



PROJECT MUSE®

---

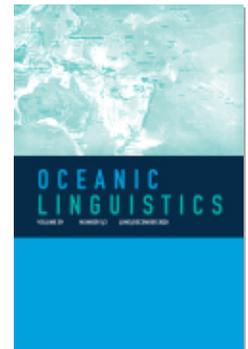
Reactions to Blust's "The Resurrection of Proto-Philippines"

R. David Zorc

Oceanic Linguistics, Volume 59, Number 1/2, June/December 2020, pp. 394-425  
(Article)

Published by University of Hawai'i Press

DOI: <https://doi.org/10.1353/ol.2020.0018>



➔ *For additional information about this article*

<https://muse.jhu.edu/article/782058>

# Reactions to Blust’s “The Resurrection of Proto-Philippines”

R. David Zorc

LANGUAGE RESEARCH CENTER AND DUNWOODY PRESS,  
HYATTSVILLE, MD

Blust has secured the position of PPH by raising the number of country-wide innovations to at least 600 etymologies (out of the 1286 proposed). Unlike PMP or PAN, at the phonological level, accent contrasts must be a significant innovation for PPH (although not explicitly stated by Blust, nine minimal pairs are well-established within his survey). An initial \*y- and a clear-cut contrast between glottal stop (\*ʔ) as opposed to \*q can also be reconstructed for PPH. Axis-relationships (areal contact phenomena) have arisen which blur genetic boundaries, but not to any great extent; discreet macro- and microgroups can be substantiated throughout the Philippines, all descended from one proto-language.

**1. OVERVIEW.** Despite the several comments or corrections I have below, I consider Blust’s paper a major contribution to the field. Of the 1286 etymologies presented in appendices 1 and 2,<sup>1</sup> well over half (600 or more, see section 6) should stand the test of time. Given that the Philippines was an early landing site for Proto-Malayo-Polynesian (PMP), there were at least 800 years to develop innovations and/or replacements within the archipelago that somehow were not exported. Then, after the dispersal of the Malayo-Polynesian (MP) languages, there were another 2,000 or more years for inter-island interactions. Thus, I do concede (vide Ross 2005) that there may have been AXIS relationships (areas of heavy contact that transcend historical subgroupings), which I noted were responsible for some replacements that do not correspond with any subgroup (North-Bisayan axis \*bakál ‘buy’ replacing PAN \*belih in West Bisayan, Asi, Romblon, Masbate, Hanunoo, and Bikol [ZDS<sup>2</sup>]; East-Mindanao axis \*sidan ‘they’ replacing PMP \*sida in Mansakan, Kamayo, Mamanwa, Subanon, Danao, and Binukid Manobo) [ZDS]. The majority of widely dispersed forms in this survey appear to (re-)justify a coherent group of genetically related languages far beyond my original attempt. However, I feel quite strongly that some of the evidence that Blust has uncovered also demonstrates areal phenomena that are more

1. Three PPH etymologies discussed within the body of the article did not make it to either appendix: \*qasin ‘salt’, \*Rumaq ‘sheath’, and \*táRuq ‘hide, conceal’.
2. ZDS, Zorc Data Sheets, see <https://zorc.net/Philippine-Etyma/>.

conductive to an interpretation of axis (Zorc 1975), linkage (Pawley and Ross 1995), or network (Milroy and Lesely 1985). Not in the dramatic cross-country way that Ross (op.cit.) proposes, but in local or largish areal pockets.

After a fair and comprehensive review of Zorc (1986), eliminating cognates found outside of the Philippines or with inadequate representation, Blust addresses each major issue that has been or might be challenged: an expanded argument for Proto-Philippines, problematic candidate replacement innovations, Proto-Bilic, Northern Luzon languages, the lower linguistic diversity within the Philippines, Proto-Batanic, and the four principles of Smith (2017). Blust also introduces the phenomenon of LEAKAGE (borrowing of innovations by a subgroup intrusive to a given area, such as Sama loans<sup>3</sup>). I find this treatment compelling as it now justifies a judgment I made long ago that Kamayo<sup>4</sup> had borrowed Bisayan lexemes, while its functor system was basically Mansakan.

I have three additional proposals supporting the defense of PPH:

- Contrastive word and morphemic accent in the Philippines (section 3) may well be an innovation. Furthermore, the majority of Philippine languages support the hypothesis that words of the shape CVC.CV(C) were accented on the ultima (in contrast with the assumption that PAN and PMP had penult accent).
- The reconstruction and value of initial PPH \*y- has too long been ignored<sup>5</sup> (section 9).
- With regard to determining the status of innovations, it should be a prerequisite to look at as many lexemes as possible that translate any word in question. Discussion of items (such as “big” or “sheath”) profits from a broader comparison of cognates among all Philippine languages for which resources are available (section 12).

**2. PHONOLOGICAL EVIDENCE.** Blust (section 4.1) points out that remarkably there are four nasal positions (\*m, \*n, \*ñ, and \*ŋ) reconstructable for PPH, as opposed to three oral stop positions (\*p / \*b, \*t / \*d, \*k / \*g)<sup>6</sup>, that is, the total merger of \*z and \*d may well be a PPH innovation (despite occurring in many other subgroups as well—as he does note). Another item, mentioned in passing by Blust, is the reconstruction of accent (realized as either long versus

3. Pallesen's study (1985) provided a very detailed look at contact effects between Sama and Tausug in the southern Philippines. Blust's exclusion of Sama as an intrusive language prompted him to mark etyma, which contained a Sama cognate, in case other evidence would raise the reconstruction to a higher level.

4. The language name itself is drawn from the second person pronoun innovated by the Mansakan group \*kamayú. Demonstrably Bisayan loans include damgu 'dream' < PBS \*damgu and gugma 'love' < PBS \*gegma. My view now is that Mansakan items are NATIVE, shared items with South Bisayan are from an EAST MINDANAO AXIS, and Cebuano LOANS abound due to the overwhelming influence of that language in the region.

5. Having been made aware of this oversight, Blust's ACD now has eighteen reconstructions with initial \*y- (as of 30 April 2020).

6. I am not sure what Blust makes of \*j, but it clearly has no voiceless counterpart.

short penults or penultimate vs. ultima stress) for PPH, but not for PMP or PAN, may prove to be of even greater significance.

**3. ACCENT.** Blust is to be commended for his inclusion of accent, which many scholars including Dempwolff have ignored. While the status of accent may be challenged for any of the higher levels (PAN and PMP), its presence in PPH is clearly established by over 600 agreements (see Zorc 1978a, 1979d, 1983b, 1993c).<sup>7</sup> In terms of phonological innovations, if PAN and PMP did not have accent, then the overwhelming agreement of accent patterns throughout the Philippines may be a significant innovation relevant to the reality of PPH.

I do not believe it is possible to reconstruct contrastive accent on words of the shape CVCCV(C), as Blust does for \*beRnát ‘relapse’, and dozens of similar entries. Dictionaries that do indicate accent on such forms reflect the fact that some languages like Tagalog<sup>8</sup>, Ilokano, Isneg, Ifugaw, and many others regularly accent such forms on the ultima, whereas a few like Bisayan<sup>9</sup> or Casiguran Dumagat on the penult. Casiguran Dumagat áteŋ and Aklanon ántiŋ may appear to justify the reconstruction of PPH \*ántiŋ ‘hear at a distance’, but the Dumagat form may be the result of nasal attrition with corresponding lengthening of the first syllable, while Aklanon reflects the Bisayan phonotactic accent pattern. The suprasegmental phenomenon of where accent falls on words with a closed (CVC) penult is language specific. The majority of Philippine languages appear to favor final accent on such forms, yet this runs counter to the assumption that PAN accent fell regularly on the penult (unless the penult had schwa).<sup>10</sup>

What is remarkable is the number of accent minimal pairs appearing in this study:

- PPH \*águm ‘appropriate for oneself’ | PPH \*agúm ‘associate with s.o.’
- PPH \*hájut ‘stench, odor’ | PPH \*hajút ‘gnaw, chew on’
- PPH \*kábit<sup>11</sup> [vine: *Caesalpinia* spp.] | PPH \*kabít ‘lead, support, as a feeble person’

7. The appendix in Zorc (1978a:106–113) contains 528 etyma with accent determined, and Blust assigns accent to well over a hundred PPH reconstructions in this article under review.

8. Tagalog words of the shape CVC.CVC are overwhelmingly accented on the final syllable. There are a few exceptions, but no minimal pairs. Most Bisayans speaking the National Language are readily identified by their pronunciation of words like [búlbul] ‘pubic hair’ instead of native Tagalog [bulból].

9. It is remarkable that even if CVC.CVC forms are accented on the penult in Bisayan, derived forms inflected with the same accent affix suffixes (like \*-en or \*-a) are accented on the ultima (see Zorc 1977:64–7). Thus, PAN \*tektek ‘chop to pieces’ > Aklanon ginatúktuk ‘being minced’, but tuktúkún ‘will be minced’ or tuktúká ‘Mince it!’.

10. Alexander D. Smith has kindly sent me a draft of an excellent manuscript “Reconstructing non-contrastive stress in Austronesian and the role of schwa in stress shift, gemination, and vowel shift,” which establishes this via a detailed analysis of most Formosan and many Malayo-Polynesian languages.

11. The accent here is based on the fact that dictionaries of neither Ilokano nor Tagalog specifically mark penult length. In dictionaries of both, orthographically unaccented forms have penult accent (and length if in an open syllable).

- PPH \*lábag ‘bundle of thread or plant fibers’ | PPH \*labág ‘against, contrary to custom’
- PPH \*pákaw ‘handle of an implement’ | PPH \*pakáw ‘bow-legged’
- PPH \*páluŋ ‘cockscorn; cut off a cock’s comb’ | PPH \*palúŋ ‘wave at sea, sea swell’
- PPH \*púli ‘replacement’ | PPH \*pulí ‘inherited characteristic, bloodline’
- PPH \*sáka ‘to climb, go up’ | PPH \*saká ‘and’
- PPH \*tánud ‘guard, sentinel; to stand guard’ | PPH \*tanúd ‘to thread a needle’

**4. VOWEL SEQUENCES.** Blust has possibly been unaware that the orthographic conventions for most Philippine languages would appear to allow vowel sequences, but their phonologies do not. With few exceptions, all syllables (CV or CVC) must begin with a consonant. Tagalog <kain> is [ka.:ŋin], Ilokano <bagiát> is [bag.yát]<sup>12</sup>. What Rubino (2000:xxxv) describes for the status of glottal stop in Ilokano generally applies to Tagalog, Aklanon, Bontok, Kankanay, and most other Philippine languages. Ifugao, Kalamianic, Kuyonon, and Mongondow do appear to allow hiatus without glottal or semivowel insertion. McKaughan and Macaraya’s orthography for Maranao (1967) is an exception, in that no semivowel is employed (i = i ~ y, o = o ~ w). In most other cases, however, one must always assume that any orthographic vowel sequence is actually V?V phonetically. If not, following \*i or \*u, an appropriate semivowel will generally intervene, that is, \*siám > [siyám] ‘nine’, \*luás > [luwás], with corresponding changes otherwise affecting \*w or \*y. Otherwise (after \*a or \*e), a glottal stop may be present. The biggest problem is after \*a, where either hiatus or glottal stop may appear. In these instances, I have often found it necessary to include the insertion of an otherwise redundant <Ø>, which is critical for marking instances where there might be ambiguity.

This state of affairs is complicated by Blust’s deleting semivowels that do appear in Philippine language dictionaries but are often deleted in citations within the ACD. Such etymologies involving orthographic vowel sequences in Philippine dictionaries include

- (1) \*ae
  - a. \*talukaeb > \*talukaʔeb ‘eyelid’ | Ilk *talukab* (truncation),  
Msk *tarakaʔob* | Png *talókap* (truncation + shimmer)
- (2) \*ai
  - a. \*balaqih → \*balaØih ‘co-parent-in-law’ | Tag *baláʔe*, Bik,  
Han *baláyi*, Akl *baeáyih*, Btk *bálay*, Tir *beláʔi* | Also: Ilk *a-balay-an*
  - b. \*kaqij → \*kaʔij ‘kind of large, openwork basket’ | Ilk *káʔij*, Tag,  
Bik, Ceb *kaʔij*
  - c. \*saij → \*saʔij ‘stand or be placed near s.o. or s.t.’ | Ibl *se-saʔij*,  
Png *saʔij*, Msk *saʔij*

12. Despite his characterization of the role of glottal stop, Rubino (phone conversation on 25 April 2020) informed me that Ilokano orthography still has relics from the Spanish system, particularly with regard to sequences of <ia>, where a <y> is still not used as in other Philippine orthographies: Ilokano *tiamba* (tyamba) ‘fluke’, *tian* (tyan) ‘belly’.

- (3) \*au
- a. \*baququ ‘tortoise’ | Agy *bakoko*
  - b. \*bijau → \*bijáØu ‘winnowing basket’ | Ilk *bigá?o*, Png *biga?ó*, Tag *bila?o*, Msk *bilaw* [ACD] | + Itb *bilaw*, Chm *bəlaw* [ZDS]
  - c. \*daúp - 1 → \*da?úp ‘to cover, covering’ | Bon *da?úp*, Msk *da?óp*
  - d. \*daúp - 2 → \*da?úp ‘to bring the hands together’ | Png *manda?óp*, Tag *da?óp*, Ceb *da?úp*
  - e. \*gáqud → \*gá?ud ‘oar; to row a boat’ | Ilk, Cas, Ceb *gá?ud*, Png *gá?or*, Tag, Bik, Akl *gá?od* [no Kalamianic or Tboli evidence for \*q; NOT in ACD header]
  - f. \*idau → \*idáØu ‘kind of snake’ | Ibg *iráw*, Isg *idaw*, Gad *i:raw*, Han *?iráwu*, Agy *iraw*
  - g. \*nau → \*naØu ‘teach’ | Itb *nawo*, Bkd *na?u*
  - h. \*saud → \*saØud ‘prepare the warp threads in weaving’
  - i. \*sauŋ → \*sa?uŋ ‘canine tooth, tusk, as of wild boar’ | Yami *ason*, Itb, Ivt *so?oŋ*, Ilk, Knk *sa?óŋ*, Bon *sa?úŋ*
  - j. \*tuRauk → \*tuRa?uk ‘crow, of a rooster’ | Agy *tolōk*, Ceb *tuk-tugá?uk*
  - k. \*ula?ul → \*ula?ul ‘hypersensitive, weeping easily’ | Ilk *ulá?ol*, Png, Mar *ola?ol*
  - l. \*ulitáu → \*ulitáØu ‘bachelor, young unmarried man’ | Cas *ulitō*, Akl *olitáwo*, Ceb *ulitáwu*
  - m. \*usauR → \*usa?uR ‘go downstream, go with the current’ | Ilk *um-usá?or*, Ifg *uhá?ul*, Bkd *usa?ug*, Ponosakan *musah*
- (4) \*ia
- a. \*bagiat → | bagyat ‘anklet, ribbon worn around leg’ | Yami <bagiat>, Ilk [bagyat]<sup>13</sup> [NOT in ACD header]
  - b. \*baniákaw → baniyákaw ‘tree sp.’ | Ilk, Isg, Bon *baniyákaw*, Mong *boniakow* [Mongondow allows vowel sequencs (Jason Lobel pers. comm.)]
  - c. \*biaR - 2 → \*biyaR ‘satiated after eating’ | Kal *bial*, Msk *biyag*, Klq *nya-bi[y]ag* | [also Pal *me-byag* [ZDS]; or possibly <PWMP \*bihaR ‘alive’ (i.e., ‘taken alive in war; allow to live’) [ACD; in ZDS they are associated]
  - d. \*buniág → \*bunyang ‘sprinkling of water; baptism’ | Png, Bik, Han *bunyang*, Akl, Hil *búnyag* | Also: Ilk *bunyang* (Carl Rubino p.c.)
  - e. \*giaw → \*giyaw ‘shouting; to shout’ | Bon, Knk *g<um>iyáw*, San *gio*, Mong *giow*
  - f. \*kamiá → \*kamya<sup>14</sup> ‘ginger plant with fragrant white flower’ | Tag *kamyá*, Bik, Akl, Ceb<sup>15</sup> *kámya*

13. Although spelled <bagiat>, Carl Rubino (pers. comm.) informs me that this is the pronunciation.

14. I note that there is Spanish <camia> ‘a fruit tree from the Philippines’. It is possible that this is a loanword into Spanish, but the inverse should be considered.

15. Wolff (1972:434) does not mark <kamya> with any accent mark, nor does he do so for any word of the shape CVC.CVC. Cebuano, like all Bisayan dialects, has accent falling on the penult, not the ultima. Even Mintz for Bikol in this case does indicate a penult accent on this citation.

- g. \*kaniá → \*kanya 'own, one's own; self' | Definitely a Tagalog loan distribution as per Blust's note.
- h. \*piɲa → \*pi[ʔy]aɲa 'tree: *Ganua obovatifolia*' | The citation from Madulid is not corroborated in any of the three dictionaries.]
- i. \*qaliθaw 'be startled or frightened, as by violent action' → Ilk <aliáw><sup>16</sup> 'horror, fright,' Agy *mag-kaliθaw* 'to yell, shout loudly, as a drunk person or people fighting'.
- j. \*riak 'noisy' → \*riθak | Ilk <riák> 'clamor, noisy talking'; Itb <riak> 'sound' in Yamada 1976, but <ryak> in 2002.
- k. \*tiqad → \*ti[ʔy]ad 'to bend backward, as when standing on tiptoe' [no Kalamianic or Tboli evidence for \*q; mixed evidence for \*ʔ or \*y]
- (5) \*ie
- a. \*liqed 'footprints, tracks' | Agy *liked*  
\*piet → \*piʔet 'narrow, tight' | Agy *ma-piet*, Ceb *piʔut*, *piʔut*
- (6) \*ii
- a. \*iqit → \*iʔit 'scraped or filed down' [no Kalamianic or Tboli evidence for \*q]
- b. \*iɲqiɲ → \*iɲʔiɲ 'shrill sound' [no Kalamianic or Tboli evidence for \*q]
- c. \*siqíd 'a trap for mudfish' → \*siʔid | Ilk, Tag, Bik *siʔid* [no Kalamianic or Tboli evidence for \*q]
- d. \*tiqin → \*tiʔin 'to decant, pour liquid out for drinking' | Ilk *tiʔin-en*, Ceb *tiʔin*, Msk *tiʔin* [no Kalamianic or Tboli evidence for \*q; NOT in ACD header]
- e. \*tiqís → \*tiʔís 'to put up with, endure, be patient' [no Kalamianic or Tboli evidence for \*q]
- (7) \*iu
- a. \*biu → \*biyu 'tree sp.' | Ilk <bió> = [byo], Han <biu> [biyu] [no ? in Ilokano, no y indicated for Hanunoo]
- b. \*iut - 2 → \*qiyút 'movement in coitus' | not just PPH. See: PAN \*qiut 'copulate, have sexual intercourse'; ZDS PPH-PHF \*qiyut 'intercourse (sex)' | Note: Kal *kuyut*.
- c. \*tiúk → \*tiyúk 'a bird, probably the swamphen' | Cas, Bik *tiyók*
- (8) \*ua
- a. \*buág → \*buwág 'uproot a tree'
- b. \*buqak ~ \*buwak<sup>17</sup> 'split open'
- c. \*buál → \*buwál 'uproot a tree' | While the Ilk <bual> [bwal] and Png are cited as they appear in Rubino and Benton respectively; Panganiban has a doublet Tag *buʔál*, *buwál*, Mintz has Bik *buwál*, Conklin Han *buwál*, *nabwál*, Schlegel Tir *buwal*.
- d. \*buaɲ → \*buwaɲ 'release s.t. pent up' | Ilk [bwán], [i-bwán], Ibl i-bowaɲ, Tir <buaɲ> | Schlegel has Tir *buwaɲ*

16. Although spelled <aliaw>, Rubino (pers. comm.) informs me that it is pronounced [alyáw], not [aliʔáw].

17. Based on its doublet \*biqak (which is itself problematic and could be \*biʔak), Blust reconstructs PPH \*buqak. However, only Cebuano has an intervocalic glottal, Ibaloy and Mansaka have <bowak>.

- e. \*buás → \*buwás ‘tomorrow’ | Akl <buás> and <pa-buás-buás> are presented as buwás and pa-buwás-buwás in Zorc (1969) as Hiligaynon loans; Kaufmann has Hil <buás> which is phonetically [bwás] as cited.
- f. \*busuánj → \*buswaj ‘strong flow of water’ | Itb *voswaj-an*, Han *buswáj*, *ma-buswáj*, Akl, Ceb<sup>18</sup> *búswaj*, Bkd *buswaj*.
- g. \*luá → \*luwá [interjection used to halt a carabao in the fields] | Ilk [*lwa*], Han, Ceb *luwá*, Ceb *pa-luwá*, WBM *luwa*, Mar <loa>.
- h. \*luánj → \*luwánj ‘wide open space’ [Ilk [*lwanj*], otherwise \*luwanj]
- i. \*luás → \*luwás ‘take a trip, commence a voyage’ | Ilk <luás> [*lwas*], Tag *luwás*.
- j. \*sabuág → sabwag ‘to scatter wildly’ [Ilk <*sabuag*> [*sabwag*], elsewhere only \*sabwag]
- k. \*suqag → \*suʔag ‘to butt or gore with the horns’ | Bot *howág*, Bik *mag-súʔag*, Msk *soʔag*, Agy *toag-en*.
- l. \*suáy → \*suwáy ‘to quarrel, part company’ | [w] appears in all citations except Agy and Mar.
- m. \*tapuák → \*tapwak ‘to plunge, dive into’ | Ilk <*tapuák*> [*tapwák*], Ceb *tápwak*.
- n. \*tuánj → \*tuwaj ‘carry a load between two people’ | [w] appears in all citations except Agy.
- (9) \*uu
- a. \*baququ ‘tortoise’ | Agy *bakoko* [gives evidence for a PSP reconstruction with \*q (otherwise \*k > Ø). As per the note, some Northern Philippine languages yield conflicting evidence for \*bakuku, while Malay suggests \*bayuku. Clearly ‘an extremely frustrating set of data.’ [ACD]]
- b. \*suquk → \*suʔuk ‘to enter’ | [no Kalamianic or Tboli evidence for \*q] If this derives from the splitting of a monosyllabic root (\*suk), it is more likely to have been [*suʔuk*] rather than [*suquk*].
- c. \*túqun ‘to put on or over s.t.’ | Agy *mag-tokon*

**5. MY PROCEDURE.** I created an Excel file for all of the reconstructions proposed with a current total of 1,320 entries. (I treated doublets as separate entries since the language support generally differs.) This allowed sorting by etymological order, English glosses, subgrouping, language representation, and so on. While Blust gives a reasonable and solid argument for “quality,” against the “numbers game” (i.e., quantity, see section 6 immediately below), overall statistics does have its place in historical linguistics. Those entries that have only two or three cognates I marked “PPH-2” [237 items] or “PPH-3” [182 items]. These I would consider “candidate etyma.” It is, however, important to note that many of these appear to be quite solid, having correct differential reflexes, so while the number of witnesses may be low, the overall quality is relatively high. Continued research will undoubtedly uncover

18. Cebuano, like all Bisayan dialects, has accent falling on the penult.

more cognates. For example, his PPH \*hubuq (my \*hubu?) has three (Ilokano, Bikol, and Western Bukidnon evidence), to which may now be added Aklanon húbo?. Voila!, we now have four witnesses. My point here is threefold:

First, we all should strive for well-represented etyma. Blust clearly tries to find as much evidence as possible, but finding additional cognates is an enormous and time-consuming task, thus far resting primarily on his shoulders.

Second, those scholars who engage in extensive language studies and find additional cognates should assist Blust in adding evidence to those etymologies with just a few witnesses.<sup>19</sup> I am not calling for an etymological "bucket brigade" in defense of PPH, but any and all reconstructions within the ACD with limited representation.

Third, the reader should not assume that I am dismissing these lessly attested etyma. There are several in this category that appear to be quite solid.<sup>20</sup>

## 6. "RULE OF FIVE" (OR MAYBE FOUR). Zorc (1994a) states:

One final issue that should be raised is the **quantity of evidence** required. Apart from startling cases of agreement with every possibility of borrowing excluded, I hold up as an ideal a "rule of five," i.e., five non-contiguous languages supporting a reconstruction. There are several reconstructions, some going back as far as Dempwolff (1938) or Blust (1970) which have not acquired additional cognates. I am concerned that further supporting data have not come to light, especially with the immense quantity of research done over the last two decades on languages with excellent lexicographic studies. Do these attest to selective retentions (see Zorc 1986), fragile innovations, undiscovered loans, or inadequate research methods?

In terms of my "rule of five," I am now amenable to accepting four witnesses, which then yields a minimum of 624 powerful (and I would add "ineluctable") witnesses for PPH, that is, cognates with four or more widespread witnesses in both the Northern and Southern Philippines. Blust's discussion of "robustly attested" versus "sparsely attested" comparisons in section 6 (pp. 60–1) is particularly relevant and welcome. Nonetheless, there are instances where even

19. For example, under PPH \*bik(e)lát [my \*biklat] 'scar', notes Tag piklát, to which can be added Akl piklat and another dozen cognates in ZDS PPH \*piklat.

20. PPH \*kebet 'to subside, of a swelling' only has two witnesses (AyA and Pal); given their separation, there is no way it could be a loan; despite the lack of additional evidence to date, this is a valid reconstruction. PPH \*beRus 'a tree: *Acalypha amentacea* Roxb'. has three (Ibl, Tag, Tsg; plus lvt vios), each with appropriate reflexes; this too is a reasonable reconstruction.

two or three widely spread and correspondence-correct witnesses establish a reliable reconstruction.<sup>21</sup>

**7. NORTHERN VERSUS SOUTHERN PHILIPPINES.** I have always held (from my 1975 dissertation on Bisayan through the present) that there were significant differences between the languages of Luzon and those of the Bisayas and Mindanao, with Mindoro being split.<sup>22</sup> This may either have been historical (yielding a PNP or a PSP) or the result of axis phenomena. If the former was the case, then etyma reconstructed on the basis of cognates in groups 1, 2a, 2b, 2c, 2d, and 3, I consider to be PNP, whereas those in groups 4a–4g through 8 to be PSP. I have mentioned in emails to Blust and Lobel that besides lexical evidence, I find grammatical evidence for such a split in the following:

- Tendency towards CVCVC word structure [without NC] in NPh | vide Reid (1982). The introduction of CVNCVC word structure (nasal incrementation) probably started in the Southern Philippines, which later became even more prominent in the Indonesian and Oceanic branches.
- CVC reduplication [PNP] to mark progressive action on verbs.  
CV reduplication [PSP] to mark progressive action on verbs.
- Reduplication prefixes [CV(C)-] marking {plural} [PNP] [Note that in Malay, full reduplication does so.]  
A unique functor marking {plural}<sup>23</sup> [maŋa]<sup>24</sup> (or some other morph, e.g., Tboli kem, Klata bi/be) [PSP]
- Verbs of motion are a separate class of intransitive verbs [PNP].  
Verbs of motion derive from DEICTICS: \*kadi, \*kani, \*kaná?, \*kadtu [GCP or PSP].

From within Blust's study alone, I find a significant amount of lexical evidence for a PNP presented in table 1 with eighty-two items] versus PSP presented in table 2 with 124 items.

21. Along the lines of Blust's reaction to Smith (2017): "Smith's critical evaluation is welcome and important, but anyone who examines the full range of evidence in the appendices to this paper must ask whether he has gone too far, and used Principles 1–4 with sledgehammer effect."

22. Several scholars (cf. Blust 2005) have proposed a tripartite split: Northern, Central, and Southern Philippines. It is quite clear that the Greater Central Philippine Expansion (Blust 1991) emerged from the Southern Philippines, wiping out many pre-existing languages in the Bisayas and Southern Luzon, and even affecting the linguistic geography of Borneo.

23. Of course, CV reduplication is retained in Tagalog and several other languages for adjectives, for example, magaganda 'beautiful (ones)', but not for nouns.

24. Possibly related to or derived from the distributive verb prefix \*maŋ-. This simple method of nominal pluralization has probably moved northward (borrowed into Ayta Abellan, Itbayaten, and Yami) or is less likely PPh, lost in all other northern languages.

**TABLE 1. LEXICAL EVIDENCE FOR PROTO NORTHERN PHILIPPINE PNP [82].**

PNP *abilus	'plant: <i>Acalypha</i> sp. '   Yami avios, Bontok bilus = 2
PNP *abuyu	'boil sugarcane to make wine' (1, 2b, 2c)   Itb, Isg, Bon = 3
PNP *qadipen	'slave' (2a, 4a, 4d)   Atta(Pamplona), Gad, Tag, Ata = 4   Clearly a reshaping of PWMP *qudipen   Tagalog is a loan. *qudipen in SPh.
PNP *qalipugpug	'whirlwind, whirlpool' (1, 2a, 2b, 2c)   Yami, Itb, Ivt, Ibt, Ilk, Isg, Bon = 7
PNP *anayup	'beautyberry: <i>Callicarpa</i> spp.' (1, 2c)   Yami, Itb, Knk = 3 + Ilk
PNP *aṅaṅ	'large earthenware jar' (1, 2b, 2c)   Itb, Ibt, Isn, Ifg = 4
PNP *apatut	'small tree: <i>Morinda bracteata</i> ?' (1, 2a, 2b)   Yami, Itb, Ibt, Ilk, Isg = 5
PNP *aRama	'kind of large marine crab' (2b, 3)   Cas & Bot = 2
PNP *bagut	'pull out, as hair' (1, 2a, 2b, 2d)   Yami, Itb, Ibt, Ilk, Cas, Ibl = 6
PNP *bakes	'old woman; female, of animals' (1, 2b, 2c)   Yami, Itb, Ivt, Ibt, Isg, Knk, Cas = 7
PNP *balinu	'Morning Glory vine' (1, 2a, 2b)   Yami, Itb, Ivt, Ilk, Ibg = 5
PNP *balitúk	'gold ore' (2a, 2b, 2c, 2d, 3, 4a)   IfgK, Ilk, Isg, Knk, Ifg, Ibl, Png, AyA, Tag = 9   If Tagalog is a loan, all other languages are NPh
PNP *balud	'bind, tie up, as a person' (1, 2a, 2c, 2d)   Yami, Itb, Ilk, Bon, Ifg, Ibl = 6
PNP *baqak → *baʔak	'old' (1, 2a, 2b, 2d)   Itb, Ilk, Isg, Ibl = 4   No NPh evidence for *q
PNP *basula	'hairy eggplant' (1, 2b)   Yami, Itb, Ivt, Ibt, Ibg, Isg = 6
PNP *batuR - 2	'aligned, lined up'; (1, 2a, 2b, 2c)   Itb, Ibt, Ilk, Isg, Bon = 5
PNP *beRnát	'relapse' (2a, 2b, 2c, 4a)   Ilk, Isg, Knk, Ifg, Cas, Tag = 6   Tagalog IS a loan as Blust notes; CPh languages have a competing etymon *beghat [ZDS].
PNP *búgaq	'pumice' (2a, 2c, 3, 4a)   Ilk, Bon, Knk, Ifg, Btd, Kpm, Tag = 7   If no SPh etymologies can be found, Tagalog with final glottal may be a loan.
PNP *bulud	'borrow, lend' (1, 2a, 2c)   Yami, Itb, Ibt, Ilk, Bon, Ifg, Btd = 7
PNP *buṅ(e)tút → *buṅtut	'stench, bad odor' (1, 2a, 2c)   Itb, Ibt, Ilk, Knk, Ifg = 5
PNP *bunuṅ	'distribute, pass out (as shares of food)' (1, 2a, 2b)   Yami, Itb, Ibt, Ilk, Cas = 5
PNP *butbut	'to make holes in sacks (as rats do)   Ilk, Bon, Knk, Cas, Ibl, Bot, AyA = 7
PNP *denden	'move aside, make room for' (1, 2a, 2b, 2c, 2d)   Itb, Ilk, Isg, Bon, Ifg, Ibl = 6
PNP *denet	'touch, come in contact with' (1, 2a, 2b)   Yami, Itb, Ibt, Ilk, Cas = 5
PNP *deṅdeṅ	'cook vegetables' (1, 2a, 2b)   Yami, Ibt, Ilk, Bon, Knk, Ifg = 6
PNP *disúl	'kind of herb with medicinal value' (2a, 2b, 3)   Ilk, Isg, Kpm = 3
PNP *dítaq	'snake venom' (2a, 2b, 2d, 3, 4a)   Ilk, Isg, Cas, Ibl, Png, AyA, AyM, Tag, Bik = 9   intrusion into Tag & Bik
PNP *galamay	'finger, toe; tentacles of octopus' (2b, 3, 4a)   Cas, Bot, AyA
PNP *gawed	'betel pepper' (1, 2a, 2b, 2d)   Yami, Itb, Ilk, Isg, Cas, Ibl = 6
PNP *gunay	'movement; to move' (1, 2a, 2c, 2d)   Yami, Ibt, Ilk, Bon, Ibl = 5
PNP *guyud-1	'banana sp.' (1, 2b)   Itb, Ibt, Isg = 3
PNP *hadawiq	'far, distant' (1, 2c)   Yami, Itb, Ivt, Bon, Knk, Ifg = 6
PNP *háq(e)muq → *haʔmuʔ	'tame, docile' (1, 2a, 2b, 2c, 2d, 3, 4a)   Yami, Itb, Ibt, Ilk, Isg, Bon, Knk, Ifg, Cas, Ibl = 12   Tag ámoʔ < *aʔmuʔ [h-loss = loan]
PNP *hátuṅ	'fuel for fire' (1, 2a, 2c, 2d)   Yami, Itb, Ibt, Ilk, Bon, Ibl = 6   Cf: Akl gaton
PNP *hawaw	'thirst; thirsty' (1, 2a, 2c)   Yami, Itb, Ilk, Bon = 4   Regional development of *quhaw
PNP *hesék	'plant seeds by dibbling' (2c, 4a)   Bon, Ifg, Btd = 3   NOT Bik
PNP *kalúban	'sheath for a bolo or knife' (2a, 2b, 4a)   Ilk, Cas, Tag = 3   ZDS *kalúban = 9   Loan in Tag and Han
PNP *katana	'the castor bean: <i>Ricinus communis</i> L' (1, 2c)   Ivt & Bon
PNP *kawkaw	'dig a hole, as by scratching' (1, 2c)   Itb & Bon = 2

PNP *kay(e)qat → *kayat	‘climb vertically, as a ladder or tree’ (1, 2c)   Yami, Itb, Ifg, Btd = 4   No evidence for *q
PNP *kayú < *ka-yú	2pl ‘you all’ (2a, 2b, 2c, 2d, 3, 4a)   Ilk, Isg, Itw, Bon, Ibl, Png, Kpm = 7   Tag (loan)
PNP *kimit	‘blink or wink’ (1, 2c)   Yami, Itb, Ibt, Bon = 4
PNP *kiwkiw	‘stir, mix in’ (1, 2b, 2d)   Itb, Ivt, Bon, Ibl = 4
PNP *kubalan	‘marine fish sp.’ (1, 2a, 2b)   Yami, Itb, Ilk, Cas = 4
PNP *kutay	‘kind of citrus fruit, Philippine orange’ (1, 2b)   Itb, Ivt, Ibt, Isg = 4
PNP *labas	‘pass by, overlook s.t. when searching’ (1, 2a, 2b, 2c, 2d, 3)   Yami, Itb, Ibt, Ilk, Isg, Knk, Png, AyA, Kpm = 11
PNP *labus	‘naked, undressed’ (2c, 2d, 3)   Bon, Knk, Ibl, AyA = 4   See: PWMP *lebas
PNP *lákúq → *lákú?	‘merchandise for sale; to sell’ (2a, 2c, 2d, 4a)   Ilk, Bon, Ibl, Tag, Bik = 5   PPH if Tag & Bik not loans
PNP *lamán	‘pork, flesh of a pig’ (2b, 2c, 2d, 3, 4a)   Isg, Bon, Ifg, Cas, Ibl, Png, Kpm, Tag, Bik = 9   PPH if Tag & Bik not loans
PNP *lebeŋ - 2	‘pond, pool; lagoon’ (1, 2b, 2c, 2d, 3)   Itb, Ivt, Ibt, Isg, Ifg, Ibl, AyA = 7 & Yami -bneŋ
PNP *líkup - 2	‘scoop; scooping tool’ (2a, 2c, 3)   Ilk, Bon, AyA = 3
PNP *linak	‘calm, stilln quiet’ (1, 2a, 2d)   Yami, Itb, Ivt, Ilk, Png = 5
PNP *liŋay - 2	‘turn the head to look back’   Yami, Isg, Bot, AyA = 4   Disjunct: *liŋaw [2]
PNP *lunag	‘melt, as lard’ (1, 2a, 2b, 2c)   Yami, Ilk, Isg, Itw, Bon = 5
PNP *lupes	‘infertile rice grain; empty rice husk’ (1, 2a, 2b)   Itb, Ilk, Cas = 3
PNP *lutáq = lutá?	‘mud, ground, earth’ (1, 2b, 2c, 2d, 3)   Itb, Bon, Ifg, Cas, Ibl, Rem = 6   Akl Eugta?   See: PWMP *lutak ‘muddy’
PNP *ŋatu	‘above, on top’ (1, 2a, 2b, 2c, 2d)   Yami, Ilk, Isg, Bon, Ibl = 5
PNP *ŋina	‘price, worth, cost’ (1, 2a, 2c)   Yami, Itb, Ibt, Ilk, Bon, Ifg = 6
PNP *palúŋ	‘wave at sea, sea swell’ (1, 2a, 2b)   Itb, Ilk, Isg = 3   Accent on ultima
PNP *parek	‘murky, as water or other liquid’ (1, 2a, 4a)   Yami, Itb, Ilk, Bik = 4   PPH if Bik not a loan
PNP *pudaw	‘whitish, gray’ (1, 2a, 2c, 2d)   Itb, Ibt, Ilk, Bon, Knk, Ibl = 6
PNP *puŋan	‘rest the head on s.t. pillow’ (1, 2a, 2b, 2d)   Itb, Ibt, Ilk, Isg, Cas, Ibl = 6
PNP *púnit	‘a tear, small hole or rip’ (2a, 2d, 3, 4a)   Ilk, Png, Bot, Tag = 4   PPH if Tag not a loan
PNP *Raŋaw	‘new shoot of vines or creepers’ (1, 2a)   Ivt, Itb, Ilk = 3
PNP *rawaŋ	‘submarine cave (?)’ (1, 2a, 2d)   Itb, Ilk, Ibl = 3
PNP *Rukib	‘cave’ (2a, 3)   Ilk & AyA = 2
PNP *sabaŋ	‘tree: <i>Erythrina</i> sp.’ (1, 2c)   Itb, Ivt, Bon = 3
PNP *sabuŋ	‘flower, blossom of a fruit tree’ (1, 2a, 2c, 2d)   Bashiic, Ilk, Bon, Btd, Ibl, Png = 9
PNP *sakeb	‘lie face down, be prone’ (1, 2b, 3)   Yami, Itb, Ibt, Cas, Kpm = 5
PNP *saluyut	‘shrub: Jew’s mallow: <i>Corchorus</i> sp.’ (1, 2a, 3)   Ivt, Ibt, Ilk, Sbl, AyA = 5
PNP *saŋi	‘molar tooth (?)’ (1, 2a, 2c, 2d)   Yami, Itb, Ilk, Bon, Ibl, Png = 6
PNP *saR(e)ked	‘block passage, oppose movement’ (1, 2a, 2d)   Itb, Ibt, Ilk, Ibl = 4
PNP *sauŋ → *saʔuŋ	‘canine tooth, tusk, as of wild boar’ (1, 2a, 2c)   Yami, Itb, Ivt, Ibt, Ilk, Bon, Knk = 7   Replaces PAN *bangeliS
PNP *taluntún	‘follow a path’ (2a, 2c, 3, 4a)   Ilk, Bon, Bot, Tag = 4   PPH if Tag not a loan
PNP *taŋay	‘look upward’ (1, 2d)   Yami, Itb, Ibt, Png = 4
PNP *taptap	‘move the lips or tongue in chewing’   Itb, Bon, Knk, Ifg = 4
PNP *taRak	‘distribute an inheritance’ ? (2a, 3)   Ilk & Bot = 2
PNP *tepet	‘question; to ask a question’ (2d, 3)   Png & AyA = 2
PNP *tiwatiw	‘shake a stick at s.t.’ (1, 2c)   Itb, Bon, Knk, Ifg, Btd = 5
PNP *tuŋíq → *tuŋí?	‘the lesser yam, <i>Dioscorea</i> sp.’ (1, 2a, 2c, 4a)   Ibt, Ilk, Bon, Knk, Btd, Tag = 6   PPH if Tag not a loan
PNP *umah	‘kiss’ (1, 3)   Itb, AyA, Kpm = 3
PNP *wiwi	‘shrill whistle or chirrup’ (1, 2c)   Itb + Bon = 2

**TABLE 2. LEXICAL EVIDENCE FOR PROTO SOUTHERN PHILIPPINE PSP [124].**

PSP *alabat /*labat	'fence, wall' (4a, 4d, 4f, 6, 8)   WBM, Msk, Tbl, PMinahasan, Tnd = 6 + Tagalog, Alajan   SEE: ZDS
PSP *amuma	'entertain guests, look after s.o.' (4a, 4d, 5)   Akl, Ceb, Agy, WBM = 4
PSP *qaRutay	'plant in banana family, <i>Musa textilis</i> ' (2b, 4b, 6) [RDZ]   Cas*, Han, Tbl, BIS = 4   *Is Cas a loan?
PSP *áyus	'arrange, make s.t. neat or proper' (2b, 4a, 4b, 5)   Cas*, Tag, Han, Agy = 4   *Is Cas a loan?
PSP *baketin	'piglet, suckling pig' (4a, 4b, 4d, 4e, 6)   Bik, Han, War, Ceb, WBM, Msk, Tir, Gor = 8
PSP *baququ	'tortoise' (4a, 4d, 5)   Agy, Bik, Bkd, WBM, Msk = 5   See: ZDS *baququ = 30
PSP *beteŋ	'pull' (4a, 4b, 5)   Han, Akl, Agy, Hil, Msk = 5
PSP *binuŋa	'tree: Macaranga tanarius' (4a, 4b, 7)   Han, Ceb, Sangir = 3
PSP *biŋkit	'joined along the length' (4a, 4d, 5, 6)   Akl, Kal, Mar, Tir = 4
PSP *bitek	'intestinal worm' (4a, 6, 8)   Tbl, Tnt, Mong
PSP *bunal	'beat up, bruise s.o.' (4a, 4d, 7)   Akl, Hil, Ceb, Bkd, Msk, Sangir = 6
PSP *buŋáŋaq	'open the mouth wide' (4a, 7)   Tag, Bik, Sangir = 3 + Ceb < *buŋaŋah
PSP *buqel	'protruding part of the lower leg' (4a, 4d, 6) [RDZ]   Tag, Bik, Akl, Hil, Ceb, WBM, Tbl = 8
PSP *butí	'smallpox, swine disease' (2b, 4a, 7)   Cas*, Hil, Ceb, Msk, San, Mong, Gor = 7   *Is Cas a loan?
PSP *dagdag / laglag	'drop, to fall down, as leaves' (2c, 4a, 5, 6)   Agy & Tir = 2
PSP *dág(e)saq → dagsa?	'wash ashore' (2b, 4a, 4e, 5)   Cas*, Bik, Akl, Agy, Ceb, Mar = 6   Agutaynen no k   *Is Cas a loan?
PSP *dalit	'venom, poison' (4a, 4b, 4c, 5)   Han, Akl, Agy, CTgb = 4
PSP *daŋaw	'handspan' (4a, 4b, 4e, 5, 7)   Han, Akl, Agy, Ceb, Mar, PSng, PEGor = 7   PNP *dangan < PMP *zaŋan
PSP *dapak	'marine fish, probably snapper sp.' (2b, 4a, 5)   Cas*, Agy, Ceb, Mapun = 4   *Is Cas a loan?
PSP *dápat - 4	'should, ought to' (2b, 4a, 5)   Cas*, Tag, Bik, Agy = 4   *Is Cas a loan?
PSP *dapu → *dapu?	'swarm around, as ants do on finding food' (3, 4a, 5)   Png*, AyA, Agy, Ceb, Moŋ = 5   Length is Png is suspicious
PSP *dílám	'stick out the tongue' (2b, 4a, 5)   Cas*, Bik, Agy, Bkd = 4   *Is Cas a loan?
PSP *dílís	'long-jawed anchovy' (4a, 5)   Tag, Bik, Agy = 3
PSP *dúlem	'darkening, obscuring of light' (2b, 4a)   Cas*, Bik, Han, Akl, Ceb = 5   *Is Cas a loan?
PSP *elad   *qelad	'a flat, wide object; sheet' (4d, 4e, 5)   Kal, Mar, WBM = 3
PSP *emel   *qemel	'squeeze into a ball' (4a, 5)   Kal, Akl, Ceb = 3
PSP *gaŋa	'open-mouthed' (4e, 5)   Agy & Mar
PSP *gásan	'coral' (2b, 4a)   Cas, Tag, Bik, Ceb = 4
PSP *gatuŋ	'firewood' (4a, 4e, 5)   Bik, Akl, Agy, Mar = 4
PSP *hambúg	'proud, boastful' (2a, 4a, 4c, 4d, 4e)   Ilk, Tag, Bik, Akl, Pal, Ceb, Mar, Dbw, Msk = 9
PSP *henaq → *hena?	'think, consider; thought, idea' (4a, 7)   Akl, Hil, Ceb, San, Mapun = 5 & Bik & Agy ena?-ena? 'think evil' (? , not k)
PSP *hiláw	'raw, unripe' (2d, 3, 4a, 4d)   Cas, Bot, Tag, Bik, Akl, Ceb, WBM, Mong = 8   PPH if Cas & Bot are not loans
PSP *hipes	'fall silent; keep quiet' (4a, 4b, 4e, 5)   Agy, Han, Akl, Hil, Tsg, Mar = 6
PSP *hipuq → *hipu?	'feel, touch' (4a, 7)   Tag & Sangir = 2
PSP *hitaq	'upper leg, thigh' → 'groin' (4a, 4b, 5)   Tag, Bik, Han, Akl, Kal, Agy, Hil = 7

PSP *hulas	‘sweat, perspiration’ (4a, 4d, 4f, 5)   Kal, Dbw, Sub-Sin, Tsg, Gor = 5   SEE: ZDS *húlas   Replaces PWMP *riŋa?et
PSP *ibus	‘rice delicacy’ (4a, 4e, 5)   Bik, Agy, Mar = 3   Akl also
PSP *qiduq → *qidu?	‘dog’ (4a, 5)   Agy, Mam, Msk, Tsg = 4   ZDS *qidu?
PSP *impas	‘consumed; paid up’ (4a, 4e, 5)   Agy, Ceb, Mar = 3 & Akl
PSP *kadkad	‘dig a hole’ (4a, 7)   Bik, Msk, Sangir = 3
PSP *kamāŋa	‘whetstone’ (2c, 4a, 4d, 4e)   Bon, Akl, Mar, WBM = 4 & Sangir (?)   Status of Bontok?
PSP *kamānsi / kamānsi?	‘the seeded breadfruit’ (2b, 4a, 4b, 4d, 4e, 6)   Cas*, Han, Ceb, WBM, Msk, Tir = 5 + Tag & Mar   PPH if Tag not a loan
PSP *kasilih	‘eel (freshwater)’   Btk, Bkd, WBM, Msk, San, PSangiric, PMinahasan = 9
PSP *keluŋ - 2	‘shield’ (4e, 6, 7)   Mar, Tir, Sangir = 3
PSP *keles	‘subside, shrink’ (4a, 5)   Agy, Tsg, Yakan = 3
PSP *kimay	‘deformation of the body’ (4a, 4b, 4d, 4e, 5)   Bik, Han, Ceb, Agy, Mar, Bkd = 6
PSP *kisaw	‘sound of swishing, as of hand passing through water’ (2b, 4a)   Cas*, Tag, Akl, Ceb = 4   PPH if Tag not a loan
PSP *kunu?	‘it is said . . .’ [dp-quotative]   Han & Tsg = 2
PSP *labat → *alabat	‘fence’   Ceb, Subanon, Tbl, BIS = 5
PSP *labay - 2	‘to pass by’   Bik, WBM, Tsg, Yakan = 4
PSP *labid	‘intertwine, braid, as strands to make rope’ (4a, 4d, 5, 6)   Ceb, Mar, Tir = 3
PSP *labut	‘involvement, engagement, business’ (4a, 4b, 6)   Bik, Han, Akl, Hil, Ceb, Tbl = 6
PSP *lakun	‘coil up’ (4a, 6)   Ceb & Tbl = 2
PSP *lāmaŋ	‘only, just, but’ (4a, 4b, 5)   Tag, Han, Agy, Ceb = 4   & Akl Eamaŋ
PSP *lambid	‘cross over, wind around, embrace’ (4a, 4e, 5)   Agy, Ceb, Mar, Tir = 4
PSP *lambuŋ	‘robe, long garment’ (4a, 4b, 5, 6)   Tag, Bik, Han, Akl, Agy, Tir, PEGor = 7
PSP *lanay - 1	‘liquid, watery’ (4a, 4b, 4e, 6)   Han, Mar, Msk, Tsg, Tir = 5
PSP *lantik	‘graceful curve of the body’ (3, 4a, 4e)   Kpm*, Tag, Mar, Mapun, Yakan = 5   PPH if Kpm not a loan from Tag
PSP *lapi	‘fold over’ (4a, 6)   Ceb & Tbl = 2
PSP *lapu	‘scald food in hot water’ (4e, 5)   Agy & Mar = 2
PSP *latag	‘spread out on the ground’ (2b, 4a, 4b, 5)   Cas*, Tag, Han, Agy, Ceb, Tsg = 6   PPH if Cas not a loan
PSP *latay	‘lay down a walkway over muddy ground’ (4a, 5)   Bik, Akl, Hil, Ceb, Agy = 5
PSP *lawig	‘long, of time; protracted’ (4a, 4b, 5)   Tag, Bik, Han, Agy = 4   + Akl Eawig
PSP *lepad	‘fly’ (3, 4a, 4c, 6, 8)   Bol*, Tina*, Bot*, AyA*, Tag, Pal, Ceb, Mam, Tir, PMin, Tnd, Tonsawaŋ = 12   PPH if Sambalic not loans
PSP *lepaw - 2	‘surpass, exceed’ (4, 6)   Bik & Tir = 2
PSP *libat	‘cross-eyed’ (4a, 4b, 4d, 5)   Han, Agy, Akl, Ceb, Bkd, Tsg, Yakan = 7
PSP *lipay - 1	‘joyful, happy’ (4a, 4b, 4d, 5)   Han, Akl, Ceb, Agy, Bkd, WBM = 6
PSP *lipen	‘faint, lose consciousness’ (3, 4a, 4b, 4d, 5)   AyA*, Han, Agy, Ceb, Bkd, WBM = 6   & Akl   PPH if AyA is not a loan
PSP *lised	‘poor, needy’ (4a, 4d, 5)   Akl, Agy, WBM = 3
PSP *liqed	‘footprints, tracks’ (4a, 5)   Han, Agy, CTgb, Mong, Gor = 5
PSP *ludeg	‘wrestle, to seize and throw a person to the ground’ (4c, 6)   Pal & Tir
PSP *luhúd	‘the act of kneeling’ (2b, 4a, 4b, 5)   Cas*, Tag, Bik, Han, Akl, Ceb, Msk, Agy = 8   PPH if Cas is not a loan
PSP *lumay	‘love charm, aphrodisiac’ (4a, 4b, 4e, 5)   Tag, Bik, Han, Agy, Mar = 5
PSP *lumun	‘live with s.o. as a free guest’ (4a, 4d, 5)   Akl, Ceb, Agy, Bkd, WBM, Msk = 6

PSP * <i>lunaw</i> → * <i>luhnaw</i>	'green, as vegetation' (4a, 4d, 4e, 6, 7)   Mar, WBM, Msk, Tir, Klg, BIK, PSan, Toratan = 8   ZDS < Mathew Charles pers. comm.
PSP * <i>lunday</i>	'canoe, small boat' (4a, 4e, 5)   Tag, Agy, Mar = 3
PSP * <i>lupis</i> - 2	'outer layer of the abaca plant' (3, 4a, 4d)   AyA*, Bik, Ceb, Bkd, Tsg = 5   PPH if AyA is not a loan
PSP * <i>lunsan</i>	'fatal blow, coup-de-grace' (4c, 6)   Pal & Tir = 2
PSP * <i>lunu</i>	'unconscious' (4e, 5)   Agy & Mar = 2
PSP * <i>máya</i>	'rice bird' (3, 4a, 4d, 5)   Kpm*, Tag, Akl, Agy, Ceb, WBM, Msk, Mapun, Yakan = 9   PPH if Kpm is not a loan
PSP * <i>panáyan</i>	'first-born child, eldest child' (2b, 4a, 4b, 4e)   Cas*, Tag, Han, Akl, Mar, Msk = 6 < * <i>pang-</i> * <i>ánay</i>   PPH if Cas is not a loan
PSP * <i>paqus</i> → * <i>paʔus</i>	'hoarse, husky voice' (4a, 4e, 5)   Agy, Tag, Ceb, Mar, Msk = 5   Agy NO [k]
PSP * <i>parásan</i>	'rattan sp.' (2b, 4a, 4b)   Cas*, Tag, Han, Msk = 4   PPH if Cas is not a loan
PSP * <i>pintas</i>	'curse or hex; to bewitch' (2b, 4a, 4b, 4c, 4e, 5)   Cas*, Tag, Bik, Han, Akl, Agy, Hil, CTgb, Mar = 9   PPH if Cas is not a loan
PSP * <i>pintuq</i> → * <i>pintuʔ</i>	'loft in house where unmarried girls reside' (4d, 7)   WBM & Sanjr = 2   Possibly a loan of Malay <i>pintu</i> 'door' (behind a door, secluded)
PSP * <i>piqaj</i> → * <i>piʔaj</i>	'crippled, lame' (4a, 4d, 4e, 5)   Agy, Ceb, Mar, Bkd = 4
PSP * <i>pugad</i> ≤ * <i>pugat</i>	'nest, as of a bird' (2b, 4a, 4b, 4e)   Cas*, Tag, Han, Akl, Mar, Msk, Tsg = 7   PPH if Cas is not a loan
PSP * <i>Ramut</i>	'charm used to control s.o. magically' (4a, 4d, 5, 6)   Agy, Mar, Msk, Tir = 4
PSP * <i>Rapuʔ</i>	'branches carried along & deposited by water' (4a, 4d, 6)   Ceb, WBM, Msk, Tir, Tbl = 5
PSP * <i>Rimukud</i>	'soul' (4a, 4d, 4g, 7)   Bkd, WBM, Sng, PSangiric, PGorontaloic = 5   Replaces PMP * <i>sumaje</i> [dt]
PSP * <i>Rumaq</i>	'sheath, scabbard'   Bot*, Sub, Bkd, WBM, Tir   Semantic shift 'house of bolo'; Botolan < early Tagalog
PSP * <i>sahuR</i>	'mix; a mixture' (4a, 4d, 8)   Tag, Bik, WBM, PMinahasan = 4
PSP * <i>santik</i>	'click or clink together, as stones in making fire' (4a, 4e, 5)   Bik, Agy, Ceb, Mar = 4
PSP * <i>saru</i>	'facing, face-to-face' (6, 8)   Tir, Tbl, PMin, Tnt = 4   Replaces * <i>qadep</i>
PSP * <i>sáysay</i>	'narrate, as in telling a story' (2b, 4a, 4d, 5)   Cas*, Tag, Bik, Akl, Agy, Ceb, Bkd, WBM, Msk = 9   PPH if Cas not a loan
PSP * <i>sebanj</i>	'rise, of the sun, moon or stars' (4a, 4e, 6, 7)   Bik, Mas, Ceb, Mar, Tir, Tsg, PSangiric = 7
PSP * <i>sedáq</i> → * <i>sedáʔ</i>	'fish; protein eaten with rice' (2a, 2b, 2c, 2d, 4a, 4b, 4c, 4e, 8) [RDZ]   Tag, PMin, Tnd, Tnt, Mong = 5   Disjunct: * <i>sidá</i> [qʔ] & * <i>sirá</i> [qʔ]
PSP * <i>seleR</i>	'flowing water, current' (4a, 4e, 8)   Mar, Sangir, PGor = 3
PSP * <i>sejet sejet</i>	'throb with pain or exhaustion' (4a, 5)   Agy, Msk, Tsg = 3
PSP * <i>sirap</i>	'glance, look at quickly' (4d, 4e, 5)   Agy, Mar, WBM = 3
PSP * <i>suqag</i>	'butt or gore with the horns' (3, 4a, 5)   Bot, Bik, Agy, Msk = 4
PSP * <i>suRud</i>	'push' (4e, 6, 7)   Mar, BIS, San, Talaud = 4
PSP * <i>suysuy</i>	'speak, say s.t., tell' (4a, 8)   Tsg & PMinahasan = 2
PSP * <i>takés</i>	'measurement; to measure' (4a, 4d, 4e, 5)   Akl, Agy, Mar, Bkd = 4
PSP * <i>tanán</i> → * <i>tanán</i>	'all' (4a, 4b, 4c, 4e, 5)   Tag, Han, Kal, Agy, PBtk, Ceb, Mam, Mar, Molbog = 9
PSP * <i>taRihtih</i>	'drizzle or light rain' [with * <i>tariktik</i> ]   Bik, Mas, San, PSangiric = 4
PSP * <i>tariktik</i>	'drizzle or light rain' (2a, 4a, 4e, 7, 8)   Mar, Tnt, PMinahasan = 3
PSP * <i>tebir</i>	'edge, seam, hem' (4e, 8)   Mar, Tnd, Tnt, PMin = 4
PSP * <i>tekeb</i>	'attack, as an animal attacking its prey' (4a, 5)   Akl, Ceb, Agy = 3
PSP * <i>tin(c)qaw</i> → * <i>tinʔaw</i>	'clear, pure, of water'   Tag, Akl, Ceb, PSangiric, Toratan = 5

PSP *tinduk	'large cooking banana or plantain variety' (2b, 4a, 4b)   Cas, Bik, Han, Ceb, Msk = 5
PSP *tiŋeR	'sound, voice' (4a, 5, 7)   Bik, Agy, Msk, Tsg, PSangiric, PGor = 6   Han tiŋi (?)   Kambera tiŋi (?)
PSP *tipuq → *tipu?	'picking of fruit, falling out of teeth' (4a, 7, 8)   Tag, PSangiric, Tnt, Mong = 4
PSP *tuwaŋ → *tuwaŋ	'carry a load between two people' (4a, 4b, 4c, 5)   Tag, Bik, Han, Agy, CTgb = 5
PSP *tunay	'thorn in the flesh' (5, 7, 8)   Agy, San, Tnt +PSangiric = 4
PSP *tundek	'poke, as with a finger' (4a, 4e, 8)   Ceb, Mar, PMin, Tonsea, Tombulu = 5
PSP *tuŋgil → *tiŋgil	'clitoris' (2b, 4a, 4b)   Ilk tuŋgil (unexplained)   Han, Rbl, Akl, Ceb = 4
PSP *tustús	'roll up a leaf, as a tobacco leaf' (2d, 4a)   Ibl & Ceb = 2
PSP *tuyuq → *tuyu?	'point at, aim for, intend to do' (3, 4a, 4b, 4d, 4e)   Bot*, Han, Akl, Mar, Bkd, WBM, Msk, Tsg = 8   PPH if Bot not a loan; mainly evidence for a GCP innovation
PSP *quhay	'rice panicle' (4a, 5)   Tag, Akl, Ceb, Kal = 4
PSP *quhut	'sheaf to which rice grains are attached' (4a, 5)   Kal & Ceb = 2
PSP *upas	'fiber of banana stalks'   Bot*, Tag, Bik, Han, Ceb, Mar, WBM, Mong = 8   PPH if Bot not a loan
PSP *quyag	'living, alive' (4d, 4e, 6)   Mar, WBM, Tir, Tbl = 4
PSP *wali	'lecture s.o.' (4a, 4d, 5)   Agy, Ceb, Bkd = 3   + Akl wálih <=

**8. GLOTTAL STOP [\*ʔ] AS OPPOSED TO \*q.** There are many reconstructions that have \*q, but with no supporting evidence from either Kalamianic (table 3) (which has a reflex of [k] everywhere)<sup>25</sup> or Tboli (table 4) (which has initial and final [k], but intervocalic [h]).<sup>26</sup> The absence of [k] in Kalamianic and the presence of final [ʔ] in Tboli<sup>27</sup> in comparisons with cognates in other Philippine languages is therefore significant.

It had always been my impression that among most Philippine languages, the glottal stop has a relatively high frequency, especially in those lects where the glottal stop precedes orthographically vowel-initial words. There are also several languages that add a phonotactic final glottal stop as a sign of word closure. Because there is extremely sparse analysis of Philippine phoneme

25. Generally PPH \*k > Kalamianic [∅], but not in monosyllabic roots or words perceived to contain one, where \*k is preserved as [k]. Complicating this, Kalamianic has also borrowed quite a few CPh words, keeping the [k], for example, Bisayan \*tambek 'fat'. In contrast, PPH \*ʔ is entirely lost; note that all vowel-final words end in ʔ phonotactically indicated word closure and therefore giving no direct evidence for \*ʔ.

26. Thus, Tboli haha 'thigh' < PAN \*paqa, lihol 'neck' < PAN \*liqeR, tuhod 'tree stump' < PAN \*tuqed.

27. Under Languages—Tboli ([https://www.trussel2.com/ACD/acd-l\\_t.htm#Tboli](https://www.trussel2.com/ACD/acd-l_t.htm#Tboli)), \*q has been lost (with a reflex of ∅) in four forms (fun, hait, hEet, laan), \*q has become ʔ in eight (bagaʔ, bálaʔ, danaʔ, gbaʔ, hosoʔ, leʔiye, salaʔ, suʔal). Tboli, Agutaynen belat, Kalamian Tagbanwa lebat, Malay berat 'heavy', along with dozens of cognates in ZDS PPH \*beRʔat, yield PMP \*beRʔat; none of the cognates under \*beReqat in the ACD support either \*q or a trisyllabic. Apart from this support for at least one glottal cluster, Tboli seems directly to support final \*ʔ in 14 reconstructions: \*amaʔ, \*betuʔ and \*pabetuʔ, \*biRaʔ, \*datuʔ, \*emaʔ, \*qiaʔ, \*kaʔ, \*kikuʔ, \*kukuʔ, \*piʔ, \*pulaʔ, \*suliʔ, and \*tudaʔ. As with many Central Philippine languages, Tboli marks some loans with glottal closure: belanguʔ, bilaʔ, bulaʔ, kmatiʔ, and kudaʔ.

TABLE 3. GLOTTAL STOP FROM KALAMIANIC EVIDENCE.

PSP *dág(e)saq → dagsa?	'wash ashore' (2b, 4a, 4e, 5)   Cas*, Bik, Akl, Agy, Ceb, Mar=6   Agutaynen phonotactic final glottal stop   PPH if Cas not a loan
PSP *dapu → *dapu?	'swarm around, as ants do on finding food' (3, 4a, 5)   Png, AyA, Agy, Ceb, Mong=5
PPH *ebeb → ?eb?eb	'sit on eggs' (2c, 2d, 5, 6)   Bon, Ibl, Agy, Tir=4   See: ZDS
PSP *qíduq → *qídu?	'dog' (4a, 5)   Agy, Mam, Msk, Tsg=4   ZDS *qídu? One of very few reconstructions with both *q and *?
PSP *henaq → *hena?	'think, consider; thought, idea' (4a, 7)   Akl, Hil, Ceb, San, Mapun=5 & Bik & Agutaynen ena 'think evil' (no k)
PPH *láv(e)qay → *láv?way	'offensive to decency, immodest' (2a, 4a, 4d, 5)   Ilk, Akl, Hil, Ceb, Agy, Bkd=6
PPH *lawáqan → *lawá?an	'kind of hardwood tree' (2a, 4a, 4b)   Ilk, Tag, Bik, Han, Msk, Agy=6
PPH *ɲani → *ɲani?	'indeed' [discourse particle expressing agreement with interlocutor] (2b, 4b, 5)   Cas, Han, Agy=3 & Akl & WBM
PSP *paqus → *paʔus	'hoarse, husky voice' (4a, 4e, 5)   Agy, Tag, Ceb, Mar, Msk=5   Agy NO [k]
PPH *pásuq → *pásu?	'roast, broil, scald' (1, 2b, 4a, 5, 7, 8) [RDZ]   Itb, Ivt, Isg, Its, Tag, Bik, Inati, Agy, Tsg, PMin, Tnd=14
PPH-2 *piet → *piʔet	'narrow, tight' (4a, 5)   Agy & Ceb=2 & Akl   Note Ceb pigʔut (with *<g>)
PSP *piqaj → *piʔaj	'crippled, lame' (4a, 4d, 4e, 5)   Agy, Ceb, Mar, Bkd=4
PPH *púruq → *puju?	'island' (2a, 4a, 5)   Ilk, Isg, Itw, Png, Bot, Tag, Bik, Akl, Agy, Hil, Tsg=11   See: ZDS
PPH *si-nu → *siʔnuh	'who' (1, 2a, 2b, 2c, 3, 4a, 4f)   Yami, Itb, Ilk, Kla, Bon, Knk, Bot, Tag, Kal, Agy, Sub, Bkd=12 < *si-ʔ(a)nuh   See: ZDS
PPH *sub(e)líq → sublí?	'pass each other; replace' (2a, 2b, 2c, 2d, 3, 4a, 4d, 4e, 5)   Ilk, Isg, Bon, Knk, Bik, Agy, WBM=14   See: ZDS
PSP *suqag → *suʔag	'butt or gore with the horns' (3, 4a, 5)   Bot*, Bik, Agy, Msk=4   PPH if Bot not a loan
LOAN *tandaq → *tanda?	'having a good memory; intelligent' (2a, 2b, 3, 4a, 4b, 5)   Ilk, Cas, AyA, Bik, Han, Akl, Agy=8   Probable loan of Malay tanda 'sign, signal, quality'
PPH *tayáq → *tayá?	'stakes in gambling; wager, bet' (1, 2a, 2b, 4a, 4b, 4d)   Itb, Ilk, Cas, Tag, Han, Akl, Agy, Hil=11
PPH-3 *tuq(e)maw → *tuʔmaw	'come into view suddenly or partially' (1, 4a, 5)   Ibl, Agy, Ceb=3
PPH *tuRauk → *tuRaʔuk	'crow, of a rooster' (4a, 5)   Agy & Ceb=2 & Bik & Akl

TABLE 4. GLOTTAL STOP FROM BILIC EVIDENCE.

PSP *Rapuq ~ *Rapu?	'branches carried along and deposited by water' (4a, 4d, 6)   Ceb, WBM, Msk, Tir, Tbl=5
PPH *tahúl <= *taʔúl	'howl, of a dog' [*taquL DOUBLET *tahúl]   Ilk taʔúl, Bon, Png taʔól, Mar, Bkd, Msk, Tbl   Tag, Bik tahol, WBM, Tsg taʔul [*h > Ø or ? = 11

frequencies<sup>28</sup> available, I have recently undertaken a study in all word positions (initial, medial, cluster, and final), thus far completed for Tagalog, Aklanon, and Klata based on wordlists containing over a 1,000 basic vocabulary tokens.

28. I could only find one which was for Tagalog. Unfortunately, it was for letters (rather than phonemes), thereby counting the <n> and <g> of [ŋ], which resulted in <a>, <n>, and <g> as most frequent ([https://en.wiktionary.org/wiki/Wiktionary:Frequency\\_lists#Tagalog](https://en.wiktionary.org/wiki/Wiktionary:Frequency_lists#Tagalog)).

I compared these with all the entries I had from the ACD (see table 8). The results illustrate that vowels rank among the highest, nevertheless glottal stop (?) is the third most common segment in Aklanon, the fourth most common in Klata, and the sixth most common in Tagalog. Blust does not reconstruct \*ʔ for PPH, but initial PAN \*q ranks 12th (only \*k, \*t, \*l, \*b, \*ŋ, and \*p have higher frequencies among consonants in the ACD).

The ACD as of 1 May 2020 had initial \*q reconstructed on 438 etyma, but vowel initial on 823 etyma (a = 298, \*e = 129, \*i = 222, \*u = 174). It would therefore appear that glottal stop has double the frequency (53.2%) of \*q in initial position alone. But the more crucial reconstruction of medial, cluster, and final glottal stop is an ever-growing list. Zorc (1982, 1996) provided quite a few solid reconstructions in medial, cluster, and final positions. Some of the most solid ones include [MEDIAL] PAN \*Caʔas ‘high~long’, \*daʔaN ‘old: object’, \*Rabiʔih ‘night’, \*Riʔek ‘thresh’, \*tineʔun ‘weave’; PMP \*batiʔis ‘calf’; PWMP \*haruʔan ‘mudfish’, \*kuʔul ‘snail’, \*laʔin ‘other, different’, \*luʔek ‘bay’; [CLUSTER] PAN \*tiʔNaw ‘clear (water)’ \*siʔbu ‘urine’ PMP \*beRʔ at ‘heavy’, \*buʔni ‘ringworm’, \*kaʔwit ‘hook’; PWMP \*sabʔa ‘plantain’, \*tuʔmid ‘heel’; [FINAL] PAN \*amaʔ ‘father!’, \*keNaʔ ~ \*tamaʔ ‘hit the mark’, \*seduʔ ‘hiccup’; PMP \*bukaʔ ‘open’, \*datuʔ ‘chief’, \*pakuʔ ‘stake’, \*paluʔ ‘strike, hit’, \*wadaʔ [existential]; PWMP \*akuʔ ‘admit, acknowledge’. I have not included any PPH etyma in this list because they are treated in tables 3–5.

I do appreciate the difficulty of reconstructing glottal stop in most Austronesian languages (even though the phonologies of most recognize a phonemic—or at least a phonotactic one throughout Formosa and the Philippines). Nevertheless, if one is dealing with Philippine-only evidence, based on any “ground-up” study (any member of the Cordilleran language group, Bisayan, Bikol, Mangyan, Mansakan, Manobo, Subanon, Tagalog, etc.), only a glottal stop can be reconstructed and must also be used for the citations from the lects represented. I am absolutely convinced that a glottal stop must be a phoneme in PPH. Explicit evidence from cognates in Agutaynon, Kalamian, Northern Tagbanwa (Kalamianic), and/or Tboli (Bilic) clearly justifies the reconstruction of PPH \*q. Otherwise, especially if Kalamianic or Tboli fails to show <k>, \*ʔ should be the default reconstruction in initial, medial, pre- or post-consonantal, and final positions (unless borrowing or phonotactics can clearly be demonstrated). Altogether, I have found 157 etyma where \*q is not justified by the witnesses, so I would suggest \*ʔ should be reconstructed. This is supported in twenty instances by Kalamianic evidence (table 3); Bilic merely supports 2 (table 4)<sup>29</sup>. In other

29. It would be absolutely unprecedented that the original \*h of \*tahul shifted to \*taqul rather than \*taʔul. While Bikol has a doublet (tahól, taʔól), so does Tagalog in Panganiban (1972:942). However, Binukid, Western Bukidnon Manobo, and Tausug have all lost the \*h in this particular etymon. In the process of lexical diffusion, this was among the first words to suffer the attrition of \*h to zero. Note that Tausug has a doublet taʔhul, Hiligaynon has taghol and Cebuano hulhul; all of which support the reconstruction of PPH \*h in the primary form (with a possible root \*hul). Wolff (1972) does not have an entry for [tagʔul], a form which I obtained in my field work on Boholano.

TABLE 5. GLOTTAL STOP AMBIGUOUS, BUT \*q NOT ESTABLISHED.

PPH *alílaq → *alíla?	'care for, wait on s.o.' (2a, 2b, 2d, 3, 4a)   Ilk, Cas, Png, AyA, Tag = 5
PPH *bakáq → *baká?	'maybe, perhaps' (2a, 2d, 3, 4a)   Ilk, Ibl, Tag, Rem, Bik = 5
PPH *balítíq → *balítí?	'banyan' (1, 2a, 2b, 3, 4a, 4d, 4e)   Yami, Itb, Ivt, Ibt, Ilk, Isg, Kpm, Tag, Akl, WBM = 12
PPH *banaq → *bana?	'earthenware water jar' (1, 2a, 2d, 4a) [RDZ]   Yami, Itb, Ibt, Ilk, Isg, Ibl, Bot, Tag, SubSin = 9
PNP *baqak → *ba?ak	'old' (1, 2a, 2b, 2d)   Itb, Ilk, Isg, Ibl = 4
PPH *báqug → *ba?ug	'spoiled; rotten, of an egg' (2a, 2b, 2c, 4a, 4b)   Ilk, Bon, Knk, Ifg, Cas, Tag, Bik, Han = 11
PPH *big(e)lác → *bigla?	'suddenly' (2a, 2b, 2c, 2d, 3, 4a, 4b)   Ilk, Bon, Cas, Png, Kpm, Tag, Bik, Han = 8
PPH *buñuq → buñu?	'skull' (3, 4a)   Tina, AyA, Tag, Bik, Akl = 5
PPH *búquq → bú?uq	'broken, shattered' (2a, 4a, 4b)   Ilk, Han, Akl, Hil, Ceb, Msk = 6
PPH-3*bus(e)qák → *bus?ak	'split apart, of wood' (2c, 4a)   Ifg, Akl, Hil = 3
PPH-2 *busiq → *busi?	'split, rip open' (2b, 2c, 4a, 4e)   Ifg & Bik = 2
PPH *busiqsiq → *busi?si?	'split, rip open' (2b, 2c, 4a, 4e)   Isg, Ceb, Bkd, WBM = 4
PPH-3*butikíq → *butikí?	'gecko' (2c, 4a)   Ifg, Tag, Bik = 3
PPH *butíq → *butí?	'roasted rice, popped rice' (2b, 2c, 4a, 4b)   Isg, Ifg, Btd, Han, Akl, Hil = 6
PPH *butítíq → *butítí?	'inflated abdomen' (2b, 4a, 8)   Isg, Tnt, PGor, Mong = 4
PNP *butúl → *but?ul	'hard seed, stone of some fruits' (1, 3, 4a, 4b)
PPH-3*dalupániq → dalupáni?	'kind of freshwater fish' (2b, 4a)   Cas, Tag, Bik = 3
PPH-2*das(e)qaR → *das?aR	'food laid out for a feast' (2a, 4d)   Ilk & Bkd = 2
PPH-3*daúp-1 → *da?up	'bring the hands together' (2d, 4a)   Png, Tag, Ceb = 3
PPH-2*daúp-2 → *da?up	'cover, covering' (2c, 4a)   Bon & Msk = 2
PPH *deR(e)qas → *deR?as	'second pounding of rice' (2b, 2c, 4a, 4e, 8)   Isg, Bon, Knk Mar, WBM, Tsg, PMin = 7
PPH *diq → *di?	[particle of negation] (1, 2a, 2b, 4a, 4e)   Yami, Itb, Ilk, Isg, Tag, Mar, Msk, Tsg = 8
PPH *gaqud → *ga?ud	'oar; to row a boat' (2a, 2b, 2d, 4a, 4b) = 8
PPH *gúguq → *gu?gu?	'tree bark used as shampoo: <i>Ganphyllum falcatum</i> ' (2a, 4a) Ilk, Kpm, Tag, Bik, Msk = 5
PNP *háq(e)muq → *ha?mu?	'tame, docile' (1, 2a, 2b, 2c, 2d, 3, 4a )   Yami, Itb, Ibt, Ilk, Isg, Bon, Knk, Ifg, Cas, Ibl = 12
PSP-2*hipuq → *hipu?	'feel, touch' (4a, 7)   Tag & Sangir = 2
PPH *híwaq = *híwa?	'cut, carve, slice (meat or fish)' (2a, 2b, 4a) [RDZ]   Ilk, Isg, Tag, Bik, Hil, Ceb = 6
PPH-2*iit → i?it	'scraped or filed down' (2c, 4a)   Knk & Gor = 2
PPH *iñqiil → *iñ?i?iñ	'shrill sound' (2c, 4a)   Knk, Ifg, Tag, Ceb = 4
PPH *ituq → *itu?	'puppy' (2b, 4d, 4f, 6) [RDZ]   Atta, Sub, WBM, Tir = 4
PPH-2*kaíñ ~ *kaqíñ → *ka?iñ	'large openwork basket' (2a, 4a)   Ilk & Ceb = 2   DUPLICATE!
PPH *kalamansiq → *kalamansi?	'citrus tree with fruit like a lemon' (1, 2a, 2b, 4a)   Itb, Ilk, Yog, Tag, Ceb = 5
PPH-3 *kam(e)qáw → *kam?aw	'kind of urn for storing food' (2a, 4a)   Ilk, Tag, Ceb
PSP *kamánsi / kamánsi?	'the seeded breadfruit' (2b, 4a, 4b, 4d, 4e, 6)   Cas, Han, Ceb, WBM, Msk, Tir = 5
PPH-3 *kapáq kapáq → kapa?-kapa?	'grope, fumble about' (2b, 4a)   Cas, Tag, Bik = 3

PPH *káti/kátiq =*kati? ~ *katih	'chicken used to lure wild fowl' (2a, 2c, 2d, 3, 4a, 4b, 4e)   Knk, Cas, Ibl, AyA, Ceb, WBM=9
PPH-2 *kelaqat → *kelaʔat	'sudden, abrupt, unexpected' (1, 2a)   Itb & Ilk
PPH-2 *kubuq → *kubuʔ	'hunchbacked, stoop-shouldered' (2a, 4a)   Ilk & Ceb=2
PPH *labúyuy → *labúyuʔ	'wild chicken' (2a, 4a, 4b)   Ilk, Tag, Han, Ceb, Msk=5
PPH *lagúq → *lagúʔ	'flourish, of plants' (2b, 2d, 3, 4a, 4b)   Cas, Png, AyA, Kpm, Tag, Han=6
PNP *lákuy → *lákuyʔ	'merchandise for sale; to sell' (2a, 2c, 2d, 4a)   Ilk, Bon, Ibl, Tag, Bik=5
PPH-2 *lamuy → *lamuyʔ	'salt meat or fish for storing' (2a, 4a)   Ilk & Ceb=2
PPH *laqús → *laʔús	'past one's prime, obsolete' (2a, 4a)   Ilk, Tag, Bik, Ceb=4
PPH *liñiq → *liñiqʔ	'turn one's head to the side to look back' (2a, 4a, 4d, 4e)   Ilk, Akl, Ceb, Mar, WBM=5
PPH-3 *lúmaq → *lúmaʔ	'old, worn out' (2a, 4a)   Ilk, Tag, Bik=3
PPH-2 *luq(e)nit → *luʔnit	'healed, of a wound with shiny skin' (2a, 4a)   Ilk & Bik=2
PPH-3 *luqúb → *luʔúb	'inside area, estuary' (2a, 4a)   Ilk luʔób, Tag loʔób, Bik luʔób=3
PPH *lúsiq → *lúsiʔ	'prepuce, foreskin; pull back the foreskin' (2a, 2c, 4a, 4e) [RDZ]   Ilk, Bon, Knk, Btd, Bik, Ceb, Mar=8
PNP *lutáq = lutáʔ	'mud, ground, earth' (1, 2b, 2c, 2d, 3)   Itb, Bon, Ifg, Cas, Ibl, Rem=6   Akl Eugtaʔ
PPH *ñániq → ñániʔ	'even, almost' [dp] (1, 2a, 2b, 2c, 4a, 4d)   Itb, Ilk, Bon, Cas, Ceb, Bkd, Ags=7
PPH *pag(e)qún → *pagʔuy	'land turtle, fresh water turtle' (2a, 2b, 2c, 4a) [RDZ] Ilk, Isg, Bon, Tag, Bik=5 & Mamanwa pagʔuy
PCP *panúqus → *panʔes	'spoiled; sour smell' (2a, 4a, 4b, 4e)   (Ilk), Han, Ceb, (Mar)=4 & Akl banʔus (shimmer!)   Tag panis
PPH-3 *paq(e)liñ → *paʔliñ	'visible defect of the eyes' (2b, 4e, 6)   Isg, Mar, Tir=3
PPH *patániq → *patániʔ	'lima bean: <i>Phaseolus lunatus</i> ' (2a, 2c, 4a, 4b)   Ilk, Bon, Tag, Han, Ceb=5
PPH-3 *piaña → *piʔaña	'tree: <i>Ganua obovatifolia</i> ' (Merr) (2a, 2b, 4a)   Ilk, Ibg, Tag - 3
PPH-2 *pikuq → *pikuʔ	'kind of children's game' (2a, 4a)   Ilk & Tag
PPH *piñkíq → *piñkiʔ	'strike objects together to produce a spark' (2a, 2b, 2c, 2d, 4a)   Ilk, Isg, Bon, Ibl, Tag, Bik, Ceb=7
PSP-2 *pintuq → pintuʔ	'loft in house where unmarried girls reside' (4d, 7)   WBM & Sangir=2
PPH *piqipiq → piʔpiʔ	'wash clothes on river rocks' (2d, 4a, 4b, 4d, 4e)   Ibl, Bik, Han, Ceb, Mar, Bkd, WBM=7
PPH-2 *pugiq → *pugiqʔ	'start the weaving of cloth' (2a, 4a)   Ilk & Bik=2
PPH *sabáliq → *sabáliʔ	'except, other than; another, different' (2a, 2c, 4a)   Ilk, Bon, Knk, Bik=4
PPH *sad(e)qay → *sadʔay	'hang, as s.t. on a nail' (2c, 4a, 4b, 4d)   Bon, Knk, Han, Bkd, Mong=5 & Tir
PPH-2 *sahuq → *sahuʔ	'word, speech' (2a, 4a)   Ilk & Bik
PPH-3 *saiñ → saʔiñ	'stand or be placed near s.o. or s.t.' (2d, 4a)   Ibl, Png, Msk=3
PPH-2 *sakaqay → *sakaʔay	'stand or walk with legs wide apart' (2b, 4a)   Ibl & Ceb [Monosyllabic expansion]
PPH *sañ(e)qát → *sañʔat	'put s.t. in a high place' (2a, 2d, 4a)   Ilk, Ibl, Bik, Ceb=4
PPH *sapat ~ *sapʔat	'put s.t. above' (1, 2a, 2b, 2d, 4a)   Yami, Itb, Ilk, Isg, Ibl, Png, Msk & PEGor=8
PPH *saq(e)gid → *saʔgid	'touch or brush against' (2a, 2d, 4a, 4e)   Ilk, Ibl, Bik, Mas, Mar=5

PPH *saq(e)nit → sánit	'snag, be snagged on s.t.' (2d, 4a)   Ibl, Tag, Akl, Ceb = 4   Glottal only in Ibaloy
PPH *saR(e)qeb → *saʔeReb	'fetch water' (2a, 2b, 2c, 4a, 4d, 4e)   Ilk, Ifg, Cas, Akl, Hil, Mar, Bkd & Ifg = 8   Tag ʔigib
PNP *sauŋ → *saʔuŋ	'canine tooth, tusk, as of wild boar' (1, 2a, 2c)   Yami, Itb, Ivt, Ibt, Ilk, Bon, Knk = 7
PPH *saw(e)qa → *saʔwa	'feel bored or uneasy about s.t.' (2b, 2d, 4a)   Cas, Png, Tag, Bik, Mas, Hil, Ceb, Msk = 8   & Han
PSP *sedáq → *sedáʔ	'fish; protein eaten with rice' (2a, 2b, 2c, 2d, 4a, 4b, 4c, 4e, 8) [RDZ]   Tag, PMin, Tnd, Tnt, Mong = 5
PPH *sibáq → *sibáʔ	'gluttony, uncontrolled appetite' (2d, 4a, 4b, 4e)   Png, Tag, Bik, Han, Akl, Mar = 6
PPH *sidáq → *sidáʔ	'food eaten with rice'   Ilk, Atta, Isg, Itw, Bon, Ifg, Png, Tag, Bik, Akl, Han, Btk, Mar = 13 > *isdaʔ
PPH-2 *siluq → *siluʔ	'noose, snare, net' (1, 2a, 2b, 3, 4a)   Yami, Itb, Ilk, Agta, Isg, Cas, AyA, Tag, Bik = 9
PPH *símaq → *símaʔ	'barb of a hook' (1, 2a, 4a, 4b)   Itb, Ibt, Ilk, Tag, Bik, Han, Ceb = 7
PPH-3 *sin(e)qek → *sinʔek	'hiccup, produce a sound in the throat' (3, 4a, 4d)   AyA, Bik, Bkd = 3
PPH *sip(e)qún → sipʔun	'cold, runny nose' (2a, 2b, 4a, 4d)   Ilk, Isg, Cas, Tag, Bik, Ceb, Bkd, Msk = 8 & Akl sipʔon
PPH *sipíq → *sipíʔ	'break off a component piece of s.t.' (2d, 4a)   Png, Bik, Akl, Hil, Ceb, Msk, Tsg = 7
PPH *siq(e)láb → *siʔláb	'burn, expose to fire' (2c, 2d, 3, 4a, 4d)   Bon, Png, Kpm, Tag, Ceb, Bkd = 6
PPH *siq(e)rip → *siʔrip	'peep, spy on' (2a, 2b, 2d, 4a, 4b, 4e)   Ilk, Isg, Ibl, Png, Tag, Bik, Han, Ceb, Mar = 9
PPH-3 *siqíd → *siʔid	'trap for mudfish' (2a, 4a)   Ilk, Tag, Bik = 3
PPH-3 *siraq → *siraʔ	'food eaten with rice'   w/ *sedaq   Ibl, Png, Bik = 3
PPH *súbaq → *súbaʔ	'go upstream, ascend a river' (2a, 2d, 4a, 4e)   Ilk, Png, Ceb, Mar, Msk = 5   Akl & Tir
PPH *suháq → *suháʔ	'fruit tree, the pomelo: <i>Citrus decumana</i> ' (2a, 3, 4a)   Ilk, Kpm, Tag, Bik = 4   Akl suwaʔ
PPH-3 *suq(e)kip → *sukip	'insert, tuck in' (2d, 4a, 4e)   Ibl, Ceb, Mar = 3   No evidence for *q or *ʔ   Ibaloi ? unexplained
PPH *suq(e)lút → *suʔlut	'wear, as clothes, get dressed' (2d, 4a, 4e)   Png, Tag, Bik, Mar = 4   Tag suʔot *1 > zero
PPH-3 *suquk → *suʔuk	'enter' (2c, 4d, 4e)   Knk, Mar, WBM = 3
PPH *tag(e)búq → *tagbuʔ	'meet, encounter, happen upon' (2b, 4a, 4b)   Cas, Bik, Han = 3   Tag tagpoʔ
* PPH *tak(e)láq → *takláʔ	'click with the tongue' (2a, 3, 4a)   Ilk, Bot, Bik, Ceb, Tsg = 5
PPH *takíp   Ibl i-taʔkip (?)	'cover; a cover' (2a, 2c, 4a)   Ilk, Ifg, Tag, Ceb, Msk = 5   Ibl i-taʔkip
PPH-2 *tálaq → *tálaʔ	'go for a walk' (3, 4a)   Bot & Ceb = 2
PPH-3 *taliwájaq → *taliwájaʔ	'middle, middling, average' (2a, 4a, 4d)   Ilk, Ceb, WBM = 3
PPH-3 *talúbuq → *talúbuʔ	'grow rapidly, thrive' (2a, 2b, 4a)   Ilk, Cas, Bik = 3
PPH-2 *talukaeb > *talukaʔeb	'eyelid' (2a, 4a)   Ilk & Msk = 2   Note: Png talokap
PPH *tampípiq → *tampípiʔ	'telescoping basket, double basket' (2a, 2c, 2d, 4a)   Ilk, Bon, Ibl, Tag, Bik, Tsg = 6
SLZ-axis *tampuq → *tampuʔ	'sulk, feel remorse' (2d, 4a)   Cas & Bik = 2 (possibly a local development) + Tag
PPH-3 *taŋ(e)buq → taŋbuʔ	'bamboo shoot ~ sucker' (3, 4b)   AyA & Han = 2 & Akl
PPH *taŋáq → *taŋáʔ	'incapable, incompetent' (2a, 2d, 3, 4a, 4e)   w/ *taŋah   Png, Ceb, Mar, Tsg = 4

PPH *taŋiliq → *taŋili?	'tree: <i>Shorea polysperma</i> ' (2a, 3, 4a)   Ilk, AyA, Kpm, Tag, Akl=5
PPH *taŋuq → *taŋu?	'nod the head, as in agreement' (1, 3, 4a)   Yami, Itb, AyA, Kpm, Tag, Bik=6
PPH *tapiq → *tapi?	'board, lumber; beam in house construction' (1, 2a, 2b, 3, 4a)   Bashiic, Ilk, Isg, Bot, Akl, Hil=8
PPH *tapuŋ → *tap?uŋ	'rice flour' (2a, 2d, 4d, 6)   Ilk, Ibl, Bot, WBM, Tir=5   Bkd tap?uŋ, Mapun tappuŋ
PPH *taq(e)naw → *ta?naw	'see or look at s.t. far away' (2a, 2b, 4a) [RDZ]   Ilk, Cas, Bik, Akl, Hil, Msk, PEGor=7
PPH *taq-1 → *ta?	'because' (1, 2a, 2b, 2c, 2d, 3, 4a, 4d)   Yami, Itb, Ibt, Ilk, Isg, Ifg, Btd, Ibl, Png, Kpm, Bik, Bkd=12
PPH *taq-2 → *ta?	[particle that softens questions, etc.] (2b, 2d, 3, 4a, 6)   Isg, Png, Kpm, Tir, Tsg=5
PPH *tebaq → *teba?	'cut down a stalk of bananas' (1, 2a, 3, 4a, 4d, 4e)   Itb, Ilk, Bot, Tag, Bik, Ceb, Mar, WBM=8
PPH-3 *tikiq → *tiki?	'gecko sp.' (3, 4a, 4b)   AyA, Han, Ceb=3
PPH-2 *tikuq → *tiku?	'bird sp.' (2c, 4a)   Knk & Bik=2
PSP *tin(e)qaw → *tin?aw	'clear, pure, of water'   Tag, Akl, Ceb, PSangiric, Toratan=5
PSP *tipuq → *tipu?	'picking of fruit, falling out of teeth' (4a, 7, 8)   Tag, PSangiric, Tnt, Mong=4
PPH-2 *tiq(e)pas → *tip?as	'cut off with one stroke' (1, 4a)   Itb & Tag=2
PPH-3 *tiq(e)ris → *ti?ris	'urine; to urinate' (2d, 4a, 4b) [RDZ]   Png, Bik, Han=3
PPH *tiqad → *ti?ad	'bend backward, as when standing on tiptoe' (2c, 2d, 4a)   Knk, Ifg, Ibl, Tag, Ceb=5
PPH-3 *tiqin → *ti?in	'decant, pour liquid out for drinking' (2a, 4a)   Ilk, Ceb, Msk=3
PPH *tiqis → *ti?is	'put up with, endure, be patient' (2b, 3, 4a, 4b)   Cas, Bot, Tag, Han=4 & Akl
PPH-3 *titiq → *titi?	'drip' (2c, 2d, 4a)   Bon, Cas, Bik=3
PNP *tugiq → *tugi?	'the lesser yam, <i>Dioscorea</i> sp.' (1, 2a, 2c, 4a)   Ibt, Ilk, Bon, Knk, Btd, Tag=6
PPH *tukaq → *tuka?	'beak; to peck, of birds; to bite, of a snake' (3, 4a, 4d, 4e)   AyA, Ceb, Mar, Bkd, Msk=5
PPH *tundaq → *tunda?	'lead, conduct, escort' (2a, 3, 4a, 4e)   Ilk, AyA, Tag, Mar=4
PPH-2 *tuŋkaq → *tuŋka?	'sleepy, drowsy' (2b, 4a)   Cas & Bik=2 (possibly a local development)
PPH *tupiq → tupi?	'fold, crease' (2a, 2d, 3, 4a)   Ilk, Ibl, Png, Bot, Tag, Bik=6
PPH *turiq → *turi?	'circumcision' (1, 3, 4a, 4b, 4c, 4e)   Itb, Kpm, Tag, Bik, Han, Akl, Btk, Mar=8
PPH-3 *tutuq → tutu?	[interjection used to call a dog] (2a, 2b, 4a)   Ilk, Cas, Bik=3
PSP *tuyuq → *tuyu?	'point at, aim for, intend to do' (3, 4a, 4b, 4d, 4e)   Bot, Han, Akl, Mar, Bkd, WBM, Msk, Tsg=8
PPH *usauR → usa?uR	'go downstream, go with the current' (2a, 2c, 4a, 4d) Ilk, Ifg, Bkd, Msk=4
PPH *wasag   Akl was?ag (?)	'scatter, disperse' (2a, 3, 4a, 4c)   Bot, AyA, Ceb, CTgb=4   & Akl was?ag (?)
PPH *wiqwiq → wi?wi?	'slit open' (2c, 4a)   Bon, Knk, Akl, Ceb=4

instances, subgrouping evidence does not support the reconstruction of \*q, such as with all northern Philippine languages and all Greater Central Philippine languages where \*q cannot be a reconstructed phoneme for their immediate proto language. In such a situation, I would propose a glottal stop be the default choice,

or (as was formerly done by Blust, Dyen, McFarland, myself, and other authors) ambiguity could be indicated with bracketed options [q?].

### 9. AN AS YET UNRECONSTRUCTED PPH INITIAL PHONEME—\*y.

In a note to PMP \*qayuyu 'coconut crab: *Birgus latro*' in the ACD, Blust states: "Among the more than 2,200 etyma in Dempwolff (1934–38) only two, \*yawak 'monitor lizard' and \*yuyu 'kind of large crab', begin with \*y. It is now clear that both etyma were trisyllables in which \*y was medial (\*bayawak, \*qayuyu) and that no instances of initial \*y can be reconstructed at any level in the Austronesian family tree above POc." I beg to differ. In my ZDS under "Y-Etyma," there are at least eighteen etymologies that might be assigned to PPH, although under my hypothesis only twelve are PPH, while four are PNP and two are PSP. Altogether I have found more than eighty<sup>30</sup> reconstructions that delineate Philippine microgroups. While some of the functors are clearly derivable from the marker \*i preceding another root, the fact remains that this resulting \*y undergoes appropriate consonantal changes in those languages where \*y merges with another phoneme (unlike \*i).<sup>31</sup>

- PPH \*ya [cm-cn-sg-nom] (common noun singular nominative case marker)
- PPH \*ya [deic-1-root] (first person demonstrative root)
- PNP \*ya [ligature]
- PPH \*yaʔmek 'soft; smooth; easy'
- PNP \*yaʔpaw 'light(weight)'
- PPH \*yakál 'tree: Philippine mahogany, *Shorea* or *Hopea* sp.'
- PPH \*yaken [pro-1-sg]
- PPH \*yamen [pro-1-pl]
- PSP \*yami [pro-1-pl], possibly PAN
- PSP \*yamu [pro-2-pl]
- PNP \*yápit 'thin'
- PPH \*yawyaw 'angry, frustrated; baffled'
- PPH \*yay [deic-1]
- PPH \*yegyeg 'earthquake' [Cf: PPH \*yugyug]
- PPH \*yi [deic-3-root]
- PNP \*yu [pro-2-pl-gen]
- PPH \*yugyug 'shake' [Cf: PPH \*yegyeg]
- PPH \*yupyup 'inhale ~ exhale'

30. PPH \*y- may be the lowest in initial frequency of all consonants (see table 8, seventeen for PPH in the ACD as of 30 April 2020), with one at the PAN level (\*ya [common noun singular nominative case marker]). The other semivowel PAN \*w (82) fares much better. Among the other lower-frequency initial PAN consonants are \*n (80), \*C (64), \*z (56), \*c (55), \*ñ (25), and \*N (23). When intervocalic and coda positions are included, the frequency of \*y rises significantly.

31. Thus, PCP \*yadtu [deic-3-pred] > Camotes zadtu, Jaun-Jaun, Surigaonon jadtu; GCP \*diyan [deic-2-loc] > Mamanwa dizan; CBs \*yuta? > Asi duta?, Boholano juta? 'earth'. I note this phenomenon even at the highest level in the ACD, where, for example, Bunun has ðami [pro-1-pl-nom] < PAN \*yami, ðaku [pro-1-sg] < \*yaku, iðuk 'orange' < PAN \*iyuk, basað 'a hairy vine': Pueraria hirsuta < PAN \*baSay, and atað 'kill' < PAN \*aCay.

I have yet to encounter a Philippine dictionary that does not have a Y section. Many of the ZDS reconstructions were originally drawn from my field word and later could be compared with dictionaries for citations with initial y-. Many dictionaries have abundant lemma, such as Cebuano (Wolff 1972) with 208, Waray (Tramp 1995) with 161, Tagalog (Panganiban 1972) with 118, Ilokano (Rubino 2000) with 101, Itbayaten (Yamada 2002) with 96, Hiligaynon (Kaufmann 1934) with 92, Bontok (Reid 1976) with 83; all the way down to Tausug (Hassan and Ashley 1994) with 12, Kagayanen (Harmon 1977) with 8, Arta (Kimoto 2017) with 4, and Tiruray (Schlegel 1971) with 3.

**10. BASHIIC AND ILOKANO “AXIS.”** I reject out-of-hand the nineteen reconstructions that only have Bashiic (1) and Ilokano (2a) cognates. (See table 6.) We do not know the prehistory of the region, but common sense dictates that, at best, such forms may have been innovated in the northernmost region of the Philippines, but did not take hold and carry on over or down into the Cordilleran and more southerly Philippine languages. I find these reconstructions completely analogous to the situation that “sweat” is Tagalog pawis and Kapampangan pawas. While a reconstruction \*pawes is certainly derivable, it is clearly an innovation created shortly after the Tagalogs moved into areas in Luzon occupied by the Pampangos. Despite the fact that each is in a different Philippine subfamily, it would be unjustified to assign \*pawes to PPH.

TABLE 6. THE BASHIIC AND ILOKANO “AXIS.”

BashIlk *anam	‘plant: <i>Glochidion</i> sp.’ (1, 2a)   Yami & Ilk = 2
BashIlk *bagiat	‘anklet, ribbon worn around leg’ (1, 2a)   Yami & Ilk = 2
BashIlk *dulit	‘smudge, dirty spot’ (1, 2a)   Yami, Itb, Ivt, Ilk = 4
BashIlk *duyuR	‘coconut shell receptacle for food or water’ (1, 2a, 2b)   Yami, Itb, Ivt, Ibt, Ilk = 5
BashIlk *hilek	‘rudderfish: <i>Kyphosus cinerascens</i> ’ (1, 2a)   Yami, Itb, Ilk = 3
BashIlk *kelaqat → *kela?at	‘sudden, abrupt, unexpected’ (1, 2a)   Itb & Ilk = 2
BashIlk *lanlan	‘eat together, as a group’ (1, 2a)   Itb, Ibt, Ilk = 3
BashIlk *lik(e)taw	‘jump over or across’ (1, 2a)   Yami & Ilk = 2
BashIlk *lubay	‘earring’ (1, 2a)   Yami, Itb, Ivt, Ilk = 4   Yami, Itb, Ivt, Ilk = 4
BashIlk *luya	‘blame, accuse’ (1, 2a)   Itb & Ilk = 2
BashIlk *pusij	‘wean a baby from breastfeeding’ (1, 2a)   Itb, Ibt, Ilk = 3
BashIlk *Rabat	‘driftwood, flotsam’ (1, 2a)   Ivt(Isamorong) & Ilk = 2
BashIlk *RaRaŋ	‘large marine mollusk: <i>Turbo marmoratus</i> ’ (1, 2a)   Itb, Ivt, Ibt, Ilk = 4
BashIlk *riak	‘noisy’ (1, 2a)   Itb & Ilk = 2
BashIlk *saway	‘in excess, overabundant’ (1, 2a)   Itb, Ivt, Ilk = 3
BashIlk *tatus	‘coconut crab’ (1, 2a)   Yami, Itb, Ibt, Ilk = 4
BashIlk *tubuy	‘send for; allow to go’ (1, 2a)   Yami, Itb, Ibt, Ilk = 4
BashIlk *tukal	‘prop, supporting beam in house’ (1, 2a)   Itb & Ilk = 2
BashIlk *urit	‘stripe, streak, line’ (1, 2a)   Itb, Ilk   Note: PMP *qurit ‘stroke, stripe, line’

## 11. CASIGURAN DUMAGAT AS A "WITNESS" LANGUAGE.

Casiguran Dumagat is cited quite frequently in this paper. I feel that this language has borrowed extensively from both Bikol and Tagalog (and some local Negrito languages), and therefore cannot be either a "test" or "criterion" language, but rather only a "witness" (Zorc 1982, 1984). This is particularly relevant when it provides the only Northern Philippine evidence for PPH.<sup>32</sup> It is often the victim of Central Philippine "leakage" (Blust's term within the article). This affects thirteen of Blust's proposals (see table 7).

## 12. CERTAIN CORRECTIONS, AMENDMENTS, OR ADJUSTMENTS.

Under his table 2, in the discussion of #06 concerning the replacement of PAN \*Raya, Blust states: "Reflexes of \*dakél in the same meaning are found from the far north (Batanic, including Yami) [to the far south (Sangiric).]" However, Batanic~Bashiic evidence is for \*rakul, which is shared with Iraya lakul, Kapampangan ma-ragul.<sup>33</sup> It is not clear why words such as this have so many variants (Proto-Manobo \*dagi, PSP \*dakela?, PBS \*dakú?, GCP dakula?) and replacements (South Cordilleran \*balleg, Ifugao \*eŋal, Central +South Cordilleran \*eteŋ, North Bisayan-axis \*bahel, Bilic \*boŋ, WBs \*hanged, Klata paya, PPH \*selaR, Ilongot \*siken; see ZDS. Perhaps "big" was used in names (as in Tboli) and could have fallen under a DEATH TABOO<sup>34</sup> such that alternatives or synonyms were created throughout the Philippines.

With regard to the semantic shift of PAN \*Rumaq 'house' to PPH "sheath (house of bolo)," as can be seen in ZDS, while clearly a valuable replacement innovation, this is primarily found throughout southern Mindanao (Tiruray ruma?, Tboli lumak, Koronadal Bilaan lumo?, Sarangani Bilaan luma? (> Tagabawa Manobo and Tagakaolo luma?, Sarangani Manobo loma), Sangil roma, Sangir homa; Sindangan Subanen gume?an, Siocon Subanon guma?an. Tagalog<sup>35</sup> must have had this word as [guma?] and brought it to Southern Luzon, where Botolan Sambal could borrow it. Philippine languages have a broad swath of lexemes in the meaning "sheath" or "scabbard." Tagalog gave up its word in favor of PNP

32. For example, Reid (1994) has argued that it is Central Philippine, while Glottolog (based on other analyses) considers it as within Nuclear Northeastern Luzon (<https://glottolog.org/resource/languoid/id/casi1235>).

33. Besides the merger of \*R > y, \*dakul is one etymon that suggests the inclusion of Bashiic, Southern Luzon and Northern Mangyan into a single macrogroup.

34. Although this has not been documented for the Philippines, my Peace Corps experiences in Aklan (1965–69) made me sensitive to people hushing me when I named a dead person. I never understood why. My decade in Australia (1976–86) later enlightened me about how seriously a "death taboo" (the prohibition of uttering a name that seemed to match phonologically or phonotactically with other lexemes) could affect the lexicon of a language, such as the death of a chief named [Matuwa], which caused the replacement of [motoka] "automobile" (English motorcar), by [lorri] (British lorry) in Aboriginal communities of Northeast Arnhem Land.

35. There is growing evidence that Tagalog had its roots in southern Mindanao: the otherwise unique Tagalog word for 'bad' is *sama?*, which has been found to be cognate with Bagobo-Klata *homo?*. Along with this evidence for \*guma?, the sharing of the word for 'all' *lahat* with southern Mindanao languages (that have no reason to borrow from Tagalog amidst pressure from Bisayan and other local languages) and the use of \**buhajin* for 'sand' are beginning to give more insight as to the original homeland of the Tagalog people within the Philippines.

TABLE 7. CASIGURAN DUMAGAT AS A “WITNESS” LANGUAGE

PSP *qaRutay	‘plant in banana family, <i>Musa textilis</i> ’ (2b, 4b, 6) [RDZ]   Cas*, Han, Tbl, BIS = 4   PPH if Cas is not a loan
PSP *áyus	‘arrange, make s.t. neat or proper’ (2b, 4a, 4b, 5)   Cas*, Tag, Han, Agy = 4
PSP *butí	‘smallpox, swine disease’ (2b, 4a, 7)   Cas*, Hil, Ceb, Msk, San, Mong, Gor = 7
PSP *dág(e)saq → dagsa?	‘wash ashore’ (2b, 4a, 4e, 5)   Cas*, Bik, Akl, Agy, Ceb, Mar = 6   Agutaynen dagta (no final k, phonotactic glottal stop)
PSP *dalupániq → dalupáni?	‘kind of freshwater fish’ (2b, 4a)   Cas*, Tag, Bik
PSP *dapak	‘marine fish, probably snapper sp.’ (2b, 4a, 5)   Cas*, Agy, Ceb, Mapun = 4
PSP *dápát - 4	‘should, ought to’ (2b, 4a, 5)   Cas*, Tag, Bik, Agy = 4
PAN *dílám	‘stick out the tongue’ (2b, 4a, 5)   Cas*, Bik, Agy, Bkd = 4   Note in ACD cites Kavalan kata-rilam
PPH *dùlem	‘darkening, obscuring of light’ (2b, 4a)   Cas*, Bik, Han, Akl, Ceb = 5   SEE: ZDS lurem [NPh dùlem] ‘cloud ~ raincloud’
PCP *gásaj	‘coral’ (2b, 4a)   Cas*, Tag, Bik, Ceb = 4
GCP *gayák	‘plan, prepare to do s.t.’ (2b, 4a, 4b)   Cas*, Tag, Bik, Han = 4
GCP *hiláw	‘raw, unripe’ (2d, 3, 4a, 4d)   Cas*, Bot, Tag, Bik, Akl, Ceb, WBM, Mong = 8
PSP *kamánsi[?]	‘the seeded breadfruit’ (2b, 4a, 4b, 4d, 4e, 6)   Cas*, Han, Tag, Ceb, WBM, Msk, Mar, Tir = 8
PCP *kepkép - 2	‘lie down flat, of the hair’ (2b, 4a)   Cas*, Bik, Ceb = 3 (possibly a local Central Philippine development)
PCP *kisaw	‘sound of swishing, as of hand passing through water’ (2b, 4a)   Cas*, Tag, Akl, Ceb = 4
PCP *kub(e)li → *kubli	‘take cover, hide behind’ (2b, 4a)   Cas*, Tag, Ceb = 3 (possibly a local Central Philippine development)
PCP *kulañut	‘dried nasal mucus’ (2b, 4a)   Cas*, Tag, Ceb = 3 (possibly a Central Philippine development)
PCP *laláñ	‘create’ (2b, 4a)   Cas*, Tag, Bik, Ceb (possibly a Central Philippine development)
*lamíg → PAN *ramig	‘cold’ (2b, 4a)   Cas* & Tag = 2   Note: Kin ramíg, Akl Eamíg, Han ma-ramíg [ZDS] < PAN *ramig [ACD]
PSP *latag	‘spread out on the ground’ (2b, 4a, 4b, 5)   Cas*, Tag, Han, Agy, Ceb, Tsg = 6
PPH *layas - 1	‘desert a place’ (2b, 4a)   Cas*, Bot*, Tag, Bik, Agy, Hil = 6
*lig(e)tas → PPH *ligtas	‘save, rescue’ (2b, 3, 4a, 4b)   Cas*, AyA, Kpm, Tag, Bik, Han, Akl = 7
*lug(e)múk → PCP *lugmuk	‘fall in a heap, of a person whose legs collapse’ (2b, 4a)   Cas*, Tag, Bik
*luhúd → PSP *luhed	‘the act of kneeling’ (2b, 4a, 4b, 5)   Cas*, Tag, Bik, Han, Akl, Ceb, Msk, Agy = 8   See ZDS: WBM luhed ‘to worship’
*pugad → PSP *puRad	‘nest, as of a bird’ (2b, 4a, 4b, 4e)   Cas*, Tag, Han, Akl, Btk, Mar, Msk, Tsg = 8   See ZDS *puRad > Kal puyad
PPH *saw(e)qa → *sa?wa	‘feel bored or uneasy about o.t.’ (2b, 2d, 4a)   Cas*, Png, Tag, Bik, Mas, Hil, Ceb, Msk = 8   & Han   Currently revised in the ACD to PWMP *saweqaq
GCP *sáysay	‘narrate, as in telling a story’ (2b, 4a, 4d, 5)   Cas*, Tag, Bik, Akl, Agy, Ceb, Bkd, WBM, Msk = 9
SLz-axis *tampuq → *tampu?	‘sulk, feel remorse’ (2d, 4a)   Cas & Bik = 2 (possibly a local development)   Note Tag tampó
PCP *tibay	‘durable, long-lasting’ (2b, 4a)   Cas*, Tag, Bik, Akl = 4   Stated to be a Tagalog loan in Aklanon; Akl has <i>lig?on</i> < GCP *lig?en [ZDS]
PCP *tinduk	‘large cooking banana or plantain variety’ (2b, 4a, 4b)   Cas*, Bik, Han, Ceb, Msk = 5

\*kalúban (found in Ibanag kellebban, Ilokano, Pangasinan kalu:ban, Ilongot kaube:n, Remontado karu:ban, Casiguran Dumagat kaluban, Kapampangan, Bolinao kalu:ban; ultimately brought to Mindoro where it was borrowed into Hanunoo kalu:ban). Indeed words for "sheath" have a fascinating distribution (see ZDS): Northeast Cordilleran \*ʔǎlag (Agta ʔǎlag, Atta ala:k, Gaddang, Yogad ʔalág, Malaweg ʔalleg); Northwest Cordilleran \*baʔina (Ilokano, Manabo, Luba, Itneg baʔina, Malaweg, Itawis bayna, Kalinga baʔinay; Itbayaten bayna?), Central Cordilleran \*siket (Amganad Ifugao hikót, Kiangan hikot, Batad hoʔót, Bayninan hekót), Southern Cordilleran \*atip (Iboloi ʔatip ~ katip, Kayapa Kallahan ʔatip). The Southern Philippine languages have innovated \*tageb or a derived \*tageban (Aklanon, Romblomanon tagób, Kuy tageban, Hiligaynon, Surigaonon tagúb, Kagayanen, Batak tageban, Kalamian tayeʔan, Tausug (+Samal) taguban); with Danao \*e > o indicating a borrowing from Bisayan: Maranao, Magindanw tagoban, Iranun taŋgoban. Some Mansakan dialects have borrowed Malay perai 'sword' deriving \*peraijan for 'sheath'. All in all, this semantic shift seems to have filled a need for an alternate lexeme.

I feel that the following reconstructions should be removed insofar as there are external cognates (the majority of them currently available in the ACD) that provide either a reasonably close or exact match.

- (10) \*aŋkas 'ride together with s.o.' is a widespread loan from Spanish *anca(s)* 'rump, hindquarter' [ZDS], precisely where someone rides with another on a horse or carabao.<sup>36</sup>
- (11) \*kabég → PWMP \*kabeR 'large fruit bat' (3, 4a, 4d, 4e) | Kpm, Akl, Ceb, Mar, Bkd, WBM, Msk = 7 → Tag *bayakan* (loan from an \*R > y language + metathesis \*kabeRan, Note Malay *kelawar* (\*k < al > abeR).
- (12) \*kaniá → \*kanya 'own, own's own; self' (2a, 2b, 4a) | Ilk, Cas, Tag, Bik = 4 [3-sg-obl] A semantic innovation within Tagalog from its oblique pronoun: \*kan- + \*iya [basically pro-3-sg-obl], but otherwise a nominative pronoun in Aborlan and Palawan Batak (*kanya*) and in Hanunoo (*kanya*) and Buhid (*hanya*) [ZDS]. The ACD does note "Possibly a Tagalog loan distribution," with which I concur.
- (13) \*lanét → \*lanés 'dried up, wilted, of plants' (1, 2a, 2b, 4a, 4e, 5) DOUBLET | Ilk lanet (is the odd man out and must be a loan from another language where \*s > t); Agy *lanet* < \*lanes, with cognates in Itb, Cas, Agy, Bik, Akl, Mar, Tsg.
- (14) \*ledem (1, 4a) | Itb & Tag both show metathesis of PMP \*delem 'shaded, shadowy'.
- (15) \*linawa < PAN \*NiSawa 'breath, breath soul' (2d, 5) | Ibl, Png, Agy = 3 < PPH \*Rahinawa [ZDS] | All three languages (plus Ilongot *yinawa*) 'heart' have [l] as the reflex of \*R, with loss of \*h and truncation of \*Ra > \*Rinawa; note in particular WBM *gehinawa* (the only quadrisyllabic witness) and Itb *hinawa* (preserving the \*h, but truncation of \*Ra).

36. Email communications (8 February 2020) with Alex Garcia, a native speaker of Spanish who has been working in Northern Alta, informed me that this word has mostly died out in Spain but is used in Mexico, the major source of Spanish loanwords in the Philippines. See Quilis and Casado (2008), section 5.7.7.

- (16) \*lunek - 2 ‘pulp, solid residue left after squeezing to remove coconut oil, etc.’ (2a, 4a) | Ilk & Bik = 2. Semantically close to PWMP \*lunek -1 ‘pulpy’ in Tsg, Kdz, NgD, Iban, Mal, PMN [Demp \*lunak ‘soft, tender, weak’]
- (17) \*sagút ‘answer, as a call or question’ (2b, 4a, 4b) | Cas, Tag, Bik, Han = 4 | (possibly a Central Philippine development) [Note also Malay *sahut* (chance resemblance?).]
- (18) \*selaR ‘big, gross, coarse’ (4a, 7, 8) [RDZ] | Sub, Sng, PMn, Tmb, Tnd, Tnt, PEGor = 8 < PWMP Timugon-Murut is not a Philippine language.
- (19) \*tambal < PMP \*tambar ‘treat with medicine’ (3, 4a, 4d) | AyA, Bik, Akl, Ceb, Bkd = 5 | Note WBM *tambar* < PMP \*tambar ‘antidote’ [Bikol & Bukidnon must be loans.]
- (20) \*tampuq → \*tampu? ‘sulk, feel remorse’ (2d, 4a) | Cas & Bik = 2 (probably a local SLz development) | Possibly: Tag *tampo* + ? loan marker(?) note Tag *tampuh-in*
- (21) \*tandaq → \*tanda? ‘having a good memory; intelligent’ (2a, 2b, 3, 4a, 4b, 5) | Ilk, Cas, AyA, Bik, Han, Akl, Agy = 8 | Malay LOAN or legitimate glottal? Malay *tanda* ‘sign, signal, quality’ | Note Tagalog *matanda?* ‘old, aged; elder’
- (22) \*taŋ(e)buq ‘tall wild grass or cane’ (3, 4a) | Bot, Tag, Bik, Han, Ceb < PWMP Malay *tamboh*
- (23) \*tawad < PWMP \*tawad ‘pardon, to forgive’ (2b, 4b) | Cas & Han = 2 | New sense via \*pa-tawad + Akl < PWMP \*tawad ‘bargain, haggle’ + \*pa- {causative} prefix.
- (24) \*tayaw < PWMP \*sayaw [traditional dance form] (2b, 2d, 5) | Ifg, Ibl, | Agy < \*sayaw = 3 | Probably forms from \*sayaw with \*s > [t] (via loan in Ifg & Ibl)
- (25) \*títiq → PWMP \*títiq ‘drip’ (2c, 2d, 4a) | Bon, Cas, Bik = 3 | Add: Aklanon *ti?ti?* ‘get last drop’

**13. MUSINGS ON THE “POSITION” OF PPH.** While I, like Blust, certainly do not accept the subgrouping nodes presented by Reid (1982:213), I have often wondered what to make of the chronological period of Malayo-Polynesian development within the Philippines prior to any immigration away from the archipelago. After the Formosan exodus, the Philippines was admittedly the staging area for what later became MP. Nasal accretion (NC clusters) seems to have started in the Central and Southern Philippines and then increased dramatically in the Indonesian–Malayan languages and also in Proto Oceanic. Still, the Cordilleran languages do have nasal clusters<sup>37</sup>, not only in loanwords (*kanta* ‘sing’, *kuntra* ‘oppose’, *pantalun* ‘trousers’, *lanjka* ~ *nanjka*<sup>38</sup> ‘jackfruit’) but also in innovated vocabulary specific to one or another subgroup (\*buntug ‘slow’, \*dantak, \*tamnay ‘lacking salt’, \*karamba ‘water jar’, \*parintumenj ‘kneel’,

37. All of the following examples were obtained from McFarland (1977).

38. It is not clear that these are loans. If not, they represent a rare instance of an original NC cluster. In support of a retention, hypothesis would also be \*banjka ‘boat’.

\*punta 'hit, strike', \*ranjay 'bridge', \*samʔit 'sweet', \*suɟbat 'answer', \*tamʔaw 'look', \*umbeg 'lie down'), \*taynan 'leave behind'.

While progress through the Philippines was relatively swift, there certainly seems to have been sufficient time for significant innovations to develop there (as demonstrated in this remarkable survey by Blust), yet not spread beyond. Nevertheless, in my complete run-through of the ACD two years ago, I found some seventeen-five etyma attributed to PMP or PWMP, which have no cognates whatsoever in the Philippines. While several may have been lost, many

**TABLE 8. PHONEME FREQUENCIES IN THE ACD AND THREE LANGUAGES.**

LANGUAGE	AKLANON	TAGALOG	KLATA	ACD
TOKENS	1725	1369	1043	7563
VOWELS				
a	2037 #01	1621 #01	674 #02	6145 #01
e	65 #22[ɛ]	30 #21[ɛ]	154 #16[ɛ]	2559 #05[ə]
i	740 #02	814 #02	343 #07	3048 #03
o	707 #04	388 #08	775 #01	268 #22[Oc]
u	680 #05	500 #04	455 #05	3896#02
CONSONANTS				
ʔ	708 #03	463 #06	463 #04	58 #30
q	n/a	n/a	n/a	1292 #12
h	453 #08	199 #16	095 #20	327 #21
S	n/a	n/a	n/a	225 #23
b	433 #10	296 #12	224 #12	1985 #08
d	287 #16	156 #18	225 #11	837 #15
j	n/a	n/a	n/a	159 #25
z	n/a	n/a	n/a	141 #27
g	359 #12	315 #11	133 #18	514 #18
p	317 #15	291 #14	254 #09	1666 #11
t	578 #07	532 #03	391 #06	2364 #06
C	n/a	n/a	n/a	174 #24
k	430 #11	292 #13	298	2610 #04
m	341 #14	361 #09	226 #10	957 #14
n	625 #06	470 #05	212 #13	1166 #13
ñ	n/a	n/a	n/a	95 #29
N	n/a	n/a	n/a	145 #26
ŋ	279 #17	222 #15	204 #14	1694 #10
l	257 #18	424 #07	516 #03	2049 #07
ɣ Akl   *R ACD	347 #13	n/a	n/a	790 #16
r	120 #21	82 #20	024 #21	579 #17
s	440 #09	350 #10	146 #17	1767 #09
c	n/a	n/a	n/a	117 #28
w	171 #20	109 #19	164 #15	537 #19
y	229 #19	175 #17	118 #19	411 #20

could have arisen in a different homeland (perhaps Borneo?) prior to the migrations across the Pacific.

Furthermore, dramatic yet isolated cases of retention are puzzling but must somehow be significant. Why does Aklanon alone retain [eásog] < PMP \*laseR ‘testicles’, while the word was lost everywhere else in the archipelago? How is it that Western Bisayan dialects (Aklanon, Kinaray-a, Bulalakawnon) retain [dahí?] ‘forehead’ metathesized from < PAN \*daqíS, when virtually all other Philippine languages have replaced the original etymon?

It is somewhat ironic that many Filipinos, in their concept of Philippine pre-history, believe that their origin was ultimately from Malaysia (or Borneo) centuries ago, while the inverse is true (Borneans and Malaysians ultimately emigrated from the Philippines millennia ago).

## ABBREVIATIONS

~	= or	CV(C)	= prefix involving reduplication of first consonant and first vowel, optionally followed by another consonant
1	= first person pronoun or deictic	deic	= deictic or demonstrative
2	= second person pronoun or deictic	Demp	= Dempwolff
3	= third person pronoun or deictic	EMn	= East-Mindanao axis
ACD	= Austronesian Comparative Dictionary ( <a href="http://www.trusnel2.com/ACD/">http://www.trusnel2.com/ACD/</a> )	Gad	= Gaddang
Agy	= Agutaynen	GCP	= Greater Central Philippines
Akl	= Aklanon	Gor	= Gorontalo
Asi	= Asi' language group (Bantoanon-Banton, Calatravanhon-Calatrava, Odionganon-Odiongan, Sibalenhon-Concepcion ~ Sibale, Simaranhon-Corcuera ~ Simara)	Han	= Hanunoo
Ata	= Ata Manobo	Hil	= Hiligaynon (or Ilonggo)
AyA	= Ayta Abellan	Ibg	= Ibanag
BashIlk	= Bashiic/Batanic-Ilokano axis	Ibl	= Ibaloi
Bik	= Naga Bikol	Ifg	= Ifugao
Bk	= the Bikol language group	Ilk	= Ilokano
Bkd	= Bukidnon Manobo	Isg	= Isneg
Bon	= Bontok	Itb	= Itbayaten
Bot	= Botolan Sambal	Ivt	= Ivatan
Btk	= Batak (of Palawan)	Kal	= Kalamian Tagbanwa
Cas	= Casiguran Dumaget	Kam	= Kamayo
CBs	= Central Bisayan	Kdz	= Kadazan
Ceb	= Cebuano	Kin	= Kinaray-a
Chm	= Chamorro	Klg	= Kalagan
cm	= case marker	Knk	= Kankana-ey
cn	= common noun	Kpm	= Kapampangan
CTgb	= Central Tagbanwa	Mal	= Malay
CV	= Consonant + Vowel syllable pattern	Mar	= Maranao
CVC	= Consonant + Vowel + Consonant syllable pattern	Mas	= Masbate(nyo)
		Mong	= Mongondow
		MP	= Malayo-Polynesian
		Msk	= Mansaka
		NC	= nasal cluster (nasal + consonant)
		NgD	= Ngaju Dayak
		nom	= nominative, subject or topic form
		NPh	= a northern Philippine language

Pal	= Palawano	PWMP	= Proto-Western-Malayo-Polynsian
PAN	= Proto-Austronesian	Rbl	= Romblon
PBS	= Proto-Bisayan	RDZ	= R. David Zorc
PCP	= Proto-Central-Philippine	San	= Sangir
PEGor	= Proto-East-Gorontalo	sg	= singular
PHF	= Proto-Hesperonesian-Formosan (Formosan & Philippine evidence)	SLz	= Southern Luzon axis
pl	= plural	Sng	= Sangir
PMN	= Proto-Minahasan	Sub	= Subanen
PMP	= Proto-Malayo-Polynesian	Tag	= Tagalog
Png	= Pangasinan	Tbl	= Tboli
PNP	= Proto-Northern-Philippine	Tir	= Tiruray or Teduray
PPH	= Proto-Philippine	Tmb	= Tombulo **
PPH-2	= only two witness languages presented in support of Proto- Philippine	Tnd	= Tondano
PPH-3	= only three witness languages presented in support of Proto- Philippine	Tnt	= Totemboan
pro	= pronoun	Tsg	= Tausug
PSP	= Proto-Southern-Philippine	WBM	= Western Bukidnon Manobo
		WBS	= West Bisayan
		Yami	= Yami
		ZDS	= Zorc Data Sheets   Philippine etymol- gies available at <a href="https://zorc.net/RDZorc/PHILIPPINE-ETYMA/">https://zorc.net/ RDZorc/PHILIPPINE-ETYMA/</a>

## REFERENCES

- Awed, Silin A., Lillian B. Underwood, and Vivian M. Van Wynen. 2004. *Tboli-English Dictionary*. Manila: Summer Institute of Linguistics, Philippines.
- Blust, Robert A. 1970. Proto-Austronesian addenda. *Oceanic Linguistics* 9:104–62.
- . 1991. The Greater Central Philippines hypothesis. *Oceanic Linguistics* 30:73–129
- . 2005. The linguistic macrohistory of the Philippines: Some speculations. In *Current issues in Philippine linguistics and anthropology parangal kay Lawrence A. Reid*, ed. by Hsiu-chuan Liao and Carl R. Galvez Rubino, 31–68. Manila: The Linguistic Society of the Philippines and SIL Philippines.
- Blust, Robert, and Steven Trussel. Ongoing. Austronesian Comparative Dictionary (<http://www.trussel2.com/ACD/>).
- Caabay, Marilyn A., Josenita L. Edep, Gail R. Hendrickson, and Melissa S. Melvin. 2014. *Agutaynen-English Dictionary*. Linguistic Society of the Philippines Special Publication 58. Manila: Linguistic Society of the Philippines.
- Charles, Matthew. 1974. Problems in the reconstruction of Proto-Philippine phonology and the subgrouping of the Philippine languages. *Oceanic Linguistics* 13:457–509.
- Conant, Carlos Everett. 1910. The RGH law in Philippine languages. *Journal of the American Oriental Society* 31:70–85.
- Conklin, Harold C. 1953. *Hanunoo-English Vocabulary*. University of California Publications in Linguistics, No. 9. Berkeley and Los Angeles: University of California Press.
- Dahl, Otto Christian. 1976 [1973]. *Proto-Austronesian*. 2nd rev. ed. Scandinavian Institute of Asian Studies Monograph No. 15. London: Curzon Press.
- Dempwolff, Otto. 1934–38. *Vergleichende Lautlehre des Austronesischen Wortschatzes*. Zeitschrift für Eingeborenen Sprachen 15, 17, 19. Berlin: Dietrich Reimer.

- Elkins, Richard E. 1968. *Manobo-English Dictionary*. Oceanic Linguistics Special Publication No. 3. Honolulu: University of Hawaii Press.
- Harmon, Carol W. 1977. *Kagayanen and the Manobo subgroup of Philippine languages*. Ph.D. diss., University of Hawaii.
- Hassan, Irene U., Seymour A. Ashley, and Mary L. Ashley. 1994. *Tausug-English Dictionary: Kabtangán Iban Maana*. Manila: Summer Institute of Linguistics.
- Headland, Thomas N., and Janet D. Headland. 1974. *A Dumagat (Casiguran)-English Dictionary*. Canberra: Pacific Linguistics (PL C-28).
- Himes, Ronald S. 2002. The relationship of Umiray Dumaget to other Philippine languages. *Oceanic Linguistics* 41(2): 275–94.
- Kaufmann, Rev. John. 1934. [*Hiligaynon*] *Visayan-English Dictionary Kapulungan Binisaya-Ininglis*. Iloilo.
- Kimoto, Yukinori. 2017. *A Grammar of Arta: A Philippine Negrito Language*. Ph.D. diss., Kyoto University, Japan.
- McFarland, Curtis D. 1977. *Northern Philippine Linguistic Geography*. Study of languages & cultures of Asia and Africa Monograph Series, No. 9. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- McKaughan, Howard P., and Batua A. Macaraya. 1967. *A Maranao Dictionary*. Honolulu: University of Hawaii Press.
- Milroy, James and Lesley Milroy. 1985. Linguistic change, social network and speaker innovation. *Journal of Linguistics* 21:339–84.
- Mintz, Malcolm Warren, and José Del Rosario Británico. 1985. *Bikol-English Dictionary, Diksiyonaryong Bikol-Ingles*. Quezon City: New Day Publishers.
- Pallesen, A. Kemp. 1985. *Culture Contact and language convergence*. Manila: Linguistic Society of the Philippines.
- Panganiban, Jose Villa. 1972. *Diksiyunaryo-Tesaurus Pilipino-Ingles*. Quezon City: Manlapaz Publishing Co.
- Pawley, Andrew, and Malcolm Ross. 1995. The prehistory of Oceanic languages: A current view. In *The Austro-nesians: Historical and Comparative Perspectives*, ed. by Peter Bellwood, James Fox, and Darrell Tryon, 39–74, Canberra: Department of Anthropology, RSPAS, The Australian National University.
- Quilis, Antonio, and Celia Casado. 2008. *La Lengua Española en Filipinas*. CSIC Press.
- Reid, Lawrence A. 1971. *Philippine minor languages: Word lists and phonologies*. Oceanic Linguistics Special Publication No. 8. Honolulu: University of Hawai'i Press.
- 1976. *Bontok-English Dictionary*. Canberra: Pacific Linguistics C-36.
- 1982. The demise of Proto-Philippines. In *Papers from the Third International Conference on Austronesian Linguistics*, ed. by Amran Halim, Lois Carrington, and S. A. Wurm, vol. 2, 201–16. Canberra: Pacific Linguistics.
- 1994. Possible Non-Austronesian lexical elements in Philippine Negrito languages. *Oceanic Linguistics* 33(1): 37–72.
- Ross, Malcolm. 2005. The Batanic languages in relation to the early history of the Malayo-Polynesian subgroup of Austronesian. *Journal of Austronesian Studies* 1(2): 1–23.
- Rubino, Carl Ralph Galvez. 2000. *Ilocano Dictionary and Grammar: Ilocano-English, English-Ilocano*. PALI Language Text. Honolulu: University of Hawai'i Press.
- Schlegel, Stuart A. 1971. *Tiruray-English Lexicon*. University of California Publications in Linguistics 67. Berkeley: University of California Press.
- Smith, Alexander D. 2017. The Western-Malayo-Polynesian problem. *Oceanic Linguistics* 56:435–90.
- Tramp, George Dewey. 1995. *Waray-English dictionary*. Kensington, MD: Dunwoody Press.

- Wolff, John U. 1972. *A Dictionary of Cebuano Visayan*. Philippine Journal of Linguistics Special Monograph Issue No. 4. Manila: Linguistic Society of the Philippines.
- Yamada, Yukihiro. 2002. *Itbayat-English Dictionary*. Endangered Languages of the Pacific Rim. Himeji: Himeji Dokkyu University.
- Yap, Fe Aldave. 1977. *A Comparative Study of Philippine Lexicons*. Institute of National Language. Department of Education and Culture
- Zorc, R. David. 1969. *A Study of the Aklanon Dialect: Volume 2: Dictionary of root words and derivations, Aklanon to English*. Kalibo, Aklan: Public Domain.
- . 1975. North Bisayan—An axis, not a subgroup. Unpublished note (<https://zorc.net/RDZorc/publications/>).
- . 1977. *The Bisayan dialects of the Philippines: Subgrouping and Reconstruction*. Pacific Linguistics C-44. Canberra: Australian National University.
- . 1978a. Proto-Philippine word accent: Innovation or Proto-Hesperonesian retention? In *Proceedings of the 2nd International Conference on Austronesian Linguistics*, 67–119. Pacific Linguistics C-61.
- . 1979d. On the development of contrastive word accent: Pangasinan, a case in point. In *South-East Asian Linguistic Studies*, ed. by Nguyen Dang Liem, vol. 3, 241–58. Canberra: Australian National University (Pacific Linguistics C-45).
- . 1982. Where, O Where, Have the Laryngeals Gone? Austronesian laryngeals re-examined. In *JICAL, Vol 2, Tracking the Travellers*, ed. by Amran Halim, Lois Carrington, and S. A. Wurm, 111–44. Pacific Linguistics C.75.
- . 1983b. Proto-Austronesian accent revisited. *Philippine Journal of Linguistics* 14(1): 1–24.
- . 1984. The Philippine language scene: sociolinguistic contributions of historical linguistics. In *Panagani Essays in Honor of Bonifacio P. Sibayan on His Sixty-Seventh Birthday*, ed. by Andrew Gonzalez. Manila: Linguistic Society of the Philippines.
- . 1986. The genetic relationships of Philippine languages. In *FOCAL II: Papers from the Fourth International Conference on Austronesian Linguistics*, ed. by Paul Geraghty, Lois Carrington, and S. A. Wurm, 147–73. Canberra: The Australian National University (Pacific Linguistics C-94)..
- . 1993c. Overview of Austronesian & Philippine accent patterns. In *Tonality in Austronesian Languages*, ed. by Edmondson and Gregerson. Oceanic Linguistics Special Publication No. 24, 17–24.
- . 1994a. Evaluation of evidence and errors in Austronesian reconstruction. In *Proceedings of the Seventh International Conference on Austronesian Linguistics*, Leiden, 22–7 August 1994, ed. by Cecilia Ode and Wim Stokhof, 603–24.
- . 1996. The reconstruction and status of Austronesian glottal stop—Chimera or Chameleon. In *Reconstruction, classification, description—Festschrift in honor of Isidore Dyen*, ed. by Berndt Nothofer, vol. 3, 41–72. Hamburg: Abera Verlag (Abera Network Asia-Pacific).
- . 2019. Klata / Giangan—A new southern Philippine subgroup. *The Archive: Special Publication No. 16*: 33–51. Diliman: University of the Philippines.
- . Ongoing. *Philippine-Etyma*. ZDS = a collection of over 6,500 etymologies from the collection of Zorc Data Sheets, started in 1972 (<https://zorc.net/Philippine-Etyma/>).