

Consider the data below from four Polynesian languages. Figure out the sound correspondences for the consonants, and reconstruct the Proto-Polynesian forms. Do the sound changes need to be ordered?

Treat Maori *wh* as a voiceless bilabial fricative (IPA ϕ)

	<u>Hawaiian</u>	<u>Maori</u>	<u>Tongan</u>	<u>Samoan</u>	
1.	ʔele	kere	kele	ʔele	‘black’
2.	ʔula	kura	kula	ʔula	‘red’
3.	hale	whare	fale	fale	‘house’
4.	heʔe	wheke	feke	feʔe	‘octopus’
5.	kalo	taro	talo	talo	‘taro’
6.	kahu	tahu	tafu	tafu	‘cook’
7.	kai	tai	tahi	tai	‘sea’
8.	haʔa	haka	haka	saʔa	‘dance’
9.	liʔi	riki	iki	liʔi	‘small’
10.	luʔu	ruku	uku		‘dive’
11.	lama	rama	ama	lama	‘torch’
12.	puna	puŋa	puŋa	puŋa	‘coral’
13.	piko	pito	pito	pito	‘navel’
14.	nuku	ŋutu	ŋutu	ŋutu	‘beak’
15.	nalu	ŋaru	ŋalu	ŋalu	‘wave’
16.	niho	niho	nifo	nifo	‘tooth’
17.	moko	moto	moto	moto	‘strike with fist’
18.	moe	moe	mohe	moe	‘sleep’
19.		aŋa	haŋa	aŋa	‘to face’
20.	iho	iho	hifo	ifo	‘downwards’
21.	aʔe	ake	hake	aʔe	‘upwards’
23.	ihi	ihi	hihi	isi	‘to strip, peel’
24.	aka	ata	ata	ata	‘dawn’
25.	awa	awa	ava	ava	‘channel’
26.	pee	pee	peʔe	pee	‘overripe’
27.	ao	ao	ʔaho	ao	‘day’
28.	au	au	ʔahu	au	‘gall’
29.	aloha	aroha	ʔaloʔofa	alofa	‘love, pity’
30.	wai	wai	vai	vai	‘water’
31.	waʔa	waka	vaka	vaʔa	‘canoe’
32.	wae	wae	vaʔe	vae	‘leg’
33.	hau	hau	hau	sau	‘dew’

34.	hiʔu	hiku	hiku	siʔu	‘tail’
35.	iwa	iwa	hiva	iva	‘nine’
36.	ihu	ihu	ihu	isu	‘nose’
37.	noho	noho	nofo	nofo	‘sit, dwell’
38.	leo	reo	leʔo	leo	‘voice’
39.	lele	rere	lele	lele	‘fly, run’
40.	lemo	remo	lemo	lemo	‘drown’
41.	lehu	rehu	efu	lefu	‘ashes’
42.	mimi	mimi	mimi	mimi	‘urinate’
43.	mana	maŋa	maŋa	maŋa	‘branch’
44.	hala	whara	faa	fala	‘pandanus’
45.	hana	whaŋa	faja	faja	‘bay’
46.	ʔapo	kapo		ʔapo	‘grasp’