

# LANGUAGE & LINGUISTICS IN MELANESIA

Journal of the Linguistic Society of Papua New Guinea ISSN: 0023-1959



**LLM SPECIAL ISSUE 2021**

## **Eight Languages of the Admiralty Islands, Papua New Guinea**

**Sketch 7: PAK**

**Robert Blust**  
University of Hawai'i

## Sketch 7: PAK

**7.1. INTRODUCTION.** Pak is spoken with small dialect differences on the islands of Pak and Tong, located due east of Manus and slightly northwest of Rambutyo island. The dialect described here is that of Mulireu village on the island of Pak. Data was collected over a period of about 8.25 hours between March 22 and March 25, 1971 from Apollos Sangkei and Set Kerenkul, both then aged 14, and from Jack Jonah, aged 15, all of whom were students at Manus Government Secondary School in Lorengau. The only other languages that any of these three speakers professed to know were English and Tok Pisin. Although recent estimates place the population of these two islands at around 3,000, the number of speakers of this language is unknown, and the growing influence of Tok Pisin is undoubtedly taking a toll on the fluency of younger members of the community.

By comparison with the other seven descriptions given here, my data for Pak is grammatically impoverished, as several topics that were covered for many other languages were left out of the description due to lack of time in the field. My main reason for including the language here is because there have been disagreements regarding its classification. Blust (1978:34) placed it with the Southeast Admiralty group, while Ross (1988:316.17) has it as part of the ‘Manus Network’, while commenting as follows (1988:424):

Pak shares some innovations with the East Manus communalects, and especially with the Los Negros communalects Mokroeng (= Mokerang) and Loniu, and other innovations with the South-East Admiralties Network, especially with Lenkau. I have tentatively interpreted this as indicating that Pak originally belonged to the Manus Network but has in more recent times been in closer contact with Lenkau. Obviously more research is needed here.

In an effort to resolve this matter I address the classification of Pak in the concluding part of this description, much as I address the classification of Bipi in my description of Loniu.

**7.2. PHONOLOGY.** The consonant phonemes of Pak are shown in Table 7.1:

**Table 7.1:** The consonant phonemes of Pak

p	pw	t	(c)	(kw)	k	(?)
		d				
m	mw	n			ŋ	
		s				h
		l				
		r				
	w			y		

The voiceless obstruents generally have their expected values except that /t/ is dental, and /d/ alveolar. Unlike many languages of the eastern Admiralties, Pak lacks a palatal series of

consonants. The only exception noted to this statement is that /c/ ([tʃ]) was recorded in the single word *acih* ‘to sneeze’, where it clearly is onomatopoeic. Apart from its occurrence word-finally as an automatic marker of word boundary as in many other languages of the Admiralties, the glottal stop is also extremely rare, having been noted only in /heʔir/ ‘spoiled, rotten’, where its phonemic status is doubtful. Finally, although /pw/ and /mw/ appear to be uncontroversially distinct from the prevocalic sequence /pu/ and /mu/, the phonemic status of /kw/ is more questionable, given its possible morphological derivation in two of the three words in which it was recorded, namely *kwihir* ‘to ask a question’ (= *ku ihir?*), and *kwilew* ‘to run’ (= *ku ilew?*), and its known historical derivation from a CV- sequence in at least one word (POC \*kuRita > *kwir* ‘octopus’).

Somewhat unusually, Pak has a single voiced stop /d/, which was sometimes recorded as partially devoiced. Not only does this language lack /b/ and /g/, but it also lacks the prenasalized bilabial and alveolar trills /br/ and /dr/ that are common to many of the languages of Manus.

The nasals are unexceptional; as in other languages of the Admiralties /mw/ is produced with lip rounding rather than lip spreading, and the velar nasal is rather rare. The first time it was transcribed, *wonoh* ‘six’ was written with a geminate nasal ([won:óh]), but subsequent checking forced me to conclude that consonant gemination is not contrastive. The other consonants all have their expected values, the only noteworthy feature being that /r/ is strongly trilled.

The most serious phonemic issues for Pak concern the vowels. The five vowels /i/, /u/, /e/, /o/, and /a/ are uncontroversial, where /i/ = [i], /u/ = [u], /e/ = [e] before a palatal glide, and sometimes /ɪ/, but [ɛ] elsewhere, /o/ = [o] or [ɔ], apparently in free variation, and /a/ = [a]. What is less certain is whether there are additional vowel distinctions. The most insistent questions concern a lax high front vowel that I write [ɪ], roughly equivalent to the vowel of English ‘pin’, or ‘sit’ in a number of forms. While still in the field I assumed that this was a free variant of /e/, and that [ɪ] and [ɛ] were therefore interchangeable. However, certain transcriptions suggest that /e/ and /ɪ/ may be separate phonemes, as is implied by [khɪn] ‘her vagina’ vs. [kɛn] ‘his/her foot’, or [ɛrik], [ɛrim], [ɛrɪn], the singular possessive paradigm for ‘heart’, vs. [kɛnek], [kɛnem], [kɛnen], the singular possessive paradigm for ‘flesh, muscle’. Other transcriptions appear to also rule out the possibility that [ɪ] and [i] are free variants of /i/, as seen in [titih] ‘to sweep’ vs. [titiʔ] ‘tattoo’, or [kɛsɪk] ‘my rib’ vs. [pɛrhik] ‘my bone’. Given these observations, I initially recognized /ɪ/ as a separate phoneme in Pak.

Since this would produce an asymmetric vowel system with three front vowels, /i/, /ɪ/ and /e/, but only two back vowels, /u/ and /o/, the question naturally arose whether there might also be a lax high back vowel phoneme /ɔ/. Because there is some support for this idea in transcriptions such as [tɔh] ‘thin-bodied barracuda sp.’, and [mwiskɔʔ] ‘to hiccup’, next to [duh] ‘sugarcane’, and [puʔ] ‘pig’, I provisionally extended the vowel system to three front vowels, three back vowels and the low vowel /a/.

The problem with basing decisions about contrast on limited data such as this is that many lexical items were recorded only once, so that if free variation exists, it would not be observable. What caused me to change my mind was the few cases where the same morpheme was recorded more than once, and the vowel was written variously as [ɪ] or [ɛ]. For example, the negative

marker was recorded in some contexts as [pwm], as with [dolɒn pwm] ‘deaf’ (= ‘no ears’), or [mar pwm] ‘living, alive’ (= ‘not dead’), but in others as [pwɛn], as with [marán pwɛn] ‘dull, blunt’ (= ‘not sharp’). Likewise, I recorded [dɛh] ‘far’, but [dɪdɪh] ‘very far’, where the second form seems transparently to be a reduplication of the first, I wrote the 2SG subject pronoun as [wɛ] in a sentence with the verb ‘to see’, but as [wɪ] in a sentence with the verb ‘to eat’, the word for the shore tree *Calophyllum inophyllum* was recorded as [pirɪw] ~ [prɪw] ~ [pirɛw] ~ [prɛw], and [luweɟ] ‘to drop’, [luwɪɟ] ‘to lose, as possessions’ were initially thought to be different words, when subsequent reflection suggests that they may well be the same. Finally, I recorded [piɹ] ‘stingray’, yet was told that it rhymes with ‘tree’, which was recorded as [key]. Moreover, where etymological data is available both [ɪ] and [ɛ] reflect \*a when a high vowel followed in the next syllable, strongly suggesting that the two phonetic transcriptions represent the same underlying vowel /e/, despite the fact that these sounds were recorded differently in successive syllables in the same morpheme, as in [dɛlwɪk] ‘my abdomen’, and [ɛrɪk] ‘my heart’.<sup>1</sup> Once [ɪ] was assigned to /e/ I concluded (on the basis of less evidence) that [u] and [ʊ] probably are free variants of /u/. The one bit of independent evidence for this interpretation in my fieldnotes appears in [kuhaʔ pɛr lulɔr] ‘megapode’ (= ‘chicken of the forest’), where the last element appears to correspond to what was elsewhere recorded as [lolur] ‘forest’, suggesting that [ʊ] is a relatively low frequency free variant of /u/.

However, this still left one unresolved problem with the vowels of Pak, namely that a low front vowel [æ] was also recorded, but in only two forms: [æ] ‘coordinating conjunction; and’, and [kothæn] ‘a group of twenty’. In this case it is much more difficult to assign the sound that was transcribed to another vowel. If it is a free variant of any other vowel the prime suspect would be /a/, and this is supported by [æ] ~ [a] variation in the two words that were recorded with [æ]. However, since [a], which has the highest text frequency of all vowels, was recorded without a variant [æ] in any other form, I tentatively accept /æ/ as a phoneme, but one with a very low functional load and obscure origin. The vowel phonemes of Pak that I have accepted based on this preliminary analysis are shown in Table 7.2:

**Table 7.2:** The vowel phonemes of Pak

i	u
e	o
æ	a

For reasons that remain unclear, although the distinction between /u/ and /o/ is unambiguous in most cases, a small number of words were recorded sometimes with /u/ and sometimes with /o/, as /ho/ ~ /hu/ ‘leaf’, or /pon/ ~ /pun/ ‘the green turtle: *Chelonia mydas*’. Other words were recorded in only one form, but show a reversal of etymological \*o or \*u, as with \*topu > *duh* ‘sugarcane’, with \*o > /u/, or POC \*pulan > Pak *pol* ‘moon’, with \*u > /o/. This will be treated further in section 7.5.

<sup>1</sup> The allophony of /e/ appears to be especially variable before /y/ and /ɹ/, where [e], [ɛ], and [ɪ] have all been recorded.

A third issue with regard to the Pak vowels is whether there is a distinction between a word-final vowel-glide sequence, as in /haw/ ‘canoe paddle’, and a word-final sequence of unlike vowels of which the second is high, as in /tou/ ‘to catch something thrown, as a ball’. In this case a phonemic distinction is justified by the phonetics, since /haw/ is [haw], but /tou/ is [təuʔ], with the glottal ending that marks all word-final vowels, but not the corresponding glides.

With regard to phonotactics, perhaps the most striking feature of Pak phonology is its numerous consonant clusters, including some cases of complex onsets. In a number of cases these are found in words that were initially given with a cluster and then offered in a slow speech form with an intervening vowel. Table 7.3 lists a number of these to give a sense of how common they are in my fieldnotes; clear cases of complex onsets are given first, followed by examples of medial clusters, which may or may not be tautosyllabic:

**Table 7.3:** Normal and slow speech variants with derived consonant clusters

Normal speech	Careful speech	
dhe	dihe	half
khi	kihi	firewood
khu-	kuhu-	buttocks
klol	kulol	to plant, bury
kray	kuray	to shoot; to hit
krun	kurun	to roast
pray	puray	canarium nut
prew	pirew	<i>Calophyllum inophyllum</i>
daple-	dapule-	forehead
dunho-	dunuho-	shoulder
kepse-	kepise-	chin/jaw
ketupre-	ketupure-	armpit
tupron	tupuron	node; joint

As can be seen, some of these initial clusters may give the misleading impression that Pak has phonemically aspirated stops, as in comparing *khu-* ‘buttocks’ with e.g. *ke-* ‘leg, foot’. However, it is clear that these are better analyzed as consonant clusters, since where they were carefully checked, such cases had slow speech variants with a vowel between the stop and apparent aspiration, as with [khuk] (rapid speech), but [kuhúk] (slow speech) ‘my buttocks’.<sup>2</sup> Further evidence that such sequences are consonant clusters is seen in the observation that /h/ may also immediately follow a voiced stop, in which case the aspirate optionally devoices it, as with [dho] ‘1DL subject, we two, the two of us’, also heard occasionally as [təhóʔ]. However, some words with initial consonant clusters, including those in which the second consonant is /h/ were recorded only in their fast speech (= normal speech) form, as with *khoh* ‘green grasshopper’, or *pholyam* ‘generic for scad and trevally’, and longer exposure to the language very likely would reveal underlying vowels between these consonants. This is even more certain in cases like

<sup>2</sup> An anonymous reviewer suggests that these vowels are not phonemic but epenthetic. This proposal has merit, as [i] generally occurs if the next vowel is front, and [u] if it is back (counting /a/ as back). However, in view of a number of exceptions, I prefer to maintain the present analysis.

*purnum* ‘roof of a house’, which probably contains *um* ‘house’, but would violate a well-supported constraint against morpheme-final consonant clusters if the underlying form did not have a vowel between the /r/ and /n/. Alternatively, as suggested here, this word may consist of three morphemes: *pur* (= ‘cover?’), *-n* ‘genitive’ and *um* ‘house’.

Somewhat different is the behavior of the sequence CuhV in rapid speech, where /u/ either metathesizes with /h/, and then semivocalizes in prevocalic position, as in /kuha/ = [kuhá] (slow speech), but [khwa] (fast speech) ‘chicken’, or semivocalizes in place without metathesis to produce [kwha] (the two variants are very difficult to distinguish). This process is especially apparent where it produces alternations, as with [puhá] ‘mouth’, but [phok] ‘my mouth’, [phum] ‘your mouth’, [phwan], or [pwhan] ‘his/her/its mouth’ (and even *pwha-n hen* ‘mouth of a river, estuary’, and *pwha-n um* ‘door of a house’).

Phonological alternations in my data are fairly limited, but include the following: 1) d- ~ -r-, as in [daj] ‘to shoot’, but [kuraj] ‘you are shooting’, [dɪŋ] ‘to cry’, but [kurɪŋ] ‘you are crying’, or /kro/ ‘to sit’ + /dan/ ‘down’, but [kroran] ‘to sit down’, 2) sporadic nasal place assimilation, as in *para-* ‘stalk, stem’: *para-n duh* ‘sugarcane stalk’, *para-m pele* ‘mast for the sail’, but *para-n peme* ‘areca palm’, and 3) glide formation from a prevocalic front vowel in [képeʔ] ‘salt’, but [kepjúŋ] ‘salty’ (/kepe-un/). With regard to the first of these it is noteworthy that no alternation occurs following a nasal consonant, as with /en dan/ ([endan], not [enran]) ‘to lie down’.

As the foregoing phonetic transcriptions show, stress was recorded as final in some forms and penultimate in others, However, there was no indication that it is phonemic. In most words it was recorded as final. This was true of all the numerals that contain at least two syllables, and of several directly possessed body-part terms, such as [purúk] ‘my head’. However, after the first 15.20 forms were recorded, I stopped writing stresses consistently, and where I later recorded it sporadically it was sometimes penultimate, as with [múwon] ‘male; man’, and [píhɪn] ‘female; woman’. Stress was also recorded on a single polysyllabic form, *dienpeliew* [díjɛnpɛlièw] ‘thigh’, where primary stress was initial, with a secondary stress on the final syllable.

**7.3. GRAMMAR.** As with other languages in this series of sketches, only limited grammatical information was collected. The categories covered are 7.3.1. the counting system, 7.3.2 personal pronouns, 7.3.3. possessive pronouns, 7.3.4. demonstratives, 7. 3.5. locatives and directionals, 7.3.6. questions, 7.3.7. causatives, 7. 3.8. the attributive suffix, 7.3.9. reciprocals and reflexives, 7.3.10. imperatives, 7.3.11. tense/aspect, and 7.3.12. miscellaneous (a catch-all for other bits and pieces that do not fit into the earlier categories).

**7.3.1. The counting system.** Like most other Admiralty systems, including all those of the eastern Admiralties, the Pak system of numeration is decimal, and like a majority of the languages, the words for ‘7- 9’ are subtractives. However, as will be explained below, the Pak system has some features that were not recorded elsewhere. The basic numerals used in serial counting are shown in Table 7.4:

**Table 7.4:** Pak numerals used in serial counting

dih	one
huoh	two
duluh	three
dalor	four
nuron	five
wonoh	six
darluh	seven
darhuoh	eight
dardih	nine
soŋoh	ten
soŋoh æ dih	eleven
soŋoh æ huoh	twelve
kothæn dih	twenty
kothæn dih æ soŋoh	thirty
kothæn huoh	forty
kothæn huoh æ soŋoh	fifty
kothæn duluh	sixty
kothæn duluh æ soŋoh	seventy
kothæn dalor	eighty
kothæn dalor æ soŋoh	ninety
sajar	one hundred
(ma)huŋor	two hundred
(ma)duŋor	three hundred
(ma)daŋar	four hundred
(ma)hoŋor	six hundred
lalsan dih	one thousand
lalsan huoh	two thousand

Numerals between 10–20 are formed by addition ( $10 + 1 = '11'$ ,  $10 + 2 = '12'$ , etc.). The most surprising feature of the Pak numeral system is the presence of a separate morpheme meaning 'group of twenty', making this an unusual blended system that is decimal from 1-19, and vigesimal thereafter. The other areally unusual feature of Pak numeration is the optional use of a numeral prefix *ma-* for multiples of one hundred, but not for lower numerals.

Like many other languages of the eastern Admiralties, Pak shows allomorphy in the stem for 'hundred', with *-ŋar* occurring where the preceding syllable contains the low vowel /a/, and *-ŋor* occurring where the preceding syllable contains the high back rounded vowel /u/. Finally, although no attempt was made to search for numeral classifiers, the forms *du poŋ* 'one bunch', *maha poŋ* 'two bunches', and *du ŋoh* 'one fathom', *hu ŋoh* 'two fathoms' were elicited by chance together with the nouns they quantify, and these suggest that Pak has other sets of numerals used in counting specific types of referents.

**7.3.2. Personal pronouns.** Although a singular-dual-plural number distinction is common in the personal pronouns of most languages of the Admiralties, Pak also has a trial number. In the

limited material recorded, it appears that object pronouns differ from the equivalent subject forms by the addition of a palatal or labiovelar glide in at least the 1SG, 1DL, 1TL, and 2SG forms. Because the pronominal paradigms that were collected were incomplete (usually missing subject pronouns for non-singular numbers), the full pattern is unclear. The fragmentary set of forms that were collected is given in Table 7.5 (subject forms precede the slash and object forms follow):

**Table 7.5:** Pak personal pronouns

	1	2	3
SG	ye/yew	we/wey	iy/iy
DL	dho/dhow	?/haw	?/how
TL	doru/doru	?/oru	?/horu
PL	dah/dah	?/oh	?/hawah

Surprisingly, no evidence was found for an inclusive/exclusive distinction in first-person pronouns. However, almost the entire pronominal paradigm was collected in connection with a single verb, /le/ 'to see', so absence of evidence should not be taken as evidence of absence. Examples of usage are given in the following sample sentences:

- 1) ye        le        iy  
   1SG        see        3SG        'I see him/her'
- 2) iy        le        yew  
   3SG        see        1SG        'S/he sees me'
- 3) ye        le        haw  
   1SG        see        2DL        'I see the two of you'
- 4) ye        le        oru  
   1SG        see        2TL        'I see the three of you'
- 5) ye        le        oh  
   1SG        see        2PL        'I see all of you'
- 6) ye        le        how  
   1SG        see        3DL        'I see the two of them'
- 7) ye        le        horu  
   1SG        see        3TL        'I see the three of them'
- 8) ye        le        hawah  
   1SG        see        3PL        'I see all of them'



9)	dho 1DL	le	iy see	3SG	‘The two of us see him/her’
10)	iy 3SG	le see	dhow 1DL		‘S/he sees the two of us’
11)	doru 1TL	le see	iy 3SG		‘The three of us see him/her’
12)	iy 3SG	le see	doru 1TL		‘S/he sees the three of us’
13)	dah 1PL	le see	iy 3SG		‘All of us see him/her’
14)	iy 3SG	le see	dah 1PL		‘S/he sees all of us’
15)	we 2SG	le see	iy 3SG		‘You see him/her’
16)	iy 3SG	le see	wey 2SG		‘S/he sees you’

In addition to the foregoing twelve personal pronouns (of which only six were recorded in the subject form), what appears to be another second person singular pronoun was incidentally recorded when eliciting certain verbs. As noted in previous sketches, it proved difficult to elicit many verbs in Admiralty languages, as speakers usually gave them with a subject pronoun attached. Thus, ‘to hunt’ was elicited as /ku le kah/ ‘you go find’, and a similar 2SG pronoun /ku/ appears attached directly to the verb in examples such as /day/ ‘to shoot’, but [kuráj] (slow speech), [kraj] (fast speech) ‘you shoot’, or /riseh/ ‘to stand up’, but [ku riséh] (slow speech), [kriseh] (fast speech) ‘you stand up’.

Finally, no information was collected on how a conjoined subject that contains both a noun and a pronoun is expressed.

**7.3.3. Possessive pronouns.** As in most other languages of the Admiralties, my data on Pak possessive pronouns is confined to singular forms, since these were collected for nearly all body-part and kin terms. This limited data shows that there two classes of possessed nouns: 1. those that take direct suffixation with a possessive pronoun, and 2. those that take an independent possessive pronoun of the same shape as the corresponding object pronoun, and separated from it by /er/, which probably is a genitive marker. Table 7.6 illustrates both sets of possessive markers, together with the nouns that take them. Bases that may occur unaffixed are given as free forms, while bases that are attested in my data only in suffixed form are followed by a hyphen:

**Table 7.6:** The two types of possessive construction in Pak

## CLASS 1: Possession by suffixation

Base	1SG	2SG	3SG	gloss
dapule-	-k	-m	-n	forehead
dehi-	-k	-m	-n	same sex sibling
delwe-	-k	-m	-n	belly, abdomen
domo-	-k	-m	-n	father
ere-	-k	-m	-n	heart
hirno-	-k	-m	-n	mother
ke-	-k	-m	-n	foot/leg
khe-	-k	-m	-n	vagina
kuru-	-k	-m	-n	back (of body)
lehe-	-k	-m	-n	tooth
mara-	-k (a>o)	-m (a>o)	-n	eye
mokopu-	-k	-m	-n	grandchild
mune-	-k	-m	-n	skin
nana-	-k (a>o)	-m (a>o)	-n	pus
nenno-	-k	-m	-n	nose
noru-	-k	-m	-n	child
ŋaha-	-k (a>o)	-m (a>o)	-n	name
pala-	-k (a>o)	-m (a>o)	-n	penis
pemine-	-k	-m	-n	hand
poru-	-k	-m	-n	head
pulu-	-k	-m	-n	spouse
puo-	-k	-m	-n	testicles
sus	-uk	-um	-un	female breast

## CLASS 2: Possession with independent postposed possessive markers

dienpeliew	er yew	er wey	er iy	thigh
hay	er yew	er wey	er iy	blood
ni	er yew	er wey	er iy	fish
pen	er yew	er wey	er iy	pen
pwapwaw	er yew	er wey	er iy	grandfather
wokan	er yew	er wey	er iy	vein, tendon

First and second person singular possessive pronouns followed by (a>o) indicates vowel variation under suffixation, hence [morok] ‘my eye’, [morom] ‘your eye’, [maran] ‘his/her eye’, etc. The phonemic shape of bases is determined from the 3SG possessed form. By chance, all bases that show rounding of /a/ under suffixation have a low vowel in both syllables, and the rounding of the penultimate /a/ appears to be a product of leftward spreading. It is therefore assumed that a base of the shape /CaCV/, where /V/ is a vowel other than /a/, would not show rounding of the penultimate /a/.

Given the widespread distinction between directly possessed nouns marking inalienable possession, and indirectly possessed nouns marking alienable possession in Oceanic languages, it is tempting to see this as another manifestation of the same system. This works with ‘fish’, the English loanword ‘pen’, and no doubt many other nouns for which possessive forms were not collected, but it strikingly breaks down with some body parts and substances, and some kin terms. On what semantic or cultural basis are ‘foot/leg’, ‘pus’, ‘grandchild’, or ‘heart’ (Class 1) distinguished from ‘thigh’, ‘blood’, ‘grandfather’ or ‘vein, tendon’ (Class 2)? Equally puzzling, why may some body parts or substances such as *sus* ‘female breast’, or *hay* ‘blood’ occur as unpossessed free forms in contradistinction to most body parts or substances, even though they belong to different possessive classes?

A few examples of nominal possession were also collected: *mune-n key* ‘bark of a tree’, *lehe-n pu* ‘tusk of a pig’, and *haye pu* ‘blood of a pig’. The first two of these, which are in Class 1, contain either the 3SG possessive suffix, or a fossilized genitive marker *-n*, but the word for ‘blood’, which is in Class 2, shows either an allomorph of the base morpheme, or a genitive marker that was not recorded elsewhere.

**7.3.4. Demonstratives.** Only limited material was recorded for the Pak demonstrative pronouns and the corresponding locative adverbs ‘here’ and ‘there’. The relevant examples are given in sentences 17) – 20):

- |     |       |        |        |       |                   |
|-----|-------|--------|--------|-------|-------------------|
| 17) | a la  | pen    | er yew |       | ‘This is my pen’  |
|     | PROX  | pen    | my     |       |                   |
| 18) | en ne | pen    | er yew |       | ‘That is my pen’  |
|     | DIST  | pen    | my     |       |                   |
| 19) | pen   | er yew |        | a la  | ‘My pen is here’  |
|     | pen   | my     |        | PROX  |                   |
| 20) | pen   | er yew |        | en ne | ‘My pen is there’ |
|     | pen   | my     |        | DIST  |                   |

Questioning about the distal demonstrative pronoun or adverb did not turn up any information about possible second person vs. third person, or in view vs. out of sight distinctions. In any case, both proximal and distal markers appeared to consist of two independent morphemes, and the meanings of the parts was not determined in the field.

**7.3.5. Locatives and directionals.** Unlike the case for most other languages for which I collected field materials, I recorded almost nothing about locatives and directionals in Pak. The one relevant sentence is the following:

- |     |    |      |     |               |                          |
|-----|----|------|-----|---------------|--------------------------|
| 21) | i  | ni   | er  | lolon tep     | ‘Fish are in the basket’ |
|     | PL | fish | COP | inside basket |                          |

The principal difference between the structure of this sentence and ones of similar meaning in other Admiralty languages is that a singular/plural number distinction is required, and in this case marks the subject as plural. Although it was not recorded, the sentence ‘A/the fish is in the basket’ presumably would be *moh ni er lolon tep*.

**7.3.6. Questions.** Fortunately, more material was collected on questions in Pak than was done for locatives and directionals. The following question words were recorded:

how? : pakha	where? : riha
how much/how many? : mathe	who? : se
what? : ta	why? : perta
when : keheh	

Examples in context, along with answers to them, appear below:

- 22) se en ni er yew  
who eat fish my ‘Who ate my fish?’
- 23) John en ni er wey  
John eat fish your ‘John ate your fish’
- 24) we en ta  
2SG eat what ‘What did you eat?’
- 25) perta John en ni er yew  
why John eat fish my ‘Why did John eat my fish?’
- 26) iy en leta ton-da iy  
3SG eat because hungry-past 3SG  
‘He ate it because he was hungry’
- 27) keheh we su ni  
when 2SG catch fish ‘When did you catch the fish?’
- 28) riha we su ni  
where 2SG catch fish ‘Where did you catch the fish?’
- 29) we su ni pakha  
2SG catch fish how ‘How did you catch the fish?’
- 30) we su ni mathe  
2SG catch fish how many ‘How many fish did you catch?’

I was told that the interrogatives for ‘when?’ and ‘where?’ may occur sentence-finally, and that those for ‘how?’ and ‘how many?’ may occur sentence-initially, although the preferred order with ‘how?’ is sentence-final.

**7.3.7. Causatives.** No useful information was collected regarding causative constructions in Pak. The one unambiguous causative form that was recorded is *hay* ‘to feed’, next to *en* ‘to eat’. However, this reflects a form that was already lexicalized in Proto-Oceanic (cp. POC \*kani ‘to eat’, \*paŋan ‘to feed’).

**7.3.8. The attributive suffix.** As noted already for other languages of the Admiralties, a disproportionately large number of words that translate as English adjectives end with -Vn, and this is also true of Pak. Too little data was collected for this language to determine whether there is synchronic evidence in the form of noun : adjective pairs for a still active attributive suffix, but this emerges fairly clearly on listing words with an attributive sense, as seen in Table 7.7:

**Table 7.7:** Evidence for Pak -*n* ‘marker of attribution’: Evidence for Pak -*n* ‘marker of attribution’

akhan ‘black; dirty’	laman ‘ripe’
anaran ‘smooth, level’	maran ‘sharp’
darhan ‘hot’	mekhen ‘thin (materials)’
duenan ‘correct, true’	mesen ‘cooked’
elwen ‘long, tall’	muhun ‘short’
hamaman ‘red’	mutan ‘old (things)’
hien ‘good’	mwanen ‘straight’
hirŋen ‘painful’	naman ‘sweet’
hohoan ‘blue’	neldun ‘cold’
holalan ‘wide, broad’	nemulen ‘sour’
homhun ‘wet’	pahun ‘new’
hurduŋ ‘thick’	perperhen ‘thin (animates)’
kapnan ‘big; elder’	punhen ‘soft’
kepyun ‘salty’	pwiphen ‘itchy’
kunun ‘heavy’	talwan ‘much, many’

As shown for other languages in this collection of sketches, not all attributive words in Pak have this property. Exceptions in my fieldnotes include: 1. *deh* ‘far, distant’, 2. *dirpey* ‘slow’, 3. *dohoh* ‘fallow, of land’, 4. *er* ‘bad’, 5. *heʔir* ‘spoiled, rotten’, 6. *hemdeh* ‘quick’, 7. *kalmara* ‘right side’, 8. *kapih* ~ *kapweh* ‘small, narrow’, 9. *kohow* ‘white’, 10. *loyay* ‘yellow’, 11. *nonow* ‘spotted, mottled’, 12. *pamar* ‘raw, uncooked’, 13. *pipir* ‘near’, 14. *poroh* ‘hard (materials)’, 15. *pwah* ‘shallow (water)’, 16. *pwaw* ‘old (animates)’, 17. *pwikow* ‘bald’, 18. *sisih* ‘false’, 19. *tama* ‘swollen’, 20. *tawtaw* ‘full (container)’, 21. *tim* ‘full (stomach)’, 22. *tuy* ‘hungry’. Altogether, then, 30 of 52 attributive words in my data, or about 58%, end with -*n*, as compared with 15 of 126 verbs, or less than 12%, a difference which strongly supports the inference that many attributive words contain a suffix that may be largely fossilized, although its status as a synchronically active morpheme, or a relic, remains to be determined.

The only elicited forms that may provide evidence that suffixation with -Vn remains an active process in Pak is seen with [kepeʔ] ‘salt’, and [kepjun] ‘salty’, which were initially treated as separate lexical entries, but now appear to be morphologically related as /kepe/ and /kepe-un/.

**7.3.9. Reciprocals and reflexives.** No information was collected regarding reciprocal or reflexive constructions in Pak.

**7.3.10. Imperatives.** Although imperatives were not elicited directly in Pak, a number of verbs were transcribed with what turned out to be a 2SG pronoun *ku-*. Since this form differs from *we-* ‘2SG subject pronoun’, which was elicited in sentence context, it remains an open question what its function is, but the most likely choice would appear to be that it is a 2SG pronoun used to mark imperatives. If so, the following forms probably are imperative constructions:

- |     |     |       |      |   |
|-----|-----|-------|------|---|
| 31) | ku  | le    | kah  |   |
|     | 2SG | go    | find | ‘Go find it!’ (given for TP <i>ronim</i> ‘to go hunting’) |
| 32) | ku  | riseh |      |   |
|     | 2SG | stand |      | ‘Stand up!’ (given for TP <i>sanap</i> ‘to stand’)        |
| 33) | ku  | ray   | mar  |   |
|     | 2SG | kill  | die  | ‘Kill it!’ (given for TP <i>kilim i dai</i> ‘to kill’)    |

It is clear that some of these are calques of the Tok Pisin prompt that was used for elicitation, and since the Tok Pisin form itself does not distinguish declarative from imperative mode in these sentences, there is nothing to prevent them from being interpreted as imperatives, although that was not my intent or understanding when they were collected. In any case, sentence 31) was given morpheme glosses by the speaker who provided it, thus confirming that /ku/ is a 2SG pronoun that is in a still undefined competition with /we/.

Some constructions of this form, as *ku hal* ‘you laugh’ or *ku deŋ* ‘you cry’ may be statements of fact rather than commands, but I assume that sentences 31) – 33) are imperative in intent. Regardless of intent, most of these sequences of pronoun and verb were also given in contracted form with syncope of the pronominal vowel, as *kriŋeh* ‘Stand up!’, *kraŋ mar* ‘Kill it!’, or *kreŋ* ‘you are crying’. However *ku le kah* ‘Go find it!’ and *ku hal* ‘you are laughing’ were recorded only in the full form.

A nominal imperative was also freely offered when I collected the words for father and mother, namely:

- |     |               |      |                 |
|-----|---------------|------|-----------------|
| 34) | momo          | moy  |                 |
|     | Father (voc.) | come | ‘Father, come!’ |
| 35) | hina          | moy  |                 |
|     | Mother (voc.) | come | ‘Mother, come!’ |

**7.3.11. Tense/aspect.** Information on tense or aspect in my data on Pak is limited to a single sentence, the answer to the question ‘Why did John eat my fish?’, which is repeated below:

- |     |     |     |         |             |     |
|-----|-----|-----|---------|-------------|-----|
| 36) | iy  | en  | leta    | toŋ-da      | iy  |
|     | 3SG | eat | because | hungry-past | 3SG |

This single example suggests that the suffix *-da* marks actions that are past or completed, but without further information it cannot be stated how productive this is, or whether future tense or irrealis mood is also marked on verbs.

**7.3.12. Miscellaneous.** Because the collection of grammatical data for Pak was limited, much of what I obtained was found as an incidental by-product of lexical elicitation. One fragmentary pattern that occurs with only three bases in my fieldnotes is a nominalization strategy that works by adding a mid vowel to the end of the verb stem, seen in *mimim* ‘to urinate’ but *mimi-e* ‘urine’, *mumur* ‘to vomit’, but *mumur-o* ‘vomitus’, and *titih* ‘to sweep’, but *tith-e* ‘broom’. It is, of course, impossible to generalize based on three divergent examples, but the available data leaves open the possibility that the nominalizing suffix is a mid vowel that agrees in frontness with the last vowel of the verb. The other differences between these three examples, namely the loss of the final stem consonant in *mimi-e*, but not in *mumur-o*, and the syncopation of the last stem vowel in *tith-e*, but not in the other stems, permits no statement about a general process.

Another pattern that was turned up incidentally during lexical elicitation is a handful of words that occur in both simple and reduplicated forms. These are:

deh ‘far’	:	dedeh ‘very far’
haw ‘canoe paddle’	:	hahaw ‘oars on a boat’
pir ‘to float’	:	pirpir ‘to drift, float away on a current’
mwar ‘snake’	:	mwarmwar ‘marine eel’
nu ‘to bathe’	:	nun ‘to dive, submerge’ (< nunu)

With so few examples it is hard to generalize about the function of reduplication in Pak, as *dedeh* is intensifying, *pirpir*, and perhaps *nun*, seem to indicate repeated or continuous action, and the two nouns possibly are simulative (thing resembling a paddle, thing resembling a snake).

A structure that I encountered often in collecting lexical data was N-n N, in which the two nouns were most commonly in a part-to-whole relationship, as in *ho-n key* : leaf of a tree, *kuha-n key* ‘root of a tree’, *motanga-n key* ‘fork of a branch’, *mune-n key* ‘bark of a tree’, *pa-n key* ‘fruit of a tree’, *poru-n key* ‘seed of a tree’, *puse-n key* ‘core of a tree’, *ho-n niw* ‘coconut frond’, *putu-n niw* ‘coconut husk’, or *de-n kur* ‘nit’ (lit. ‘feces of a louse’). Since part-to-whole relationships in Oceanic languages are commonly expressed by connecting two nouns with a genitive marker that often reflects \*ni, it is easy to assume that the postnominal *-n* in these constructions is a reduced form of \*ni, and hence a genitive marker. However, in all languages of the Admiralties except Wuvulu-Aua and one of the extinct languages of the Kaniet islands (Blust 1996a) this *-n* could also be the 3SG possessive pronoun, and this may be the best analysis for this bound morpheme in Pak and other languages with similar structures, since *-n* is abundantly attested as 3SG possessor, but is unknown as an unambiguous genitive marker. Some nouns that were recorded only with *-n* may in fact be bimorphemic, as [asan] ‘inner gills’, which probably is /asa-n/ ‘its gills’.

A contrast that was recorded only in *moh hamar* ‘one person’ vs. *i hamar* ‘many people’, suggests that nouns must, or at least can, be distinguished by these markers as singular vs. plural,

a feature that was not recorded in any other of the 26 Admiralty languages for which I have fieldnotes. Ironically, *moh* ‘marker of singular nouns’ is a homophone of *moh* ‘twins’, a coincidence that must create awkwardness in some communicative contexts.

Although traditional personal names were not recorded, and those of the speakers with whom I worked were mostly of European origin (Apollos, Jack, Set, which may be ‘Seth’), the contrast in *pi-naw* ‘widow’, *po-naw* ‘widower’ marks a feminine : masculine contrast that reportedly is also reflected in personal names, as it is in Nali and some other languages of eastern Manus.

Finally, as seen in the vocabulary, the words for ‘mother’ and ‘father’ have distinct vocative forms, hence *hirno-* ‘mother’ (ref.), but *hina* ‘mother’ (voc.), *domo-* ‘father’ (ref.), but *momo* ‘father’ (voc.). Since other relatives than the primary ones must be called on occasion, it is reasonable to suppose that these also have vocative forms, although none of these were collected.

**7.4. LEXICON.** The following vocabulary was collected for Pak, and forms the current basis for determining the affiliation of this language with the languages of the southeastern islands, rather than with those of eastern Manus.

#### PAK-ENGLISH VOCABULARY

/a/

- 001. *a* : gloss uncertain (cf. *la*)
- 002. *aciŋ* : to sneeze
- 003. *ahay* : west monsoon; west
- 004. *ahir* : to caulk a canoe (possibly variant of #77, *ehir*)
- 005. *akhan* : black; dirty
- 006. *akhuh* : to hide (trans.), to conceal something
- 007. *aleŋ* : to want, desire
- 008. *almamaw* : to yawn
- 009. *alu* : to bend, as an iron bar
- 010. *alweh* : to pluck, pull out
- 011. *an<sub>-1</sub>* : (gloss uncertain; cf. *nampoh*)
- 012. *an<sub>-2</sub>*: termite
- 013. *anaran* : smooth, level
- 014. *añum* : to bail out a canoe
- 015. *apuh* : to boil (water, food)
- 016. *apwal* : mangrove swamp
- 017. *asan* : gills (internal, red substance; probably = asa-n)
- 018. *aseh* : to walk
- 019. *aw* : largest kind of grouper

/æ/

- 020. *æ* : coordinating conjunction: and



/d/

021. *dah* : 1PL, we/us (four or more)  
 022. *dakahow* : to bark, of a dog  
 023. *dalor* : four  
 024. *dan* : down; earth, ground, soil  
       *dan memelew* : earthquake  
 025. *daŋar ~ ma-daŋar* : four hundred  
 026. *dapule-* ~ *daple-* forehead, *dapule-k*, *dapule-m*, *dapule-n*  
 027. *dardih* : nine  
 028. *darhan* : hot (water, food, weather)  
 029. *darhuoh* : eight  
 030. *darluh* : seven  
 031. *day* : to shoot; kill  
       *ku-ray* ‘Shoot it!, Kill it!’  
 032. *de*<sub>1</sub> : feces  
 033. *de*<sub>2</sub> : (gloss uncertain; cf. *nampoh*)  
 034. *deh*<sub>1</sub> : far, distant  
       *dedeh* : very far  
 035. *deh*<sub>2</sub> : lionfish  
 036. *dehi-* : parallel sibling, *dehi-k*, *dehi-m*, *dehi-n*  
 037. *deih* : a shore tree: *Terminalia catappa*  
 038. *deley* : kind of small clam  
 039. *delwe-* : abdomen, belly, *delwe-k*, *delwe-m*, *delwe-n*  
 040. *deme* : slitgong  
 041. *den* : (gloss uncertain; cf. *kur*)  
 042. *denih* : sardine  
 043. *deŋ* : to weep, cry  
       *ku reŋ* ‘You are crying’  
 044. *deŋkel eh* : ashes  
 045. *des* : saltwater  
 046. *dewe* : to scrape the meat from a coconut  
 047. *dho* : 1DL subject, we two, the two of us  
 048. *dhow ~ təhow* : 1DL object, the two of us  
 049. *dienpeliew* : thigh  
 050. *dih* : one  
 051. *dihe ~ dhe* : half  
 052. *dipahoh* : morning  
 053. *dirpey* : slow  
 054. *do*<sub>1</sub> : (gloss uncertain)  
       *do popwm* : not yet  
 055. *do*<sub>2</sub> : ironwood tree: *Intsia bijuga*  
 056. *do*<sub>3</sub> : punting pole  
 057. *dohoh* : fallow, of land  
 058. *dohu* : conch shell (trumpet)  
 059. *dolaw* : east wind

060. *doljo-* : ear, *doljo-k*, *doljo-m*, *doljo-n*  
*doljo-n pwen* : deaf ('no ears')
061. *domo-* : father (voc.), *domo-k*, *domo-m*, *domo-n*
062. *dop* : basket
063. *doru* : 1TL, we three, the three of us
064. *dow* : wet nasal mucus, snot
065. *du* : one (in counting bunches and fathoms; cf. *poŋ*)
066. *duenan* : correct, true
067. *duh*<sub>1</sub> : pandanus used to weave mats; pandanus sleeping mat
068. *duh*<sub>2</sub> : sugarcane
069. *duk* : gecko
070. *duluh* : three
071. *dunuho-* ~ *dunho-* : shoulder, *dunuho-k*, *dunuho-m*, *dunuho-n*
072. *duŋor* ~ *ma-duŋor* : three hundred
073. *dusu* : tidal wave

/e/

074. *-e/o* : nominalizing suffix
075. *eh*<sub>1</sub> : fire
076. *eh*<sub>2</sub> : to shave
077. *ehir* : the putty nut: *Parinari laurinum*
078. *ehiro-* : sweat, perspiration, *ehiro-k*, *ehiro-m*, *ehiro-n*
079. *el*<sub>1</sub> : angry; to fight, as in war
080. *el*<sub>2</sub> : barracuda, sea pike (thick body)
081. *eldun* : egg
082. *elwen* : long (of things), tall
083. *en*<sub>1</sub> : to eat
084. *en*<sub>2</sub> : gloss uncertain (cf. *ne*)
085. *en*<sub>3</sub> : to lie, recline  
*en dan* : to lie down
086. *epi* : sago
087. *er*<sub>1</sub> : bad
088. *er*<sub>2</sub> : copula  
*i ni er lolon tep* 'many fish are in the basket'
089. *er*<sub>3</sub> : genitive marker (?)  
*wokan er yew* 'my blood vein'  
*hay er wey* 'your blood'  
*pwapwaw er iy* 'his/her grandfather'
090. *ere-* : heart, chest, *ere-k*, *ere-m*, *ere-n*
091. *ew* : banyan
092. *ewe* : breakers, surf

/h/

093. *ha-* : branch  
*ha-n key* : branch of a tree

094. *hah* : to open the mouth, gape  
 095. *hal* : to laugh  
       *ku-hal* : ‘you are laughing’  
 096. *halow* : to hold in the hand  
 097. *halwuh* : to pour, spill  
 098. *ham* : lime spatula  
 099. *hamaman* : red  
 100. *hamar* : person, human being  
       *i hamar* : people (many)  
       *moh hamar* : person (one)  
 101. *hay*<sub>1</sub> : day  
 102. *hay*<sub>2</sub> : to feed  
 103. *hay*<sub>3</sub> : to give (possibly identical to the preceding)  
 104. *hayayah* : to think  
 105. *hapah* : to carry a person on the back, carry piggy back  
 106. *hat* : to slap, hit with the open hand; to beat the water to drive fish into a corral  
 107. *haw*<sub>1</sub> : canoe paddle  
       *pahaw* : oars for a boat  
 108. *haw*<sub>2</sub> : 2DL, you two, the two of you  
 109. *hawah* : 3PL, they/them  
 110. *hawar* : to play, as children  
 111. *hay* : blood, *hay er yew*, *hay er wey*, *hay er iy*  
       *haye pu* : blood of a pig  
 112. *heh* : kind of long, thin, light-colored fish  
 113. *hemdeh* : quick  
 114. *hemel* : lightning  
 115. *hen* : fresh water, river, stream  
 116. *hejin* : odor, stench  
 117. *hejkaw* : (gloss uncertain; cf. *menwey*)  
 118. *he?ir* : spoiled, rotten  
 119. *hi-* : prefix in names of girls (boy’s names have no special marker)  
 120. *hien* : good  
 121. *hina* : mother (voc.)  
       *hina moy* ‘Mother, come!’  
 122. *hiprul* : black sea bird the size of a seagull  
 123. *hipwe* : grandmother  
 124. *hir* : to crush lice between the fingernails  
 125. *hirno-* : mother (ref.), *hirno-k*, *hirno-m*, *hirno-n*  
 126. *hirjen* : pain, toothache, headache; painful  
 127. *hit* : to press, squeeze, as a fruit to get the juice  
 128. *hiw* : to pull, as a rope  
 129. *ho ~ hu* : leaf, frond  
       *para-n ho* : betel pepper  
       *ho-n key* : leaf of a tree  
       *ho-n niw* : coconut frond  
       *hu-n melel* : an edible plant: *Hibiscus manihot*

130. *hoh* : dark  
 131. *hoho-* : brain, *hoho-k*, *hoho-m*, *hoho-n*  
 132. *hohoan* : blue (color of parrotfish)  
       *ni hohoan* : parrotfish  
 133. *holalan* : wide, broad  
 134. *hom* : hair  
       *hom poru-* : head hair, *hom poru-k*, *hom poru-m*, *hom poru-n*  
 135. *homhun* : wet  
 136. *honu-* : (liquid?)  
       *honu-n moro-* : tears  
       *honu-n niw* : coconut milk  
 137. *hoŋ* : to hear  
 138. *hoŋor* ~ *ma-hoŋor* : six hundred  
 139. *horu* : 3TL, the three of them  
 140. *how<sub>-1</sub>* : to bind, to tie up  
       *ku how* ‘Tie it!’  
 141. *how<sub>-2</sub>* : 3DL, the two of them  
 142. *hu<sub>-1</sub>* : dugong  
 143. *hu<sub>-2</sub>* : two (in counting fathoms)  
 144. *huh* : to blow (of the wind, or of a person on a fire)  
 145. *hulili-* : fat, grease, *hulili-k*, *hulili-m*, *hulili-n*  
 146. *hululuŋ* : wooden headrest, pillow  
 147. *huntoh* : swordfish, marlin (thin body)  
 148. *huŋor* ~ *ma-huŋor* : two hundred  
 149. *huoh* : two  
 150. *hurdu* : thick (as a plank)

/i/

151. *i* : plural marker  
       *i hamar* ‘many people’  
       *i ni* ‘many fish’  
 152. *ih* : lime (calcium carbonate)  
 153. *in* : to drink  
 154. *it* : to count  
 155. *iy* : 3SG, s/he

/k/

156. *kah<sub>-1</sub>* : to find  
       *ku le kah* : to hunt, go hunting  
 157. *kah<sub>-2</sub>* : kava, *Piper methysticum*  
 158. *kaha* : coconut flower spathe  
 159. *kak* : red starfish, Crown-of-thorns starfish  
 160. *kalaw* : sand crab  
 161. *kalmara* : right hand, right side

162. *kalmoy* : mangrove crab  
 163. *kalow* : deep blue sea beyond the reef  
 164. *kan* : food  
 165. *kanah* : wooden bowl  
 166. *kanaru* : adze  
 167. *kanas* : mullet  
 168. *kanaw* : seagull  
 169. *kanawelul* : butterfly  
 170. *kanuh* : saliva; to spit  
 171. *kapah* : passage through reef, channel  
 172. *kapih* ~ *kapweh* : small, narrow; younger (of siblings)  
 173. *kapnan* : big; elder (of siblings)  
 174. *kapran* : dry coconut  
 175. *kapupow* : spider  
 176. *kar* : thatch for roof  
 177. *karah* : frigate bird  
 178. *kaukau* : sweet potato (TP)  
 179. *kaw* : to fetch water  
 180. *kawas*<sub>1</sub> : brideprice  
 181. *kawas*<sub>2</sub> : friend, companion  
 182. *kayat* : outrigger boom  
 183. *ke-* : foot, leg, *ke-k*, *ke-m*, *ke-n*  
 184. *keheh* : when?  
 185. *kehey* : red parrot  
 186. *keher* : sago grub  
 187. *kehien* : to heal, of a wound; to recover from an illness  
 188. *kehku-* : neck, *kehku-k*, *kehku-m*, *kehku-n*  
 189. *kehme-* : tongue, *kehme-k*, *kehme-m*, *kehme-n*  
 190. *kel*<sub>1</sub> : boat, canoe  
 191. *kel*<sub>2</sub> : to dig  
 192. *kelhen* : gloss uncertain (residue?; possibly *kelhe-n*)  
       *kelhen eh* : ember, charcoal  
 193. *keli* : grouper (general term)  
       *keli aw* : largest grouper  
       *keli wih* 'second largest type of grouper  
 194. *kelkel* : to draw, to write  
 195. *kelmow* : firefly  
 196. *kelmu* : left hand, left side  
 197. *kelpwe* : blind  
 198. *kemit* : storm, strong wind and rain  
 199. *kendu* : housepost  
 200. *kene*<sub>1</sub> : flesh, muscle; body, *kene-k*, *kene-m*, *kene-n*  
       *kene-n ih* : lime (for betel chew)  
 201. *kene*<sub>2</sub> : point, prong, as on a spear  
       *kene nah* : metal points on a fish spear  
 202. *kep* : elephant ear taro, *Alocasia* spp.

203. *kepe* : salt  
*kepe-un* ~ *kepy-un* : salty
204. *kepise-* ~ *kepe-* : chin, jaw, *kepise-k*, *kepise-m*, *kepise-n*
205. *kere-* : base, foundation  
*kere-n key* : base of a tree
206. *kerpow* : black and white heron
207. *kes* : to scratch, claw
208. *kese-* : rib, *kese-k*, *kese-m*, *kese-n*
209. *kethun niw* : golfball-sized coconut
210. *ketupure-* ~ *ketupre-*: armpit, *ketupure-k*, *ketupure-m*, *ketupure-n*
211. *key* : tree, wood
212. *khe-* : vagina, *khe-k*, *khe-m*, *khe-n*
213. *kheyoh* : canoe bailer
214. *khikhih* : sugar ant
215. *khoh* : green grasshopper
216. *khom* : bottom  
*khom pwah* : lagoon
217. *khon* : (gloss uncertain; cf. *lumu-*)
218. *khuy* : to sniff, smell something
219. *kihi* ~ *khi* : firewood
220. *kimey* : to come (= *ki mey?*; cp. *moy*)
221. *kip* : tongs
222. *ko<sub>-1</sub>* : fence
223. *ko<sub>-2</sub>* : garden (possibly identical to *ko<sub>-1</sub>*)
224. *kohow* : white
225. *kohu-* : intestines, *kohu-k*, *kohu-m*, *kohu-n*
226. *kolaw* : clothing (generic)
227. *kolpen* : tail
228. *kompah* : shallow green water between reef and beach
229. *kon* : animal  
*kon ke-n dalor* : four-legged animal, quadruped  
*kon penin* : bird (lit. ‘animal with wings’)
230. *kop* : hermit crab
231. *kopow<sub>-1</sub>* : comb of a fowl
232. *kopow<sub>-2</sub>* : small brown poisonous reef fish that swims in schools
233. *kori* : bark basket used to store sago
234. *kosus* : coconut crab
235. *kothæn* : a group of twenty  
*kothæn dih* : twenty  
*kothæn dih æ sojoh* : thirty  
*kothæn huoh* : forty  
*kothæn huoh æ sojoh* : fifty  
*kothæn duluh* : sixty  
*kothæn duluh æ sojoh* : seventy  
*kothæn dalor* : eighty  
*kothæn dalor æ sojoh* : ninety

236. *krehis* : to smoke fish or meat for preservation (= *ku rehis*?)  
 237. *kro* : to sit  
       *kro-ran* : to sit down (*ran* = /dan/)  
 238. *kronoh* : to make, to build (= *ku donoh*?)  
 239. *krun* : to roast (= *ku dun*?)  
 240. *ku* : 2SG, you (in imperatives?)  
 241. *kuay* ~ *kway* : to grow (as plants)  
 242. *kuh* : clay cooking pot  
 243. *kuha*<sub>1</sub> ~ *kwaha* : chicken  
       *kuha per lolur* : megapode  
 244. *kuha*<sub>2</sub> : root (generic)  
       *kuha-n key* ~ *kwahan key* : root of a tree  
 245. *kuhey* : small flying fox variety  
 246. *kuhu-* ~ *khu-* : buttocks, *kuhu-k*, *kuhu-m*, *kuhu-n*  
 247. *kukah* : to seek, look for  
       *kukah kur* : to groom, nitpick  
 248. *kul* : breadfruit  
 249. *kuli* : rudder; to steer a canoe  
 250. *kulol* ~ *klol* : to plant, to bury  
 251. *kuluh* : to pull  
       *kuluh ouh* : to breathe  
 252. *kulwoh* : hearth, cooking place  
 253. *kumahah* : to know, understand; to recognize, as a person (= *ku mahah*?)  
 254. *kumelolon* : to enter, go inside (probably = *ku me lolon*)  
 255. *kumwan* : black ant with painful bite  
 256. *kumwaral* : Morning star/Evening star  
 257. *kuniw* : hawk  
 258. *kunun* : heavy  
 259. *kuŋ* : kind of four-cornered fish  
 260. *kuol* : stick used to split sago trunks  
 261. *kup* : east monsoon; east  
 262. *kuphu-* : occiput, back of the head, *kuphu-k*, *kuphu-m*, *kuphu-n*  
 263. *kupwen* : casting net  
 264. *kur* : louse  
       *den kur* : nit (= ‘feces of louse’?)  
 265. *kuru-* : back (anat.), *kuru-k*, *kuru-m*, *kuru-n*  
 266. *kuruwuh* : to chew betel  
 267. *kusu mara-n* : eyebrow  
 268. *kut* : shrimp(?)  
       *kut lemuh* : lobster

/kw/

269. *kwihir* : to ask a question (= *ku ihir*?)  
 270. *kwilew* : to run (= *ku ilew*?)  
 271. *kwir* : octopus

/A/

272. *la* : this, here (reference to something near speaker)  
*a la pen er yew* ‘This is my pen’
273. *lah* : to go  
*ku lah* ‘Go!’
274. *lal* : Trochus shell
275. *lalsan* : unit of one thousand  
*lalsan dih* : one thousand
276. *laman*<sub>1</sub> : deep sea  
*laman kalow* : sea, ocean
277. *laman*<sub>2</sub> : ripe
278. *lan* : west wind
279. *lapak* : flat black and white striped fish that stays in the sand and has only one eye,  
generic for flounders and soles
280. *lat* : coral limestone
281. *lawar* : cuscus, opossum
282. *le*<sub>1</sub> : to go  
*le muh* : to go to the back
283. *le*<sub>2</sub> : to see, to look
284. *lehe-* : tooth; tusk, *lehe-k*, *lehe-m*, *lehe-n*  
*lehe-n pu* : tusk of a pig
285. *lej* : shore, beach
286. *lerew* : kind of thick bamboo used to make combs
287. *leta* : because
288. *ley* : ginger
289. *lo* : coconut husk wringer for squeezing sago flour
290. *lol* : to sink; to drown
291. *lolhon*<sub>1</sub> : coconut with soft shell
292. *lolhon*<sub>2</sub> : inside  
*lolhon mine-* : palm of the hand, *lolhon mine-k*, *lolhon mine-m*, *lolhon mine-n*
293. *lolur* : bushland, jungle
294. *loput* : Long-snouted unicornfish: *Naso unicornis* (Forskål)
295. *lor* : boil, abscess
296. *los* : to fall from a height; to trip and fall, stumble
297. *loso* : bandicoot
298. *loyaŋ* : yellow
299. *luey*<sub>1</sub> : to drop
300. *luey*<sub>2</sub> : to lose, as possessions (probably identical to the preceding)
301. *luh* : men’s house
302. *luk* : to fold, as a mat or a piece of paper
303. *lulu* : lagoon
304. *lumlum* : moss, algae
305. *lumu-* : feather  
*lumu-n kapse-n* : catfish (‘hairy jaw’)  
*lumu-n khon* : its tail feathers



306. *lur* : pearl

/m/

307. *ma-* : numeral prefix (for multiples of 100)

308. *mah* : red taro

309. *maha* : two (in counting bunches; cf. *poŋ*)

310. *malsayaw* : a marine fish, Spanish mackerel

311. *malwan* : whale

312. *mamah* : a stick

313. *mamar* : to wake up (INTR), come to consciousness

314. *mamaw* : smallest type of rock cod

315. *man* : very large type of wooden bowl

316. *majan* : fontanelle

317. *majas* : to work (as in the garden)

318. *mar* : to die, dead

*mar pwen* : living, alive

319. *mara-* : eye; face, *moro-k*, *moro-m*, *mara-n*

*maram puro-* : navel, *maram puro-k*, *maram puro-m*, *maram puro-n*

320. *maran* : sharp, of point or blade

*maran pwen* : dull, blunt

321. *mat* : sea anemone (generic)

322. *mathe* : how much/how many?

323. *mehemeh* : to dream

324. *mehih* : Malay apple: *Syzygium gomata* (short variety)

325. *mekhen* : thin, of materials

326. *melel* : *Hibiscus Manihot* (cf. *hun*)

327. *melhu* : sea swell, wave in the open sea

328. *melir* : kind of tree whose bark is used to make baskets

329. *melyow* : a shore tree with large glossy green leaves: *Barringtonia asiatica*

330. *memelew* : to shake, rock back and forth

331. *menih* : honeybee

332. *mensow* : parent-in-law

333. *menwey* : sea eagle

*menwey heŋkaw* : land eagle

334. *mer* : reef

*mer tamah* : low tide (= ‘dry reef’?)

335. *mere* : mountain

336. *merih* : to sleep

337. *mesen* : cooked

338. *mimim* : to urinate

*mimi-e* : urine

339. *mimini* : medium-sized black crab with a red pincer (lives in holes along the beach)

340. *miminih* : story

341. *mimiti* : shame, ashamed, embarrassed

342. *moh*<sub>1</sub> : singular marker  
*moh hamar* ‘one person’
343. *moh*<sub>2</sub> : twins
344. *mohoh* : hole (in wall, canoe)
345. *mokopu-* : grandchild, *mokopu-k*, *mokopu-m*, *mokopu-n*
346. *molar* : Japanese chub mackerel: *Scomber japonicus* (Huyttuyn)
347. *molmol* : goldlined seabream: *Rhabdosargus sarba* (Forskål)
348. *molur* : kind of dove with a white tail
349. *momo* : father (voc.)  
*momo moy* ‘Father, come!’
350. *mon* : kind of pandanus with red or yellow fruit
351. *moro-* : eye, face, *moro-k*, *moro-m*, *mara-n*
352. *motaja-* : forked, bifurcating  
*motaja-n key* : fork of a branch
353. *moy* : to come (cf. *kimey*)
354. *muh* : back, rear part; last (in sequence)
355. *muhemweh* : star
356. *muhun* : short
357. *mum* : to hit with a stick
358. *mumur* : to vomit  
*mumur-o* : vomit (n.), vomitus
359. *mumuro* : fear, afraid
360. *mune-* : skin, *mune-k*, *mune-m*, *mune-n*  
*mune-n key* : bark of a tree
361. *muon* : male, man
362. *musal* : giant clam, *Tridacna* sp.
363. *musip* : a shore tree: *Casuarina equisetifolia*
364. *musu-* : lip, *musu-k*, *musu-m*, *musu-n*
365. *mutan* : old, of things

/mw/

366. *mwahay* : calm, still, as the surface of water
367. *mwamwak* : squid with shell
368. *mwanen* : straight
369. *mwar*<sub>1</sub> : snake  
*mwar-mwar* : marine eel
370. *mwar*<sub>2</sub> : wound
371. *mweh* : large red crab with black dots (lives in the sea)
372. *mweran* : to descend, as a ladder (= *mwe ran*?)
373. *mwi* : dog
374. *mwisku* : to hiccup

/n/

375. *nah* : pronged fish spear  
*kehe nah* : metal points on fish spear

376. *naham* : to lick  
 377. *nakoh* : to scratch an itch  
 378. *nala* : fog, mist  
 379. *nalar* : stinging nettle, *Laportea* sp.  
 380. *naman* : sweet  
 381. *nampih* : mosquito  
 382. *nampoh* : housefly  
       *nampoh an de* : stinging March fly  
 383. *nanan* : pus (probably *nana-n*)  
 384. *naw* : widowed, having lost a spouse  
       *pi-naw* : widow  
       *po-naw* : widower  
 385. *nay* : kind of edible seaweed  
 386. *ne*: that, there (reference to something not near speaker)  
       *en ne pen er yew* ‘That is my pen’  
 387. *neldun* : cold (water, food, weather)  
 388. *nemulen* : sour  
 389. *neney* : woman’s traditional grass skirt  
 390. *nen-* : nose, *nen-k*, *nen-m*, *nen-n*  
 391. *ni* : fish  
 392. *nik* : to climb, as a ladder  
 393. *niw* : coconut tree  
 394. *noh* : tidal flow, current  
 395. *nol* : to wash, as clothes or dishes  
 396. *non* : snout  
       *non pu* : snout of a pig (probably *no-n pu*)  
 397. *nono* : a flowering plant, the hibiscus: *Hibiscus tiliaceus*  
 398. *nonow* : spotted, as a dog, mottled, as a snake  
 399. *nop* : stonefish  
 400. *noru-* : child, *noru-k*, *noru-m*, *noru-n*  
       *noru-n poke* : illegitimate child, bastard  
 401. *nu* : to bathe  
 402. *nun* : to dive, to submerge  
 403. *nuron* : five  
 404. *nuy* : squid without shell
- /ŋ/
405. *ŋaha-* : name, *ŋoho-k*, *ŋoho-m*, *ŋaha-n*  
       *ŋoho-m se* : What is your name?  
 406. *ŋay* : hole (in the ground)
407. *ŋoh* : fathom  
       *du ŋoh* : one fathom  
       *hu ŋoh* : two fathoms  
 408. *ŋurlon* : to grunt, as a pig; to snore

/o/

409. *oh*<sub>1</sub> : to bite  
 410. *oh*<sub>2</sub> : to husk coconuts  
 411. *oh*<sub>3</sub> : 2PL, you two, the two of you  
 412. *orduŋ* : thunder  
 413. *oru* : 2TL, you three, the three of you  
 414. *osun* : gall bladder  
 415. *osusun ih* : smoke of a fire  
 416. *ot* : to husk coconuts  
 417. *ouh ~ ow* : wind, breath

/p/

418. *pa*<sub>1</sub> : fruit  
     *pa-n key* : fruit of a tree  
 419. *pa*<sub>2</sub> : to want, desire  
     *ye pa yek mimim* 'I want to urinate' (= 'make urine')  
 420. *pah* : pandanus with edible fruit  
     *pwan pah* : pandanus with edible fruit  
 421. *paha* : large black stingray  
 422. *pahana ~ phana* : to steal  
 423. *pahun* : new  
 424. *pakayaw* : flying fish  
 425. *pakha* : how?  
 426. *pala-* : penis, *polo-k*, *polo-m*, *pala-n*  
 427. *palaua* : flower (TP)  
 428. *palmaran* : gloss uncertain (= pal mata-n?)  
     *palmaran sus* : nipple of the breast  
 429. *pamar* : raw, uncooked  
 430. *pan* : fungus that leaves white marks on skin, leucoderma  
 431. *paŋ* : rain  
 432. *paŋan* : gills (external)  
 433. *papi* : sand (on the beach)  
 434. *para-* : stalk, stem  
     *para-n duh* : sugarcane stalk  
     *para-m pele* : mast for the sail  
 435. *parah* : kind of strong grass light elephant grass or light bamboo  
 436. *parlan* : surface; platform  
     *parlan kel* : canoe platform  
 437. *pat* : fish corral  
 438. *paw* : a fish, generic for emperors  
 439. *pay* : firewood shelf above the hearth  
 440. *peini* : white taro (commonly eaten)  
 441. *peldien* : middle, center  
     *peldien sen* : noon

442. *pele* : sail of a boat  
 443. *peliw* : obsidian; obsidian spear head  
 444. *pelseh* : to turn head or body; to spin, rotate  
 445. *pelyow* : bonito, skipjack tuna  
 446. *peme* : betel nut  
       *para-n peme* : areca palm  
 447. *pemine-* : hand, *pemine-k*, *pemine-m*, *pemine-n*  
 448. *penin* : wing (probably *peni-n*)  
 449. *penit* : grass, sword grass  
 450. *penoh* : caterpillar  
 451. *penu* : village  
 452. *per* : (gloss uncertain; cf. *kuha*<sub>1</sub>)  
 453. *perhi-* : bone, *perhi-k*, *perhi-m*, *perhi-n*  
 454. *permine-* : finger, *permine-k*, *permine-m*, *permine-n*  
 455. *perperhen* : thin (of animates), skinny  
 456. *perta* : why? (= *per ta*?)  
 457. *perwir* : trivet, three stones to hold the cooking pot  
 458. *petit* : kind of slender bamboo used to make fish spears  
 459. *pew* : shark  
 460. *pey* : stingray  
       *pey menwey* : eagle ray (spotted)  
 461. *pholyam* : generic for scad and trevally  
 462. *pi-* : feminine name prefix  
 463. *pihen* : female, woman  
 464. *pineh* : afternoon, evening  
 465. *pipir* : near  
 466. *pir* : to float  
       *pir-pir* : to drift, float away on a current  
 467. *pirew* ~ *prew* : a shore tree: *Calophyllum inophyllum*  
 468. *pise-* : cross sibling, *pise-k*, *pise-m*, *pise-n*  
 469. *po*<sub>1</sub> : masculine name prefix  
 470. *po*<sub>2</sub> : k.o. pandanus with broad leaves  
 471. *poh* : white residue left after removing coconut  
 472. *pohen* : place  
       *pohen mwar* : scar ('place of wound')  
 473. *poke* : (gloss uncertain; cf. *noru-*)  
 474. *pokosus* : large storage basket made of coconut leaves  
 475. *pokrih* : to hide (INTR), to conceal oneself  
 476. *pol*<sub>1</sub> : moon, month  
 477. *pol*<sub>2</sub> : mushroom  
 478. *poldan* : to stick, adhere; birdlime  
 479. *polu* : rat, mouse  
 480. *pom* : kind of seaweed used to scrub dishes or pots  
 481. *pon* ~ *pun* : the green turtle: *Chelonia mydas*  
 482. *ponay* : sea cucumber, sea squirt

483. *poŋ*<sub>1</sub>: bunch, cluster, as of bananas or betel nuts  
     *du-poŋ* : one bunch  
     *maha-poŋ* : two bunches
484. *poŋ*<sub>2</sub>: night
485. *popoti* : yellow grasshopper
486. *popwm* : (gloss uncertain; cf. do)
487. *poroh* : hard
488. *porpor* : puffer fish
489. *poru*<sub>1</sub> : head, *poru-k*, *poru-m*, *poru-n*
490. *poru*<sub>2</sub> : seed  
     *poru-n key* : seed of a tree
491. *posi* : sleep in the eye, mucus in corner of eye
492. *poswen* : to evaporate, dry up (probably = *posu-en*)
493. *pow* : kind of tree whose bark is used to make cordage for carrying firewood
494. *praim* : to fry (TP)
495. *pron* : thorn
496. *pu* : pig
497. *puey* : crocodile
498. *puh*<sub>1</sub> : bamboo basket trap for fish
499. *puh*<sub>2</sub> : fork for connecting sticks on outrigger
500. *puha-* : mouth, *pho-k*, *phu-m*, *pwha-n*  
     *pwha-n hen* : mouth of a river, estuary  
     *pwha-n um* : door of a house
501. *puhor* : Red-toothed triggerfish: *Odonus niger* (Rüppell)
502. *pul* : dove
503. *pulel* : few
504. *pulkey* : mussel
505. *pulu-* : spouse, *pulu-k*, *pulu-m*, *pulu-n*
506. *pulyih* : kind of large blue fish with square forehead, Double-headed parrotfish
507. *pun* : banana
508. *punhen* : soft
509. *puniw* : ladle
510. *puo-* : testicles, *puo-k*, *puo-m*, *puo-n*
511. *pur*<sub>1</sub> : (gloss uncertain; cover?)  
     *pur-n-um* : roof of a house
512. *pur*<sub>2</sub> : stone
513. *puray* ~ *pray* : canarium nut
514. *puro* : gloss uncertain (cf. mara-)
515. *puroh* : raincloud
516. *pusas*<sub>1</sub> : bubbles, foam
517. *pusas*<sub>2</sub> : liver, *pusas er yew*, *pusas er wey*, *pusas er i*
518. *puse-* : core, inner part  
     *puse-n key* : core of a tree, heartwood
519. *pute* : all
520. *putiten* : fin of a fish

521. *puto* : island  
 522. *putu*<sub>1</sub> : container (?)  
       *putu-n ih* : lime gourd  
 523. *putu*<sub>2</sub> : fibers (?)  
       *putu-n niw* : coconut husk  
 524. *putun mine-* : fingernail, *putun mine-k*, *putun mine-m*, *putun mine-n*

/pw/

525. *pwa* : Black-spotted sea perch  
 526. *pwah* : shallow, of water  
 527. *pwān* : (gloss uncertain; cf. *pah*)  
 528. *pwāŋ* : to capsize, of a boat  
 529. *pwāpwāw* : grandfather, ancestor, *pwāpwāw er yew*  
 530. *pwat* : a fish, generic for demoiselles  
 531. *pwaw* : old, of animates  
 532. *pway* : to say, tell, speak  
 533. *pwekow* : bald  
 534. *pwelay* : large flying fox variety  
 535. *pwele* : insane, crazy  
 536. *pwen* : negative marker, no, not  
 537. *pwenah* : beads  
 538. *pwep* : small flat black or yellow reef fish with sail-like dorsal fin: coralfish  
 539. *pwesihe* : kind of round crab with pincer that encircles the body  
 540. *pwiphen* : itchy, to itch

/r/

541. *rih* : to plait, as a mat or basket  
 542. *riha* : where?  
 543. *ris* : to split  
 544. *riseh* : to stand up, to rise  
       *ku riseh* : 'Stand up!'

/s/

545. *salpwap* : to talk in one's sleep  
 546. *sam* : to bind, to tie up  
       *ku-sam* 'Tie it!'  
 547. *sanar* : one hundred  
 548. *sasaw* : year  
 549. *se* : who?  
 550. *sel* : to break, to chop firewood  
 551. *selyun* : Black-finned long tom: *Tylosurus melanotus* (Bleeker)  
 552. *semet* : to whet, to sharpen a blade  
 553. *sen* : sun, day

554. *seneh* : to throw, as a stone; to throw away, discard  
 555. *sie* : to fart  
 556. *sihiih* : to carry on a shoulder pole  
 557. *sinapu* : nature spirit  
 558. *sisih* : false; to lie  
 559. *soh* : stuck together, as with glue  
 560. *son* : to push  
 561. *soŋoh* : ten  
 562. *sorel* : to cough  
 563. *sorur* : to stab  
 564. *sos* : to gather, assemble, as people for a meeting  
 565. *sosokriw* : centipede  
 566. *su* : to catch, as fish  
 567. *sueh* ~ *sweh* : long yam  
 568. *suh* : to peel, as yams  
 569. *sul* : to burn  
 570. *suoh* : to paddle a canoe  
 571. *sus*<sub>1</sub> : female breast; breast milk, *susu-k*, *susu-m*, *susu-n*  
 572. *sus*<sub>2</sub> : to sew  
 573. *susluh* : to rub into the skin, as oil or liniment

/t/

574. *ta*<sub>1</sub> : mangrove  
 575. *ta*<sub>2</sub> : what?  
 576. *tal* : sea urchin  
 577. *talán* : path, way  
 578. *talaw* : man's sarong  
 579. *talkow* : ladder  
 580. *talwan* : much, many  
 581. *tam* : outrigger float  
 582. *tama* : swollen, to swell  
 583. *tamah* : dry? (cf. *mer*)  
 584. *tamalwan* : shadow, reflection; spirit of the dead, ghost  
 585. *tame* : to dance  
 586. *tamra* : road  
 587. *tanap* : small fish with a needle nose (blue on top, white on the bottom): :Long-finned garfish: *Euleptorhamphus viridus* (van Hasselt)  
 588. *tandon* : to swallow  
 589. *taŋaw* : frog, toad (generic)  
 590. *taŋket* : croton, cordyline (TP)  
 591. *taŋtaŋ* : starfish  
 592. *tapwan* : sap, viscous substance  
     *tapwan kul* : breadfruit sap  
 593. *tawtaw* : full (of a container)  
 594. *tay* : Malay apple: *Syzygium gomata* (long variety)



595. *ten* : to cut (wood, meat, rope)  
 596. *tep* : small basket of coconut leaves used to carry fried sago  
 597. *teti* : tattoo  
 598. *tilel* : ancestral spirit  
 599. *tilen* : taro sucker or shoot  
 600. *tim*<sub>1</sub> : to buy  
 601. *tim*<sub>2</sub> : full (stomach after eating), satiated  
 602. *tith* : to sweep  
       *tith-e* : broom  
 603. *tiw* : needle  
 604. *toh* : areca palm without useful nut, black palm (TP: *waillimbun*)  
 605. *tolay* : swordfish, marlin (thick body)  
 606. *tomorrow* : to fell trees  
 607. *toj ~ tuy* : hungry  
 608. *topaniw* : generic for cornetfish  
 609. *topuŋ* : jellyfish  
 610. *tou* : to catch something thrown, as a ball  
 611. *tu* : comb  
 612. *tuh* : trumpetfish: *Aulostoma chinensis* (Linn.); thin-bodied barracuda  
 613. *tuhen ~ twhen* : to cover  
 614. *tul* : coconut leaf torch  
 615. *tupur* : to pinch  
 616. *tupuron ~ tupron* : node in bamboo or sugarcane, joint  
       *tupuron mine-* : elbow, *tupuron mine-k*, *tupuron mine-m*, *tupuron mine-n*  
       *tupuron ke-* : knee

/u/

617. *uh* : white yam (generally round and sometimes long)  
 618. *ul* : maggot  
 619. *um* : house  
 620. *umwo-n* : nest  
 621. *ur* : to submerge a vessel to fill it

/w

622. *war* : up; sky  
 623. *wari* : monitor lizard  
 624. *way* : vine; rope, cordage  
 625. *we* : 2SG subject, you  
 626. *weh* : second largest kind of grouper  
 627. *welaw* : spiderweb  
 628. *wesew* : rattan  
 629. *wey*<sub>1</sub> : mango  
 630. *wey*<sub>2</sub> : 2SG object, you  
 631. *wihi*<sub>1</sub> : dolphin

632. *wihi*<sub>2</sub> : rafter of a house  
 633. *wilye-* : mother's brother, uncle, *wilye-k*, *wilye-m*, *wilye-n*  
 634. *woh* : to call out to someone, to hail  
 635. *wohi* : to sing  
 636. *wokan* : vein, tendon, *wokan er yew*, *wokan er wey*, *wokan er i*,  
 637. *won* : sandy ground, sandy soil  
 638. *wonoh* : six  
 639. *wow* : short-necked brown heron  
 640. *wowoh* : to fly  
 641. *wulu* : high tide, flood

/y/

642. *yas* : canoe hull in which sago is beaten, sago trough  
 643. *yay* : fishhook  
 644. *yayay* : to swim  
 645. *ye*: 1SG subject, I  
 646. *yek* : to make  
 647. *yew* : 1SG object, me

#### 7.4.1. English-Pak Index

abscess	:	lor
abdomen	:	delwe-
to adhere	:	poldan
adze	:	kanaru
afraid	:	mumuro
afternoon	:	pineh
algae	:	lumlum
alive	:	mar pwen
all	:	pute
ancestor	:	pwapwaw
and	:	æ
angry	:	el-
animal	:	kon
ant sp.	:	khikhih, kumwan
areca palm	:	para-n peme
armpit	:	ketupuri- ~ ketupri-
ashamed	:	mimiti
ashes	:	deŋkel eh
to ask (a question)	:	kwihir
to assemble	:	sos
back (anat.)	:	kuru-
back (behind)	:	muh
back of head	:	kuphu-
bad	:	er

to bail out (canoe)	:	añum
bailer (for canoe)	:	kheyoh
bald	:	pwekow
bamboo	:	lerew, petit
banana	:	pun
bandicoot	:	loso
to bark (dog)	:	dakahow
bark (of tree)	:	mune-n key
base	:	kere-
base of a tree	:	kere-n key
basket	:	dop, kori, pokosus, tep
bastard	:	noru-n poke
to bathe	:	nu
beach	:	leŋ
beads	:	pwenah
because	:	leta
belly	:	delwe-
to bend (as iron bar)	:	alu
betel leaf	:	ho
betel nut	:	peme
betel pepper	:	para-n ho
bifurcating	:	motaja-
big	:	kapnan
to bind	:	how, sam
bird	:	kon penin
birdlime	:	poldan
bird sp.	:	hiprul, keheŋ, kanaw, karah, kerpow, kuha per lolur, kuniw, menwey, molur, pul, wow
to bite	:	oh
black	:	akhan,
blind	:	kelpwe
blood	:	hay
to blow	:	huh
blue	:	hohoan
blunt	:	maran pwen
boat	:	kel
body	:	kene-
boil (sore)	:	lor
to boil (water, food)	:	apuh
bone	:	perhi-
bottom	:	khom
bowl (wooden)	:	kanah, man
brain	:	hoho-
branch	:	ha
breadfruit	:	kul

breadfruit sap	:	tapwan kul
to break (as wood)	:	sel
breakers	:	ewe
breast (female)	:	sus
breath	:	ouh
to breathe	:	kuluh ouh
brideprice	:	kawas
broad	;	holalan
broom	:	tith-e
bubbles	:	pusas
to build	:	kronoh
bunch	:	poŋ
to burn	:	sul
to bury	:	kulol
bush (land)	:	lolur
butterfly	:	kanawelul
buttocks	:	kuhu-
to buy	:	tim
to call (a person)	:	woh
calm (water)	:	mwahay
canarium nut	:	puray ~ pray
canoe	:	kel
canoe hull	:	yas
canoe platform	:	parlan kel
to capsize	:	pwaŋ
to carry (on back)	:	hapah
to carry (on pole)	:	sihih
to catch (as fish)	:	su
to catch (s.t. thrown)	:	tou
caterpillar	:	penoh
to caulk (a canoe)	:	ahir
center	:	peldien
centipede	:	sosokriw
channel	:	kapah
charcoal	:	kelhen eh
chest	:	eri-
to chew (betel)	:	kuruwuh
chicken	:	kuha
child	:	noru-
chin	:	kepise- ~ kepse-
to chop (firewood)	:	sel
clam sp.	:	deley, musal
to claw	:	kes
to climb	:	nik
clothing	:	kolaw
cloud (rain)	:	puroh

cluster	:	poŋ
coconut (dry)	:	kapran
coconut flower spathe	:	kaha
coconut frond	:	ho-n niw
coconut husk	:	putu-n niw
coconut milk	:	honu-n niw
coconut residue	:	poh
coconut (small size)	:	kethun niw
coconut (soft shell)	:	lolhon
coconut tree	:	niw
cold	:	neldun
comb	:	tu
comb (of fowl)	:	kopow-
to come	:	kimey, moy
companion	:	kawas
to conceal	:	akhuh
conch shell (trumpet)	:	dohu
container	:	putu (?)
cooked	:	mesen
copula, to be	:	er
coral limestone	:	lat
cordage	:	way
core	:	puse-
correct	:	duenan
to cough	:	sorel
to count	:	it
to cover	:	tuhēn ~ twēn
current	:	noh
crab sp.	:	kalaw, kalmoŋ, kop, kosus, mimini, mweh, pwesihe
crazy	:	pwele
crocodile	:	puey
to crush (lice)	:	hir
to cry	:	deŋ
cuscus	:	lawar
to cut (general)	:	ten
to dance	:	tame
dark	:	hoh
dawn	:	kumaral
day	:	haŋ, sen
dead	:	mar
deaf	:	dolŋo-n pwen
to descend	:	mweran
to desire	:	aliŋ, pa
to die	:	mar
to dig	:	kel

dirty	:	akhan
to discard	:	seneh
distant	:	deh
to dive	:	nun
dog	:	mwi
dolphin	:	wihi
door	:	pwha-n um
down (direction)	:	dan
to draw	:	kelkel
to dream	:	mehemeh
to drift	:	pir-pir
to drink	:	in
to drop	:	luey
to drown	:	lol
dry	:	tamah (?)
to dry up	:	poswen
dugong	:	hu
dull	:	maran pwen
ear	:	doljo-
earth	:	dan
earthquake	:	dan memelew
east	:	kup
to eat	:	en-
eel (marine)	:	mwarmwar
egg	:	eldun
eight	:	darhuoh
eighty	:	kothæn dalor
elbow	:	tupuron mine-
elder	:	kapnan
embarrassed	:	mimiti
ember	:	kelhen eh
to enter	:	kumelolon
estuary	:	pwha-n hen
to evaporate	:	poswen
evening	:	pineh
Evening star	:	kumwaral
to excavate	:	ir
eye	:	mara-
eyebrow	:	kusu mara-
face	:	mara-
to fall (from height)	:	los
fallow, of land	:	dohoh
false	:	sisih
far	:	deh
to fart	:	sie
fat (n.)	:	hulili-

father (ref.)	:	domo-
father (voc.)	:	momo
fathom	:	ŋoh
fear	:	mumuro
feather	:	lumu-
feces	:	de
to feed	:	haŋ
to fell (trees)	:	tomorrow
female	:	pihen
fence	:	ko
to fetch water	:	kaw, ur
few	:	pulel
fibers	:	putu-
fifty	:	kothæn huoh æ soŋoh
to fight (as in war)	:	el-
fin	:	putiten
to find	:	kah
finger	:	permine-
fingernail	:	putun mine-
fire	:	eh
firefly	:	kelmow
firewood	:	kihi ~ khi
firewood shelf	:	pay
fish	:	ni
fish corral	:	pat
fishhook	:	yay
fish sp.	:	aw, denih, deh, heh, huntoh, el, kanas, keli, keli aw, keli weh, kopow, kuŋ, lapak, loput, lumu-n kapse-n, malsayaw, mamaw, molar, molmol, ni hohoan, nop, paha, pakayaw, paw, pelyow, pew, pholyam, pey, pey, porpor, puhor, pulyeh, pwa, pwat, pwep, selyun, tanap, tolay, topaniw, tuh, weh
fish trap	:	puh
five	:	nuron
flesh	:	kene-
to float	:	pir
flood	:	wulu
flow (tidal)	:	noh
flower	:	palaua (TP)
to fly	:	wowoh
flying fox (large)	:	pwelay
flying fox (small)	:	kuhey
foam	:	pusas

fog	:	nala
to fold	:	luk
fontanel	:	maŋan
food	:	kan
foot	:	ke-
forehead	:	dapule-
fork (of branch)	:	motaja-
fork (on outrigger)	:	puh
forked	:	motaja-
forty	:	kothæn huoh
foundation	:	kere-
four	:	dalor
four hundred	:	(ma)-daŋar
friend	:	kawas
frog	:	taŋaw
fruit	:	pa
to fry	:	praim (TP)
full (after eating)	:	tim
full (container)	:	tawtaw
fungus (skin)	:	pan
gall (bladder)	:	osun
to gape	:	hah
garden	:	ko
to gather (people)	:	sos
gecko	:	duk
ghost	:	tamalwan
gills (external)	:	paŋa-n
gills (internal)	:	asa-n
ginger	:	ley
to give	:	haŋ
gloss uncertain	:	a, an, de, den, do, heŋkaw, i, khon, lulur, per, poke, popwɪn, pur, pwan
to go	:	lah, le
to go to the back	:	le muh
good	:	hien
grandchild	:	mokopu-
grandfather	:	pwapwaw
grandmother	:	hipwɪ
grass	:	penit
grass sp.	:	parah
grasshopper (green)	:	khoh
grasshopper (yellow)	:	popoti
grease	:	hulili-
to groom	:	kukah kur
ground	:	dan
to grow (as plants)	:	kuay ~ kway



to grunt (pig)	:	ɲurlon
to hail (a person)	:	woh
hair	:	hom
half	:	dihe ~ dhe
hand	:	pemine-
hard	:	poroh
he	:	iy
head	:	poru
headache	:	hirɲen
headrest (wooden)	:	huhuluɲ
to heal	:	kehien
to hear	:	hoɲ
heart	:	eri-
heartwood	:	puse-n key
hearth	:	kulwoh
hearth stones	:	perwir
heavy	:	kunun
her	:	iy
here	:	la
to hiccup	:	mwisku
to hide (intrans.)	:	pokrih
to hide (trans.)	:	akhuh
him	:	iy
to hit	:	kray, mum
to hold	:	halow
hole (in ground)	:	ɲay
hole (through s.t.)	:	mohoh
honeybee	:	menih
hot (food, weather)	:	darhan
house	:	um
housefly	:	nampoh
housepost	:	kendu
how?	:	pakha
how much/many	:	mathe
human being	:	hamar
hungry	:	tuɲ
to hunt (for game)	:	ku le kah
to husk (coconus)	:	oh
I, me, 1SG object	:	yew
I, 1SG subject	:	ye
insane	:	pwele
inside	:	lolhon
island	:	puto
itch(y)	:	pwiphen
intestines	:	kohu-
jaw	:	kepise- ~ kepse-

jellyfish	:	topuj
joint	:	tupuron ~ tupron
jungle	:	lolur
kava	:	kah
to kill	:	kray
knee	:	tupuron ke-
to know	:	kumahah
ladder	:	talkow
ladle	:	puniw
lagoon	:	khom pwah, lulu
last (in sequence)	:	muh
to laugh	:	hal
leaf	:	ho ~ hu
left (side)	:	kelmu
leg	:	ke-
leucoderma	:	pan
level	:	anaran
to lick	:	naham
to lie (deceive)	:	sisih
to lie down	:	en (dan)
lightning	:	hemel
lime (for betel chew)	:	kene-n ih
lime gourd	:	putu-n ih
lime spatula	:	ham
lip	:	musu-
liquid	:	honu
liver	:	pusas
living	:	mar pwen
lobster	:	kut lemuh
long	:	elwen
to look at	:	le
to look for	:	kukah
to lose (things)	:	luey
louse	:	kur
maggot	:	ul
to make	:	kronoh, yek
Malay apple	:	tay
male	:	muon
man	:	muon
mango	:	wey
many	:	talwan
March fly	:	nampoh an de
mast	:	para-m pele
men's house	:	luh
middle	:	peldien
milk (breast)	:	sus

mist	:	nala
monitor lizard	:	wari
monsoon, east	:	kup
monsoon, west	:	ahay
moon/month	:	pol
morning	:	dipahoh
Morning star	:	kumwaral
mosquito	:	nampih
moss	:	lumlum
mother (ref.)	:	hirno-
mother (voc.)	:	hina
mother's brother	:	wilye-
mottled (as snake)	:	nonow
mountain	:	mere
mouse	:	polu
mouth	:	puha-
mouth of river	:	pwha-n hen
much	:	talwan
muscle	:	kene-
mushroom	:	pol
mussel	:	pulkey
name	:	ŋaha-
name prefix (girls)	:	hi-
name prefix (men)	:	po-
name prefix (women)	:	pi-
narrow	:	kapih ~ kapweh
navel	:	maram puro-
near	:	pipir
neck	:	kehku-
needle	:	tiw
nest	:	umwo-n
net (casting)	:	kupwen
new	:	pahun
night	:	poŋ
nine	:	dardih
ninety	:	kothæn dalor æ soŋoh
nipple (of breast)	:	palmaran sus
nit	:	den kur
to nitpick	:	kukah kur
no/not	:	pwen
noon	:	peldien sen
nose	:	nen-
not yet	:	do popwen
oar (of boat)	:	pahaw
obsidian	:	peliw
occiput	:	kuphu-

octopus	:	kwir
odor	:	heḡin
old (animates)	:	pwaw
old (things)	:	mutan
one	:	dih
one hundred	:	sajar
one (of people)	:	moh
one (of bunches)	:	du
to open mouth	:	hah
opossum	:	lawar
outrigger boom	:	kayat
outrigger float	:	tam
paddle (of canoe)	:	haw
to paddle (a canoe)	:	suoh
pain	:	hirḡen
palm of hand	:	lolhon mine-
pandanus	:	duh, mon, pah, po
parent-in-law	:	mensow
passage (in reef)	:	kapah
path	:	tala-n
pearl	:	lur
to peel	:	suh
penis	:	pala-
person	:	hamar
perspiration	:	ehiro-
pig	:	pu
pillow	:	huhuluḡ
to pinch	:	tupur
place	:	pohen
to plait	:	rih
to plant	:	kulol
plant sp.	:	hun mehih, melel, nalar, nono, tanḡket (TP)
platform	:	parlan
to play	:	hawar
to pluck	:	alweh
point (of weapon)	:	kehe
pot (cooking)	:	kuh
to pour	:	halwuh
to press	:	hit
prong (of fish spear)	:	kehe, keneneh
to pull	:	hiw, kuluh
to pull out	:	alweh
to punch	:	kray
punting pole	:	do
pus	:	nanan

to push	:	son
putty nut	:	ehir
quadruped	:	kon ke-n dalor
quick	:	hemdeh
rafter	:	wihi
rain	:	paŋ
rat	:	polu
rattan	:	wesew
raw	:	pamar
rear	:	muh
to recline	:	en
to recognize	:	kumahah
to recover	:	kehien
red	:	hamaman
reef	:	mer
reflection	:	tamalwan
rib	:	kese-
right (side)	:	kalmara
ripe	:	laman
to rise (from sitting)	:	riseh
river	:	hen
road	:	tamra
to roast	:	krun
to rock	:	memelew
roof (of house)	:	pur-n-um
root	:	kuha-
rope	:	way
to rotate	:	pelseh
rotten	:	heʔir
to rub in	:	susluh
rudder	:	kuli
to run	:	kwilew
sago	:	epi
sago grub	:	keher
sago trough	:	yas
sail	:	pele
saliva	:	kanuh
salt	:	kepe
saltwater	:	des
salty	:	kepyun
sand (on beach)	:	papi
sandy soil	:	won
sap (of tree)	:	tapwan
sarong (man's)	:	talaw
satiated	:	tim
to say	:	pway

scar	:	pohen mwar
to scrape (coconut)	:	dewe
to scratch	:	kes
to scratch (an itch)	:	nakoh
sea anemone	:	mat
sea cucumber	:	ponay
sea (deep)	:	laman (kalow)
sea (shallow)	:	kompah
sea squirt	:	ponay
sea urchin	:	tal
seaweed	:	nay, pom
to see	:	le
seed	:	poru
to seek	:	kukah
seven	:	darluh
seventy	:	kothæn duluh æ soŋoh
to sew	:	sus
shadow	:	tamalwan
to shake	:	memelew
shallow	:	pwah
shame	:	mimiti
sharp	:	maran
to sharpen	:	semet
to shave	:	eh
she	:	iy
shoot (of taro)	:	tilen
to shoot	:	day
shore	:	leŋ
short	:	muhun
shoulder	:	dunuho- ~ dunho-
sibling (cross)	:	pise-
sibling (parallel)	:	dehi-
to sing	:	wohi
to sink	:	lol
to sit	:	kro
to sit down	:	kro ran
six	:	wonoh
six hundred	:	(ma-)hoŋor
sixty	:	kothæn duluh
skin	:	mune-
skinny	:	perperhen
skirt (grass)	:	neney
sky	:	war
to slap	:	hat
sleep (in eye)	:	posi
to sleep	:	merih

slitgong	:	deme
slow	:	dirpey
small	:	kapih ~ kapweh
to smell (s.t.)	:	khuj
smoke (of a fire)	:	osusun eh
to smoke (fish, meat)	:	krehis
smooth	:	anaran
snake	:	mwar
to sneeze	:	aciŋ
to sniff	:	khuj
to snore	:	ŋurlon
snot	:	dow
snout	:	non
soft	:	punhen
soil	:	dan
sour	:	nemulen
to speak	:	pway
spear (fish)	:	nah
spear head	:	peliw
spider	:	kapupow
spiderweb	:	welaw
to spill	:	halwuh
to spin	:	pelseh
spirit (ancestral)	:	tilel
spirit (of dead)	:	tamalwan
spirit (nature)	:	sinapu
to spit	:	kanuh
to split	:	ris
spoiled (as food)	:	heʔir
spotted (as dog)	:	nonow
spouse	:	pulu-
to squeeze (as fruit)	:	hit
squid (with shell)	:	mwamwak
squid (without shell)	:	nuy
to stab	:	sorur
starfish	:	taŋtaŋ
to stick to	:	poldan
straight	:	mwanen
stalk	:	para-
to stand up	:	riseh
star	:	muhemweh
starfish (red)	:	kak
to steal	:	pahana
to steer (canoe)	:	kuli
stench	:	heŋin
stick (piece of wood)	:	mamah

stick (for splitting)	:	kuol
still	:	mwahay
stone	:	pur
storm	:	kemit
story	:	miminih
stream	:	hen
stuck together	:	soh
to stumble	:	los
to submerge	:	nun
sucker (taro)	:	tilen
sugarcane	:	duh
sun	:	sin
surf	:	ewe
surface	:	parlan
to swallow	:	tandon
swamp (mangrove)	:	apwal
sweat	:	ehiro-
to sweep	:	titih
sweet	:	naman
sweet potato	:	kaukau (TP)
to swell	:	tama
to swim	:	yayay
swollen	:	tama
sword grass	:	penit
tail	:	kolpen
to talk in sleep	:	salpwap
tall	:	elwen
taro	:	kep, mah, peini
tattoo	:	teti
tears	:	honu-n moro-
to tell	:	pway
ten	:	soŋoh
tendon	:	wokan
termite	:	an
testicles	:	puo-
that	:	en ne
thatch	:	kar
them (dual)	:	how
them (plural)	:	hawah
them (trial)	:	horu
there	:	en ne
they (dual)	:	how
they (plural)	:	hawah
they (trial)	:	horu
thick (as a plank)	:	hurduŋ
thigh	:	dienpeliew



to think	:	haŋaŋah
thin (of animates)	:	perperhen
thin (of materials)	:	mekhen
thirty	:	kothæn dih æ soŋoh
this	:	la
thorn	:	pron
thousand	:	lalsan
three	:	duluh
three hundred	:	(ma-)duŋor
to throw	:	seneh
to throw away	:	seneh
thunder	:	orduŋ
tidal wave	:	dusu
tide (high)	:	wulu
tide (low)	:	mer tamah
to tie	:	how, sam
toad	:	taŋaw
tongue	:	kehme-
tongs	:	kip
tooth	:	lehe-
toothache	:	hirŋen
torch	:	tul
tree	:	key
tree sp.	:	deih, do, ew, melir, melyow, musip, pirew ~ prew, pow, ta, toh
to trip	:	los
trivet	:	perwir
Trochus shell	:	lal
true	:	duenan
to turn	:	pelseh
turtle (sea)	:	pon ~ pun
tusk	:	lehe-n pu
twenty (group)	:	kothæn
twenty (number)	:	kothæn dih
twins	:	moh
two	:	huoh
two (of bunches)	:	maha
two hundred	:	(ma-)huŋor
uncle (maternal)	:	wilye-
to understand	:	kumahah
up (direction)	:	war
to urinate	:	mimim
urine	:	mimie
us (dual)	:	dhow
us (plural)	:	dah
us (trial)	:	doru

vagina	:	khe-
vein	:	wokan
village	:	penu
vine	:	way
to vomit	:	mumur
vomit (n.)	:	mumur-o
to wake up	:	mamar
to walk	:	aseh
to want	:	aliŋ, pa
to wash	:	nol
water (fresh)	:	hen
wave (at sea)	:	melhu
way	:	tala-n
we (dual)	:	dho
we (plural)	:	dah
we (trial)	:	doru
to weep	:	deŋ
west	:	ahay
wet	:	homhun
whale	:	malwan
what?	:	ta
when?	:	keheh
where?	:	riha
to whet	:	semet
white	:	kohow
who?	:	se
why?	:	perta
wide	:	holalan
widowed	:	naw
widow	:	pi-naw
widower	:	po-naw
wind	:	ouh
wind (east)	:	dolaw
wind (strong)	:	kemit
wind (west)	:	ahay, lan
wing	:	peni-n
woman	:	pihen
wood	:	key
to work	:	majas
wound	:	mwar
wringer (for sago)	:	lo
to write	:	kelkel
yam	:	sueh ~ sweh, uh
to yawn	:	alimamaw
year	:	sasaw
yellow	:	loyaŋ

you, 2SG object	:	wey
you, 2SG subject	:	ku, we ~ wey ~ we
you (dual)	:	haw, oh
you (trial)	:	oru
younger	:	kapih ~ kapweh

**7.5. HISTORICAL PHONOLOGY.** As with Seimat, and all languages of the eastern Admiralty Islands, Pak shows canonical reduction of earlier words by loss of -V(C), resulting in a high incidence of monosyllabism for lexical bases, as shown in Table 7.8:

**Table 7.8:** Canonical reduction of Proto-Oceanic word forms in Pak

POC	Pak	
*ane	an	termite
*apaRat	ahay	west wind
*api	eh	fire
*kanase	kanas	mullet
*laje	lat	coral limestone
*lumut	lum-lum	moss, algae
*mamata	mamar	to wake up
*matiruR	merih	to sleep
*qatop	kar	thatch
*quloc	ul	maggot
*supi	suh	to peel
*tanjis	deŋ	to weep, cry

One known form shows an apparent retention of the final consonant, and another shows retention of the vowel preceding a final consonant: POC \*laman > *laman* ‘deep sea’, \*qulin > *kuli* ‘rudder of a boat’. The first of these may have lost the final consonant and then added the attributive suffix \*-ana with contraction of a sequence of like vowels, hence \*laman > \*lama-ana > \*lamana > *laman*, as it has the meaning ‘deep’ in a number of languages. However, no explanation is available for the retention of the last-syllable vowel in *kuli*.

In addition to a general ‘erosion from the right’ characteristic of the whole of the eastern Admiralties, Pak shows a number of changes to the POC consonants, as shown in Table 7.9:

**Table 7.9:** Pak reflexes of Proto-Oceanic consonants

POC	Pak
*pw	pw
*bw	?
*mw	mw
*w	w
*p	p- (in nouns), h (elsewhere)
*b	p
*m	m

*t	d-, -r-, -r
*d	n
*s	t-, s-, -s-
*n	n
*r	h
*dr	h
*l	l
*c	h
*j	t
*ñ	n
*y	y
*k	k-, Ø-, -Ø-
*g	k
*ŋ	ŋ
*q	Ø-, k-
*R	Ø, y

POC \*pw and \*bw are rare; no reflexes of \*bw were recorded, and in the single reflex of \*pw the consonant remained unchanged: \*kupwena > *kupwen* ‘casting net’.

A reflex of the POC labiovelar nasal \*mw is attested in five recorded forms, in each case as a word onset. In three of these there is no change: \*mwamwaki > *mwamwak* ‘immature squid with shell’, \*mwanene > *mwanen* ‘straight’, and \*mwata > *mwar* ‘snake’. In two others the original nasal is reflected as *mo-*, with fusion of the first stem vowel and the rounding of the nasal: POC \*mwaña > *mon* ‘pandanus sp.’, PADM \*mwalutV > *molur* ‘dove with white tail’.

POC \*w underwent no change in initial, or derived final position: \*waiwai > *wey* ‘mango’, \*waRoc > *way* ‘vine; rope, cordage’, \*kanawe > *kanaw* ‘seagull’, \*lawaq ‘spider’ > *we-law* ‘spiderweb’, \*mawap > *al-ma-maw* ‘to yawn’, \*qayawan > *ew* ‘banyan’, PADM \*watiV > *wari* ‘monitor lizard’.

In a single known example \*w was lost in derived final position: PADM \*macawa > *mat* ‘k.o. sea anemone’. In another example it appears as *h*: \*kawa > *kah* ‘kava’.<sup>3</sup>

A development that also involved \*w, but as a historically secondary word onset, is the addition of a labiovelar glide before original or derived rounded vowels, as in \*kuriap (> \*uria > \*uri > \*wuri > \*wiri) > *wihi* ‘dolphin’, \*onom > *wonoh* ‘six’, \*qone > *won* ‘sand’, \*qulua > *wulu* ‘high tide, flood’, \*Ropok > *wo-woh* ‘to fly’. Given examples like \*qasu > *osu-n* ‘gall (bladder)’, or \*quloc > *ul* ‘maggot’, it might be supposed that glide addition preceded loss of \*q-, but this is counterindicated by \*qulua > *wulu*.

<sup>3</sup> The problems with determining the history of kava in the Pacific are well-known (Crowley 1994). Nonetheless, the comparison of Paluai *kaw*, Lou *ka*, with Proto-Polynesian \*kawa ‘kava: *Piper methysticum*’ shows that the word \*kawa was present in the Admiralty Islands early enough for it to spread either by lineal transmission over time, or by borrowing, and in either of these processes the change of \*w (or /w/) to /h/ is irregular.

As elsewhere in much of the eastern Admiralties, POC \*p is reflected as a stop word-initially in nouns, but as /h/ word-initially in other word classes, and in non-initial position more generally:

\*p- > p- : \*padran > *pah* ‘pandanus’, \*pa-layaR ‘to sail’ > *pele* ‘a sail’, \*pano > *pan* ‘skin disease, leucoderma’, \*panua > *penu* ‘village’, \*paRa > *pay* ‘firewood shelf’, \*paRi > *pay* ‘stingray’, \*patu > *pur* (?) ‘stone’, \*boma > *pom* ‘k.o. seaweed’, \*poñu > *pon* ~ *pun* ‘the green turtle: *Chelonia mydas*’, \*pudi > *pun* ‘banana’, \*pulan > *pol* ‘moon, month’, \*puñun > *poj* ‘bunch, cluster’, \*pupu > *puh* ‘basket trap for fish’, \*puqaya > *puey* ‘crocodile’, PADM \*papaw > *pahaw* ‘oars for a boat’.

\*p- > h- : \*pañan > *hañ* ‘to feed’.

\*-p- > -h- : \*apaRat > *ahay* ‘west wind’. \*lipon > *lehe* (?) ‘tooth’, \*mipi > *mehe-meh* ‘to dream’, \*papine > *pihen* (< M) ‘woman’, \*qapatoR > *keher* ‘sago grub’, \*tapuRi > *dohu* ‘conch shell trumpet’, PADM \*papaw > *pahaw* ‘oars for a boat’.

\*-p- > -h : \*api > *eh* ‘fire’, \*katapa > *karah* ‘frigate bird’, \*mapu > *mah* ‘red taro’, \*ñapa > *ñoh* ‘fathom’, \*pupu > *puh* ‘basket trap for fish’, \*qapuR > *ih* (?) ‘lime’, \*qupi > *uh* ‘yam’, \*sa-ñapulug > *soñoh* ‘ten’, \*supi > *suh* ‘to peel’, \*tanipa > *denih* ‘sardine’, \*topu > *tuh* ‘sugarcane’.

Irregularities in this development include: \*panako (> \*pa-panako) > *pahana* (expected \*\*hahana) ‘to steal’, and \*nopuq > *nop* (expected \*\*noh) ‘stonefish.’

POC \*b is invariably reflected as Pak *p*: \*bakewak > *pew* ‘shark’, \*baluc > *pul* ‘dove’, \*banic > *peni-n* ‘wing’, \*batuk > *poru-* ‘head’, \*boñi > *poj* ‘night’, \*boRok > *pu* ‘pig’, \*buto- > *maram puro-* ‘navel’, \*koba > *kop* ‘hermit crab’, \*mokobu > *mokopu-* ‘grandchild’, \*Rabia > *epi* ‘sago’.

POC \*m is unchanged in Pak: \*mai > *moy* ‘to come’, \*mamata > *mamar* ‘to wake up, become conscious’, \*mapu > *mah* ‘red taro’, \*maqati ‘dry reef’ > *mer* ‘reef’, \*mata > *mara-n* ‘eye; sharp’, \*mataqu > *kal-mara* ‘right side’, \*mate > *mar* ‘to die; dead’, \*matiruR > *merih* ‘to sleep’, \*mimi > *mi-mim* ‘to urinate’, \*mipi > *mehe-meh* ‘to dream’, \*mokobu > *mokopu-* ‘grandchild’, \*muri > *muh* ‘back, rear part’, \*mutaq > *mu-mur* ‘to vomit’; \*d(r)amut > *ham* ‘lime spatula’, \*laman (> \*lama-na) > *laman* ‘deep blue sea’, \*lumut > *lum-lum* ‘moss, algae’, \*mamata > *mamar* ‘to wake up’, \*mimi > *mi-mim* ‘to urinate’, \*boma > *pom* ‘k.o. seaweed’, \*qalimañu > *kalmañ* ‘mangrove crab’, \*Rumaq > *um* ‘house’, \*saman > *tam* ‘outrigger float’, \*tama ‘father’, > *domo* ‘father (voc.)’, \*taumata > *hamar* ‘person, human being’, PADM \*mosimo > *musip* ‘a shore tree: *Casuarina equisetifolia*’.

POC \*t became Pak *d-*, *-r-* and *-r*, without respect to word-class. In other words, although the fusion of the unstressed prenominal article \*na with an obstruent base-initial consonant produced a split between POC \*p- > *p* in nouns, but \*p- > *h* in words of other classes, and \*-p- > *h* in words of all classes, a similar split between nasal grade and oral grade reflexes did not occur with \*t:

\*t- > d- : \*taci > *dehi-* ‘parallel sibling’, \*taliŋa > *dolŋo-* ‘ear’, \*talise > *deih* ‘a shore tree: *Terminalia catappa*’, \*tama > *domo-* ‘father’, \*tanipa > *denih* ‘sardine’, \*tanoq > *dan* ‘earth, ground’, \*tanjis > *deŋ* ‘to weep, cry’, \*tapuRi > *dohu* ‘conch shell (trumpet)’, \*taqe > *de* ‘feces’, \*tasik > *des* ‘saltwater’, \*tokalaur > *dolaw* ‘east wind’, \*tokon > *do* ‘punting pole’, \*tolu (> \*tolu-pu) > *duluh* ‘three’, \*topu > *duh* ‘sugarcane’, \*toRas > *do* ‘ironwood tree’.

\*-t- > -r- : \*batuk > *poru-* ‘head’, \*buto > *maram puro-* ‘navel’, \*katapa > *karah* ‘frigate bird’, \*mata > *mara-n* ‘eye; sharp’, \*mataqu > *kal-mara* ‘right side’ \*mate > *mar* ‘to die; dead’, \*matiruR > *merih* ‘to sleep’, \*natu > *noru-* ‘child’, \*pitaquR > *pirew* ‘a shore tree: *Calophyllum inophyllum*’, \*qate ‘liver’ > *eri-* ‘heart’, and PADM \*watiV > *wari* ‘monitor lizard’.

\*-t- > -r : \*kuRita > *kwir* ‘octopus’, \*kutu > *kur* ‘louse’, \*loto > *lor* ‘boil, abscess’, \*mamata > *mamar* ‘to wake up’, \*maqati ‘dry reef’ > *mer* ‘reef’, \*mutaq > *mu-mur* ‘to vomit’, \*mwalutV > *molur* ‘dove with white tail’, \*mwata > *mwar* ‘snake’, \*patu > *pur* (?) ‘stone’, \*qapatoR > *keher* ‘sago grub’, \*qarita > *ehir* ‘putty nut’, \*qatop > *kar* ‘thatch’, \*qutup ‘submerge to fill’ > *ur* ‘to fetch water’, \*salatoŋ > *nalar* ‘stinging nettle’, \*sa-ŋaRatus > *saŋar* ‘one hundred’, \*taumata > *hamar* ‘person, human being’.

A somewhat more questionable etymology is POC \*qatoluR > *eldu-n* ‘egg’, which requires the assumption that the medial vowel has syncopated (as in \*taliŋa > *dolŋo-* ‘ear’), that /d/ and /l/ have metathesized, and that this word contains a 3SG possessive pronoun, as in many other nouns that take direct possessive markers.

Exceptions to these generally regular changes include the following: \*taumata > *hamar* ‘person, human being’, and \*tina > *hina* ‘mother (voc.)’. These cases appear to reflect an intermediate stage in which \*t had become *dr-*, but why prenasalization would affect only these *t*-initial bases and not others is unclear.

Reflexes of POC \*d are rare. In the only unambiguous example in my data, it became n in final position: \*pudi > *pun* ‘banana’.

POC \*s became t- (through intermediate \*c-) in nouns, s- in words of other classes, and -s- or -s in words of any class:

\*s- > t : \*salan (> \*cala-na) > *tala-n* ‘path, road’, \*salaŋ > *tal* ‘spiny sea urchin’, \*saman > *tam* ‘outrigger float’, saŋa > *mo-taŋa-* ‘bifurcation, fork of a branch’, \*saŋasaŋa > *taŋtaŋ* ‘starfish’, \*soŋe ‘famine’ > *toŋ ~ tuŋ* ‘hungry’, \*suluq > *tul* ‘coconut leaf torch’.

\*s- > s : \*(i) sai > *se* ‘who?’, \*sa-ŋapuluq > *soŋoh* ‘ten’, \*sa-ŋaRatus > *saŋar* ‘one hundred’, \*sinaR ‘to shine’ > *sen* ‘sun’, \*sulu > *sul* ‘to burn’, \*supi > *suh* ‘to peel’.

\*-s- > -s- : \*asaŋ > *asa-n* ‘gills’, \*kasusu > *kosus* ‘coconut crab’, \*qasu > *osu-n* ‘gall (bladder)’, \*susu > *susu-* ‘female breast’, and PADM \*mosimo > *musip* ‘a shore tree: *Casuarina equisetifolia*’.

\*-s- > -s : \*kakas-i > *kes* ‘to scratch, claw’, \*kanase > *kanas* ‘mullet’, \*kasusu > *kosus* ‘coconut crab’, \*tasik ‘sea, saltwater’ > *des* ‘saltwater’.

Exceptions to these patterns include \*salatoŋ > *nalar* ‘stinging nettle’, with unexplained \*s > n, \*susu > *susu-* (expected \*\*tusu-) ‘female breast’, and \*kanus-i > *kanuh* ‘to spit; saliva’, \*talise > *deih* ‘a shore tree: *Terminalia catappa*’, both with /h/ for expected /s/.

POC \*n is unchanged in all positions: \*nai > *ne-ney* ‘traditional grass skirt’, \*nanaq > *nana-n* ‘pus’, \*natu > *noru-* ‘child’, \*ikan (> \*nika) > *ni* ‘fish’, \*niuR > *niv* ‘coconut tree’, \*nopus > *nop* ‘stonefish’, \*banic > *peni-n* ‘wing’, \*kanase > *kanas* ‘mullet’, \*kanawe > *kanaw* ‘seagull’, \*kanusi > *kanuh* ‘saliva; to spit’, \*mwanene > *mwanen* ‘straight’, \*onom (> \*ono-pu) > *wonoh* ‘six’, \*panako (> \*pa-panako) > *pahana* ‘to steal’, \*panua > *penu* ‘village’, \*papine > *pihen* (< met.) ‘female, woman’, \*tanipa > *denih* ‘sardine’, \*tina > *hina* ‘mother (voc.)’; \*ane > *an* ‘termite’, \*dranum > *hen* ‘water, river’, \*inum > *in* ‘to drink’, \*kani ‘to eat’ > *en* ‘food’, \*maRuqane > *muon* ‘male, man’, \*mwanene > *mwanen* ‘straight’, \*pano > *pan* ‘leucoderma’, \*qeno > *en* ‘to lie down, recline’, \*qone > *won* ‘sand’, \*sinaR ‘to shine’ > *sen* ‘sun’, \*tanoq > *dan* ‘earth, ground’.

POC \*r regularly became PAK *h* in all positions: \*raqaŋ > *ha-* ‘branch’, \*raun > *ho-* ‘leaf’, \*roŋoR > *hoŋ* ‘to hear’, \*rodrom > *hoh* ‘dark’, \*rua (> \*ruo-pu) > *huoh* ‘two’, \*ruyuŋ > *hu* ‘dugong’; \*kuriap > *wihi* ‘dolphin’, \*kuron > *kuh* ‘clay cooking pot’, \*matiruR > *merih* ‘to sleep’, \*muri > *muh* ‘behind, last’, \*ñoro > *noh* ‘tidal flow, current’, \*qarita > *ehir* ‘putty nut’.

POC \*dr merged with \*r as PAK *h*: \*d(r)amut > *ham* ‘lime spatula’, \*dranum > *hen* ‘water, river’, \*draŋi > *haŋ* ‘day’, \*draRaŋ > *hay* ‘blood’; \*padran > *pah* ‘pandanus’, \*rodrom > *hoh* ‘dark’. The one known exception, \*draraRV > *deh* ‘lionfish’, may be a loanword.

POC \*l became Pak *l* in all positions: \*laje > *lat* ‘coral limestone’, \*lako > *lah* (?) ‘to go’, \*lalak > *lal* ‘Trochus shell. \*laman (> \*lama-na) > *laman* ‘deep sea’, \*laqia > *ley* ‘ginger’, \*lawaq ‘spider’ > *we-law* ‘spiderweb’, \*lipon > *lehe-* (?) ‘tooth’, \*lolop > *lol* ‘to sink, to drown’, \*loto > *lor* ‘boil, abscess’, \*lumut > *lum-lum* ‘moss, algae’; \*baluc > *pul* ‘dove’, \*keli > *kel* ‘to dig’, \*kalika > *keli* ‘grouper’, \*kuluR > *kul* ‘breadfruit’, \*pa-layaR ‘to sail’ > *pele* ‘a sail’, \*pulan > *pol* ‘moon’, \*qalimaŋu > *kalmoy* ‘mangrove crab’, \*qalu > *el* ‘barracuda, sea pike’, \*qulin > *kuli* (?) ‘rudder of boat’, \*quloc > *ul* ‘maggot’, \*salan > *tala-n* ‘path, road’, \*salaŋ > *tal* ‘spiny sea urchin’, \*salatoŋ > *nalar* ‘stinging nettle’, \*sulu > *sul* ‘to burn’, \*suluq > *tul* ‘coconut leaf torch’, \*taliŋa > *dolŋo-* ‘ear’, \*talise > *deih* ‘a shore tree: *Terminalia catappa*’, \*tokalaur > *dolaw* ‘east wind’, \*tolu (> \*tolu-pu) > *duluh* ‘three’, and PADM \*mwalutV > *molur* ‘dove with white tail’, \*qulua > *wulu* ‘high tide, flood’.

There are two known cases in which \*l was lost: Exceptions: \*sa-ŋapuluq > *soŋoh* ‘ten’, and \*talise > *deih* ‘a shore tree: *Terminalia catappa*’.

POC \*c did not occur word-initially, and only two examples are known in intervocalic position, where it became *h*: \*ŋacan > *ŋaha-* ‘name’, \*taci > *dehi-* ‘parallel sibling’.

POC \*j (the nasal grade of \*s) which is also rare, became *t* in both known reflexes: \*kayajo > *kayat* ‘outrigger boom’, \*laje > *lat* ‘coral limestone’.

POC \*ñ became Pak *n* in all positions: \*mwaña > *mon* ‘pandanus sp.’, \*ñoro > *noh* ‘tidal flow, current’, \*ñu > *nu* ‘to bathe’; \*poñu > *pon* ~ *pun* ‘sea turtle’.

POC \*y generally remained unchanged: \*kayajo > *kayat* ‘outrigger boom’, \*kayu > *key* ‘tree, wood’, \*pa-layaR ‘to sail’ > *pele* ‘a sail’, \*puqaya > *puey* ‘crocodile’.

However, in three known examples it disappeared: \*qayawan > *ew* ‘banyan’, \*ruyuŋ > *hu* ‘dugong’. \*pa-layaR ‘to sail’ > *pele* ‘a sail’. The first of these exceptions appears to be due to sporadic contraction of the sequence \*aya > /e/, but no explanation is available for the other two.

POC \*k became Pak *k-* in word-initial position, seemingly without respect to word class, but sometimes disappeared and sometimes remained intact without storable conditions in medial and derived final positions:

\*k- > *k*: \*kakas-i (> \*kasi) > *kes* ‘to scratch, claw’, \*kalika > *keli* ‘grouper’, \*kana > *kan* ‘food’, \*kanase > *kanas* ‘mullet’, \*kanawe > *kanaw* ‘seagull’, \*kanus-i > *kanuh* ‘to spit; saliva’, \*kasusu > *kosus* ‘coconut crab’, \*katapa > *karah* ‘frigate bird’, \*kayajo > *kayat* ‘outrigger boom’, \*kayu > *key* ‘tree, wood’, \*keli > *kel* ‘to dig’, \*koba > *kop* ‘hermit crab’, \*koŋa > *kuŋ* ‘k.o. squarish fish’, \*kuluR > *kul* ‘breadfruit’, \*kupwena > *kupwen* ‘casting net’, \*kuro > *kuh* ‘clay cooking pot’, \*kuRita > *kwir* ‘octopus’, \*kutu > *kur* ‘louse’.

\*k > -Ø/-k- : \*bakewak > *pew* ‘shark’, \*tokalaur > *dolaw* ‘east wind’, but \*mokobu > *mokopu-* ‘grandchild’.

\*k > -Ø/-k : \*kalika > *keli* ‘grouper’, \*ikan (> (nika) > *ni* ‘fish’, \*panako (> \* pa-panako) > *pahana* ‘to steal’, \*tokon > *do* ‘punting pole’, but \*mwamwaki > *mwamwak* ‘squid with shell’.

In two known cases \*k- disappeared in initial position, and in one known case it is reflected as /h/, if the etymology is in fact valid: \*kani > *en* ‘to eat’, \*kuriap > *wihi* ‘dolphin’ (with subsequent homorganic glide addition and subsequent sporadic \*u > i); \*lako > *lah* ‘to go’.

No reflexes of POC \*g (the nasal grade of \*k) are known, but PADM \*g became Pak *k* in the only known reflex: PADM \*kagV > *kak* ‘Crown-of-thorns starfish’, a word that has become *kaŋ* in Paluai and Lou, but *kak* or *ka* in most others.

POC \*ŋ remained unchanged in all positions: \*ŋacan > *ŋaha-* ‘name’, \*ŋapa > *ŋoh* ‘fathom’, \*boŋi > *poŋ* ‘night’, \*draŋi > *haŋ* ‘day’, \*koŋa > *kuŋ* ‘k.o. squarish fish’, \*paŋan > *haŋ* ‘to feed’, \*puŋu > *poŋ* ‘bunch, cluster’, \*qalimaŋu > *kalmoy* ‘mangrove crab’, \*roŋoR > *hoŋ* ‘to hear’, \*sa-ŋapuluq > *soŋoh* ‘ten’, \*saŋasaŋa > *taŋtaŋ* ‘starfish’, \*soŋe ‘famine’ > *tuy* ‘hungry’, \*taliŋa > *dolŋo-* ‘ear’, \*taŋis > *deŋ* ‘to weep, cry’.

POC \*q usually disappeared, but is reflected as *k-* word-initially in a few words:



\*q > Ø : \*qalu > *el* ‘barracuda, sea pike’, \*qapuR > *ih* ‘lime (for betel)’, \*qarita > *ehir* ‘putty nut’, \*qasu- > *osu-n* ‘gall (bladder)’, \*qate ‘liver’ > *eri-* ‘heart’, \*qatolu > *eldu-n* ‘egg’, \*qayawan > *ew* ‘banyan’, \*qeno > *en* ‘to lie down, recline’, \*qone > *won* ‘sand’, \*quloc > *ul* ‘maggot’, \*qupi > *uh* ‘yam’, \*qutup ‘to submerge to fill’ > *ur* ‘to fetch water’; \*maqati ‘dry reef’ > *mer* ‘reef’, \*maRuqane > *muon* ‘male, man’, \*mataqu > *kal-mara* ‘right side’, \*pitaquR > *pirew* ‘a shore tree: *Calophyllum inophyllum*’, \*puqaya > *puey* ‘crocodile’, \*raqan > *ha-* ‘branch’, \*taqe > *de* ‘feces’, PADM \*qulua > *wulu* ‘high tide, flood’

\*q > k- : \*qalimaŋu > *kalmoy* ‘mangrove crab’, \*qapatoR > *keher* ‘sago grub’, \*qaqe > *ke-* ‘leg, foot’, \*qatop > *kar* ‘thatch’, \*qulin > *kuli* (?) ‘rudder of a boat’.

As is true in other languages of the eastern Admiralties, POC \*R sometimes became y, and sometimes disappeared without stateable conditions:

\*R > y : \*apparat > *ahay* ‘west wind’, \*draRaQ > *hay* ‘blood’, \*paRa > *pay* ‘firewood shelf’, \*paRi > *pey* ‘stingray’.

\*R > Ø : \*Rabia > *epi* ‘sago’, \*Rumaq > *um* ‘house’; \*boRok > *pu* ‘pig’, \*kuRita > *kwir* ‘octopus’, \*maRuqane > *muon* ‘male, man’, \*sa-ŋaRatus > *saŋar* ‘one hundred’, \*tapuRi > *dohu* ‘conch shell (trumpet)’, \*toRas > *do* ‘ironwood tree’.

The POC vowels generally remain unchanged in Pak with one major exception, namely that \*a has often assimilated to the palatal or labial quality of a vowel in the following syllable, although sometimes the change cannot be accommodated to this description. Examples of canonical assimilations in frontness/backness are as follows:

\*a > e/ \_\_Ci : \*api > *eh* ‘fire’, \*banic > *peni-n* ‘wing’, \*kakas-i (> \*kasi) > *kes* ‘to scratch, claw’, \*kalika > *keli* ‘grouper’, \*kani > *en* ‘to eat’, \*kayu > *key* ‘tree, wood’, \*laqia (> \*laya) > *ley* ‘ginger’, \*maqati ‘dry reef’ (> \*mati) > *mer* ‘reef’, \*matiruR > *merih* ‘to sleep’, \*nai > *ne-ney* ‘grass skirt’, \*papine > *pihen* (< met.) ‘female, woman’, \*paRi > *pey* ‘stingray’, \*puqaya > *puey* ‘crocodile’, \*qarita > *ehir* ‘putty nut’, \*qayawan (> \*qaiwa) > *ew* ‘banyan’, \*Rabia > *epi* ‘sago’, \*(i)sai > *se* ‘who?’, \*taci > *dehi-* ‘parallel sibling’, \*talise > *deih* ‘a shore tree: *Terminalia catappa*’, \*tanipa > *denih* ‘sardine’, \*tanjis > *deŋ* ‘to weep, cry’, \*tasik > *des* ‘saltwater’, \*waiwai > *wey* ‘mango’.

\*a > o/ \_\_Cu : \*batu > *poru-* ‘head’, \*kasusu > *kosus* ‘coconut crab’, \*natu > *noru-n* ‘child’, \*qalimaŋu > *kalmoy* ‘mangrove crab’, \*qasu > *osu-n* ‘gall (bladder)’, \*sa-ŋapuluq > *soŋoh* ‘ten’, \*tapuRi > *dohu* ‘conch shell (trumpet)’.

Although a partial assimilation in frontness and rounding has affected most examples of \*a in the stated environments, some words show no change to \*a where it would be expected, and others show a change which is not expected, as follows:

\*a > a/ \_\_Ci, u : \*d(r)amut > *ham* ‘lime spatula’, \*draŋi > *hay* ‘day’, \*kanus-i > *kanuh* ‘to spit; saliva’, \*mwamwaki > *mwamwak* ‘squid with shell’, \*qalimaŋu > *kalmoy* ‘mangrove crab’, PADM \*watiV > *wari* ‘monitor lizard’..

\*a > e/\_\_\_Cu : \*dranu > *hen* ‘water, river’, \*panua > *penu* ‘village’, , \*pitaquR > *pirew* ‘a shore tree: *Calophyllum inophyllum*’, \*qalu > *el* ‘barracuda, sea pike’. Additional examples of this change may be found in \*patu itV > *perw-ir* trivet (three stones that support the cooking pot)’, and the highly compressed form \*batu i low (‘stone of Lou’) > *peliw* ‘obsidian’, both of which are widespread in the eastern Admiralties (cp. POC \*patu > *pur* ‘stone’). In the case of \*dranum > *hen* ‘water, river’, it is possible that *honu-* ‘liquid’, found in *honu-n moro-* ‘tears’, and *honu-n niw* ‘coconut milk’, is a doublet that shows the expected reflex of \*a. Finally, the different treatment of \*a in \*draya > *hay* ‘blood’, or \*paRa > *pay* ‘firewood shelf’, next to \*kayu > *key* ‘tree, wood’, and \*laqia (> \*laya) > *ley* ‘ginger’, may indicate that low vowel assimilation in anticipation of \*i or \*y was complete before the change \*R > y took place.

A second vowel change which is was already noted in connection with the synchronic phonology, is the occasional variation of *o ~ u*, as in *ho ~ hu* ‘leaf, frond’, or *pon ~ pun* ‘the green turtle: *Chelonia mydas*’. This may account for two known instances in which \*a > u/\_\_\_Cu, namely \*baluc > *pul* ‘dove’, or \*patu > *pur* ‘stone’, both of which could have variants with *o* which were not recorded.

Other changes of \*a under conditions that are phonetically opaque are seen in: \*mai > *moy* ‘to come’, \*qapatoR > *keher* ‘sago grub’, \*qapuR > *ih* ‘lime (for betel)’, \*qaqe > *ke-* ‘leg, foot’, \*sawit > *tiw* ‘needle’, \*taliŋa > *dolŋo-* ‘ear’, and \*karamea > *kehme-* ‘tongue’.

Irregularities in the reflexes of other vowels are uncommon, and are often shared with other Admiralty languages. Among those noted are \*kuriap > *wihi* ‘dolphin’, with irregular fronting of the first vowel also seen in the cognate forms in Lindrou, Sori, and Loniu, among others, and \*lipon > *lehe-* ‘tooth’, with the same vocalic irregularities (assuming that the etymology is valid) that are found throughout the eastern Admiralties.

## 7.6. PAK REFLEXES OF PROTO-OCEANIC AND PROTO-ADMIRALTY

	POC	PEADM	PAK	
001.	*ane	*ane	an	termite
002.	*apaRat	*apaya	ahay	west wind
003.	*api	*api	eh	fire
004.	*asaŋ	*asa	asa-n	gills
005.	*bakewak	*bakewa	pew	shark
006.	*baluc	*balu	pul	dove
007.	*banic	*bani-	peni-n	wing
008.		*bapawV	hahaw	oars
009.	*batuk	*batu	poru-	head
010.	*boma	*boma	pom	k.o. seaweed
011.	*boŋi	*boŋi	poŋ	night
012.	*boRok	*boo	pu	pig
013.	*buto	*buto-	maram puro-	navel
014.	*d(r)amut	*dramu	ham	lime spatula

015.	*dranum	*dranu	hen	water, river
016.	*draŋi	*draŋi	haŋ	day
017.		*draraRV	deh	lionfish
018.	*draRaq	*draya	hay	blood
019.	*ia	*ia	iy	3SG, s/he
020.	*ikan	*nika	ni	fish
021.	*inum	*inu	in	to drink
022.		*kagV	kak	spiny starfish
023.	*kakas-i	*kasi	kes	to scratch, claw
024.	*kali	*keli	kel	to dig
025.	*kalika	*kalika	keli	grouper
026.	*kanan	*kana	kan	food
027.	*kanase	*kanase	kanas	mullet
028.	*kanawe	*kanawe	kanaw	seagull
029.	*kani	*kani	en	to eat
030.	*kanus-i	*kanus-i	kanuh	to spit; saliva
031.	*karamea	*karamea	kehme	tongue
032.	*kareŋas	*kareŋ	karen	red parrot
033.	*kasusu	*kasusu	kosus	coconut crab
034.	*katapa	*katapa	karah	frigate bird
035.	*kayajo	*kayaco	kayat	outrigger boom
036.	*kayu	*kayu	key	tree, wood
037.	*koba	*koba	kop	hermit crab
038.	*koŋa	*koŋa	kuŋ	k.o. squarish fish
039.	*kuluR	*kulu	kul	breadfruit
040.	*kupwena	*kupwena	kupwen	casting net
041.	*kuriap	*kuria	wihi	dolphin
042.	*kuron	*kuro	kuh	clay cooking pot
043.	*kuRita	*kuita	kwir	octopus
044.	*kutu	*kutu	kur	louse
045.	*laje	*lace	lat	coral limestone
046.	*lako	*lako	lah	to go
047.	*lalak	*lala	lal	Trochus shell
048.	*laman	*lama-na	laman	deep sea
049.	*laqia	*laya	ley	ginger
050.	*lawaq	*lawa	we-law	spider; spiderweb
051.	*lipon	*lipo-	lehe-	tooth
052.	*lolop	*lolo	lol	to sink, to drown
053.	*loto	*loto	lor	boil, abscess
054.	*lumut	*lumu	lum-lum	moss, algae
055.		*macawa	mat	k.o. sea anemone
056.	*mai	*may	moy	to come
057.	*mamata	*mamata	mamar	to wake up
058.	*mapu	*mapu	mah	red taro
059.	*maqati	*mati	mer	dry reef; reef
060.	*maRuqane	*mwane	muon	male, man

061.	*mata	*mata-	mara-n	eye; sharp
062.	*mataqu	*matau	kal-mara	right side
063.	*mate	*mate	mar	to die; dead
064.	*matiruR	*matiru	merih	to sleep
065.	*mawap	*mawa	al-ma-maw	to yawn
066.	*mimi	*mimi	mi-mim	to urinate
067.	*mipi	*mepi-mepi	mehe-meh	to dream
068.	*mokobu	*mokobu	mokopu-	grandchild
069.		*mosimo	musip	casuarina
070.	*muri	*muri	muh	back, rear part
071.	*mutaq	*muta	mu-mur	to vomit
072.		*mwalutV	molur	dove with white tail
073.	*mwamwaki	*mwamwaki	mwamwak	squid with shell
074.	*mwanene	*mwanene	mwanen	straight
075.	*mwaña	*moña	mon	pandanus sp.
076.	*mwata	*mwata	mwar	snake
077.	*nai	*nay	ne-ney	grass skirt
078.	*nanaq	*nana	nana-n	pus
079.	*natu	*natu	noru-	child
080.	*niuR	*niw	niw	coconut tree
081.	*nopuq	*nopu	nop	stonefish
082.	*ñoro	*ñoro	noh	tidal flow, current
083.		*ñu	nu	to bathe
		*ñu-ñu	nun	to dive, submerge
084.	*ñui	*ñui	ñuy	shellless squid
085.	*ŋacan	*ŋara	ŋaha-	name
086.	*ŋapa	*ŋapa	ŋoh	fathom
087.	*onom	*ono	wonoh	six
088.	*padran	*badra	pah	pandanus
089.	*pa-layaR	*baleya	pele	to sail; a sail
090.	*panako	*pa-panako	pahana	to steal; thief
091.	*pano	*bano	pan	leucoderma
092.	*panua	*banua	penu	village
093.	*paŋan	*paŋa	haŋ	to feed
094.	*papine	*bepine	pihen	female, woman
095.		*paunV	pahun	new
096.	*paRa	*baya	pay	firewood shelf
097.	*paRi	*bay	pey	stingray
098.	*patu	*batu	pur	stone
098.	*pitaquR	*bitau	pirew	<i>Calophyllum</i> spp.
100.	*poñu	*boñu	pon ~ pun	sea turtle
101.	*pudi	*budri	pun	banana
102.	*pulan	*bula	pol	moon, month
103.	*puŋun	*buŋu	poŋ	bunch, cluster
104.	*pupu	*bupu	puh	basket trap for fish
105.	*puqaya	*buaya	puey	crocodile

106.	*qalimanju	*qalimanju	kalmonj	mangrove crab
107.	*qalu	*qalu	el	barracuda, sea pike
108.	*qapatoR	*qapeto	keher	sago grub
109.	*qapuR	*qapu	ih	lime (for betel)
110.	*qaqe	*qaqe-	ke-	leg, foot
111.	*qarita	*qarita	ehir	putty nut
112.	*qasu	*qasu-	osu-n	gall (bladder)
113.	*qate	*qate	eri-	liver; heart
114.	*qatoluR	*qatolu	eldu-n	egg
115.	*qatop	*qato	kar	thatch
116.	*qayawan	*qaiwa	ew	banyan
117.	*qeno	*qeno	en	to lie down, recline
118.	*qone	*qone	won	sand
119.	*qulin	*quli	kuli (?)	rudder of boat
120.	*quloc	*qulo	ul	maggot
121.		*qulua	wulu	high tide, flood
122.	*qupi	*qupi	uh	yam
123.	*qutup	*qutu	ur	to fetch water
124.	*raqan	*dra-	ha-	branch
125.	*raun	*drau	ho-	leaf
126.	*rodrom	*roro	hoh	dark
127.	*roŋoR	*roŋo	hoŋ	to hear
128.	*rua	*ruo-pu	huoh	two
129.	*ruyuŋ	*druyu	hu	dugong
130.	*Rabia	*yabia	epi	sago
131.	*Ropok	*opo	wo-woh	to fly
132.	*Rumaq	*uma	um	house
133.	*(i) sai	*(i)sey	se	who?
134.	*salan	*cala-na	tala-n	path, road
135.	*salaŋ	*cala	tal	spiny sea urchin
136.	*salatoŋ	*nalato	nalar	stinging nettle
137.	*saman	*cama	tam	outrigger float
138.	*saŋa	*caŋa	mo-taŋa-	bifurcation
139.	*sa-ŋapuluq	*sa-ŋapulu	soŋoh	ten
140.	*sa-ŋaRatus	*saŋat	saŋar	one hundred
141.	*saŋasaŋa	*caŋacaŋa	taŋtaŋ	starfish
142.	*sapa	*capa	ta	what?
143.	*sawit	*cawi	tiw	needle
144.	*sinaR	*sina	sen	to shine/sun
145.	*soŋe	*coŋe	toŋ	famine; hungry
146.	*sulu	*sulu	sul	to burn
147.	*suluq	*culu	tul	coconut leaf torch
148.	*supi	*supi	suh	to peel
149.	*susu	*susu	susu-	female breast
150.	*taci	*dari	dehi-	parallel sibling
151.	*taliŋa	*daliŋa	dolŋo-	ear

152.	*talise	*dalise	deih	<i>Terminalia catappa</i>
153.	*tama	*tama-	domo-	father
154.	*tanipa	*danipa	denih	sardine
155.	*tanoq	*dano	dan	earth, ground
156.	*tanjis	*tanji	deŋ	to weep, cry
157.	*tapuRi	*dapuy	dohu	conch shell (trumpet)
158.	*taqe	*daqe	de	feces
159.	*tasik	*dasi	des	saltwater
160.	*taumata	*damata	hamar	person, human being
161.	*tina	*tina	hina	mother (voc.)
162.	*tokalaur	*tokalaw	dolaw	east wind
163.	*tokon	*doko	do	punting pole
164.	*tolu	*tolu-pu	duluh	three
165.	*topu	*dopu	duh	sugarcane
166.	*toRas	*doa	do	ironwood tree
167.	*waiwai	*wewey	wey	mango
168.	*waRoc	*wayo	way	vine; rope, cordage
169.		*watiV	wari	monitor lizard

**7.7. THE LINGUISTIC POSITION OF PAK.** As noted earlier, the position of Pak-Tong within the larger Admiralty subgroup of Oceanic languages has been open to question. Blust (1978:34) considered Pak-Tong a descendent of Proto-Southeast Admiralty which, along with Proto-Manus, was seen as one of two immediate descendants of Proto-Eastern Admiralty (PEADM). In his landmark treatment of the Austronesian languages of western Melanesia, Ross (1988:424, fn. 112) acknowledged that the matter remained unsettled, but he tentatively assigned Pak-Tong to the Manus Network, and suggested that the innovations it shares with languages of what he called the ‘South-East Admiralties Network’, are products of diffusion, specifically from Lenkau. On reconsidering this question I was initially inclined to agree with Ross, but then, as I pursued it further, the evidence began to weigh increasingly in favor of a Southeast Admiralties (SEA) connection. The following data supports this conclusion.

**7.7.1. Replacement innovations in the lower numerals.** It is well known that numerals may be borrowed, but low numerals (often stated as 1-3, but reasonably extendable to 5, given the number of digits on a human hand, and the crucial role of finger counting in numeral systems worldwide) rarely are part of the loan vocabulary. The numeral systems given for the languages cited in this sketch show clearly that 2 through 5 reflect POC \*rua, \*tolu, \*pat, and \*lima, in each case with a suffix \*pu that almost certainly is a fossilized numeral classifier reflecting POC \*puaq ‘fruit’ (hence \*ruo-pu, \*tolu-pu, \*pa-pu, \*lima-pu). That these are retentions from POC is important, since it allows us to be certain that cognate sets shared by the SEA languages that depart from them must be innovations. More particularly, although PEADM \*sipV ‘one’ is shared by languages reaching from at least Sori to Lenkau, the SEA languages as a group share innovations for ‘four’ and ‘five’ apart from all other languages, as seen in **Table 7.10**:

**Table 7.10:** Innovations in the numerals for ‘four’ and ‘five’ in Southeast Admiralties languages

	one	two	three	four	five
PEADM	*sipV	*ruo-pu	*tolu-pu	*pa-pu	*lima-pu
PSEA	*sip	*ruop	*tulup	*talət	*ɲuran
Pak	dih	huoh	duluh	dalor	nuron
Lou	sip	ruep	tellip	tolət	ɲuran
Lenkau	sip	huep	trilip	trolotr	ɲuran
Penchal	səw	lup	tulup	talət	ruɾən
Nauna	səw	ruh	tuluh	talət	tutən

It is clear that Pak *dalor* is cognate with the other forms given here, since \*t > d-, -r, and the last syllable vowel of the proto-form was either mid-back or mid-central. The word for ‘five’ is more problematic, since Lou and Lenkau support a proto-form with an initial velar nasal, while Pak has *n*, which is not a regular reflex of \*ɲ. However, if the Penchal word is cognate, its initial consonant is also irregular, so there may have been taboo reasons for irregularly altering this form in more than one language. In any case, at the very least (making allowances for erratic vowel correspondences throughout the eastern Admiralties), Pak *dalor* regularly corresponds to the forms in the other languages, and it unlikely to be a loan from any of them.

**7.7.2. Exclusively shared innovations in the color terms.** Another semantic domain in which Pak shares more than one term with SEA languages, but not with any of the languages of Manus for which data is available, is in the color terminology. In general I collected terms for the basic triad of black : white : red, and then yellow and blue/green. The relevant terms for this set appear in Table 7.11:

**Table 7.11:** Innovations in the color terms in Southeast Admiralties languages

	black	white	red	yellow	blue/green
PEADM	*roketanV	?	*ramanV	*aŋoanV	*kawarina
PSEA	*karan	*korow	*ramraman	*aŋoan	*arawin
Pak	akhan	kohow	hamaman	loyaŋ	hohoan
Lou	karan	koroun	ramraman	montl	arawIn
Lenkau	kahan	kohow	hamaman	aŋoan	tahin
Penchal	coket(an)	kaləw(an)	lolom(on)	patanoi	lam
Nauna	coketan	laŋan	raraman	aŋoan	cec

A PEADM reconstruction is not available for ‘white’, but the Proto-Manus (PM) term for ‘white’ was \*parilenV (Nali *pallen*, Ere *paren*, Loni *pi?en*, , Bipi *paxilen*, Leipon *peren*, Titan *pareren* vs. Likum *pellen*, Levei *pelleŋ*, Lindrou *bellen*, Sori *bihireŋ*), while reflexes of \*karan and \*korow have not been reported outside the collection of languages cited here, and these

suggest that Pak is not only a member of the Southeast Admiralty group, but that it is most closely related to Lou, Lenkau and Penchal.

**7.7.3. Exclusively shared innovations in body-part terminology.** Still another semantic domain that is resistant to borrowing, and yields comparisons linking Pak with other descendants of Proto-Southeast Admiralties is body-part terminology, as seen in Table 7.12, where obligatorily possessed bases are given in their 3SG phonemic shapes:

**Table 7.12:** Innovations in body-part terminology in Southeast Admiralties languages

	penis	bone	flesh
PEADM	*quti-	*drui-	?
PSEA	*pala-	*peteri-	*kanen
Pak	pala-n	perhi-	kene-n
Lou	pala-n	peteri-	kanIn
Lenkau	----	pirihi-	kene-n
Penchal	----	tuin	kanen
Nauna	pal	cin	kanən

This set of terms is small, but contains members that are rarely borrowed among speakers of preliterate languages. Although PADM had \*pisiko ‘flesh’, and a PEADM term cannot yet be reconstructed, many of the languages of eastern Manus reflect \*caŋi- in this meaning, so all three of the above terms clearly link Pak with the Southeast Admiralty group, and at least \*pala- is a replacement innovation (the same is harder to say for \*peteri- ‘bone’, since Penchal *tui-n* and Nauna *ci-n* may reflect \*drui-).

Weighing against this evidence is Pak *pusas*, Ahus *brusasa-*, Loniū *pusasa-*, Papitalai *brusas* ‘liver’, and Pak *dow*, Loniū *drow*, Papiptalai *ndow* ‘snot’, which suggest a connection between Pak and the languages of eastern Manus.

**7.7.4. Other proposed lexical innovations pointing to Pak as a SEA language.** In addition to the seven exclusively shared lexical innovations cited above, other innovations that connect Pak to the Southeast Admiralty group rather than to eastern Manus include the following:

8. POC, PADM \*tubu-, but Pak, Lenkau, Penchal *pwapwaw*, ‘grandfather’ (distinct from reflexes of \*papu, found in a number of the languages of eastern Manus in the same meaning).

9. POC \*tuRu, PADM \*tu, PEADM \*dru, but Pak *kendu*, Lou *kIndru* ‘housepost’ (reflexes of \*dru in Lenkau, Penchal and Nauna).

10. POC, PADM, PEADM \*koro, but Pak *penu*, , Lou, Lenkau *ponu*, Penchal, Nauna *panu* ‘village’. This is a clear reflex of POC \*panua ‘inhabited territory’, but with a distinctive semantic shift.



11. PEADM \*kapopV, but Pak *pakayaw*, Nauna *pakiaw* ‘flying fish’.
12. Proto-Manus \*bruleyV, but Pak, Penchal, Nauna *polu* ‘rat’.
13. Pak *apuh*, Lenkau *apuh*, Lou *apur* ‘to boil, as food’ (PSEA \*apur; unknown anywhere in Manus). Penchal *əp*, Nauna *əh* ‘to boil’ may also be related.
14. Pak *aseh*, Lenkau *asek* ‘to walk’ (PSEA form unclear, since Pak /h/ : Lenkau /k/ cannot be assigned to any known PSEA consonant. However, the probability that this is not a chance resemblance is increased by the same correspondence appearing in comparison 34; unknown anywhere in Manus).
15. Pak *darhan*, Nauna *tatahan* ‘hot’ (PSEA \*tatahan; unknown anywhere in Manus).
16. Pak *deh*, Penchal *rə* ‘far’, Nauna *tə* (PSEA \*dreh; unknown anywhere in Manus).
17. Pak *haŋaŋah*, Lou *aŋar*, Penchal, Nauna *haŋal* (PSEA \*haŋar ‘to think’; unknown anywhere in Manus). The Pak form presumably shows internal reduplication from earlier *haŋah*.
18. Pak *heŋin*, Lenkau, Penchal *taŋin*, Nauna *caŋin* ‘odor; smelly’ (PSEA \*draŋin; unknown anywhere in Manus).
19. Pak, Lenkau *how* ‘to tie, bind’ (PSEA \*how; unknown anywhere in Manus).
20. Pak *ihir*, Lou *ruit* (< met.), Nauna *ulit* ‘to ask a question’ (PSEA \*urit; unknown anywhere in Manus).
21. Pak, Lenkau, Penchal, Nauna *kel*, Lou *kil* ‘canoe’ (PSEA \*kel; unknown anywhere in Manus).
22. Pak *kepeun* ‘salty’, Lou *kapeun* ‘bitter’ (PSEA \*kape-un; unknown anywhere in Manus).
23. Pak, Penchal, Nauna *kip* ‘tongs for picking up hot coals’ (unknown anywhere in Manus)
24. Pak *kumwaral*, Lou *komtal*, Penchal *kontal* ‘Morning star’ (PSEA \*kumwatal?; unknown anywhere in Manus).
25. Pak *kunun*, Lenkau, Nauna *konun*, Lou *(kun)kunun* ‘heavy’ (PSEA \*kunun; unknown anywhere in Manus).
26. Pak, Lenkau *lolon*, Lou *lalun*, Penchal *lalon* ‘inside’ (PSEA \*lalon; unknown anywhere in Manus).
27. PAK *lolur*, Nauna *lolout* ‘forest’ (PSEA \*lolout; unknown anywhere in Manus). Evidence from a broad range of Austronesian languages suggests that this probably was PSEA \*lo-lout ‘in the forest’, with the ‘adhesive locative’ (Blust 1989).

28. Pak *luh*, Nauna *lau* ‘men’s house’ (PSEA \**laur*; unknown anywhere in Manus).
29. Pak *mahah*, Penchal *mahal*, Nauna *mahal-an* ‘to know, be expert’ (PSEA \**mahar*; unknown anywhere in Manus).
30. Pak *mohoh*, Penchal *molop*, Nauna *moloh* ‘hole through an object, as wall, side of canoe, etc.’ (PSEA \**morop*; unknown anywhere in Manus). Lenkau *morohop* may also be related, but contains an additional syllable that is not supported by other witnesses.
31. Pak *nakoh*, Penchal *ñakup* ‘to scratch an itch’ (PSEA \**ñakop*; unknown anywhere in Manus).
32. Pak *ouh*, Lou *aur*, Lenkau *aw*, Penchal *aul*, Nauna *eul* ‘wind’ (PSEA \**aur*; unknown anywhere in Manus).
33. Pak *pamar*, Lou *pamat*, Lenkau *pa-pamat* ‘raw’ (PSEA \**pamat*). The last syllable of this word evidently reflects POC \**mataq* ‘raw’, but the added first syllable makes it unique.
34. Pak *pelseh*, Lenkau *pelsek* ‘to turn, as the head’ (unknown anywhere in Manus).
35. Pak *poldien* (< met.), Lou *perelian*, Nauna *perilian* ‘middle’ (PSEA \**petilian*, obtained in the expression ‘noon’ = ‘middle of the day’; unknown anywhere in Manus).
36. Pak *puh*, Nauna *pəh* ‘fork of outrigger boom’ (PSEA \**pəh*; unknown anywhere in Manus).
37. Pak *pwele*, Lou *pwa-pwali*, Lenkau *pwam-pwali-an* ‘crazy, insane’ (PSEA \**pwali*; unknown anywhere in Manus).
38. Pak *son*, Penchal *cun*, Nauna *co-coun* ‘to push’ (PSEA \*(cs)oun; unknown anywhere in Manus).
39. Pak *tilel*, Lou *pwali silal*, Penchal *ciləl*, Nauna *cilal* ‘ancestral spirit’ (= Tok Pisin *tambaran*; PSEA \**cilal*). Kuruti, Ere *sinel*, Leipon *cinel*, Loniu *cinen* ‘ancestral spirit’ appear related, but systematically differ in having medial *-n-*, as opposed to *-l-* in the Southeast Admiralties.
40. Pak *topuŋ*, Penchal, Nauna *capoŋ* ‘jellyfish’ (PSEA \**capoŋ*; unknown anywhere in Manus).

In addition to these ‘clean’ comparisons, a number of others are confined to SEA languages and one or two languages at or near the eastern end of Manus. Particularly striking is the distribution of reflexes of \**paŋ* ‘rain’, attested in all SEA languages for which I have data (Pak, Lou, Lenkau, Penchal, Nauna) and in Leipon, spoken on Pityilu island, off the northeast coast of Manus, but nowhere else. Since reflexes of POC \**qusan* ‘rain’ are found in several languages of Manus, it is unlikely that \**paŋ* (or \**paŋV*) has an antiquity greater than PSEA, but one is left wondering under what conditions a word for ‘rain’ would be borrowed. Other comparisons of this type include reflexes of \**cim* ‘to buy’ in Pak, Nauna and Loniu, of \**mwaray* ‘calm, still, of the surface of water’ in Pak, Lou, Nauna and Loniu, of \**sus* ‘to sew sago leaves for thatch’ in Pak,

Lenkau, Penchal, Nauna and Bipi (assuming that Bipi was formerly in eastern Manus), of \**maŋas* ‘to work’ in Pak, Lou, Nauna and Leipon, of \**los* ‘to fall’ in Pak, Lou, Lenkau, Penchal and Nali, of \**luey* ‘to drop’ in Pak, Lou and Ahus, of \**mocan* ‘old (of things)’ in Pak, Lou, Lenkau, Penchal, Nauna and Titan, of \**tuenan* ‘true, correct’ in Pak, Lenkau and Loniu, of Pak *nay*, Lou *na*, Lenkau *nay*, Penchal *ñay* and Ere *nay* ‘kind of edible green seaweed’, and a number of others. The concentration of such lexical distributions in languages of the Southeast Admiralties, with additional forms in one or two languages of eastern Manus, strongly suggests that the languages of the southeastern islands (the ‘Matankor’ of Mead 1930) had a strong contact influence on those of eastern Manus (the ‘Usiai’ of Mead 1930) and its immediate satellites. Even where they represent semantic categories that are rarely subject to contact influence, the kinds of words that appear to be borrowed in eastern Manus from SEA languages tend to have referents that are readily observable or easily conceived (as ‘rain’, or ‘to buy’), while those that could have been borrowed but were not, would likely be more difficult to describe in contact situations (as ‘to push’, ‘to boil food’, ‘to ask a question’, ‘to know’, ‘to think’, or ‘inside’).

These 40 lexical comparisons do not constitute an overwhelming body of evidence linking Pak with the Southeast Admiralty group. However, some of them are unambiguous replacement innovations, and since they are the product of searching limited data in a relatively short time, it may be expected that many more comparisons of similar quality are yet to be found. Moreover, preliminary investigation suggests that cognate sets shared exclusively by Pak with languages of the southeast Admiralties are considerably more numerous than those that connect Pak to the East Manus Network. Finally, despite the suggestion by Ross (1988:424, fn. 112) that Pak favors Lenkau in exclusively shared lexical distributions, the evidence found here suggests that Pak (and the closely related Tong, for which I have no data) is about equally distant from all languages of the southeast Admiralties, a pattern of resemblance that weighs against borrowing as a plausible explanation of the comparisons cited here.