The History of the Philippine Languages R. David Zorc, Jason W. Lobel, and William Hall¹

1. Introduction. The Philippines, a nation of over 7,000 islands, is located just south of Taiwan, northeast of Borneo, and due north of the Indonesian island of Sulawesi. Its 179 living, indigenous languages mostly belong to the Philippine subfamily (cf. Blust 2019),² and 171 of the 190 members of the Philippine subfamily are spoken within its borders.

Philippine languages were among the first languages in Asia to be the subject of western linguistic study³, as a number of Spanish friar-linguists began the documentation and description of several of these languages in the first decades of the Spanish occupation of the Philippines, including Tagalog (San Augustin 1703, San Joseph 1752), Bikol Naga (Lisboa 1865), Waray-Waray and Cebuano (Sanchez 1711, Ezguerra 1747), and Ilonggo/Hiligaynon and Kinaray-a (Mentrida 1637).⁴ Unfortunately, even as access to these volumes has become widespread over the past half-century, few scholars other than Mintz (1991, 2000, 2004, 2011) and Lobel (2005, 2013) have paid them much attention. This is extremely unfortunate, as they provide invaluable data on what in a number of cases are not only selected archaic features and vocabulary items which can aid in lexical and grammatical reconstruction, but also important clues as to the migration history of certain languages. In some cases (e.g., Old Bikol and Old Ilonggo), this four-century-old data reveals ancient languages which are different enough to be considered separate languages from their modern counterparts.

This survey will run through fourteen Philippine macrogroups (section 2), phonological developments relevant to Proto-Philippine and some of the more unusal ones in individual languages (section 3), subgrouping issues and controversies, and the possibility that axis-relationships will assist in resolving them (section 4), the seventy most highly-relevant and well-retained etyma within the lexicon of most Philippine languages (section 5), our conclusions (section 6), and the many references on which we so heavily relied.

The authors wish to thank first and foremost all of the native speaker consultants who have provided them with data on the languages mentioned in this chapter over their decades of fieldwork in the Philippines. Special thanks are also due to Robert Blust, Lawrence A. Reid, Hsiu-chuan Liao, John Lynch, and the two editors (K. Alexander "Sander" Adelaar and Antoinette Schapper) for their extremely valuable comments on earlier drafts of this chapter.

Per Blust (2007), the seven Sama-Bajaw languages spoken in the Philippines—Yakan, Inabaknon, Mapun, Sama Bangingi, Central Sama, Southern Sama, and Sama Pangutaran—subgroup with Malagasy in the Greater Barito subgroup, and are therefore not included in this number as they are not part of the Philippine macrogroup. Note that the numbers of languages mentioned in this sentence differ from the statistic of "170" listed in the Ethnologue (Eberhard, Simons, and Fennig 2019) due to the exclusion of (1) Sign Language, which is not an orally-spoken language; (2) Filipino, which is simply Tagalog; (3) a number of immigrant languages from Europe and elsewhere in Asia; (4) Chavacano, a Spanish creole; (5) Eskayan, a constructed secret code dating to the revolutionary era; and (6) Ayta Sorsogon, Ayta Tayabas, and Katabagan, for which no evidence exists; and (7) Mt. Iraya Agta, which does not appear to be distinct from the other two Inagta languages in the Bikol Region (Inagta Mt. Isarog and Inagta Mt. Iriga/Asog). Not in the Ethnologue list are several languages which have yet to be added therein: Bulalakawnon, Northern Samarenyo, Isamal, Tasaday, Tigwa Manobo, Tawlet Subanen, and Klata.

³ Not quite as "ancient" as the first Malay wordlist and sentences (Pigafetta 1522) or the first Malagasy textbook and lexicon (Houtman 1603).

⁴ The data in these volumes were collected by Spanish friars in the 15th and 16th centuries, in spite of the much later dates at which many of them were published.

- **2. Subroups of the Philippine Languages.** Following Blust (1991, 2019), Charles (1974), Reid (1989), Robinson and Lobel (2013), Lobel (2010, 2013), and Zorc (2019), the languages of the Philippine macrogroup can be assigned to the following fourteen primary branches, roughly listed from north to south:
 - 1. Batanic/Bashiic
 - 2. Northern Luzon ("Cordilleran")
 - 3. Umiray Dumaget
 - 4. Central Luzon
 - 5. Manide-Alabat
 - 6. North Mangyan
 - 7. Greater Central Philippines
 - 8. Palawanic
 - 9. Kalamianic
 - 10. Ati
 - 11. Southwest Mindanao
 - 12. Southeast Mindanao
 - 13. Sangiric
 - 14. Minahasan
- **2.1 Batanic/Bashiic.** The northernmost subgroup in the Philippines is Batanic (or "Bashiic"), which consists of the Itbayaten, Ivatan and Ibatan/Babuyan languages spoken on the Batanes Islands off the northern tip of Luzon, and the Yami language of Orchid Island in Taiwan. The interrelationships of these languages have been studied by Tsuchida, Yamada, and Moriguchi (1987), Ross (2005), and Blust (2017, 2019), while major works on individual languages include Yamada (1976) for Itbayaten, Reid (1966) for Ivatan, Maree (2007) and Maree and Tomas (2012) for Ibatan. Among the numerous lexical innovations defining the Batanic/Bashiic subgroup are *aʔləp 'night', *batah 'say, tell', *bubun 'bury', *bulək 'belly', *dalmət 'heavy', *hilak 'white', *kadam 'rat', *muhdan 'nose', *makpahad 'bitter', *puaw 'lungs', and *taur 'heart'.
- **2.2 Northern Luzon.** Formerly known as the "Cordilleran" subgroup, the Northern Luzon subgroup consists of six branches: Ilokano, Cagayan Valley, Northeastern Luzon, Central Cordilleran, Southern Cordilleran, and Arta. Lawrence Reid (1979, 1989, 1991, 2006) and Ronald Himes (1997, 1998, 2005) are the primary scholars to have addressed either the entire subgroup or multiple branches thereof, while a number of other scholars have studied individual languages belonging to this group.
- **2.2.1. Ilokano.** Spoken by nearly ten percent of the Philippine population as well as a considerable number of early Philippine immigrants to the United States, Ilokano is now the major trade language of most of northern Luzon, with pockets of speakers also found in certain parts of western Mindanao. Although Ilokano has over the past century become a widely-spoken trade language and thus the source of many borrowings throughout northern Luzon, there was a time that Ibanag held this position, which may explain the widespread /g/ reflexes of *R in

Ilokano (vs. the expected /r/ reflexes in native Ilokano forms). Its two-way history of borrowing therefore makes it difficult to identify Ilokano lexical innovations, although some candidates include *dúrek* 'earwax', *isú* 'he/she (3sg.NoM)', *kaladkad* 'climb', *lapáyag* 'ear', and *punpun* 'bury'. Ilokano technically has two main dialects: a northern dialect in which earlier *ə is reflected as /e/, and the word for 'no' is *saán* /saʔán/; and a southern one in which *ə is reflected as /ə/ and the word for 'no' is *haán* /haʔán/, which prompted Dyen to use the term "Ilokan". While far less studied than Tagalog, an impressive number of works have been published for Ilokano, making it the best studied Philippine language north of Tagalog: three dictionaries (Vanoverbergh 1956a, 1956b, Constantino 1971a and Rubino 2000); two grammars (Vannoverberg 1955 and Constantino 1971b, besides the grammar sketch in Rubino 2000); a historical study by Tharp (1974); and pedagogical materials at various levels (Espiritu 1983, 2004).

2.2.2. Cagayan Valley. The Cagayan Valley subgroup includes Adasen, the three Atta languages (Atta Faire, Atta Pamplona, and Atta Pudtol), Central Cagayan Agta, Gaddang, Ga'dang, Itawit/Itawis, Isnag/ Isneg, Malaweg, Yogad, and Ibanag, which was once a major trade language in northern Luzon prior to the expansion of Ilokano. Research done on one or more of these languages include Reid (1979), and a Spanish-era dictionary of Ibanag by Bugarin (1854). Note that the Cagayan Valley languages, along with the Northeastern Luzon languages, were formerly believed to form a "Northern Cordilleran" node within the Northern Luzon ~ Cordilleran subgroup, but Robinson and Lobel (2013) found no evidence for this after a more thorough survey of the members of the Northeastern Luzon subgroup. Innovations unique to this group include: *agál 'liver', *agída 'they (3PL.NOM)', *alág 'sheath (for a bolo)', *aŋ(ə)tiŋ 'afraid', *apúŋət 'chicken louse', *busáli 'boil, abscess', *dákəs 'bad', *dapíŋ 'dirty', *dəgá 'turtle', *dəmdəm 'lonely, sad', *əbíŋ 'child', *po:ray 'angry, brave', *sangáw (temporal: now, recent past, a little later), *tanakuwán 'other, different', *təkaw 'borrow', *to:lay 'person', *túmeŋ 'heel', *túnuŋ 'straight', *ubo:bug 'speak', *ŭgaŋ 'sweat', and *utún 'summit'.

2.2.3. Northeastern Luzon. This subgroup includes five Negrito Filipino languages—Dupaningan Agta, Pahanan Agta, Dinapigue Agta, Casiguran Agta, ⁵ and Nagtipunan Agta—all spoken on or near the Pacific coast of northeastern Luzon by groups self-identifying as "Agta". Robinson & Lobel (2013) represent the only historical-comparative study of these languages, although Headland (1975) published an earlier study based on lexicostatistics and mutual intelligibility. Major works on individual members of this subgroup include Headland and Headland (1974) for Casiguran Agta, and Robinson (2011) for Dupaningan Agta. Innovations within this group include *ləbbút 'boil water'; *ladú? 'fever'; *putát 'full'; *ma-dəggá? 'heavy'; *démət 'arrive'; *pilás 'muscle'; *sánig 'hear, listen'; *tóglad 'push'; *bakál 'stab', *réktat 'begin', and *ləddís 'crush lice'.

2.2.4. Central Cordilleran. This large group of languages includes Balangao, Isinay, Luba, Manabo, Northern Kankanaey, Southern Kankanaey, and various languages identified by

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⁵ Generally called "Casiguran Dumagat" in the literature, following its primary scholar, Tom Headland, this and other groups speaking Northeastern Luzon languages refer to themselves as "Agta", while *dumagat* is a Tagalog term referring to any of the Negrito Filipino populations along the Pacific coast of northern and central Luzon, including the Umiray Dumaget, the Alta, and the Agta and other Negrito Filipinos of Alabat Island.

broader names "Itneg" (Binongan Itneg, Inlaod Itneg, Maeng Itneg, Masadiit Itneg, Moyadan Itneg, Banao Itneg), "Kalinga" (Butbut Kalinga, Limos Kalinga, Lubuagan Kalinga, Mabaka Valley Kalinga, Majukayang Kalinga, Southern Kalinga, Tanudan Kalinga); "Bontok" (Central Bontok, Eastern Bontok, Northern Bontok, Southern Bontok, Southwestern Bontok) and "Ifugao" (Amganad Ifugao, Batad Ifugao, Mayoyao Ifugao, Tuwali Ifugao). Linguists who have published on one or more of these languages include: Reid (1979) and Himes (1997). Innovations defining the Central Cordilleran subgroup include: *?ákaw 'steal' (unexplained loss of *t- < *takaw), *?alməŋ 'laugh', *?anuká 'whatchamacallit', *?awíl 'gift', *ba?úd 'tie, tether', *bagá?ən 'slave', *bagáŋ 'neck' (semantic shift from PAN *baRqaŋ 'molar'), *tágu 'person, human' (insertion of -g- into PAN *Cau), *tə?túwa 'true', *tubu 'leaf' (semantic specialization of PMP *tubuq 'grow, germinate, sprout'), *tuŋ?al 'bone' (double metathesis of PWMP *tuqəlaŋ), *tupák 'mouth', *úgud 'story', *wanəs 'loincloth', *wanwaŋ 'river', and *wasít 'throw'.

- **2.2.5. Southern Cordilleran**. The Southern Cordilleran subgroup, for which Himes (1998) is the primary historical-comparative work, includes Ilongot/Bugkalot; Pangasinan, I-wak, Ibaloi, Kalanguya, Keley-i Kallahan, and Karao. Pangasinan is the best documented language from this subgroup, with grammars and dictionaries such as Rayner (1923) and Benton (1971), while Zorc (1979) has studied the historical development of contrastive accent in Pangasinan. Innovations defining this group include *?əgə́s 'intestines', *?aləgə́y 'stand', *baklaŋ 'body', *ballə́g 'big', *dalin 'earth, soil', *?əsə́l 'speak', *sakə́y 'one', *tawən 'sky', and *səlí 'foot'.
- **2.2.6. Alta**. This subgroup consists of two languages—Northern Alta and Southern Alta—spoken by Negrito Filipino populations both along the eastern coast of north-central Luzon between Baler and Dingalan in Aurora Province and upriver from those areas. Both have been treated in papers by Reid (1991) and Himes (2005), while the only major work on either has been a recent documentation project and dissertation by Alexandro Garcia-Laguia (2017) on Northern Alta. Proposed innovations include *bitlay 'carry on shoulder', *dakəl 'flood', *ibut 'lost', *i?ə 'this', *lanis 'sweet', *lutit 'mud', *mudoŋ 'mountain', and *pənaŋ 'hot (of weather)'.
- **2.2.7. Arta**. This near-extinct Negrito Filipino language spoken near Maddela, Quirino Province, was discovered by Reid (1989), who identified almost 150 unique forms (e.g., *binguèt* /binuət/ 'night', *bukágan* /buka:gan/ 'woman', and *bunbun* 'house'), and noted that the retention rate of Arta from PMP was among the lowest figures (26.9%) known for any Philippine language, with only 51 Arta reflexes out of 189 PMP reconstructions. More recently, a documentation project by Kimoto (2017a, 2017b, 2019) has contributed immensely to our understanding of this near-extinct Negrito Filipino language, including that the Arta apparently shifted from having a close relationship with the Yogad in Isabela Province, evidenced by several loans (Kimoto p.c. 12/10/2019), to Quirino Province where an extremely negative headhunting relationship developed with the Bugkalot/Ilongot. One interesting result of this is the shared innovation of *matləm for 'blood' (replacing PAN **daRaq*) with their former enemies, realized as Arta *ma-lèm* /ma?ləm/ and Ilongot /matyɨm/ (also found in Northern Alta as *matləm*).

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⁶ Bayninan Ifugao and Kiangan Ifugao, both included in Reid (1971) are actually dialects of Kallahan/Kalanguya and Tuwali Ifugao, respectively.

2.3. Umiray Dumaget. The Umiray Dumaget language—which has at least a northern/coastal and southern/inland dialect,⁷ and possibly a third dialect on Polillo Island—is spoken over a considerable part of central-eastern Luzon, now primarily in inland and highland parts of the elaborate river network of the area, but as late as the 1970s and 1980s, also along a stretch of the coastline of northeastern Luzon from near Baler in the north to near General Nakar in the south. Other than a New Testament translation and various literacy materials developed by Tom and Pat Macleod of SIL-Philippines during their work among the Dumaget from the 1950s to the 1980s, little has appeared about this highly-unique language whose innovations include *sagú* 'blood', *órat* 'water', and *tapúk* 'rain'. Himes (2002) who was the first to make a serious attempt at its subgrouping, arguing that it should be subgrouped with the Greater Central Philippine languages. However, Lobel (2013) refutes this based on a much larger body of evidence including complete sets of functors, arguing that Himes's analysis suffered from a lack of distinction between retentions, innovations, and borrowings. Instead, Lobel argued that Umiray Dumaget forms a primary branch of the Philippine subfamily, not closely related to any of the other Negrito Filipino languages, nor to any of the languages spoken by non-Negrito Filipino populations.

2.4 Central Luzon (and Remontado/Hatang-Kayi). The Central Luzon subgroup consists of two branches, one of which is Kapampangan, and the other the Sambalic or Sambali-Ayta group, which includes Botolan Sambal, "Tina" Sambal, Bolinao, Ayta Mag-antsi, Ayta Mag-indi, Ayta Abellen, Ayta Ambala, and Ayta Bataan/Magbukun. The primary study of this subgroup is Himes (2012), while a number of works have been published on Kapampangan (Forman 1971a, 1971b, Turla 1999, Bergaño 1732, 1736). Kapampangan and Sambalic share a number of innovations, including *gurut 'back', *unut 'coconut {generic}' (< PPH *hunut 'coconut shell cup'), *takla? 'excrement, to defecate' (also found in Remontado and Iraya), and *tələk 'deaf' (borrowed into Pangasinan). The Sambalic subgroup reflects the innovations *anag 'termite' (< PAN *aNay), *bəkraw 'throat', *dalúnut 'smooth', *dayi 'still, yet', *dəbləm 'dark', *duday 'urine', *kudpal 'thick', *lálə? 'deep', *ma?ín 'have, there is', and *ray?əp 'cold'.

Special mention should be made here of the moribund Remontado/Hatang-Kayi language (often referred to in the literature by the unfortunate misnomer "Sinauna" or "Sinauna Tagalog" meaning 'Archaic/Aboriginal Tagalog') spoken by some 300 adult Remontados in the highlands of Tanay and General Nakar towns east of Manila. Following Santos (1975), most scholars, including Blust (1991) and Himes (2012) have included Hatang-Kayi in the Central Luzon group, but Lobel and Surbano (2019, 2020) refute this as the product of the limited size of earlier data sets, much of which was ambiguous as to whether it was borrowed or inherited. Further documentational and historical-comparative work on this language is certainly in need.

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Some speakers of the southern dialect use the endonym *Bulus*, this name is not recognized as an ethnic identifier by speakers of this language in other areas, who generally identify as *Dumaget* /dumagét/, which is cognate with Tagalog *dumágat* (which Reid (2013) considers to be from du- [case marker] + magat [name of river] rather than *d<um>aRat. Finally, in spite of the erroneous usage of the term in the linguistics literature, in no area do Dumaget use the term *agta* as an ethnic identifier, as *agta* in the Dumaget language simply means 'person' in general.

⁸ "Tina" is placed in quotation marks as at least some speakers consider it offensive, and the Ethnologue no longer includes it as the primary name of the language; however, the removal of this identifier leaves only "Sambal", which creates ambiguity as to which of the two Sambali languages are being referred to.

- **2.5. Manide-Alabat.** The small Manide-Alabat subgroup consists of two languages spoken by Negrito Filipino populations in south-central Luzon, Inagta Alabat, spoken by the Agta of Alabat Island and Lopez, Quezon; and the Manide language spoken by the Manide. Both languages were virtually unknown prior to work by Lobel over the past two decades, although wordlists had also been collected for both languages by Garvan during his tenure in the Philippines in the first quarter of the 20th century. The only publications on these two languages are Lobel (2010, 2013) and Lobel, Barreno, Susutin and Barreno (2020), although Philippine scholar Louward Allen Zubiri (2019) has developed an expansive set of pedagogical materials for Inagta Alabat over the past five or so years. These two languages, closely related to one another, do not have any other close relatives, although related languages may once have been spoken by other groups in Quezon Province who now speak only Tagalog as their native language, such as the "Katabagan" of Catanauan. Noteworthy features of these two languages include not only their large amounts of unique vocabulary, but also their vowel shifts which affect /a/ and /u/ after voiced stops and glides: Low Vowel Fronting (a shift shared with other Negrito Filipino languages along the Pacific coast of Luzon) and Low Vowel Backing in both languages, and Back Vowel Fronting in Manide. Innovations shared by these two languages include *senul 'sit', *panagbey 'swim', *pála? 'die, kill', *katlub 'tongue', *sewen 'ear', *gemes 'rain', *pelenut 'mosquito', *ma-lem?at 'white', *su?en 'thorn', *hi?new 'wind (n.)', *be?dis 'feces', and over 200 others (Lobel 2020e).
- **2.6. North Mangyan.** The North Mangyan subgroup consists of the Alangan, Iraya, and Tadyawan languages spoken in the northern half of Mindoro Island. Major works include the aforementioned Zorc (1974) and Barbian (1977) for the Mangyan languages in general. Apart from a short article on Iraya by Reid (2017), no recent work has been done on these three languages. Words that appear to be unique to this group include: *apu 'there is, have [existential]', *dulan 'knee', *nakay 'what?', *Ratan 'hold', and the unexplained addition of -y to PAN *duSa 'two', yielding *duway.
- **2.7. Greater Central Philippines.** The Greater Central Philippine subgroup, first proposed by Blust (1991), combines seven Philippine subgroups (Central Philippines, South Mangyan, Palawanic, Subanen, Danaw, Manobo, and Mongondow-Gorontalo) on the basis of both shared lexical innovations and the *R > /g/ shift. Of the 94 innovations that Blust presented at the time to establish this group, 28 are now shown in the Blust and Trussel (ongoing) as being retentions from either PAN, PMP, PWMP, or PPH. The 66 that remain include *?əbúh 'cough', *darág 'yellow', *haldək 'fear', *pispis 'bird', and *púnu? 'leader, chief' (a semantic shift and metathesis of PMP *puqun 'base (of a tree); cause; source, origin'). Zorc, however, questions the inclusion of the Palawanic languages in this subgroup (cf. Section 2.1.5.6), given the small number of GCPH innovations that they reflect, as opposed to languages such as Mongondow, Maranao, Western Bukidnon Manobo, Gorontalo, and Tagalog. Likewise, Lobel (2013, 2016b) has raised the possibility that Molbog, the southernmost language identified as Palawanic, may instead be more closely related to the Bonggi language of Sabah, Malaysia, a language which Blust (2010) argues is more closely related to the Idaanic languages in a Northeast Borneo subgroup.
- **2.7.1. Central Philippines.** The approximately 50 members of this group, which consists of

Tagalog, Mamanwa, and the various Bikol, Bisayan, and Mansakan languages, are spoken natively from southern Luzon to northern Mindanao, and are spoken as a first language by over sixty percent of the Philippine population, represented primarily by Tagalog (28%), the national language; Cebuano (13.1%); Ilonggo/Hiligaynon (7.5%), Bikol (6%), and Waray (3.4%).

2.7.1.1. Tagalog. Chosen as the National Language or "Wikang Pambansa" in 1937, Tagalog is the most widely-studied Philippine language, and the subject of two of the most comprehensive lexicographical works on any Philippine language, Panganiban (1972) and Leo English's Tagalog-English and English-Tagalog pair of dictionaries (1977, 1986). Many grammars are also available, one of the classics being Schachter & Otanes (1972). Tagalog has been both donor and recipient countless loanwords, including from Malay, from which Wolff (1976) identified 300 loans including ultimate borrowings from Arabic and Sanskrit; Kapampangan, whose territory alternated over the centuries as the center of trade and capital of the Philippines, and several other languages of Luzon; Chinese (Chan-Yap 1980), and, more recently, from Spanish and English. Due to both the reciprocal borrowing relationships between it and its neighbors, as well as its solitude (along with Kasiguranin) in its branch of the Central Philippine subgroup, it is exceedingly difficult to find unique lexicon in the Tagalog language, but candidates include: bungángà /bunána?/ 'mouth', búti 'good, well', dumí 'dirt, dirtiness', gagambá 'spider', háwak 'hold', higáb ~ hikáb 'yawn', nguyâ /núya?/ 'chew', saán /sa?án/ 'where?', sinungáling /sinunálin/ 'lie, mistruth', tandâ /tandá?/ 'old (person)', tanóng /tanún/ 'ask', upô /?upú?/ 'sit', and *úsok* 'smoke'. However, the numerous "non-standard" dialects of Tagalog are much more conservative than Manila Tagalog, and are more widely distributed geographically than Manila. Non-standard features widely attested in Tagalog dialects outside of Manila include the retention of earlier post-consonantal glottal stops (Southern Tagalog gab-i/gab?i/'night', big-át/big?át/ 'heaviness, weight', and ngay-on /nay?ún/ 'today, now' for Manila Tagalog gabí, bigát, and ngayón, respectively); the presence of contrastive vowel length in prepenultimate syllables (nākáin /na:ká?in/ 'eats, is eating (Actor Focus)' vs. nakáin /naká?in/ 'accidentally ate, was able to eat (Object Focus)'); and differences in stress patterns (Southern Tagalog divan /divan/ 'there. near addressee' and bitúin /bitú?in/ 'star' vs. Manila Tagalog diyán /diyán/ ~ dyan /dʒan/ and bituín /bitu?ín/ ~ bitwín /bitwín/, respectively).

2.7.1.2. Bisayan. The primary study of the approximately 40 languages belonging to the Bisayan subgroup (some of which are spoken at the southeastern corner of Luzon and the northeastern corner of Mindanao) is Zorc (1977), in which 36 Bisayan speech varieties were compared on the basis of lexicostatistics, intelligibility testing, functor analysis, and shared innovations. Some of the innovations defining the entire Bisayan subgroup include *dakú? 'big', *damgu 'dream', *gəgma 'love', *gi- 'non-Actor Focus past', *hibadú 'know how to do, know (facts)', *lú?uy 'pity', *-na? 'root of 2nd-position deictic', *singit 'shout', *yáwa? 'devil, demon (also used as a curse word)'. Zorc's five-way division of the Bisayan languages —Central, Western, Southern, Cebuano and Asi'/Bantoanon—has been adopted by all subsequent authors writing about these languages, with the exception of Gallman (1997), whose proposed Northeastern Mindanao group consisting of Cebuano, Southern Bisayan, Mansakan, and Mamanwa, has not been accepted by

⁹ It is unclear whether this number includes all of the Bikol languages, or only Central Bikol; and, if so, whether the languages of Sorsogon and Masbate, genetically part of the Bisayan subgroup, may have also inadvertently been included.

any other authors, and which may be the product of an East-Mindanao-axis¹⁰.

The Western Bisayan subgroup consists of not only "standard" Kalibonhon Aklanon and the "standard" Kinaray-a of San Jose Buenavista Antique, but also a number of minor languages including Malaynon, Buruanganon, Nabasnon, Pandanon, Libertadnon, Jamindanganon-Mambusaonon, Bulalakawnon, Inonhan, Ratagnon, Panay Binukidnon (sometimes referred to as "Sulod"), and numerous "non-standard" dialects of Kinaray-a in the provinces of Iloilo and Capiz. Innovations defining this subgroup include *ayán 'go', *búhay 'long (of time)' [specification of GCPH *búhay 'live long'], *-gi [deic-1-root], *hangəd 'big, many', *hilə́ŋ 'drunk', *hinga? 'lie down', *kasalpan 'west', *libáyən 'sibling', *ráha? 'cook', *tána 'he/she (nominative)', *sánda 'they (nominative)'.

The Central Bisayan subgroup consists of the major languages Ilonggo/Hiligaynon, Waray-Waray, and Masbatenyo, as well as numerous minor languages including Romblomanon, Northern Sorsoganon, Southern Sorsoganon-Northwestern Samarenyo, Northern Samarenyo, Bantayanon, Utudnon/Baybayanon, Kinabalian, Porohanon and possibly also Northern Binukidnon and Southern Binukidnon. The best represented of these languages in terms of published materials are Ilonggo (Kaufmann 1934, Motus 1971, Wolfenden 1971, Mentrida 1637, etc.), Waray-Waray (Tramp 1995, Ezguerra 1747), and Masbatenyo (Wolfenden 2001). Innovations defining this subgroup include *irúy 'mother', *kadá? 'go there (near addressee)', *kánam 'play', *píraw 'sleepy', and *sumat 'say, converse'.

The Cebuano branch of the Bisayan subgroup consists of a single language, Cebuano, represented by numerous dialects throughout the central Visayan Islands, with those in the southern third of Cebu Island, the eastern coast of Bohol Island, the southwestern coast of Leyte Island, and the eastern coast of Negros Island retaining more conservative phonological and grammatical features than the Cebuano spoken in Cebu City, northern Cebu Island, and most of Mindanao as an immigrant language or second language. As was discussed for Tagalog, finding unique forms for Cebuano is difficult due to its extended and complex history of both contributing and borrowing lexicon through contact with various Bisayan, Mansakan, and Manobo languages, but candidates include *daghan* 'many', *hagbung* 'fall', *húnung* 'stop', *kámu* 'cook', *kubut* 'hold', and the genitive common noun case marker *ug*. The study of Cebuano has greatly benefited from the 1972 dictionary by Wolff, one of the most thorough dictionaries of any Philippine language to date.

The Southern Bisayan subgroup consists of Surigaonon, Butuanon, Tandaganon/Tagonon [called "Naturalis¹¹" in Zorc (1977)], and Tausug. Of these, only Tausug has a dictionary (Hassan, Halud & Ashley 1975, revised as Hassan and Ashley 1994). Innovations include: *bugá? 'afraid', *hiram 'mosquito' (borrowed into Kamayo, Ata Manobo and Dibabawon Manobo), *kawá? 'get, take' (a reshaping of PPH *kúha?), *kunsələm 'tomorrow', *pisak 'mud', and *yupú? 'short'.

The Asi' subgroup consists of a single language, Asi' [Bantoanon in Zorc (1977)], which is spoken in five towns, each with its own distinct dialect. Three of these dialects are spoken on

¹⁰ Zorc coined the term AXIS in 1972 based on WWII (Axis vs.Allies), well before Bush's "axis of evil" (State of the Union, January 29, 2002). At that time (and long thereafter) he was unaware that Milroy (1985) introduced the term NETWORK, Ross (1988), Pawley and Ross (1995) LINKAGE to describe similar phenomena. See section 4.2.

¹¹ #37 at < http://sealang.net/archives/zorc/>. This was the name my informant, Dominggo Elizalda-Midrano used. Derived from Spanish *natural(es)* 'natural, native, plain' (masculine plural), it implied their 'native' language, distinct from Cebuano, which was also heavily used in that area as a trade language.

small islands to the northwest of Romblon—Bantoanon, Simaranhon, and Sibalenhon on the islands of Banton, Corcuera, and Concepion/Maestro de Campo, respectively—while two are located interspersed between dialects of Inonhan and Romblomanon on the island of Tablas: Odionganon in Odiongan town, and Calatravanhon in Calatrava town. The Asi'/Bantoanon language is distinguished phonologically by a triad of shifts: PPH *d > /r/, *y > /d/, and *l > /y/, e.g., gador 'emphatic marker' < PGCPH *gayəd. The five dialects share a number of innovations including /ási?/ 'why?' (from which this group gets its name), bagúntor 'mountain', guyáh 'laugh', hidáit /hidá?it/ 'love' (other Bisayan *gəgma), insulíp 'tomorrow', *kag 'nominative common noun case marker' (most Central Philippine ang ~ an), kumán 'earlier (today), and nak 'linker' (other Philippine *nga or *na). A number of other forms hint at external contacts that speakers of this language have had over the past millenium, including bilá-bilá 'butterfly' shared with Romblomanon; dútà /dúta?/ 'earth' shared with Cebuano yútà /yúta?/; maádo /ma²ádu/ 'good, well' shared with Cebuano and Central Bisayan maáyu 'good'; rampog 'raincloud' shared with Central Bisayan *dampəg; and even taybu 'dust' shared with Bikol Rinconada and Bikol Libon talbu.

2.7.1.3. Bikol. The Bikol subgroup consists of eight languages exclusively native to the Bikol Region of the southeastern portion of the large northern Philippine island of Luzon. The primary study of these languages is McFarland (1974), while Lobel (2013) has done a considerable amount of additional work on the subgroup. The subgroups within the Bikol node are Northern Bikol, consisting of a single language usually called "Central Bikol" or "Bikol Naga", spoken in various dialects from Daet, Naga, Partido, Legaspi, southern Catanduanes, and the northern coast of Sorsogon; Southern Bikol, consisting of the Rinconada, Buhi-non, Bikol Libon, West Albay Bikol, and Bikol Miraya languages; Northern Catanduanes, consisting of a single language spoken in the towns of the northern half of Catanduanes Island; and Inagta, a language spoken by the Agta of Mt. Isarog and Mt. Iriga (also known as Mt. Asog) in Camarines Sur province. Not included in the Bikol subgroup are three languages also native to the Bikol Region, Northern Sorsoganon, Southern Sorsoganon, and Masbatenyo, the first two of which are nevertheless often called "Bikol" by their speakers in spite of belonging instead to the Central Bisayan subgroup (Zorc 1977). Innovations defining the Bikol subgroup include *bayún bird', *?əsád ~ *sarú? 'one', *gəda?an 'die, kill', *həlay 'long (time)', *payú 'head', *rahay 'good', and *sadáy 'small'. Central Bikol is the best-represented of the Bikol languages in the literature, with major lexicographical works not only in the modern era (Mintz and Britanico 1985, Mintz 2004) but also during the Spanish occupation (Lisboa 1865, whose data actually dates back to the first quarter of the 17th century); as well as a grammar and pedagogical materials (Mintz 1971a,b).

2.7.1.4. Mansakan. The Mansakan subgroup consists of nine languages: Kamayo (with a northern and southern dialect), Mandaya (with various dialects), Mansaka, Davawenyo, Isamal, Kāgan/Kalagan¹² and Tagakaolo. These languages can generally be divided into a Kamayo branch (consisting of Kamayo alone), a Southern branch (consisting of Kāgan, Kalagan, and Tagakaulu), and a Central branch consisting of the remaining four languages. Zorc (1977) was the first scholar to propose a "Proto-Mansakan", which Gallman (1979) later referred to as

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¹² While *Kāgan* /kaagan/ is simply the native pronunciation of *Kalagan*, the latter is usually used in the Davao region to refer to the Muslim ethnolinguistic group, while the former is used to refer to the non-Muslim group.

"Proto-South-East Mindanao" within what he later (1997) proposed as "Proto-East Mindanao" (a grouping which no other scholars have accepted but included Cebuano, some but not all of Zorc's South Bisayan languages, and Mamanwa). Proto-Mansakan innovations include *atulun 'fire', *da?ig 'many', *hambun 'afternoon', *hikəl 'laugh', *kagpa? 'short (of objects)', *kamayu 'to you (pl.) (2PL.OBL), *kisələm 'tomorrow', *kulkulhun 'fingernail', *lumun 'sibling', *tanak 'lose', *tiyayu? 'cry, weep', and *unan 'what?', and *ya?an '3SG.NOM'.

2.7.1.5. Mamanwa. The Mamanwa language is spoken by a Negrito Filipino population language of the same name in the northeastern Mindanao provinces of Surigao del Norte, Surigao del Sur, and Agusan del Norte (with small but long-established migrant communities on the Visayan islands of Samar, Leyte, and Biliran). In spite of the fact that the vast majority of its lexicon appears to be borrowed from neighbors such as Kamayo, Surigaonon, Agusan Manobo and Cebuano, Mamanwa retains a number of functors which point to a non-Central Philippine origin. Most of our knowledge about this language is the product of missionary sisters Helen Miller and Jeanne Miller over their decades of work with the Mamanwa (Miller 1964, 1973, Miller and Miller 1969, 1976, 1991), with only Lobel (e.g., 2013) having done additional work on this group in the decades since. Unique Mamanwa forms include *kamahan* 'monkey' and *nao* /na?o/ 'my, by me (1sg.gen)', as well as sharing a handful of innovations apparently borrowed from Mansakan *atmu? 'full, replete', *kamayu '2PL.OBL', *kulkulhun 'fingernail', *lumun 'sibling', *tanak 'lose', and the nominative common noun case marker *yan); South Bisayan (e.g., *dəkag 'itch', *la?as 'old, of person', *ləpəs 'rope', *si?ət 'narrow', *ta?əd 'many'); and Manobo (e.g., *bubun 'mountain', *buhi? 'full, sated', *?impis 'egg').

2.7.2. Manobo. The Manobo subgroup consists of at least 18 languages spoken throughout central and eastern Mindanao. Elkins (1974-75, 1984) has addressed the entire group in great detail along with a substantial number of lexical reconstructions. Zorc (1974b) and Harmon (1977) have addressed the position of the geographically-distant Kagayanen which nevertheless belongs to the Northern Manobo subgroup, while Burton (1996) presents a study of borrowing and lexical interrelationships between Manobo and Mansakan languages. The Manobo subgroup is defined by a number of lexical innovations, including *?aha? 'see', *?aram 'choose', *?atəbay 'sister (of a man)', *bakəsan 'snake', *bala?ug 'sow', *din '3SG.GEN', *gətək 'belly', *laŋəsa 'blood', *lipədəŋ 'sleep', pinənu?u 'sit', *rimusəng 'sweat', *tabak 'answer', *tampəd 'cut in two', and *ti?əm 'lips'.

Following Elkins (1984) analysis of the internal subgrouping of the Manobo languages for which data was available at the time, the 18 Manobo languages can be classified as follows:

Northern: Talaandig-Higaonon (a.k.a. Binukid), Kinamigin, Kagayanen, Umajamnen Southern: Tagabawa, Sarangani Manobo, Cotabato-Kalamansig Manobo, Tasaday¹³ Core-Western: Obo Manobo, Ilianen Manobo, Western Bukidnon Manobo, Pulangiyen Manobo

Core-Central: Ata Manobo, Matig Salug Manobo, Tigwa Manobo Core-Eastern: Agusan Manobo, Rajah Kabungsuwan Manobo, Dibabawon Manobo

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¹³ This southern Manobo group distinguishes itself by a unique word for 'blood': *dipanug, a replacement of PMB *laŋsa < PPH *laŋsa 'smell of blood ~ fish' [ZDS], most Philippine languages have syncopated the schwa.

- 2.7.3. Subanen. The Subanen subgroup consists of seven languages spoken exclusively in the Zamboanga Peninsula in western Mindanao: Northern Subanen, Southern Subanen, Eastern Subanen, Central Subanen, Western Subanon, Western Kolibugan, and Salug-Godod Subanen (including Tawlet/Kalibugan). The primary division in this subgroup is between the Western branch (containing Western Subanon and Western Kolibugan) and the Eastern branch (containing the other five), with the former defined by the loss of PPH *k, among other innovations. The best-known of these languages are Western Subanon (Hall 1987, Blust and Nielsen 2016, Bulalang 2018, 2020) and Central Subanen (Brichoux 1970, 1984, 1988, 1992, 2002, Brichoux and Hale 1977). Early work on these languages include Christie (1909) and Finley and Churchill (1913), while more recent work has been done by Hall (1987), Daguman (2004), Lobel and Hall (2010), Lobel (2013) and Bulalang (2020). The Subanen subgroup is defined by a handful of phonological innovations as well as 70 lexical innovations (Lobel 2013), including *dupi? 'rain', *gəbək 'run', *gəŋay 'gills', *ləgdəŋ 'straight', *m[a]-ika? 'small', *tapuk 'lungs', and *tərawan 'spear'.
- 2.7.4. Danaw. The Danaw (or "Danao") subgroup includes Maranao and the various dialects of the Maguindanaon and Iranun languages in central and western Mindanao, as well as the Eastern Sabah and Western Sabah dialects of Iranun in Sabah, Malaysia. Very little comparative work has been done on this subgroup other than a pair of articles (Allison 1979 and Fleischman 1981), although a number of works have been published on individual languages: Maranao (McKaughan and Macaraya 1996, McKaughan 1950, 1958, 1962, Lobel and Riwarung 2009, 2011); Maguindanaon (Juanmarti 1892, Sullivan 1986), and Sabah Iranun (McKaughan 2002a,b,c). Lexical innovations defining the group include *agag 'dry', *apa? 'wait', *bənəŋ 'forehead; face', *bida? 'other, different', *dadag 'lose', *gandər 'pull', *itug 'throw', *ləndu? 'long', *mayaw 'hot', *nin 'what?', *pasaŋ 'difficult', and *sandak 'stab'.
- 2.7.5. South Mangyan. The South Mangyan subgroup consists of the Hanunoo, Buhid, Eastern Tawbuwid, Western Tawbuwid, and Bangon languages spoken in central and southern Mindoro Island. Only Zorc (1974) has treated the internal subgrouping of the Mangyan languages in general, while Pennoyer (1980) addressed the relationship between Buhid and the Tawbuwid. A thesis by Barbian (1977) provided an invaluable expanded wordlist, but the subgrouping analysis contained therein is highly problematic, based on shared features and ignoring both innovations and important differences between the languages. Likewise, Barbian erroneously treated Ratagnon as a Mangyan language, when in fact it is clearly and uncontroversially a Western Bisayan language. Conklin's Hanunoo dictionary (1953) provides the most thorough lexicographical study of any of the Mangyan languages to date. Innovations in this group appear to be extremely limited (*labuŋ 'leaf', *siraŋ-siraŋ 'daily'), while a handful of forms are shared exclusively with Bisayan (*badás 'sand') or Bikol (*túkaw 'sit'), likely due to contact with these two subgroups at various times in the past.
- **2.7.7. Mongondow-Gorontalo.** One of three subgroups located outside of the geographical Philippines (the other two being Sangiric (§2.12) and Minasahan (§2.13), the Mongondow-Gorontalo subgroup consists of nine languages spoken in the central part of northern Sulawesi, Indonesia: Ponosakan, Mongondow, Lolak, Bintauna, Bolangitang-Kaidipang, Bolango,

Suwawa, Gorontalo, and Buol. Other than a pair of inconsistently-transcribed 19th-century wordlists (Jansen 1855, Niemann 1869, 1870), the earliest publications on these languages were those of Breukink (1906) for Gorontalo and the extensive work of Dunnebier (1916, 1929a, 1929b, 1930, 1948, 1949, 1951, 1953) on Mongondow. More recent work includes that of James Sneddon and the late Indonesian scholar H. T. Usup (Usup 1984, 1986, Sneddon and Usup 1986, Sneddon 1991), Lobel (2011, 2015, 2016a) and Lobel and Paputungan (2017). Halust (1991) has clearly established that the Mongondow-Gorontalo languages belong to the Greater Central Philippine subgroup, following Charles (1974), and among the 140 innovations that Lobel (2020) has identified defining the Mongondow-Gorontalo subgroup are *bolay 'monkey', *boyod 'rat', *buloy 'spouse', *gogoyon 'hungry', *mo-?ibun 'salty', *korot 'coconut milk', *mo-lanit 'sharp (of edge)', *litu? 'sit', *liyon 'forget', *lolayag 'ear', *miya? 'sleep; mucus/crust at edge of eyes after waking up', *mo-bunod 'thick', *mo-lono? 'fat', *oŋkag 'river', *porok 'smoke (n.)', *mo-pulin 'full (as a container', * puput 'grass', *mo-rogan 'thirsty', *talib 'pass by', *tigogow 'neck', *mo-tumpin 'cold (as an object)', and *utas 'sibling'.

2.8. Palawanic. The Palawanic subgroup is generally defined as consisting of Batak, Aborlan Tagbanwa, Molbog, and various languages spoken by groups identifying as *Palawan* [sometimes Pala?wan], including Brooke's Point, Central Palawan, Southwest Palawan, and the closely related languages of Panimusan, Islamized coastal groups who do not identify as "Palawan" but whose language is nevertheless largely identical to that of the non-Muslim Palawanic peoples. The only major study of this subgroup is by Thiessen (1981). Blust (1991) proposed that these languages form one of seven nodes of the Greater Central Philippine macrogroup. Scebold (2003) introduced the Central Tagbanwa language, for which data had not been available to earlier authors. The Palawanic languages share a number of lexical innvovations including *bakal 'throw', *bəgit 'bird', *gərən 'back', *rayak 'pull', and *tabuk 'smoke'. The northern branch has *kəʔdən 'dog', while the southern branch has *idən, both replacing PAN *asu. The Southern branch additionally differs with the innovations *dələk 'rain', *kəsit 'laugh' and *tipusəd 'sibling'. The majority of the data for the Palawanic languages comes from Revel-MacDonald (1979) for Palawan, Warren (1959) for Batak, and Thiessen (1981) as a general overview of the languages of Palawan Province. Of the seven microgroups that Blust proposes as members of Greater Central Philippines, Palawanic is the most problematic, since, in spite of sharing the R > g shift, the amount of lexical innovations shared with PGCPH is minimal, which may indicate that Proto-Palawanic was the earliest to split from the other GCPH languages.

2.9. Kalamianic. The Kalamianic subgroup, for which Himes (2007) is the primary historical-comparative work, consists of the Agutaynen, Calamian Tagbanwa, and Karamianen languages, all located on islands near northern Palawan. Of these three, only Agutaynen has a large dictionary (Caabay et al., 2014). Lexical innovations defining the innovations: *aliŋət 'near', *aniŋ 'say', *ələd 'fear', *gə?əd 'bolo', *gu?uy 'call', *kandas 'liver', *kulit 'white', *tan- '3rd-person pronominal formative', and *yawa? 'you (2SG.NOM)'.

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¹⁴ Lobel is also currently working on a dictionary and grammar of the now-extinct Ponosakan language as well as for the moribund Lolak language.

2.9. Inete/"Inati" (and the Ata of Negros). While the existence of the Ati people of Panay island had been known since the Spanish occupation of the Philippines, it wasn't until Pennoyer (1986-87) that any data from or description of the language surfaced. The language appears to form a primary branch of the Philippine subfamily (Blust 1991:80), with a large number of unique features in the functor subsets, although the vast majority of its lexicon has been borrowed from neighboring Bisayan languages on Panay Island, primarily Kinaray-a and Aklanon, but also Ilonggo. Blust (ibid.) notes that "[u]niquely among languages in the Philippines, it has merged *R and *d in at least final position (intervocalically pre-Inati *d became /r/, and subsequently pre-Inati *R became /d/), e.g., *kadat* 'bite', *kiturud* 'sleep', *paridus* 'bathe'. Little Inati data has appeared in the literature outside of that found in Pennoyer (1986-87) and Lobel (2013), but some unique lexical items include *sapiw* 'house', *awuy* 'yes', *nalang* 'no', *umê* 'arrive', *dugûk* 'go', *ngadin* 'don't know', *pegek* 'chicken', *betleng* 'put', *miyâ* 'what?', *ki-ara* 'where?', *da-it* 'rain', *mesned* 'far', *ereden* 'path' 'himpun 'fire', and *gine* 'also'.

It should be noted that the Ete/"Ati" of Panay, Guimaras, and Boracay islands are distinct from the Ata people of Negros Island (who in turn should not be confused with the linguistically and ethnically distinct Ata Manobo of central Mindanao Island, closely related to the neighboring Tigwa and Matigsalug Manobo). The Ata of Negros Island are descendants of a widespread population encountered by the Spanish in the 15th century thus compelling the latter to rename the island of Buglas as "Negros" (from the Spanish plural for 'black', or, in this context, 'black person'). The most important distinction in terms of linguistics is that while both the Ati and the Ata retain distinct ethnic identities, only the Ati retain a completely-distinct language from their neighbors, whereas Lobel, in multiple visits to Ata communities throughout the island, has found only a handful of Ata who can remember even small fragments of an "Inata" language. The current situation is unsurprising, however, considering that three-quarters of a century earlier, Rahman and Maceda (1955:818) reported that no other Ata could be found who spoke a distinct language from Cebuano or Ilonggo other than one deaf old man who "speaks in a language which they do not understand…when he gets angry with his children."

2.10. Southwest Mindanao. The Southwest Mindanao subgroup consists of Tboli (sometimes called "Tagabili"), Koronadal Blaan, Sarangani Blaan, and the more distantly related Tiruray (more correctly "Teduray"). Innovations defining the Southwest Mindanao subgroup include *bakun 'deaf', *butən 'night', *dawin 'loincloth' (vs. PMP *bahaR), *de?e 'many', *kodog 'boil (water)', *isaq 'break open, hatch' (vs. PAN *pəcəq), *kuwah 'oar, paddle', *lakay 'tail feather of rooster' (vs. PMP *lawi), and *Rasan 'skinny'. The Tboli-Blaan node is defined by innovations such as *bong 'big', *fayah 'tomorrow', *kahun 'swim' (vs. PAN *Nanguy), *kahi? 'salt' (vs. PAN *qasiN), and *litə? 'blood' (cf. PAN *Nitəq 'sap').

2.11. Southeast Mindanao. This group consists of the various dialects of the Klata language (also known as Bagobo, Giangan, or Diangan), spoken in Magpet in Cotabato and in the Baguio, Calinan, Marilog, and Tugbog districts of Davao City. This moribund language was only

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¹⁵ Note that *Ete* /ete/ (underlyingly probably *ata, as /a/ raises to $[\varepsilon] \sim [\varpi]$ in the Inete language) and *Inete* /inete/ are the endonyms for the group and its language, respectively, while *Ati* and *Inati* are the Bisayan exonyms.

¹⁶ Ultimately from PAN *aRi (with a <CV> infix and -an suffix) 'come; toward the speaker' [ACD], also found as Aklanon *aeagyan* 'path, way', but clearly replacing PAN *zalan 'path, made by a human...' [ACD].

recently discovered to be distinct from all other southern Philippine languages (cf. Evans 2017 and Zorc 2019). Generally, it is no longer being passed on to children, which is largely due to intermarriage with Cebuanos and other local groups. A few of its unique vocabulary items include the plural marker $b\varepsilon$ (vs. PSP *maŋa), benne'/bɛnnɛ?/ 'cry, weep' (vs. PAN *Caŋis), byoo/byo?o/ 'year' (vs. PMP *taqun, PPH *dag?un), klammag 'star' (vs. PAN *bituqən), kulung 'back' (vs. PAN *likud), lammi 'new' (vs. PAN *baqəRuh), ongob 'fingernail' (vs. PMP *kukuh), and paya 'big' (vs. PAN *Raya, PMP *laba, PPH *dakəl).

- **2.12. Sangiric.** Divided by the maritime border between the Philippines and Indonesia, the five Sangiric languages have been recognized since Sneddon (1984) as a primary branch of the Philippine subgroup. Three of these languages (Sangir/Sangihe, Talaud, and Sangil) are spoken on a series of small islands between southeastern Mindanao and northeastern tip of Sulawesi, while the other two (Ratahan/Pasan and Bantik) were traditionally spoken on the mainland of northeastern Sulawesi. Like the vast majority of languages native to northeastern Sulawesi, the Sangiric languages in Indonesia are all highly endangered, seldom spoken and no longer being learned by younger generations, who have all switched to Manado Malay. Little has been published on these languages other than Sneddon (1984) and Steller & Aebersold (1959) for Sangir, although documentation for Ratahan/Pasan collected between 2005 and 2007 has been archived by Anthony Jukes (2005-2007). Innovations identified by Sneddon as defining the Sangiric subgroup include: *ake? 'water', *babəlaw 'afternoon', *busak 'banana', *payan 'thigh', *pepe 'urine', *sina? 'know a person', *tanak 'live, dwell', *təbay 'old (of object)', *təmbu? 'head', *tipu 'smoke', *timbonan 'head', *t[io]nkaRia 'ear', *tətuR 'hot coals, embers', and *tolay 'tail'. Bordering on one another in many areas, the Sangiric and Minahasan groups have interacted for centuries as evidenced by shared innovations: *dou ~ *r₂e?o 'thirst', *paluka 'shoulder', *hənisə? ~ *rəngis 'burn', *dirihə? ~ *ririh 'yellow', *tagas 'low tide; ebb', *təkəl 'sleep', *tumpa 'descend; alight', *tunay 'thorn', and *utak 'hair' [< PMP *utək 'brain'].
- 2.13. Minahasan. The Minahasan languages are spoken exclusively on the mainland of northeastern Sulawesi, in what was formerly the subprovince or "regency" of Minahasa (now broken up into several smaller regencies). These five languages—Tontemboan, Tonsawang, Tonsea, Tondano, and Tombulu—were first assigned to the Philippine sufamily by Sneddon (1978), a position also adopted by Blust (1991). As mentioned for the Sangiric languages in Section 2.1.12, all of the Minahasan languages except Tonsawang are moribund, with even elderly Minahasans now speaking Manado Malay more frequently than their ancestral language, which few children are still learning. Major works on individual languages include Sneddon (1975) for Tondano, and Schwarz (1908) for Tontemboan. Innovations identified by Sneddon (1978) as defining the Minahasan subgroup include *akad 'until, to the extent that', *baŋko? 'big', *baya 'all', *bənaŋ 'debt', *bər₂ən 'eye', *bisa 'which?, where?', *date 'cold', *ələp 'drink', *əŋah 'cough', *biaʔi 'here', *indo 'take, get, fetch', *kabisa 'when?', *katar₂ə 'first', *keʔkeʔ 'laugh', *pəntuʔ 'bitter', *pola 'sugarcane', *r₂ondor₂ 'straight', *saho 'dew', *salaksak 'ribs', *takur₂a 'how much?', *tələb 'fly (away)', *tiəy 'pig', and *ulit 'true, correct'.

3. Phonological Developments.

3.1. Consonants.

Sixteen consonants (cf. Table 1) are found in the vast majority of Philippine languages and can be reconstructed for Proto-Philippine. Although [r] is only an allophone of /d/ in many languages, it derives its phonemic status either through Spanish or Malay loanwords. Reid (1973) has one of the best summaries available.

Table 1. The Consonant System of most Philippine languages.

The following relatively rare consonants are also know to occur in some languages:

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/\beta/ [bilabial fricative < *-b-] in Agta
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/f/ [labio-dental fricative < *p] in Koronadal Bilaan, Sarangani Bilaan, Tiruray

/p'/ in Maranao [heavy bilabial stop, orthographic <ph> < *pC] (Lobel 2010)

/r/ as the phonetic rendition of /*l/: Bontok, Mansaka

/t'/ in Maranao [heavy dental stop, orthographic < *tC] (Lobel 2010)

/s'/ in Maranao [heavy palatal fricative, orthographic $\langle z \rangle < *sC$] (Lobel 2010)

/w/ in Aklanon, orthographic <e> [voiced velar approximant, allophone of *l]

/k'/ in Maranao [heavy velar stop, orthographic <kh> < *kC] (Lobel 2010)

Although many Philippine languages have the glottal fricative /h/, its provenance varies. PAN *S and *h merged in PPH *h, but, as Blust (2018) notes, its appearance in coda position is extremely rare, only preserved word-finally and sporadically among Itbayaten, Ayta Abellan, Tina Sambal, Mamanwa, Waray, and Aklanon 18. Thus PAN *CinaS 'food stuck in teeth' > Itbayaten $ti\tilde{n}ah$, Aklanon, Mamanwa tinah. It is not pronounced finally in Tagalog and Cebuano, but often occurs morphophonemically when inflected, e.g., natinaha 'happened to have food stuck in one's teeth'.

/h/ [derived from PPH *h] in Itbayaten, Tagalog, Bisayan (except Kuyonen, and a few other West Bisayan dialects), Naga Bikol, Hanunoo (partially), several Manobo (Binukid, Dibabawon, Western Bukidnon; Ata - initial), and Casiguran Dumagat (mainly loans).

/h/ [derived from the merger of PPH *s and *h: Ayta Abellen, Sarangani Bilaan

/h/ [derived from PPH *s] in: Amganad Ifugao, Balangaw, Batad Ifugao, Bayninan Ifugao Kayapa Kallahan, Keleyqiq Kallahan, Klata, Koronadal Bilaan, and Tboli.

 $/\mathbf{h}/[\text{derived from PPH *b, *d, *j, *R, and *r}]: Agta.$

/h/ [derived from PPH *l] in: Ivatan; Tagalog (partially).

/**h**/ [derived from PPH ***p**]: Tboli.

/h/ [derived from PPH *q]: Tboli (intervocalically).

Its varying retention has been compared in standard words (*tebuh 'sugarcane') as opposed to monosyllabic reduplications (*muhmuh 'rice crumbs'). Some languages fare better in preserving the monosyllabic reduplicates.

 $^{^{17}}$ The PAN and PMP phoneme * \mathbf{q} also belongs in this table, but is supported only by evidence from the Kalamianic group and Tboli (Tagabili) within the Bilic subgroup.

/h/ [derived from PPH * **R** and ***r**] Casiguran Dumagat. /h/ [derived from PPH * **R**] Mamanwa (very rare), Minahasan.

3.2. Vowels.

Most Philippine languages have three or four vowels, although some have five to seven, all of which can be derived from PPH *i, *u, *e [schwa], and *a. Only one has eight. See Reid (1973) for a tour de force. All have /a, i, \mathbf{u}^{19} /; many have schwa /ə/, although pronounced variously as [i, ü, ə, Λ]; it is orthographically represented as <e>, if there is no conflict with /ɛ/. Furthermore, educated or urban speakers of many Philippine languages have learned to distinguish /ɛ/ from /i/ and /o/ and /u/²⁰, even though these two vowels (/ɛ/ and /o/) are not otherwise contrastive in the native lexicon of their languages. ²¹

Languages with as few as THREE vowels: Abaknon, Bantayanon, Cebuano, Kamayo, Porohanon, Rinconada, Surigaonon, Tausug, and some dialects of Waray. Atta also has three, but can contrast two by length /e:, o:/.

The Languages with FOUR vowels are those that have preserved the PPH system, including most Cordilleran languages, Inland Bikol, Palawanic, Kalamianic, Manobo, Mansakan, and those at the extreme west or east of the Visayas.

The languages with FIVE vowels are: Amganad and Bayninan Ifugao, Isneg, Klata, Sarangani Manobo, Western Subanon; and, for many urban speakers (see above), many other languages where a contrast between ϵ and ϵ are learned.

SIX vowels: Agta (Central Cagayan Agta), Arta, Gaddang, Batad Ifugao, Kalagan, Kalamansig-Cotabato Manobo, Sangil, Sangir, Central Subanen, Tiruray.

SEVEN vowels:Balangaw, Koronadal and Sarangani Blaan, Tboli (Tagabili).

EIGHT vowels: Casiguran Dumagat (/i, e, $\varepsilon < \ddot{e} >$, $i < \acute{e} >$, a, u, o, o, o o o o stands unique among all Philippine languages.

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²⁰ They can contrast: /lúlu/ 'Lulu' (female name) vs. /lólo/ 'grandfather'.

¹⁹ Some linguists, faced with a three-vowel system, or one where there is no phonemic difference between /u/ and /o/, have chosen <o>. This has an orthographic advantage in pedagogy since it is simply a circle and therefore much easier for children to learn to read and write than <u>.

²¹ Note, however, that for many speakers, even loanwords from Spanish and English are adapted to the native phonology of Tagalog, Bikol, Ilonggo, Cebuano, and most other languages. Several like Bilic, Klata, Ponosakan, Mongondow, and Lolak have a phonemic /o/ (< *ə); but then /o/ is also kept in loanwords.

Healey [in Headland & Headland (1974:xix-xx)] points out that /ɔ/, spelled <ö> derives from early PPH sequences of either *au *as in *laud 'open sea' > dilöd ' downriver') or *aw (*langaw 'house fly' > /langö/ and appears in reduplicated monsyllables that had *u (*kutkut > /kötköt/ 'dig a hole'. Similarly, sequences of either *ai (*kain 'wrap-around skirt' > kën) or *ay (*anay 'termite' > anë) and also in reduplicated monosyllables that had *i (*bitbit 'hold with fingers' > bëtbët 'carry by hand'). A final syllable that had *u winds up with /o/ if the preceding consonant is not a voiced stop: *hapuy 'fire' > /apoy/, *besuR 'satiated' > bésog, *kayu 'tree' > kayo. The standard reflex of schwa (PPH *e) is Cas /i/ spelled <é>.

4. Subgrouping Issues and Controversies.

4.1. Proto-Philippines.

By far the largest controversy in the literature on Philippine and Philippine-type languages has been the question of whether or not a "Proto-Philippines" actually existed, i.e., whether the languages of the Philippines (minus the Sama-Bajaw languages) plus Yami in Taiwan and the Sangiric, Minahasan, and Mongondow-Gorontalo languages of Indonesia, are more closely related to one another than any are to any languages outside of this grouping. As Blust (2019) notes, the existence of a Philippine subfamily was largely assumed for much of the twentieth century, and rarely openly doubted until Reid (1982), who argued against it based primarily on the presence or absence of what he claimed was an "intrusive nasal" (in spite of providing neither a comprehensive list of such forms nor thorough evidence to support his claim). In response to Reid (1982), Zorc (1986) presented 98 lexical innovations that had not previously appeared in the literature. Little more appeared on the issue for almost two decades until Ross (2005) again revived the issue in his reanalysis of the position of the Batanic languages, pointing out the lack of evidence for a Proto-Philippines other than a relatively small number of lexical items, which he believed could have been borrowed in a contact zone. However, Blust, in his work on the online Austronesian Comparative Dictionary (Blust and Trussel ongoing) has gradually identified hundreds of lexical items unique to the members of the purported Philippine macrogroup. He did so by finally publishing a comprehensive analysis (Blust 2019) defending the existence of a Proto-Philippines, based on over a thousand lexical innovations for the subfamily and one phonological innovation - the merger of *z and *d. This merger should be seen as opposed to the retention of both *n and *ñ [by now just a theory that a language will maintain an equal number of stops and nasals]. It remains to be seen whether Blust's most recent treatise will be the last word on the topic. The sheer number of lexical innovations that Blust has presented would seem to complicate any possible arguments that they are simply the result of borrowing, but it seems likely that the lack of grammatical innovations (explainable as being due to the relative conservativity of the Philippine languages as a whole) will motivate other authors to continue to argue against the existence of this grouping. Oceanic Linguistics has requested three forthcoming reactions to Blust.

- (1) Zorc (to appear) is generally supportive and has proposed that the complex accent patterns exclusive to the Philippines and the reconstruction of an initial PPH *y- may provide supporting evidence for such a node. He pointed out nine accent minimal pairs reconstructed for PPH within Blust's article. He also dealt with the lack of true vowel sequences and the need to reconstruct glottal stop in most microgroups and for PPH in all positions: initial, medial, pre- and post-consonantal, and final. He proposed that forms shared exclusively between Bashiic and Ilokano were most probably the product of a Bashiic-Ilokano Axis, and disputed the value of Casiguran Dumagat as any more than a "witness" language.
- (2) Liao (to appear) noted that "no proposed etymon contains evidence from all Philippine microgroups." She calls Blust to task for his use of the term "knowledge gap" insofar as this "can also be related to researchers' limited familiarity with currently available linguistic studies." Blust did not include data on Ati, Arta, Northern Alta, all of which have been covered in recent dissertations. Lastly, she states: "Issues with the use of negative evidence cannot be eased simply by drastically increasing the number of lexical innovations that are not established through the bottom-up reconstruction method." She concludes: "Instead, the status of Proto-

Philippines remains controversial."

(3) Reid (to appear) disputes terminological labels ("Malayo-Polynesian" which has its roots in Scheerer (1918) with the presumption that Filipinos came from Malaysia, over a less controversial "Extra-Formsoan". "Cordilleran" is now referred to as "Northern Luzon" (Reid 2006:2). Like Zorc (op.cit.), he cites several instances where Blust reconstructs *q as opposed to *? in three sets: (1) with no Tboli or Kalamianic evidence - 39 etyma, (2) where Tboli or Kalamianic does justify *q - 6 etyma, and (3) where Agutaynen has irregular reflexes - 3 etyma. He highlights Blust's inconsistent use of <e> for schwa, instead of <ə>. He takes up the case for prenasalization (NC clusters), unknown in any Formosan language apart from reduplicated monosyllables (Dahl 1976:128) and difficult to reconstruct for PPH (unless the product of syncope from words with *<um> or *<in> infixes. He disputes the need for the term "leakage" to replace "borrowing". Like Liao (op.cit.) he faults Blust for excluding valuable recent data on Negrito languages: Arta - Kimoto (2017), Northern Alta - Garcia-Laguia (2017), Southern Alta - Abreu (2017); also Mindoro - Barbian (1977) which is admittedly difficult to obtain.

4.2. The Complicating Factors of Axis Relationships.

When writing his dissertation in 1972-73, Zorc was confronted with some innovations that were spread across various otherwise well-established subgroups. For example, a replacement of PAN *beli 'to buy' (retained in Bilic, Tagalog, Tausug, and Mansaka) is found as *bakál in Aklanon bakáe, Asi', Romblon bakáy, Bulalakawnon, Kinaray-a, Semirara, Hiligaynon, Masbate, Hanunoo, and all Bikol dialects bakál. This cuts across four discreet subgroups: West and Central Bisayan, Bikol, and South Mangyan, which are the result of a North Bisayan Axis. If one scans through Reid (1971 #39) or looks at the ZDS²³, it is clear that analogous replacements of PAN *beli occur throughout the Philippines. Waray, Cebuano, Surigaonon, Mamanwa, Kamayo, several Mansakan dialects, and Kagayanen have palít (from PPH *palít 'exchange' [ACD], possibly related to Dempwolff's *palit 'return gift') yielding an Eastern Mindanao Axis. Kalamianic and Palawanic have *alan, supporting a Palawan-Kalamian Axis. Northern Philippine languages [McFarland (1977 #294-295)] (besides cognates of PAN *saliw) have either *gátaŋ or *láku?, suggesting a Northern Luzon Axis. South Cordilleran has *tungal, which is subgroup specific. Lastly, the Danao languages (plus Dibabawon and Western Bukidnon Manobo) have pamasa 'buy' (which may be derived from Persian bāzār 'market' via Malay pasar). Each of these replacements of the Austronesian word for 'to buy' represent "leakage" (term from Blust 2019 for loans across genetic boundaries) from one well-established subgroup into other neighboring languages where significant trade or social networks have developed. This phenomenon could well be accounted for by already existing Germanic terms such as SPRACHBUND or SPRECHBUND, but also fit in with the political extension of the word AXIS. This refers to post-split innovations that falsely reinforce the impression that they form a genetic subgroup, whereas they represent a significant sociolinguistic replacement phenomenon.

Thus far, Zorc has uncovered evidence for the following eight axes. Note that some languages can be involved with two or more of them (especially Ilokano, Tagalog, and Hanunoo):

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²³ ZDS = Zorc Data Sheets, see https://zorc.net/RDZorc/PHILIPPINE-ETYMA>.

Bashiic-Ilokano axis [Ilokano, Yami, Itbayaten, Ibatan, and Ivatan]

- * $d\acute{u}yuR$ 'coconut-shell receptacle for food or water' > Ilokano $d\acute{u}yog$, Yami, Itbayaten, Ibatan royoy, Ivatan duyuy.
 - *kelá?at 'sudden, abrupt' > Ilokano kellá?at, Itbayaten akxat.
- *lanlan 'eat together as a group' > Ilokano ag-la-lanlán 'to eat together', Itbayaten xanxan 'idea of eating in a group (at least two)', Ibatan hanhan 'two people eat together, face to face'.
- **Rábat* 'flotsam' > Ilokano *gábat* 'flotsam; debris; stray; straggler; loot', Ivatan (Isamorong) *yavat* 'driftwood'
- *RaRáŋ 'large marine mollusk:Turbo marmoratus' > Ilokano raráŋ ' kind of large, elongated mollusk with a pointed shell; mother-of-pearl', Itbayaten yayaŋ 'seashell with a shutter or lid: Turbo marmoratus (larger of the two Turbo varieties)', Ivatan yayaŋ 'turbo shell', Ibatan yayaŋ 'kind of large sea snail'

Northern Luzon axis [Ilokano, Cagayan Valley, Central Cordilleran]

- *layús 'flood' shared by Ilokano, Gaddang, Manabo, Luba, Itneg and Isinai.
- *lukmeg 'fat' in Ilokano, Luba, Bontok, and Isneg.
- *sabáli 'other, different' shared by Isneg, Ilokano, Manabo, Itneg, and Balangaw.
- *sal?it 'lightning' in Isneg, Ilokano, Itneg, and Kalinga.
- *su2pit 'narrow' in Isneg, Malaweg, Kalinga, and Manabo

Central Luzon axis [Central and South Cordilleran]

- *betik 'run' in Amganad and Kiangan Ifugao, Ibaloi, Kallahan, and Pangasinan.
- *búten 'drunk' in Isinai, Kiangan Ifugao, Kankanay-N&S, Inibaloi
- *dagém 'wind' shared by Isinai, N&S Kankanay, Ibaloi, Kayapa Kallahan and Pangasinan
- *imuk 'mosquito' shared by Isinai, Ibaloi, and Kayapa Kallahan.
- *taláw 'star' in Balangaw, Bontok, Luba, Kankanay, Ibaloi, Kayapa Kallahan.

Southern Luzon axis [Tagalog, Sambalic, Kapampangan, Remontado, Pangasinan, Casiguran Dumagat, Bikol, and Hanunoo]

- *alikabúk 'dust' in Botolan, Ayta MagIndi, Kapampangan, and Casiguran Dumagat, Bulalakawnon, and Tagalog.
- *buláti 'earthworm' in Kapampangan, Botolan, Remontado, Tagalog, and Masbate (Chavacano borrowed from Tagalog).
 - *damúlag 'carabao' in Bikol (Naga and the Inland dialects), Kapampangan, and Sambalic.
- * $p\acute{a}wes$ 'sweat' in Kapampangan $p\acute{a}was$, Tagalog $p\acute{a}wis$ (borrowed by Remontado & Casiguran Dumagat).
 - *ti?ris 'urine' in Naga Bikol, Tadyawan, and Pangasinan; Hanunoo 'millipede secretion'.

North Bisayan axis [West Bisayan, Central Bisayan, Asi', Bikol, and Hanunoo]

- *bah'el'big' in Aklanon, Looknon, Bulalakawnon, Kinaraya, Datagnon, Kuyonon, and Romblomanon.
- *be?él 'take' in Aklanon, Kinaray-a, Bulalakawnon, Datagnon, Kuyonon, Asi', Romblomanon, and Hanunoo.
- *hambal 'say, speak' in Aklanon, Kinaray-a, Bulalakawnon, Semirara, Asi', Romblomanon, Hiligaynon, Masbate, and borrowed by Kagayanen (Manobo).

- **indu* 'your' [pro-2-pl-gen] in Semirara, Kuyonon, Naga, Legazpi, Virac, Romblomanon, Asi', and Sibalenhon
- *isará 'one' in Aklanon, Kinaray-a, Pandan, Bulalakawnon, Semirara, Kuyonon, Hanunoo, and Kagayanen Manobo.
- *taʔú 'give' in Aklanon, Pandan, Kinaray-a, Bulalakawnon, Semirara, Romblomanon, Asi', Naga, Legazpi, Virac and Iriga Bikol.

Palawan-Kalamian axis [The Kalamianic and Palawanic languages]

- *alan 'buy' in Northern Tagbanwa, Aborlan, Batak, and possibly Palawano (elen).
- *belag 'not so' [neg] in Agutaynen, Karamianen, Palwano, and Molbog; Aborlan 'different'.
 - *kumba 'lungs' in Northern Tagbanwa, Karamianen, Aborlan and Central Tagbanwa.
- *luwak 'plant = dibble' [v] in Northern Tagbanwa, Agutayen, Karamianen, Aborlan, Palwano, and Batak.
 - *tagek 'blood' Northern Tagbanwa, Karamianen, Batak, and Central Tagbanwa.

Palawan-Mindoro axis [North & South Mangyan, Kalamianic, and Palawanic]

- *[h]abuat 'long' in Kalamianic, Palawanic, North Mangyan, and South Mangyan.
- *anbe? 'rat' in Aborlan, Batak, Hanunoo, Buhid, plus West Bisayan.
- *bílug 'body' in Northern Palawanic, South Mangyan, and North Mangyan.
- *hampaŋ 'say, speak' shared by Palawano, Aborlan, Batak, and Hanunoo. [Cf: PBS *hampaŋ 'play']
- *kawa 'thou' [pro-2-sg-nom] in Kalamianic *yawa? (< *i-kawa), Central Tagbanwa and Tadyawan kawa.

Easterm Mindanao axis [South Bisayan, Kamayo, Mansakan, Mamanwa, Manobo and Subanen]

- *allan 'slave' in Mansakan, Dibabawon, and Sarangani (Manobo)
- *ba?al 'make' in Western Bukidnon Manobo, Subanen, Maranao, and Maguindanao.
- *baŋa? 'bite' in South Bisayan (except Tausug), Manskan, Mamanwa, and Sarangani Manobo.
- *dayaw 'good' in South Bisayan, Mansakan, Mamanwa, and in Ata and Dibabawon Manobo.
- *sidan 'they' [pro-3-pl-nom] (PMP *sida with a final nasal) in Mamanwa, Kamayo, Mansakan, and Subanen.
- **4.3. Relationship of Bashiic/Batanic, Central Luzon, and North Mangyan.** In his treatment of the Mangyan languages native to the island of Mindoro, Zorc (1977:34) pointed out not only the primary division between North Mangyan (Iraya, Alangan, and Tadyawan) and South Mangyan (Hanunoo, Buhid, Tawbuwid, and Bangon) languages, but suggested the possibility of a "North Extension" containing not only the North Mangyan languages but also Batanic/Bashiic and Central Luzon (i.e., Kapampangan and the Sambali-Ayta languages). This "North Extension" was based on the merger of PAN *R with *y, not generally found elsewhere among Philippine and Philippine-type languages, but also a handful of putative lexical innovations, including *dagul 'big', *udi 'left (side)' and *dimla? 'cold'. Neither McFarland (1980) nor Blust (1991,

2019) accept the grouping of Batanic/Bashiic with North Mangyan and Central Luzon, but far more research and documentation is still needed on all of these languages. It should be noted that the presence of forms reflecting *R as /y/ instead of the expected /g/ or /l/ in languages of the South Mangyan, Palawanic and Kalamianic subgroups may turn out to be evidence that an ancient member of Zorc's North Extension may have once been a prestige language in the area: e.g., Calamian Tagbanwa, Karamianen, Batak *ikuy* 'tail' (< *ikuR); Agutaynen *ki-yuy* /ki?yuy/ 'egg' (< *qitəluR); Agutaynen *niyuy* 'coconut' (< *niyuR); Batak, Aborlan Tagbanwa *punyangan* 'parent-in-law' (< *tuRaŋ), and Kalamianic *wai? 'water' (< *wahiR).

4.4. The position of Molbog and Bonggi. The languages of the Philippine province of Palawan have been demonstrated by a number of authors (e.g., Zorc 1977, Thiessen 1981, Blust 1991, 2010, Himes 2007) to be split between a Kalamianic group and a Palawanic group, both belonging to the Philippine macrogroup. Likewise, the majority of the languages of Sabah (as well as a handful of others spoken in Sarawak, Brunei, and the Indonesian province of Kalimantan Utara) are known to belong to two subgroups, Southwest Sabah and Idaanic/Northeast Sabah (Blust 1998, 2010, Lobel 2013), neither of which immediately subgroup with the languages of the Philippines (Blust 1998) in spite of their Philippine-type features. However, one controversy remains with regard to these two groups: the position of Molbog and Bonggi, the former spoken primarily on the island of Balabac off the southern tip of Palawan, but also in a handful of communities near the southern tip of Palawan as well as in two communities on Banggi Island off the northwestern tip of Sabah; and the latter spoken on the aforementioned island of Banggi and Balambangan to its immediate west. Thiessen (1981) treats both languages as members of the Palawanic group, while Blust (2010) argues that Bonggi subgroups with the Idaanic languages (Idaan, Begak, Buludupi, Subpan, and Sungai Seguliud) in a "Northeast Sabah" subgroup. Lobel (2013), on the other hand, notes striking similarities (but not shared innovations) pointing to a closer connection between Molbog and Bonggi in a Molbog-Bonggi subgroup or axis whose external relationships have yet to be determined. While the data Blust cites linking Bonggi to the Idaanic languages appears to be quite strong, the similarities Lobel notes between Molbog and Bonggi warrant further investigation: it is clear that the Palawan-Sabah area is at the border of Philippine and non-Philippine languages. What remains to be understood, however, is whether Molbog and Bonggi were once two closely-related languages that came under mutually exclusive influences, one (Molbog) borrowing from and assimilating to languages to its north, while the other (Bonggi) borrowed from and assimilated to the languages to its south. If not, then the similarities shared by these two languages, one each from the Philippine and Greater North Borneo macrogroups, are the result of a contact-induced convergence whose further investigation will shed light on the undocumented social history of this little-studied border zone.

4.5. The position of the languages of Sabah. Much less a "controversy" among scholars of Philippine and Philippine-type languages than simply a "issue" that deserves comment here is the position of the languages of Sabah. In quite a few places outside of the geographical Philippines is the Philippine-type grammatical structure found, and among these are Taiwan, North Sulawesi, Madagascar (i.e., the Malagasy language), northern Borneo, Old Javanese, and Batak. However, as Blust (1998, 2010, 2013) points out, none of the languages native to Borneo belong to the Philippine subgroup, the Philippine-type structure of many of the languages in the

northern extreme of the island notwithstanding. This was not immediately apparent in the early years of Austronesian scholarship, but the emergence of a larger amount of data on Malagasy and the Formosan languages of Taiwan has revealed that the Philippine-type structure is a retention of an earlier system reconstructable to either Proto-Austronesian, or to a proto-language forming a primary branch thereof. Thus far, Blust's division between the Philippine languages and the languages of northern Borneo has only been challenged by Reid (p.c.)²⁴, but has been supported by two of his students writing on the topic (e.g., Lobel 2013, 2016b, Smith 2017). In all fairness, there are not many other people working on this topic, since it is extremely complicated in that it involves several macrogroups.

4.6. Migration and Historical Leveling. Blust (1991, 2005) draws attention to the relatively low level of diversity²⁵ found among modern Philippine languages in comparison to the presumed time depth during which these languages have been present in the Philippines after the departure of speakers of Proto-Malayo-Polynesian from Taiwan. To explain this, Blust proposed two periods of language levelling: the first in which speakers of Proto-Philippines expanded throughout the Philippines at the expense of speakers of other Malayo-Polynesian subgroups; and the second during which speakers of Proto-Greater Central Philippines expanded throughout not only the central and southern Philippines but also northern Sulawesi, levelling non-GCPH languages that had previously been spoken in those areas.

A number of other levelling episodes could also be added to Blust's list. Inati/Inete, the language of the Ati people of Panay, appears to be a primary branch of the Philippine subgroup (Pennoyer 1986-1987, Blust 1991). It clearly represents a language that was present in its current location prior to the expansion of speakers of Bisayan languages from northeastern Mindanao throughout the present-day Visayan Islands. While the Ata of Negros no longer retain a distinct language, the various Bukidnon peoples found on the island are clearly remnants of earlier Bisayan-speaking populations. They were the only non-Negrito inhabitants of the island at the time of the arrival of the Spanish. They fled to the mountains to maintain their freedom during the Spanish occupation, and became minorities later on after the spread of the sugarcane plantations and the arrival of tens of thousands of Cebuanos and Ilonggos in the mid-19th century. In Luzon, the Umiray Dumaget were still a largely-coastal population in central Luzon when the Canadian missionaries Thomas and Pat Macleod arrived in the area in the 1960s; half a century later, extremely few Dumaget communities can be found along or near the coast, ²⁶ with Tagalogs having now taken over the land that the Dumagets' ancestors had lived on since time immemorial. What has happened with the Dumagets over the past 50 years has occurred many times over the past 500 or so years. Many native populations now confined to upland areas report that their ancestors once moved freely between coastal and interior areas prior to the arrival of

²⁴ "I believe there was a branch of PMP hat extended into Borneo and south, which changes that developed in Borneo languages outlined by Smith." [Email of 2020.05.13]

²⁵ Reid (email of 2020.05.13) notes "The level of diversity of Philippine languages is not as low as Blust makes out. Compare, for example, the Batanic and Bilic languages, and the northern languages of Mindoro with Bontok. Even within the Central Cordilleran family, Isinay is vastly different in phonology, morphology and syntax than say Kalinga languages. The level of diversity that there is, is the result, I claim of centuries of interisland trade and contact..."

²⁶ Reid (p.c. 2020.05.13) reported that he visited several communities of Negritos along the coast during a trip south by *bangka'* in the late 1980's. Alex Garcia (2017:2) also mentions having encountered both Casiguran and Umirey Dumaget groups during his fieldwork.

groups now living along the coast, who, based on linguistic evidence, are clearly much more recent arrivals.

In other cases, however, remnants of levelled populations still exist even in coastal areas: for example, early Spanish documents make no mention of Cebuano speakers on Leyte Island and appear to indicate a slightly wider distribution of Waray-Waray on that island. Today's Baybayanon and Kinabalian languages appear to represent remnants of Warayan dialects that existed prior to the expansion of Cebuano along Leyte's western and southern coasts. In northeastern Luzon, the still-coastal Agta have yet to be fully displaced from their ancestral waters, although the expansion of Tagalogs from the south and Ilokanos from the north are slowly minoritizing both them and the natives of Casiguran town. (The Kasiguranin language is largely a mix of Tagalog and Casiguran Agta).

4.7. Negrito Filipinos. In addition to the "Austronesian"-featured population, an estimated 15,000 Negrito Filipinos (or "Black Filipinos" in Lobel's terminology) can also be found in the Philippines, and the population of Filipinos who can recall having at least one Negrito Filipino grandparent may be considerably larger.²⁷ Most of these populations live on the fringes of modern Philippine society, and a number of authors have written about the violence, discrimination, and other abuse that these populations suffer on a regular basis. On the other hand, a number of these groups (Umiray Dumaget, Casiguran Agta, Mamanwa, Atta, and Central Cagayan Agta) were also early beneficiaries of literacy programs and other aid provided by members of the Summer Institute of Linguistics beginning in the 1960s. Thomas Headland, Lawrence Reid, and Jason Lobel are among the most widely-published scholars on the Negrito languages, many of which either form primary branches of the Philippine macrogroup (e.g., Arta, Inati, Umiray Dumaget, and Manide-Inagta Alabat) or preserve ultra-conservative features that have been lost in the languages of non-Negrito Filipino populations. Reid (2013) and Lobel (2013:55-102) give extensive overviews of the Negrito Filipino populations and their languages. Other important studies on one or more of these languages include: Headland & Headland (1999-Agta), Headland & Blood (2002-broadly), Reid (1989-Arta, 1991-Alta, 2017-Iraya), Robinson (2011- Dupaningan Agta), Lobel (2010-Manide), Miller and Miller (1969, 1976, 1991-Mamanwa), Macleod (1972-Umiray Dumaget), Himes (2002-Umiray Dumaget; 2012-Central Luzon), and Abreu (2018-Southern Alta).

5. Lexicon.

The various subgroups, languages, and axes mentioned throughout this survey are based upon and derived from significant replacement innovations for well-established PAN or PMP reconstructions in any given meaning. Thanks to Blust & Trussel's ACD, one can find over 720 high-level etymologies which result in two or more printed pages of comparative evidence. Below is a list of the top 70 highest-frequency etymologies (representing 10 or more pages) reflected and retained in all (or most) Philippine subgroups. They are in alphabetical order with parentheses indicating how many pages each entry is. All citations are PAN, unless labelled

²⁷ This number could be as high as 75,000, if we include the 10,000 Iraya Mangyans and 50,000 Ata, Tigwa, and Matigsalug Manobos of Mindanao, large portions of whose populations clearly have Negrito-like physical characteristics.

²⁸ The reader should also be aware of the ABVD (Austronesian Basic Vocabulary Database) of Greenhill, Blust, & Gray (2003-2020) available at https://abvd.shh.mpg.de/austronesian/>.

PMP. Accent is not reconstructable to PAN or PMP, but is included below to show where it generally falls among the accent-preserving Philippine languages.

PAN * $ak\acute{u}$ 'I [pro-1-sg-nom] (13), * ama^{29} 'father' (18), * $am\acute{\iota} \sim *kam\acute{\iota}$ 'we (exclusive)' (10), *aNák 'child, offspring' (36), *bábuy 'pig' (12), *báhi 'woman, female' (14), *batúx 'stone' (19), *búag 'fruit' (25), *búlaN 'moon' (13), PMP *bukúh 'node; joint; knuckle' (11), PMP *bulu 'body hair, feather, down' (14), *buNúq 'throw at; hit with projectile' (16), *búngah 'flower, blossom' (12), *Cákaw 'steal' (10), *CáliS 'twine' (12), *CaNém³⁰ 'bury; grave' (12), *Cángis 'cry, weep' (18), *Cáqi 'feces' (10), *CúNuh 'roast over fire' (13), PMP *dáhun 'leaf' (13), *dálem 'in(side); deep' (11), *dáRaq 'blood' (12), *dengéR 'hear; sound' (16), *duSá '2, two' (45), *eném '6, six' (13), PMP *hángin 'wind' (11), *Sepát '4, four' (20), *ina³¹ 'mother; mother's sister' (16), PMP **inúm* 'drink' (14), **itá* ~ *kitá* 'we (inclusive)' (12), **ká[?]en* 'eat' (64), **káSiw* 'wood, tree' (21), *ku 'my, by me' [pro-1-sg-gen] (13), *kúCux 'louse' (19), *lángaw 'fly, housefly' (11), *lángiC 'sky' (11), *limá '5, five' (24), *manúk 'chicken; bird' (17), *maCá 'eye' (53), *maCáv 'die, dead' (18), *ngájan 'name' (13), *penúg 'full' (11), *pijáx [qw: quantity] 'how many?' (13), PMP *píliq 'choose, select' (18), *pitú 'seven' (20), *púluq 'ten {unit}' (19), PMP *puqún ~ *púnug 'base (of a tree); cause, source, origin' (11), PMP *Ratús 'hundred' (10), *qabúh 'ash, cinder, powder' (14), *qaCáy 'liver' (19), PMP *qatép 'thatch roof' (11), *qúluh 'head' (14), *quzáN 'rain' (14), *Sapúy 'fire' (15), PMP *sakít 'sick, painful' (22), *síkux 'elbow' (17), PMP *saláq 'wrong, in error; miss target' (17), *súsu 'breast' (17), *tákut 'fear' (11), PMP *taneq 'earth, soil' (11), PMP *táRuq 'store, put away; hide' (12), *telú 'three' (29), *túbah 'plant: Derris elliptica' (12), *túduR 'sleep' (10), *tuqáS 'old (person); primary (forest)' (15), *tuzúq 'point at ~ out' (13), *ulíq 'return home' vs *úliq 'return; restore' (11), *útaq 'vomit' (13), *walú '8, eight' (10), *zálan 'path (made by human); way' (16).

Many others can be found in Blust and Trussel's ACD (one must check the COGNATE SETS and LOANS sections as well as the FINDERLIST therein), and, of course, the ABVD.

It should also be noted that each language may have URBAN vs. RURAL speech, and also a HIGH (archaic) vs. LOW (slang) register, and all sorts of admixtures of these [see Joos (1967)].

The contact languages that have most contributed to Philippine lexicons over the past millenium are **Malay** (and via Malay, Indic and Sanskrit loans), **Spanish** (from the late 16th century through 1898, and for several decades thereafter), and **English** (from the arrival of the Thomasites³² in 1901 onwards). Borrowings from **Arabic** are most common in the Muslim languages of the southern Philippines, although many Arabic loanwords entered non-Muslim languages through Malay. Lastly, several regional varieties of **Chinese** (Hokkien, Minan, Southern Min) have also made their imprint in the areas of commerce and cuisine.

Writing was also present in the Philippine islands, with various iterations of a localized Indic script (ABUGIDA) most commonly called either *alibata* or *baybayin*³³ being used in many places from as early as the 16th to as late as the 18th century. This now largely-forgotten script has experienced revivals since the advent of the internet, and is even present on Philippine

³² "A group of 600 American teachers who travelled from the United States to the newly occupied territory of the Philippines on the transport ship USS Thomas." < https://en.wikipedia.org/wiki/Thomasites>.

²⁹ Probably *áma, with derived vocative or reference forms *amá?, *amáh, *amáng, *amáy, *táma.

³⁰ PPH *tanem has come to mean 'plant' (as crop), whereas *lebeng has filled the semantic space of 'bury, inter'.

³¹ Probably *ína, with derived vocative or reference forms *iná?, ináh, *ináng, *ináy, *tína.

This alphasyllabary usually goes from top to bottom; except for Hanunoo (where it goes from bottom to top). Besides Tagalog, *baybayin*, some other local terms employed are: *badlit* (Bisayan), *kulitan* (Kapampangan), *kuritan* (Ilokano). *Alibata* is itself an Arabic calque.

currency, but otherwise only survives in productive use among a handful of rural minorities such as the Hanunoo of Mindoro. The shift to the Latin alphabet (after the arrival of the Spanish) made it possible to write native words in a far more faithful transcription, so much so that most orthographies are phonemically correct (minus accent marks and the indication of glottal stop).

6. Conclusion. Although an impressive amount of work has been done over the past century, much work remains, and is made even more urgent by the rate at which native speaker populations have been diminishing in the Philippines as elsewhere in the world. For various reasons including intermarriage and, more recently, the rise of the internet and social media—tens of millions of Philippine³⁴ youth are no longer growing up fully communicatively competent in their parents' language(s). Instead, they speak a largely random mixture of Tagalog, English, and, outside of the Tagalog region, whatever local language or languages surround them. At the same time, the expansion of electricity and mobile phone networks into rural and remote parts of the Philippines, among other factors, has induced a shift from many minor languages to lowland trade languages such as Tagalog, Cebuano, Ilonggo, Ilokano, etc. In the current context, documentation projects such as those by the Macleods for Umiray Dumaget, Kimoto for Arta, Garcia for Alta, Lobel for Ponosakan, and Lobel and Zubiri (separately) for Inagta Alabat will turn out to be as important to historical linguists in the future as decades—and even centuries-old work on now-extinct languages have been for the historical linguists of the past half-century. Future fieldwork should go far beyond the relatively short wordlists of the past, striving to collect substantially longer wordlists, extensive sentence lists and recordings (including transcriptions and translations) of spontaneous speech. Future scholars must devote more time to grammatical and taxonomical reconstruction, thus far absentees in this field.

Research has already uncovered certain important facts relevant to movements and extinctions throughout the Philippines, such as:

† Ilokano and Tagalog have made major incursions into the Pacific northeast Luzon coastal areas.

†The West Bisavan subgroup is intrusive to Panay, and southern Mindoro.

†The Tausugs moved to Sulu from Butuan, becoming co-resident with the Sama-Bajaw.

†The Tagalogs moved to southern Luzon from northeast Mindanao, having formerly come from much further south³⁵.

†Hiligaynon (Ilonggo and Capiznon) expanded to Panay from Leyte.

†Cebuano expanded to northern Cebu & western Leyte, and also throughout Mindanao.

†Bikol took up residence in Camarines Norte.

†The island of Negros (originally known as Buglas) was taken over by Hiligaynon (western areas) and Cebuano (eastern areas) due to the establishment of sugarcane plantations. It is hoped that continued research will uncover far more about the provenance of other Philippine languages.

Scholars researching Philippine historical linguistics must give more attention to

34. Likewise, the vast majority of populations speaking languages of the Sangiric, Minahasan, and Mongondow-Gorontalo subgroups in northeastern Sulawesi have shifted to speaking Manado Malay, with youth in most areas no longer able to even understand their ancestral language(s).

³⁵ Witness otherwise unique Tagalog [samá?] 'bad' with a cognate in Klata [homo?], which can now be reconstructed as PSP *samá?, and Tagalog [da?án] 'hundred', Klata [malála] 'thousand' a unique semantic shift from PAN *zalan 'path (made by humans)' to a numeral.

accentual, morphological, and grammatical reconstruction. Philippine accent patterns may prove to be a highly significant innovation, not found elsewhere in the Austronesian family.³⁶ There are dozens of verbal, nominal, and adjectively affixes that have yet to be reconstructed. Grammatical paradigms particular to each language need to be mapped alongside any system reconstructed for Proto-Philippine.

Many issues still remain, and the vast majority of Philippine languages are still in dire need of even a basic level of documentation. Further documentation, especially in terms of expanded wordlists and lexical studies, as well as reference grammars, text collections (particularly about origin myths, place names, local flora and fauna, recipes, and other local customs and traditions), and other data beyond the level of individual words, will likely go a long way towards determining whether languages such as Umiray Dumaget, Inati, Manide, Inagta Alabat, Remontado/Hatang-Kayi, Molbog and Bonggi have a particularly close relationship to any other documented Philippine languages. If it turns out that many of these languages are, in fact, primary branches of the Philippine macrogroup, then this will also help us revise our understanding of Proto-Philippines and even possibly of higher-level nodes of the Austronesian family tree.

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³⁶ Alex Smith (n.d.) has drafted an important and comprehensive paper that surveys the accent patterns of Formosan and Philippine languages, Tondono and Minahasan, Chamorro, Sumatran, Western Indonesian, Malay/Indonesian, Kenyah, Central Sarawak, Kayan, and Sumba-Flores. His conclusion is that PAN accent fell on the penult unless it contained schwa, when it fell on the ultima, thereby leading to stress shift, gemination, and/or vowel shift.

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