f > \phi / \# __$ (in 4)

NOTE: the reconstruction of $*f$ fits these data and may be correct, though some might prefer to reconstruct $*\phi$ (a bilabial rather than a labiodental fricative). Reasons might be that (1) some of the things written as f may in fact actually be bilabial; (2) in directionality $\phi > f$ may be more expected than $f > \phi$; and (3) f in a number of cases is due to later European influence, where European languages with labiodental [f] influenced other languages to shift bilabial [ϕ] to [f].

(3) What is the best reconstruction (proto-form) for 6, 16, 20 and 32?

Reconstructions:

6. $*taŋata$ ‘man, person’

16. $*feke$ ‘octopus’

20. $*sika$ ‘firemaking’

32. $*laso$ ‘scrotum, testicle’

Show how your postulated sound changes apply to each of these to produce the modern forms.

The following derivations show the application of these sound changes in sequence.

When the change does not apply to a particular language, it is left blank; when the sound change takes place in the language but does not apply to the particular form in question, this is signaled by “--”.

6. $*taŋata$

Changes	Māori	Tongan	Samoan	Rarotongan	Hawai‘ian
1	--		--	--	--
2	--				
3				--	--
4	--	--		--	--
5			--		--
6		--	--		--
7		--	--	--	
8				--	
9					kaŋaka
10					kanaka
11	--				
Result:	taŋata	taŋata	taŋata	taŋata	kanaka

16. **feke* ‘octopus’

Changes	Māori	Tongan	Samoa	Rarotongan	Hawai‘ian
1	--		--	--	--
2	--				
3				heke	heke
4	--	--		--	--
5			fe’e		he’e
6		--	--		--
7		--	--	--	
8				’eke	
9					--
10					--
11	ϕeke				
Result:	ϕeke	feke	fe’e	’eke	he’e

20. **sika* ‘firemaking’

Changes	Māori	Tongan	Samoa	Rarotongan	Hawai‘ian
1	--		--	--	--
2	--				
3	hika			--	--
4	--			hika	hika
5			si’a		hi’a
6			--		--
7			--	--	
8				’ika	
9					--
10					--
11	--				
Result:	hika	--	si’a	’ika	hi’a

32. **laso* ‘scrotum, testicle’

Changes	Māori	Tongan	Samoa	Rarotongan	Hawai‘ian
1	--		--	--	--
2	--				
3				--	--
4	laho	laho		laho	laho
5			--		--
6	raho			raho	
7		--	--	--	
8				ra’o	
9					--
10					--
11	--				
Result:	raho	laho	laso	ra’o	laho

Relative Chronology: The exercise does not call for you to work out and state the relative chronology. However, it may be important to point out that change 1. (*ʔ and *h > Ø /V__ V) had to take place prior to 2. (*f > h /V__ V in Māori) and before 3. (*f > h) in Hawai‘ian and Rarotongan, and before 8. (h > ʔ) in Rarotongan, for otherwise the *h* and ʔ produced by these changes would have gone on in change 1. to be lost in these languages. However, since that did not happen, the loss of *h* and ʔ by 1. must have taken place before these later cases of *h* and ʔ were created by subsequent sound changes in these languages.

Exercise 5.4 Orokolo-Toaripi (Eleman languages)

Orokolo and Toaripi are two closely related Eleman languages (usually assigned to the Trans-New Guinea grouping, though this is as yet uncertain). Compare the data presented here and reconstruct Proto-Orokolo-Toaripi. (1) List the sound correspondences you find. (2) Give the proto-sounds you reconstruct to represent these. (3) Present the sound changes which you postulate that each language has undergone. (4) If there is any relative chronology involved among these changes, state what it is and the evidence for it. (5) Give your reconstruction of 12, 25 and 35 together with how the individual sound changes apply to these to produce the modern forms.

NOTE: for this problem, consider Orokolo *r* and *l* the same sound. Do not struggle over the difference between *ae* and *ai* in no. 38.

	<i>Toaripi</i>	<i>Orokolo</i>	<i>gloss</i>
1.	uti	uki	‘bone’
2.	ete	eke	‘vagina’
3.	tete	keke	‘fish scales’
4.	tao	kao	‘tooth’
5.	toare	koare	‘senior’
6.	tola	kora	‘tree’
7.	tolotolo	korokoro	‘leaves’
8.	tapare	kapare	‘grease’
9.	torea	korea	‘theft’
10.	turuturu	kurukuru	‘thundering’
11.	aite	aire	‘after’
12.	kite	kile	‘mat’
13.	lauta	laura	‘flame tree’
14.	ita	ila	‘pig’
15.	puta	pura	‘cloth’
16.	uta	ura	‘hole’
17.	fi	hi	‘cry’
18.	firu	hiru	‘portion’
19.	fe	he	‘penis’
20.	fere	here	‘betel nut’
21.	fapai	hapa	‘open’