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PROTO-KIMBE: A NEW ANALYSIS

WARD H. GOODENOUGH

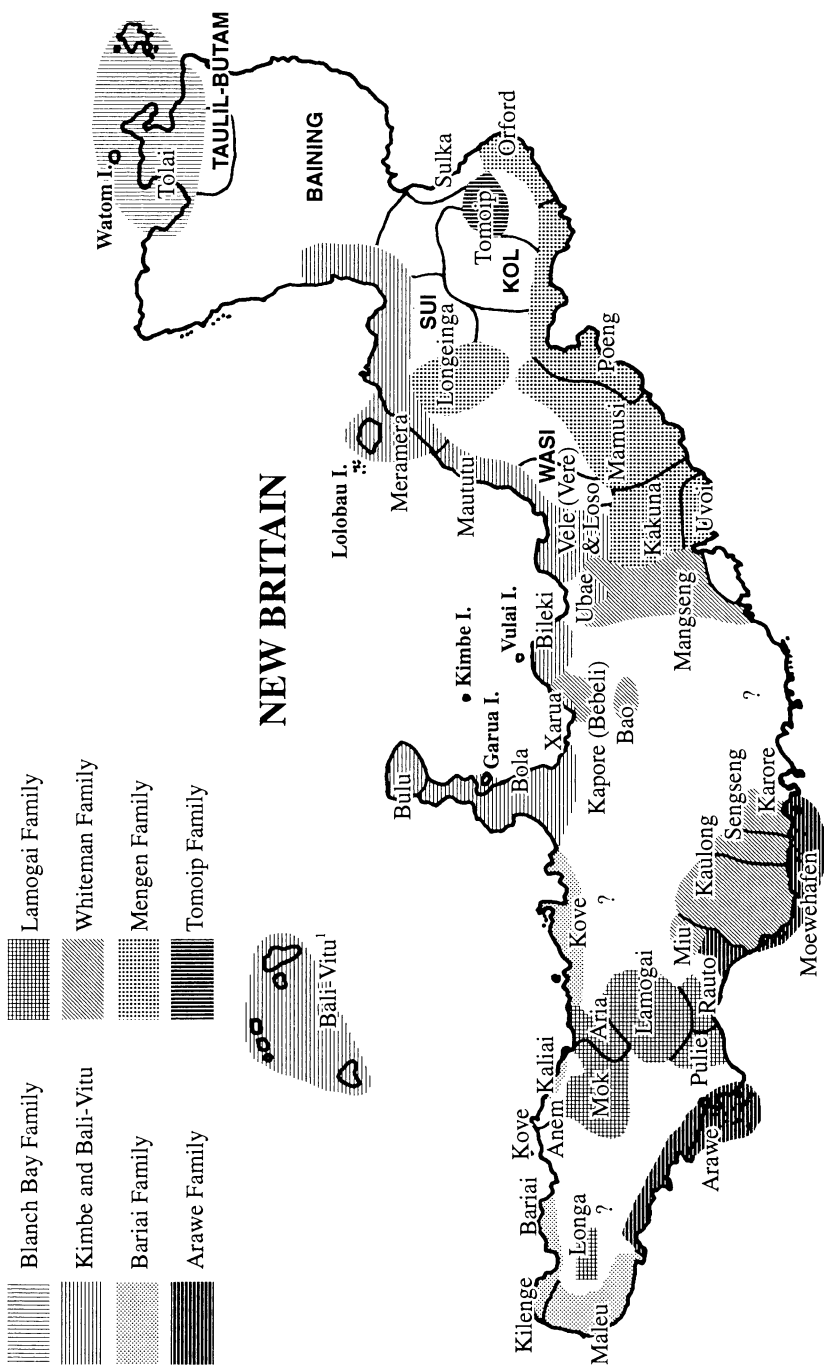
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Using data gathered by Chowning, Valentine, and Goodenough in 1954, a reconstruction is undertaken of Proto-Kimbe, an Austronesian group of languages in North Central New Britain. It significantly revises the reconstruction by Johnston (1982). It confirms that Bali and Vitu, included by Johnston, must be excluded from the Kimbe group, though remaining closely related to it. This analysis shows that both the Kimbe languages and Bali and Vitu have had complicated histories, involving extensive borrowing from another Austronesian language by Bali and the merging of two dialect communities in the formation of what became Proto-Kimbe. This analysis also provides evidence that Proto-Malayo-Polynesian *p and *b had not merged in Proto-Oceanic as *p nor had *d and *D merged as Proto-Oceanic *r, as has been hitherto assumed, although such merger is widely attested in many Oceanic languages.

1. INTRODUCTION. A reconstruction of Proto-Kimbe has been undertaken by Raymond Johnston (1982). He included the dialects spoken on Bali and Vitu in the French Islands for comparison with the Willaumez and Nakanai (his Meramera and Nakanai) languages spoken on the central north coast of New Britain Island in Papua New Guinea (see map). It is now evident that earlier inclusion of Bali and Vitu in the Kimbe group of languages (Chowning 1969) is no longer tenable (Chowning 1986). The Kimbe languages share phonological innovations not found in Bali and Vitu (see discussion in 6.5). Johnston's reconstructions of Proto-Kimbe that are based on evidence from Bali or Vitu and from either the Willaumez or Nakanai languages alone must be excluded from Proto-Kimbe, at least on the basis of internal evidence. For this reason, I have excluded 24 of his 86 reconstructions. Most of them reappear here in lower level reconstructions, however. A number of Johnston's reconstructions are based, moreover, on Bali forms that are innovations peculiar to Bali (see 6.5). All of my 282 reconstructions for Proto-Kimbe include cognates from at least one Willaumez and one Nakanai language, Willaumez and Nakanai constituting the two major subgroupings, based on shared innovations, within the Kimbe group of languages (see figs. 1 and 2).

This reconstruction of Proto-Kimbe (PK_B) follows on earlier reconstructions of Proto-Willaumez (PW_M) (Goodenough 1961a) and Proto-Nakanai (PN_K) (Goodenough 1996). The results of these two endeavors, reworked, have been incorporated into the reconstruction of Proto-Kimbe presented here.

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¹Bali-Vitu is no longer included in the Kimbe family (Chowning 1986:427-428). It now appears to be a distinct though closely related family in the Eastern Oceanic division of Oceanic languages. For a slightly modified linguistic map of New Britain, see Chowning 1996.

My reconstruction differs from Johnston's in the number of Proto-Kimbe phonemes arrived at. Johnston missed them because he did not include all the dialects within the Nakanai languages, especially the Ubae dialect, in his comparison, relying almost entirely on Bileki as his representative of what he called Nakanai (here called Lakalai) and Meramera. Whereas he reconstructs 14 consonant phonemes for Proto-Kimbe, I find it necessary to reconstruct 18. Sampling from within a language family to reconstruct the protoforms within that family proves in this instance to be unsound methodologically. On vowels, however, I concur with his findings (Johnston 1982:77–79).

The differences in Johnston's and my reconstructions have important consequences for determining the place of the Kimbe group of languages in the larger Oceanic subfamily of Austronesian languages, consequences that also require reconsideration of some of the current working hypotheses regarding the phonology of Proto-Oceanic, as will be indicated below.

1.1 DATA SOURCES. In large part, the data on which this comparative study rests were gathered in 1954 by Ann Chowning, Charles Valentine, and myself during an ethnographic field study among Bileki speaking Lakalai (West Nakanai) on the Hoskins Peninsula, New Britain (see map), during which we were able to gather materials on all of the Nakanai and Willaumez dialects that make up the Kimbe language group (Chowning 1976) in the Oceanic subfamily of the Austronesian language phylum.¹ Johnston (1980, 1982) and Schumm (1945) supply additional useful data.

KEY TO AUSTRONESIAN LANGUAGES AND DIALECTS ON MAP

| | | |
|--------------------------|---------------------|---------------------|
| I. Blanche Bay Family | IV. Arawe Family | VII. Mengen Family |
| 1. Tolai | 16. Arawe | 31. Uvoi |
| II. Kimbe and Bali-Vitu* | 17. Moewehafen | 32. Kakuna |
| 2. Meramera | V. Lamogai Family | 33. Mamusi |
| 3. Maututu | 18. Longa | 34. Poeng |
| 4. Vele (Vere) & Loso | 19. Mok | 35. Orford |
| 5. Ubae | 20. Ari | 36. Longeinga |
| 6. Bileki | 21. Lamogai | VIII. Tomoip Family |
| 7. Xarua | 22. Pulie | 37. Tomoip |
| 8. Bola | 23. Rauto | |
| 9. Bulu | VI. Whiteman Family | |
| 10. Bali-Vitu* | 24. Miu | |
| III. Bariai Family | 25. Kaulong | |
| 11. Kove | 26. Sengseng | |
| 12. Kaliai | 27. Karore | |
| 13. Bariai | 28. Bao | |
| 14. Kilenge | 29. Kapore (Bebeli) | |
| 15. Maleu | 30. Mangseng | |

*Bali-Vitu is no longer included in the Kimbe family (Chowning 1986:427–428). It now appears to be a distinct though closely related family in the Eastern Oceanic division of Oceanic languages.

The Nakanai² dialect of which we have the most information is Bileki (B1), for which a dictionary (unpublished) has been compiled by Chowning and Goodenough (n.d.). The word list prepared for comparative study by the Tri-Institutional Pacific Program (TRIPP)³ was also used with Bileki. The TRIPP list was used to collect data from all but one of the remaining Nakanai dialects: Gaikeke (GK, also known as Vele), Kai-Sisimi (KS, also known as Vele), Maututu (MT, also known as Gomu), Meramera (MR, also known as Melamela and Noau), Tarobi (TA, also known as Vere), and Ubae (UB). No data were knowingly obtained for Loso, a Lakalai dialect inland from the Vele dialect area (Johnston 1978:29), but what Valentine recorded for KS and GK seems to fit better what Johnston says about Loso phonology than what he says about Vele phonology. We shall follow Valentine here, but it makes no difference for our reconstructions if he failed to distinguish Loso-speaking from Vele-speaking informants. The TRIPP list was also used to obtain materials from the Willaumez languages—Bola (Bo), Bulu (BU), and Xarua (XA)—which, together with the Nakanai languages, form the Kimbe language group. For Bola we have also had a copy of the unpublished vocabulary compiled by the late Father Schumm, translated and arranged in 1945 by A. Capell, who kindly made it available to us.⁴ Survey data based on the TRIPP list were also obtained from Kapore (or Bebeli) and Mangseng, both of them in the Whiteman group of Austronesian languages, from Bali (BA) and Vitu (Vi) in the French Islands, which do not belong in the Kimbe group,⁵ and from Wasi, a non-Austronesian language.

Survey data like that gathered with the TRIPP list is likely to contain a number of transcription errors. Even after considerable exposure to a language, a non-native speaker may still have trouble hearing the difference between some phonemes. For the Kimbe languages, the data indicate that in the Nakanai group of languages, recorders, some more than others, had difficulty hearing /h/ and /q/ as against /θ/. There were conditions, moreover, depending on the location of stress, where /h/ was dropped by native speakers. In the Willaumez group of languages there was variation in recording /x/, the velar spirant, as either *g* or *h*. In most instances these problems of recording do not impede reconstruction.

Some apparent anomalies in the data, however, may result from such recording error. Glossing errors are also not uncommon in survey data. In the material presented here, the greatest reliability is for Bileki glosses in the Nakanai group, a language in which Chowning achieved some fluency, and for Bola in the Willaumez group, where it is possible to check Valentine's and Chowning's survey data with the extensive vocabulary compiled by Father Schumm (1945).

1.2 THE LANGUAGES. The Nakanai dialects constitute two languages. One is Meramera, spoken on Lolobau Island and the adjacent mainland. The other, Lakalai,⁶ includes all the remaining dialects (including Loso), among which there are varying degrees of mutual intelligibility, the most distant among them being Ubae.

The Willaumez languages are Bulu, Bola (Bakovi), and Xarua (Harua, Garua). They are all closely related and form a distinct subdivision of the Kimbe language group.⁷ At the time of our survey, Bulu was spoken in only two villages at the northern tip of the Willaumez Peninsula. Xarua was likewise confined to two villages at the western base of the Hoskins Peninsula. Bola was spoken in a large number of villages over most of the Willaumez Peninsula. Population figures for speakers of these languages in the 1970s are given by Johnston (1982:60).

2. PLACE OF THE KIMBE LANGUAGE GROUP IN THE OCEANIC LANGUAGES. The Kimbe language group stands apart from the other Austronesian languages spoken in most of New Britain (Chowning 1996). Ross (1988) places the group (his Willaumez chain) in his Meso-Melanesian cluster (together with Bali-Vitu, the Lavongai-Nalik chain, other New Ireland languages, and Northwest Solomonian). My own work has led me to the working hypothesis that the Micronesian, Polynesian, and Solomon Islands languages (along with most if not all other Austronesian languages spoken in Remote Oceania) belong together with Ross's Meso-Melanesian cluster in what Geraghty (1983) has designated as the Eastern Oceanic subdivision of the Oceanic branch of Austronesian languages. In disagreement with Ross (1996), Chowning (1969) and I do not include his Meso-Melanesian cluster in his Western Oceanic Linkage with the more distantly related languages in his North New Guinea cluster (including his Southwest New Britain network). Further study is needed to show how they relate as separate subdivisions of Oceanic to Eastern Oceanic.

Evidence in support of grouping the Kimbe languages with other Eastern Oceanic languages as distinct from the neighboring languages on New Britain is provided by a lexicostatistical comparison of Bileki and Bulu (both Kimbe languages) with Fijian and a similar comparison of all three of these with Kapore (Bebeli) and Mangseng, languages in the Whiteman group on New Britain that are spoken by neighbors of Bileki speakers. This comparison involved only cognates for which there were regular sound correspondences. Bileki and Bulu have respectively 28% and 25% shared retentions of basic vocabulary with Fijian, whereas Bileki has only 15% and 12% shared retentions with Kapore and Mangseng, and Fijian has 13% shared retentions with Mangseng (Goodenough 1961b). Similar results have been obtained from lexicostatistical comparisons of Kimbe languages with neighboring ones by Allen and Hurd (1963) and Chowning (1969).⁸

What I am calling the Eastern Oceanic languages are distributed over the area that is associated with the geographic spread in the second millennium B.C. of cultures characterized by Lapita pottery, a spread that went from the Bismarck Archipelago through southern Melanesia to the Central Pacific in 300–500 years (Kirch 1996). These languages show the kind of relationship to one

another that we would expect if a group of closely related dialects had spread rapidly over this region at about the time we associate with Lapita remains, as has been noted by Pawley and Green (1984). Proto-Kimbe speakers, we must infer, came to the central north coast of New Britain as a part of this spread of Lapita cultures.⁹ The area to which they came was close to the source of the widely traded obsidian, from Talasea near the Willaumez Peninsula, where Lapita pottery has been found (Kirch 1996), and from Mopril (Mopir) inland from the Hoskins Peninsula (Gosden 1994:25). Proto-Kimbe speakers represented the part of the Lapita trade network that most directly accessed this valuable resource, which found its way in trade as far away as the St. Matthias Islands in the north and the Santa Cruz Islands in the southeast Solomon Islands (Kirch, Hunt, Wesler, Butler, and Allen 1991).

Nearly a thousand years after these Lapita traders moved into the area, a great volcano called Vitori (Witori) exploded about 2,600 years ago, leaving a caldera covering over half the Hoskins Peninsula (Chowning 1996:24). This eruption and others that followed it put an end for a time to the obsidian trade from Mopril (Pavlidis 1993). Lapita traders in the area, whom I consider to be linguistic ancestors of the speakers of Kimbe languages, survived this catastrophe in two communities (judging from linguistic evidence alone in the absence of any archaeology): one on the Willaumez Peninsula and the other on Lolobau Island. Their closest Lapita trading link to the east of Lolobau appears to have been the island of Watom, where a Lapita site was buried under a heavy fall of ash following the great volcanic eruption whose resulting caldera is now Rabaul Harbor at what may have been roughly the same time as the Vitori eruption (Specht 1968; Chowning 1996).

These eruptions would have effectively disrupted the trade network, as evidenced by the disappearance of obsidian traded from New Britain in the later levels of a Lapita site in the St. Matthias Islands (Kirch, Hunt, Weisler, Butler, and Allen 1991). From that time the descendants of the Kimbe speakers appear to have been cut off from other Lapita communities and to have lost whatever seafaring knowledge they had had. When first encountered by Europeans, the Kimbe speaking communities were without sailing canoes, using only long, dugout outrigger canoes that they propelled by paddling or by punting along the coastal shallows.

Thus, I am proposing, Proto-Kimbe was part of a chain of Eastern Oceanic dialects that were linked together in the Lapita trade network.¹⁰ As part of this network, Proto-Kimbe speakers were located on the Willaumez Peninsula, Lolobau Island, and probably intervening points on the Hoskins Peninsula, closest to the source of Mopril obsidian. The modern division of the Kimbe languages into the Willaumez and Nakanai dialect groups is a natural consequence of their geographic separation by the Mt. Vitori and subsequent eruptions. In time, Nakanai speakers spread westward along the north coast of New Britain, presumably interacting and intermarrying with non-Austronesian and Whiteman speakers there. In connec-

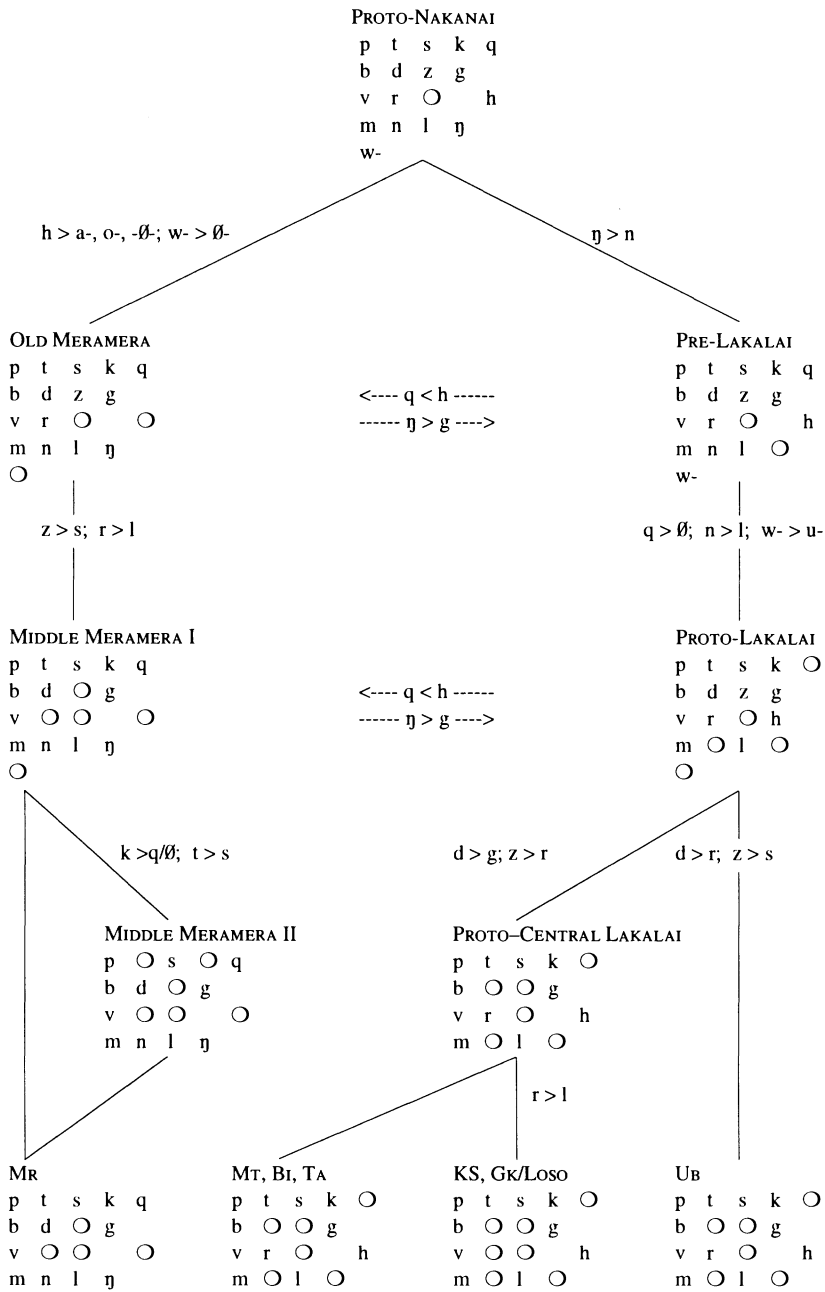
tion with this spread, we should note again that this entire coast of New Britain from Lolobau to the Hoskins Peninsula, except for the intervening estuary of the Kapeuru River, remains lined with volcanoes, at least two of them currently active. The region, we must presume, has had a continuing history of being intermittently vacated and resettled because of volcanic activity, the most recent such episode occurring on the Hoskins Peninsula, where Mt. Pago had a major eruption around 1910 (Chowning and Goodenough 1966, Chowning 1996). The consequences for population movement and the interaction and even merging of different dialect communities must have been important in the history of the Nakanai group of languages.

3. HISTORY OF THE NAKANAI DIALECTS. Comparison of the Nakanai dialects reveals a number of different correspondence patterns that result in the tentative reconstruction of considerably more Proto-Nakanai (PNk) phonemes than seem reasonable in the light of what has been reconstructed for Proto-Oceanic. These tentatively reconstructed (TNk) phonemes for PNk (table 1) cluster into pairs that reflect equally and randomly what have been reconstructed for Proto-Oceanic (POc) and Proto-Malayo-Polynesian (PMP).¹¹ The presence of a number of doublets in the Lakalai (Lk) group of dialects corresponding to single forms in Meramera testifies to what has probably occurred in the history of the Nakanai dialects (diagrammed in figure 1).

In that early history, PNk split into two dialects: Old Meramera and Pre-Lakalai. In both of them sound shifts and consonant mergers subsequently took place. Old Meramera continued to be spoken on Lolobau Island, the point from which Nk speakers presumably spread. Those who established settlements on the mainland of New Britain to the south and southwest of Lolobau became the Pre-Lakalai speakers. Subsequently, the latter seem to have assimilated speakers of at least one other language, and it may be that Nk or Lk came to be used as a second language for trading purposes on the New Britain coast as well. Whatever occasioned it, the evidence of change suggests that there may have been considerable learning of PNk and its Lk derivatives as a second language, a process in which some PNk consonants were merged to fit the phonological habits of nonnative speakers.

The first step in this process was the split that produced Old Meramera (Old Mr) and Pre-Lakalai (Pre-Lk). In Old Mr, PNk *h- was replaced by *o- and *a-, *-h- was lost, and *w- was lost. In Pre-Lk, PNk *ŋ (the velar nasal) and *n merged as *n. Speakers of the Old Mr and Pre-Lk dialects remained in fairly close interaction with one another with some borrowing of lexical items between the two dialects. In such borrowing, Old Mr *ŋ was interpreted by Pre-Lk speakers as *g (accounting for TNk *ng) and Pre-Lk *h was interpreted by Old Mr speakers as *q (accounting for TNk *H). We may speculate that some intermarriage was taking place between speakers of the two dialects and that

FIGURE 1. HISTORY OF NAKANAI SOUND CHANGES



Note: Modern MT, B1, TA, KS, Gk, and UB all exhibit the phoneme /d/ in a few words that are loans from MR or other languages.

this contributed to interdialect borrowing. Our field study group observed this process in 1954 in the Lakalai community of Galilo, where B1 speakers were being exposed to M1 forms as a result of intermarriage and visiting.

Further changes in Old M1 gave rise to Middle M1 I, in which Old M1 *z and *s merged as *s, and *r and *l merged as *l. These changes are also represented in Middle M1 II, in which, in addition, Old M1 *k and *q merged as *q and *t and *s merged as *s. Modern M1 derives mainly from Middle M1 I but shows loans from Middle M1 II (whence TNk *K and *T). Meantime, changes in Pre-Lk gave rise to Proto-Lakalai (PLk), in which Pre-Lk *q was lost, *n and *l merged as *l, and *w- merged with *u-.¹²

The area first occupied by PLk seems to have been the region of what is now the M1 dialect area. UB split off first from PLk, leaving what became PCLk. In the latter PLk *d and *g merged as *g, and *z and *r merged as *r. In UB, by contrast, PLk *d merged with PLk *r as UB r, and PLk *z merged with PLk *s as UB s. Subsequently, as PCLk speakers spread to the area occupied

TABLE 1. SOUND CORRESPONDENCES
AMONG THE KIMBE LANGUAGES

| PKB | PWM | BU | BO | XA | PNK | M1 | PLK | UB | PCLK | B1 | M1 | TA | KS | GK |
|-------|-----|----|----|-----|--------|----|-----|----|------|----|----|----|----|----|
| *r | *R | r | r | l | *r | l | *r | r | *r | r | r | r | l | l |
| *l | *l | l | l | l | *l | l | *l | l | *l | l | l | l | l | l |
| *L | *L | l | r | l | *l | l | *l | l | *l | l | l | l | l | l |
| *n | *n | n | n | n | *n | n | *l | l | *l | l | l | l | l | l |
| *ŋ | *ŋ | ŋ | ŋ | ŋ | *ŋ(ŋ) | ŋ | *l | l | *l | l | l | l | l | l |
| | | | | | *ŋ(ng) | ŋ | *g | g | *g | g | g | g | g | g |
| *g | *g | g | g | g | *g | g | *g | g | *g | g | g | g | g | g |
| *d | *d | d | d | d | *d(d) | d | *d | r | *g | g | g | g | g | g |
| | | | | | *d(D) | d | *g | g | *g | g | g | g | g | g |
| | | | | | *d(R) | g | *R | r | *g | g | g | g | g | g |
| *t | *t | t | t | t,s | *t(t) | t | *t | t | *t | t | t | t | t | t |
| | | | | | *t(T) | s | *t | t | *t | t | t | t | t | t |
| *s | *r | r | r | r | *s | s | *s | s | *s | s | s | s | s | s |
| *z | *r | r | r | r | *z(z) | s | *z | s | *r | r | r | r | l | l |
| | | | | | *z(Z) | s | *r | r | *r | r | r | r | l | l |
| | | | | | *z(j) | s | *j | r | *j | r | s | r | l | l |
| *k | *k | k | k | k | *k(k) | k | *k | k | *k | k | k | k | k | k |
| | | | | | *k(K) | q | *k | k | *k | k | k | k | k | k |
| *q(q) | *k | k | k | k | *q | q | *Ø | Ø | *Ø | Ø | Ø | Ø | Ø | Ø |
| *q(Q) | *K | x | k | k | *q | q | *Ø | Ø | *Ø | Ø | Ø | Ø | Ø | Ø |
| *h | *x | x | x | h,x | *h(h) | Ø | *h | h | *h | h | h | h | h | h |
| | | | | | *h(H) | q | *h | h | *h | h | h | h | h | h |
| Ø | *Ø | Ø | Ø | Ø | *Ø | Ø | *Ø | Ø | *Ø | Ø | Ø | Ø | Ø | Ø |
| *m | *m | m | m | m | *m | m | *m | m | *m | m | m | m | m | m |
| *b | *b | b | b | b | *b | b | *b | b | *b | b | b | b | b | b |
| *p | *p | p | p | p | *p | p | *p | b | *p | p | p | p | p | p |
| *v | *v | v | v | v | *v | v | *v | v | *v | v | v | v | v | v |
| *w- | *Ø | Ø | Ø | Ø | *w- | Ø | *u- | u- | *u- | u- | u- | u- | u- | u- |

by UB speakers and its vicinity, especially those that became B1 speakers, Ubae borrowed a number of words that reflect PLK *d with *g and PLK *z with *r*, accounting for TNK *D and TNK *Z. Doublets tell the story here. For example, UB *vasu* ‘forehead, brow’ shows the merger of PLK *z and *s, whereas UB *varu-la-luma* ‘roof of the house’ shows the *r* form found in the identical construction in B1, TA, and MT. UB speakers were ultimately confined to the region of the modern village of Ubae. Like other inland villages, they were influenced by coastal villages, the flow of influence going from coastal B1 speakers inland to UB speakers.

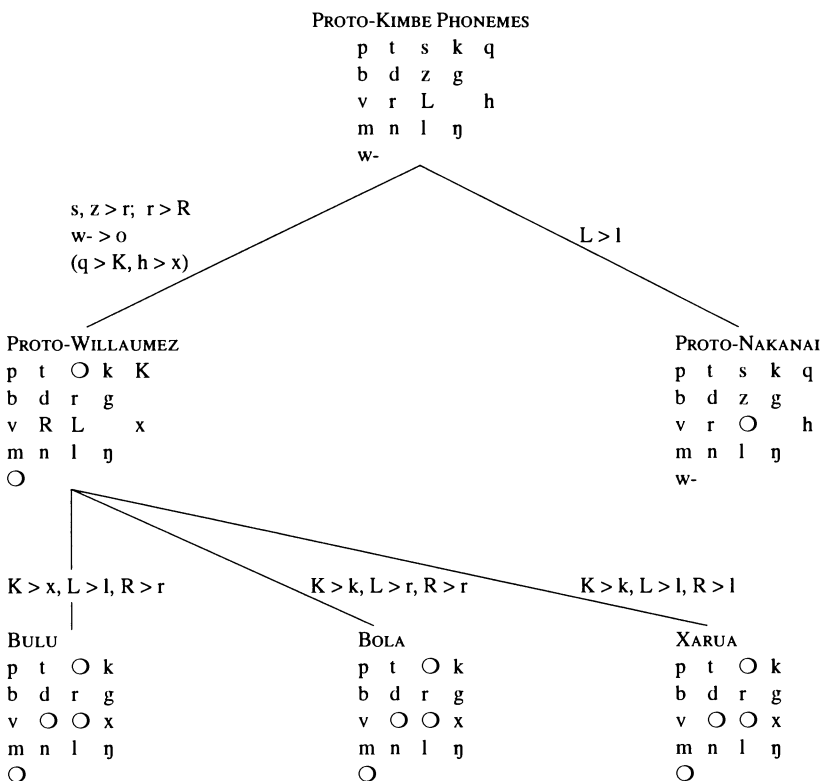
Similarly, speakers of what became the Vele (Vere) dialects, represented here by TA, KS, and GK, spread inland from the coast near the present village of Tarobi, PCLK *l and *r merging as *l* in KS and GK. These two PCLK phonemes remained distinct in MT, B1, and apparently in coastal Vele, as represented by TA.¹³ KS and GK show some *r* forms, however, representing the spread of influence inland from the coast. Some influence went the other way, too, as indicated by the less frequent occurrence of *l* forms instead of *r* forms in TA and, though very rarely, even in nearby MT. Because MT speakers remained in closest geographic proximity to MR speakers, there continued to be some borrowing each from the other. Thus borrowing from MR into MT accounts for TNK *j, and borrowing from MT into MR accounts for TNK *R. Cross-dialect movements of the kind suggested by the linguistic data continue to the present time, considerable such movement in this century being documented in our field notes (Goodenough 1976).

Speakers of the various Nakanai dialects remained in contact not only with one another but with speakers of various non-Nakanai languages as well: Longeinga and Mamusi in the Mengen group of languages, Mangseng and Kapore (Beli or Bebeli) in the Whiteman group of languages, and Wasi, a Non-Austronesian language. Kapore, particularly, shows massive borrowing from a Nakanai dialect similar to neighboring B1 and some borrowing also from a Willaumez language. The names and reputed places of origins of some of the matrilineal clans in the B1 speaking area appear to indicate assimilation of some speakers of Mangseng, a Whiteman language, and Xarua, the latter a closely related language in the Willaumez group. In 1954, it was apparent that bilingualism and even multilingualism of at least a minimum level of competence was widespread. The non-Nakanai speaking interior peoples, especially, seemed to cultivate the nearest coastal Nakanai dialect as a second language to facilitate external communication and trade. Kapore and Xarua speakers on the western end of the Hoskins Peninsula similarly cultivated the Bileki dialect of Lakalai as a second language.

In the twentieth century, many Nakanai speakers have become fluent in Pidgin English, learned as a second language. Inhabitants of the villages with Wesleyan mission schools have also learned some Kuanua, spoken by the Tolai people around Rabaul, as the language of the Bible and ritual. Until the time of our study, Wesleyan mission teachers and pastors were regularly recruited from among na-

tive Kuanua speakers. Now, Nakanai young people are increasingly acquiring proficiency in more standard English, especially those who go on to higher education. As spoken at the time of our study, the Nakanai dialects showed the effects of these exposures to other languages, effects that are destined to continue to accumulate for as long as these dialects survive.

FIGURE 2. SOUND CHANGES FROM PROTO-KIMBE TO PROTO-WILLAUMEZ AND PROTO-NAKANAI



PROTO-KIMBE REFLEXES OF PROTO-MALAYO-POLYNESIAN

PK_B *p < PMP *p; PK_B *b < PMP *mp, *mb; PK_B *v < PMP *p, *b.
 PK_B *t < PMP *t, *T; PK_B *d < PMP *nt, *nT, *nd, *nD, *ns, *nz, *nj.
 PK_B *l < PMP *d, *l, *r; PK_B *L < PMP *D, *R; PK_B *r < PMP *R.
 PK_B *s < PMP *s, *c(?); PK_B *z < PMP *z, *Z, *j.
 PK_B *k < PMP *k, g(?); PK_B *g < PMP *ŋk, *ŋg, *g(?); PK_B *q < PMP *k;
 PK_B *h < PMP *q.
 PK_B *m < PMP *m; PN_K *n < PMP *n, *ñ; PK_B *ŋ < PMP *ŋ.
 PK_B *w- < PMP *w-.

4. HISTORY OF THE WILLAUMEZ DIALECTS. Proto-Willaumez shows more phonological change from Proto-Kimbe than does Proto-Nakanai (figure 2). PKB *s and *z were replaced by PWM *r, and PKB *w- was lost in PWM. PKB *l, *L, and *r remained distinct in PWM as *l, *L, and *R respectively, but subsequently underwent different histories in what became the three Willaumez dialects: PWM *l, *L and *R all merged as *l* in Xarua, PWM *L and *R merged with PWM *r as *r* in Bola, and in Bulu PWM *l and *L merged with PWM *l as *l*, while PWM *R merged with PWM *r as *r*. PKB *h is represented in PWM by *x. This may or may not have involved a phonetic change. PKB *q is represented by PWM *K, involving what seems to have been a phonetic change. It appears subsequently to have merged with PWM *h as Bulu *x*, but to have merged with PWM *k as Bola and Xarua *k*. But Bulu also shows the same merger of PWM *K with PWM *k in a somewhat fewer number of instances (hence Tentative Proto-Kimbe or TKB *Q). I infer that these instances of Bulu *k* from which TKB *Q has been reconstructed are a result of borrowings from Bola or Xarua, or both, and do not reconstruct a separate PKB phoneme *Q. Thus different sound changes leading to Bulu, Bola, and Xarua from PWM had the effect, by different routes, of producing identical phonemes for all three dialects, phonemes, however, that show different patterns of sound correspondence.

5. PROTO-KIMBE (PKB) RECONSTRUCTIONS. In what follows, I give for each reconstructed PKB phoneme the set of phoneme correspondences among the Nakanai and Willaumez dialects along with the Proto-Nakanai and Proto-Willaumez reconstructions. Where two or more sets of correspondences are treated as derived from the same protophoneme as a result of former interdialect borrowing, the tentatively reconstructed phonemes (TKB, TNk) are given in parentheses. Immediately after each PKB phoneme in my reconstruction, I give in parentheses the symbol for the equivalent phoneme used by Johnston (1982) in his reconstruction. Note that a Johnston symbol may appear with more than one of my reconstructed phonemes, since he reconstructs my *r and *L both as *r, my *s and *z both as *z, and my *p, *v, and *w- all as *v.

5.1 PKB *r (J: *r). PNk *r: B1, TA, MT, UB *r*, KS, Gk, MR *l*. PWM *R: BU, Bo *r*, XA *l*. The number of reconstructable examples is few. In the examples that can be derived from PMP forms, PKB and PNk *r reflect PMP *R, as (much more frequently) does PKB *L. The example of PNk initial *r reflects PMP *l, as does one possible example of PKB medial *r, whereas PMP *l is usually reflected by PKB *l. It would appear that PKB *r is a result of borrowing from a dialect in which PMP *l and *R (and possibly *D) had merged as *r at some pre-PKB stage in the history of the Oceanic languages, a merger for which there is otherwise no supporting evidence in the Kimbe languages, except for the possible doublet PKB *mauLi and PNk *meru, both meaning 'left hand' (PMP *[ma]-wiRi).

As for PN_K, the correspondence pattern represents what is statistically most common in the data. There is, however, some variation between *r* and *l* in the Vele dialects of TA, KS, and GK (possibly reflecting a failure to distinguish Vele-speaking from Loso-speaking informants; and MT occasionally, though rarely, shows an *l* instead of its usual *r*. It appears that in Vele (or Loso according to Johnston) *l* and *r* fell together as *l*, especially in the more inland villages. Vele villages on or near the coast retained *r* as distinct from *l*, as did the B₁ and MT dialects, from which coastal Vele communities were less isolated. Some spreading inland of *r* forms as alternatives and some spreading coastward of *l* forms, however, could have taken place to produce the variation found in the data.

Examples of PK_B **r*, given in Appendix A, are: **rabia* 'sago' (POC Rampia), **dara* 'blood' (PMP **n*(dD)aRa_q), **puru*, 'be fallen, descend', **vore* 'paddle' (PMP **be*Rsay). Perhaps also **ŋo*(rz)o 'to snore' (POC **ŋo*Ro), **ka*(rz)a 'sharp' (PMP **ka*Rat), **vi*(rz)i 'twists, turns' (PMP **bili*ŋ).

For other examples of PN_K **r*, see Appendix B: **ra*ŋo 'fly (insect)' (PMP **la*ŋaw), **bar*(ie)golu 'throat', **gari* 'to bite', **-gari* 'hard', **kar*(ui)su 'rib' (PMP **Rusuk*), **kukure* 'spider', **kuru* 'black', **madiri* 'to stand' (PMP *[*man*]-DiRi), **maramara* 'relieved, easy', **marasa* 'beautiful', **mera* 'spoken word', **meru* 'left (opposed to right)', **papara* 'to boil', **tivura* 'hot'.

For other examples of P_WM **R*, see Appendix C: **ve*Re 'sharp', **vu*RuRu 'red'.

5.2 PK_B **l* (J: **l*). PN_K **l*: B₁ *l*, TA *l*, KS *l*, GK *l*, MT *l*, UB *l*, MR *l*. P_WM **l*: BU, BO, XA *l*. (Note that UB *l* becomes *r* when the next following consonant is *r*, as in PN_K **lodo* 'night', UB *roro*.) According to Johnston, B₁ *l* appears as *r* in the Vere (Vele) dialects, here represented by TA, KS, and GK, whereas the *l* (or sometimes *r*) reported by Valentine fits what Johnston reports for Loso. In either case, our reconstructions are not affected.

All examples of PK_B and P_WM **l* and some examples of PN_K **l* for which there are PMP reconstructions are reflexes of PMP **d*, **l*, and **r*.

Examples of PK_B **l*, given in Appendix A, are: PK_B **lahia* 'cultivated ginger' (PMP **la*qia), **lapu* 'to pull, drag', **lavo* 'cross cousin, brother's wife', **lete* 'roof, crown of head', **lidi* 'to throb' (PMP **lin*Tik 'to snap'), **(l)*jilo 'in' (PAN **lem*), **lima*₁ 'arm' (PMP **lima*), **lima*₂ 'five', **lipi* 'club', **loa* 'relative by marriage' (PMP **dawa*), **loho* 'throat, neck' (PMP **liqe*R), **lolo* 'mountain', **lomu* 'lake', **loŋo* 'to hear' (PMP **deqe*R), **lua* 'to vomit' (PMP **lua*q), **avala* 'year, wet season' (PMP **haba*Rat), **baulo* 'pertaining to outrigger', **bola*, 'wide' (PMP **belaj*), **bole* 'to carry', **(gŋ)*ala 'belly', **golo* 'rattle', **habulo* 'ashes' (cf. PMP *abuh*), **kuli* 'skin' (PMP **kulit*), **malai* 'withered' (PMP *[*ma*]-layu), **malala* 'ground cleared of vegetation' (POC **malala*), **malaqu* 'long', **pile* 'to scorn, reject', **qulu*/kulu 'breadfruit' (PMP **kulu*(rR)), **sa-vulu* 'ten' (PMP **pulu*q), **tabele* 'tongue', **tabuli* 'to rest, be located', **tala* 'apparent, in the open', **taliŋa* 'ear, mushroom' (PMP **taliŋa*), **tolo* 'to cut crosswise or around' (PMP **telen* 'middle'), **tolu* 'three' (PMP **telu*), **tulu*₁ 'to walk', **tulu*₂ 'sleep'

(PMP *tuDuR), *vali₁ ‘to cut or strike off’ (PMP *ba(rj)is), *vali₂ ‘to brush away, scatter’, *vitolo ‘hungry’ (POC *pitolo), *vulala ‘be spread out’, *vulu ‘ten’ (PMP *puluq), *wa(iL)u ‘eight’ (PMP *walu), *zala/dala ‘road, out-doors’ (PMP *zalan).

For other examples of PNk *l that are not demonstrable reflexes of PMP *D or PMP *R (5.3), see Appendix B: *lagu ‘face’, *-lau ‘sea (as direction)’ (PMP *lahud), *livo ‘tooth’ (PMP *lipen), *lohi ‘to rub, scrape’, *loto ‘to fold, break’, *-ale ‘westward, to the right (facing inland)’, *bar(ie)golu ‘throat’, *bulu ‘liquid’ (PMP *pulut ‘juice, sap, glue’), *dabutala ‘to think’, *gele ‘to play, laugh’, *golo ‘feigned’, *hali ‘obsidian’, *havivili ‘to blow, wind’, *hili ‘to wake up’, *iwalasiwo ‘nine’, *kalua ‘to vomit’ (PMP *luaq), *malehu ‘thirsty’ (PWMP *laqu, *daqu ‘thirst’), *maligoma ‘darkness’, *malulu ‘valley’, *ŋala ‘breath’, *ŋalahate ‘to breathe’, *pakali ‘to steal’, *pola ‘to break into small pieces’ (PMP *rempak), *polo ‘to go, walk, move’ *puli ‘foot’, *sali ‘to flow’ (? PMP *saluR), *tilia ‘to dance’, *tola ‘to cry out’, *tolu and *hatolu ‘egg’ (PMP *qateluR), *vali ‘to move, change location’ (PMP *balik, *baliw), *valipola ‘to hatch’, *vulo ‘to turn over’ (PMP *pules).

For other examples of PWm *l, see Appendix C: *kalolo ‘to sing’, *kalupe ‘to spit’, *Keli ‘to dig’ (PMP *kali), *laxo ‘to walk’ (PMP *lakaw), *l(uo)xoi ‘to think’, *pala ‘to cut’ (PMP *paraŋ), *raulo ‘to dance’, *varili ‘grass’ (*PAN *bali(jzZ)i).

5.3 PKb *L (J: *r). PNk *l: Bi, TA, KS, Gk, MT, UB, MR *l*. PWm *L: Bu, XA *l*, Bo *r*. All examples of PKP *L for which we have reconstructions of PMP words are reflexes of PMP *D or PMP *R. It is clear from this that PMP *D had not fallen together with PMP *d and *r in Proto-Oceanic or Proto-Eastern Oceanic.

Examples of PKb *L, given in Appendix A, are: *Lau, ‘leaf’ (PMP *Dahun), *Lau₂ ‘far’ (? PMP *Za(hØ)uq), *Lavi ‘evening’ (PMP *Rabi), *Lodo ‘night’ (PMP *DemDem), *Lovo ‘to fly’ (PMP *Rebek), *Lua ‘two’ (PMP *Duha), *Luma ‘house’ (PMP *Rumaq), *boLo ‘pig’ (PMP *beRek), *gaLamo ‘slit gong’, *qaLaba ‘new’, *heLe ‘to disperse’, *mahuLi ‘alive’ (PMP *[ma]-quDip), *mauLi ‘left hand’ (PMP *[ma]-wiRi(h)), *mavuLu ‘to stink’ (PMP *[ma]-buRuk), *muLi ‘behind, after’ (PMP *[m]-huDi), *naLu ‘fresh water’ (PMP *(dD)anum), *noLo ‘ant’, *paLa₁ ‘shoulder blade, wing’ (PMP *qabaRa), *paLa₂ ‘open, revealed’ (? PMP *pa(n)daŋ ‘open or cleared area’), *qala ‘to bite’ (PMP *kaRaT), *qiLa ‘adze’ (PMP *kiRam), *sakaLu ‘reef’ (PMP *sakaRu), *tibuLu ‘forest’, *toLa ‘firm, strong’ (PMP *teRas), *tuLa ‘sibling-in-law’ (PAN *(CtT)uRaŋ ‘in-law’), *tuLu ‘knee’ (? PMP *(tT)uhu(dj). Note also PKb *ka(Lr)uki ‘crab’ (PMP *kaRuki).

For other examples of PNk *l that derive from PMP *D and PMP *R, see Appendix B: *lalua ‘vein’ (PMP *uRaT), *loto ‘to fold, break’ (PMP *Re(n)(tT)en), *alalavi ‘yesterday’ (PMP *Rabi), *ŋolo ‘to sleep’ (? POC *ŋoRo ‘to snore’), *matatulu ‘sleepy’ (PMP *tuDuR). See also Appendix D: PLk *latu ‘hundred’ (PMP *Ratus).

For other examples of PWM *L, see Appendix C: *-Liki ‘second growth bush’ (PMP *Diki(hq) ‘small’, PAN *Dikiq), *Lopo ‘rotten’, *k(uo)l(ao)ba ‘sibling of opposite sex’, *maLaxaLaxa ‘light (not heavy)’, *puLa ‘flower’.

5.4 PKB *n (J: *n). PNk *n: Bi, TA, KS, GK, MT, UB *l*, Mr *n*. PWM *n: BU, BO, XA *n*. All examples of PKB, PNk, and PWM *n for which we have PMP reconstructions reflect either PMP *n or PMP *ñ.

Examples of PKB *n, given in Appendix A, are: *-na- ‘of (belonging to common noun)’, *-na₁ ‘of him, her, it’, *-na₂ ‘nominalizing suffix’, *nagi ‘to mark off a limit’, *naLu ‘fresh water’ (PMP *(dD)anum), *natu ‘son, daughter’ (POC *natu), *nava ‘what?’, *-ne- ‘of (belonging to a proper noun)’, *niu ‘coconut’ (PMP *niuR), *noba ‘a bivalve shellfish’, *noLo ‘ant’, *bonu ‘turtle’ (PMP *peñu), *bunu ‘wrapped, tangled’, *hanu/ *hanunu ‘soul’ (POC *nunū, *(qØ)anunu), *inu ‘to drink’ (PMP *inum), *manu ‘bird’ (PMP *manuk), *qani ‘eats’ (POC *kani), *(q)ina ‘mother’ (PMP *ina), *tano ‘down, below’ (PMP *tanem), *tanu ‘to bury’, *tavine ‘woman’ (POC *tapine), *tunu ‘hot, to burn’ (PMP *tunu), *vonu ‘full’ (PMP *penuq).

For other examples of PNk *n, see Appendix B: *noqa/*noha ‘nest’, *nunū ‘shadow’ (POC *nunū), *baini ‘small’, *danu ‘to plant’ (PMP *tanem), *mahono ‘to sweat’, *maqini ‘flesh’, *tagana ‘pillow’, *tina ‘mother’ (PMP *ina).

For other examples of PWM *n, see Appendix C: *na ‘at’, *nana ‘mother’, *nogo ‘to laugh’.

5.5 PKB *ŋ (J: *ŋ). PNk *ŋ (TNk *ŋ): Bi, TA, KS, GK, MT, UB, *l*, Mr *ŋ*; also PNk *ŋ (TNk *ng): Bi, TA, KS, GK, MT, UB *g*, Mr *ŋ*. PWM *ŋ: BU, BO, XA *ŋ*. All examples of PKB, PNk, and PWM *ŋ for which we have reconstructions of PMP forms reflect PMP *ŋ. As recorded by Valentine, BU and BO *ŋ* and *g* were often both rendered ambiguously as *ng*. Other materials provided information allowing these ambiguities to be resolved (Goodenough 1961a).

The grouping of TNk *ŋ and TNk *ng together as PNk *ŋ is based on the fact that both randomly correspond to the velar nasal in other related languages and in reconstructed Proto-Oceanic. It assumes also two steps in the history of the Nakanai dialects. Step one was the separation of Pre-Lk from Old Mr. This led to the merging in Pre-Lk of PNk *ŋ and PNk *n as Pre-Lk *n. In the second step, which gave rise to PLk, Pre-Lk *n merged with Pre-Lk *l as PLk *l. Evidence in support of this interpretation derives from the presence of the reconstructed doublet for PLk of *gala ‘breath’ and *lala-hate ‘breathes’ (cf. Mr *ŋala* and *ŋala-sasage*).

For examples of PKB *ŋ, see Appendix A: *-ŋa ‘nominalizing suffix’, *ŋala ‘breath, chest’, *ŋo(rz)o ‘to snore’ (? POC *ŋoRo ‘to snore’), *hadoŋo ‘to wake up, rise from sleep’, *(i)ajo ‘yellow’ (POC *yaŋo), *loŋo ‘to hear’ (PMP *deŋeR), *maŋi ‘smell, have odor’, *taliŋa ‘ear, mushroom’ (PMP *taliŋa), *taŋi ‘to weep’ (PMP *taŋis).

For other examples of PNk *ŋ, see Appendix B: *ŋolo ‘to sleep’ (? POC *ŋoRo ‘to snore’), *laŋi ‘sky’ (PMP *laŋit), *raŋo ‘fly (insect)’ (PMP *laŋaw), *soŋo ‘to swallow’.

For other examples of PWM *ŋ, see Appendix C: *ŋava ‘mouth’ (PMP *ŋaŋa + *babaq), *ŋiŋi ‘teeth’, *paŋo ‘to hunt’, *r(uo)ŋi ‘to smell, detect odor’, *noŋo ‘to laugh’, *roŋo ‘warm, hot, stinging’ (PMP *seŋet).

5.6 PKB *g (J: *g). PNk *g: B1, TA, KS, Gk, MT, UB, MR g. PWM *g: BU, Bo, XA g (phonetically [g] or [ŋg]). All examples of PKB, PNk, and PWM *g for which there are reconstructions of PMP forms can be understood as reflecting PMP *ŋk and, presumably, PMP *ŋg. As noted in 5.5 above, ambiguities in the recording of BU and Bo ŋ and g have been capable of resolution (Goodenough 1961a).

For examples of PKB *g, see Appendix A: *ga- ‘future marker’, *gaLamo ‘slit gong’, *gi ‘to count’, *gogo ‘black substance’, *golo ‘rattle’, *go(rz)o ‘chest, breast’, *-gu ‘of me’ (PMP *-(ŋ)ku), *gutu ‘to cook’, *ago ‘to make a design’, *muga ‘ahead, preceding’, *nagi ‘to mark off a limit’, *pagi ‘to leap, jump’, *t(au)maga ‘sling’, *tugu ‘to push’, *vago ‘to punt (a canoe), punting pole’, *waga ‘canoe’ (PMP *waŋkan).

For other examples of PNk *g, see Appendix B: *gari₁ ‘to bite’, *gari₂ ‘to split’, *-gari ‘hard, rigid’, *gata₁ ‘right (hand)’, *gata₂ ‘spear’, *gele ‘to laugh’, *golo ‘feigned’, *lagu ‘to face (in a direction)’, *maga ‘sand, earth’, *maligoma ‘darkness’, *masaga ‘to desire’, *mugu ‘dirty, old’, *pago ‘to meet’, *tagana ‘pillow’, *tagaza ‘dry’, *tagu ‘to stab’.

For other examples of PWM *g, see Appendix C: *girixi ‘spouse’, *maLogo and *maRogo ‘crooked’, *nugu ‘to hold’.

5.7 PKB *d (J: *d). PNk *d (TNk *d): B1, TA, KS, Gk, MT, g, UB r, MR d; PNk *d (TNk *D): B1, TA, KS, Gk, MT, UB g, MR d; PNk *d (TNk *R): B1, TA, KS, Gk, MT, MR g, UB r. PWM *d: BU, Bo, XA d. All examples of PKB, PNk, and PWM *d for which there are reconstructed PMP forms can be understood as reflecting PMP *nd, nD, nj, ns, nt, nT, nz, nZ.

For examples of PKB *d, see Appendix A: *dala (also *zala) ‘road, outdoors’ (PMP *(n)Zalan), *dame ‘to lick’ (POC *dami), *dara ‘blood’ (PMP *(n)daRaŋ), *dasi ‘sea water’ (PMP *(n)(t)asik), *di- ‘they’ (cf. PMP *siDa), *dodo ‘to pity, love’, *doqo/(sz)o ‘be alight, burn’ (PMP *zeket), *hada ‘phosphorescent light’ (PMP *(qh)antaD), *hadono ‘to wake up, rise from sleep’, *kidu (also *kisu) ‘back of the head’ (POC *k(iu)zu), *(kq)adavu ‘rain’, *lidi ‘to throb’ (PMP *li(n)Tik ‘to snap’), *Lodo ‘night’ (PMP *De(n)Dem), *mide ‘an insect’, *mudo ‘cloudy (of water), murky’, *sudu ‘to push forward’ (PMP *sunDul), *tamudi (also *tamusi) ‘intestines, guts’, *tudu ‘to bend one’s head down’ (PMP *(t)un(dD)uk), *vudi ‘banana’ (PMP *pun(t)ti).

For other examples of PNk *d, see Appendix B: *hadavi ‘near’, *hudu ‘to carry’, *-dei ‘today, now’, *-lado ‘small stone’, *madiri ‘to stand’ (PMP *[man]-

diRi), *mado ‘salt water, sand’, *maqidi ‘cold’, *pidi ‘to throw’, *tada₁ ‘to dream’, *tada₂ ‘be afraid’.

For other examples of PWM *d, see Appendix C: *kedo ‘stone’, *padi ‘to spear’, *vida/pida ‘to split’ (PMP *pi(n)tak).

5.8 PKB *t (J: *t). PN_K *t (TN_K *t): B_I, TA, KS, G_K, M_T, U_B, M_R *t*; PN_K *t (TN_K *T): B_I, TA, KS, G_K, M_T, U_B *t*, M_R *s*. PWM *t: B_U, B_O, X_A *t* (*s* {_{-i}}). All examples of PKB, PN_K, and PWM *t for which there are reconstructed PMP forms reflect PMP *t (PAN *t and *C) and PMP *T.

For examples of PKB *t, see Appendix A: *ta-₁ ‘of its own accord’, *ta-₂ ‘we (incl.)’ (cf. PMP *kita), *tabaqa ‘to remain, stay for a time’, *tabele ‘tongue’, *tabuli ‘to rest, be located’, *tahe ‘excrement’ (PMP *taqi), *tala ‘becoming apparent’, *taliṇa ‘ear, mushroom’ (PMP *taliṇa), *ta-Lua ‘we two’, *tama ‘father’ (PMP *t-ama), *tam(ou)(h)ane ‘man, male’, *tamusi/tamudi ‘intestines, guts’, *tani ‘to weep’ (PMP *tanis), *tasa ‘one’, *tata ‘to converse’, *tavine ‘woman’ (POC *tapine), *tazi ‘younger sibling (same sex)’ (PMP *ta-huaji), *tazo ‘away from speaker, out’, *-teu/-tou ‘plural marker for pronouns’, *tike ‘to walk on the balls of one’s feet’ *tia ‘belly’ (PMP *tian), *tibuLu ‘forest’, *titiu ‘a bird’, *toho ‘mangrove’, *toLa ‘firm, strong’ (PMP *teRas), *tolo ‘to cut cross-wise or around’ (PMP *teleṇ ‘middle’), *tolu ‘three’ (PMP *telu), *toto ‘to set up, put in place’ (PMP *tetep), *tovo ‘to measure something’, *tovu ‘sugarcane’ (PMP *tebuh), *tubu₁ ‘to grow’ (PMP *tu(m)buq), *tubu₂ ‘grandparents, grandchildren’ (PMP *(tT)umpuq), *tudu ‘to bend one’s head down’ (PMP *(tT)un(dD)uk), *tugu ‘to push’, *tuha ‘bone’, *tulu₁ ‘to walk’, *tulu₂ ‘sleep’ (PMP *tuDuR), *tuLa ‘sibling-in-law’ (PAN *(CtT)uRaṇ), *tuLu ‘knee’ (? PMP *(tT)uhu(dj), *tuma ‘flea, louse’ (PMP *tuma(h)), *(au)maga ‘sling’, *tunu ‘hot, to burn’ (PMP *tunu), *tupo ‘dull (not sharp)’ (PMP *tumpel), *tuqa ‘older sibling of same sex’ (PMP *tuqah), *tutu₁ ‘to strike’ (PMP *TukTuk), *tutu₂ ‘to set things up’, *-ata ‘up’ (PMP *a(n)tas), *boto ‘short’, *gutu ‘to cook’, *hate ‘liver’ (PMP *qatay), *kato ‘black’, *kavutu ‘stomach’, *lete ‘roof, crown of head’, *mahati ‘to ebb (of tide)’ (POC *maqati), *mata ‘eye’ (PMP *mata), *mata-tulu ‘sleepy’ (PMP *tuduR), *mate ‘to die’ (PMP *matay), *mota ‘vine, rope’, *natu ‘son, daughter’ (POC *natu), *pati ‘to float’, *putu ‘to break apart’ (PMP *pu(n)tun), *putus, *puTul, *qutu ‘louse’ (PMP *kutu), *utu ‘open sea’, *vatu ‘stone, seed’ (PMP *batu), *vitolo ‘hungry’ (POC *pitolo).

For other examples of PN_K *t, see Appendix B: *tada₁ ‘to dream’, *tada₂ ‘be afraid’, *tagana ‘pillow’, *tagaza ‘dry’, *tagu ‘to stab’, *-tano ‘down’ (PMP *tanem ‘to bury’), *tau ‘to put’ (PMP *taRuq), *tavu/tabu ‘pertaining to the nose’, *-ti ‘perfective suffix’, *tilia ‘to dance’, *tina ‘mother’ (PAN *t-ina), *tiu ‘strings’, *tivura ‘hot’, *tola ‘to cry out’, *tolu and *hatolu ‘egg’ (PMP *qateluR), *tuku ‘dull’, *butu ‘piece of wood’, *butu-kuha ‘joint’, *dabutala ‘thinks’, *gata₁ ‘right (hand)’, *gata₂ ‘spear’, *huti ‘penis’ (PMP *qutin), *kapute ‘to spit’, *loto ‘to fold, break’ (PMP *Re(n)(tT)en), *mavuta ‘to sleep’

(PMP [ma]-buta ‘be blind’), *pita ‘mud’ (PMP *pitak), *utu ‘to cut’, *vauta ‘deaf’, *zutu ‘wife’.

For other examples of PWM *t, see Appendix C: *tata ‘father’, *tua ‘to flow’ (PMP *(t)uan), *b(oi)to ‘back (of body)’ (PMP *be(n)teŋ ‘lower part of body, abdomen’), *mata ‘snake’ (POC *mwata), *matau ‘to sit’ (PMP *[ma]-taRuq), *mati/mita ‘to see’.

5.9 PKB *s (J: *z). PNK *s: B1, TA, KS, GK, MT, UB, MR *s*. PWM *r: BU, BO, XA *r*. Most examples of PKB and PNK *s for which there are reconstructed PMP forms reflect PMP *s. One example reflects PMP *z, and two reflect PMP *j, both of which are also reflected by PKB *z (see 3.10).

For examples of PKB *s, see Appendix A: *sahi ‘to sew’ (PMP *zaqit), *sakaLu ‘reef’ (PMP *sakaRu), *savu ‘to rub’ (PMP *sapu(h)), *saqe ‘to climb up’ (PMP *sakay), *sa-vulu ‘ten’, *soso ‘branching coral’, *sudu ‘to push forward’ (PMP *sunDul), *susu ‘to suck’ (PMP *supsup), *dasi ‘sea water’ (PMP *(n)(t)asik), *isa ‘name’, *isu ‘nose’ (PMP *ijun), *kasi ‘to scrape, scratch’ (PMP *kaskas), *kisu/kidu ‘back of the head’ (POC *k(iu)zu), *ma(h)asi ‘salty’ (PMP *ma-qasin), *pasu ‘going, coming’ (PMP *pasuk), *tasa ‘one’ (cf. PMP *esa).

For other examples of PNK *s, see Appendix B: *sali ‘to flow’ (PMP *saliR), *sau ‘to hold’, *sesee/sese ‘flower’, *sima ‘lightning’, *sivo ‘to climb down’ (POC *sipo), *so- ‘toward, in the direction of’, *soro ‘to swallow’, *aso ‘to smell’ (PMP *hasen), PMP *buso ‘navel’ (PMP *pusej), *-isa ‘when?’ (PAN (q)ija(nN)), *isi ‘dorsal fin’, *kabeso/kapeso ‘chin’, *kasoso ‘blood’ (? PMP *cemcem ‘make wet, moisten’), *karusu/karisu ‘rib’ (PMP *Rusuk), *k(ei)sa ‘blue, green’, *marasa ‘beautiful’, *masaga ‘to desire’, *musi ‘to hunt’, *pesi ‘to dig’, *qisu ‘to desire, choose’, *viso ‘knife’ (PMP *pisaw), *walasiwo ‘nine’ (PMP *siwa).

For other examples of PWM *r, see under 3.10 PKB *z.

5.10 PKB *z (J: *z). PNK *z (TNK *z): B1, TA, MT *r*, KS, GK *l*, UB, MR *s*; PNK *z (TNK *Z): B1, TA, MT, UB *r*, KS, GK *l*, MR *s*; and PNK *z (TNK *j): B1, TA, UB *r*, KS, GK *l*, MT, MR *s*. PWM *r: BU, BO, XA *r*. Most examples of PKB and PNK *z for which there are reconstructed PMP forms reflect PMP *z (also reflected by PKB *s), *Z, and *j (also reflected by PKB *s). There are several instances where PKB *z may reflect PMP *s, which is usually reflected by PKB *s (see 3.9), and one example where PKB *z reflects PMP *c.

For examples of PKB *z, see Appendix A: *zala (also *dala) ‘road, outdoors’ (PMP *zalan), *zei/ze ‘who?’ (PMP *(cs)ai), *zobo ‘block off, cover’, *bozu ‘to topple’, *hazo ‘day, sun’ (PMP *qa(n)jaw), *mazi ‘to know’, *mazu ‘sated, full (of food)’ (PMP *masuR), *pazava ‘shore’, *tazi ‘younger sibling of same sex’ (PMP *ta-huaji), *tazo ‘away from speaker, out’, *vazu ‘forehead’ (PMP *pasu, *pasun ‘cheek bone’), *viza/ziva ‘how many?’ (PMP *pija). Note also PKB *(rz)olo ‘to go down out of sight’ (PMP *celeb), *(sz)oko/doqo ‘to be alight, burn’ (PMP *Zeket), *vo(rz)e ‘paddle’ (PMP *beRsay).

For other examples of PNk *z, see Appendix B: *zivo ‘swidden area, bush’, *zobe ‘to moan, ail’, *zova/zava ‘what?’ (PMP *sapa), *zua ‘husband’, *zutu ‘wife’, *haze ‘mouth’ (PMP *qazay ‘chin, jaw’), *buzo ‘ashes’, *huza ‘rain’ (PMP *quZan), *paza ‘rotten’, *pazu ‘to fall’, *puzu ‘to swim’, *tagaza ‘dry’.

For other examples of PWM *r, see Appendix C: *raulo ‘to dance’, *ronjo ‘warm, hot, stinging’, *kere ‘dry’, *roko ‘fire’ (PMP *zeket), *ara ‘name’ (PMP *(hθ)ajan), *varili ‘grass’ (PAN *bali(jzZ)i), *voro ‘to throw’, *xuru ‘to swim’.

5.11 PKB *k (J: *k). PNk *k (TNk k): B₁, TA, KS, Gk, MT, UB, MR *k*; PNk *k (TNk *K): B₁, TA, KS, Gk, MT, UB *k*, MR *q/o*. PWM *k: BU, BO, XA *k*. It should be noted that, according to Johnston (1988:28), PNk *k is represented by *q* (glottal stop) in the Vere (Vele) dialect, here represented by TA, KS, and Gk, whereas the *k* Valentine recorded fits better what Johnston describes for Loso. In either case, our reconstructions are not affected.

All examples of PKB, PNk, and PWM *k for which we have reconstructed PMP forms reflect PMP *k, as do a roughly similar number of examples of PKB *q (see 3.12).

For examples of PKB *k, see Appendix A: *ka(Lr)uki ‘crab’ (PMP *kaRuki), *ka(rz)a₁ ‘sharp, piercing’, *ka(rz)a₂ ‘to suffice’, *kasi ‘to scrape, scratch’ (PMP *kaskas), *kato ‘black’, *kavutu/kaputu ‘stomach’, *kea ‘white’, *kisu/kidu ‘back of the head’ (POc *k(iu)zu), *kuli ‘skin’ (PMP *kulit), *kuku ‘finger’ (PMP *kuku ‘claw’), *kulu/qulu ‘breadfruit’ (PMP *kulu(rR)), *kume ‘pus’, *kureko ‘chicken’, *bakaka ‘entrails’, *bakovi ‘man’, *ba(rz)akau ‘thorn, thorny vine’, *boko ‘to carry’ (PMP *bekes ‘bundle’), *iku ‘tail’ (PMP *ikuR), *sakaLu ‘reef’ (PMP *sakaRu), *uku ‘turtledove’, *(sz)oko/doqo ‘to be alight, burn’ (PMP *Zeket).

For other examples of PNk *k, see Appendix B: *kabeso/kapeso ‘beard, chin’, *kaizobo ‘clothing’, *kalalua ‘vomits’, *kapute ‘spits’, *karusu/karisu ‘rib’, *kasoso ‘blood’, *k(ei)sa ‘green’, *kukure ‘spider’, *kumu ‘to thunder’, *kuru ‘black’, *makoko ‘crooked, curved, bent’, *pakali ‘to steal’, *poke ‘back’, *pokio ‘shark’, *tuku ‘dull’.

For other examples of PWM *k, see Appendix C: *kalupe ‘to spit’, *kedo ‘stone’, *kere ‘dry’, *keva ‘moon’, *k(uo)L(ao)ba ‘sibling of opposite sex’, *kuruve ‘rat’, *-Liki ‘second growth bush’ (PMP *Diki(qh)).

5.12 PKB *q (J: *x). PNk *q: B₁, TA, Ks, Gk, MT, UB θ, MR *q*. PWM *k (TKB *q): BU, BO, XA *k*; PWM *K (TKB *Q): BU *x*, BO, XA *k*. All examples but one of PKB and PNk *q for which we have reconstructed PMP forms reflect PMP *k, as do all examples of PKB *k (see 3.11 above). The exception is PKB *tuqa ‘older sibling of same sex’ (PMP *tuqah), where we expect PKB *tuha. The double set of reflexes of PMP *k suggests interdialect borrowing in a pre-PKB phase of what became PKB, with PMP *k remaining *k in one and becoming a glottal stop *q in the other.

For examples of PKB *q, see Appendix A: *qai ‘tree’ (PMP *kayu), *qaLa ‘to bite’ (PMP *kaRat), *qaLaba ‘new’, *qani ‘to eat’ (POC *kani, PMP *kaen), *qiLa ‘adze’ (PMP *kiRam), *qini ‘to pick, collect leaves’, *qulu/kulu ‘bread-fruit’ (PMP *kulu(rR)), *qutu ‘louse’ (PMP *kutu), *doqo/(sz)oko ‘to be alight, burn’ (PMP *Zeket), *iqa ‘fish’ (PMP *ikan), *maqi(dg)i ‘cold’, *moqe ‘pandanus’, *saqe ‘to climb’ (PMP *sakay), *tabaqa ‘to remain, stay for a time’, *tuqa ‘elder sibling of same sex’ (PMP *tuqah), *vaqi ‘to blow’, *vuqo ‘fish net’ (PMP *puket), *waqa ‘root’ (PMP *wakaR). Note also PKB *(hq)aLaba ‘new’.

For other examples of PNK *q, see Appendix B: *qisu ‘to desire’, *qu- ‘to proceed, do’, *maqigi ‘cold’, *maqini ‘flesh’, *noqa ‘nest’, *puqe/vuqe ‘to open a bundle’, *saqe ‘to climb’.

For other examples of PWM *K, see Appendix C: *Keli ‘to dig’ (PMP *kali). *Ko(e) ‘thou’ (PMP *kaw).

5.13 PKB *h (J: *q). PNK *h (TNK *h): BI, TA, KS, GK, MT, UB *h*, MR \emptyset ; PNK *h (TNK *H): BI, TA, KS, GK, MT, UB *h*, MR *q*. PWM *x: BU, BO *x*, XA *x/h*. It should be noted that according to Johnston (1978:28), in Vere (Vele), here represented by TA, KS, and GK, PCLK *h has been dropped. The *h* Valentine recorded for these villages fits better with what Johnston reports for Loso. Our reconstructions are not affected in either case.

All examples of PKB and PNK *h, and all but one of PWM *x for which there are reconstructed PMP forms can be understood as reflecting PMP *q. The PWM exception is *laxo ‘to walk’ (PMP *lakaw), for which there are no cognates in the Nk languages.

Some cases showing the pattern of TNK *H but with BI \emptyset have been treated as ambiguously PNK *q/h, and those showing the pattern TNK *h but with BI \emptyset have been treated as ambiguously PNK * \emptyset /h. In MR \emptyset - is replaced by *a*- or *o*- (before *a*) when the following vowel is stressed, but remains zero if it is unstressed: *o*-ate ‘liver’ (*a-hate), *ate*-na ‘his liver’ (*hate-na), stress in each case falling on the next to last syllable. This is the case with MR reflexes of PNK * \emptyset - as well as for PNK *h-.

For examples of PKB *h, see Appendix A: *habulo ‘ashes’ (cf. PMP *abuh), *hada ‘phosphorescent light’ (PMP *(qh)antaD), *hadongo ‘to wake up, rise up from sleep’, *hanu/hanunu ‘soul, shadow’ (POC *(q \emptyset)anunu), *hate ‘liver’ (PMP *qatay), *hazo ‘day, sun’ (PMP *qa(n)jaw), *heLe ‘to disperse’, *hiva ‘sibling-in-law’ (PAN *qipaR), *huma ‘garden’ (PMP *quma), *huvi ‘yam’ (PMP *qubi(h)), *lahia ‘cultivated ginger’ (PMP *laqia), *loho ‘throat, neck’ (PMP (liqeR)), *mahati ‘to ebb (of tide)’ (POC *maqati), *mahuLi ‘alive’ (PMP *[ma]-quDip), *sahi ‘to sew’ (PMP *zaqit), *tahe ‘excrement’ (PMP *taqi), *taho ‘significant person’, *toho ‘mangrove’, *tuha ‘bone’, *vaha ‘leg’ (PMP *paqa), *vuhu ‘base, cause, beginning, origin’ (PMP *puqun). Note also PKB *(h \emptyset)abi ‘to take in hand, give’ (PMP *(qh)a(m)pit ‘to hold tight’, cf. PAN *kabi(Ct) ‘hang on, cling to’).

For other examples of PNK *h, see Appendix A: *(h)adavi ‘near, to approach’, *hade ‘to converse, speak’, *hali ‘obsidian’, *hatolu ‘egg’ (PMP

*qateluR), *havi ‘fire’ (PMP *hapuy), *havu ‘lime for chewing with betel’ (PMP *qabu), *haze ‘mouth’ (PMP *qazay ‘chin, jaw’), *hili ‘to wake up’, *(hθ)ode ‘root’, *hova ‘hole’, *hudu ‘to carry’, *huti ‘penis’ (PMP *qutin), *huza ‘rain’ (PMP *quZan), *lohi ‘to rub, grate’, *mahono ‘sweat’, *malehu/malou ‘thirsty’ (PWMP *[ma]-laqu ‘thirst’), *ŋala-hate ‘to breathe’ (PMP *qatay), *pu(h)i ‘to carve in wood’.

For other examples of PW_M *x, see Appendix C: *xale ‘bad’, *xi(rl)olo ‘to bathe’, *bal(ai)xua ‘worm’, *girixi ‘spouse’, *laxo ‘to walk’ (PMP *lakaw), *l(uo)xoi ‘to think’, *maLaxaLaxa ‘light (not heavy)’.

5.14 PK_B *θ (J: *θ). PN_K *θ: Bi, TA, KS, GK, MT, UB, MR θ. PW_M *θ: BU, Bo, XA θ. Nearly all examples of PK_B, PN_K, and PW_M *θ for which we have reconstructed PMP forms reflect either PMP *θ or PMP *h (PAN *S). Four examples reflect PMP *R (cf. 5.1 and 5.3).

Instances in which Bi and MR show θ and other dialects show *h* (as recorded by V) are interpreted as ambiguously PN_K *θ/*h*. A few words in Bo were recorded (by V) as having intervocalic *h*, but were not so recorded by others. PMP *awa appears as PK_B *oa, as in PK_B *loa, and PMP *awi appears as PK_B *au, as in PK_B *mauLi (see examples below).

For examples of PK_B *θ, see Appendix A: *a- ‘common noun marker’ (POC *a), *ago ‘to make a design’, *au ‘I’ (PMP *aku(h)), *avala ‘year, wet season’ (PMP *habaRat), *e- ‘proper noun and pronoun marker’ (cf. POC *i), *ia ‘he, she, it’ (PMP *ia(h)), *(i)aŋo ‘yellow’ (POC *yaŋo), *iku ‘tail’ (PMP *ikuR), *inu ‘to drink’ (PMP *inum), *iqa ‘fish’ (PMP *ikan), *isa ‘name’, *isu ‘nose’ (PMP *ijun), *iti ‘be elevated’, *ivu ‘hair, feather’, *o- ‘at’, *ubi ‘to spear, strike’, *uku ‘turtledove’, *utu ‘open sea’, *bua₁ ‘areca palm’ (PMP *buaq), *bua₂ ‘heart’, *kea ‘white’, *lahia ‘cultivated ginger’ (PMP *laqia), *loa ‘relative by marriage’ (POC *dawa), *lua ‘to vomit’ (PMP *luaq), *Lau₁ ‘leaf’ (PMP *Dahun), *Lau₂ ‘far’, *Lua ‘two’ (PMP *Duha, PAN *DuSa), *mai ‘hither’ (PMP *maRi), *malai ‘withered’ (PMP *[ma]-layu), *mauLi ‘left hand’ (PMP *[ma]-wiRi(h)), *niu ‘coconut’ (PMP *niuR), *-teu ‘plural marker’, *tia ‘belly’ (PMP *tian), *-tou ‘plural marker’, *vaa ‘four’, *va-ubi ‘to fight’, *vou ‘deaf’, *vua ‘seed, berry’ (PMP *buaq), *zei ‘who?’ (POC *(cs)ai).

For other examples of PN_K *θ, see Appendix B: *alavi ‘yesterday’ (PMP *Rabi), *-ale ‘westward, to the right (facing inland)’, *aso ‘to smell, sniff’ (PMP *qasen, *hasen), *-ata ‘up’ (PMP *a(n)tas), *avu ‘to wrap up’ (PMP *kaput), *ilo ‘in’ (PAN *lem), *-isa ‘when?’ (PAN (q)ija(nN)), *isi ‘dorsal fin’, *obu ‘tree, tree trunk, wood’, *utu ‘to cut’, *kea ‘white’, *lalua ‘vein’ (cf. PMP *uRat), *-lau ‘sea’ (PMP *lahud), *moe ‘mat’, *puu ‘to fall (as rain)’, *tau ‘to put’ (PMP *taRuq), *tilia ‘dances’, *tiu ‘strings’, *vauta ‘deaf’, *zua ‘husband’ (cf. PAN *(CtT)uRaQ ‘in-law relative’).

For other examples of PW_M *θ, see Appendix C: *ara ‘name’ (PMP *(hθ)a-jan), *Ko(e) ‘thou’, *paiti ‘to stand’, *raulo ‘to dance’, *tua ‘to flow’.

5.15 PKB *m (J: *m). PNk *m: B1, TA, KS, GK, MT, UB, MR *m*. PWM *m: BU, Bo, XA *m*. All examples of PKB, PNk, and PWM *m for which there are reconstructed PMP forms reflect PMP *m, including POC *mw.

For examples of PKB *m, see Appendix A: *ma- 'state of being' (POC *ma-), *ma(h)asi 'salty' (PMP *[ma]-qasin), *mahati 'to ebb (of tide)' (POC *maqati), *ma(h)avu 'healed' (PMP *[ma]-ampun 'forgiven'), *mahuLi 'alive' (PMP *[ma]-quDip), *mai 'hither' (PMP *maRi), *malai 'withered' (PMP *[ma]-layu), *malala 'ground cleared of vegetation' (POC *malala), *malaqu 'long', *manu 'bird, living creature' (PMP *manuk), *manji 'smell, have odor', *maqi(dg)i 'cold', *mata₁ 'eye' (PMP *mata), *mata₂ 'to look at', *mata-tulu 'sleepy', *mata-viti 'getting dark (in evening)', *mate 'to die' (PMP *matay), *mauLi 'left hand' (PMP [ma]-wiRi(h)), *mav(ac)(q)a 'heavy', *mavo 'taro', *mavuLu 'to stink' (PMP *[ma]-buRuk), *mazi 'to know', *mazu 'sated' (POC *masuR), *mide 'an insect', *mimi 'urine, to urinate' (PMP *miRmiR), *-mi-Lua 'we two (excl.)', *momo 'shattered, crumbled' (PMP *mekmek), *moqe 'pandanus', *mota 'vine, rope', *-mu 'of you (sg.)' (POC *-mu), *mudo 'murky, troubled', *muga 'ahead, preceding', *muLi 'behind, after, follow' (PMP *[m]-huDi), *-mu-Lua 'you two', *ba(rz)ema 'nipa palm', *dame 'to lick' (POC *dami), *gaLamo 'slit gong', *huma 'garden' (PMP *quma), *kume 'pus', *lima₁ 'hand' (PMP (lima), *lima₂ 'five', *lomulu 'lake', *Luma 'house' (PMP *Rumaq), *namo 'mosquito' (PMP *ñamuk), *pe(rz)emu 'to fast, observe a food taboo', *tama 'father' (PAN *t-ama), *tam(uo)(h)ane 'man, male' (POC *maRuqane), *tamusi/tamudi 'intestines, guts', *tuma 'flea, louse' (PMP *tuma(h)), *(au)maga 'sling'.

For other examples of PNk *m, see Appendix B: *madiri 'to stand' (PMP *[man]-DiRi), *mado 'salt water, sand', *maga 'sand, earth', *mahono 'sweat', *makoko 'curved, crooked, bent', *malehu/malau 'thirsty' (PWMP *[ma]-laqu), *maligoma 'darkness', *malulu 'valley', *maqini 'flesh', *maramara 'relieved, easy', *marasa 'beautiful', *masaga 'to desire', *mavuta 'to sleep, lie' (PMP *[ma]-buta 'be blind'), *mugu 'dirty, old (worn)', *musi 'to hunt', *-mutou 'you (pl)', *bigomu 'fence', *kumu 'to thunder', *sima 'lightning'.

For other examples of PWM *m, see Appendix C: *manjeje 'to fear', *maLaxa-Laxa 'light (not heavy)', *maLogo and *maRogo 'crooked', *mata 'snake' (POC *mwata), *(kK)oma 'small child'.

5.16 PKB *b (J: *b). PNk *b: B1, TA, KS, GK, MT, UB, MR *b*. PWM *b: BU, Bo, XA *b*. All examples of PKB, PNk, and PWM *b for which there are reconstructed PMP forms reflect PMP *mb or PMP *mp, or can be interpreted as reflecting prenasalized variants of PMP *b or PMP *p.

For examples of PKB *b, see Appendix A: *bakaka 'entrails', *bakovi 'man', *ba(rz)akau, 'thorny, thorn vine', *ba(rz)ema 'nipa palm', *baulo 'pertaining to outrigger', *bebe₁ 'to squeeze' (? PAN *pedped), *bebe₂ 'butterfly, to flutter' (? PAN *beŋbeŋ, *bemben), *be(lL)e 'bamboo', *boko 'to carry' (PMP *bekes

'bundle'), *bola 'wide' (PMP *belaj), *bole 'to carry', *boLo 'pig' (PAN *beRek), *bonu 'turtle' (PMP *peñu), *boto 'short', *bozu 'to topple', *bua₁ 'areca palm' (PMP *buaq), *bua₂ 'heart', *bulu 'liquid, sap' (PMP *pulut 'glue'), *bunu 'wrapped, tangled', *(hØ)abi 'to take in hand, give' (PMP *(qh)a(m)pit 'to hold tight'), *habulo 'ashes' *(hq)aLaba 'new', *noba 'a bivalve shell', *rabia 'sago' (POc *Rampia), *tabaqa 'to remain, stay for a time', *tabele 'tongue', *tabuli 'to rest, be located', *tibuLu 'forest', *tubu₁ 'to grow' (PMP *tu(m)buq), *tubu₂ 'grandparents, grandchildren' PMP *(tT)umpuq), *ubi 'to spear', *va-ubi 'to fight', *zobo 'to block off, cover'.

For other examples of PNk *b, see Appendix B: *baini 'small', *bar(ie)golu 'throat', *buso 'navel' (PMP *pusej), *butu 'small piece of wood', *butu 'handle, stem', *butu-kuha 'joint', *buzo 'ashes', *dabu 'to think', *kubaqa 'good (to taste), sweet', *obu 'tree, trunk, leg', *zobe 'be sick, to moan'.

For other examples of PWM *b, see Appendix C: *bati 'far', *b(oi)to 'back (of body)' (PMP *be(n)ten 'lower part of body, abdomen'), *bobo 'meat', *k(uo)L(ao)ba 'sibling of opposite sex', *bubu 'cloud' (cf. PMP *embun, *Rambun), *bur(uo)ŋi 'to smell'.

5.17 PKb *p (J: *v). PNk *p: BI, TA, KS, GK, MT, UB, MR *p*. PWM *p: BU, BO, XA *p*. All examples of PKb, PNk, and PWM *p for which there are reconstructed PMP forms reflect PMP *p. For the greater number of examples of PKb *v reflecting PMP *p, see 3.18.

For examples of PKb *p, see Appendix A: *pagi 'to jump', *paLa₁ 'shoulder blade, wing' (PMP *qabaRa), *paLa₂ 'be open, revealed' (? PMP *pa(n)daŋ 'open or cleared area'), *pa(rz)i 'swift, quick', *pasu 'going, coming' (PMP *pasuk), *pati 'to float', *pazava 'shore', *pe(rz)emu 'to fast, observe a food taboo', *pile 'to scorn, reject', *pir(ou)pir(ou) 'a bird', *pulo 'to twist, wring' (PMP *pules), *pupu 'to blow' (PMP *puput), *puru 'be fallen descend', *putu 'to break apart' (PMP *pu(n)tun, *putus, *puTul), *lipi 'club', *tupo 'dull' (PMP *tumpel).

For other examples of PNk *p, see Appendix B: *pago 'to meet', *pagoto 'adze', *pai 'many', *pakali 'to steal', *paza 'rotten' (cf. PMP *zaqat), *pazu 'to fall', *pesi 'to dig', *pita 'mud' (PMP *pitak), *poke 'back', *pola 'broken in little pieces' (PMP *rempak), *polo 'to go, walk', *pokio 'shark', *puli 'footprint, sole', *puhi 'to carve in wood', *puqe/vuqe 'opens a bundle' (PMP *pukas), *puu 'to fall (as rain)', *puzu 'to swim', *kapi 'to close, to shut off' (PMP *ka(m)pit, *ga(m)pit), *kapute 'to spit', *lapu 'to pull, drag'.

For other examples of PWM *p, see Appendix C: *padi 'to spear', *pa-iti 'to stand', *pala 'to cut' (PMP *paraŋ), *pajo 'to hunt', *pida/vida 'to split' (PMP *pi[n]tak), *po(kK)o 'smoke', *pote 'few', *puLa 'flower' (PMP *pulpul), *kalupe 'to spit', *(rR)apu 'old', *tupo 'dull'.

5.18 PKb *v (J: *v). PNk *v: BI, TA, KS, GK, MT, UB, MR *v*. PWM *v: BU, BO, XA *v*. All examples of PKb, PNk, and PWM *v for which we have recon-

structed PMP forms can be understood as reflecting PMP *p or *b. PMP *p seems to be reflected also in a somewhat smaller number of instances by PKB *p (see 3.17 above).

For examples of PKB *v, see Appendix A: *va- ‘do mutually’, *-va ‘interrogative suffix’ (PMP *ba), *vaa ‘four’ (cf. PMP *e(m)pat), *vago ‘to punt (a canoe), punting pole’, *vaha ‘leg’ (PMP *paqa), *vai ‘to plait a mat’, *vali_i ‘to cut, strike off’ (PMP *ba(rj)is), *vali_i ‘to brush away, scatter’, *vanana ‘to make inquiry’, *vaqi ‘to blow’, *va-ubi ‘to fight’, *vatu ‘stone’ (PMP *batu), *vazu ‘forehead’ (PMP *pasu, *pasuŋ ‘cheek bone’), *veLe ‘sharp’, *ve(rz)u ‘to share out, divide’, *vi(rz)u ‘to twist, turn’ (? PMP *biliŋ, PAN *pi(dDr)i(Ct)), *vitu ‘seven’ (PMP *pitu), *vitolo ‘hungry’ (POC *pitolo), *viza ‘how many?’ (PMP *pija), *vonu ‘full’ (PMP *penuq), *vore ‘paddle’ (PMP *beRsay), *vou ‘deaf’, *vua ‘seed, berry’ (PMP *buaq), *vudi ‘banana’ (PMP *pun(tT)i), *vuhu ‘base, cause, beginning, origin’ (PMP *puqun), *vulala ‘be spread out’, *vuli ‘to twirl in something (as a pepper leaf in lime)’, *vuqo ‘fishnet’ (PMP *puket), *vuvu ‘wasp’ (? PMP *bukbuk ‘wood weevil’), *avala ‘year, wet season’ (PMP *habaRat), *hiva ‘sibling-in-law of same sex’ (PMP *qipaR), *huvi ‘yam’ (PMP *qubi(h)), *ivu ‘hair, feather’, *kaliva ‘elephant ear taro’ (POC *piRaŋ), *kavutu ‘stomach’, *(kq)adavu ‘rain’, *lavo ‘cross cousin, wife’s brother’, *Lavi ‘evening’ (PMP *Rabi), *Lovo ‘to fly’ (PMP *Rebek), *ma(h)avu ‘healed’ (PMP *[ma]-ampun ‘forgiven’), *mata-viti ‘getting dark in evening’, *mav(ae)(q)a ‘heavy’, *mavo ‘taro’, *mavuLu ‘to stink’ (*PMP *[ma]-buRuk), *nava ‘what?’, *pazava ‘shore’, *savu ‘to rub’ (PMP *sapu(h)), *sa-vulu ‘ten’ (PMP *puluq), *tavine ‘woman’, *tovo ‘to measure (something)’, *tovu ‘sugarcane’ (PMP *tebuh).

For other examples of PNk *v, see Appendix B: *vai ‘to plait’, *vauta ‘deaf’, *velevele ‘empty space’, *vovo ‘skin, body surface (cf. PMP *bebak ‘pelt, skinned’), *vulo ‘to turn over’ (PMP *pules), *havi ‘fire’ (PMP *qapuy), *havivili ‘to blow, wind’, *havu ‘lime for chewing with betel’ (PMP *qabu), *hova ‘hole’, *kavou ‘white ashes’, *livo ‘tooth’ (PMP *lipen), *mavuta ‘to sleep, lie’ (PMP *[ma]-buta ‘be blind’), *sivo ‘climb down’ (POC *sipo), *tavu/tabu ‘pertaining to the nose’, *tivura ‘hit’, *zova/zava ‘what?’ (PMP *sapa).

For other examples of PWM *v, see Appendix C: *varili ‘grass’ (PAN *bali(jzZ)i), *vi ‘fat’, *vida/*pida ‘to split’ (PMP *pi(n)tak), *voro ‘to throw’, *vuRuRu ‘red’, *keva ‘moon’, ŋava ‘mouth’ (PMP *ŋaŋa + *babaq).

5.19 PKB *w- (J: *v-). PNk *w-: Bi, TA, KS, Gk, MT, UB *u-*, MR *o-*. PWM *O-: BU, Bo, XA *o-*. The examples of PKB *w- for which there are reconstructed PMP forms reflect PMP *w.

For examples of PKB *w-, see Appendix A: *waga ‘canoe’ (PMP *waŋkaŋ), *wa(IL)u ‘eight’ (PMP *walu), *waqa ‘aerial root’ (PMP *wakaR), *wono ‘six’ (PMP *enem).

6. IMPLICATIONS FOR PROTO-OCEANIC. As is evident from the correspondence sets presented above, PKB shows two sets of reflexes each for PMP *k (PKB *k and *q), PMP *p (PKB *p and *v), and PMP *R (PKB *r and *L). They seem to be roughly equal in number in the case of PKB *k and *q; instances of PKB *p are fewer than those of PKB *v, and instances of PKB *r are much fewer than those of PKB *L. In my interpretation, this indicates that at some time in a pre-PKB phase, speakers of two mutually intelligible but somewhat different Oceanic dialects came into close interactive relations, perhaps more than once, very likely intermarrying and forming a single community. Where there were significant phonetic differences, there arose a number of competing forms, *r forms versus *L forms, *k forms versus *q forms, and *p forms versus *v forms. Over time some of the forms of one and some of the forms of the other dialect prevailed. Some competing forms survived as doublets, e.g., PKB *kulu and *qulu ('bread-fruit'), PKB *(sz)oko and *doqo ('to burn'), PLK *koli and PCLK *oli ('to dig'), and PWM *pida and *vida ('to split'). Significantly, in the last example, the form *pida occurs in the Bulu word *pala-pida-i*, in which *pala* also shows the PWM reflex *p of PMP *paraŋ rather than the PWM reflex *v. Thus we can account for the three double sets of PKB reflexes of what has been reconstructed for PMP, without having to revise the PMP reconstructions.

6.1 PKB *p, *b, *v. Especially relevant for Proto-Oceanic are PKB *p, *b, and *v. It has been accepted that PMP *p and *b fell together as POC *p, which then shifted in PEO to a bilabial spirant, either voiced *v or unvoiced *f, while POC *b reflected the prenasalized variants of PMP *p (*mp) and *b (*mb) (Ross 1988:33–35).

It is clear that PKB *b is in conformity with this long standing conclusion that POC *b reflects PMP *mp and *mb. PMP *b is consistently reflected by PKB *v, also. It is PMP *p that has the double reflexes as PKB *p and *v. We must conclude from this that the two dialects that gave rise to the competing doublets in what later became PKB differed in their reflexes of PMP *p but not in their reflexes of PMP *b. The *p dialect thus seems to have preserved the distinction between PMP *p and *b, the former remaining unchanged while the latter had become the spirant *v. Geraghty (1983:96–119) has also found reason to reconstruct a PEO *p as distinct from *b and *v, but some of his examples are reflexes of PMP *b as well as *p, and none of them are cognate with the forms that have been reconstructed here with PKB *p. In this respect, developments in the history of Fijian and the other languages examined by Geraghty were independent of those that led to PKB *p.

In his lengthy discussion of reflexes of POC *p as both *p* and *v* in many Oceanic languages, Ross (1988:48–63) uses the presence of doublets showing both reflexes as evidence that the two reflexes may be a consequence of "morphological conditioning," though he is unable to show what the conditions of such variation were. His examples include reflexes of both PMP *p and *b. Proto-Kimbe

clearly differs in this respect, only reflexes of PMP *p appearing as PKB *p (with one exception: PKP *paLa, *(qk)a-paLa ‘shoulder blade’, PMP *baRa, *qabaRa). The Proto-Kimbe evidence is striking.

6.2 PKB *k, *q, *g. We cannot infer for similar reasons that the *k dialect (as distinct from the *q dialect) preserved a distinction between PMP *k and *g. PMP *ŋk is clearly reflected by PKB *g (phonetically either [g] or [ŋg]). We lack examples in PKB of words that reflect PMP *g or *ŋg, but there are some apparent reflexes in individual Kimbe languages, as follows: Bo *gahe* ‘to work (building a house)’ (PMP *gaway ‘work magic’), Bo *gaho* ‘to work (making a canoe)’ (PMP *gawa ‘work with the hands’), Bo *gururu* ‘thunder’ (PMP *guRuq), Bu *pagipagi* [pangipangi] ‘to dance’ (PMP *pangil ‘to call, shout’, cf. Bali-Vitu *gambigambi* ‘to sing’), B1 *kupi* ‘to pick up with the toes or with outstretched fingers, to pick up with two fingers only as in cat’s cradle’ (PWMP *gu(m)pit ‘pinch together’ and PMP *gepit ‘to pinch, squeeze’), B1 *tigi* ‘to build, set up’ (PMP *tingi ‘be high’). Two of the foregoing reflect what has been reconstructed as PMP *ŋg, fitting our expectations. The remainder could reflect either PMP *g or *ŋg. B1 *kupi* is the only form with *k* rather than *g*. Very tentatively, we may infer that perhaps in the pre-PKB *k dialect, PMP *k and *g merged as PKB *k (B1 *kupi*), whereas in the PKB *q dialect PMP *k remained distinct while PMP *g merged with PMP *ŋg and *ŋk. If this inference should prove correct, it would indicate that PMP *k and *g had not fallen together in POC, as is ordinarily assumed. As yet, however, the evidence is insufficient to allow for a firm conclusion.

6.3 PKB *l and *L. It has also been accepted that PMP *d and *D fell together as Pre-POC *d and POC *r (Ross 1988). Again the evidence from PKB shows that this merger had not taken place in POC, since PMP *d is reflected by PKB *l, whereas PMP *D is reflected by PKB *L, and PMP *nd and *nD are reflected by PKB *d.

6.4 PKB *s, *z, *d. Still another finding, as I had occasion to suggest some time ago (Goodenough 1961b), is that PKB *z and *s are not reflections one of PMP *nj, *ns, *nz, and *nZ and the other of PMP *j, *s, *z, and *Z. In this I differ with Ross (1988:95). Doublets and other evidence in PKB show that PMP *s is reflected by PKB *s, PMP *z and *j are reflected by both PKB *s and *z, PMP *Z is reflected by PKB *z, and PMP *nj, *ns, *nz, and *nZ have fallen together with PMP *nt, *nd and *nD as PKB *d. Examples of such doublets are PKB *kisu and *kidu (‘back of the head’), PKB *tamusi and *tamudi ‘intestines’, PKB *(sz)oko and *doqo (‘to burn’), and PKB *zala and *dala (‘road’).

Significantly for POC, doublets in Fijian point in the same direction, e.g., the pair *gudu* and *gutu* (‘to cut off’) and the pair *mudu* (‘cut off, ceased, ended’) and

musu ('to break or cut crosswise'). Doublets of the former kind involving Fijian *d* and *t* have been interpreted as reflecting prenasalized variants. Double reflexes of the latter kind, however, have been interpreted differently. Like those involving *d* and *t*, they occur sometimes in one form and sometimes in the other in various of the Eastern Oceanic languages, as Geraghty has noted (1983:149–153). To account for them, he suggests PEO *j as a third palatal to go with PEO *s and *z. The large number of cross-language inconsistencies he presents lend support to what I am suggesting, namely that they are a product of alternation of PEO *s and *z with their prenasalized variant PEO *d and that his PEO *j is unnecessary.

We have only one example in PKB of a word that reflects PMP *c: PKB *(rz)olo 'to go down out of sight' (PMP *celeb). PNK *kasoso 'blood' may contain a reflex of PMP *cemcem 'to make wet, moisten', as well. PMP *c would thus appear as PKB *z in one instance and PKB *s in the other.

7. COMPARISON WITH BALI AND VITU. In the appendices I have included all the Bali and Vitu words published by Johnston (J) as well as those recorded by Valentine (V) after their apparent cognates in the Kimbe languages. It will be immediately evident that there are some significant differences in what they record. Where Johnston records BA z and VI δ, Valentine consistently records *r*. Where Johnston records *x* (velar spirant), Valentine records *g*; but since Valentine consistently records *ng* for what Johnston records as *ŋ* and *ŋg*, we may safely equate Valentine's *g* with Johnston's *x*. With these differences in mind, we can call attention to developments in the Kimbe languages that are not evident in Bali and Vitu, and developments in Bali and Vitu that are not evident in the Kimbe languages, as well as developments that they share.

Already mentioned are the double reflexes in Proto-Kimbe of PMP *R as PKB *r and *L, of PMP *p as PKB *p and *v, and PMP *k as PKB *k and *q. The first two of these are not found in Bali or Vitu. This difference is in itself compelling evidence for a unity of the Kimbe languages as a distinct group that does not include Bali and Vitu. But both Bali-Vitu and the Kimbe languages share the double reflex of PMP *k, in Bali and Vitu as *k* and *x*, and they share it in the same way in many words. This attests to a common history of dialect mixture prior to the separation of Proto-Kimbe and Proto-Bali-Vitu.

PMP *s remained distinct from PMP *z, *Z, and *j as PKB *s and *z respectively but merged in Bali and Vitu (BA z, VI δ). They also merged in Proto-Willaumez, however, so the difference is not diagnostic in the way that the double reflexes just cited are.

Not found in the Kimbe languages is the preservation in Bali, but not in Vitu, of a number of words with the final consonant of the PMP root plus a vowel. This final consonant was lost in most Oceanic languages, certainly in most Eastern Oceanic languages, unless followed by a suffix such as the POC

verb formative *-i or noun formative *-a. In Bali, by contrast, the vowel following the preserved final consonant is not such a suffix, except in the case of the verb formative suffix *-i* (e.g., *xinumi* 'drink'). Rather, it varies according to the preceding vowel, which it tends to echo. Examples are *manuku* 'bird', *ixaŋa* 'fish', *rovoko* 'to fly', *vonuku* 'full', *rumaka* 'house', *izana* 'name', *vuxoto* 'net', *kalambaka* 'new', *vozere* 'paddle', *mboroko* 'pig', *xuzaxa* 'rain', *kuvuseke* 'rat', *ndalaŋa* 'road', *voraka* 'root' (metathesis of PMP *wakaR), *mapurutu* 'rotten' (PMP *[ma]-buruk), *ndaziki* 'sea', *za(ŋa)vuluku* 'ten', *lua-luaka* 'vomit' (Johnston 1982).

These final vowels are typical of what often happens when people speaking a language whose words end only in vowels borrow from a language with words ending in consonants: they add a vowel at the end that echoes the preceding vowel. This is well illustrated by loanwords from English in the Polynesian languages and Fijian, for example. What this phenomenon suggests is that modern Bali derives from a coming together of two Austronesian speaking communities at some time in the past, one of which preserved reflexes of PMP final consonants and the other of which did not. Noteworthy in this regard is a double reflex of PMP *q: it has merged with PMP *k as BA *k* in words preserving final PMP final consonants but remains separate from PMP final *k as Bali *x* otherwise. In Vitu PMP *q appears consistently as *x*. Similarly, PMP *θ- appears as Vitu *x- and in Bali as *x- in words that do not show the echoing final vowel, but as Bali θ- in words that do show the echoing final vowel, as in the Bali doublet *xinumi* 'drink (something)' (J) and *inumu* 'drink' (V).¹⁴

These Bali words with final consonants and echoing vowels were, it seems, construed by Johnston as representing retentions of older protoforms that had been lost in Vitu and the Kimbe languages. He used them regularly for reconstructing his Proto-Kimbe forms, instead of excluding them as products of extensive borrowing from another, more distantly related, Austronesian language.

Although it is not possible to include Bali and Vitu within the Kimbe group of languages, the relationship between the two groups remains close, as evidenced by the high percentages of cognates (even allowing for some inflation) shared by Bali and the several Kimbe languages (see footnote 6) and the shared double reflex of PMP *k.

8. CONCLUSION. Few systematic comparative studies and reconstructions of protolanguages have been undertaken for subgroups within the Oceanic sub-family of Austronesian, except for the Central Pacific group, consisting of the Polynesian (Biggs, Walsh, and Waqa) and Fijian dialects (Geraghty 1983), and also the Trukic group of dialects in Micronesia (Jackson 1983). Instead, we have had large-scale comparative surveys (e.g., Ross 1988) or comparisons of languages across subgroups (e.g., Blust 1978, 1984).

The findings from Geraghty's comparative study of Fijian dialects (1983) raised many provocative questions relating to the history of Eastern Oceanic languages. The more modest study presented here calls attention to similar problems. We may conclude that more such studies undertaken with other sub-groups of languages, in Melanesia particularly, will provide evidence that requires further revision of present formulations of Proto-Oceanic and the major language groups that derive from it.

The evidence of a complicated history of language and/or dialect mixing in pre-Proto-Kimbe, pre-Proto-Bali-Vitu, and subsequently in Bali should not be surprising, given the importance of this part of New Britain as a source of widely traded obsidian for thousands of years. Chowning (1969, 1996) points similarly to evidence for a complicated history among languages in southwest New Britain. As she observes, the historical complexities are not consistent with the hypothesis that the Kimbe languages descended in situ from the language ancestral to all the Austronesian languages farther to the east in Oceania (Ross 1988:261). Talasea and Mopril obsidian made the central north coast of New Britain an attractor for trading settlements rather than a generator of exploration and colonization to the east.

NOTES

1. I am much indebted to Ann Chowning for her careful reviews of earlier drafts of this paper, calling my attention to up-dated corrections of earlier errors in the data, providing helpful observations and suggestions, and guiding me to relevant bibliography.

There are five appendices to the paper giving reconstructed forms: A: Proto-Kimbe (PK_B), B: Proto-Nakanai (PN_K), C: Proto-Willaumez (PW_M), D: Proto-Lakalai (PL_K), E: Proto-Central Lakalai (PCL_K).

Abbreviations for language and dialect names are as follows: Nakanai group: B_I, Bileki; G_K, Gaikeke; K_S, Kai-Sisimi; L_O, Loso; M_R, Meramera; M_T, Maututu; T_A, Tarobi; U_B, Ubae; Willaumez group: B_O, Bola; B_U, Bulu; X_A, Xarua (Garua); Other languages: B_A, Bali (French Islands); F_I, Fijian; G_B, Gilbertese; K_O, Kove; K_P, Kapore; M_G, Mangseng; S_A, Sa'a-Ulawa; S_M, Samoan; T_O, Tongan; T_R, Trukese (Chuukese); V_I, Vitu (French Islands); Protolanguages: P_{AN}, Proto-Austronesian; PCL_K, Proto-Central Lakalai; PEO, Proto-Eastern Oceanic; PK_B, Proto-Kimbe; PL_K, Proto-Lakalai; PM_C, Proto-Micronesian; PMP, Proto-Malayo-Polynesian; PN_K, Proto-Nakanai; POC, Proto-Oceanic; Pre-POC, Pre-Proto-Oceanic; PTK, Proto-Trukic; PW_M, Proto-Willaumez.

Concerning symbols, η is used to represent the velar nasal (but g in F_I and S_M), q to represent the glottal stop, and x to represent the voiced velar spirant. Other symbols are the conventional ones for P_{AN} and PMP or are those used by the author cited.

2. The name Nakanai is said to have been given to the coastal people of northern Central New Britain by the Tolai of northeastern New Britain, who traded with the Nakanai for *Nassarius* shells.
3. A program, funded by the Carnegie Corporation of New York and jointly administered by the Bernice P. Bishop Museum and the Departments of Anthropology of the University of Hawai'i and Yale University, that sponsored ethnographic and lin-

guistic research in the Pacific region. The TRIPP list was in three parts: one part contained a set of 215 basic vocabulary items; the second part was a set of 212 additional items, some basic vocabulary and others basic to Oceanic environment and culture; and the third part was a set of 311 short phrases covering basic grammatical features. Lexicostatistical comparisons cited in this paper were based on the first set of 215 items.

4. This material failed to distinguish orthographically between /g/, a voiced velar stop or prenasalized stop (in free variation), and /x/, a voiced velar fricative. Ann Chowning was able to check out Father Schumm's vocabulary with a Bola speaker and make needed corrections.
5. Once thought to belong to the Kimbe group, Bali-Vitu has recently been put into a separate group of its own on closer study by Chowning (1986:427–428) and Ross (1988). Significant in this regard is the fact that Bali-Vitu does not seem to show the double set of reflexes for PMP *p that we show here must be reconstructed for Proto-Kimbe.
6. Lakalai has been used to refer to the Bileki dialect. Here we reserve Lakalai to refer to the larger group of mutually intelligible dialects. The group of dialects here referred to collectively as Lakalai have also been called Nakanai (as distinct from Meramera) by Johnston (1978, 1982) and, following him, Ross (1988). This designation is unfortunate because the once distinct phonemes *n and *l have merged as *l* in all the Lakalai dialects, one of the features that sets them apart from Meramera. Nakanai is, thus, more appropriate as the more inclusive name for both Lakalai and Meramera.
7. A lexicostatistical comparison, using the TRIPP list, showed the following percentages of shared cognates in the same meaning slots among them to be Xarua-Bola 66% (206 items), Xarua-Bulu 54% (205 items), and Bola-Bulu 53% (205 items). Using a modified list of one hundred items, Johnston (1982:62) shows the following percentages of shared cognates: Xarua-Bola 85%, Xarua-Bulu 66%, and Bola-Bulu 68%. His percentages are higher but the relative positions remains the same. The higher percentage of shared cognates between Xarua and Bola suggests that the speakers of these two languages lived in close proximity with one another for a time after Bulu speakers had been more fully separated as a linguistic community. Although the Xarua people are now located a little farther away from Bola speakers than the Bulu people are, tradition (as recorded among Lakalai speakers on the Hoskins Peninsula and in the neighboring Kapore speaking village of Banaule) derives them from the island of Garua and the adjacent part of the Willaumez Peninsula in the heart of what is now Bola speaking territory. The same tradition has the Xarua speakers migrating first to the eastern end of the Hoskins Peninsula and going from there to their present location. The matrilineal Garua clan among the Bileki (Lakalai of the Hoskins Peninsula) attests to past intermarriage and close interaction between Bileki and Xarua speakers. Johnston also gives shared percentages of Willaumez languages with Bileki, Meramera, and Bali-Vitu: Bulu-Bileki 47%, Bulu-Meramera 52%, Bulu-Bali 47%; Bola-Bileki 49%, Bola-Meramera 52%, Bola-Bali 43%; Xarua-Bileki 49%, Xarua-Meramera 49%, Xarua-Bali 44%; Bileki-Bali 40%, Meramera-Bali 42%. Examination of what he treats as cognates in reconstructing Proto-Kimbe, leads me to consider his percentages in comparisons with Bali, especially, as inflated.
8. Ross (1988:263) has called my conclusions in this regard into question. To dismiss significantly high percentages of shared retentions in Fijian and Kimbe languages as due to these languages' greater conservatism is tantamount to dismissing the evidence of shared retentions in all lexicostatistical studies. Shared retentions of vocabulary, as distinct from grammatical features, is what lexicostatics is based on as a measure of relative phylogenetic distance.

9. Ross (1988:261) has averred that the languages in his Meso-Melanesian cluster spread to New Ireland from the central north coast of New Britain and that the Kimbe and Bali-Vitu languages have remained in that group's homeland. If so, then this would be the place of origin of the Eastern Oceanic division of Oceanic languages. Ross offers no convincing evidence in support of this assertion, however, and the distributional evidence and distance from other languages in New Britain point to the Kimbe languages as being intrusive to the area.
10. My argument would be greatly strengthened by showing that the Kimbe languages share innovations with the other languages in Eastern Oceanic with which I am proposing to group them. Unfortunately, the data needed to determine whether or not there are such shared innovations is not yet adequate. Most systematic comparative work of the kind needed in the subgroups of the Oceanic languages has been confined to the Eastern Oceanic languages. For the time being, therefore, we must rely on percentages of shared retentions as shown by lexicostatistics for evidence of subgroupings.
11. Following Blust (1980), I use Proto-Malayo-Polynesian (PMP) to refer to the subdivision of Proto-Austronesian that includes all Austronesian languages of record outside of Taiwan. The reconstructions of Dempwolff (1938) and of Dyen (1951, 1953) did not include any languages from Taiwan, so they in effect are putative reconstructions of Proto-Malayo-Polynesian, and I cite them as such in addition to Blust's reconstructions.
12. Subsequent borrowing of Lk forms by Middle Mr and Mr may account for PNk *Ø where we expect *q and PNk *l where we expect PNk *n from comparison with other Oceanic languages.
13. According to Johnston (1978:28–29), Vele shows loss of PLk *h, replacement of PLk *k by q, and merger of PLk *r and *l as r (as I interpret his statement that “Bileki /l/ is represented as /r/”). Loso, he says, has lost PLk *h but retains the PLk *l and *r contrast. He also states that Vere and Loso both, like Mr, show the prefixed marker for common nouns as *a-*, rather than Bileki *la-*. It appears from what Johnson reports that the differences between his Vele and Loso are such that Loso belongs with Vele in the Central Lakalai group of dialects and is not to be considered in a separate branch of Lakalai, like Ubac. In the account given here I am necessarily following the data on Vele/Loso as recorded by Valentine.
14. Chowning (1986:423) reports a similar retention of final PMP consonants with an additional vowel in some Kove words, but in Kove the added vowel is regularly the high vowel *-i* (*-u* after *m*). Given the geographical proximity of Kove and Bali, it is possible that we have examples here of loans from the same source. Comparison of the Bali and Kove words showing these PMP final consonants and added final vowels could indicate whether or not such is the case.

APPENDIX A: RECONSTRUCTED PROTO-KIMBE (PKB) FORMS

The abbreviations for sources (see References) are B: Blust, Dp: Dempwolff, Dy: Dyen, G: Geraghty, and R: Ross. All PMc citations are from Goodenough (n.d.). Where citations of Nakanai and Willaumez dialects differ, the sources are indicated by C: Chowning, G: Goodenough, and V: Valentine; those from Johnston (1980, 1982) are marked J. Bali and Vitu citations are from Johnston

(1980, 1982), marked J, and from Valentine, marked V. Citations from Bulu, Bola, and Xarua are from Valentine and/or Schumm (unmarked) and from Johnston (1980), marked J. Citations from Kove are from Chowning (1996).

PKB *a- 'common noun marker'. MR *a-*. XA *a-*. POC *a (R). Cf. PLK *la-.

PKB *-a 'him, her, it (suffixed to verb)'. PNK *-a: B1, TA, KS, MT, UB, MR *-a*. PWM *-a: BO, XA *-a*.

PKB *ago 'to make a design'. B1 *ago* 'make a design'. BO *ago* 'to paint'. Cf. PMP *gawa 'to work (with the hands)'.

PKB *au 'I, 1st sg prn'. PNK *au: B1, TA, KS, GK, MT, UB, MR *e-au*. BO *i-au*. PMP *aku(h) (Dy).

PKB *avala 'year, wet season'. PNK *avala: B1, TA, KS, GK, MT, UB *le-avala*, MR *avala*. PWM *vala: BU *i-vala*, BO *au-vala*, XA *vala*; BO (J), XA (J) *vala* 'rain' (initial *a-* has been reinterpreted as a noun marker in the Willaumez languages). FI *cavaa* 'storm', SM, TO *afaa*, FU *afaa* 'storm', PEO *yavaRa (G), POC *apaRat (R), PMP *habaRat (Dy). Cf. PMP, PAN *qabaRat (R).

PKB ? *bakaka 'entrails': B1 *bakaka* 'string of large, cut, disc-shaped pearl shells, used to represent a person's entrails in homicide payments'. BO *bakaka* 'entrails'. May well be a loanword in one or the other language.

PKB ? *bakovi 'man'. B1 *bakovi* 'a very handsome man'. PWM *bakovi: BO, XA *bakovi* 'man'. The B1 form may be a loan from XA.

PKB ? *ba(rz)akau 'thorn, thorny vine'. B1 *barakakau* 'a thorny vine'. BO *barakau* 'thorn'.

PKB *ba(rz)ema 'nipa palm'. B1 *barema*. BO (J) *a-barem* (sic). BA (J) *mbarema*.

PKB ? *baulo 'pertaining to outrigger'. B1 *baulo* 'outrigger float'. BO *baulo* 'outrigger'.

PKB *bebe₁ 'to squeeze'. PNK *bebe: B1, TA, KS, MT, MR *bebe*, GK *bebe-* *a*. PWM *bebe: BO *bebe*, XA *bebe-a*. Cf. PAN *pedped 'to press together' (B).

PKB *bebe₂ 'to flutter'. PNK *bebe 'butterfly': B1, TA, KS, MT, MR *bebe*, UB *babe* (I cannot account for the *a*). PWM *bebe 'to fly': BU *bebebe*, BO, XA *bebe*. PMC *pepe 'to skip, flit'. Cf. PAN *benben, *bemben (R) and PMP *ambay 'flutter, move to and fro' (Dp). J: PKB *ka-bebe (based on BA *kambamba*, V1 *kambembe*).

PKB *be(IL)e 'bamboo': B1 *bele* 'small cultivated bamboo used for thatching rods'. BU *bele* 'bamboo' (J).

PKB *boko 'to carry'. PNK *boko 'to carry; carry in a sling, pick up (a child)': B1, TA, KS, MT, UB, MR *boko*. BO *boko* 'to carry'. PMP *bekes 'bundle' (Dp), PWMP *begen 'to hold firmly' (B).

PKB *bola 'wide'. PCLK *bola: TA *bola-ha* 'wide'; KS *bola* 'width', *bola-la uru* 'wide' ('its width big'). PWM *bola: BU, XA *bolabola*, BO *bola* 'wide'; BO *bola-vaxa* 'foot'. PMP *belaj 'spreads, stretches, wide' (Dp). Cf. PCLK *bola 'round'.

PKB *bole 'to carry'. PLK *bole 'to carry (on the shoulder)': B1, TA, KS, MT *bolebole*, UB *bole-a*. BO *bole* 'to bring'. See also PCLK *bole 'to rise, lift'. Cf. PAN *beRay 'to give' (R).

PKB *boLo 'pig'. PNK *bolo: B1, TA, KS, MT, UB, MR *bolo*. PWM *boLo: BU (J) *bolo*, BO *boro*. POC *boRok (R), PAN *beRek (B). J: PKB *borok (based on BA *mboroko*, V1 *mboro*).

PKB *bonu ‘turtle’. B1 *bolu*. PWM *bonu: BU (J), BO *bonu*, XA (J) *bono* (sic). POC *poñu (R), PMP *peñu (Dp). Note also BA (J) *mbonu*.

PKB *boto ‘short’. PNK *boto: B1, TA, KS, GK, MT, UB, MR *boto*. BU *boto-ka*. Note also BA *botogo* ‘short’ (J). Cf. TR *mwoch* ‘short’, FI *modo* ‘cut into short pieces’.

PKB *bozu ‘to topple, fall’. PNK *bozu: B1 *boru*, UB *a-bosu*. PWM BO, XA *boru*.

PKB *bua₁ ‘areca palm’. PNK *bua: B1, MR (J) *bua*. PWM *bua: BU (J), BO, XA (J) *bua*. POC and PAN *buaq (R). J: PKB *bua (based also on BA and V1 *mbua).

PKB *bua₂ ‘heart’. B1 *bua-gu* (‘my h.’). PWM *bua: BU, BO, XA *bua-* (J). BO *bua-na* (‘his h.’).

PKB *bulu ‘gummy’. PNK *bulu ‘juice, sap, liquid’: B1, TA, KS, MT, UB, MR *bulu*. BO *mata-na-bulu* ‘pond’. FI *bulubulu-ti* ‘sticky, gummy’, PMP *pulut ‘glue’ (Dp) and PMP *bulit, *pulit ‘glue, paste’ (B).

PKB ? *bunu ‘wrapped, tangled’. B1 *bululu* ‘snarled (of string)’. BO *bunu* ‘wraps up’.

PKB *dala ‘road, outdoors’. See PKB *zala.

PKB *dame ‘to lick’. B1 *game*. BO *dame*. POC *dami ‘chew, lick’ (B).

PKB *dara ‘blood’. PNK *dara (TNK *dD): B1 *gara* ‘menarche rite’, *la-gara-gu* ‘my b.’ (exclamation by mother on seeing her child fall down); MR *dala* ‘blood’. PWM *daRa ‘blood’: BU, BO *dara*, XA *dala*. PMC *dadaa, POC *draRaQ (R), PMP [n](dD)aRaQ (Dy). Note also PNK *kasoso ‘blood’. J: PKB *dara.

PKB *dasi ‘sea water’. PNK *dasi (TNK *dD) ‘sea, wave’: B1 *gasi* ‘wave’; TA *a-gasi*, MR *dasi* ‘sea’. PWM *dari ‘salt water, sea’: BU, BO, XA *dari*. PMC *taaSi (taSi-), PMP *[n](tT)asik (Dp), PAN *tasik (R). Note GK *dari*. UB *tasihi* ‘sand’ seems unrelated. Cf. PEO *tazi (G). J: PKB *dazik (based on BA *ndaziki*, V1 *ndaði*).

PKB *di-, *(sz)i- ‘they’. PLK *-gi-te, *-gi-teu ‘they’: B1 *e-gi-te*, *e-gi-teu*, TA, KS, MT *e-gi-teu*, UB *e-gite*. PWM *ri- ‘they’: BU *re-teu*, BO *ri-* (before verbs), XA *e-ri-tou*. Cf. PMP *siDa.

PKB *dodo ‘to pity, love’. B1 *gogo*. BO *dodo*. Note B1 *dododo* in same meaning is a loanword.

PKB *doqo ‘to burn’. See PKB *(sz)oko ‘to burn’.

PKB *e- ‘prefixed “proper noun” and independent pronoun marker’. PNK *e-: B1, TA, KS, GK, MT, UB, MR *e-*. BO *e-*.

PKB *ga- ‘future marker (pref.)’. PLK *ga-isa ‘when (future)?’: B1, TA, KS, MT *ga-isa*, UB *g-isa* (<*gaisa). PWM *ga-r[ie]ka ‘when (future)?’: BU *ga-reka*, BO, XA *ga-rika*. Cf. POC *ñica (R).

PKB *(gñ)ala ‘belly’. B1 *gala* ‘crawls’. PWM *(gñ)ala ‘belly’: BU, BO *ngala* (the written *ng* here is ambiguously *g* or *ñ*). Cf. PMP *kalanj ‘support, lining, base’ (Dp) and *galanj ‘support’ (Dp). Cf. PKB *ñala ‘breath, chest’.

PKB *gaLamo ‘slit gong’. B1 *galamo*. BO *garamo* ‘drum’.

PKB *gi ‘to count’. PNK *gi: B1, MT *gigi*, TA *gi/gigi*, GK *gi-a/gigi-a*, UB *gi*, MR *gi-moni*. PWM *gi: BU *gi-i*, BO *gi*, XA *i-gi*.

PKB *gogo ‘black substance’. B1 *gogo* ‘a black vine, black hardened earth’. BO *gogo* ‘to blacken the teeth’.

PKB *golo ‘rattle’. B1 *gologolo* ‘a rattle used in magic, ankle rattles worn in dance’. BO *golo* ‘ankle rattles made from seeds’.

PKB *go(rz)o ‘chest, breast’. B1 *goro* ‘chest ornament of shell’. BO *goro* ‘breast’. May well be a loanword in one or both languages.

PKB *-gu 'of me, my'. PNk *-gu: B1, TA, KS, MT, UB, MR -*gu*. PWM *-gu: BU, BO, XA -*gu*. PMC *-xu, POC *-gu (R), PAN *-ŋku (R). J: PKB *-gu (based also on BA, V1 -*ŋgu*).

PKB *gutu 'to cook'. PNk *gutu: B1, TA, KS, GK, MT, UB, *gutu*, MR *guguti*. PWM *gutu: BU *gutu-i*, BO *gutu*, XA *gusi-a*.

PKB *(gk)o(rz)a 'good'. B1 *kora*. PWM *go(rR)a: BU *gora-ka*, BO *u-gora*.

PKB *(hθ)abi 'to take in hand, give'. PLk *abi 'to take': B1, TA, KS, GK, MT, UB *abi-a*; B1, KS, MT, UB *ababi* 'carry in hand'. PWM *xabi 'to give': BO *xabi*, *habi* (J), XA *habi-a*. PMP *(qh)a(m)pit 'to hold tight' (Dy), *ga(m)pit (Dp), *ka(m)pit (Dp). Cf. PMP *kabiR 'draw toward oneself' (B), PAN *qabin 'carry under the arm' (B).

PKB *hada 'phosphorescent light'. B1 *haga* 'luminous fungus, phosphorescence in water'. PWM *xada 'star': BU *xadaxada*, BO *xada*, *hada* (J), XA *hadahada*. PMP *(qh)antaD (Dy).

PKB *hadoŋo 'to wake up, rise from sleep'. B1 *hagolo*. BO *xadoŋo*.

PKB *hanu, *hanunu 'soul, shadow, reflection'. PLk *halulu 'soul': B1, TA, KS, MT, UB *halulu*. BO *xanu*. POC *(qθ)anunu (B). Cf. PMP *qaninu, *qaninun 'shadow, reflection' (B). See also PNk *nunu and PLk *kalulu 'soul'.

PKB *hate 'liver'. PNk *hate: B1, TA, KS, GK, MT, UB *hate*, MR *o-ate*, *ate-na*. PWM *xate: BU *hate katokato*, BO *xate kato* 'black l.', XA *a-hate-gu* 'my l.', PMC *aate, *ate-, POC *qate (R), PMP *qatay (Dy).

PKB *hazo 'day, sun'. PNk *hazo (TNk *haZo): B1, TA, MT, UB *haro*, KS *halo*, GK *halo/haro*, MR *o-aso*. PWM *xaro: BU, BO *xaro*, *haro* (J), XA *haro*. PMC *a(sS)o 'time of something', PEO *qazo (G), PMP *qa(n)jaw 'day, sun' (Dy). Cf. PEO *qaco (R). J: PKB *qazo.

PKB ? *heLe 'to disperse'. B1 *hele* 'to flee, clear out, go away'. BO *xere* 'to put separately'.

PKB ? *hipu 'prevailing wind'. B1 *hipu*. XA *hipu*. Possibly a loan from B1 to XA.

PKB *hiva 'sibling-in-law of same sex'. B1 *hiva* (in address), *iva-gu* ('my s.'). BO *xiva-gu* ('my s.'). PAN *qipaR (R). Cf. PMP *hipaR 'affines' (Dp).

PKB *huma 'garden': PNk *huma, *ma-huma: B1, TA, KS, MT *ma-huma*, MR *ma-uma*, B1, UB *lo-luma* 'from the g.'. BU (J) *x/in/uma*. PMP *quma 'garden' (B). J: PKB *maquma (based on BA *xuma*).

PKB *huvi 'yam'. B1 *huvi*. PWM *xuvi: BU (J), BO, *xuvi*; BO (J), XA (J) *huvi*. PMP *qubi(h) (Dy). Cf. POC *qupi (R).

PKB *-i- 'general counting classifier prefix'. PLk *-i-: B1, TA, KS, GK, MT, UB *i-lua* 'two', *i-tolu* 'three'. PWM *-i-: BO *i-ra-vulu* 'ten', XA *i-vitu* 'seven'.

PKB *ia 'he, she, it': PNk *(i)a B1, TA, KS, GK, MT, UB *e-ia*, MR *e-i*. BO *ia*. POC *ia (R).

PKB *(i)aŋo 'yellow'. PNk *iaŋo (TNk *iaŋo): B1, MT *ialalo*, TA *gava-ialo*, MR *iaŋaŋo*. PWM *(i)aŋo: BU *aŋaŋo*, BO *ŋaŋo*, XA *iaŋaŋo*. POC *(yaŋo)yaŋo 'turmeric' (R). Cf. PMP *iRaŋ 'red' (Dp).

PKB *iku 'tail'. PNk *iku (TNk *K): B1, TA, KS, GK, Ma *kiu*, UB *iku*, MR *iu* (V), *qiu* (J). PWM *iku: BU *iku*, BO *ku-na* ('his t.'), XA *a-iku-na* ('his t.'). POC *ikuR (R), PMP *ikuR (Dp). J: PKB *iku (based also on BA, V1 *liko*).

PKB *-in- 'nominalizing infix'. PNk *-in-: B1 -*il-*, MR -*in-*. BO -*in-*.

PKB *inu 'to drink'. PNk: B1, TA, KS, GK, MT, *liu*, MR *inu*, *niqinu* (J). PWM *inu: BU *inu*, *xinu*, BO *ninu* (*ininu), XA *inu*. PMP *inum (Dp). J: PKB *qinum (based on BA *xinumi*); note also BA *inum* (V) and V1 *xinu* (J), *ginu* (V).

PKB *iqa ‘fish’. PNk *iqa: B1, TA, KS, GK, MT, UB *ia*, MR *a-iga* (J: *aia*). BU *ixa* (J). PMP *ikan (Dy). J: PKB *ixan̄ (based BA *ixan̄a*); note also V1 *xixu* (J).

PKB *isa ‘name’. PNk *isa: B1, TA, KS, GK, MT, UB *isa*, MR *s-isa*. PWM *ira: BU, XA *ra* (J), Bo *ria* (J). Tr *iti* (*ita-*), PEO *isa. J: PKB *qizan (based on BA *izana*, V1 *xiḡa*); note BA, V1 *ira-ngu* ‘my n.’ (V).

PKB *isu ‘nose’. PCLk *ma-isu ‘nose’: B1, TA, KS, GK, MT *ma-isu*. PWM *iru: BU *iru*, Bo *ru-pere-gu* ‘(my n.)’, XA *a-iru-gu* ‘(my n.)’. PMC *pwa- uSu, PMP *ijuṅ ‘nose’ (Dy). Note BA *iru* (J), BA, V1 *iru-ngu* ‘my n.’ (V).

PKB *iti ‘be elevated’. B1 *iti* ‘to rise’, *ma-iti* ‘a house built on piles’, *popo-iti* ‘hill, rise’ PWM *pa-iti ‘to stand’: BU *pa-iti*, Bo *p-esi*, XA *pa-isi*.

PKB *ivu ‘hair, feather’. PNk *ivu/hivu: B1 *ivu* (G), *hivu* (V), TA, MT, UB *ivu*, *hivu*, GK *hivu*, MR *a-ivu*, *a-ivu-gu* ‘(my h.)’. PWM *ivu: BU, Bo *ivu*, XA *a-hivu-gu* ‘(my h.)’ (V), *a-ivu-* (J). Cf. PMP *buhuk (Dy).

PKB ? *kaliva ‘elephant ear taro’. B1 *kaliva*. Bo *kaliva*. Metathesis of POC *piRaq (R).

PKB *ka(Lr)uki ‘crab’: MR *aluqi* (J). PWM *ka(Lr)uki: Bo (J) *karuki*, XA (J) *kaluki* ‘soldier crab’; Bo (C) *karoki* ‘crab’. The MR form is presumably *qaluqi*. PMC *karuki ‘white sand crab or ghost crab’, PMP *kaRuki ‘sand crab’ (B).

PKB *ka(rz)a₁ ‘sharp, piercing’. PCLk *kara ‘sharp’: B1, TA, MT *kara*. Bo *kara* ‘to bite, to wound’, *kara-pasi* ‘incisor tooth’. Cf. PKB *qaLa ‘to bite’.

PKB *ka(rz)a₂ ‘to suffice’. B1 *kara* ‘be up to, be in amount of’. Bo *kara* ‘suffice’.

PKB *kasi ‘to scrape, scratch’. PNk *kasi: B1, KS, GK, MT *kasi-a*, TA, UB *kasi*, MR *kakasi*; B1 *kasi* ‘shell knife’. PWM *kari ‘to scratch’: BU, Bo *kari*, XA *kari-u*. To *kakahi*, SM *qaqasi*, PMP *kaskas (Dp). Cf. POC *karis ‘to scratch’ (R). See also PLk *makasili ‘itches’.

PKB *kato ‘black’. B1 *kato*. PWM *kato: Bo *kato*, *katokato* (J), XA *kato* (J).

PKB *kavutu ‘stomach’. PNk *kavutu/kaputu (TNk *K): B1, TA, KS, MT, UB *kavutu*, MR *aputu*. PWM *kavutu: BU, Bo *kavutu*, XA *a-kavutu-gu* ‘(my s.)’.

PKB *kea ‘white’. PNk *kea, *akea: B1, TA, KS, GK, MT, UB, MR *kea*; B1, TA, KS, MT, MR *akea*. PWM *kea: BU, Bo, XA *kea*.

PKB *kidu ‘back of the head’. See PKB *kisu.

PKB *kisu, *kidu (<*kinsu) ‘back of the head’. PNk *kisu (TNk *K): B1, TA, GK, MT, UB *kisu*, MR *isu*. PWM *kidu: BU *kidu*, *kidukidu*, Bo *kidu*, XA *a-kidu-gu* (with pos. suf.). PMC *kiu, POC *k(iu)ju (R). Cf. PEO *keju (G), POC *geju (R). Here PKB *kidu can be understood as deriving from a prenasalized variant (see also F1 *kidu* ‘to wash dirt from the head’). J: PKB *kidu (based also on BA *kindu*).

PKB *kuli ‘skin, bark’. PNk *kulikuli (TNk *K): B1, TA, KS, GK, MT, UB *kulikuli*, MR *qulikuli*. PWM *kuli: BU, Bo *kuli*, XA *kukuli*. POC *kulit (R), PMP *kulit (Dp).

PKB *kuku ‘finger’. PNk *kuku (TNk *K): B1, TA, KS, MT, UB *kuku*, MR *uqu*. Bo *kuku*. PMP *kuku (Dp), PAN *kuSkuS ‘claw, nail’ (B). J: PKB *kuku (based also on BA *kuku*).

PKB *kulu ‘breadfruit’. See PKB *qulu.

PKB *kume ‘pus’. B1 *kume*. Bo *kume*.

PKB *kureko ‘chicken’. PNk *kureko: B1, TA, MT, UB *kureko*, MR *kuleko*. Bo *kureko*.

PKB *(kq)adavu ‘rain’: MR (J) *qadavu*. BU *kadavu*.

PKB *lahia ‘cultivated ginger’. B1 *lahia*. Bo *laxia*. PMP *laqia (B).

PKB *lapu 'to pull, drag'. PNk *lapu: B1, TA, KS, MT, UB *lapu*, GK *lapu-a*, MR *lapu-ale*. Bo *lapu* 'to tear out, uproot'.

PKB ? *lavo 'cross cousin, wife's brother': B1 *lavo-gu* 'my cross cousin'. Bo *lavo* 'wife's brother'.

PKB *lete 'roof, crown of head'. MR *lete* 'roof', *lete-gu* 'my head'. Bo *lete* 'crown of head'. Note also UB *luto*, *lutu* 'head'.

PKB *lidi 'to throb'. PNk *lidi (TNk *dD) 'to throb': B1, TA, KS, MT *ligi* 'to pain'; UB *lidilidi* 'pulse'. Bo *lidi* 'to rap with the fingers'. PMP *li(n)Tik 'snaps' (B).

PKB *(l)ilo 'in'. PNk *ilo: B1, TA, KS, GK, UB *o-ilo*, MT *ilo*, MR *lilo*. PWM *lilo: BU, Bo, XA *lilo*. PAN *lem (B).

PKB *lima₁ 'arm, hand'. PNk *lima: B1, TA, KS, GK, MT, UB, MR *lima*. PWM *lima: BU, Bo *lima*, XA *a-lima-gu* ('my h.'). PMP *lima (Dp). Note also BA, V1 *lima* (V).

PKB *lima₂ 'five'. PNk *lima: B1, TA, KS, GK, MT, UB *i-lima*, MR *lima*. PWM *lima: Bo, BU *lima*, XA *i-lima*. PMc *liima, *lima-; POC *lima (R).

PKB ? *lipi 'club'. B1 *lipi*. Bo *lipi*. Possibly a loan word in one or the other language. Cf. Ko *lipi*, Sengseng *e-lip* (Chowning, pers. comm.).

PKB *loa 'relative by marriage'. B1 *loa-* 'parent-in-law, son-in-law'. Bo *loa-* 'brother-in-law'. PAN *dawa (R).

PKB *loha 'eagle'. B1 *loha-uru*. Bo *loxa*.

PKB *loho 'throat, neck'. PNk *loho (TNk *H) 'neck': B1, TA, KS, MT, UB *loho*, MR *loqo*. PWM *loxo 'throat': BU, Bo *loxo*, XA *a-loho-gu* ('my t.'). PMP *liqeR (Dy). J: PKB *loqo (based also on BA, V1 *loxo*); note also BA, V1 *logoro-ngu* 'my t.' (V).

PKB *lolo 'mountain'. PNk *lolo: B1 *lolo* 'name of a mountain'; MR *lolo* 'mountain'. PWM *lolo: BU, Bo, XA *lolo*.

PKB *lomu 'lake'. PCLk *lomu: KS, GK *lomu*, B1 *lomu* 'pool in bush, water in canoe'. Bo *lomu*. See also PLk *tilomu 'sinks, drowns'.

PKB *lojo 'to hear'. PNk *lojo (TNk *ŋ): B1, TA, KS, GK, MT, UB *lolo*, MR *loge*. PWM *lojo: BU *lojo-ne*, *lojoni* (J), Bo *lojo*, XA *lojo-a*. PEO *roŋo-z (G), POC *roŋoR (R), PMP *deŋeR (Dp), PAN *deŋeR (B). J: PKB *lojoni (based on the BU form and on BA *lojoni*). The *n* in the BU and BA forms is unexpected, but is shared also with neighboring Ko *longoni* (Chowning, pers. comm.). Note also BA, V1 *longori* (V), which are expected forms; and J also gives BA *lojori*.

PKB *lua 'to vomit, spit'. PNk *lua 'to spit': B1 *lalua-taro-susu* 'late at night (lit. 'spits away the breast', of a baby); B1, TA, MT *kalalua*, MR *alualua* 'to vomit'. PWM *lua 'to vomit': BU *lualua*, Bo *lua*, XA *kulu-lua*. PMP *luaq (Dy). J: PKB *lualuak (based on BA *lualuaka*); note also BA *lolouaka* (V) and V1 *lualua* (J,V).

PKB *Lau₁ 'leaf'. PNk *lau: B1 *ga-lau*, *ga-lalau*, TA, GK *ga-lalau*, MT *ga-laulau*, MR *lau-na* ('its l.'). PWM *Lau: BU, XA *lalau*, Bo *rau*. PMP *Dahun (Dy). Cf. POC *raun 'leaf' (R), PAN *daSun (B). J: PKB *raun (based on BA *rauna*).

PKB *Lau₂ 'far'. PLk *ma-lau 'long, tall, far': B1, TA, KS, GK, MT *ma-lau*, UB *ma-lalau*. Bo *rau* 'far'. See also PKB *malaqu 'long'. Cf. PMP *Za[ho]uq (Dy).

PKB *Lavi 'evening, yesterday'. PNk *lavi: B1, TA, KS, MT *ala-lavi*, UB *ala-lavi*, *ela-lavi*, MT *a-lavi*, *lavi* 'yesterday'; B1, TA, MT *mau-lavi*, KS, UB *mou-lavi* 'evening'; MR *lavlavi savulo* 'tomorrow'. Bo *ravi* 'yesterday'. PPN *afiafi, PMc *faka-afi, PMP *Rabi (Dp), PAN *Rabi 'evening meal' (B). J: PKB *aŋaravi (based also on BA *garavi* 'afternoon').

PKB *Lodo 'night'. PNk *lodo: B1, TA, KS, MT, *logo*, GK *logo*, *lodo*, UB *roro* (<*loro), MR *lodo*. PWM *[LR]odo: Bo *rodo*, XA *lodo*. Tr *roch* (*rocho-*), GB *roo*. PMP

*DemDem ‘be dark’ (B). Cf. PAN *DeSem ‘night’ (R). Note also BU (J) *boni* ‘night’, PMC *pwoŋi, pwoŋi-, PMP *beŋi (Dp), PAN *beRŋin (B). Note also KO *voŋi*.

PKB *Lovo ‘to fly’. PNk *lovo: B1, TA, GK, KS, MT, UB, MR *lovo*. BO *kadi-rovo* ‘bird’. PMP *Rebek ‘to fly’ (B). J: PKB *rovok (based on BA *rovoko*).

PKB *Lua ‘two’. PNk *lua: B1, TA, KS, GK, MT, UB *i-lua*, MR *lua*. PWM *Lua: BU *lua*, BO *rua*, XA *i-lua*. PMP *Duwa (Dp), *Dewha (Dy), PAN *DuSa (B).

PKB *-Lua ‘dual marker’. B1 *-lua*. PWM *Lua, *Lu: BU, XA *-lu*, BO *-rua*.

PKB *Luma ‘house’. PNk *luma ‘house’: B1, UB, MR *luma*. PWM *Luma: BU (J), XA (J) *luma*, BO *ruma* (J,V). POC *Rum(w)aq (R), PMP *Rumaq (Dy), PAN *Rumaq (B). J: PKB *rumak (based on BA *rumaka*).

PKB *ma- ‘state of being...’: PNk *ma-. PWM *ma-. See PKB *ma(h)asi, *mahuLi.

PKB *ma(h)asi ‘salty’. PNk *masi ‘salty, sour’: B1 *mamasi* ‘salty’, KS *mamasi* ‘sour’, MR *masi* ‘salt, sour’. XA *maxari*. PMP *ma-qasin (B). Note also MT *memeso* ‘sour’.

PKB *mahati ‘to ebb (of tide)’. B1 *mahati*. BO *maxasi*. POC *maqati (B).

PKB *ma(h)avu ‘healed (of sore or wound)’. B1 *mahavu*, *mavu*. BO *mavu*. Cf. PMP *ampun ‘pardon, forgiveness’ (Dp).

PKB *mahuLi ‘alive’. PNk *mahuli: B1 *mahuli*, TA, KS, MT, UB *mahulihuli*, MR *maululi*. PWM *maxuLi: BU, XA *maxuli*, BO *maguri* (**maxuri*). PMP *[ma]- quDip (Dy).

PKB *mai ‘hither, toward speaker’: PLk B1, TA, KS, GK, MT, UB *go-mai* ‘come here’. PWM *mai: BU *mai* ‘come’ (J), BO *mai*, *i-mai* (J). PMP *maRi (Dp). Note also BA (V, J), V1 (V) *mai*.

PKB *malai ‘withered’. B1 *malai*. BO *malai*. PMP *[ma]-layu (Dp).

PKB *malala ‘ground cleared of vegetation’. B1 *malala* ‘dancing ground, garden cleared but not yet planted’. PWM *mal(ai)la: BO *malala* ‘earth, soil’, XA (J) *malila*. POC *malala (B). Cf. PKB *vulala ‘be spread out’.

PKB *malaqu (TKB *Q) ‘long’. PLk *malau ‘long, tall, far’: B1, TA, KS, GK, MT *malau*, UB *malalau*. PWM *malaku: BU, XA *malaku* ‘long’, BO *malaku* ‘narrow’ (sic). Perhaps from PMP *laku ‘trade’ (Dp). Note also PMP *ruqaR ‘wide, spacious’ (Dp) and PAN *luqaR ‘wide, spacious’ (B). See also PKB *Lau ‘far’.

PKB *manu ‘bird, living creature’. PNk *manu ‘bird’: B1, TA, KS, GK, UB *malu*, MR *manu*. PWM *manu: BU *manu* ‘bird’, BO, XA *manu* ‘fish’. POC *manuk (R), PMP *manuk (Dp). J: PKB *manuk (based on BA *manuku*).

PKB *maŋi, *maŋi-na ‘smell, have odor’. PNk *maŋi: B1 *mali* ‘smell’, *mali-a* ‘smell it’; B1 *mali-rumurumu* ‘fragrant’; KS *mali-tigi* ‘fragrant’; MR *maŋi-na* (V), *maŋi* (J) ‘smell, have odor’. PWM *maŋi- n(ao): BU *maŋi-na* (J), XA *maŋi-no* (J). See also PLk *malia ‘to smell good’. J: PKB *maŋin(ao).

PKB *maqi(dg)i (TKB *q) ‘cold’. PNk *maqidi (TNk *R) ‘cold’: B1, TA, KS, GK, MA *maigi*, UB *miri* (**mairi*), MR *maqigi*. PWM *maKigi: BU *maingi* (**maigi*), XA *maxigi*. See also GK *makigi* and B1 *makarigi* ‘cold’. MG, KP *merir*, GB *mariri* ‘cold’ appear to be unrelated. Cf. POC *madridriŋ (R), Pre-POC *[ma]ndindriŋ (R), PAN *ma(ŋ)-(dD)iŋ(dD)iŋ (B), *maka(dD)iŋ(dD)iŋ (B). The UB form points to a PNk *d, but without it we would reconstruct PNk and PKB *g. J: PKB *ma-karigi ‘cold’ (based on a B1 form that he mistakenly treats as cognate with these). Note also BA, V1 *maŋgimaŋgi-aŋa*.

PKB *mata₁ ‘eye’. PNk *mata: B1, TA, KS, GK, MT, UB, MR *mata*. PWM *mata: BU, BO *mata*, XA *a-mata-gu* (‘my e.’). POC *mata (R), PMP *mata (Dp), PAN *maCa (B). J: PKB *mata (based also on BA, V1 *mata*); note also BA, V1 *mata-ngu* ‘my e.’ (V).

PKB *mata₂ ‘to look at’. B1 *mata*. BO *mata-i*, *masi-a*.

PKB *mata-tulu 'sleepy'. PNk *mata-tulu: B1, TA, KS, UB, MR (J) *mata-tutulu*; MT, MR *tama-tutulu* (V), Bo *mata-tulu*. PMP *tuDuR (Dp), PAN *tuDuR (R). Note also XA *makene-tutulu* 'sleepy' (J). J: PKB *mata-turuturu-ni (based on BA *turuturu-ni*).

PKB *mata-viti 'getting dark (in evening)'. B1 *mata-viviti-la* 'twilight'. Bo *mata-vitiviti-axini* 'be getting dark (of a place)'.

PKB *mate 'to die'. PNk *mate: B1 *mate* 'out, dead (of fire only)', MR *mate*. PWM *mate: BU, XA *mate*, Bo *mate-pali* 'to die'; BU *ubi-mate*, Bo *bi-mate-a* 'to kill'. POC *mate (R), PMP *matay (Dp).

PKB *mauli 'left hand'. PCLk *mauli 'left hand': B1, MT (*e*)-*mauli* (V). PWM *mauli: BU *mauli*, Bo *mauri*, XA *a-mauli-mu* (with pos. suf.). PMP *[ma]-wiRi (Dp). Cf. PNk *meru. Note also BA, V1 *mauri* (V).

PKB ? *mav(ae)(q)a 'heavy'. PNk *mav(ae)qa: B1 *mavevea*, MR (J) *mavaqa*. PWM *mava (? *mavaa): BU (J), Bo (J,V), XA (J) *mava*. Cf. PMP *[ma]-beRat (Dp), *[ma]-beRqat (Dy). No other Oceanic language is on record with a possible reflex of this PMP form (Blust, pers. comm.).

PKB *mavo 'taro': PNk *mavo: B1, MR (J) *mavo*. PWM *mavo: BU (J), Bo, XA (J) *mavo*. For cognates in other Oceanic languages, see Chowning (1963).

PKB *mavuLu 'to stink'. PCLk *mavulu 'stinks, is rotten': B1, KS *mavulu*. Bo *mavuru*. PMP *[ma]-buRuk 'spoiled' (Dp), PAN *buRuk 'rotten' (R). J: PKB *ma-vurut (based on BA *mapurutu*).

PKB *mazi 'to know'. PNk *mazi (TNk *) 'to know': B1, TA, Gk *mari*, MT *masi*, UB *mamari*. Bo *mari*.

PKB *mazu 'sated, full (of food)'. PNk *mazu (TNk *maZu): B1, TA, UB *maru*, KS *malu*, MR *masu*. Bo. *maru*. PMC *masu, F1 *macu*, PEO *mazu (G), PMP *masuR (B). Cf. PAN *ba(cs)uR (B).

PKB *mide 'an insect'. B1 *mige* 'insect that attacks taro'. Bo *mide* 'sand fly'.

PKB *mimi 'urine, to urinate': PNk *mimi: B1, TA, KS, MT *mimi-si*, UB *mi-si*, MR *mimi*. Bo *mimi*. PMP *miRmiR, *miqmiq (B). UB *mi-si* follows a common pattern of dropping one of two like syllables in compounds.

PKB *-mi-Lu(a) 'we two (excl.)'. PNk *-milua/-mila: B1, TA *a-milua*, *a-mila*, MT, UB *e-milua*, MR *a-milu*. PWM *mi-Lu[a]: BU, XA *milu*. Note Bo *miria* 'we two (excl.)'. PWM *Lu(a) is inferred from Bo *ta-rua* 'we two (incl.)' and *mu-rua* 'you two'. See PKB *Lua 'two'.

PKB *momo 'shattered, crumbled'. B1 *momomo* 'shattered, broken to bits'. Bo *momo* 'a crumb of bread'. PMP *mekmek (B).

PKB *moqe (TKB *q) 'pandanus for mats and umbrellas'. PNk *moc: B1 *moe* 'pandanus species, mat', TA, KS, MT, UB, MR *moe* 'mat'. PWM *moke: Bo *moke* 'pandanus umbrella'; Bo (J), BU (J), XA (J) *moke* 'mat'. PMC *mwoe 'sleep'. Cf. F1 *moce*, PPN *mohe, PEO *moze (G).

PKB *mota 'vine, rope'. PNk *mota: B1, TA, KS, Gk, MT, MR *mota*. PWM *mota: BU, Bo, XA *mota*. Note also BA, V1 *mota* (V).

PKB *-mu 'of you (sg.)'. PNk *-mu: B1, TA, KS, MT, UB, MR *-mu*. PWM *-mu: Bo, XA *-mu*. POC *-mu (R).

PKB *mudo 'murky, troubled'. B1 *mugo* 'cloudy (of water), murky'. Bo *mudo* 'troubled, mournful'.

PKB *muga 'ahead, preceding'. PNk *muga: B1, MR (J) *muga*. PWM *muga: Bo, XA (J) *muga*. Cf. PMC *mw(ou)a. J: PKB *muga (based also on BA *munga*).

PKB *muLi ‘behind, after, follow’. PNk *muli: B1, TA, KS *muli*, MR *ma-muli*; MT *vaha-muli*, UB *maha-vuli* (*vaha-muli) ‘walk behind’ (see PLk *vaha ‘leg’). PWM *muLi: BO *muri*, XA *mulimuli* (J). PMc *mwuri*-, POc *muri (R), PMP *[m]-huDi (Dp). J: PKB *muri (based also on BA *mirimuri*).

PKB *mu-Lua, mu-lu ‘you two’. PNk *-mulua, -mulu: B1, TA, KS, UB *a-mulua*, MR *qa-mulu*. PWM *muLua, muLu: BU, XA *mulu*, BO *murua*. See PKB *Lua.

PKB *-na- ‘of (connecting two nouns)’. PNk *-na-: B1, TA, KS, MT, UB *-la-*, MR *-na-*. BO *-na-*.

PKB *-na₁ ‘of him, her, it’. PNk *-na: B1, TA, KS, GK, MT, UB *-la*, MR *-na*. PWM *-na: BU, BO, XA *-na*. PMc *-ña, POc *-ña (R).

PKB *-na₂ ‘nominalizing suffix’. B1 *-la*. BO *-na*.

PKB *nagi ‘to mark off a limit’. B1 *lagi* ‘garden plot, counting classifier for garden plots (with num. suf.)’. BO *nagi* ‘to mark off a limit’.

PKB *namo ‘mosquito’. PCLk *lamo: B1, TA, KS, MT *lamo*. BO *namo*. PMc *ñaamwu, *ñamwu-, PEO ñamu (G), POc *ñamu(k) (B), PMP *ñamuk (Dp). Note also MR *lalama*.

PKB *naLu ‘fresh water’. PNk *nanu: B1, TA, KS, MT, *lalu*, UB *ha-lalu*, MR *nanu*. PWM *naLu: BU, XA *nalu*, BO *naru*. PMP *(dD)anum (Dp), PAN *(dD)aNum (B). The PKB form is a metathesized reflex of the PMP form. Cf. PMc *daanu, *danu-, F1 *dranu*, POc *(d)ranu (R), and PAN *dañum (Wolff 1993).

PKB ? *natu ‘son, daughter’. PNk *latu: B1, TA, KS, MT, MR *latu*. PWM *tu-: BO, XA *tu-na* ‘his s/d.’, POc *natu (B). I attribute the PWM forms to an earlier *natu, *na- having been reinterpreted as a prefixed common noun marker, but note that they may result from a loan from a Whiteman language, as suggested by Sengseng *-tu-* ‘son, daughter’ (Chowning, pers. comm.). The MR form would seem to be a back borrowing from a Lakalai dialect.

PKB *nava ‘what?’. PLk *lava: B1, TA, UB *lava*. BO *nava*. See PKB *-va.

PKB *-ne- ‘of (connecting a common noun to a possessor proper noun)’. B1 *-le-*. BO *-ne-*.

PKB *niu ‘coconut’. PNk *niu: B1, TA, KS, MT, UB *liu*, MR *niu*. PWM *niu: BO, XA (J) *niu*, PMc *niiu (niu-), SA, F1 *niu*, POc *niuR (R), PMP *niuR (Dp), *ñiuR (Dy).

PKB *noba ‘a bivalve shellfish’. B1 *loba* ‘a small mussel’, BO *noba* ‘clam shell’.

PKB *noLo ‘ant’. B1 *lolo* ‘large red ant’. BO *noro* ‘ant’. See also Sa’a *lolo*.

PKB *-ña ‘nominalizing suffix’. B1 *-la*. BO *-ña*. See also PKB *-na.

PKB *ñala ‘breath, chest’. PNk *ñala (TNk *ng) ‘breath’: B1, TA, KS, GK, MT, UB *gala*, MR *ñala*. BO *ñalapala* ‘chest, stomach’. Cf. PKB *(gn)ala ‘belly’.

PKB *ño(rz)o ‘to snore’. B1 *goro*. BO *goro*. POc *ñoRo ‘to snore’ (R). See also PNk *ñolo ‘to sleep’, and note V1 *ngoro* ‘sleep’ (V).

PKB *o- ‘at’. B1 *o-*. BO *o-*.

PKB *pagi ‘to leap, jump’. B1 *pagi*, BO *pagi*, *page*.

PKB *paLa₁, *(qk)a-paLa ‘shoulder blade, wing’. PLk *pala: B1 *pala* ‘shoulder blade’; B1, TA, KS, GK, MT, UB *palapala* ‘wing’. PWM *ka- L(ae)pa: BU *ka-lapa* ‘right (hand)’, BO *ka-rapa*, XA *ka-lepa-na* ‘wing’. PTK *ya-fara ‘shoulder’, GB *ki-baa* ‘stroke of the arms’, PMP *baRa (Dp), *qabaRa (Dy, B) ‘shoulder’. Note also PMP *kapak ‘to fly, beat wings’ (Dp).

PKB *paLa₂ ‘be open, revealed’. B1 *palala* ‘be partially uncovered or revealed’. BO *para* ‘be clear, open’. PMP *pa(n)daŋ ‘open or clear area’ (Dp).

PKB *pa(rz)i 'swift, quick'. B1 *pari* 'quickly'. Bo *dari pari* 'current, stream' (lit. 'swift water').

PKB *pasu 'going, coming'. B1 *pasu-roro* 'go down completely, as the setting sun' (*roro* 'disappear'). PWM *paru: BU *ka-paruparu* 'to walk', Bo *paru* . . . *xosi* 'from . . . to', *paru mona* 'from now on', XA *paru ia* '(?) come from'. PMP *pasuk (Dp).

PKB *pati 'to float'. PNk *pati: B1, TA, KS, MT, UB, MR *pati*; B1, TA, KS, Gk, MT *paipati*. PWM *pati: BU *patipati*, Bo *pasi*, XA *paspasi* (*pasipasi). Cf. Ko *poti* and Manam *pwati* (Chowning 1991:58), also PMC *peti 'to float'.

PKB *pazava 'shore'. PLK *parava: B1, TA, MT, UB *parava*, KS *palava*. XA (J) *parava* 'beach'. Note also BU (J) *bike*, BA (J) *bikere* 'beach', PMC *piike, pike- 'sandy islet' and PMC *piia, pia- 'sand, beach'.

PKB *pe[rz]emu 'to fast, observe a food taboo'. B1 *peremu* 'to observe a food taboo'. Bo *peremu* 'to fast', *ni-peremu* 'fasting'. Either or both of the B1 and Bo forms could be loanwords.

PKB *pile 'to scorn, reject'. B1 *pile* 'to scorn, reject as bad'. Bo *pile* 'to hate'.

PKB ? *pir(ou)pir(ou) 'a bird'. B1 *piropiro* 'a bird'. Bo *pirupiru* 'starling'.

PKB *pulo 'to twist, wring'. PLK *pulo 'to twist, wring': B1, MT *pulo*, *pulo-gogo*, TA *pulo-gogo*, KS *pulo-a*, UB *pulo*. Bo *ma-pulo* 'to turn'. F1 *vulo* 'to twist', PMP *pules (Dp).

PKB *pupu 'to blow'. B1 *pupu* 'blow (in compounds), e-pupu 'blowfish'. Bo *pupu* 'to blow'. PMP *puput (Dp).

PKB *puru 'be fallen, descend'. B1 *puru-su* 'be fallen, droop, descend'. PWM *pu[rR]u: BU *puru* 'to fall', Bo *maxita puru* 'to lie down'.

PKB *putu 'to break apart'. PLK *putu 'to break (as a stick)': B1, TA, KS, UB *putu*. PWM *putu: BU *putu-i* 'to split', Bo *putu* 'to break'. PMP *pu(n)tun, *putus, *puTul (Dp).

PKB *qai (TKB *q) 'tree'. PNk *i 'tree trunk': MT *i-la*, MR, *a-i-na* 'its tree trunk', *ai* 'tree' (J). PWM *Kai: BU *xai*, Bo *kai* (also recorded as *kahi*), XA *kai*. The PNk form can be understood as resulting from Pre-PNk initial *qa being absorbed by the preceding *a of the prefixed noun marker *na- or *a-. POC *kai (R), PMP *kayu (Dp), PMP *kahi (Dy), PAN *kaSiw (B). B1 *kai-soko* 'firewood' appears to be a loan. See also PKB *(sz)oko. J: PKB *xai (based also on BA, V1 *xai*). Note also BA, V1 *gai* (V).

PKB *qaLa (TKB *q) 'to bite'. PNk *qala: B1, TA, KS, Gk, MT, UB *ala*, MR *aleqale* (?*qaleqale). PWM *KaLa: BU *xala-tata-i*, Bo *kara*, XA *kala-ki-a*. PMP *kaRat (Dp), PAN *kaRaC (B).

PKB *qaLaba (TKB *Q) 'new'. PNk *halaba: B1, MT, UB *halaba*, TA *soko-alaba*, MR *alaba* (? *qalaba*) 'new'; Gk *alaba* 'smooth'. PWM *kaLaba 'new': BU *kalaba-ka*, Bo *karaba*, XA *kalaba*. J: PKB *xarabak (based on the BU form).

PKB *qani (TKB *q) 'to eat'. PNk *qani: B1, KS, Gk, MT, UB *ali*, MR *aqani* (?*qaqani). PWM *Kani: BU *xaxani*, Bo *kani*, XA *kani*, *kakani*. POC *kani (R), PAN *kaen (B). Cf. PMC *kanj 'to eat'. J: PKB *xani (based also on BA, V1 *xani*); note also BA *gani* 'to bite' (V) and V1 *ganigani* 'to eat, bite' (V).

PKB *(qk)apaLa 'shoulder, wing'. See PKB *paLa.

PKB *qiLa 'adze'. PLK *ila: B1, TA, KS, MT, UB *ila*. PWM *kiLa; BU, XA *kila*, Bo *kira*. PMP *kiRam (B). J: PKB *kira (based also on BA, V1 *kira*).

PKB *(q)ina ‘mother’ (TKB *qQ). PNk *ina: MT *ila*, MR *ina*. PWM *[kK]ina: Bo *kina-na* (‘her m.’), XA *kini-na* (‘his m.’). PMP *ina (Dp), PAN *i(nN)an (B). See also PNk *tina. Note that we expect the MR form to be *qina. Cf. Sengseng *ina* and *tina*, both used in address only (Chowning, pers. comm.). J: PKB *tina (based on BA *tina*); note also V1 *tana-ngu* ‘my m.’ (V).

PKB *qini (TKB *qQ) ‘to pick, collect leaves’. B1 *ili* ‘to pick leaves’. Bo *kini* ‘to collect’.

PKB *qulu (TKB *qQ), *kulu, ‘breadfruit’. B1 *ulu*, *kulu-* (in compounds). Bo *kulu*. Pre-POC *kuluR (R), PMP *kulu(rR) (Dp). Note MR *unu* ‘b.’ (J). J: PKB *kulu (based on BA, V1 *kulu*).

PKB *qutu (TKB *q) ‘louse’. PLk *utu ‘louse’: B1 *utu* (G), *hutu* (V), TA, KS, MT *hutu*, GK, UB *utu*. PWM *Kutu: BU *xutu*, Bo, XA *kutu*. POC *kutu (R), PMP *kutu (Dp). J: PKB *xutu (based also on V1 *xutu*).

PKB *rabia ‘sago palm’: MR (J) *labia*. PWM: BU (J), XA (J) *rabia*. POC *Rampia (Chowning 1991), PMP *rumbi(y)a (Dp). Note the *r* in the XA form is unexpected.

PKB *(rz)olo ‘to go down out of sight’. B1 *roro* ‘disappear into, set (as sun), go out of sight’. Bo *rolo* ‘go under’. PMC *(sS)olo ‘fade from view’. PMP *celeb ‘to sink, submerge’ (B).

PKB *sa- ‘one’. See PKB *sa-vulu ‘ten’.

PKB *sahi ‘to sew’. PNk *sahi: B1, TA, KS, MT, UB *sahi*, GK *sai-a*, MR *sai*. PWM *raxi: BU, Bo *raxi*, XA *rahi*. PMC *saisai, *sai-ti, POC *saqit (R). Cf. PEO *zaqi-t ‘to copulate’ (B), PMP *zaqit ‘to sew’ (Dy).

PKB *sakaLu ‘reef’. PNk *sakalu (TNk *K): B1 *sakalu*, MR (J) *saqalu*. PWM *rakaLu: BU (J), XA (J) *rakalu*, Bo *rakaru*. PMC *sakau, PMP *sakaRu (B). Cf. PEO *zakaRu (G).

PKB *saqe ‘to climb up’ (TKB *q). PNk *saqe (TNk *qH) B1 *sae* (G), *sahe* (V), TA, KS, MT, UB *sahe-ti*, MR *saqe-si* (J: *sage/sae*); B1 *saesae* (G), *sahe* (V), TA, KS, UB *sahe* ‘boil, rise while cooking’. BU *rake* (J). PMC *sake, Fi *cake*, POC *sake (R), PMP *sakay (Dp). Cf. PEO *zake (G). J: PKB *zaqe (based on Bali *zaxe*).

PKB *savu ‘to rub’. PLk *savula ‘to rub’: B1, TA, UB, *savula*, GK *savule-a*; B1 *savu* ‘hold or press with hands’. Bo *ravu* ‘rub’, *ravu-li* ‘wipe off’. PMP *sapu(h) (Dy). Note also KS *sale-a*.

PKB *sa-vulu, *sa-ŋa-vulu ‘ten’. PNk *sa-vulu: B1, TA, KS, GK, MT, UB *sa-vulu*, MR *sa-vulu/su-vulu*. PWM *ra-vulu, ra-ŋa-vulu: BU *ra-ŋa-vulu*, Bo *i-ra-vulu*, XA *i-ra-ŋa-vulu*. Fi *sa-ga-vulu*, PMC *-ŋa-vulu, PMP *puluq (Dy). See also PKB *tasa ‘one’ and PLk *sasa ‘one’. Cf. PEO *zanjavulu (G). J: PKB *zanjavuluk (based on BA *za(ŋa)vuluku*, V1 *ŋanjavulu*). Note that *k* in BA is a reflex of PMP *q as well as *k, but not in the Kimbe languages, a difference that J does not take into account.

PKB *soso ‘branching coral’. B1 *soso*. Bo *roro*.

PKB *sudu ‘to push forward’. PNk *sudu (TNk *d): B1 *sugu*; B1, TA *sugu-taro*, KS, MT *sugu-talo-a*, UB *suru-taso*, MR *sudi-tase* ‘push away’. Bo *rudu* ‘send, order’. PMP *sunDul ‘push’ (Dp). See also PKB *tugu ‘push’. Cf. POC *zuzu(ln) ‘push’ (R).

PKB *susu ‘to suck, breast’. PNk *susu: B1, TA, KS, GK, MT, UB, MR *susu*. PWM *ruru: BU *rururu*, Bo, XA *ruru*. PMC *susu ‘breast, to suckle’, PMP *susu ‘breast’ (B), PMP *supsup ‘to suck’ (B). Cf. PEO *zuzu (G). J: PKB *zuzu (based also on BA *zuzu* and V1 *đuđu*); note also BA, V1 *ruru* (V).

PKB *(sz)oko, *doqo (PKB *Q) 'to be alight, burn'. UB *soko*; PCLk *goo: B1 *goo*, *gogoo/gogoho*, TA *gogoho*, KS *goho*, *gogoho*, MT *gogo* (*gogoo). PWM *roko: BU *xa-roko* 'fire', XA *rokoroko* 'to burn'. PMP *zeket (B). Cf. PMP *deket (Dp). B1 *kai-soko* 'a piece of firewood' appears to be a loan (see PKB *qai).

PKB *ta₁ 'of its own accord'. B1 *ta-*. Bo *ta-*.

PKB *ta₂ 'we (inclusive)'. See PKB *ta-Lua.

PKB *tabaqa (PKB *qQ) 'to remain, stay for a time'. B1 *tabaa*. Bo *tabaka*.

PKB *tabele 'tongue'. PNk *tabele: Lo, MR *tabele* (J). PWM *tabele: BU, Bo *tabele*, XA *a-tabele-gu* 'my t.'. J: PKB *tabele (based also on BA *tambela*).

PKB *tabuli 'to rest, be located'. B1 *tabuli*. Bo *tabuli*.

PKB *tahe 'excrement'. PNk *tahe: B1, TA, KS, MT, UB *tahe*, MR *taetae*. PWM *taxe: Bo, XA (J) *taxe*. See also PLk *matahe 'anus'. GB *bwu-tae*, TR *pwi-se*, SA *qae*, To *taqe*, SM *tae*, POC *taqe (R), PMP *taqi (Dy), PAN *Caqi (R). J: PKB *taqe (based also on BA *taxetaxe*).

PKB *taho 'significant person'. B1 *taho-gu* 'my namesake', *taho-* 'counting classifier for persons', *taho-la* 'owner of a place (its person)'. Bo *taxo* 'relative, owner of a place'. Cf. PMP *taquh 'is accustomed, knows' (Dy).

PKB *tala 'apparent, in the open'. PNk *tala 'becoming apparent': see PNk *dabutala. Bo *tala* 'outside', *tale-a* 'opens (something)'. Cf. PKB *zala 'road'.

PKB *taliŋa 'ear, mushroom'. B1 *taliŋa* 'small edible fungus'. PWM *taliŋa 'ear': BU, Bo *taliŋa*, XA *a-taliŋa-gu* (with pos. suf.). PMC *taliŋa, Pre-POC *taliŋa (R), PMP *taliŋa (Dp), PAN *Caliŋa (B). J: PKB *taliŋa (based also on BA, V1 *taliŋa*); note also BA, V1 *taliŋa* (V).

PKB *ta-Lua 'we two (incl.)'. PCLk B1, TA *ta-lua*, PWM *ta-Lu[a]. BU *ti-ta-lu*, Bo *ta-rua*, XA *ta-lu*. See PKB *Lua 'two'.

PKB *tama 'father (in reference)'. PNk *tama: B1, TA, KS, GK, MR *tama*. PWM *tama: BU, XA *tama-na* 'his f.', Bo (J) *tama-*. POC *tama (R), PAN *i-tama (B). Cf. PMP *ama (Dp). Note MT *uma*. J: PKB *tama (based also on BA *tama*); note also V1 *tama-ngu* 'my f.' (V).

PKB *tam(ou)(h)ane 'man, male'. PNk *-tamane 'man, male'; with pos. suf. 'brother (of a woman)': B1, TA, KS, GK, MT *ha-tamale*; B1 *ha-tamale-*, UB *ma-tamale-*, MR *la-tamane* 'brother (of a woman)'. PWM *tam[ou]xane. BU *tamoxane*, Bo *tamuxane*. PMC *mwaane, To *tangane*, *tuongaqane*, PEO *mwaqane. Cf. POC *maRuqane (B). Cf. also PMP *baRani, *Rani (Dp), PAN *waNay 'man, male' (B). J: PKB *tamaqane (based on BA *tamaxane*).

PKB *tamusi, *tamudi (<*tamusi) 'intestines, guts'. PLk *tamusi: B1, TA, KS, GK, MT, UB *tamusi*. PWM *tamudi: Bo, XA (J) *tamudi*, BU *tamodi* (J).

PKB *tano 'down'. PNk *-tano: B1, TA, KS, MT, UB *-talo*, MR *-tano*. Bo *tano*. Cf. PMP *tanem 'to bury' (Dp).

PKB *tanu, *danu 'to bury, plant'. PNk *danu 'to plant': B1 TA, KS, MT *galu*, UB *laru* (<*ralu), MR *dani*; B1 *talu* 'to put in, plant'. Bo *tanu* 'to bury'. Cf. PMP *tanem 'to bury' (Dp).

PKB *tani 'to weep'. PNk *tani (TNk *G): B1 *taitali*, TA, KS, GK, MT, *tali*, UB *titali*, MR *taŋi*. PWM *tani: Bo, Bo, XA *tangi*; Bo *taŋiti* (J). PMP *taŋis (Dp), PAN *Caŋis (B). J: PKB *taŋit (based on his Bo *taŋiti*, in which the *t* is unexpected); note also BA *ngi* (V) and V1 *tangi* (V).

PKB *tasa 'one': PNk *tasa: MT, MR *i-tasa*. PWM *tara: BU, Bo, XA *tara*. Cf. SA *ite*, FI *caca*, To *ha*, SM *sa*, TR *e-tte-*, POC *sa (R), PMP *esa/isa. See also PLk *sasa 'one'.

PKB ? *tata ‘to converse’. B1 *tata* ‘hold hands, walk with somebody’. Bo *ta* ‘say’, *tata* ‘converse’.

PKB *tavine ‘woman’. PNk *tavine: B1, TA, KS, GK, MT, UB *tavile*, MR *tavine* ‘woman’; B1, TA, GK, MT *ha-tavile-gu*, KS *la-tavile-gu*, UB *ma-tavile-gu*, MR *la-tavine-gu* ‘my sister (of a man)’. PWM *tavine, *tavile*: BU *tavivine*, *tavine* (J), Bo *nga-tavile*, *ṇa-tavine* (J), XA *nga-tavine*. POC *tapine (R). Note also BA, V1 *tavine* (V, J).

PKB *tazi ‘younger sibling of same sex’. PNk *tazi (TNk *zZ): B1, MT *tari*, GK *tali*, MR *tasi*. PWM *tari: BU *tari*, XA *tari-gu* ‘my s. of same sex’, Bo *tari-gu* ‘my s. of same sex’. PEO *tazi (G), PMP *[t]-aji(h) (Dy), *ta-huaji (B). Note also BA, V1 *tali-ngu* ‘my s.’ (V) with unexpected *l*.

PKB *tazo ‘away from speaker, out’. PNk *tazo: B1 *taro*; B1, TA *sugu-taro*, KS, MT *sugu-talo-a*, UB *suru-taso*, MR *sudi-tase* ‘pushes away’. Bo *malo-taro* ‘calls out’. See also PNk *sudu, *dabu.

PKB *-teu, *-tou ‘plural marker on pronouns’: PNk *-teu, *-tou (see PNk *-mutou, PLk *-gite/-giteu, PLk *tatou, PNk *-miteu/-mitou). PWM *-teu, *tou: BU *re-teu*, Bo *tou*, XA *e-ri-tou* ‘they’. F1 *ra-tou* ‘they’. Cf. POC *-tolu (R).

PKB ? *tike ‘to walk on the balls of one’s feet’. B1 *tike* ‘to walk on tiptoe’. Bo *tike* ‘to climb up (a mountain)’.

PKB *tia ‘belly’. PNk *tia ‘belly’: B1, TA, KS, GK, MT, UB, MR *tia*. Bo *tia* ‘stomach lining of a pig’. PMP *tian (B).

PKB *tibuLu ‘forest’. PNk *tibilu: B1, TA, KS, GK, MT, MR *tibilu*. PWM *tibuLu: BU *tibilu*, *sibilu*, Bo, XA *siburu*.

PKB *titiu ‘a bird’. B1 *titiu* ‘a bird’. Bo *titiu* ‘honeysucker’.

PKB *toho ‘mangrove’: PNk *toho: B1 *toho* ‘mangrove tree’, MR (J) *to* (presumably *to*) ‘swamp’. XA (J) *toho* ‘swamp’.

PKB *toLa ‘firm, strong’. PNk *tola ‘firm, firmly’: B1 *tola*; B1, MR *sau-tola*, TA, KS, UB *sau-tole-a*, GK *sau-tole-a* ‘holds firmly’. Bo *tora* ‘strong, healthy’. PMc *ma-toa, PMP *teRas (Dp).

PKB *tolo ‘to cut wood crosswise or around’. PLk *tolo ‘to cut wood’: B1, TA, KS, MT UB *tolo*; B1 *tolo* ‘to cut sideways (of wood), to bite (a person)’. PWM *tolo: Bo *tolo* ‘to cut around’, XA (J) *tolo* ‘to bite’. Cf. PMP *teleṇ ‘middle’ (Dp) and PMP *gelen ‘to cut off, sever, ring a tree’ (B). See also PLk *olo ‘to cut wood’.

PKB *tolu ‘three’. PNk *tolu: B1, TA, KS, GK, MT, UB *i-tolu*, MR *tolu*. PWM *tolu: BU, Bo *tolu*, XA *i-tolu*. POC *tolu (R), PMP *telu (Dp).

PKB *toto ‘to set up, put in place’. B1 *toto* ‘to stand something up, stand things in a line’. Bo *toto* ‘to place something, lean a thing against something’. Note also PKB *tutu₂ ‘to set up’.

PKB *-tou ‘plural marker’. See PKB *-teu.

PKB *tovo ‘to measure (something)’. B1 *tovo*. Bo *tovo*. Motu *toho*.

PKB *tovu ‘sugarcane’. PNk *tovu: B1, MR (J) *tovu*. BU (J), Bo, XA (J) *tovu*. PMP *tebuh (Dy), PAN *CebuS (B).

PKB *tubu₁ ‘to grow’: PNk *tubu ‘be fat, grow’: B1 *tubu*; MT *tubu* ‘thick’; B1, TA, MT *kabili-tubu*, MR *ainiai-tubu* ‘be fat (of person)’. Bo *tubu* ‘make grow’. POC *tubuq (R), Pre-POc *tumpuq (R), PMP *tu(m)buq (Dp). Note also UB *tuvu-ti* ‘is fat’, *hobu* ‘is thick’.

PKB *tubu₂ ‘grandparents, grandchildren’. PNk *tubu: B1, MR (J) *tubu*. Bo *tubu*. PMP *(tT)umpuq. J: PKB *tubu (based also on BA *tumbu*).

PKB *tudu 'to bend one's head down'. B1 *tugu* 'bend downward from the hips'. Bo *tudu* 'put the head down and feet up'. PMP *(tT)un(dD)uk, *tutuk (B).

PKB *tugu 'to push'. Gk *tugu*. PWM *tugu: BU *tungu-i* (*tungu-i), Bo *tungu* (*tungu), XA *tugi-a*. See also PKB *sudu 'push forward'.

PKB *tuha 'bone' PNk *tuha: B1, TA, KS, Gk, MT, UB *tuha*, MR *tua* (Hees 1915–16), *tuha* (V, J). PWM *tuxa: BU, Bo *tuxa*, Bo *a-tuha* (J), XA *a-tuha-gu* 'my bone'. V's and J's MR *tuha*, where we expect *tuqa*, is unexpected and contradicted by Hees, who appears not to have recorded glottal stops.

PKB *tulu₁ 'to walk'. B1 *tulu* 'to wade'. Bo *tulu* 'to step'.

PKB *tulu₂ 'to sleep'. See PKB *mata-tulu 'sleepy'. PMP *tuDuR (Dp).

PKB *tuLa 'sibling-in-law, cross-cousin'. B1 *tula-gu* 'my co-wife, husband's brother, husband's brother's wife, wife's brother, wife's brother's wife'. Bo *tura* 'cross-cousin'. PAN *(CtT)uRaj 'in-law' (B). Cf. PNk *zua.

PKB *tuLu 'knee'. PNk *tulu: B1, TA, Ks, MT *tulu*, MR *pa-tulu*. BU *tutulu* (J), Bo *turu*. Cf. POC *turu (R), Pre-POC *tudu (R), PAN *tudu (B). J: PKB *turu (based also on BA *turu*, V1 *tuturu*).

PKB *tuma 'flea, louse'. B1 *tuma* 'flea, louse'. Bo *tuma* 'bug'. Pre-POC *tuma 'body louse' (R), PMP *tuma(h) (Dy).

PKB ? *t(ua)maga 'a sling (weapon)'. PNk *tumaga: B1, TA, KS, MT, UB, MR *tumaga*. Bo *tamaga*. May well be a loanword.

PKB *tunu 'hot, burns'. PNk *tunu: B1, Gk *tululu* 'burns'; UB *tutulu*, MR *tunutunu* 'hot'. Bo *tunu a-kanono* 'light a torch'. PMP *tunu (Dp).

PKB *tupo 'dull (not sharp)'. B1 *mata-tupo*. PWM *tupo: BU, Bo, XA *tupo*. PMP *tumpel. See also PNk *tuku.

PKB *tuqa (TKB *Q) 'older sibling of same sex'. PNk *tuqa: B1, TA, KS, Gk, UB *tua*, MR *tuqa*. PWM *tuKa: BU *ma-tuxa-na* 'his/her spouse', Bo *tuka-gu* 'my older sibling of same sex', XA (J) *tuka-*. Cf. PMP *tuqah (B). Note we would expect PKB *tuha as the reflex of PMP *tuqah, and so it is in B1 *ma-tuha* 'mature'.

PKB *tutu₁ 'to strike, hammer'. B1 *tutu* 'to tap a tattooing needle'. Bo *tutu* 'to hammer'. PMP *TukTuk (Dp).

PKB *tutu₂ 'to set things out'. B1 *tutu* 'put stones on the fire (for cooking)'. Bo *tutu* 'set out, place'. Note also PKB *toto 'to set up'.

PKB *ubi 'to strike, hit, spear'. PNk *ubi 'spear, stab': B1, TA, KS, MT, UB *ubi*, Gk *ubi-a*, MR *o-ubi*. PWM *ubi 'strike': BU *ubi*, Bo *bi-a*, *ubi* (J). See also PKB *va-ubi 'to fight'. Note also BA *vari-gumbi* 'to fight' (V) and V1 *gumbi-mate* 'to kill' (V).

PKB *uku 'turtledove'. B1 *uku* 'a bird that calls *ku* mournfully during the day'. Bo *uku* 'turtledove'.

PKB *utu 'open sea'. B1 *utu*. Bo *utu*.

PKB *va- 'do mutually'. PLk *va-: B1, TA, MT, UB *va-ubi* 'fights, war'. PWM *va-: BU *va-ubiubi*, Bo *va-ubi*, XA *va-padi* 'fights' (*padi-a* 'spear him'). See PKB *ubi 'spears, strikes'. J: PKB *vari (based on Bali *vari-* but otherwise unsupported by his data). Note also BA, V1 *vari-* (V).

PKB *-va 'interrogative suffix'. PNk *-va: B1, TA, UB *la-va* 'what?'; B1, TA *i-la-va* 'what for?'; B1 *te-la-va* 'why?'; B1, TA *ro-va*, KS, Gk, MT *lo-va*, MR *sa-va* 'what?'. PWM *-va(i): BU *o-va*, Bo *-i-vai*, XA *ungo-vai*, *i-vai* (J) 'where?'; Bo *na-va* 'what?'. PMP *ba (Dp).

PKB *vaa 'four'. PNk *vaa: B1, TA, KS, Gk, MT, UB *i-vaa*, MR *ii-va* (?<*i-vaa), 'four'. PWM *vaa: BU, Bo *vaa*, XA *i-vaa*. Fi *e-vaa*. PEO *vaa. Cf. POC *pat (R), PMP *e(m)pat (Dp), PAN *Sepat (B).

PKB *vago ‘to punt, punting pole’. B1 *vago*. Bo *vago*. PMc *faxo, PEO *vago.

PKB *vaha ‘leg’. PLK *vaha: B1, TA, KS, GK, MT, UB *vaha*. PWM *vaxa: Bo *vaxa*, XA *a-vaha-gu* (with pos. suf.). POC *paqal ‘thigh’ (R), PMP *paqa (Dy).

PKB *vai ‘to plait (as a mat)’: PNk *vai: B1, TA, KS, MT *vei*, UB *vai-a*, MR *vai*. PWM *vai: BU (J), Bo *vai* ‘to weave’. POC *vai (R). Note also BA *vai* ‘to weave’ (J).

PKB *vali₁ ‘to cut or strike off (as leaves from a tree)’. B1 *vali*, *vale*. PWM *vali: Bo *vali*, XA *vali-a*. PMP *ba(rj)is (Dp). Note also V1 *bari-a* ‘to cut’ (V).

PKB *vali₂ ‘to brush away, scatter’. B1 *vali* ‘brush away’, Bo *vali* ‘repel, scatter’.

PKB ? *vanana ‘to make inquiry’. B1 *valala* ‘question an object (in divination)’. Bo *vanana* ‘question among themselves’.

PKB *vaqi (TKB *Q) ‘to blow’. PNk *vaqi’: B1, TA, KS, GK *vai*, MR *vaqi*. PWM *vaki ‘to blow, swell up’: BU, Bo, XA *vaki*.

PKB *va-ubi ‘to fight (strike mutually)’. PLK *va-ubi: B1, TA, MT, UB *va-ubi*. PWM *va-ubi: BU *va-ubiubi*, Bo *va-ubi*. Note also MR *ma-ubi* ‘fight’. See also PKB *va- and PKB *ubi.

PKB *vatu ‘stone, seed’. MR *vatu* ‘stone’. BU *vatu-ka* ‘seed’. PAN *batu (R).

PKB *vazu ‘forehead’. PNk *vazu (TNk *z): B1, TA *varu*, UB *vasu*; (TNk *Z): B1 TA UB *varu-la-luma*, KS *valu-la-luma* ‘roof of the house’, MR *valu* (J, an apparent inter-dialect loan). PWM *varu: BU *varu*, XA *a-varu-gu* (with pos. suf.). TR *faat* (fētú-) ‘eyebrow’, F1 *vacu* ‘eyebrows’. Cf. PMP *pasu, *pasuŋ ‘cheek bone’ (B).

PKB ? *veLe ‘sharp’. PCLK *vele ‘iron or steel adze’: B1, TA, KS *vele*. Bo *vere* ‘sharp’.

PKB ? *ve(rz)u ‘to share out, divide’. B1 *veru* ‘disperse food at a feast’. Bo *veru* ‘share out’, *va-veru* ‘divide up’.

PKB ? *vi(rz)i ‘to twist, turn’. B1 *viru*. Bo *viru*. Cf. B1 *vili-a* ‘jumping rope’, and cf. also PMP *biliŋ (Dp), PAN *pi(dDr)i(Ct) (B).

PKB *vitu ‘seven’. PLK *vitu: B1, TA, KS, GK, MT, UB *i-vitu*. PWM *vitu: BU *vitu*, XA *i-vitu*. POC *pitu (R), PMP *pitu (Dp).

PKB *vitolo ‘hungry’. PNk *vitolo: B1, TA, KS, MT, MR *vitolo*. Bo *vitolo*. TR *fiyon*, POC *pitolo (R), PMP *(tT)elen (Dp).

PKB *viza, *ziva ‘how many’. PNk *viza (TNk *z) ‘how many’: B1, TA, MT *i-riva*, KS *i-liva*, UB, MR *i-visa*. Bo *riva*. PMc *fi(sS)a, PEO *viza *G, PMP *pija (Dp), PAN *pija (B). Cf. POC *pican (R).

PKB *vonu ‘full’. PNk *vonu: B1, TA, KS, MT, UB *volu*, MR *vonu* (also *vovonu* ‘swollen’). PWM *vonu: BU (J), Bo, XA (J) *vonu*. POC *ponuq (R), PMP *penuq (Dy). J: PKB *vonuk (based on BA *vonuku*). Note that *k* in BA is a reflex of PMP *q as well as *k, but not in the Kimbe languages, a difference that J does not take into account.

PKB *vo(rz)e ‘paddle’. B1 *vore*, MR *vole* (J). PWM *vore: Bo *vore* ‘to steer’, ‘paddle’ (J); BU, XA *vore* ‘paddle’ (J). PEO *voze (G), PMP *beRsay (B). Cf. POC *pose (R). Note the inconsistency between the MR and XA forms reported by J. J: PKB *vozer (based on BA *vocere*); note also V1 *voðe*.

PKB *vou ‘deaf’. B1 *vou*. Bo *vou*.

PKB *vua ‘seed, fruit, berry’. PNk *vua ‘seed’: B1, TA, KS, GK, UB *ha-vua*; MR *ua-na* ‘its seed’; B1 *vavua*, MT *vavua* ‘flower’. PWM *vua ‘berry’: BU *vua-ka*, Bo *vua*, XA *vua-na*. PMc *wuwa ‘fruit’, F1 *vua* ‘fruit’, POC *pua ‘fruit’ (R), PMP *buag (Dp).

PKB *vudi ‘banana’. PNk *vudi: B1 *vugi*, MR *vudi* (J). PMw *vudi: Bo, XA (J) *vudi*. PMc *wuudi, *wudi-, PMP *pun(tT)i (Dp). J: PKB *vudi. Note also BA *mbetsi* ‘b.’ (J).

PKB *vuhu 'base, cause, beginning, origin'. B1 *vuhu*. Bo *vuxu-na* ('its b.'). POC *puqun (R), PMP *puqun (Dy).

PKB *vulala 'spread out'. B1 *vulala* 'protruding (of ears)'. Bo *vulala* 'spread out'. Cf. PKB *malala 'ground cleared of vegetation'.

PKB *vuli 'twirls in something (as a pepper leaf in lime)'. B1 *vuli*. Bo *vuli*.

PKB *vulu 'ten': see PKB *sa-vulu. PMP *puluq (Dy).

PKB *vuqo (TKB *qQ) 'fish net'. PNk *vu(q)o, *pu(kq)o: B1, MR *vu*o (J); B1 *vu*o 'to fish with a net'; MR *pu*qo (J). PWM *vuko: BU (J), Bo *vuko*, XA *vugo* (J, sic). PMP *puket (Dp). J's XA form is unexpected. J: PKB *vuxot (based on BA *vuxoto*).

PKB *vuvu 'wasp'. B1 *vuvu*. Bo *vuvu*. Cf. PMP *bukbuk 'wood weevil' (B).

PKB *waga 'canoe'. PNk *waga: B1, MT (J), Lo (J) *uaga*; TA, KS, MT, UB *vaga* (V); MR *o-aga* (V), *oaga* (J, sic) (<*a-waga). PWM *aga: BU (J), Bo (J) *anga*; Bo, XA (J) *aga*. POC *waga (R), PMP *wanjaŋ (Dp). J: PKB *vaga (based on BA *vanga*). Note that POC *w appears to be reflected by *v* in BA, which is not the case in the Kimbe languages.

PKB *wa(IL)u 'eight'. PLk *ualu: B1, TA, KS, GK, UB *i-ualu* (<*i-walu). PWM *alu: BU *alu*, XA *i-alu*. PMC *walu-ua, F1 *walu*, POC *walu (R), PMP *walu (B). See also PNk *walasiwo 'nine'.

PKB *waqa 'root'. PNk *waqa 'aerial root (of mangrove)': B1, TA, KS, GK, MT, UB *ua*, MR *aga* (V), *qaga* (J, sic). PWM *aka, aka(IL)ja 'root': BU *akala-ka*, Bo *ka-na*, XA *kala-na* (all with pos. suf.). POC and PMP *wakaR (R). J: PKB *vorak* (based on metathesized BA *voraka*); J also gives BA *vaka-*. Note that POC *w appears to be reflected by *v* in BA, which is not the case in the Kimbe languages.

PKB *wono 'six'. PLk *uolo 'six': B1, TA, KS, GK, UB *i-uolo* (<*i-wolo). PWM *ono: BU *xono* (J: *volo/xolo*), XA *i-ono*. PMC *wono-ua, To *ono*, POC *onom (R), PMP *enon (Dp). I cannot account for *x* in the BU form. J: PKB *volo (based on treating PWM *polo- 'numeral formative from six to nine' as cognate with this).

PKB ? *za(u)bolo 'moray eel'. B1 *rau*, *rau-bolo* 'moray eel'. PWM *rabelo: BU (J), Bo *rabolo* 'eel'. PMC *lapw(ou)(sS)o or *(sS)apw(ou)lo 'moray eel', suggesting PEO *za(u)bolo.

PKB *zala, *dala (<*nzala) 'road, outdoors'. PNk *zala (TNk *Z), *dala (TNk *dD) 'outside, outdoors': B1, TA, KS, MT, -*gala*; UB -*rara* (<*rala), MR -*sala*. PWM *dala 'road': BU, Bo, XA *dala*. These forms suggest a PKB and PNk doublet *dala and *zala, the former derived from the prenasalized variant of the latter. PMC *yala, PEO *zala (G), PMP *zalan 'path, road' (B). Note also PKB *tala 'outside, in the open'. It is possible that in the Lakalai dialects, there has been a falling together of two words, one from *nt and from *ns, both of which fell together as PKB *d and *PCLk *g. Cf. PCLk *gauru 'road, path'. J: PKB *dalaŋa (based on BA *ndalaŋa*); note also BA *ngalanga* (V) and V1 *ndala* (J,V).

PKB *zei, *ze 'who?'. PNk *zei, *ze (TNk *z): B1, *e-rei*, UB *e-sei*, MR *sei*; B1, TA *e-re*, KS *e-le/e-re*, GK, KS *e-le*. PWM *rei, *re: BU *e-re*, Bo, XA *e-rei*. PEO *z(ae)i (G). Cf. POC *sai (R), PAN (cs)ai (B).

PKB *ziva 'how many'. See PKB *viza 'how many'.

PKB *zobo 'blocks off, covers'. PNk *zobo (TNk *Z): B1 *robo*; B1, TA, UB *kai-robo*, KS *pigi-lobo*, MT *kairobo/mela-lobo*, MR *kai-sobe* 'clothing'. Bo *robo* 'blocked up'.

APPENDIX B: RECONSTRUCTED PROTO-NAKANAI (PNK) FORMS

PNK *a-lavi, *a-lalavi 'yesterday'. See PKB *Lavi.

PNK *-ale 'westward, to the right (facing inland)': B1 *-ale*, MR *lapu-ale* (see PKB *lapu).

PNK *aso 'to smell': B1, TA, KS, MT, UB *aso*, GK *haso-a*, MR *o-aso*. F1 *yaso* 'to lament', PAN *Sajek (B). Cf. PMP *qaseG (Dp *haseG) 'to inhale deeply'.

PNK *-ata 'up': B1, TA, KS, MT, UB, MR *-ata*. PMc *ata-, PMP *a(n)tas (Dp). Cf. Pre-POc *qatas (R).

PNK *avu 'to wrap up': B1, TA, MT *avu*, KS *avu-robo*, UB *avu-a*, MR *avi-sobe*. PMP *kaput 'to tie or clasp together' (B), which leads us to expect MR *qavi-sobe* and PNK *qavu.

PNK *baini 'small': GK *baili*, MR *mala-baini*.

PNK *bar(ie)golu 'throat': B1 *barigolu*, KS *baligolu*, UB *baregolu*, MR *balegolu*.

PNK *beho 'shoulder blade': B1, TA, MT, UB *beho*, MR *baō-gu* ('my s.'). I cannot account for the *a* in the MR form, except as possibly a result of dissimilation.

PNK *bigomu 'fence': B1, TA, KS, MT, UB, MR *bigomu*.

PNK *buse 'small dog': B1 *buse* 'dwarf, small dog'; MR *buse* 'dog'. Note that B1 informants felt that, in the sense of dog, it was a loan from an eastern dialect.

PNK *buso 'navel': B1, MR (J) *buso*. PMP *busoj (Dp). J: PKB *buso (based also on BA *puzo* and VI *puḏo*).

PNK *butu₁ 'small piece of wood': B1, TA, GK, MT, UB *butu*, MR *butubutu*. Cf. PMP *butuq 'penis' (Dy).

PNK *butu₂ 'handle, stem': see PNK *butu-kuha.

PNK *butu-kuha (TNK *K, *H) 'joint (?)': B1, TA, MT, UB *butu-kuha-la-lima-gu*, MR *but-uqa-gu* (*butu-uqa) 'my elbow'; B1 *butu* 'handle, stem'. PMP *butuq 'penis' (Dy).

PNK *buzo (TNK *j) 'ashes': B1, TA *buburo*, GK *bubulo*, MT *pupuso*, UB *ha-buro*. MT *pupuso* instead of *bubuso* suggests a loan in MT and makes this reconstruction uncertain. Cf. PMP *abus, *qabu 'ashes' (B). See also PWM *xabulo 'ashes' and PNK *havu 'lime for betel nut'.

PNK *dabu 'to think': see PNK *dabu-tala, PCLK *gabu-taro.

PNK *dabu-tala 'to think': B1 *gabu-tatala* (G), *gabu-talala* (V), TA, KS, MT, UB *gabu-talala*, GK *gabu-tale-a*, MR *dam-tatala* (<*dabu-tatala).

PNK *danu 'to plant': B1 TA, KS, MT *galu*, UB *laru* (<*ralu), MR *dani*. See also PKB *tanu. SM *tanu* 'to bury', PEO *danu. Cf. PMP *tanem (Dp).

PNK *-d(æ)i (TNK *D) 'today, now': B1 *ga-gi-e*, *ga-gei-e*, TA *ga-gai-e*, KS *ga-gei-e*, UB *e-gi-e*, MR *sei-dei*. The MR form appears to be a reduplication of the root, the first element without prenasalization and the second element with it. Cf. F1 *daidai* 'now'.

PNK *gari₁ 'to split': MT *gali-a*, UB *gari*, MR *gali*.

PNK *gari₂ 'to bite': B1, UB *gari*, MR *gali*. Cf. PMP *garis 'to scrape' (Dp) and PMc *ḡari, *ḡari-ti 'to nibble, gnaw, crunch'.

PNK *-gari 'hard': B1, MT, UB *va-gari*, KS *va-gali*, MR *sa-gali*.

PNK *gata₁ 'right (hand)': B1, TA, GK, MT, MR *gata*, KS *pini-gata*, UB *piri-gata*.

PNK *gata₂ 'spear': B1, TA, KS, MT, UB, MR *gata*.

PNK *gatu 'to pound'. See PNK *katu.

PNk *gele 'to play, laugh': Ub *pa-gegere* 'to laugh', Mr *gele* 'to laugh, play'; Bi, TA, KS, Gk *lege*, *legelege*, Mt *lege* 'to laugh'; Bi, TA, KS *lege-balala*, Mt *vai-lege* 'plays'. Note that the Central Lakalai dialects share a metathesized form that gives us PCLk *lege.

PNk *golo 'to feign, feigned': Bi *golo*, *gologolo*; Bi, TA, KS, Mt *mavuta-golo*, Mr *golo-golo* 'feign sleep' (*golo* 'sleep'). See also PLk *vasi-golo.

PNk *(h)adavi (TNk *R) 'near, to approach': Bi *hagavi*, *agavi*, TA, KS, Gk, Mt *agavi*, Ub *araravi*, Mr *i-agavi*. XA *gagavi* and Kp *hagavi* are presumably borrowings from Bi.

PNk *hade (TNk *H, *D) 'to converse, speak': Ub *isa-hage* 'to ask'; Mr *vevea gadeqade* 'to converse'.

PNk ? *hali 'obsidian': Bi *hali*, Mr *ali* (J). J: PKb *qane (based on BA *xane*). The Mr form may be a loan from Bi, whose speakers are closer to the source of widely traded Mopril and Talasea obsidian, and the BA form may also result from a loan from another language source. Cf. Ko *aliali* 'obsidian' (Chowning, pers. comm.).

PNk *hatolu 'egg'. See PNk *tolu.

PNk *havi 'fire': Bi, TA, KS, Gk, Mt, Ub *havi*, Mr *o-avi*. Tr *ááf (efi-)*, POC *api (R), PMP *hapuy (B).

PNk *havivili 'to blow, wind': Ub *havivili* 'blow'; Mr *avivili* 'wind'.

PNk *havu 'lime, ash': Bi *havu* 'lime for chewing with betel nut', Mr *o-avu* (J) 'ash, lime'. PMP *qavu 'ashes' (B). See also BA *xavu* 'ash, dust' (J) and BA *kavu* 'lime' (J). J: PKb *qavul (based on combining these with PWM *xabulo; see Appendix C).

PNk *haze 'mouth': Bi, TA *hare*, KS, Gk *hale*, Mt *hare-velevele*, Ub *hase* 'lips'; Mr *ase-gu* 'my mouth'. PMP *qazay 'chin, jaw' (B). Note also Lo *ale* 'mouth' (Johnston 1978:29). Note also BA, Vi *are* 'tooth' (V).

PNk *hili 'to wake up': Bi, TA, KS *hili*, Mr *ili-si*.

PNk *(h)ode 'root' (TNk *dG): Mt *oge*, Ub *hore*.

PNk *hova 'hole': Bi, TA, KS, Gk, Mt, Ub *hova*, Mr *a-uva* (?*a-ova).

PNk *hudu 'to carry': KS, Mt *hugu*, Ub *xuru-a* (*huru), Mt *o-udi*; Bi *hugu* 'carry on the head'. Ko *uru* and POC *quntu (Chowning 1991:56).

PNk *huti 'penis' (TNk *hH): Bi, TA, KS, Mt, Ub, *huti*; Mr *qa-uti*, *ma-utuquti*. PMP *qutin (B).

PNk *huza 'rain': Bi, TA, Gk, Mt *hura*, Ub *l-usa*; Mr *a-usa* 'fog'. The variant forms TA, Mt *ua*, KS *i-ua* are presumably loans from a common source in the Whiteman group. PEO *quza (G), PMP *quZan (Dy). Cf. POC *qusan (R). J: PKb *quzaja (based on BA *xuzaja*); note also Vi *xuda*.

PNk *isa 'when?': Bi, TA, KS, Mt *ga-isa*, Ub *g-isa* 'when? (future)'; Bi, TA *a-la-isa*, KS *a-l-isa*, Mr *a-isa* 'when? (past)'. Cf. PEO *η-iza (G), POC *gica (R), PAN *(q)ija(nN) (B). J: PKb *ηiza-ηa (based on BA *ηiza-ηa*); note also Vi *ηida*.

PNk *isi 'dorsal fin': Ub *l-isi*, Mr *isi-na*.

PNk *i-viza 'how many?': see PKb *viza/ziva.

PNk *kaizobo (TNk *Z) 'clothing': Bi, TA, Mt, Ub *kairobo*, Mr *kaisobe*. See also PKb *zobo.

PNk *kalua (TNk *K) 'to vomit': Bi, TA, Mt, *kalalua*, Mr *alualua*. Cf. PMP *luaq (Dy).

PNk *kabeso, *kapeso (TNk *K) 'beard, chin': TA *kabeso*, Mt *kapeso*, Mr *abeso*.

PNk *kapi (TNk *K) 'to close, shut off': Bi, TA, KS *kapi-utu*, Mt *kilapi* (with *-il-* infix), Mr *api* 'house partition'. Cf. PMP *ka(m)pit, *ga(m)pit 'hold together' (Dp).

PNk *kapute (TNk *K, *T) ‘to spit’: B1, TA, KS, UB *kapute*, Gk *katupe*, MT *kapute*, *katupe*, MR *apiso*. (I interpret MR *apiso* as resulting from a metathesis of vowel rounding in what was *apuse.)

PNk *kar(iu)su, (TNk *K) ‘rib’: B1, TA, MT *karusu*, KS *karisu*, MR *alisu* (<*qalisu). Cf. PMP *Rusuk (Dp).

PNk *kasoso ‘blood’: B1, TA, Gk, MT, UB, *kasoso*, KS *kasoso/kasaso*; MR *kasoso* ‘red’. Cf. To *toto*, PMP *cemcem ‘make wet, moisten’ (Dp).

PNk *katu, *gatu ‘to pound’: B1, TA, KS, MT *katu*, UB *katu-a*, MR *gati*. (I take MR *gati* as reflecting a prenasalized variant of *katu*.)

PNk *kavou ‘white ashes’: Gk, MR *kavou*.

PNk *k(ei)sa (TNk *K) ‘green’: B1, KS *kakesa*, TA *keakisa*, MT *kisa*, UB *kesa*, *kisa*, MR *gesaquesa*.

PNk *kukure ‘spider’: MT *kukure*, TA, MR *kukule*.

PNk *kumu (TNk *K) ‘to thunder’: TA, KS, MT, UB *kumu*, MR *qumu*. Note also Gk *gamu*.

PNk *kuru (TNk *K) ‘black’: B1, TA *kuru*, KS, Gk *pala-kuru*, MT, UB *para-kuru*, MR *pa-ulu*. See also PLk *para-.

PNk *-lado (TNk *dR) ‘small stone’: B1, Gk *ka-lalago*, UB *ha-raro*.

PNk *kubaqa ‘good (to taste), sweet’: TA *taro-kuba*, KS *talo-kuba*, MR *kubaqana*. Unclear whether to reconstruct as *kubaqa or *kuba.

PNk *lagu ‘face, to face (in a direction)’: B1, TA, KS, MT, UB, MR *lagu*.

PNk *lalua ‘vein’: MT, MR *lalua*. Cf. POC *uRat (R), PMP *uRat (Dy).

PNk *laŋi (TNk *ng) ‘sky’: B1, KS, *lagi*, TA, MT *lage* ‘sky’; MR *laŋi* ‘cloud’. PMP *laŋit (Dp). J: PKB *laŋit (based on BA *laŋiti*).

PNk *lau ‘sea (as direction)’: B1, TA, UB *go-lau*, MR *qu-lau* ‘go seaward’; MT *so-lau* ‘seaward’. POC *laur (R), PMP *laud (Dy).

PNk *livo ‘tooth’: B1, KS, MR *livo*. PAN *lipen (R), *nipen (B).

PNk *loi ‘to rub with the hands’: B1, MR *loi*. Cf. PNk *lohi.

PNk *lohi ‘grate, cough’: TA *lohi* ‘to rub’; B1, MT, UB *lohi* ‘to cough’. Cf. PNk *loi.

PNk *loto, ‘to fold, break’: B1 *loto*; MT *sapi-loto-a*, MR *sagi-lote* ‘to break’. Cf. PMP *Re(n)(tT)ej ‘to bend, stretch’ (Dp).

PNk *madiri (TNk *R) ‘to stand’: B1, TA, KS, MT *magiri*, Gk, MR *magili*, UB *mariri*. See also BA, V1 *mandiri*. POC *madriRi (R), Pre-POC *mandiRi (R), PMP *DiRi (Dp), *diRi (B). J: PKB *ma-diri (based on BA *mandiri*), where we would expect PKB *madiLi. Note also BA, V1 *mandiri* (V).

PNk *mado (TNk *D) ‘salt water, sand’: B1, TA, KS, Gk, MT, UB *mago* ‘salt water’; MR *mado* ‘sand’. Cf. Tr *mwóóch*, *mwóchu*- (<*mwacho-) ‘reef pass’.

PNk *maga ‘sand, earth’: B1, TA, KS, Gk, MT, UB *maga-sa*, MR *magamaga*.

PNk *mahono ‘to sweat’: B1, KS, MT *maholo*, MR *maono*. Tr *moonoon*, Raga *mamaono* (Chowning 1991). PEO *maqono.

PNk *mahuma ‘garden’: B1, TA, KS, MT *mahuma*, MR *mauma*. See PKB *huma.

PNk *makoko ‘crooked, curved, bent’: B1 *makoko*; B1, TA, MT, UB, MR *polo-makoko*, KS *lilo-mahoko* ‘turns’.

PNk *malehu/malou ‘thirsty’: B1, TA, KS, MT *malehu*, UB *malolou*, MR *malou*. Cf. PMP *qa(qus) (Dy), PWMP *laqu, *daqu ‘thirst’ (B).

PNk *maligoma ‘dark (as at night)’: B1, MR (J) *maligoma*. J: PKB *marigomo (based on *maringomo* and V1 *maringogo*).

PNk *malulu 'valley': B1, TA, KS, MT, UB, MR *malulu*. See also BO *la-malu-na-vaha-gu* 'my footprint'.

PNk *maqini 'flesh': B1, TA, KS, GK, MT, UB *maili*, MR *maqini*.

PNk *maramara 'easy, relieved': B1 *maramara*, MR *malamala* 'easy' (J). Cf. PWM *maLaxaLaxa 'light (not heavy)'.

PNk *marasa 'beautiful': B1, TA, MT, UB *marasa*, MR *malasa*. J: PKB *mazat (based on Bali *mazata* 'beautiful', which cannot be cognate with these forms).

PNk *masaga 'to desire': B1, MR *masaga*, UB *masaga-tavua*.

PNk *mavuta 'to sleep, lie': B1, TA, KS, GK, MT, UB, MR *mavuta*. POC *[ma]-puta (R), PMP *buta 'be blind' (Dp). Note also BO *mahita* 'to sleep' (J).

PNk *mera 'spoken word', *meramera 'talk': B1, *meramera*, MR *melamela* 'talk'; B1, TA *mera-robo*, GK, MT. *mela-lobo* 'taboo' (lit. 'covered word'). See PKB *zobo.

PNk *meru 'left, left hand': B1, TA, MT, UB, *meru*, KS, GK *melu*, MR *meli*. Cf. PKB *mauli.

PNk *-mi-teu/-mi-tou 'we (pl. excl.)': B1, TA, MR *a-mi-teu*, MT *e-mi-teu*, KS, UB *e-mi-tou*.

PNk *mugu 'dirty, old (worn)': B1, TA, KS, GK, MT, UB *mumugu*, MR *mugu/mumugu*. Note also KS *mamuga*, GK *mumuga* 'old'.

PNk *musi 'to hunt': B1 *vaa-musi*, *va-musi*, TA, GK *vaha-musi*, MR *musi*.

PNk *-mu-tou 'you (pl.)': B1, TA, KS, GK, MR *a-mu-tou*, MT, UB *e-mu-tou*. F1 -mu-dou.

PNk *no(qh)a (TNk *qh) 'nest': B1 *loa* (G), *loha* (V), TA, KS, UB *loha*, MT *laloha*, MR *noqa*.

PNk *nunu 'shadow': B1, TA, MT, UB, *ha-lulu*, B1, TA, KS, MT, UB *ka-lulu*, MR *nunu*, *lunu* (J). POC *nunu (B), *(qθ)anunu (B). See also PKB *hanu, *hanunu and PLK *kalulu 'soul'. J: PKB *kanuanua 'shadow' (based on BA *nuanua*, which cannot be cognate with these forms).

PNk *ŋala-hate (TNk *G, *T) 'to breathe': B1, TA, KS, GK, MT, UB *lala-hate*, MR *ŋala-sasaqe*.

PNk *ŋolo (TNk *ng) 'to sleep': UB *gogolo* 'lies'; MR *ŋolo* 'to sleep', *ŋolo-golo* 'to feign sleep'. Note also PCLk *hagolo* 'awake'. Cf. PKB *ŋo(rz)o 'to snore', POC *ŋoRo 'to snore' (R), and note V1 *ngoro* 'to sleep' (V).

PNk *obu 'tree, tree trunk, wood': B1, TA, KS, GK, MT, UB *obu*, MR *o-obu/o-ubu* 'tree, stick'; TA, KS *obu* 'leg', MR *ubu-gu* 'my leg'.

PNk *pago 'find, encounter': MR *page* 'to find'; PLK *poga: B1 *poga*, *poge-a* 'to approach, find, meet a person', KS *poge-a* 'to find'. Cf. BO *pakerau* 'to find, meet'. Cf. PWM *pajo 'to hunt'.

PNk *pagoto 'adze': MT *pagoto*, MR *pagoti* (? *pagote). These may be loans from a common non-Nakanai source.

PNk *pai 'many': B1 *ma-pai-ti*, UB, MR *papai* 'many'; UB *papai-balo* (*balo* 'not'), MR *ma-paipai-goto* (*goto*, *oto* 'not') 'few'.

PNk *pakali (TNk *K) 'to steal': B1, TA, KS, MT, UB *pakali*, MR *paqali*.

PNk *paza (TNk *j) 'rotten': B1, TA, UB *parara*, KS *palala*, MT *pasasa*, MR *pasa-si*; B1 *pasasa* 'spoiled (of food)'. Note also B1 *sasaha* 'rotten', PMP *zaqat (Dy).

PNk *pazu 'to fall': B1, TA, MT *paru*, KS, GK *palu*, UB *pasu*.

PNk *papara 'to boil': MT *papara*, MR *papala*. Cf. PMP *baka(r) 'make hot' (Dp).

PNk *pesi 'to dig': B1 *pesi*, MR *pesi-a*. Note also B1 *esi* 'to dig'.

PNk *pidi (TNk *dR) 'to throw': B1, TA, KS *pigi*, MT, GK *pigi-a*, UB *piri*, *piri-gata*. F1 *bisi* 'to cast, throw (not away)'. See also PLK *piri-gata 'right hand'.

PNk *pita (TNk *T) ‘mud’: B1, TA, KS, MT, UB *pita*, MR *pipisa*. PMP *pitak ‘mud’ (B).

PNk *poke ‘back’: B1, TA, KS, GK, MT *poke*, MR *poqe* (J). J: PKB *poke (based on Bali *poke*).

PNk *pokio (TNk *K) ‘shark’: B1, TA, KS, MT, UB *pokio*, MR *poqio*. Cf. Fi *qio*, PMP *kiyu. Cf. also PMP *buqaya(h) (Dy).

PNk *pola ‘broken into small pieces’: B1 *pola*; B1, KS *ma-pola* ‘is shattered’; B1, TA, UB *ma-pole-a*, MT *katu-pole-a* ‘shatters (something)’; B1, TA, KS, MT, UB *vali-pola*, MR *vali-pole* ‘hatches’ (see PKB *vali₂). Cf. Bo *poda* ‘in pieces’, *ma-poda* ‘split, crack, explode’ and cf. PMP *rempak ‘crumble’ (Dp), PMP *pecaq ‘in pieces’ (Dy).

PNk *polo, ‘to go, walk, move’: B1 *polo*; B1, TA, MT, UB, MR *polo-makoko* ‘to turn’. Cf. PWM *polo-.

PNk *polo-makoko ‘to turn’. See PNk *polo, PNk *makoko.

PNk *pu(h)i ‘to carve in wood’: B1 *puhi*; B1 *puhi-golo* (G), *puh-golo* (V). TA, MR *puh-golo* ‘carved image’.

PNk *pu(h)i-golo ‘carved image’: see PNk *pu(h)i.

PNk *puli ‘foot, sole (of foot), footprint’: B1, MT, MR *puli*. Note also UB *lamuli* ‘foot’.

PNk *puqe, *vuqe ‘to open a bundle’: B1 *pue* (G), *puhe-a* (V), KS *puhe-a*, MR *vuqe*. SA *huqe*, To *fuke*, PEO *fuke. Cf. PMP *buka (Dp), *pukas ‘to release, loosen, untie’ (B).

PNk *puzu ‘to swim, bathe’: B1, TA, MT *puru*; KS *pulu*, GK *pupulu*, UB *pusu* ‘to bathe’. TR *wutuut* (*wutu-*) ‘to splash water’, Fi *vuui*, *vuuya* ‘to wash’. Note also UB *apurusu* ‘to swim’, MR *avutu* ‘to bathe’.

PNk *puu ‘to fall (as rain)’: B1, GK, MR *puu*.

PNk *qisu ‘to desire, choose’: B1, TA, KS, MT *isu*, MR *qisu-qana*.

PNk *qu- ‘proceed, do’: B1, KS *u-mala* ‘do not’, MR *qu-lau* ‘go seaward’.

PNk *raŋo (TNk *ng) ‘fly (insect)’: B1, TA, UB *rago*, MR *lajo*. Cf. PMP *laŋaw (Dp).

PNk *sali ‘to flow’: B1, GK *saisali*, TA, KS, MT, UB, MR *sali*. PMP *saliR (B).

PNk *sau ‘to hold’: B1 *sau*; TA, KS, UB *sau-tole*, GK *sau-tole-a*, MT *sau-vola*, MR *sau-tola* ‘hold firmly’.

PNk *sa-vulu-tolu ‘thirty’: B1, TA, KS, UB, MR *sa-vulu-tolu*. See PKB *sa-vulu, *tolu.

PNk *sa-vulu-lima ‘fifty’: B1, TA, KS, UB, MR *sa-vulu-lima*. See PNk *sa-vulu, *lima.

PNk *sese(e) ‘flower, to bloom’: B1 *sese*, *sese*; TA, KS, GK, UB, MR *sese*.

PNk *sima ‘lightning’: B1, TA, KS, MT, UB, MR *sima*.

PNk *sivo ‘to climb down’: B1 *sivo*, TA, KS, MT, UB *sivo-ti*, MR *sivo-si*. PMC *siwo, Fi *sivo* ‘debased, put down’. POC *sipo (R). Cf. PEO *zivo (G). J: PKB *zivo (based on Bali *zio*).

PNk *so- ‘toward, in the direction of’: B1, TA, KS, UB *so-mai* ‘hither’.

PNk *soŋo (TNk *ng) ‘to swallow’: B1, TA, KS *sogo-mu*, MR *bu-soŋe*.

PNk *tada₁ (TNk *tT, *D) ‘to dream’: B1, TA *taga-bara*, KS *tage-a*, MT *taga-bulu*, MR *tada*.

PNk *tada₂ (TNk *dR) ‘be afraid’: B1, TA, KS *taga*, *tataga*, UB *ha-tara*.

PNk *tagana (TNk *t) ‘pillow’: B1, TA, MT *tagala*, MR *tagana*. I cannot account for UB *tagara* ‘pillow’.

PNk *tagaza (TNk *t, *Z) ‘dry’: B1, KS, MT, UB *tagara*, MR *tagasa*. Note also PCLK *masaga.

PNk *tagu (TNk *t) ‘to stab’: B1 TA, KS, MT, UB *tagu*, GK *tagu-a*, MR *tagi*.

PNk *tau (TNk *t) 'to put': B1, TA, KS, MT, UB *tau-a*, MR *tau*. Cf. PMP *taRuq (Dy). J: PKB *taruq (based on Bali *taruxi*).

PNk *tavu, *tabu (TNk *T) 'pertaining to the nose': B1 *tavu* 'to pierce (as a nose)', 'hornbill', UB *tavu-la*, MR *tabu* 'nose'. Cf. PMP *te(m)buk 'to pierce' (Dp).

PNk *-ti (TNk *T) 'perfective suffix': B1, TA, KS, MT, UB *-ti*, MT *-si*.

PNk *tilia (TNk *t) 'to dance': B1, TA, KS, UB, MR *tilia*, GK *tilalia*.

PNk *tina (TNk *t) 'mother': B1, TA, KS, GK, UB *tila*, MR *tina*, *ina*. Note also BA *tina*- (J) and PMc *tiina, *tina-. Cf. PMP *ina (Dp), PAN *t-ina (B). See also PKB *(q)ina 'mother'.

PNk *tiu (TNk *T) 'to string (as beads)': B1, TA, KS, MT, UB *tiu*, MR *siu*.

PNk *tivura (TNk *t) 'hot': B1, TA, MT *tivura*, KS, GK *tivula*, MR *tivuvula*.

PNk *tola (TNk *t) 'to cry out, call': B1 *tola*, *tatola*, TA, KS, MT *tatola*, UB, MR *tola*.

PNk *tolu, *hatolu (TNk *t) 'egg': PLk: *hatolu: B1, GK, UB *hatotolu*, KS *hatolu*, TA, MT *hatatolu*; MR *tolutolu*. PMP *qateluR (B), (tT)eluR (Dp). Note also J's strange BU *gatelu* 'egg'.

PNk *tuku (TNk *t, *K) 'dull (not sharp)': UB *mata-ha-tuku*, MR *tuqi*. See also PKB *tupo.

PNk *utu (TNk *t) 'to cut': B1 *utu*, MR *o-uti*; B1, KS *bara-utu*, *bar-utu*, GK *bal-utu-a*, *bar-utu*; KS *vali-utu-a*, GK *vali-tu-a*.

PNk *vali-pola 'to hatch': B1, TA, KS, MT, UB *vali-pola*, MR *vali-pole*. See PNk *pola.

PNk *vauta 'deaf': MR *vauta*; B1 *e-vauta* 'deaf mute (epithet)'. See also PLk *vou 'deaf'.

PNk *-ve 'where?, how?': B1, TA, KS, GK *o-ve*, MT *i-o-ve*, MR *i-ve* 'where?'; B1 *ma-ve* 'how?'. Cf. Fi *vei* 'place where?', POC *pai (R). See also PKB *-va and note also UB *o-vai*, MR *i-va* 'where?'.

PNk *viso 'knife': B1, TA, KS, MT, UB, MR *viso*. PMP *pisaw.

PNk *vovo 'skin, body surface': B1, TA, KS, GK, MT, UB, MR *vovo*. Cf. TR *wóó-*, GB *i-ao-* 'on, at surface of'. Cf. ? PMP *bebak 'pelt, skinned' (Dp).

PNk *vozo-a 'to pound (as nuts)': B1, TA, MT *voro-a*, KS *volo-a*, UB *voso-a*. Cf. PMP *pecaq 'in pieces' (Dp), PAN *pecel 'squeeze in the hand' (B).

PNk *vulo 'to turn over': B1, TA, KS, MT, UB *vulo*, MR *vule*. Fi *vuloc-a*, PMP *pules (Dp).

PNk *vutu 'be immersed in water': MT *vutu* 'to sink, drown', MR *a-vutu* 'to wash'. Note also MR *pu-mutu* 'to drown'. Cf. PAN *puqpuq 'to wash the private parts' (B).

PNk *walasiwo (?<*walu-siwa) 'nine': B1, TA, KS, GK, UB *ualasiu* (<*i-walasiu, following *i-ualu* 'eight' in serial counting), MR *i-alasue* (<*i-walasiwo). POC *siwa 'nine' (R), PMP *siwa (Dp). Cf. PEO *ziwa 'nine' (G). Note also PLk *ualu 'eight'.

PNk *zivo (TNk *zZ) 'swidden area, bush': B1 *-rivo*, MR *tau-ma-sivo* 'bush spirit'.

PNk *zobe (TNk *Z) 'to moan, ail': B1, TA. KS *roberobe*, MT, UB *robe* 'moan'; MR *sobe* 'be sick'.

PNk *zova, *zava (TNk *zZ) 'what?': B1, TA *rova*, KS, GK, MT *lova*, MR *sava*. Cf. TR *ta-fa-* 'what relationship?, what place?, what use?'. Fi *cava*, PEO *zava (G). Cf. PMP *sapa (B). See also PKB *.va.

PNk *zua 'husband': B1, TA, MT *ha-rua*, KS, GK *ha-lua*, UB *ha-sua*, MR *sua*. Cf. PKB *tuLa. Cf. also PEO *joRa (G).

PNk *zutu (TNk *T) 'wife': B1, TA, MT *rutu*, KS *lutu*, GK *litu*, UB *sutu*, MR *susu*.

APPENDIX C: RECONSTRUCTED PROTO-WILLAUMEZ (PWM) FORMS

PWM *ara 'name': Bo *ara-mu* 'thy n.', XA *ara-gu* 'my n.'. PEO *aza (G), PMP *(hø)ajan (Dy).

PWM *bal(ai)xua 'worm': Bo *balaxua*, XA *balixua*. Cf. F1 *bala* 'the male turtle', the name referring to the tail or penis, according to Capell (1941:4)

PWM *bati 'far': Bo, XA *basi*.

PWM *b(o)i to 'back (of body)': Bu *boto*, Bo *bito*, XA *a-bito-gu* 'my b.' PMP *be(n)ten 'lower part of body, abdomen'.

PWM *bobo 'meat': Bu, XA *bobo-na* 'its m.', Bo *bobo*.

PWM *bubu 'cloud': Bu, Bo *bubu*. Cf. PLK *sobu 'smoke, fog'.

PWM *bodu 'island': Bu (J), Bo, XA (J) *bodu*.

PWM *bur(uo)ŋi 'to smell': Bu *buroŋi*, XA *buruŋi-a*.

PWM *gepe 'shoulder': Bu, Bo, XA *gepe-* (J).

PWM *girixi 'spouse': Bo *girixi-gu* 'my s.', XA *girihi-na* 'his/her s.'.

PWM *kalupe 'to spit': Bu, Bo, XA *kalupe*.

PWM *kaL(ea)pa 'wing'. See PKB *paLa, *(qk)apaLa.

PWM *kamangi 'lime': Bu (J) *kamangi*, Bo (J), XA (J) *kamagi*.

PWM *kedo 'stone': Bu, Bo, XA *kedo*. Cf. MR (J) *mata-qedaqedo* 'star'.

PWM *kere 'dry': Bu, Bo, XA *kere*.

PWM *keva 'moon': Bu, Bo, XA (J) *keva*.

PWM *k(uo)L(ao)ba 'sibling of opposite sex': Bu *kulaba*, Bo *kuraba*, XA *koloba-gu* 'my s.'.

PWM *kuruve 'rat': Bu, Bo, XA *kuruve* (J). Cf. PCLK *kusuke. J: PKB *kuvuzek (based on Bali *kuvuzeke*), but note V1 *kuḍuve*, which is cognate with Willaumez forms and suggests possible PKB *ku(sz)uve.

PWM *(kK)alolo 'to sing': Bo, XA *kalolo*.

PWM *(kK)oma 'small child': Bo, XA *koma*. Cf. Molima *gwoma* 'child' (Chowning, pers. comm.).

PWM *Keli 'to dig': Bu *xeli*, Bo *keli*, XA *keli-a*. Cf. PMP *kali (Dp). Cf. also PLK *koli and PCLK *oli 'to dig'. J: PKB *xali (based on B1 *oli* and MR *elai*, which are not apparent cognates of these forms).

PWM *Ko(e) 'thou': Bu *he-xo*, XA *koe*. PMP *kaw (Dp). Cf. Bo *i-oe*.

PWM *laxo 'to walk': Bo *laxo*, XA *lalaho*. PMP *lakaw (B).

PWM *-Liki 'second growth bush': Bu *ma-lilikili*, Bo *mu-riki*, XA *mi-lilikili*. PMP *Diki(qh) 'small' (Dy).

PWM *Lopo 'rotten': Bo *ropo*, XA *lopo*. Cf. Bu *luba-ka* 'rotten'.

PWM *maŋeŋe 'to fear': Bo, XA *maŋeŋe*.

PWM *maLaxaLaxa 'light (not heavy)': Bu, XA *malaxalaxa* (J), Bo *maraxaraxa* (J). See also PNk *maramara. J: PKB *mazaqazaqaŋa (based on Bali *mazaxazaxaŋa*, which is not cognate with these PWM or PNk forms but may be cognate with PCLK *masaga 'dry').

PWM *maLogo, *maRogo: 'crooked, bent': Bo *marogo*, XA *malego*, XA *laho marogo* 'to change direction'. Cf. B1 *koko*, *makoko* 'crooked'.

PWM *maRogo 'crooked, bent': see PWM *maLogo.

PWM *mata 'snake': Bu, Bo, XA (J) *mata*. POC *mwata (R).

- PWM *matau 'to sit': BU, Bo *matau*. PMP *[ma]-taRuq (Dy).
- PWM *mati, *mita 'to see': Bo *masi-a*, XA *mise-a*. Cf. PKB *mata₂.
- PWM *meŋo 'cassowary': BU (J), Bo (J), XA (J) *meŋo*.
- PWM *mita 'to see': see PWM *mati.
- PWM ? *m(ao)lome 'eel': Bo (J), *molome*, XA (J) *malome*.
- PWM *na 'at': BU, Bo *na*.
- PWM *nana₁ 'mother': BU, Bo, XA *nana*.
- PWM *nana₂ 'to ask': Bo *nana*, XA *nana-ge*.
- PWM *noŋo 'to laugh': BU, Bo, XA *noŋo*. Note also BA, V1 *noŋo* (V), BA *noŋo* (J).
- PWM *nugu 'to hold': BU *nugu-i*, Bo *nugu*, XA *nugu-tate-a*.
- PWM *ŋava 'mouth': BU *ŋava-* (J), Bo *ŋava*, *lava-gu*, XA *a-ŋava-gu* 'my m.'. PMP *ŋaŋa + *babaq (Dp).
- PWM *ŋiŋi 'teeth': BU, Bo *ŋiŋi*, XA *a-ŋiŋi-gu* 'my t.'. Cf. PMP *gigi 'teeth' (Dp). Note also Bo *nii-gu* 'my t.' and B1 *livo*.
- PWM *padi 'to spear': BU *padi*, Bo, XA *padi-a*. Note also V1 *pande* 'to s., stab' (V).
- PWM *pa-iti 'to stand': BU *pa-iti*, *pa-sisi* (J), Bo *p-esi*, XA *pa-isi*.
- PWM *pala 'to cut': BU *pala-i*, Bo *pala* 'to cut'; BU *pala-pida-i* 'to split'. POC *pala 'to chop' (R), PMP *paraŋ 'bushknife'.
- PWM *paŋo 'to hunt': BU *paŋopaŋo*, Bo, XA *paŋo*. The BU, Bo, and XA forms were recorded ambiguously as *ng* by V but confirmed as *ŋ* by Chowning for Bola. Note also BA *to-paŋo* 'to hunt' (V), and Ko *paŋo* 'to hunt'. Cf. PNK *paŋo 'to find, encounter'.
- PWM *pepe 'frog': BU (J), Bo (J), XA (J) *pepe*.
- PWM *pida 'to split': see PWM *vida.
- PWM *po(kK)o 'smoke': Bo *poko*, XA *poko-na-kai*.
- PWM *polo- 'numerical formative from six to nine': Bo, XA *polo-*. J: PKB *volo (based on BA, V1 *polo-*). Cf. PNK *polo 'to go, walk, move'.
- PWM *pote 'few': Bo *popote*, XA *pote*.
- PWM *puLa 'flower': BU *pula-ka* 'its f.', Bo *pura*, XA *pula*. Cf. PMP *pulpul, *buŋa.
- PWM *raulo 'to dance': BU, Bo, XA *raulo*.
- PWM *riŋ(uo) 'to smell, detect odor': see PWM *r(uo)ŋi.
- PWM *roŋo 'warm, hot, to sting': BU, XA *roroŋo*, Bo *roŋo*. PMP *seŋet. J gives Bo *ruŋani* and *nono*.
- PWM *r(uo)ŋi, *riŋ(uo) 'to smell, detect odor': BU *riŋo-i*, BU *bu-Sroŋi*, XA *bu-ruŋi-a*.
- PWM *(rR)apu 'old': BU *rapurapu*, Bo *rapu*.
- PWM *tata 'father': BU, XA *tata*, Bo *tata*, *taata*. Note also V1 *tata* (J). Cf. B1 *tete* (in address and first person possessive).
- PWM *tua 'to flow': BU *kura-tua*, Bo *tua*, XA *i-tua*.
- PWM *tupo 'dull': BU, Bo, XA *tupo*.
- PWM *va-padi 'to fight': BU, XA *va-padi*. See PWM *padi 'to spear'.
- PWM *varili 'grass': BU, XA *varirili*, Bo *varili*. PAN *bali(jzZ)i (B), of which this is a metathesized form.
- PWM *veRe 'sharp': BU, Bo *vere*, XA *ka-vele*.
- PWM *vi 'fat': BU *vi-ka*, Bo *vi-na*, XA *a-vi-na* 'its f.'.
- PWM *vida, *pida 'to split': BU *pala-pida-i*, Bo *vida*, XA *vide-a*. F1 *vida* 'to split', PMP *pi[n]tak 'share, partition' (Dp). Cf. PEO *vazi 'to split lengthwise' (G).

PWM *voro 'to throw': BU *voro-i*, BO, XA *voro*.

PWM *vuRuRu 'red': BU, BO *vururu*, XA *vululu*.

PWM *xabulo 'ashes': BO, XA *xabulo*. Cf. PMP *qabu 'ashes' (B). J: PKB *qavul (based on treating these forms and PNk *havu as cognates and assuming that -lo in the BO and XA forms represented the final consonant of a POC root plus vowel). See also PNk *havu.

PWM *xale 'bad': BO *i-gale* (? *xale*), XA *xale*.

PWM *xi(rl)olo 'to bathe': BO *xilolo*, XA *xirolo*.

PWM *xuru 'to swim': BU *xuru*, *uruguru* (? *xuruxuru*), BO *xuru*, XA *huru*. Note also BA *guru* (V).

APPENDIX D: RECONSTRUCTED PROTO-LAKALAI (PLK) FORMS

PLk *baisi/bisi 'small, narrow': Bi, TA *baisi*, *bisi*, KS, MT *baisi*, Gk *baisi koli*, *bisi koli*, UB *bisi*. See also PNk *baini 'small' and PCLk *bakisi 'few'.

PLk *basi 'animal, to hunt': Bi, TA, KS, Gk, MT, UB *basi* 'animal'; Bi *basi* 'to hunt'; Bi, TA, KS *basi-muli* 'to hunt, chase'. See PNk *muli 'behind, after'.

PLk *bau 'to sing': Bi, TA, KS, Gk, MT, UB *bau*.

PLk *baugu 'bad': Gk *baugu*, UB *bugu* (<*baugu).

PLk *beta 'wet': Bi, TA, KS, Gk, MT, UB *beta*.

PLk *bili 'to kill': Bi, TA, KS, MT, UB *bili*, Gk *bili-a*.

PLk *bobore 'smooth': Bi, TA, UB *bobore*, KS *bobole*.

PLk *bula(h)u 'nothing, of no account': Bi *bulahu*, UB *paga-bulau* 'nothing, worthless person'.

PLk *buru 'buttocks': Bi, TA, MT, UB *buru*. Cf. Fi *buli*.

PLk *buso 'ventral or anal fin': Bi, UB *buso*. Note also PNk *buso* 'navel', PMP *pusoj 'navel' (Dp), from which this meaning may be derivative.

PLk *gago, *garo 'gums, molar tooth (?)': Bi *gago*; TA, UB *gago*, KS *galo*, MT *garo* 'molar tooth'.

PLk *gaho 'head (especially of animals and monsters)': Bi, TA, MT, UB *gaho*. Cf. Pre-POC *daqe 'forehead' (R), PMP *(t)aqay 'forehead' (Dp).

PLk *gaisa 'when?': Bi, TA, KS, MT *gaisa*, UB *gisa* (<*gaisa). Cf. PEO *ɟiza (G).

PLk *gala 'leaf': Bi, TA, Gk *galagala*, KS *gagala*, UB *gala*; Cf. Bi *kala*- 'leaf, blade' (in compounds only) and PCLk *galau.

PLk *gal(ai)geli 'tomorrow': Bi, MT, UB *galageli*; Bi, TA, KS *galigeli*.

PLk *gale 'cheek': Bi, TA, MT, UB, *gale*, KS *gale-maututu*.

PLk *gale-la-luma 'house wall': Bi, TA, KS, UB *gale-la-luma*.

PLk *garo 'gums, molar tooth'. See PLk *gago.

PLk *gati, *kati 'to bite, chew': Bi, TA, KS, Gk *gati*, UB *kati*.

PLk *gavure 'fingernail, toenail': Bi *gavure*, *gavurevure*, TA, MT *gavurevure*, KS *gavule*, UB *garivo* (?<*gavure by metathesis).

PLk *gavusa 'ear, fin at gills (of fish)': Bi, TA, KS, Gk, MT, UB *gavusa*.

PLk *golu 'throat': Bi *golu*, *bari-golu*, TA *golu*, KS *bali-golu*, UB *bare-golu*.

PLk *go-mai 'come here': Bi, TA, KS, Gk, MT, UB *go-mai*. See PKB *mai 'hither'.

PLK *gove 'mountain': B1, TA, KS, MT, UB *gove*, GK *goigove* (*goegove). Cf. MR *loe* 'mountain'.

PLK *guliliki 'child (other than one's own)': B1, TA, KS, MT, UB *guliliki*.

PLK *halala 'branch': B1, UB *halala*, KS *lalaha*. Cf. PMP *(dD)ahan (Dy).

PLK *ha(rs)i 'to run': B1 *hari*, TA, KS *hasi*, UB *harihari*; B1 *hari*, *harihari*, TA, KS *hari* 'fast, quick'. Suggests PNK *ha(sz)i.

PLK *hatolu 'egg': see PNK *tolu 'egg'.

PLK *hazua 'husband': see PNK *zua.

PLK *hele 'to flee': B1 *hele*, *hele-taro*, TA *hele-taro*, KS, MT, UB *hele*.

PLK *hilo 'to see': B1 *hilo/liho*, TA, KS, GK, MT, UB *hilo*. Cf. PMP *qilaw 'reflection' (Dy), *PAN *kilep 'to glance, glimpse' (B).

PLK *hoi 'bush': B1 *hoi*, *hohoi*, TA, KS, GK, UB *hoi*, MT *hoioi*.

PLK *igo 'to do, make': B1, TA *igo*; B1, TA, KS, MT *igo-golu*, UB *igo-li* 'to work'.

PLK *ioo 'goodbye': B1, TA, KS, MT, UB *ioo*.

PLK *kabili 'middle': B1, TA, KS, MT, UB *kabili*.

PLK *kahotavu 'quarrel': B1, TA, KS, MT, UB *kahotavu*. Cf. PLK *kohotavu.

PLK *kala-mea 'tongue': B1, TA, KS, GK, MT, UB *kala-mea*. PAN *Sema 'tongue' (B). See B1 *kala-* 'leaf, blade' (in compounds only).

PLK *kalulu 'soul': B1, TA, KS, MT, UB *kalulu*. Cf. TR *ngúún* (*ngúnú-*) 'soul'. See also PKB *hanu, *hanunu and PNK *nunu.

PLK *kamulu 'small feather': B1, TA, MT, UB *kamulu*. Cf. POC *pulu 'body hair' (R), PMP *bulu 'hair, feather' (Dp). Cf. PLK *koma.

PLK *kati 'to bite, chew'. See PLK *gati.

PLK *katu, *gatu 'to pound': B1 TA, KS, MT, *katu*, UB *katu-a*; MR *gati* 'to pound'. PAN *kaTuk (B).

PLK *kavou 'to stroll about': B1 *kavou*, *kavovou*, TA, UB *kavovou*. Note that this word is also used as a euphemism for 'defecate'.

PLK *kavurasi 'to spit, spittle': B1, GK, UB *kavurasi*.

PLK *kirere 'worm': B1, TA, UB *kirere*.

PLK *k(ei)si 'to tie': B1, TA, KS *kisi*, GK *kisi-a*, MT *kisi-tole-a*, UB *kesi*.

PLK *kohotavu 'to quarrel': B1, TA, KS, MT, UB *kohotavu*. Cf. PLK *kahotavu.

PLK *koko 'to defecate': B1, TA, KS, MT, UB *koko*.

PLK *kokora 'good': B1, TA, MT, UB *kokora*, KS, GK *kokola*. Note also BU *gora* 'good' (J).

PLK *koli 'to dig (a hole)': B1, TA, MT, UB *koli*, GK *koli-a*; note also PCLK *oli*.

PLK *koma 'feather (larger, not 'down')': B1, TA, GK, MT *kokoma*, KS *kakoma*, UB *ha-koma*. Cf. PLK *kamulu.

PLK *kue 'to hit': B1, TA, KS, GK, MT, UB *kue*.

PLK *-kumu 'heavy': B1, TA, KS, GK *ti-kumu*, MT *tu-kumu*, UB *hutu-kumu*.

PLK *la- 'prefixed "common noun" marker': B1, TA, KS, GK, MT, UB *la-*. Note also MR *a-*. Cf. PMP *na- (B).

PLK *latu 'hundred': B1 TA, KS, UB *sa-latu-saa* 'one hundred'. TR *e-ngé-réw* 'one thousand', PMP *Ratus 'hundred', suggesting PNK and PKB *latu.

PLK *la-va 'what?': B1, TA, UB *la-va*. See PNK *-va.

PLK *lela 'bald': B1, TA, KS, MT, UB *lela*.

PLK *-ligo 'variegated': B1 *ma-ligoligo-a*, MT *go-ligoligo-a*, UB *palo-ligo*.

PLK *lolovi 'breath, wind': B1, TA, KS, GK, MT, UB *lolovi*.

- PLK *loto 'to buy': B1, TA, KS, MT, UB *loto*.
- PLK *lulu 'hole (in ground)': B1, TA, KS, MT, UB *lulu*.
- PLK *magasa 'earth': B1, TA, GK, MT, UB *magasa*, KS *magasa/magesa*. See also PNK *maga 'earth, sand'.
- PLK *magese 'red': B1 *magese*, TA, KS, GK, MT, UB *magegese*.
- PLK *magoa 'rotten': KS, UB *magoa*.
- PLK *makasili 'to itch': B1, TA, KS, MT, UB *makasili*. See also PNK *kasi.
- PLK *mala₁ 'do not': B1, KS *u-mala*, UB *mala*. See PNK *qu-.
- PLK *mala₂ 'far': B1, TA, KS, MT, UB *mala*. (PLK *mala and PKB *malaqu appear to be doublets, *mala the more likely to represent a borrowing from a non-Nakanai source.)
- PLK *malia 'to smell good': B1 *malia* 'smell good'; B1 *malalia*, UB *malilia* 'fragrant'; B1, TA *malia-tigi* 'fragrant'; B1, TA, MT *malia-tataho* 'fragrant'. See also PKB *manji, *manji-na 'to smell, have odor'.
- PLK *mapola 'shattered, broken apart, in small pieces': See PNK *pola*.
- PLK *matabu 'star': B1, TA, KS, GK, UB *matatabu*, MT *matautabu*.
- PLK *mataha 'sharp': TA, GK, UB *mataha*, KS *mata*. Note also BA, VI, *matanga* (V).
- PLK *matahe 'anus': B1, TA, KS, MT, UB *matahe*. See also PKB *tahe 'excrement'.
- PLK *matakea 'blind' (lit. 'white eye'): B1, TA, MT, UB *matakea*. See PKB *mata, *kea.
- PLK *matata 'smooth, straight, correct': B1, TA, KS, GK, MT *matata*, UB *tama-matata*.
- PLK *mauaga 'thin': B1, TA, KS, UB *mauaga*.
- PLK *maulavi 'evening': B1, TA, MT *maulavi*, KS, UB *moulavi*. See also PKB *lavi 'evening'.
- PLK *me₁ 'and': B1, TA, KS, GK, MT, UB *me*. Cf. TR *me*, GB *ma* 'and', PMP *may 'and' (B).
- PLK *me₂ 'you (sg.)': B1, TA, KS, GK, MT, UB *e-me*.
- PLK *meme 'lightning': B1, TA, KS, MT, UB *meme*.
- PLK *mila 'salty': B1, TA, KS *mimila*; UB *ha-mila* 'salty', *mimila* 'sour'.
- PLK *misi, *mimisi 'urine': B1, TA, KS, MT *mimisi*, UB *misi*. See also PKB *mimi.
- PLK *momi 'ant': B1 *momi-ou*, TA, KS, UB *momi*.
- PLK *mori 'cloud': B1, TA, MT, UB *mori*, KS, GK *moli*.
- PLK *morivava 'worthless person': B1, TA, KS, MT, UB *morivava*.
- PLK *o- 'at': B1, TA, KS, GK, MT, UB *o-*.
- PLK *olo 'to cut flesh': B1, MT, UB *olo*, TA *olo/holo*, GK *olo-a*. See also PLK *tolo 'to cut wood'.
- PLK *pa(h)a 'to look for, hunt': B1 *paa* (G), *pae-a* (G), *paa-muli* (G), *paha* (V), *pahe-a* (V), *paha-muli* (V), TA, KS *paha*, UB *paha-muli-a*.
- PLK *paga 'thing (indefinite)': B1 *paga*; B1, TA, KS *paga-bubu*, UB *paga-bulau* 'nothing'.
- PLK *pahu 'to hunt': B1, UB *pahu*, *vi-pahu*.
- PLK *pakeso 'worm': B1, TA, GK, *pakeso*; UB *pakeso* 'snake'. Cf. PCLK *pase 'snake'.
- PLK *para- 'pertaining to appearance': B1 *para-lahu* 'appear in large quantities'; B1, TA, MT, UB *para-kuru*, KS, GK *pala-kuru* 'black'. (Note also MR *pa-ulu* 'black'.)
- PLK *pari 'to leap, run': B1 *paripari* 'fast'; UB *pari* 'to jump'.

PLK *paua 'crazy': BI, TA, KS, MT, UB *paua*. Note also MR *vauta* (see PNK *vauta 'deaf').

PLK *peho 'to die': BI, TA, KS, GK, MT, UB *peho*. Cf. TR *pe* (*pee-*), suggesting PNK *peho.

PLK *pepeso 'infant': BI, TA, MT, UB *pepeso*.

PLK *piri-gata 'right hand': KS *piri-gata*, UB *piri-gata*. (Note there is no phonemic distinction between [n] and [l] in KS.) Cf. FI *bisi* 'to cast, throw (not away)', *viri* 'to throw at'. See also PNK *gata 'spear', PNK *gata 'right (hand)', and PNK *pidi 'to throw'.

PLK *poiti 'rough': BI, TA, UB *poititi*, KS *poiti*, *poititi*, MT *ma-poiti*.

PLK *posa 'in the center': BI *posa*; BI, TA, KS, UB *hoi posa* 'bush'.

PLK *pou 'to sit': BI, TA, JS, GK, MT, UB *pou*.

PLK *rako 'grass': BI, UB *rako*.

PLK *rau 'eel': BI, TA, MT, UB *rau*, KS *lau*.

PLK *robe 'to moan': BI, TA, KS *roberobe*, MT *robe*.

PLK *rovi 'to know': BI, TA *rovi*, KS *lovi*; UB *rovi-a* 'to teach'. Cf. PMP *sobut (Dp).

PLK *sahari 'some': BI, TA, UB *sahari*, GK *sahali*; BI i-sahari, KS *i-sali*; MT *i-sali-lou* 'some more'.

PLK *sa-latu-saa 'one hundred': see PLK *latu.

PLK *sasa 'one': BI *i-sasa*, *i-sa-moli* ('only one'), *bari-saa* 'one clutch of four eggs'; TA, KS, GK, UB *i-sasa*; MT *ku-sasa* 'six' (lit. 'one finger' [after five]). See also PKB *tasa 'one'. Cf. FI *caca*, POC *sa (R); PMP *esa, *isa (Dp).

PLK *simuru 'dew': BI, TA, MT, UB *simuru*, KS *simulu*. Cf. PMP *lamuR 'dew' (Dp).

PLK *sivava 'chin': BI, TA, KS, UB *sivava*.

PLK *sobu 'smoke, fog': BI *sosobu* 'smoke, to be dark', TA *sosobu* 'smoke', *sobu-mu* 'fog', GK *sosobu* 'smoke, fog', KS, MT *sosobu* 'smoke', UB *sosobu* 'fog'. Cf. FI *kobuta* 'misty', *kabukabu* 'fog', and cf. PWM *bubu 'cloud'.

PLK *sogo 'to swell, swollen': BI *sogo*, *sosogo*, TA, KS, GK, MT *sogo*, UB *a-sosogo* 'to swell', *sosogo* 'swollen'.

PLK *tahalo 'man': BI, TA, KS, GK, MT *tahalo*, UB *talo*.

PLK *taholi 'echo': BI, TA, KS, MT, UB *taholi*.

PLK *tapulake 'to open': BI, TA, KS MT, UB *tapulake*.

PLK *tarob(iu) 'belch': BI, TA, UB *tarobi*, KS *talobu*, MT *tarobu*.

PLK *ta-tou 'we (pl. incl.)': BI, TA, KS, MT, UB *e-ta-tou*. See PKB *ta- 'we'.

PLK *taua 'bush spirit': BI, TA, KS, MT, UB *taua*. (Note MR *tau masivo* 'bush spirit'.)

PLK *tete 'father (in address)': BI, TA, GK, UB *tete*.

PLK *tia-la-utu 'deep sea, middle of the sea': BI, TA, KS, MT, UB *tia-la-utu*. See PKB *tia, PLK *utu.

PLK *tigi 'to work, make, build a house': BI, KS, MT, UB *tigi*.

PLK *(i)ukumu 'heavy': BI, TA, KS, GK *tikumu*, MT *tukumu*, UB *hu-tukumu*.

PLK *tilomu 'to sink, drown': BI, TA, KS, UB *tilomu*. Note also BI *taromu* 'to sink in mud' and PKB *lomu 'lake'. Cf. PMP *lemes 'immerse, submerge' (Dp).

PLK *ti(rl)i 'clitoris': BI, TA *tiri*, UB *tili*. Molima *sili* (Chowning, pers. comm.). Cf. PMP *teli, *tila, *tilay 'female genitals' (B).

PLK *togo 'tooth': BI, TA, KS, GK, MT, UB *togo*.

PLK *toko 'star': BI, TA, KS, GK, UB *toko*.

- PLK *totolo ‘angry, to scold’: B1 *totolo*; B1, TA, KS, MT, UB *va-igo-totolo* ‘to quarrel’.
- PLK *toumi ‘all’: B1, TA, KS, GK, MT, UB *toumi*. Also recorded for B1 as *tomi*.
- PLK *tuga ‘go’: B1, TA, KS, P GK, MT, UB *tuga*. Note MR *qasu* ‘go’, which seems to be a metathesized form of a doublet without prenasalization of the same root.
- PLK *uru ‘big’: B1, TA, UB *uru*, KS, GK *a-ulu*, MT *a-uru*. Note also PCLK *usu ‘many’.
- PLK *utu ‘deep sea’: B1, TA, KS, MT *utu*; UB *utu* ‘channel’. See also PLK *tia-la-utu.
- PLK *vagari ‘hard, strong’. See PNK *-gari.
- PLK *vaigigo ‘to quarrel’: B1, TA, KS, MT, UB *vaigigo*. See PLK *igo ‘to do’.
- PLK *vaigo-la ‘a quarrel’: B1, TA, KS, MT, UB *vaigo-la*.
- PLK *vaigo-totolo ‘to quarrel’: B1, TA, KS, MT, UB *vaigo-totolo*. See PLK *totolo.
- PLK *vaililo ‘to show (an object)’: B1 (V), TA, KS, UB *vaililo*, B1 *vaililo* ‘to compare’ (G). Cf. B1 *vaihilo*, *vahilo* ‘to show’ (G).
- PLK *vaka- ‘frequency of occurrence, time or times of occurrence’: see PLK *vaka-saa. PAN *pa-ka- (R).
- PLK *vaka-saa ‘once (not twice)’: B1 *vaka-saa*, *vaka-sa*, *vaka-sasa*, TA, KS, MT, UB *vaka-sa*.
- PLK *vasi-golo ‘to tell a lie, a falsehood’: B1, MT, UB *vasi-golo*, TA *vasi-gologolo*; KS *vasi-golo-la*. Note also B1 *visi-golo*, UB *vi-golo*. See PNK *golo.
- PLK *veresua ‘to drool; (as noun) spittle’: B1, TA, UB *veresua*.
- PLK *veveha ‘fillet, hat’: B1 *veveha*, *vevea*, TA, MT, UB *veveha*.
- PLK *vikarakara ‘to converse’: B1, TA, MT, UB *vikarakara*.
- PLK *vikue/vaikue ‘to fight with fists’: B1 *vikue/vukue*, TA, MT, UB *vikue*, KS *vaikue*.
- PLK *viri ‘to twist’: B1, KS *viri*; UB *hate-viriri* ‘intestines’. Cf. POC *piri ‘twist’ (R), PAN *pi(dDr)i(Ct). Cf. also Tr *piti* ‘to braid, twist’, Fi *vici* ‘to bind, roll up’, suggesting POC *pizi.
- PLK *voto ‘dog’: B1 (said to be a loan from UB), GK, MT, UB *voto*.
- PLK *vou ‘deaf’: B1, TA, KS, MT, UB *vou*. Note also MR *vauta*.
- PLK *vulai ‘to clear a garden’: B1 *vulai*, *vulalai*, TA *vulalai*, UB *vulilai*.

APPENDIX E: RECONSTRUCTED PROTO-CENTRAL LAKALAI (PCLK) FORMS

- PCLK *alaura ‘formerly’: B1, TA, MT *alaura*, KS *alaula-ti*.
- PCLK *ale, *al- ‘this, that’: B1 *ale*, *ale-ie*, GK *al-e*, TA, MT *ale-ie*, KS *al-ie* ‘this’; B1 *ale-o*, *ale-io*, GK *al-o*, TA, MT *ale-io*, KS *al-io*, ‘that’.
- PCLK *ama ‘bitter, sour’: B1, TA, KS, MT *ama*.
- PCLK *babia ‘soft, flimsy’: B1, TA, KS *babia*. See also PCLK *mata-babia ‘eyebrow’.
- PCLK *bakisi ‘little, few’: B1 *bakisi*, *kapisi*, KS, GK *bakisi*; TA *bakisi* ‘narrow, small’. See also PLK *baisi/bisi ‘small, narrow’ and PNK *baini ‘small’.
- PCLK *bara-utu ‘to cut off a part of something’: B1, TA *bara-utu*, *bar-utu*, KS *bal-utu-a*, *bar-utu*, MT *bar-utu*. See also PNK *utu ‘to cut’.
- PCLK *basi-muli ‘to defeat in war’ (lit. ‘chase after, pursue’): B1, TA, KS *basi-muli*. See PLK *basi and PNK *mulu.
- PCLK *bele ‘vulva’: B1, TA, KS, MT *bele*.
- PCLK *beua ‘to return, come back’: B1 *beua* (G), *beoa* (V), TA *beoa*, KS *beua*.

PCLk *bitolu 'thick (of things)': Bi, TA *bitolu*. PCEMP *telu (Chowning, pers. comm.).

PCLk *bola 'full (of moon), round (of head shape)': Bi *bolabola*; Bi, TA, KS *ta-bola*, MT *tia-bola* 'belly'. Cf. PMP *bulan 'moon', *bulat 'round' (Dp).

PCLk *bole₁ 'to rise, lift, rise or break (as a wave)': Bi, TA, KS *bole*. Note also MT *bolopuu* 'wave, breaker'.

PCLk *bole₂ 'to win (as a game)': Bi *bole*; Bi *bole-ho*, *bole-hoho*, TA, KS, MT *bole-ho* 'win a contest of endurance'. Cf. Bi *hoho* 'perform on a ceremonial platform high up in a tree'.

PCLk *bole-ho, *bole-hoho 'to win a contest of endurance'. See PCLk *bole₂, PCLk *hoho.

PCLk *bubu 'to no effect, aimless': Bi *bubu*; Bi, TA, KS *paga-bubu* 'nothing, worthless person'.

PCLk *butu 'dull': TA *butubutu*, KS, Gk *bitutu*, MT *mata-bututu*.

PCLk *gabu-taro 'to forget': Bi, KS, MT *gabu-taro*, TA *gabu-taro*, *kabu-taro*. (Note also UB *laho-tase* 'to forget'.) See PNk *dabu, PNk *tazo.

PCLk *gama 'head': Bi, TA, KS, Gk, MT *gama*. BA *dama-* (J), Tr *chaamw* (*chamwa-*), POC *dramwa 'forehead' (R), suggesting PNk *dama.

PCLk *garosi 'to wash, clean': Bi, TA, KS, *garosi*.

PCLk *-ga-tou 'of us (pl. inclusive)': Bi, TA, KS, MT *-ga-tou*. See also PLk *ta-tou. Cf. Fi *da-tou* 'we three', POC *-da-tolu (R).

PCLk *gauru 'road': Bi, TA *gauru*, KS, Gk, MT *gaulu*.

PCLk *gavure 'fingernail': Bi, TA, MT *gavurevure*, KS *gavule*.

PCLk *gere 'voice': Bi, TA, KS, MT *gere*.

PCLk *gimigaegae 'sky world or its inhabitants': Bi, TA, MT *gimigaegae*.

PCLk *gulula 'rock, boulder': Bi, TA, KS *gulula*.

PCLk *(h)otaota 'vein': Bi *otaota* (C), *hotahota* (G), *haotaota* (V), TA, KS *haotaota*. Note also TA, KS, MT *haotaota* 'grass' (V).

PCLk *hagolo 'to wake, be awake': Bi, TA, KS, MT *hagolo*. Cf. PTK *ɲolo 'observe with pleasure, take pride'.

PCLk *hatamale 'man, brother (of a woman)': Bi, TA, KS, Gk, MT *hatamale*. See also PNk *-tamane.

PCLk *hate-malakilaki-la 'lungs': Bi, TA, KS, MT *hate-malakilaki-la*. Note also Bi *hate-malailai* 'lungs'. Cf. Bi *malakilaki* 'soft'.

PCLk *hihi 'to wipe hard, scrub': Bi *hihi* (G), *ihi* (V), TA *ihi*, *ii-a*, MT *ihi*.

PCLk *hoho 'endurance test': Bi *hoho*, *hohoho* 'perform on a ceremonial platform high in a tree'; Bi *bole-ho*, *bole-hoho*, TA, KS, MT *bole-ho* 'win in a contest of endurance'.

PCLk *hugu 'to pant, be out of breath; (as noun) heart': Bi *huguhugu* 'to pant'; Bi *hugugu*, TA *huguhugu*, Gk *hate-mugu-hugu*, MT *hate-la-huguhugu* 'heart'.

PCLk *igoe 'today, now': Bi, TA, KS, MT *igoe*.

PCLk *igo-golu 'to work, make things, make food': Bi, TA, KS, MT *igo-golu*. UB *igoli* appears to be a corrupted loan.

PCLk *iua 'rain': TA, KS *iua*, MT *ua*. Possibly borrowings from a common non-Nakanai source. Cf. Bi *iua* 'boil, sore'.

PCLk *ka 'not': Bi, KS, Gk *ka*, TA *ka-ti-ma*.

PCLk *kahokahu, *kahokaku 'cry out': Bi *kakaku*, *kahoaku*, TA, MT *kahokahu*, KS *kahokaku*. Cf. PMC *kau, kakau 'to call out'.

PCLk *ka-ma ‘not’: B1, KS, GK *ka-ma*, TA *ka-ma*, *ka-ti-ma*, MT *ka-ma*, *ga-ma*. See PLk *ka ‘not’.

PCLk *kamilato ‘charred wood’: B1, TA, KS *kamilato*, GK *kamilata*.

PCLk *kapiti ‘bow, to shoot a bow’: B1, TA, KS, MT *kapiti*. Cf. PMP *piTik ‘to jerk, snap’ (Dp).

PCLk *kapi-utu ‘partition (in a house)’: B1, KS *kapi-utu*. See PNk *kapi, *utu.

PCLk *kavukoki ‘morning’: B1 *kavukoki*, *kavikoki*, TA, KS, MT *kavukoki*.

PCLk *keho ‘yellow’: TA *kekekeho*, KS, GK *kekeo*; B1 *e-keho* ‘red-legged land crab (epithet name)’.

PCLk *kope ‘to open’: B1 *kope-a*, TA, KS, MT *kope*. Note also UB *robe-a*, MR *pege* (?<*pego <*qope, in which case we can reconstruct TNk *Kope and PNk *kope).

PCLk *kulu(h)e ‘to cough’: B1 *kulue* (G), *kuluhe* (V), TA, MT *kuluhe*.

PCLk *kuraraba ‘to thunder’: B1, MT *kuraraba*.

PCLk *kusuke ‘rat’: B1, TA, KS, MT *kusuke*. Cf. POC *kusupeq (R). Appears to be a metathesized loanword.

PCLk *kuve ‘semen’: B1 *kokuve*, *kuekuve* ‘semen’; TA, KS *kuekuve* ‘human milk’ (V).

PCLk *laba ‘unmarried’: B1 *laba* ‘unmarried’; B1, TA, MT *hatamale laba*, KS *tamale ka-laba* ‘boy, young male’; B1, TA *tavile laba* ‘girl, young female’.

PCLk *laba ‘to throw (as stone or spear)’: B1 *laba*, *labe-a*, TA, KS *labe*. Note also MR *lape*. PMP *laban ‘to be an opponent, fight’ (Dp).

PCLk *lapa ‘to cut’: B1 *lapa*, *lapalapa* ‘to cut’; TA *lape* (?<*lapa, *lape-a*) ‘to split’. PMP *Ra(m)pas ‘to tear off, split off’ (Dp).

PCLk *la-ro-va ‘what?’: B1, TA *larova*, KS, GK, MT *lalova*.

PCLk *lave ‘to pull’: B1 *lave*, MT *lave-a*.

PCLk *lea ‘sick’: B1, TA, KS, MT *lea*.

PCLk *lege ‘to laugh, play’: see PNk *gele.

PCLk *loso ‘to swim, bathe’: TA *loso* ‘to wash, swim’; GK *loso* ‘to swim’; MT *loso*, *loso-a* ‘to wash’.

PCLk *magoro ‘chest’: B1, TA, KS, MT *magoro*. See also B1 *goro* ‘to snore; (as noun) chest ornament of shell’.

PCLk *mailivulou ‘green, blue’: B1, TA, KS *mailivulou*, GK *maluvololou*.

PCLk *makili ‘fly (insect)’: B1 *makilikili* ‘sandfly, gnat’, KS *makikili*, MT *makilikili*.

PCLk *malama ‘sweet, good tasting’: B1, TA *malama*.

PCLk *mali ‘to plait’: B1, TA, KS *mali*.

PCLk *malirumurumu ‘fragrant’: B1, TA, MT *malirumurumu*, KS *malilumulumu*.

PCLk *masali ‘tear-drop’: B1, TA, KS *masali*, MT *masasali*. See also PNk *sali ‘to flow’.

PCLk *masaga ‘dry’: B1, TA, KS *masaga*. Note also PNk *tagaza. Cf. PMP *maja ‘dry’ (Dp). Cf. PWM *maLaxaLaxa ‘light (in weight)’.

PCLk *mata-babia ‘eyebrow’: B1, TA, MT *mata-babia*, KS *hivu-la-mata-babia*. See PNk *mata and PCLk *babia.

PCLk *matau ‘to fear’: B1 *matau*, GK, MT *matau-a*. POC *[ma]takut (R), PMP *takut (Dp), suggesting PNk *mataqu.

PCLk *mera-robo ‘taboo’: B1, TA *mera-robo*, KS, MT *mela-lobo*. See PNk *mera, PKB *zobo.

PCLk *mitigile ‘worm’: KS, MT *mitigile*.

PCLk *mola ‘sweet, rich (in taste)’: B1, TA, KS *mola*, *molamola*, GK *mamola*. POC *moña(k) (R), PMP *meñak (Dp).

PCLk *murobo 'axe': B1 *mumurobo*, TA, KS *murobo*.

PCLk *oli 'to dig': B1, TA, KS, MT *oli*. See also PLk *koli.

PCLk *ororo 'thorn': B1, TA, MT *ororo*, KS *ololo/ororo*.

PCLk *paha 'to chop (as with an axe)': B1 *paha*; B1, TA, KS *papaha* 'axe' (V); B1 *papaha* 'one who is skilled in making canoes' (G). Note also MR *uaba* 'axe'. PMP *paqat (Dy) 'adze'.

PCLk *paipai 'thorns': B1, TA, KS *paipai*.

PCLk *paia 'dog': B1, TA, KS, Gk *paia*. Apparently a loan from a non-Nakanai source. Cf. Tg *qayam* 'dog', TB *peam* 'habit', PMP *qayam 'be tame' (Dy).

PCLk *pase 'snake': B1, TA, KS, Gk *pase*. Cf. Fi *baca* 'worm'.

PCLk *pelepele 'dorsal spines on a fish': B1, KS *pelepele*.

PCLk *pigo 'to bear a child, give birth': B1, TA, KS, MT *pigo*.

PCLk *piligi 'to abandon': B1, TA, KS, MT *piligi*.

PCLk *poga 'lower back': B1 TA, KS, MT *poga*.

PCLk *pusa 'rotten (from exposure to weather)': B1, TA, MT *pusa*. Cf. Fi *vuca*, Ko *vura* 'rotten, soft with rot' and *vusa* 'rotten, stinking', PMc *pwusa 'bad, objectionable'.

PCLk *pusi 'to rise, come to the surface, break open (as a boil)': B1, TA, KS, MT *pusi*.

PCLk *pu(h)e 'to unwrap, open (as bundle)': B1 *pue* (G), *puhe-a* (V), KS *puhe-a* (V).

PCLk *raga 'to jump': B1, TA *raga*, KS *laga*.

PCLk *r(au)bula 'ash': B1, TA *rubula*, KS *rabula*.

PCLk *saki 'to tie': B1, TA, KS *saki*. Note also PNk *sahi 'to sew'. Cf. POC *saqit 'sew' (R). There appears to be a doublet here, with PCLk *saki representing a loan from a non-Nakanai language.

PCLk *sala 'thigh': B1 *sala* 'thigh, groin', TA, KS, MT *sala*. Cf. Tk *tanga-*, PMc *(sS)aaŋa, *(sS)aaŋa- 'inner thigh', POC *saŋa 'bifurcation' (R), PMP *saŋa 'fork-ing' (Dp), PAN *saŋa (B), suggesting PNk and PKb *saŋa. Cf. *PEO *zaŋa (G).

PCLk *sa-latu- 'hundred': B1, TA, KS, MT *sa-latu-*. See also PKb *latu.

PCLk *savula 'to rub': B1, TA, KS *savula*, Gk *savule-a*.

PCLk *siko 'to curve, fins': B1 *siko* 'to curve, bend'; B1, TA *silikoliko*, MT *siko* 'fins'.

PCLk *sivuti 'to find, discover': B1 *sivuti/suvuti*, TA, KS *sivuti*.

PCLk *sobe 'unmarried girl': B1, KS *sobe*.

PCLk *sogomu 'to swallow': see PNk *soŋo.

PCLk *sulu 'to split': B1, TA *sulu*, KS *sulu-pole-a*.

PCLk *ta-bola, *tia-bola 'belly': B1, TA, KS *tabola*, MT *tiabola*. See PNk *tia 'belly'.

PCLk *tagabara 'to dream': B1, TA *tagabara*. See also PNk *tada₁ 'to dream'.

PCLk *tahi 'to ask': B1, TA, KS, MT *tahi*. Note MR *tautagu*, *tagei*.

PCLk *taive 'python': B1, MT *taive*.

PCLk *taio 'moon': B1, TA, KS, MT *taio*. Note also Ko *taiko*.

PCLk *taku 'of me, for me': B1, TA, MT *taku*.

PCLk *talo 'to roll or pound to make soft (of cooked taro only)': B1, TA, KS, MT *talo*. Cf. PMP *tales 'taro' (Dp).

PCLk *taro-tigi 'good': B1, TA, MT *taro-tigi*, KS, Gk *talo-tigi*. Note also the variants: B1 *tari-tigi*, *tari-kidi* (Chowning, pers. comm.).

PCLk *tataho 'in good manner': B1 *tataho*; B1, TA, MT *malia tataho* 'fragrant'.

PCLk *taro 'in appearance': B1, TA, MT *taro-*, KS *talo-*. See PCLk *taro-tigi, *tataro.

PCLk *tataro 'variegated, many colored': B1 *tataro*, KS *tatalo*, *tataro*.

PCLk *tau-taro 'to lose (something)': B1, TA, KS, MT *tau-taro*. See PNk *tau, PKb *tazo.

PCLK *tavi ‘thin, flimsy’: B1 *tavi*, TA, MT *taivavi*.

PCLK *teretere ‘sling’: B1, TA, MT *teretere*.

PCLK *tigi ‘well, good’: B1, TA *taro-tigi*, GK *talo-tigi* ‘good, beautiful’; KS, MT *lagu-tigi* ‘handsome faced’. Note B1 variant *tari-kidi* ‘good, beautiful’ (Hees 1915–16; Chowning, pers. comm.).

PCLK *tomu ‘to swallow’: B1, TA, KS *tomu*, MT *vi-tomu-a*.

PCLK *tupo ‘dull (of knife)’: B1, TA *mata-tupo* ‘dull’.

PCLK *tutuhu ‘octopus’: B1, TA, KS, MT *tutuhu*. Note also MR *ulita* ‘octopus’, POC *kuRita (R).

PCLK *uati ‘stone’: B1, TA, GK, LO (J) *uati*. Note also MR *vatu* ‘stone’. Cf. POC *patu (R), PMP *batu (Dp). J: PKB *vatu (based on MR form and Bali *vatu*). Note that *uati* is also the Tolai (Kuanua) form (Chowning, pers. comm.).

PCLK *ulai ‘to bury’: B1, KS, TA *ulai*, MT *ulalai*.

PCLK *usu ‘many’: B1, TA, MT *usu*, KS, GK *a-usu*. Cf. UB *uru-balo*, and see also PLK *uru ‘big’.

PCLK *vago ‘to take away, carry’: B1 *vago*; B1, KS *vago-mai-a* ‘bring it’; KS, MT *vago-ate-a* ‘bring it up’. B1 *vago* can be analyzed as a shortened form of a construction *va-* (‘causative pref.’) *go-* (‘be in motion’) plus the directional *-io* (Chowning, pers. comm.).

PCLK *vahula ‘to forget’: B1, KS, MT *vahula*.

PCLK *valua ‘men (not man)’: B1, TA, KS, GK, MT *valua*. Possibly related to PMC *fanua ‘inhabited land’, F1 *vanua* ‘land’, POC *panua ‘settlement’ (R), PMP *banu(w)a ‘land, settlement’ (Dp).

PCLK *vei ‘to say, talk’: B1 *vei/vevei*, TA, KS, MT *vei*, GK *vei-mago*. Note also UB *ovai*, MR *vevea* ‘to talk’. Cf. Bugotu *ei*.

PCLK *vera ‘k. of pandanus, mat’: B1 *vera* ‘k. of pandanus’, TA *vera* ‘mat’.

PCLK *veto ‘fog (on water)’: B1, TA, MT *veto*.

PCLK *vigia ‘to talk’: B1 *vigia*, *vigagia*, TA, KS, MT *vigagia*.

PCLK *vilelo ‘hot spring, pond’: B1, TA, MT *vilelo*.

PCLK *voho ‘large stone’: KS, GK, MT *voho*.

PCLK *voka ‘woman’s leaf apron’: B1, GK *voka*.

PCLK *vovoroko ‘molar tooth’: TA *vovoroko*, GK *vovoloko*.

PCLK *vuragaraga ‘fierce, hard-working’: B1 *vuraga*, *vuragaga*, TA, KS *vuragaraga*.

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