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Response to Blust "The Resurrection of Proto-Philippines"

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This article is a response to Blust's lengthy article in Oceanic Linguistics 58(2): 153–256 in which he begins by critiquing an old paper (Reid 1982) that he knows I no longer believe in, but Blust continues to discuss it as though it is still my current position. His article is an attempt to establish his Proto-Philippines (PPH) primarily by reconstructing a large body of lexical items that he assumes are only found in the Philippines. I do not believe a PPH existed. I discuss multiple problems in phonology that are apparent in his reconstructions, both in the article and his online Austronesian Comparative Dictionary from which he has drawn his reconstructions. This includes the issue of prenasalization, its direction, and loss. Much of the discussion is involved with borrowing, or Blust's term "leakage," which assumes the reality of a PPH. His discussion of borrowing rejects what is known and discussed by other researchers. There is discussion of relying on negative evidence for assuming the reality of a hypothesis that Blust claims I was guilty of, and of which he is also guilty. The Blust article does not discuss the position of the languages of many Negrito groups in relation to his PPH, where his earlier articles do. The problems with his PPH are summarized in the conclusion.

1. INTRODUCTION. I wish to thank Blust for completely demolishing my 1982 paper that I never formally retracted, as he so carefully noted (Blust, p. 185). I am hereby retracting it. I no longer believe that the relationship between languages can be shown by tree diagrams, as I noted in Reid (2018), that Blust also had available to him, and referred to (pp. 190, 194, 200). My 1982 paper argued against the concept of Proto-Philippines (PPH) on the basis of sound change and morphosyntactic innovation rather than the lexicon. I made it clear that the PPH that I was arguing against was the wave theory of the immigration of the Philippines that "has, for me, . . . been the completely untenable theory that the different ethnic groups in the Philippines are the result of a series of migrations from the south and west, a view that was popularized by the late H. Otley Beyer (1948) and which is still taught as fact in Philippine schools today." The work of a researcher is building on and correcting earlier work, as Blust must know from his own work. The Austronesian Comparative

^{1.} See also Reid (2019) in which I formally retract my tree diagram of the Central Cordilleran languages, published in Reid (1974).

Dictionary (ACD) (Blust and Trussell Ongoing) is very different from earlier versions, none of which he has ever retracted, but of course, it is not formally published.² Unfortunately, he does not quote any of my initial characterizations of the 1982 paper, specifically "Its results are tentative." Neither does he mention the fact that I no longer believe in the tree diagram that he cites.

In his introductory comments, Blust (p. 154) notes, "A group containing all languages of the Philippine islands was implicitly accepted by the beginning of the twentieth century, as seen in statements by such writers as Blumentritt (1899), Blake (1902, 1920), Conant (1910), and Brandstetter (1916[1911]), who evidently assumed that subgroup boundaries and geography coincide." He does not mention Scheerer (1918), one of the major early writers on Philippine languages, who also believed that the Philippine languages constituted a distinct unit from other Malayo-Polynesian languages, claiming:

- 1. As early as 1604, the principal Philippine languages were recognized as constituting a linguistic unit.
- 2. Since an equally early time, the belief was sustained that these languages were born of the Malay language as spoken on the Peninsula of Malacca.
- 3. In 1801, Hervás published his opinion that the languages of the islands in the Pacific and in the southern Indian Ocean (Malagasy of Madagascar) were related to those of the Philippines and, hence, with Malay. (Scheerer 1918:60)

Scheerer (1918) noted that the Philippines was a northern extension of Indonesian (Malay and its extensions) and that this language was the source of Philippine languages. The term Malayo-Polynesian in Scheerer's view constituted the extreme border areas of a family in the same sense as Indo-European covers many Indian and European languages (see Ross 1996:144), and this was the Malayo-Polynesian I used in Reid (1982).⁴

Blust (p. 155) complains that I do not specify which languages I refer to when I say "northern Philippines." Blust says "his reference appears to be

- 3. Zorc (1986:147), in his response to my paper, noted that my analyses were tentative.
- 4. I still have problems with the name Malayo-Polynesian for all the Austronesian languages outside Taiwan proper because of its original meaning. I prefer Proto-Extra Formosan, but I now follow the practice of calling the family Malayo-Polynesian, as Blust does (see Reid 2009:462, fn. 4 for explanation).

This is not the first time that he has critiqued my outdated analyses. He did so in Blust (2009), citing my first attempts at reconstructing what I was then calling "Proto-Philippine construction markers" (Reid 1978). He did not cite my revised claims (Reid 2002), although when I pointed them out, he apologized, but then cited reasons for his claims (for details, see Reid 2010:441). Blust has a limited acquaintance with Philippine writings (although clearly, he has explored many dictionaries). An example of this is Blust (2018:343), in which he cites Lebar (1972) citing Jenks (1905), and Keesing (1962) about Bontok men's houses, even though Jenks and Keesing were in Bontoc only for a few months and did not speak the local language. He did not know about Reid (1972), written after several years' residence in the community, which provides much more detail about men's houses in Bontoc than either Jenks or Lebar, for which he apologized when I mentioned it to him, but provided explanations why he did not use more recent studies (e-mail December 18, 2018).

to all Philippine languages north of Tagalog." However, I specifically mention in Reid (1982:204) that I refer to the Cordilleran group of languages.⁵

2. PHONOLOGY. Blust (p. 187) cites my "inexplicable" statement that "Tboli is the only Philippine language (apart from Tagbanwa) which retains PAN *q as a backed velar stop." Blust's problem is that I refer to PAn *q as a backed velar stop, when he claims, "In fact, PAN *q probably was a uvular stop." Although I claimed that this was in the Philippine languages, Blust then proceeds to list other non-Philippine languages "which retain PAn *q as /k/." But Blust does not comment on the phonetic character of /k/. Apparently, Blust has limited knowledge of the phonetics of Philippine languages, having never done fieldwork in the Philippines. In Tagalog, Schachter and Otanes (1972:18–19) imply that Tagalog [k] is a backed velar or uvular stop. They say, "The point of articulation of the Tagalog phoneme (/k/) is . . . usually somewhat further back than that of even the most retracted allophone of English /k/." Wolfenden (1971:18) says of Hiligaynon, "The velar stop is made further back in the mouth than the English velar stops." Similarly, Ballard and Afable (2011:772) define /q/ as a "back k, articulated farther back in the throat than /k/." The phoneme /k/ is a "front k" and is the prevocalic variant of /g/, represented in their orthography as upper case K. The phoneme q is listed in their figure of consonant phonemes as uvular and is represented in their orthography as k.6 I have also commented on back velar [q] for the Central Bontok language in Reid (2005), citing /bitík/ [fitíq] 'a bundle, as of rice', /nabtik/ [nabtiq] 'bundled', with the following footnote:

The symbol [q] is used here and throughout the paper in its IPA value (Pullum and Ladusaw 1986:130) to represent a voiceless, backed velar or uvular stop, and does not represent glottal stop, as is often found in literature on Philippine languages (e.g., Reid 1971). In Guinaang Bontok there is a clear difference between the point of articulation of the prevocalic allophone of /g/, which is a voiceless, fronted velar or palatal stop (with light aspiration), and its voiceless counterpart /k/, which is always [q]. This is the usual point of articulation of /k/ in many Philippine languages. According to Jacobson (1979:143), this phone occurs in 60% of Philippine languages. In literature that uses [q] to represent a glottal stop, a backed velar stop is typically represented by [k]. (Reid 2005:387)

^{5.} The Cordilleran languages are now referred to as Northern Luzon (Reid 2006:2); however, Blust does not use the term Northern Luzon; he prefers to label all Northern Luzon languages as Cordilleran even though many are not spoken in the Cordilleras. He refers to them (p. 163) as 2a = Cordilleran (Ilokano), 2b = Cordilleran (Northern), 2c = Cordilleran (Central), 2d = Cordilleran (Southern), not noting that there are clear phonological and morphological reasons to keep the latter two groups together, now called Meso-Cordilleran (Reid 1991).

^{6.} Pullum and Ladusaw (1986) indicate that neither Pike (1943) nor Smalley (1963) uses the symbol [q]; they refer to this consonant by a backed velar [k]. The symbol /q/ for the backed velar or uvular stop is also used in various works by Kliminko on Yattuka and other Ifugao languages, such as Klimenko and Stanyukovitch (2018).

Blust (p. 219) claims that "all GCP languages have merged *q and zero wordinitially." Blust continues to insist that all Greater Central Philippine (GCP) languages have zero word initially, even though multiple dictionaries indicate that they do not mark glottal stop initially because of the influence of Tagalog/ Filipino, which does not mark glottal stop word initially, because this was the Spanish practice that is followed in many Philippine languages. In the following, I include the references for many Philippine languages that are claimed to have glottal stop initially. These I have sent to Blust, but even though all the forms in ACD are supposedly in phonemic transcription, Blust refuses to acknowledge initial glottal stop, claiming that it would not make any difference to his reconstructed forms (Blust, pers. comm.). Hanunóo forms that have a glottal stop initially (Conklin 1953) were removed by Blust in his initial listing of Hanunóo forms, until I insisted that they be returned, in that Conklin listed them in the dictionary. I even insisted that he mark initial glottal stop in Bontok, since there is clear morphophonemic evidence for its presence. For example, [?imís] 'take a bath' becomes [nam?is] 'bathed', with the addition of a naprefix, loss of the first unstressed vowel, and obligatory metathesis of the glottal stop sequence [?m]. Even though glottal stops are present in possibly every language of the Philippines, glottal stop is not reconstructed even for his Proto-Philippine reconstructions, contrary to Zorc (1996) who believes they should be. Himmelmann (2005:117) also states, "A fair number of languages, including Dobel and many Philippine languages (e.g., Iloko, Tagalog), have mandatory onsets, i.e. there are no vowel-initial syllables (and hence no vowel-initial lexical bases). . . . Thus when Tagalog mag- is combined with ingáy 'noise' the result is [mag.?i.náj] and not *[ma.gi.náj]." Evidence for initial glottal stop in Philippine languages is as follows.

Northern Luzon languages: Ilokano. "As all syllables in Ilocano must have a consonantal onset, words that orthographically begin with a vowel are actually articulated with an initial glottal stop" (Rubino 2000:xxxv). Initial glottal stop is lost from vowel initial words when prefixed with ag- and nag-, but glottal stop is retained with other consonant-final prefixes such as agat- and pagat-, for example (where hyphen represents a glottal stop) pagat-abága 'shoulder-high', agat-asuk 'having the taste or smell of smoke'; and glottal stop is also retained with reduplication: umas-asuk 'still hot and smoking' (see Geladé 1993:9). Gaddang. The vocabulary has initial glottal stops before all otherwise vowelinitial words (Calimag 1965). Balangao. "glottal stop. . . is not written word initially" (Shetler 1976:8). Batad Ifugao. "The dictionary user needs to be aware, however, that words written with initial vowels actually begin with a glottal stop" (Newell and Poligon 1993:6). Ibaloy. "All words that 'begin with a vowel' actually have a glottal stop at the beginning of the word, but it is not written" (Ballard and Afable 2011:3). "Glottal stop is not written word-initial, since all 'vowelinitial' words do in fact begin with glottal stop" (Ballard and Afable 2011:776).

Central Luzon languages: **Sambal, Botolan**. "Glottal stop is written as a hyphen when it occurs word medially, as a grave accent when it occurs word

finally, and is left unmarked word initially" (Antworth 1979:5). Ayta Abellen. In the "Ayta Abellen Orthography Fact Sheet" (which can be found in the SIL Philippines website), one of the "Spelling Rules" states, "Glottal stop is a phoneme, but you could prefer not to write it." A hyphen (which presumably is the representation of a glottal stop) occurs following every occurrence of the (borrowed) prefix mag- before otherwise vowel-initial words, implying glottal stop at the beginning of the words, as in mag-adal, mag-ahawa, mag-alha, mag-alih, mag-atadah, mag-ibano, mag-ilod, mag-ilyadi, mag-obda, and so on. Glottal stop also apparently occurs before otherwise vowel-initial words with other consonant final prefixes, for example, an-inholtoen, an-ipatopad, man-ihil, in-abel, and so on. It also occurs before reduplicated forms of otherwise vowel-initial words, when the form ends with a consonant, for example, ampayimot-imotan, kaanak-anakan, ingah-ingah, iteh-iteh, and although he usually writes two vowels separated by a glottal stop together as in Tagalog, sometimes the author places a hyphen, representing glottal stop, between them, for example, i-abanti, i-itlen, and ino-ino (Stone Ongoing). The same could be said of Ayta Mag-antsi. "Where a word is written beginning with a vowel, the word actually begins with an unwritten glottal. Where a word ends with a vowel, that word may actually end with an unwritten glottal," for example, aho [?aho?] 'dog' (Storck and Storck 2005:xiii).

GCP languages: Tagalog. "Like Schachter and Otanes (1972), I posit that every Tagalog syllable begins with a consonant . . . stems transcribed with vowel-initial become glottal-initial" (French 1988:5). Mamanwa. "All consonants occur initially . . . Glottal stop will be written as in Pilipino, i.e., omitted word initial" (Miller and Miller 1976:24–25). Cebuano. "The phoneme /'/ is a full glottal stop characterized by momentarily stopping the air passage at the glottis. The initial . . . glottal . . . is not written by convention" (Bunye and Yap 1971:5). "In word initial position, glottal stop is not written . . . [it] is always articulated" (Wolff 1972:x). Hiligaynon. "In word-initial position it [glottal stop] is not symbolized in written Hiligaynon" (Wolfenden 1971: 18–19). "The glottal stop . . . is marked only in the medial and final positions in this book. The sound occurs also in the initial position of words which begin with vowels, but is left unmarked" (Motus 1971:viii). Hanunóo. "All consonants occur in initial, medial and final positions" (Conklin 1953:5). Aklanon. "Glottal stop [is] represented by a hyphen following a consonant, as in mad-an 'dry', mag-abot 'to arrive', ayad-ayad 'to beautify, decorate'" (Reyes, Zorc, and Prado 1969). These imply word-initial glottal stop. Manobo, Western Bukidnon. "Glottal stop is symbolized by an apostrophe (') except when it occurs word initially preceding a vowel. The glottal stop in that position is symbolized by the absence of a consonant symbol" (Elkins 1968:xi). Manobo, Sarangani. "Glottal stop is a consonant which is written as in other Philippine orthographies as follows. (1) It is not written when it occurs word initial" (Dubois 1976). Even in Chamorro there is an initial glottal stop before otherwise vowel-initial words. Topping, Ogo, and Dungca (1975:xv) state, "It was determined by the Orthography Committee that the glottal consonant should be written in Chamorro whenever it occurs, except in initial position."

All the data for Blust's "Proto-Philippines" are in the ACD. One needs to be careful in citing data from the ACD. The source for Gaddang data (according to the ACD) is Reid (1971) where q is the representative of glottal stop. For some words, the source is said to be McFarland (1977), which lists /?/ before all otherwise vowel-initial words, but in ACD the glottal stop is deleted in all initial positions. Sometimes Blust replaces *i* with *e*, as in *dulem* 'cloud', *bekken* 'generic negative', nateggat 'hard' (Blust writes it with an initial ma-), and mellakad 'to walk', but elsewhere he copies the vowel faithfully, as in qimmin 'all', which Blust writes as imin, inexplicably leaving out gemination of m. These may be typographical errors, but eliminating all initial glottal stops is problematic. The lists in ACD are presumably phonemic, where all ng sequences in the dictionaries are transcribed as η . However, Blust has not read the introductions to the dictionaries or has ignored them. A case in point is the Pangasinan data which is claimed to be from Benton (1971), for example, banél 'to crush', and *tepet* (actually *tepét*) 'a question; to ask a question' (Blust pp. 197, 217; with many more examples in ACD such as ebá, ebéb, eléng). Benton (1971:xi) says that Pangasinan has four vowel phonemes a, i, e, o, but these are his orthographic symbols, as Blust has noted with regard to the consonant $\tilde{n}g$, which Blust writes η . Benton then proceeds to say that e is a high back unrounded vowel. In IPA this is /w/, and is typically written as /i/ or /ə/. It is a reflex of PMP *e, which is the orthographic symbol for *a. It is not a mid-front unrounded vowel that Benton writes as E.

The PPH reconstructions made by Blust never have a glottal stop. Many of Zorc's PPH reconstructions show initial, medial, and final glottal stops. Zorc reconstructs the following (which Blust discusses) *qa?juŋ 'nose', *?anúk 'chicken', *?ələk 'sound of snoring/choking', *?in+də[gR] 'stand', *?udu 'medicine, charm', *?uŋa? 'child', *sə?it 'thorn', *si?ák '1sg., I', *sa(?)kən '1sg., I', and *lanka? 'jackfruit' (which Blust [p. 159] writes as *lankaq). Zorc always writes the central vowel as *a, which Blust always writes as *e. Apparently, when there was a form in one of the Kalamianic languages or Tboli that shows a /k/ corresponding to glottal stop in other languages, Zorc reconstructed *q, for example, *tuqlid 'straight' (ex. 93, p. 160), agreeing with Blust. I went through the first set of Blust's PPH reconstruction in ACD (*a through *h) checking the number of reconstructions that actually have a Tboli or Kalamianic language reflex. The first group, Set 1 (listed below), do not have any forms from Tboli or Kalamianic languages, but Blust still reconstructs them with a PPH *q. The far fewer second set are forms that have a /k/ reflex in Tboli or one of the Kalamianic languages. Set 3 are a few forms that have an irregular Agutaynen (Kalamianic language) reflex.

Set 1. *alilaq 'to care for someone, wait on'. Blust notes that this is possibly a Tagalog loan distribution (Ayta Abellen *alili* has an irregular final vowel);

*apu-q 'grandparent, ancestor, lord, master, owner (voc.)'; *bakáq 'maybe, perhaps, possibly'; *balaqih 'co-parent-in-law, the relationship between parents of spouses'; *balítiq 'a tree: the banyan or strangler fig'; *baŋaq2 'earthen water jar'; *baqak2 'old'; *bes(e)qel 'blame someone for something'; *búgaq 'pumice'; *bujiq 'fish eggs, roe'; *bunánaq 'open the mouth wide'; *buniq 'harelip; missing or crooked teeth'; *bunuq 'skull'; *buqak 'to split open'; *buqbuq-an 'place into which something is poured'; *buq(e)tis 'pregnant'; *búquŋ 'broken, shattered'; *busiq 'split, rip open'; *busiqsiq 'split open'; *butikíq 'gecko, house lizard'; *butíq 'roasted rice, popped rice'; *butítiq 'have an inflated abdomen'; *dalupániq 'kind of freshwater fish'; *danáq1 'beaten track, footprints making a trail'; *danáq2 'that, those'; *daqit-en 'to sew'; *dag(e)qún 'year'; *das(e)qaR 'food laid out for a feast'; *deR(e)qas 'second pounding of rice'; *diq 'particle of negation'; *ditaq 'snake venom; plant poison used on tips of arrows'; *gáqud 'oar; to row a boat'; *gúguq 'a tree with bark that can be used as a shampoo: Ganophyllum falcatum Bl.'; *hadawiq 'far, distant'; *henaq 'think, consider; thought, idea'; *hideRáq 'lie down'; *hipuq 'feel, touch'; *híwaq 'cut, carve, slice (meat or fish)'; *h<um>aq(e)muq 'to become tame or gentle'.

Set 2. *adayúq 'far'; *baququ 'tortoise, land turtle'; *báwiq 'to recover something lost, regain'; *bayáq 'to leave things or people alone; to abandon'; *buqel 'protruding part of the lower leg' *dalíq 'quick, do quickly; do in a short time'.

Set 3. *big(e)láq 'suddenly' (Agutaynen *bigla*, problem: no final consonant); *dág(e)saq 'to wash ashore, as driftwood' (Agutaynen *i-dagta*, problem: no final consonant); *daq(e)taR 'floor' (Agutaynen da tal). Quakenbush (1991:121) notes that glottal stop before a consonant is neutralization of contrast of voiceless stops p, t, and k. In this instance, it is neutralization of k. Quakenbush cites Kalamian Tagbanwa daktal floor. So this form should be in Set 2, with the Kalamian reflex cited.

3. PRENASALIZATION. Blust (p. 38) says, "As noted by Dahl (1976 [1973]:128), the medial prenasalization of obstruents in established cognate sets other than reduplicated monosyllables such as *beNbeN 'banana', is unknown in any Formosan language, suggesting that it was innovated after the AN dispersal from Taiwan." The origin of the medial nasal (Dempwolff's "facultative nasal") has been discussed fairly fully in the literature beginning with Dempwolff (1969:96–115, also see Reid 2000). Blust follows Dempwolff in reconstructing all forms with such nasals to PMP (Urindonesisch in Dempwolff's terms), but does not note Dempwolff's claim that "the nasal accretions in medial position were originally infixes; but the original sound phenomenon and its grammatical function cannot be ascertained." Blust (p. 195) repeats his claim that medial prenasalization is far less likely to appear in Tagalog (and presumably other GCP languages) than in Toba Batak, Javanese, Malay, Ngaju Dayak, or Malagasy. He claims (Blust p. 195) that Tagalog is in the process of losing the medial nasal

and that the northern languages of the Philippines are more advanced in this regard, rather than the reverse that Indonesian languages are the source of prenasalization and that these forms are all borrowed in Philippine languages. But Blust, although careful to note various terms that are found in Ilokano, claiming that these are reflexes of PMP constructions, does not refer to the claims I made about Bontok prenasalization, which cannot possibly be from inherited forms. I claimed that:

there is no synchronic or other evidence which would indicate a phonological restriction on medial nasal clusters. On the contrary, all possible nasal plus consonant clusters occur in the language, both homorganic and heterorganic, as the result of loss of an unstressed pepet [schwa] vowel following either -in- or -um- infixes, and the introduction of borrowed forms with such clusters. Neither is there any evidence to suggest that medial nasal clusters developed as non-nasal clusters as has been proposed by Blust (1980) for the Chamic languages where such clusters may have become sequences of glottal stop plus consonant. (Reid 1982:206)

Do current speakers of Bontok know which forms with medial nasals are supposed reflexes of PMP? Obviously not. How come Bontok does not reflect most of the medial nasals that Blust reconstructs to PMP? Were they lost (without any indication), and how come borrowed forms with medial nasals (shown by irregular reflexes) have not lost their nasals? Blust never addresses these questions.

Blust (p. 195) lists 10 forms with medial nasals in Ilokano, claiming that these cannot be borrowings from Tagalog, Malay, or other languages that have had widespread influence in the Philippines. Three are supposedly only found in the Philippines. The first of the so-called PPH forms is *hampak 'to slap, smack'. This is found only in Ilokano among the Northern or Central Luzon languages, and could be a borrowing from one of the GCP languages, all of which show identical forms. Such forms are commonly borrowed among languages. An example is Bon, AgtCa, Ceb, Akl, and other languages *suntok* 'box, a blow with the fist'.

Another of the so-called PPH forms is *antabay. This is a trisyllabic form, with a prefix attached, probably */?aN/ with an assimilating N, but note the alternate Bikol form with a velar nasal, suggesting it is borrowed. The meanings are very diverse, which is typical of borrowed forms. Ilk 'unison (of voices, strings, etc.); stand side by side; sing in unison; Png 'to guide, assist in learning a skill'; Ayta Abellan 'to put a hand on someone's shoulder'; Tag 'slowing down in order to wait'; Akl 'wait for'; Bik 'accompany, escort, stay with; stay tuned to a particular radio station or television channel'; Agt 'to assist, support someone in walking somewhere by holding their arm; to lead someone by the hand or arm'.

Blust also cites his PPH *tándaq claiming that this is one of the forms that cannot be a borrowing. But Blust says in his footnote to his proposed

reconstruction of this form in ACD: "Some aspects of this comparison suggest that it is cognate with, or a borrowing of, Malay *tanda* 'sign; token; emblem'. If so, the absence of a final -h in the Malay form is unexplained. Moreover, Ilokano distinguishes the two words as *tánda* 'memory', and *tandá* 'sign, signal, quality', with different affixation potentials, suggesting that they have distinct histories that have become entangled in some languages."

The cited forms in Blust's quote above are given in Rubino (2000:598). But there is no phonological difference between *tánda* and *tandá* in any Philippine language, and no Philippine language contrasts disyllabic forms with an initial CVC.7 Rubino clearly constructed these as the bases for different words in Ilokano, tandáan /tandá?an/ with a base tánda (all such forms have an underlying stress on the first syllable) and tandaánan /tanda?ánan/ for which Rubino proposed tandá. Note Ilk tandáan /tandá?an/ 'sign, mark, token, trait, symbol; memory, recollection' (Geladé 1993:663). This form was treated as a noun, and resuffixed, with stress moving one syllable to the right, to form a verb, Ilk tandaánan /tanda?ánan/ 'to mark, to stamp, to brand, to put a mark on; to notice, to mark, to observe, to give attention to, to take note of, to regard, to remember, to hold in memory, etc.' (Geladé 1993:663). With respect to the final glottal stop on the forms in Bikol /ma-tandá?/, Hanunóo /tandá?/, and Aklanon /tánda?/, these are all apparently from Tagalog or could be independently borrowed from a Malay dialect. Wolff notes that borrowing of such forms is reflected in a final glottal stop in Tagalog. With respect to the missing final -h on the Malay form, Wolff suggests Brunei Malay was the dialect that influenced Tagalog. The absence of a final -h in the form is explained by Wolff, "... current Brunei Malay does not preserve the h in all cases (as contrasted with the Malay of Banjarmasin, for example, which preserves h almost invariably)." (Wolff 1976:353).

Of the PMP (or PWMP) forms, Blust cites his PMP *ampaw 'empty husk'. All of the GCP languages have meanings such as 'puffed rice candy', which was clearly a traded item, such as delicacies are today. The only meanings that support the reconstructed meaning are Ilokano and the Central Malayo-Polynesian language Buruese *apa-n* 'empty (grain) hull'. Whether the latter is 'cognate' with Ilokano is questionable.

Another of the PMP forms that Blust cites is *pa(n)tár 'treeless plain'. That such a form is a *paN- prefix on PAn *dataR with regular loss of the initial consonant and unstressed initial vowel is clear, from the forms that Blust cites with final stress, such as Ceb datág 'open field, plain, prairie', Akl datág 'level land', and Bon nadtal 'to be level' (which Blust does not cite). That these are

^{7.} Lexical stress in Philippine languages is relevant only on bases with an open syllable as the initial syllable, as Ilk *lása* 'a kind of bow net for fishing', and *lasá* 'half milled rice' (Rubino 2000:319), Tag *dilis* /dílis/ 'long-jawed anchovy' and *dilis* 'chord or string for guitar or bow' (English 1987:443). Forms marked with stress (acute accent) on initial or final syllables on words that have an initial CVC structure depend entirely on how they are pronounced in isolation, when sometimes stress gets conflated with intonation (Shetler and Fetzer 1964).

subject to borrowing is clear from Blust's note under the reflexes of PAn *dataR.

Blust proposes that the Ilokano reflex of his PMP *baŋkaq 'boat' is not borrowed. But if one reads the notes to this entry in ACD, he says, "Although *baŋkaq appears to be clearly attributable to PMP, there are indications that some of its reflexes were borrowed even within the Philippines (as seen in the phonologically irregular Bikol and Aklanon forms). . . ." He also claims that the Kavalan reflex of the form is a loan because of its phonology. One may also question why he chose a final *q, to represent glottal stop, since all the proposed reflexes have a glottal stop, not a reflex of a final uvular stop, and this is the normal ending of borrowed forms from Malay in Tagalog.

Blust (p. 195) claims, "Although it has relatively few examples of such words, Pangasinan reflects PMP *punti 'banana' as punti, a form that appears to be unique within northern Luzon." While Blust refers only to McFarland (1977) and Reid (1971),8 the form punti 'banana' appears not only in Pangasinan, Palawan languages (Aborlan Tagbanwa and Palawan Batak) and in Kalamianen (Kalamian Tagbanwa, a Kalamianic language),9 but also occurs in one of the Sambal dialects, a Central Luzon language (SIL word list), and Batangan (also known as Tawbuid), one of the so-called Mangyan languages of Mindoro (Madulid 2001). Blust (1991:92) claims that Kalamian Tagbanwa and Palawan Batak show a borrowing influence from some Central Luzon language. But borrowing could have gone in the opposite direction. As we already know there were many Malay and other Indonesian language borrowings into Palawan and ultimately into Mindoro. Not only lexical forms but also the religion Islam and the Indic writing systems were borrowed. 10 I suggest that punti ultimately comes from one of the Indonesian languages. The form is potentially related to Tag. putî /putí?/ 'white, light in color' and refers to the color of the banana or the banana skin. If Blust had checked Cebuano (Wolff 1972:811-12), he would have noted that Ceb puti is used in plant descriptions to indicate red or brown (skin) varieties, with putian indicating "a variety of coconut and pineapple more orange in color than the ordinary." Madulid lists Bis *putian* as a kind of banana, as well as BisC *pamotiyon* 'banana (Musa sapientum)'. Note also Tag pula-pula 'red kind of banana (i.e., having a red skin)' (Tag pulá 'red'). There are also other terms for 'banana' that have a possible reference to color, for example, IltK ?apugin 'banana' appears to be a borrowed reflex (with suffix *-ən and with PMP *R > g) of PMP *qapuR (Ilt Papuy) 'lime (part of the betel chew)', suggesting whitish. Madulid (2001) gives numerous instances of punti and puti meaning 'whitish', for example,

^{8.} Blust (p. 38) claims that data from Reid (1971) is "elsewhere in the Philippines," although the work to which he refers contains only the "minor" languages from which data was then available.

^{9.} This form appears in Reid (1971) from which Blust removes the final glottal stop (*puntiq* / punti?/), apparently believing that final glottal stop occurs on all vowel-final words in Kalamianen, reconstructing PMP *punti.

^{10.} See above for discussion of Malay tanda 'sign; token; emblem'.

Png uong na punti 'a k.o. mushroom (Volvaria esculenta)', Ifg lapunti 'white butterfly bush (Buddleja asiatica)', BisC alapunti 'a k.o. plant with orange flowers, climbing pandanus (Freycinetia cumingiana)', BisPn punti 'a k.o. tree with reddish-brown wood (Syzygium nitidum)', Tbw puntit bay-o 'a k.o. woody vine, with whitish flowers (Kadsura marmorata)', Tbw maramputian 'a k.o. tree with whitish flowers (Acronychia pedunculata)', and Tbw/Pal punti bayoo 'a k.o. whitish orchid (Liparis condylobulbon)'.

One could continue discussing the Ilokano forms, but I consider them all to be ultimately borrowings of forms either directly borrowed from Brunei Malay or from some other language that Malay has influenced. The level of borrowing into languages across genetic boundaries has been addressed in many works, but in the Bontok dictionary alone, there are more than 300 words that have an -ay or -aw ending, where inherited forms always have -ey or -ew (where e represents a schwa vowel) many of which have been borrowed from Ilokano or some other language, as Bon banggaw [baŋkʰaw] 'spear without barbs', which not only has final -aw, but other phonological evidence that it is a loan (see ACD, PWMP baŋkaw 'barbless spear'). There are also other words with irregular phonology. Isinay of Nueva Vizcaya, in which PMP *k became /2/, has literally hundreds of forms that have /k/, all of which are borrowings of forms from Tagalog, Ilokano, or some other such language. Similarly, PMP *ə became /o/ establishing a contrast between two back vowels. However, there are multiple cases where /o/ is a borrowing.

4. BORROWING. Blust (p. 164) notes what he calls "leakage," which is his new term for 'borrowing'. He cites *siám 'nine' as "leakage" in virtually all the languages of Sabah. That this form primarily appears in the Philippines shows it clearly belongs to the set of numerals that were used in trading, as all numbers were. This and the other forms that Blust notes that are reflexes of his PPH terms were either reflexes of PAN or PMP or were developments in the Philippines that were shared because of trade and the widespread travel that early Filipinos engaged in. Blust does not recognize numerals as borrowed during trade; he restricts this to referents that are normally exchanged in commercial transactions. He (p. 129) also cites the distribution of reflexes of *siaw as forms that are spread by contact. He says, "Since it is quite clear that GCP languages, represented here by the Manobo, Danaw and Gorontalic groups, do not subgroup with either Sangiric or Minahasan languages, and that the latter two groups themselves are very distinct, it appears that reflexes of *siaw in northern Sulawesi and southern Mindanao have, for some unexplained reason, spread by contact." These are not unexplained reasons. They were spread because numerals are commonly used in trade and their distribution is due to borrowing.

^{11.} This includes, of course, Bontok ?uyáw 'to criticize; to laugh at another person's misfortune or physical disability' (cited by Blust p. 217), which is clearly a borrowing of Ilk uyáw /?uyáw/ 'to criticize; jeer; ridicule; mock; scorn', showing that Blust's comment that these languages are not connected by geographically intermediate languages is not necessarily true.

As for the different words for "who" in Philippine languages, Blust (p. 180) comments, "We are thus left to choose between positing two words for 'who?' in PPH, or to abandoning a strict family tree model for subgrouping these languages." Maybe he should reject the strict family tree model. Of *sungay* 'horn', Blust again notes, "Once again we are confronted with the unhappy prospect of positing two words for the same meaning, or of recognizing an apparent replacement innovation of incomplete scope." That the Philippines spread forms that supposedly have replacement innovations does not require a PPH. Their distribution is the result of spread through borrowing and the multilingual capacity of Filipinos.

While Blust is careful to note that borrowing in trade is a real factor, he restricts this to referents that are normally exchanged in commercial transactions, rejecting forms such as his PPH *abaka 'Manila hemp, Musa textilis', which was commonly traded (although Blust uses it to show that Bilic languages belong to his PPH group). We do not know the original form for this, because of the wide range of forms, many of which show evidence of borrowing. The forms in languages such as Yami, Ivatan, Ibatan, Ilokano, Ifugaw are all clear borrowings of the Tagalog form (see Reid 1971; Madulid 2001). Similarly, his PPH *baRubu has a wide range of forms (not only the ones he cites), which show the effect of borrowing between languages; specifically, most of the GCP languages have either an /l/ or /r/ reflex of his PPH *R (Madulid 2001). They should have a /g/. Although Blust speaks to the irregular /h/ reflex of his PPH *R in Casiguran Dumagat bahubu, he does not mention the fact that the initial vowel of the form should be either /i/ or /e/, clear evidence that the form is borrowed, since there was vowel raising and fronting in inherited forms following voiced stops in that language (see Blust p. 171, where he discusses this with reference to other forms that have /a/ following a voiced stop, but all of which are clearly borrowings, not replacement innovations).

There are multiple cases where Blust's innovations can be questioned, including the first one he lists as a candidate replacement innovation for 'exclamation of pain'. Some languages have more than one form, depending on the type of pain (see the multiple terms for 'pain' and 'ouch' in Vanoverbergh 1956 and Rubino 2000). There is a difference between pain in giving birth, for example, and pain from a splitting headache or a wound when stepping on a sharp object, for which several exclamations of pain exist. His PPH *ananay is probably a combined form of a reflex of *?aná 'pain' and the third-person singular possessive pronoun =na and possibly the nominative specifier =i (Zorc 1977; Reid 1979) that also occurs on forms such as Bon wad-ay 'there is', that can be used in isolation, without a complement. Note also Ilk annay 'ouch' (apparently a borrowing from one of the Cagayan Valley languages). Similarly, Blust discusses his PPH *bakés and his *lutun concluding that they appear to have

^{12.} Blust notes Bon *anana* (copied without stress on the middle vowel), in the notes to his *ananay in the ACD, but does not give Bon *aná*.

coexisted in PPH as names for different types of monkeys. However Philippine languages typically distinguish the names of monkeys by their size and gender, not their type.

There are sets of innovations that are restricted in their distribution. Blust claims that these are due to a dialect chain, which I have claimed, and which Blust rejects. PMP spread through the Philippines rapidly, according to archaeological evidence, which Blust endorses, but claims that the dialect chain was his PPH. "It is hard to avoid the conclusion that Northern Luzon and GCP formed the central axis of an earlier dialect chain stretching the length of the Philippine archipelago and perhaps beyond (Blust, pp. 219–20). He claims, "this community formed a dialect chain from north to south (the natural direction of population movement in an archipelago the shape of the Philippines)" (Blust, p. 184). This implies a PMP dialect chain (whether or not the Batanes Islands were involved), rather than Blust's PPH.

- **5. NEGATIVE EVIDENCE.** Blust claims (p. 195) that I fell into a common logical trap, drawing positive conclusions from negative evidence (Blust and Chen 2017). I admit that I did this, but Blust also falls into the same logical trap. He concludes from negative evidence that the forms that he reconstructs to PPH do not exist in languages outside the Philippines. While Blust has provided many sets of cognates that follow regular correspondences in the Philippines and are found only in the Philippines, he assumes that because of their quantity they are only found in the Philippines, although he is careful to state (p. 163), "but many of them could, in principle, have external cognates." Philippine languages typically have the largest and best dictionaries of MP languages, as Blust (p. 164) notes also, "lexicographic resources for Philippine languages are far richer than those for many other areas, in particular Borneo, eastern Indonesia, and much of Melanesia, and this difference in documentation statistically favors comparisons that are robustly exemplified in the Philippines but are, in at least some cases, very rare elsewhere." This is apparent from the many items that Zorc (1986) lists in his PPH that Blust (p. 159–60) has found non-Philippine cognates for.
- **6. NEGRITOS.** Blust (pp. 162–3) claims that he excludes various Negrito languages because of the limited availability of published lexical data, but there is a wide range of data on Arta available from Kimoto (2017), also from both Alta languages. Northern Alta data is available from Garcia-Laguia (2017) and Southern Alta (Abreu 2017). There is also substantial Mindoro language data, apart from Zorc (1974); see Barbian (1977).

In this article, Blust does not talk about the Negrito situation during the time of his PPH, which I have questioned in several places. In Blust (2005) he speculates that from the initial Austronesian settlement of the Philippines (his Proto-Malayo-Polynesian) for perhaps a thousand years of agricultural expansion and language differentiation, the pre-Neolithic Negrito populations remained in

their "exclusive preserve" (Blust 2005:54), the mountainous interior regions of the Philippines, apparently having no contact at all with Austronesians. This was a period during which he claims the expansion of one particular Austronesian-speaking group, in a competition between agricultural groups for the same territory, eliminated all of the diversity that had developed in the previous millennium (from the Batanes Islands to Southern Mindanao). This language became the parent (his PPH) of all of the languages currently spoken in the Philippines and parts of Northern Sulawesi (his "First Extinction"). Apart from the lexical evidence that Blust claims (many of which are questionable), Bellwood (pers. comm.) claims that there is no archeological evidence for this. It was only subsequent to these events, Blust believes, that meaningful contact was established between the Negrito hunter-gatherers in their "remote mountain areas" (Blust 2005:41). It is inconceivable to me that the Negritos would have chosen to live in such remote mountain areas, rather than in the valleys and seashores where food supplies would have been far more abundant and readily obtainable (Reid 2007:239). Bellwood refers to Negritos as "traditionally forest and coastline hunters and gatherers" (Bellwood 1985:72). There is considerable archaeological evidence to support this claim, notably the extensive shell middens near Lal-lo and other sites along the lower Cagayan River in northern Luzon. The lower levels of these midden sites date to 5000 BP, at least a thousand years prior to the Austronesians' arrival in the area, while the upper levels date to 4000 BP (Paz 1999:154). So Negritos contacted Austronesian settlers from the time they first arrived from Taiwan till today. Their relationship with their neighbors has evolved over the centuries, so that today their languages are closely related to the Austronesian languages with which they are in daily contact (see Reid 2013, and references therein).

7. CONCLUSION. Blust has done a very good job in citing all of the forms that he believes support his 'PPH', apart from the phonemic representations of e and o, and the missing glottal stops discussed in the body of this comment. Most of the translations are correctly copied by Blust from their dictionary sources, apart from "help," which should be "hemp" (p. 192) and the species "Tabemaemontana subglobosa," which should be Tabernaemontana subglobosa (p. 207).

We need to remember several things about the forms Blust considers evidence for his PPH. The first is that cognates of such forms could well be found either in the languages of Taiwan or in countries outside the Philippines, since Philippine languages are clearly the best documented. The other alternative is that they could have existed in the past, and been lost in languages not in the Philippines.

Second, even those that he claims are replacement innovations could well have spread through the Philippines as the result of borrowing, even those with sound changes matching accepted sound changes for the group. Blust (p. 185) rejects forms as borrowings, which have "unambiguous native reflexes of

diagnostic proto-phonemes such as *q, *j, or *R, making a borrowing hypothesis untenable." This is not necessarily true; they could also be borrowed. Since all Filipinos are bilingual in Tagalog and/or one of the local lingua franca, they are well aware of the differences in pronunciation between words with the same or similar meaning in the languages with which they are familiar. For example, Isinay (a Northern Luzon language) has many words that are borrowed from Tagalog (only a distantly related language but commonly spoken), but there are transitive forms that in Tagalog are suffixed with -in (a reflex of PMP *-ən) and that are suffixed in Isinay with -on, since Isinay people know that Tagalog -in and Isinay -on are equivalent suffixes. An example of this is Tagalog amò 'tameness'; amuin 'to coax' (English 1987:46); Isinay ámo 'kindness, gentleness, meekness', amówon 'to attract someone to be close' (Isinay Community Dictionary, Ongoing:24). Isinay also know that a final glottal stop in a Tagalog form (marked with a grave accent over the final vowel in Tagalog) is zero in Isinay. Isinay does not have final glottal stops (except as a reflex of *k).

Third, we need to note Blust's claim that PPH was a dialect chain in which innovations sometimes failed to reach the extremities. His claim that PPH was a north–south dialect chain (Blust, p. 184) implies a PMP dialect chain, with settlement in the north of the Philippines.

Fourth, the phonological evidence that Blust refers to is not necessarily evidence of his PPH. We know that sound change can spread over wide areas. For example, reflexes of Blust's PMP *q occur as glottal stop over wide areas of the Philippines (including all the Northern Luzon, Central Luzon, and GCP languages) and in multiple languages south of the Philippines.

There are other problems with Blust's analysis that need to be considered. With respect to the unbalanced Kapampangan system, Blust (p. 158) claims, "From one point of view this is problematic for PPH, since it is contrary to theoretical expectation. However, from another point of view it can be seen as strengthening the claim for a Philippine subgroup, since an unbalanced system of nasal-obstruent contrasts such as this would be rare, and hence unlikely to have arisen independently." But why it should have occurred in his PPH is never made clear. This change could have taken place in a PMP dialect chain that extended through the Philippines and beyond without going any further than the south of the Philippines, as so many lexical items appear to have done. It is amazing that PMP *R was retained for a thousand years until Blust's PPH, but it changed in all languages of the Philippines and languages south of the Philippines, and in many languages in Taiwan, which were not part of the Philippine group. It is better from a phonological point of view to have the reflexes of PMP *R change after the dispersal of all languages from the original PMP dialect chain.

The alternative to Blust's PPH is a dialect chain splitting eventually into groups of languages that has been claimed in Reid (2018, 2019). Even Blust admits that according to archaeological evidence there must have been a rapid

spread of Malayo-Polynesian speakers from their first arrival in the north of the Philippines to Western Oceanic.

At the beginning of this comment, I thanked Blust for completely demolishing my 1982 article, but I am concerned about why it is only now that he refers to it. I have visited his office on multiple occasions over the years and discussed his and my academic differences with mutual respect, but he has never mentioned this article on one occasion. He also claims (p. 153) that his paper was finished on April 21, 2019, "which happened to be the first Sunday after the first full moon after the vernal equinox." I am impressed with his knowledge of the church requirements for Easter Sunday, but he should have written the word "ecclesiastical" before the vernal equinox, since the astronomical equinox was on March 20 at 21:58 UTC. The full moon was less than 4 hours later on March 21 at 1:43 UTC, as Blust probably knows. If the church followed the timing of these astronomical events, Easter Sunday would have been celebrated on March 24, the Sunday after the full moon on March 21, and Blust would not have had a reason to name his paper as he has.

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