

The Kalamian Microgroup of Philippine Languages*

Ronald S. Himes
San Diego State University
ronaldhimes@cox.net

The Kalamian (Klm) microgroup of Philippines languages, spoken in the northern parts of Palawan province, consists of Agutaynen and several dialects of Kalamian Tagbanwa. It is set apart from other microgroups by a body of uniquely shared lexical innovations and by the configuration of phonological rules that derive the modern languages from Proto-Philippines. An examination of the Klm lexicon indicates that the Klm languages are not particularly closer to one other microgroup than they are to the others. Application of the phonological rules allows the identification of items borrowed into Klm languages, and it provides some indication of the source of the borrowed item. These rules also permit the reconstruction of Proto-Philippine lexemes that can be added to those already established.

11* Many of the data in this paper are taken from Reid (1977), Quakenbush (1991), Elkins and Hendrickson (1984), Fox (1957), Panganiban (1973), Pennoyer (1986/87), Revel (1994), Ruch (1964, 1974, 1978), Scebold (2003), Sneddon (1978, 1984), Thiessen (1981, 1994), Warren (1959), Usup (1980) and Yap (1977). The bulk of the Agutaynen data were collected in the field in 1964, 2001 and 2003. I am especially indebted to Mr. Epifanio Aban and Mr. Emilio Edualino of Agutaya, Palawan, and to Mrs. Policronia Bacuel and Mr. Romeo Bacuel of New Agutaya, San Vicente, Palawan for their help and patience with this portion of the research. Mrs. Aludia Rios of Old Busuanga, Busuanga, Palawan and Mr. Ray Caballero and Mrs. Elizabeth Efin of Dipalengged Island, Busuanga, Palawan were most obliging with the dialects of Karamiananen and Tagbanwa respectively. In addition to the wordlist that appears in Reid (1977), data on Aborlan Tagbanwa were provided by Mrs. Diding Gantang of Apurawan, Aborlan, Palawan and Mr. Willy Martinez of Manalo, Puerto Princesa, Palawan. The data for the Southern Palawan dialect were graciously provided by Mr. William Davis of the New Tribes Mission.

The abbreviations used in this paper are:

Agu	Agutaynen
Btk	Batak of Palawan
Klm	Kalamian
Krm	Karamiananen
PAn	Proto-Austronesian
PKlm	Proto-Kalamian
PMP	Proto-Malayo-Polynesian
PPh	Proto-Philippines
TbwA	Aborlan Tagbanwa
TbwC	Central Tagbanwa
TbwK	Kalamian Tagbanwa

1. Introduction

The northern reaches of Palawan province are home to the pair of languages, Agutaynen (Agu) and Kalamian Tagbanwa (TbwK), that constitute the Kalamian microgroup of Philippine languages. Agutaynen is native to Agutaya and five smaller islands in Cuyo island group, and it is spoken in Roxas, San Vicente and Brooke's Point municipalities on the Palawan mainland. There are also Agutaynen-speaking groups in Puerto Princesa, Manila, and elsewhere. Kalamian Tagbanwa is spoken in the northern islands of Palawan, primarily near Coron and Busuanga on Busuanga Island. Ethnologue (2004) notes a distinct dialect of TbwK in Baras on the Palawan mainland opposite Dumaron Island. The data provided in Reid (1977) are from the dialect spoken at Coron. On and near the island of Busuanga a slightly different dialect of Tagbanwa is spoken. Those who speak this dialect and who have adopted a lowland lifestyle refer to their language as Karamiananen, while the speakers of virtually the same dialect (95% cognate on a 100-item lexicostatistical list) on nearby Dipalengged Island call their language Tagbanwa. For our purposes here I will refer to this latter speech form as Karamiananen (Krm), a coordinate dialect with Tagbanwa of Coron (TbwK), both of them equidistant from and equally related to their sister language, Agutaynen. The percentages of shared cognates are as follows:

	Agu	
Krm	.88	Krm
TbwK	.88	.91

2. Phonology

The phonemic inventory of Proto-Philippines (PPh) included the following consonants according to Blust (1991:88): *p, *t, *k, *q, *b, *d, *z, *j, *g, *s, *h, *m, *n, *ñ, *N, *l, *r, *R, *w and *y. The four PPh vowels are *i, *e (schwa), *u and *a. Stress was also phonemic in PPh. Proto-Kalamian (PKlm) seems to have lost stress as a phonemic feature.

2.1 Vowels

The Klm languages have inherited the four vowel system of PPh. All four vowels are regularly reflected as the earlier forms, although the non-low central vowel is raised and represented as /ɪ/.

Only /i/ and /u/ seem not to have undergone any changes. In some environments the other two vowels have succumbed to assimilation.

2.1.1 *a

When, because of consonant loss, vowel clusters are formed, *a as the first vowel assimilates to a following /i/ or /ɪ/.

* <i>lalaki</i> ²	‘man’	* <i>lalai</i>	<i>lalii</i>	(TbwK)
* <i>sakit</i>	‘pain’	* <i>sait</i>	<i>siit</i>	(TbwK)
* <i>ta{ }eb</i>	‘sea’	* <i>taIb</i>	<i>tIIb</i>	(TbwK)

Although the data are severely limited, it appears that clusters of the low vowel persist as such unless followed by a final voiceless stop.

* <i>bahaR</i>	‘G-string’	* <i>baaR</i>	<i>baal</i>	(Agu, Krm, TbwK)
* <i>na{ }a</i>	‘this’		<i>naa</i>	(Agu, Krm, TbwK)
* <i>bahaq</i>	‘flood’	* <i>baak</i>	<i>bIIk</i>	(Krm)

2.1.2 *e

The non-low central vowel has undergone a number of shifts due to the influence of a nearby vowel. Within a morpheme, at least, *e assimilates to a high vowel in the following syllable.

* <i>esi</i>	‘flesh’	* <i>?Isi</i>	<i>?isi?</i>	(Agu), <i>?ic&i?</i>	(Krm)
* <i>ebu</i>	‘to smell’	* <i>?Ibu</i>	<i>?uBu?</i>		(Krm, TbwK)

The high central vowel is backed to /u/ if preceded by /u/ and followed by a final voiced consonant, and it is lowered to /a/ if followed by a final voiceless consonant.

* <i>bituqen</i>	‘star’	* <i>bitukIn</i>	<i>bitukun</i>	(Agu, Krm, TbwK)
* <i>qulej</i>	‘worm’	* <i>kulId</i>	<i>kulud</i>	(Agu, Krm)
* <i>buhek</i>	‘hair’	* <i>buI?</i>	<i>bua?</i>	(Agu, Krm, TbwK)
* <i>buReh</i>	‘to spit’	* <i>bulIh</i>	<i>bula?</i>	(TbwK)

Thiessen (1981:29) notes that Batak (Btk) and Aborlan Tagbanwa (TbwA) also share the rule by which *e is reflected as /u/ in a syllable contiguous to another /u/. These two languages also reflect PAN **Sesi* ‘flesh’ as *?isi*, rather than the expected **?Isi* ‘meat, flesh.’

2.1 Consonants

PKIm inherited the voiced stops (b d g), the nasals (m n N), the liquids (l r) and the glides (w y) intact from PPh. *p, *t and *s also entered PKIm without change, although subsequent rules have affected them in some environments. The remaining consonants—*k, *q, *h, *z, *j, *ñ, *R, and *?—have undergone notable changes.

² Ancestral forms with a single asterisk (such as **lalaki*) can be attributed to Proto-Philippines (or higher). Those with a double asterisk (such as ***pIIk*) are attributed to Pre-Kalamian.

2.1.1 *z, *j

*j and *z merged with *d, and in all three languages /d/ is manifested as /r/ intervocallically.

	<i>*zalan</i>	‘path’		<i>dalan</i>	(Agu, Krm, TbwK)
	<i>*tazem</i>	‘sharp’	<i>*ma-tadem</i>	<i>matarIm</i>	(Agu, TbwK)
TbwK)	<i>*hujuN</i>	‘nose’	<i>*?uduN</i>	<i>?uruN</i>	(Agu, Krm,
	<i>*qujiN</i>	‘charcoal’	<i>*kudiN</i>	<i>kuriN</i>	(Agu, Krm,
TbwK)	<i>*qulej</i>	‘worm’	<i>*kulId</i>	<i>kulud</i>	(Agu, Krm)
	<i>*qedeN</i>	‘to stand’	<i>*kIdIN</i>	<i>kIrIN</i>	(Agu, Krm,
TbwK)					

2.1.2 *ñ

The palatal nasal merged with *n.

	<i>*nšamuk</i>	‘mosquito’	<i>namu?</i>	(Agu, Krm, TbwK)
	<i>*paNanšuj</i>	‘cloud’	<i>paNanud</i>	(Krm, TbwK)

2.1.3 *R

*R is merged with /l/ in all environments.

	<i>*Ramut</i>	‘root’	<i>lamut</i>	(Agu, Krm, TbwK)
	<i>*bahaR</i>	‘G-string’	<i>baal</i>	(Agu, Krm, TbwK)
	<i>*duRih</i>	‘bone’	<i>duli?</i>	(Agu, Krm, TbwK)
	<i>*beRsay</i>	‘paddle’	<i>bIltay</i>	(Agu, Krm)

2.1.4 *h, *?

Both *h and *? have been lost in all positions, although glottal stop occurs as an initial consonant on otherwise vowel-initial words, and a non-phonemic glottal stop occurs on all otherwise vowel-final words.

	<i>*heyep</i>	‘blow’	<i>?IyIp</i>	(Agu, Krm, TbwK)
	<i>*qaluh</i>	‘pestle’	<i>kalu?</i>	(Agu, Krm, TbwK)
	<i>*tuhud</i>	‘knee’	<i>tuud</i>	(Agu, Krm, TbwK)
	<i>*qadu?</i>	‘ladle’	<i>karu?</i>	(Krm, TbwK)
	<i>*ha-di?put</i>	‘short’	<i>diput</i>	(Agu, Krm, TbwK)
	<i>*du?{eu}n</i>	‘there’ ³	<i>duun</i>	(Agu, Krm, TbwK)

³ Reconstructed forms containing either of two possible phonemes have those phonemes in square brackets; e.g., **du?{eu}n* has reflexes of both *du?un* and *du?en*. Those with a

2.2.5 Voiceless Consonants Before a Consonant

In Agutaynen, the voiceless obstruents /p t k q s/ are all reflected as /ʔ/ when immediately preceding another consonant.

⁴

<i>*pia</i>	‘good’	<i>*mu-pia</i>	<i>*mupya</i>	<i>muʔya</i>
<i>**pIIlIq</i>	‘discard’	<i>*ʔi-pIIlIk</i>	<i>*ʔiplIk</i>	<i>ʔiʔlIk</i>
<i>*beteN</i>	‘to pull’	<i>*bItIN-In</i>	<i>*bItNIn</i>	<i>bIʔNIn</i>
<i>*lakbaN</i>	‘wide’	<i>*ma-lakbaN</i>		<i>malaʔbaN</i>
<i>*daqtaR</i>	‘floor’	<i>*daktal</i>		<i>daʔtal</i>
<i>*qaslem</i>	‘sour’	<i>*kaslIm</i>		<i>kaʔlIm</i>

The non-labial voiceless obstruents are manifested as /k/ in TbwK.

<i>*pia</i>	‘good’	<i>*mu-pia</i>		<i>mupya</i>
<i>*tudul</i>	‘to dig’	<i>*pa-tudul</i>	<i>*patdul</i>	<i>paʔdul</i>
<i>*lakbaN</i>	‘wide’	<i>*ma-lakbaN</i>		<i>malakbaN</i>
<i>*daqtaR</i>	‘floor’	<i>*daktal</i>		<i>daktal</i>
<i>*qaslem</i>	‘sour’	<i>*kaslIm</i>		<i>kaklIm</i>

Krm also maintains /p/, and it merges /t/ and /s/ with /k/, which then shifts to /ʔ/ in this environment. *q is manifested as /k/.

<i>**pIIlIq</i>	‘to lose’	<i>*na-pIIlIk</i>		<i>naplIk</i>
<i>*tudul</i>	‘to dig’	<i>*pa-tudul</i>	<i>*patdul</i>	<i>paʔdul</i>
<i>*lakbaN</i>	‘wide’	<i>*ma-lakbaN</i>		<i>malaʔbaN</i>
<i>*qaslem</i>	‘sour’	<i>*kaslIm</i>	<i>*kaklIm</i>	<i>kaʔlIm</i>
<i>*daqtaR</i>	‘floor’	<i>*daktal</i>		<i>daktal</i>
<i>*tuqlid</i>	‘straight’	<i>*ma-tuqlid</i>		<i>matuklid</i>

There is one item in Agu and Krm which appears not to conform to these rules. This is the reduplicated monosyllable **tuktuk* ‘forehead,’ which is manifested as *tutu* (Agu) and *tutuan* (Krm). Likewise, the precursor to Agutaynen *kalipapaʔ* wing was probably ***qali-pakpak*, from PPh **pakpak* ‘wing.’

segment which may or may not have been present have that segment in parentheses; e.g., the form ancestral to *lubay*, *lumbay* and *luNbay* is represented as **lu[N]bay*.

⁴ The data for this rule are tenuous for TbwK. Ruch (1974), for example, cites *wislIk* ‘shake off’ instead of **wiklik*.

2.2.6 *k, *q

In all other environments, *k is lost (and replaced with glottal stop if initial or final).

<i>*katel</i>	‘itch’	<i>*atIl</i>	<i>?atIl</i>	(Agu, Krm, TbwK)
<i>*sakit</i>	‘pain’	<i>*sait</i>	<i>siit</i>	(Agu, TbwK)
			<i>c&iit</i>	(Krm)
<i>*manuk</i>	‘chicken’	<i>*manu</i>	<i>manu?</i>	(Agu, Krm, TbwK)

*q is reflected as /k/ in all three languages.

<i>*qenay</i>	‘sand’	<i>*qInay</i>	<i>kInay</i>	(Agu, Krm, TbwK)
<i>*heyaq</i>	‘shame’	<i>*Iyaq</i>	<i>?Iyak</i>	(Agu, Krm, TbwK)
<i>*taqun</i>	‘year’		<i>takun</i>	(Agu, Krm, TbwK)

2.2.7 *t, *s

Both *t and *s are reflected as such in TbwK. In Agu and Krm, *s is reflected as /t/ in all environments except immediately preceding /i/. Likewise, *t is reflected as /t/ in the same environments. Immediately before /i/, Agu reflects both *t and *s as /s/, and Krm as [c&].

		Agu	Krm	TbwK	
<i>*taqun</i>	‘year’		<i>takun</i>	<i>takun</i>	<i>takun</i>
<i>*batu</i>	‘stone’	<i>batu</i>	<i>batu</i>	<i>batu</i>	
<i>*tiyan</i>	‘belly’		<i>siyan</i>	<i>c&iyan</i>	<i>tian</i>
<i>*punti</i>	‘banana’		<i>punsi?</i>	<i>punc&i?</i>	<i>punti?</i>
<i>*qasiN</i>	‘salt’		<i>kasin</i>	<i>kac&in</i>	<i>kasin</i>
<i>*nipis</i>	‘thin’		<i>manipit</i>	<i>manipit</i>	<i>manipis</i>
<i>*qasawa</i>	‘spouse’	<i>katawa?</i>	<i>katawa?</i>	<i>kasawa?</i>	

2.2.8 Voiced Stops

It was noted above that /d/ is manifested as /r/ intervocally in all three speech forms. The Tbw dialects demonstrate a weakening of the other two voiced stops between vowels. Both dialects have a voiced bilabial fricative as an allophone of /b/, this being weakened even further to /w/ in Krm when between a high vowel and /a/.

		Agu	Krm	TbwK	
<i>*babuy</i>	‘pig’	<i>babuy</i>		<i>baBuy</i>	<i>baBuy</i>
<i>*lubug</i>	‘lie down’		<i>lubug</i>	<i>luBug</i>	<i>luBug</i>
<i>*bibir</i>	‘lip’		<i>bibil</i>	<i>biBil</i>	<i>biBil</i>
<i>*lu[N]bay</i>	‘weak’	<i>malubay</i>	<i>maluway</i>	<i>maluBay</i>	
<i>*Re?bat</i>	‘heavy’	---	<i>malIwat</i>	<i>lIBat</i>	

(There are no instances in the data of the sequence /iba/.)

The intervocalic voiced velar stop is manifested phonetically as [h] in Krm and as [v] in TbwK.

		Agu	Krm	TbwK
** <i>lagIm</i>	‘black’	<i>lagIm</i>		<i>lahIm</i> <i>laVIm</i>
* <i>lagi?</i>	‘old’	<i>lagi?</i>		<i>lahilahi?</i> <i>laVilaVi?</i>
* <i>tageb</i>	‘scabbard’	<i>tagIb</i>		--- <i>taVIBan</i>
*- <i>agad</i>	‘child-in-law’	<i>ninagad</i>	<i>minahad</i>	<i>minaVad</i>

2.2.9 Final Diphthongs

Most diphthongs in word-final position that are inherited from PPh (some of them ultimately from PAn) are interpreted as such, with *-ey reinterpreted as *-ay.

		Agu	Krm	TbwK
* <i>qaljaw</i>	‘sun, day’	<i>kaldaw</i>	<i>kaldaw</i>	<i>kaldaw</i>
* <i>quhaw</i>	‘thirst’	<i>kuaw</i>	<i>kuaw</i>	<i>kuaw</i>
* <i>Sapuy</i>	‘fire’	<i>?apuy</i>		<i>?apuy</i> <i>?apuy</i>
* <i>pajey</i>	‘rice plant’	<i>paray</i>		<i>paray</i> <i>paray</i>
* <i>qaqay</i>	‘foot’	<i>kakay</i>	<i>kakay</i>	<i>kakay</i>

Some final diphthongs, on the other hand, are treated as vowel clusters and they follow rules for vowel assimilation, while others are treated as diphthongs.

		Agu	Krm	TbwK
* <i>bala^oi</i>	‘co-parent-in-law’	---	<i>balii?</i>	<i>balii?</i>
* <i>la-laki</i>	‘man’	<i>lalii?</i>	<i>lalii?</i>	<i>lalii?</i>
* <i>ba-baHi</i>	‘woman’	<i>babay</i>	<i>baBay</i>	<i>baBay</i>

And one item is treated differently in the Tbw dialects than in Agu. The reconstructed item **wa?i[k?]* ‘water’ appears to be an innovative form from PAn **wa[h0]iR*. While Agu allows for the vowel assimilation to occur, Krm and TbwK interpreted the term as having a final diphthong.

** <i>wa?i[k?]</i> ‘water’	<i>wii?</i>	<i>way</i>	<i>wai?</i>
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2.2.10 Summary of Sound Changes

Some of the sound change rules posited here are necessarily ordered relative to each other. They are listed in Table 1 in the order in which they are likely to have occurred.

Table 1. Phonological rules for the derivation of Kalamian languages from PPh

1)	*h, *?	>	0
	*j, *z	>	d

- | | | | | |
|--|----|---|----------------------|--|
| | *ñ | > | n | |
| | *R | > | l | |
| | *e | > | i, u/ ___ C i, u | |
| | | > | u / uC ___ | |
| | | > | a / ___ [C -voice] # | |
- 2) *d > r / V ___ V
 - 3) In Agu, *[obstruent – voice] > /?/ / ___ C
 In Krm, *t, *k, *s > /?/ / ___ C
 *q > /k/ / ___ C
 In TbwK, *t, *k, *q, *s > /k/ / ___ C
 - 4) *k > 0 / ___ V, ___ #
 - 5) *q > k
 - 6) *a > i, I / ___ i, I
 - 7) In Agu, Krm *t > s / ___ i
 *s > t / ___ [V – front], #
 - 8) In Krm, *s > c& / ___ i
 - 9) In Krm, TbwK *b > B / V ___ V
 - 10) In Krm, *B > w / [V + high] ___ a
 - 11) In Krm *g > h / V ___ V
 In TbwK *g > v / V ___ V
 - 12) 0 > ? / # ___, V ___ #

3. Pronouns

The Kalamian pronouns form a set distinct from all others, although individually they are derived from PPh etyma.

3.1 Nominative Pronouns

The full form nominatives are as follows:

	Agu	Krm, TbwK		Agu	Krm, TbwK
1s	<i>yuu?</i> ⁵	<i>yuu?</i>	1p	<i>yami?</i>	<i>yami?</i>
			1+2p	<i>?ita?</i>	<i>?ita?</i>
2s	<i>yawa?</i>	<i>yawa?</i>	2p	<i>yamu?</i>	
	<i>yamu?</i>				

⁵ Phonetically [yo].

3s	<i>tanandiya?</i>	<i>tanya?</i>	3p	<i>tanira?</i>
	<i>tanira?</i>			

There is no form in the Klm languages for the 1+2s ‘we (dual).’ Instead, as in Tagalog, the 1+2p form is used.

On the basis of these forms we can reconstruct for PKlm the following set:

1s	** <i>?i-ku?u</i>	1p	** <i>?i-kami</i>
		1+2p	** <i>?i-kita</i>
2s	** <i>?i-kawa</i>	2p	** <i>?i-kamu</i>
3s	** <i>tan[an]-[di]ya</i>	3p	** <i>tan-ida</i>

Although there is no direct evidence for the prefix in the 1+2p form, symmetry suggests that PKlm had a prefix ***?i-* for the non-third person pronominals and a prefix ***tan[an]-* for those in the third person. The 1s and 2s items, prior to the affixation, may have been formed by adding an echo vowel to form a two-syllable pronoun comparable to those in the plural forms. Compare the PPh long nominative set.

1s	* <i>?aku</i>	1p	* <i>kami</i>
		1+2p	* <i>kita</i>
2s	* <i>kaw</i>	2p	* <i>kamu</i>
3s	* <i>ia[h]</i>	3p	* <i>ida</i>

The subject marking prefix **?i-* is not limited to Klm, but it appears also in Bashiic, Cordilleran, Umirey Dumagat and Sangiric.

3.2 Genitive Pronouns

All three of the Klm speech forms have the same set of genitive pronouns, with the exception of the 1p item which appears in Agu as *-amIn* and in Krm and TbwK as *-yamIn*.

1s	<i>-u</i>	1p	<i>-[y]amIn</i>
		1+2p	<i>-ta</i>
2s	<i>-mu</i>	2p	<i>-mi</i>
3s	<i>-na</i>	3p	<i>-nira</i>

The set of genitives that we can reconstruct for PKlm, with the exception of the 2p form, are clearly derived from PPh or higher.

	PPh	PKlm
1s	* <i>ku</i>	** <i>-ku</i>
2s	* <i>mu</i>	** <i>-mu</i>
3s	* <i>na</i>	** <i>-na</i>
1p	* <i>amen</i>	** <i>-[y]amIn</i>

1+2p	* <i>ta</i>	** <i>-ta</i>
2p	* <i>mi</i>	** <i>-mi</i>
3p	* <i>ni [n]da</i>	** <i>-nida</i>

The evidence for the 2p genitive form is tenuous. The northern Palawan languages Batak, TbwA and TbwC have *mi*, and Inati of Panay has *kimi* and *mim*. Given their geographical proximity to the Klm languages, diffusion in some direction could have occurred.

4. Uniquely Shared Innovations

There are a number of innovations that appear to be shared exclusively by the Kalamian languages. For an item to be attributed to PKlm it must have a reflex in Agu and at least one of the Tbw dialects. Innovations that are identified are of two types, phonological/morphological and lexical.

4.1 Phonological/Morphological Innovations

Those terms that appear to derive from an etymon at a higher level of reconstruction but do not reflect the regular sound change rules are considered innovative. There are 5 of this type. All items reconstructed here are given at the Pre-Kalamian level for ease of comparison with other languages.

***?i-ku?u* ‘I’

Agu *yuu?*, Krm, TbwK *yuu* ‘I.’ This appears to come from PAn **ku* ‘I’ with the addition of a vowel and the pronominal prefix **?i-*. Cf. Ayta (Abellen) *hiko.o* ‘I.’

***dIIIp* ‘swim’

Agu, Krm *dIIIp* ‘to swim’ Cf. PAn **lezep* ‘to dive.’ Cf. Casiguran Dumagat *lIdIp* ‘to swim under water.’

***tan[an]-* ‘3rd person marker’

Agu *tanandiya?*, Krm, TbwK *tanya?* ‘he/she,’ Agu *tanira?*, Krm, TbwK *tanira* ‘they’ Cf. Kuyunen and Kinaray-a *tana* ‘he/she.’ The singular forms seem to be based on PAn **ia[h]* ‘he/she,’ and the plural forms on PMP **iDa* ‘they.’

***tim{Iu}d* ‘chin, heel’

Agu *simId*, Krm *c&imud* ‘chin;’ Krm *c&imud yaN kakay*, TbwK *timId* ‘heel’
Cf. PAn **timid*, **timij* ‘chin.’

***wa?i[k?]* ‘water’

Agu *wii?*, Krm, TbwK *wai?* ‘water.’ Cf. PAn **wa[h0]iR* ‘water.’
The expected Klm form is **wiil*. This has diffused into TbwC as *wai* ‘water.’

4.2 Lexical Innovations

A number of lexemes in the Klm languages are most likely innovative and uniquely shared within the microgroup. They include the following:

- ***g{aI}[k]Id* ‘bolo’
Agu, Krm, TbwK *gIID* ‘bolo’
- ***gukuy* ‘to call’
Agu *gu?yan*, Krm, TbwK *guuy* ‘to call’
- ** *[k]alINIt* ‘near’
Agu, Krm, TbwK *?alINIt* ‘near’
- ** *[k]aniN* ‘to say’
Agu, Krm, TbwK *?aniN* ‘to say’
- ** *[k]IIId* ‘to fear’
Agu, Krm, TbwK *?IIId* ‘to fear’
- ** *[k]ImIt* ‘face, cheek’
Agu, TbwK *?ImIt* ‘face;’ Krm, TbwK *?ImIt* ‘cheek’ This has
diffused into
TbwC as *?ImIt* ‘face.’
- ** *[k]IpIt* ‘old (person)’
Agu, Krm *mIIpIt*, Krm, TbwK *maIpIt* ‘old (person)’
- ** *[k]IqIl* ‘to bring’
Agu, Krm *?IkIl*, Krm *?IkIlan* ‘to bring’
- ** *[k]imud* ‘to laugh’
Agu, Krm, TbwK *?imud* ‘to laugh’
- ** *lagIm* ‘black’
Agu *lagIm*, Krm *malahIm*, TbwK *laVIm* ‘black’ Cf. Tagalog
lagi!m
‘gloom, downhearted feeling.’ This item has diffused into TbwC as *lahIm*
‘black.’
- ** *lanaw* ‘honey’
Agu, Krm *lanaw* ‘honey’ Also borrowed into TbwC as *lanaw*
‘honey.’

- **lIblIb** ‘wall’
 Agu, TbwK *lIblIb* ‘wall’ Cf. Iloko *lebleb* and Northern
 Kankanaey *lIblIb*
 ‘border or rim of a basket;’ cf. also Tagalog *libli!b* ‘hidden, secret
 (place).’ Diffused into TbwC as *lIblIb* ‘wall.’
- **liwag** ‘difficult’
 Agu, Krm, TbwK *maliwag* ‘difficult;’ Krm *maliwag* ‘poor’ Cf.
 Tagalog
liwag ‘slowness to act.’
- **pIIlIq** ‘to throw (away), to lose’
 Agu, TbwK *pIIlIk* ‘to throw, toss;’ Agu *?i?lIk*, TbwK *?ipIIlIk*
 ‘to throw
 away;’ Krm *naplIk*, TbwK *pIIlIk* ‘to lose’
- **pinli** ‘rope, string’
 Agu, Krm, TbwK *pinli?*, ‘rope,’ Krm, TbwK *pinli?* ‘string’
- **qandas** ‘liver’
 Agu, Krm *kandat*, TbwK *kandas* ‘liver’ Diffused into TbwC
kandat
 ‘liver.’
- **qa{st}i{st}iya[k]** ‘armpit’
 Agu *kasi?iya?*, Krm *kac&ic&a?* ‘armpit’
- **qulit** ‘white’
 Agu *kulit*, Krm, TbwK *makulit* ‘white’ Borrowed by TbwC as
kulit
 ‘white.’
- **{st}agbIN** ‘to kick’
 Agu, Krm *tagbIN* ‘to kick’
- **si{dr}aq** ‘to delouse’
 Agu, TbwK *sirak*, Krm *c&irak* ‘to delouse’ Borrowed into TbwC
 as
magtirak ‘to delouse.’
- **si{dr}uq** ‘to burn’
 Agu, TbwK *siruk*, Krm *c&iruk* ‘to burn’ Cf. Southern Alta *tedok*
 and Obo
 (Manobo) *tiduk* ‘to burn.’

****{st}impIN** ‘to swell’
Agu *simpIN*, Krm *c&impIN* ‘to swell’ Borrowed into TbwC as
manimpIN
‘to swell.’

****{st}iNgi** ‘red’
Agu *siNgi?*, TbwK *c&iNgi?* ‘red’ Also borrowed into TbwC as
matiNgi
‘red.’

****{st}u{dr}ubul** ‘slave’
Agu *turubulun*, Krm *turuBulun* ‘slave’

****talipaqa** ‘frog’
Agu, Krm, TbwK *talipaka?* ‘frog’ Diffused into TbwC as
talipaka
‘frog.’

****tinaNuni** ‘body’
Agu *sinaNuni?*, Krm *c&inaNuni?*, TbwK *tinaNuni?* ‘body’
Borrowed into
TbwC as *tinonNi* ‘body.’

****tulm{Iu}n** ‘to push’
Agu, Krm, TbwK *tulmun* ‘to push’

5. Kalamian and Other Groups

5.1 Evidence of Diffusion.

The nearby Palawanian microgroup of languages—including Aborlan Tagbanwa (TbwA), Central Tagbanwa (TbwC), Batak (Btk), the various dialects of Palawan (or Palawano) (Plw) and Molbog (Mol)—coalesce with others into the Greater Central Philippines group (Blust 1991). The members of this larger group share certain phonological commonalities, such as reflecting PPh *R as /g/. Most of them share some lexical and semantic innovations as well. Yet in some Palawanian words, Blust points out, wherein a /g/ reflex of *R is expected, we find /y/ instead. He attributes these occurrences to the influence of a substrate, related to the “Central Luzon” microgroup (Sambalic and Northern Mangyan) that must have been displaced or assimilated by the more recent Greater Philippines settlers. In Sambalic and Northern Mangyan, as well as in Bashiic, *R is regularly reflected as /y/. Examples of Palawanian words containing an unexpected /y/ include:

***beRek** ‘pig’ TbwA *bIyIk* (expected **bIgIk*) Cf. Iraya, Alangan, Tadyawan
bIyIk ‘pig.’

**ZaRu*m ‘needle’ Btk *dayum* (expected **dagum*) Cf. Sambal, Iraya *kadayum*, Alangan *kurayum*, Tadyawan *karayum* ‘needle.’

**tubaR* ‘answer’ Btk *tubay*, TbwC *tuvay* (expected **tubag*) Cf. Sambal *tubay* ‘answer.’

The Kalamian languages also demonstrate this phenomenon. Some examples are:

**?ikuR* ‘tail’ Krm, TbwK *?ikuy* (expected **?iyul*) Cf. Sambal, Iraya, Alangan, Tadyawan *?ikuy* ‘tail.’

**niu!R* ‘coconut’ Agu, TbwK *niyuy* (expected **niyul*, **niul*) Cf. Ivatan *niyuy* ‘coconut.’

**tu!RaN* ‘parent-in-law’ Krm, TbwK *punyaNan* (expected **punulaNan*) Cf. Sambal Tina *katyaNan* ‘parent-in-law.’

Speakers of the Klm languages may also have displaced or assimilated an earlier population having the /y/ reflex of *R. More likely, they were established in their current territory but came into inevitable contact with such speakers and experienced some lexical give and take with them. The Klm languages certainly have borrowed from their contemporary neighbors such as Kuyunen, Tagalog and the northern Palawan languages. Evidence of this diffusion abounds:

**DiRuq* ‘to bathe’ Agu *digu*, TbwK *diVu* (expected **diluk*) Cf. Hiligaynon *digu?* ‘to bathe.’

**beRkes* ‘bundle’ Agu *bIgkIt* (expected **bIIIt*) Cf. TbwA *bIgkIs* ‘bundle.’

**hi!paR* ‘sister-in-law’ Krm, TbwK *?ipag* (expected **?ipal*) Cf. Tag, Hiligaynon *hipag*, Kuyunen *?ipag* ‘sister-in-law.’

It should be noted here that the phonological expression of loan words in the Klm languages gives some clue as to when and from where they were taken into these languages. For example, the words for ‘egg’ must have been borrowed into Agu from the substrate (where /y/ was the regular reflex of *R) and into Krm and TbwK from Tagalog or Bisayan (where the regular reflex of *R is /g/), and these borrowings must have occurred before the Klm rules affecting the voiceless stops operated. The resulting forms are Agu *ki?yuy*, Krm *ki?lug* and TbwK *kiklug* ‘egg.’ (The first occurrence of /y/ in Agu is unexplained.) Conversely, in the items meaning ‘tail,’ the Klm languages must have taken their items after the rules affecting *R and *k operated, giving *?ikuy* from the substrate in Krm and TbwK, while the source for the Agu *?ikug* must have been Bisayan, Palawan or some other language with a /g/ reflex of *R.

5.2 Lexical Innovations Shared with Other Groups

Keeping in mind the caveats implied above about the extent and the time depth of diffusion, we are faced with a body of lexemes, not limited to the Kalamian languages, that occur only in the western Philippines from the north to the central and southern areas. Some of these are probably assignable to the level of PPh. Others are undoubtedly innovations in one language or one microgroup that spread to others either recently or more distantly in time. Any reconstructions are, of course, highly tentative. Most suspect are those that are shared only by Klm languages and the northern Palawan languages. Nevertheless, this list should contain some Klm contributions to the reconstruction of the PPh lexicon.

- **ʔalaN* ~ **[k]alaN* ‘to buy, sell’
Btk, TbwA *ʔalaN*; Krm, TbwK *ʔalaN* ‘to buy, to sell’
- **ʔambeN* ~ **[k]ambeN* ‘happy’
TbwA, TbwC *ʔambIN*; Agu *maambIN* ‘happy’
- **ʔati*[] ‘that (distant)’
Alangan *ʔati*; Btk *ʔiyayati*, PlwS *ʔatin, yatin*; Agu *ʔasi*,
Krm *ʔac&i*, TbwK
ʔatii ‘there (far from speaker and addressee)’
- **ʔeRen* ‘sated; to live’
Btk, TbwA *ʔIgIn*; Agu *ʔIlIn* ‘sated;’ Btk *magIn*, TbwC *ʔIhIn* ‘to
live’
- **ʔi-kawa* ‘you (singular)’
Tadyawan *kawa*; TbwC *kawa*; Agu, Krm *yawaʔ*, TbwK *yawa* ‘you
(singular)’
- **bawaN* ‘river’
Southern Palawan, Molbog *bawaN*; Krm, TbwK *bawaN* ‘river;’ Agu
babawaN ‘to flow’
- **belag* ‘not (negator of nominals), different’
Btk, TbwC *bIlag*; Agu, Krm, TbwK *bIlag* ‘not;’ TbwA, TbwC
bIlag;
Krm *bIlag* ‘different’
- **binlay* ‘raft’
TbwA *binlay*; Krm, TbwK *binlay* ‘raft’
- **busliʔ* ‘to lie; falsehood’
Iraya *busliʔIn*, Alangan *busliʔon*; Agu, Krm *buʔliʔ*, TbwK
bukliʔ ‘lie, to

lie'

**buwat* 'long, tall, high'

Alangan *mabbwat*; Btk ?*abwat*, TbwA ?*abwatay*,
TbwC ?*abuwatay*, Mol
mobuat; Agu *mabwat*, Krm, TbwK ?*abwat* 'long;'
Alangan, Tadyawan *mabwat*, Tadyawan *mabuwat*; Btk *madibwat*, TbwA
mabwatay, TbwC *dibuat*; Krm ?*abwat* 'tall, high'

**buyu?* 'buttocks, anus'

Sambal (Mag-Indi) *buyu?*; Agu *buyu?buyu?* 'buttocks;'
Krm, TbwK *buyuBuyu?* 'anus'

**damuR* 'dew'

TbwC *damog*, Molbog *damug*; Krm *damul* 'dew'

**geba?* 'forest'

TbwA *gIba?*, Brookes Point Palawan *gOba?*, Southern Palawan
gUba?,
Molbog *goba?*; Agu *kaguban*, Krm *kagIwan* 'forest'

**ka{dr}asiyaw* ~ **qalasiyaw* 'deer'

Hanunóo *karasyaw*, Krm *kalac&aw*, TbwK *kalasiaw* 'deer'

**kumba?* ~ **qumba* 'lung'

TbwA *kumba?*, TbwC *kumba*; Krm, TbwK *kumba?* 'lung'

**lagat* 'later'

Btk *lagatlagat*; Agu *lagat lagat* 'later'

**larip* 'to slice'

Ivatan *haripIn*; TbwK *larip* 'to slice' Cf. Tagalog *lalip*
'removal of
marrow (of bone), pith (adhering to bark of trees)'

**{lr}ugud* 'sibling, cousin'

Btk *rogud* 'cousin;'
Agu *lugud* 'sibling'

**luwak* ~ **luwaq* 'to plant'

Btk ?*iluak*, TbwA, Brookes Point Palawan, Southern Palawan
luwak,
TbwC *manluak*; Agu, Krm *luwak*, TbwK *luak* 'to plant'

**mi* 'your (plural)'

Btk, TbwA, TbwC *mi*; Inati *kimi, mim*; Agu, Krm, TbwK *-mi* ‘your (plural)’

**pasiN* ‘buttocks’
Molbog *pasiN*; TbwK *pasiN* ‘buttocks’ Cf. Sambal (Tina) *pasiN*
‘vagina.’

**qedeN* ‘to stand’
Sambal (Bolinaw) *?umdIN*, Sambal (Tina) *?umduN, mi ?ruN*; Sambal (Botolan) *mi : rIN*, Sambal (Mag-Indi) *mi : dIN*; Agu, Krm, TbwK *kIrIN* ‘to stand’ Cf. PAn(Blust) **ke[dD]eN* ‘to stand.’

**qi{djr}ib* ‘cogon’
Kapampangan *?ilib*; Agu, Krm, TbwK *kirib* ‘cogon’

**RaNaw* ‘tree, wood’
Alangan *yaNaw* ‘tree;’ TbwK *laNaw* ‘firewood’ Cf. Buol *kagoNoan* ‘forest’

**sakwal ~ *saqwal* ‘to climb’
Btk *sakwal*, TbwC *takuwal*; Krm, TbwK *takwal* ‘to climb’
Because of
the initial consonant, TbwK must have borrowed this item from TbwC or Krm.

**sal[i]yaN* ‘comb’
Btk *saliaN*, TbwC *talyaN*; TbwK *salyaN* ‘comb’

**seged* ‘betel leaf’
Btk *sIgId*, TbwC *tIhId*; Krm *tIhId*, TbwK *tIVId* ‘betel leaf’
Note that if **sIgId* is the underlying form, TbwK must have borrowed the item from TbwC or Krm.

**seqe{dj}* ‘rope, to tie’
Sambal (Mag-Indi) *sI?Il* ‘rope,’ Sambal (Mag-Indi, Mag-Anchi)
?is?Il ‘to
tie, tether;’ Agu, Krm *tIkId*, TbwK *sIkId* ‘to tie, tether’

**tagek* ‘blood’
Btk *tagIk*, TbwC *tahIk*; Krm *tahIk*, TbwK *taVIk* ‘blood’

**tapnay* ‘to hold’
TbwA *tapnay*; TbwK *tapnay* ‘to hold’

**tugda?* ‘to plant’
tugda? ‘to
 Alangan *?agtugda?*; Btk *magtugda*, TbwA *tugda?*; Agu, TbwK
 plant (with dibble)’

**tugpu* ‘dew’
 Btk, TbwA *tugpu*; Agu *tugpu* ‘dew’

6. External Relationships of Kalamian Languages

6.1 Lexicostatistics

The lexicostatistical evidence demonstrates that the Klm microgroup is not particularly closer to any other one microgroup than to the others. The ranges of the percentages of cognates shared by Klm and other groups are listed in Table 2.

Table 2. Percentages of Shared Cognates between Kalamian and Other Microgroups (100-Item List)

Bashiic	33	-	35
Cordilleran	22	-	38
Sambalic	29	-	38
Northern Mangyan	28	-	34
Central Philippines	30	-	45
Southern Mangyan	30	-	39
Palawanic	40	-	48
Danaw	33	-	34
Manobo	30	-	40
Subanun			37
Gorontalo-Mongodow	27	-	36
Inati			46
Bilic	31	-	38
Sangiric	23	-	32
Minahasan	23	-	31

The rather elevated high figures for the Central Philippines and Palawanic are most likely the result of undetected borrowing. And the high percentage of shared cognates with Inati most likely results from mutual borrowing from Bisayan languages.

6.2 Lexical Sharing

Of approximately 1,950 lexical items attributed to PPh by Zorc, Charles, Reid, and myself, the Klm languages show a reflex of about 210 of them. The other microgroups that also have a representative in these innovative items vary widely because of several factors. Not the least of these is the number of languages represented in the microgroup data. Another reason for the resultant number is the quantity (and perhaps quality) of the data for the languages in question. Inati, for example, is the only language in its group, and the lexicon available for comparison is limited to the items found in Pennoyer (1986/87). The Central Philippines microgroup, on the other hand, is represented by many languages and there are quite extensive dictionaries and wordlists of some of

them. Table 3 lists the numbers of PPh items shared by Klm languages and languages of the other microgroups.

Table 3. Klm and Other Microgroups Shared PPh Innovations (N = 210)

	Number	Percent
Bashiic	19	9
Cordilleran	107	51
Sambalic	79	38
Northern Mangyan	46	22
Central Philippines	151	72
Southern Mangyan	62	30
Palawanian	116	55
Danaw	44	21
Manobo	91	43
Subanun	41	20
Gorontalo-Mongodow	35	17
Inati	22	10
Bilic	43	20
Sangiric	29	14
Minahasan	29	14

It is not surprising that the Bashiic languages, at the northern extreme of the Philippine language distribution, shares only 9% of PPh reconstructions with Klm. Nearby Inati, represented by only one language with sparse data available, shares approximately 10% with them, in spite of the likelihood that both Klm and Inati have unidentified (and therefore undiscarded) items borrowed from Bisayan. The highest numbers for shared lexemes attributable to PPh are with the Central Philippines group (72%) and the Palawanian languages (55%). Again, we would expect this because of the undeniable contacts they have had with Klm.

If we disregard these extreme cases, the next highest percentages of lexical sharing with Klm are with the Cordilleran (51%), Manobo (43%) and Sambalic (38%) languages. With other members of the Greater Central Philippines family, such as Danaw, Subanun, etc., the percentages of shared PPh lexical items is much lower. This would indicate that the Klm languages do not convincingly subgroup more closely with the Greater Central Philippines family than they do with the languages of northern and central Luzon.

6.3 Phonological Changes

There is no single rule for the derivation of Klm phonemes from PPh that is unique. The aggregate of the rules, of course, is unique to the Klm languages.

The two most diagnostic of the protophonemes are *R and *q. The Klm reflex of PPh *R is /l/. This is also the regular reflex of *R in Central and Southern Cordilleran and in the Bilic languages. The /k/ reflex of PPh *q (as opposed to /ʔ/ or 0) occurs only in the Klm languages and in the Bilic language Tagabili.

7. Conclusion

On a phonological basis, then, it would appear that Klm is more closely related to Bilic than to other microgroups. Both Klm and Bilic, however, each have a number of phonological rules not shared by the other. Likewise, there appear to be no lexical innovations uniquely shared by the two groups. We can conclude from this only that both Klm and Bilic are quite distinct groups that diverged from the rest of the Philippine population at an early date.

And from the evidence provided by lexicostatistics and lexical sharing, we can conclude that the Klm microgroup does not subgroup conveniently and convincingly with any other microgroup of Philippine languages and that it should, then, be considered as distinct from the others as is Sangiric, Bilic or Bashiic.

References

- Blust, Robert 1991 The Greater Central Philippines hypothesis. *Oceanic Linguistics* 30, 2:73-129.
- Elkins, Richard E., and Gail R. Hendrickson 1984 Sampling of Philippine kinship patterns. Manila, Summer Institute of Linguistics.
- Ethnologue 2004 <http://www.ethnologue.com>. ISO 639-2:TBK.
- Fox, Robert B. 1957 Molbog wordlist collected from Taróng at Barrio Bulán Bulán, Balabac Island, Palawan.
- Panganiban, Jose V. 1973 *Diksyunaryo-Tesaurus Pilipino-Ingles*. Quezon City, Manglapaz Publishing Co.
- Pennoyer, F. Douglas 1986/87 Inati: The hidden Negrito language of Panay, Philippines. *Philippine Journal of Linguistics* 18/19:1-36.
- Quakenbush, J. Stephen 1991 Agutaynen glottal stop. *Workpapers of the Summer Institute of Linguistics, University of North Dakota* 35:119-131.
- Reid, Lawrence A., ed. 1971 *Philippine minor languages: Word lists and phonologies*. Oceanic Linguistics, Special Publication, No. 8. Honolulu: University of Hawaii Press.
- Reid, Lawrence 1982 The demise of Proto-Philippines. In *Papers from the Third International Conference on Austronesian Linguistics, vol.2*, ed. By Amram Halim, Lois Carrington, and S. A. Wurm. *Pacific Linguistics C-75*:201-216. Canberra: The Australian National University.
- Revel, Nicole 1994 Palawan. In Darrell T. Tryon (ed.), *Comparative Austronesian Dictionary: An introduction to Austronesian Studies*.
- Ruch, Edward 1964 The phonological and morphophonemic systems of Calamian Tagbanwa. M.A. thesis, Cornell University.
- Ruch, Edward 1974 Role combinations and verb stem classes in Kalamian Tagbanwa. Pacific Linguistics Series A, No. 41. *Papers in Philippine Linguistics* No. 5, pp. 23-60.
- Ruch, Edward 1978 Calamian Tagbanwa. *Studies in Philippine linguistics*, 44-61.
- Scebold, Robert A. 2003 *Central Tagbanwa: a Philippine language on the brink of extinction*. Manila: Linguistic Society of the Philippines.

- Sneddon, J. N. 1978 Proto-Minahasan: phonology, morphology and wordlist. Pacific Linguistics B-54. Canberra: The Australian National University.
- Sneddon, J. N. 1984 Proto-Sangiric and the Sangiric languages. Pacific Linguistics Series B. —
No. 91. Canberra, The Australian National University.
- Thiessen, Henry Arnold 1981 Phonological reconstruction of Proto-Palawan. Anthropological Papers, no. 10. Manila: National Museum of the Philippines.
- Thiessen, Henry Arnold 1994 Molbog. In Darrell T. Tryon (ed.), Comparative Austronesian Dictionary: An introduction to Austronesian Studies.
- Usup, Hunggu Tajuddin 1980 Rekonstruksi Protobahasa Gorontalo-Mongodow. Ph.D. dissertation, University of Indonesia.
- Warren, Charles P. 1959 A vocabulary of the Batak of Palawan. Philippine Studies Program, Transcript No. 7. University of Chicago.
- Wurm, S. A., and B. Wilson 1973 English finderlist of reconstructions in Austronesian Languages (post-Brandstetter). Pacific Linguistics Series C-No. 33. Canberra: The Australian National University.
- Yap, Fe Z. Aldave 1977 A comparative study of Philippine lexicons. Manila, Institute of National Language. Quezon City, The Phoenix Publishing House.
- Zorc, R. David 1986 The genetic relationships of Philippine languages. In Paul Geraghty, Lois Carrington, and S. A. Wurm, eds., Focal II: Papers from the Fourth International Conference on Austronesian Linguistics:147-173. Pacific Linguistics Series C-No.94. Canberra: The Australian National University.

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