

Possible Non-Austronesian Lexical Elements in Philippine Negrito Languages*¹

The languages spoken by Philippine peoples of a Negrito physical type appear to be Austronesian languages of the sort generally found in the Philippines. However, this paper presents a significant body of unique terms gleaned from their vocabularies that may constitute evidence for a non-Austronesian substratum in these languages. Alternative explanations are considered, but the one opted for hypothesizes an early pidgin or trade language, subsequently creolized, that was developed by the Negritos to facilitate communication with in-migrating Austronesians, and later decreolized to such an extent that it came to bear close resemblance to nearby Austronesian languages.

1. Introduction

It is a well-known fact that Philippine Negritos speak languages that lexically and syntactically clearly appear to be Austronesian. It is possible without too much difficulty to associate each such language with one of the subgroups of Philippine languages spoken by non-Negritos. For some Negrito language groups, such as the Atta who live in the far north of Cagayan province in Luzon, the relationship with a non-Negrito language appears to be very close. Atta is said to be almost mutually intelligible with Ibanag, the language of the non-Negritos who live in the same region (Reid 1987:44). In other cases, however, such as the Arta of Quirino, the relationship with non-Negrito languages appears to be remote. This language has been characterized as a first-order branch of the Northern Philippine subgroup, with possibly several thousand years of independent development (Reid 1989a:47).

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It is also widely assumed that today's Negritos are the descendants of pre-Austronesian populations in the Philippines, and that they must have learned to speak Austronesian languages by association with Austronesians when the latter first moved into the Philippines. Such assumptions, however, have not gone unchallenged. Meacham (1991:404-405), for example, suggests that "the predecessors of the Philippine Negritos be counted among the ancient Austronesians.... [They] were speaking Austronesian from its earliest emergence." This is tantamount to claiming that the Philippines was the home of Proto-Austronesian, and that the ancestors of the Negritos were its earlier speakers. Meacham's position is his way of avoiding what he refers to as the conundrum of why Negritos all gave up their original languages in favor of the language of the in-migrating Austronesians. Apart from the problem of explaining what language non-Negritos would have been speaking when they first arrived in the Philippines, Meacham's position simply places the shoe on the other foot: why would the non-Negritos have given up whatever they were speaking to learn the language of the local Negritos?

No linguist has ever seriously proposed the Philippines as a homeland for Proto-Austronesian, for several reasons. If that were the case, one would expect far greater diversity among Philippine languages than actually exists. Although there are a significant number of languages spoken in the archipelago, they are generally considered to be similar with respect to their phonology, morphology, and syntax. But the similarities could be, and probably are, the result of the leveling processes brought about by extensive trade between geographically close language groups. A greater difficulty is explaining away the linguistic evidence that points to Taiwan as the homeland of the Austronesian language family.

In an earlier paper, I posed a question for which I had no answer, "So why did they [i.e., Philippine Negritos] give up their original languages in favor of those of the in-migrating Austronesians?" I suggested then that "perhaps the languages started off as pidgins, and over the thousands of years since then have acquired all the grammatical paraphernalia of Philippine languages" (Reid 1987:57). At that time I thought there was no evidence to support such a hypothesis.

I now believe that it is in principle possible to identify terms in the languages of Negritos that may well be remnants of the languages that were spoken by them in pre-Austronesian times. If words can be identified in languages spoken by Negritos that are

not found in languages spoken by non-Negritos, they would constitute evidence for the generally accepted view outlined above that before the arrival of non-Negritos, the Negritos were speaking languages other than Austronesian.

The presence of a possible substratum of non-Austronesian lexical items shared among languages spoken by Negritos suggests that in fact the Negritos did not simply “give up” their original languages, but that there was a process of pidginization, subsequent creolization, and long periods of decreolization that have resulted in the languages as we find them today. It was during the periods of decreolization—gradual adaptation to the forms of the status language—that they acquired the complex morphological and grammatical structures of the languages of their non-Negrito neighbors. The identification of an original Negrito substratum would furthermore be of great value in attempting to identify the possible external relationships of Philippine Negritos. The work of identifying such terms has only just begun (I have concentrated mainly on the Arta and Alta languages), and their comparison with non-Austronesian languages of the Indo-Pacific region is a project that will take an appreciable amount of time and the assistance of scholars familiar with the latter languages.

There are two papers that have discussed the similarities between the physical description and name of the thunder god among some Philippine and Malayan Negritos: Cooper (1941:36) and Blust (1981:302). Both suggest that these similarities are probably best explained as retentions of terms present in a linguistic substratum common to the Austronesian-speaking Negritos of the Philippines and the Austroasiatic-speaking Negritos of the Malay Peninsula.

The identification of a non-Austronesian substratum in the Negrito languages implies that the languages are not themselves truly Austronesian, and therefore have no place in a family tree of those Philippine languages that are genuine descendants of the original Austronesian language to have established itself in the Philippines. I shall continue, however, to refer to them as members of particular subfamilies of Philippine Austronesian languages, with the understanding that this is a convenient fiction for the purpose of identifying those languages with which the Negritos must have acquired the Austronesian component that now overwhelmingly dominates their languages.

2. Negrito Languages as Creolized Austronesian

2.1 Unique terms in Negrito languages

In papers I have written on the Northern and Southern Alta languages and on Arta (Reid 1989a, 1991), I have noted that each of these languages has a significant proportion of vocabulary that is unique to each language. Some 17% of the 539 forms I collected appeared to be unique in Northern Alta, 25% in Southern Alta, and 29% in Arta.² The definition that I was using for UNIQUE, “those forms for which no cognate has been found in any other language,” allowed the inclusion of words with possible Austronesian etymologies except that they had undergone some innovation, such as either a semantic shift or a sporadic phonological change that is not shared with any other language. If we exclude such possible “Austronesian” words, we are still left with a substantial number of unique words in each language that are phonologically dissimilar and clearly not relatable to words of similar meanings in other Philippine languages.

I had earlier assumed that these unique terms were either Austronesian in origin and had been lost in most if not all other Austronesian languages, or had undergone radical semantic or phonological changes that obscured their relationships, or that they were Negrito coinages subsequent to the switch from the original Negrito languages to Austronesian. Each of these explanations could still be true for certain words (see the discussion in section 2.5), but we must also allow for the possibility that some at least of these words are in fact of pre-Austronesian origin, and thus constitute a Negrito language substratum.

2.2 Regional Negrito languages

I am assuming that, prior to Austronesian contact, the Negritos inhabiting distinct geographical areas probably spoke different languages, since there is archaeological evidence that there was human habitation in Luzon for many thousands of years prior

² David Zorc (pers. comm.) notes that this is not a specifically Negrito phenomenon. Tagalog has about 12% unique vocabulary on the Swadesh 200 list; Aklanon has 11%; Ilongot has as much as 25%. What is important, he notes, is the relatively high percentages (those above 20%) for some Negrito language. In fact the high percentage of Ilongot unique forms may be evidence that this language was also formerly a creolized Austronesian language. Although Ilongots do not now identify themselves as Negrito, their physical appearance, and continuing close association with neighboring Negritos, particularly the Alta, suggest the possibility that there has been a greater degree of “admixture” of Austronesian and Negrito languages than is found with other Southern Cordilleran groups.

to Austronesian in-migration. The languages were probably related to each other, although in some cases only quite distantly. But especially in contiguous geographical areas (for example, along the Eastern Coast of Luzon, or along the Cagayan River and its tributaries), there would probably have been appreciable dialectal differentiation, and also substantial intergroup contact. There is plenty of evidence for such contact going back to the early stages of their adoption of Austronesian languages (see section 2.5). It must be assumed therefore that such contact probably also predated the arrival of the Austronesians. Prior to Austronesian contact then, at least within contiguous geographical regions, the languages spoken by the Negritos probably shared bodies of vocabulary, inherited as well as borrowed. On the other hand, the Negrito languages in other areas of the Philippines (Batak, Palawan; Inati, Panay; and Mamanwa and Ata Manobo,³ in Mindanao, for example) must have been much more distantly related, and possibly shared little common vocabulary with their Luzon neighbors.

There is a significant body of comparable data available now for the Negrito languages of Luzon, including over 50 wordlists (see Appendix A).⁴ In order to facilitate the comparison of the data and to identify possible shared unique terms, I have grouped the lists into regions, the inhabitants of which probably spoke at least one distinct language prior to the arrival of the Austronesians.

2.2.1 North Agta

This group consists of all the lists that appear to represent communities now speaking a language or languages that are part of what has been called Northern Cordilleran. To date, there has been no systematic analysis done of these lists to determine how many separate languages or dialects they represent, so I have subdivided them on the basis of a casual inspection of their lexical similarities and their geographical locations.⁵

³ Editors' note. Although the name suggests that the Ata Manobo may originally be a Negrito group, they no longer identify themselves as such.

⁴ The great majority of these lists consist of over 375 lexical items (the list used in Reid 1971), with additional data available for a more limited set, specifically Casiguran Dumagat (Agta) (Headland and Headland 1974), the Arta and Alta languages (Reid 1990), and Umiray Dumagat (Agta) (an unpublished lexicon by Pat McLeod [SIL], and Reid 1990).

⁵ Headland and Headland, and Headland and Healey (1974), on the basis of lexicostatistical evidence, claim that there are nine "languages and dialects" spoken down the eastern coast of Luzon, from the northern tip almost as far south as Baler. In preparing this paper, it has become apparent that at least one well-defined phonological isogloss divides this group of languages. One set shows an /h/

- A. Northern Cagayan (NC), those lists taken in the far north of Cagayan province.
- B. Central Cagayan (CC), those lists taken in areas to the west of the Sierra Madre in the central regions of Cagayan province.
- C. Eastern Cagayan (EC), those lists taken along the Eastern Coast of Cagayan province.
- D. Southern Cagayan (SC), those lists taken in the southern regions of Cagayan province.
- E. Southern Isabela (SI), one list.
- F. Aurora (AU), the data representing the various speech communities speaking what has been called Casiguran Dumagat (Agta).

2.2.2 Arta (Art)

Although there are only about 12 remaining speakers of this language (confirmed during my 1990 fieldwork) living in Aglipay, Quirino, it is clearly distinct from all other Negrito languages and is a first order subgroup of Cordilleran⁶ (Reid 1989a).⁷

2.2.3 Alta

This group includes several wordlists that can be grouped into two very different languages distantly related to the South-Central Cordilleran languages (Reid 1991).

- A. North Alta (NA), primarily spoken in Aurora province.
- B. South Alta (SA), sometimes referred to as Kabuluen, primarily spoken in Nueva Ecija and Bulacan.

2.2.4 Central Agta

This group of wordlists represents communities scattered over a fairly wide area of Eastern Luzon, from Southern Aurora (Dibut, San Luis), various communities (including Umiray) along the coast in Quezon at least as far as Infanta, Polillo Island, and eastward into Bulacan as far as Norzagaray. The language is generally known as Umiray Dumaget. In Bulacan, the people refer to themselves as Tagabulos. There is some dialectal differentiation, but considering the wide geographical area over which the language is spoken, it is surprisingly homogeneous. This language is said to be spoken by several thousand Negritos, possibly more than any other Philippine Negrito language. No careful analysis has yet been done to place this language unambiguously into the broader context of Philippine subgroups, but a cursory inspection of sound changes

reflex in forms reconstructible with *r. The other set retains /r/. Much more work needs to be done before the internal relationships of this group can be elucidated.

⁶ Editors' note. This subgroup of Philippine languages is now renamed as Northern Luzon (see Reid 2007).

⁷ This number was reduced to 11 with the death of another individual in late 1992.

and verb morphology suggests that it is probably a Central Philippine language, related fairly remotely to the Bikol languages.⁸

2.2.5 South Agta

There are a number of wordlists of Negrito communities in Southern Luzon that remain unanalyzed. They also appear to be related to the Bikol languages, but the two groups are lexically very different from each other, and from the Central Agta language. No morphological or syntactic data is available for these languages.

- A. Camarines Norte (CN). One list available.
- B. Camarines Sur (CS). Several wordlists taken in the vicinity of Lake Buhi, each lexically similar to the other and probably representing the same language.

2.2.6 Sinauna

There are two wordlists representing dialects of a language spoken in Rizal and contiguous areas of Quezon. Santos (1975) subgroups the language with the Central Luzon subgroup of languages (including Kapampangan and the Sambalic languages).

2.2.7 Ayta

There are an appreciable number of lists, some labeled Ayta or Aeta, and some Sambal, each of which is presumably the language of some Negrito community. Wimbish (1986) claims that there are six different Ayta languages spoken in the Zambales mountains: Abelen, Aberlen, Magganchi, Maggindi, Ambala, and Magbeken Ayta. Some of these names can be associated with the lists available to me; others cannot.

2.3 The identification of a Negrito substratum

Vocabulary that can be identified as unique to Negrito languages, and that cannot be associated with any Austronesian etymon, allow for several possible interpretations. Either (a) the forms are remnants of one or more of the original Negrito languages, shared either by common inheritance among languages that were more or less closely related genetically, or by borrowing, especially among those Negrito languages that were spoken in geographically contiguous areas; or (b) the forms may be post-Austronesian innovations in one of the Negrito languages that have then spread by con-

⁸ Editors'note. See Himes (2004) for confirmation of this hypothesis.

tact into other languages; or (c) the forms may be retentions of an Austronesian etymon that has been lost in all but the Negrito languages.

In a number of instances of the second alternative, such innovations (whether or not they have spread to other groups) can be identified by the phonological structure of the term. For example, in a language in which /k/ became glottal stop (such as Northern Alta) or was completely lost at some early stage (such as Arta), but in which /k/ has subsequently redeveloped because of borrowings from languages in which the phoneme was retained, the presence of a unique form containing /k/ can only be the result of a recent innovation, or is a borrowing from some still unidentified source language. Thus North Alta *balík* ‘small (object)’, although unique, is recognizable as possibly a borrowing of North Agta *bəlik* (no. 200), with subsequent phonological modification. North Alta *piknat* ‘tear (v.)’ is similarly identified as a borrowed item, or as a post-Austronesian contact innovation.

How is one able to choose between the alternative interpretations, especially when there is no phonological evidence to force an interpretation? Interpretation (c) is least likely, especially when the form in question is distributed among several Negrito language groups. However, it is clearly not impossible (see section 2.5). To choose between the other interpretations is not so simple.

If the present-day Negrito languages started off as pidgins, we would expect that most areas of the core vocabulary would be from the superstrate language, and that original Negrito vocabulary would persist in highly culture-specific words, such as terms for local flora and fauna that are culturally relevant, and in “secret” vocabulary such as words for sex organs and the like. Similarly, it is probable that such terms that are shared between regional Negrito languages are more likely be retentions than those that are restricted to a single language.

It is necessary then to view any proposed original Negrito term with a certain degree of caution, realizing that the level of confidence associated with each varies considerably, depending at least on whether or not the term is part of the body of culture-specific or secret vocabulary, and the degree to which the term is shared among other Negrito languages. Caution is also in order because, even though proposed original Negrito terms have been carefully checked for similar forms in all other Philippine languages for which data are available, the number of substantial dictionaries is ex-

tremely limited, and most checking has of necessity been restricted to wordlists and short lexicons.

2.4 Possible retentions of original Negrito forms

In the following lists, if a form appears in any of the North Agta, Alta, and/or South Agta regional groups, its actual distribution is indicated following the cited form, with abbreviations for languages within a group separated by commas, and the languages of each regional group separated by semicolons (see section 2.2 for abbreviations, and Appendix A for a list of sources).

*R is the reconstructed proto-phoneme (probably a voiced velar fricative) having reflexes of /g/ in the Agta languages and Northern Cordilleran languages, as well as most of the Central and Southern Philippine languages. It is reflected as /r/ in Ilokano and Arta, as /l/ in the South-Central Cordilleran languages and the Alta languages, and as /y/ in the Batanes languages as well as the Sambalic group⁹. It appears that *R was not only a phoneme in the language of the Austronesians, but was also present in the languages of the Negritos prior to the arrival of the Austronesians.

All numbered forms are tentative reconstructions. Where there are no comparable data from external languages, a reconstruction has been obtained by using the technique known as internal reconstruction. That is, the forms I propose would have probably predated known phonological changes that have taken place in the languages. These changes include the lowering of schwa and correlated gemination of the following consonant in many of the North Agta languages and Arta; the raising and fronting of the low, central vowel *a following voiced stops, and so on.

A single phoneme in square brackets (examples include nos. 11, 20, 28, and 32) indicates that some languages reflect its presence, others do not. Two phonemes in square brackets indicate an ambiguity in the reconstruction. For example, front vowels (/e/ or /i/) following voiced stops (/b/, /d/, and /g/) in North Agta languages may reflect an original *i, or may reflect *a (examples include nos. 10, 12, and 36). Similarly, a glottal stop in North Alta may reflect an original glottal stop, or *k, since *k > ʔ in this language (examples include nos. 87, 90, and 93). Where there is conflicting evidence for one or more Proto-phonemes in different languages, doublets are proposed

⁹ Editor's note. This subgroup is now referred to as Central Luzon, with Sambalic being restricted to a set of languages within the subgroup.

and are usually indicated as separate reconstructions (examples include nos. 19, 30, 42, and 51).

Affixation on most verbal forms (including adjectives) has been removed, since it appears always to be of Austronesian origin, and where affixation has resulted in vowel syncope, a schwa has been replaced in the root, as for example *Rəbi ‘plenty, kindness’ (no. 6), which is reconstructed from the following data: AGTAU *kagbi*, Art *pagarbian*, North Alta *maʔalbi*, South Alta *mokkalbi*, South Agta (apparently borrowed from South Alta) *kalbi* ‘pity’; ART *meʔarbi* ‘kind’.

Affixation on what appear to be morphologically complex, derived nominal forms has been retained, with the affix separated from the reconstructed root by a hyphen and placed in parentheses. For some of these forms, more than one parse is possible. In such cases, alternate analyses are included in the endnotes (see nos. 128 and 131, for example). The data on which the reconstructions are based are given in Appendix B, with an index in Appendix C. To simplify comparison, the phonetic notation of the original sources has been regularized in the following ways: schwa and glottal stop are represented as indicated above, with [ə] and [ʔ]. All word-initial glottal stops have been deleted. Where stress has been indicated, it is marked as an acute accent on the stressed vowel.

I have generally excluded from these lists forms that have a wide distribution in Negrito languages but appear to have a cognate in one of the Northern Philippine languages such as Isnag, Ibanag, or Gaddang, even though it is probable that in such cases the form may originally have been Negrito and has been borrowed into the non-Negrito language. An example is the word for ‘night’, reconstructed as *kələp, from AGTNC1, AGTNC2, AGTNC3, AGTCC6, AGTEC2, AGTEC3, AGTSC1 *kalləp*, AGTCC3 *kálap*, AGTCC4 *kələp*, AGTEC1 *kələp*, AGTSC2 *kalləp*, AGTSC3, AGTSC4 *kəlləp*, AGTSI *kaləp*, AU *kəláp*. In Isnag, there is a corresponding form *kəlləp* ‘moonless night’.

2.4.1 Unique forms shared among four Negrito language groups

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|-------------|-------|--------------------------------------|
| 1. ‘rattan’ | *lati | NC, CC, EC, SC; NA, SA ¹⁰ |
|-------------|-------|--------------------------------------|

2.4.2 Unique forms shared among three Negrito language groups

North Agta, Alta, and Central Agta

¹⁰ Note also Ayta *lawi* ‘rattan’.

2. ‘rat’	*kuyəŋ	NC, CC, SC, AU; NA
3. ‘ashamed’	*aməs	CC; NA
4. ‘vein’	*litid	AU; NA
5. ‘bury, inter’	*tapuR	AU; SA ¹¹

North Agta, Arta, and Alta

6. ‘pity, kindness’	*Rəbi	AU; NA, SA ¹²
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Alta, Central Agta, and Sinauna

7. ‘snake’	*babak	SA
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2.4.3 Unique forms shared between two Negrito language groups

North Agta and Arta

8. ‘thirst’	*pələk	EC, AU
9. ‘hunt’	*purab	SC, AU
10. ‘deer, buck’	*b[ia]dut	SI, AU
11. ‘fingernail’	*[l]usip	EC, SC ¹³
12. ‘penis’	*g[ia]ləŋ	SI, AU
13. ‘wall’	*gəsəd	SI ¹⁴
14. ‘dog, puppy’	*lapul	AU
15. ‘fire’	*dukut	AU
16. ‘hair, feather’	*pulug	AU

North Agta and Alta

17. ‘boil (v.)’	*ləbut	NC, CC, EC, SC, SI, AU; NA
18. ‘forget’	*liksap	AU; NA
19. ‘summit’	*taltay/*taytay	AU; SA

North Agta and South Agta

20. ‘forehead’	*[l]aŋas	SC; CS
21. ‘summit’	*kurut	NC, CC, EC, SC; CS ¹⁵

Arta and Alta

22. ‘fragrant’	*səlub	NA
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¹¹ Note also Arta *itapug* ‘bury, inter’, borrowed from a language in which *R > g.

¹² Note also Ibanag (*k*)əbbi ‘pity’.

¹³ See Ilongot *lukip* ‘fingernail’.

¹⁴ Possibly connected with Proto-Cordilleran *gusud ‘fence’.

¹⁵ Possibly related to Kalamansig Cotabato Manobo *kogol* ‘ridge’. Possibly also an irregular reflex of PPH *bakulud ‘mountain’, Bikol (Iriga) *kulud* ‘mountain’, Bikol (Buhi) *bakulud* ‘summit’, AGTCS₁ *ku-lud* ‘summit’.

Alta and Central Agta

23. ‘buttocks’	*sula	SA ¹⁶
24. ‘fast’	*paripari	SA
25. ‘know (s.o.)’	*abuyan	SA
26. ‘leaf’	*agid	SA
27. ‘man, male’	*patud	SA
28. ‘see’	*lawi[g]	SA
29. ‘wall’	*sagbuŋ	SA

Alta and South Agta

30. ‘shoulder’	*sugbuŋ/*subuŋ(-an)	SA; CS ¹⁷
31. ‘run’	*kaldit	SA; CN

Alta and Ayta

32. ‘betel leaf’	*li[t]lit	SA
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Central Agta and Sinauna

33. ‘waterfall’	*gərəy	
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2.4.4 Unique forms shared between North and South Alta

34. ‘accompany’	*ilan	NA, SA
35. ‘know’	*ənul	NA, SA
36. ‘lazy’	*b[ia]kət	NA, SA
37. ‘pregnant’	*tuyud	NA, SA
38. ‘sleep’	*puləd	NA, SA

2.4.5 Unique forms shared among North Agta languages

39. ‘heavy’	*dəgi	NC, CC, EC, SC, AU ¹⁸
40. ‘thick’	*bagəl	NC, CC, EC, SC, AU
41. ‘bitter’	*təkak	NC, CC, EC, SC
42. ‘butterfly’	*lullu/*lilli	NC, CC, EC, SC ¹⁹
43. ‘dry in sun’	*sarun	NC, CC, EC, SC
44. ‘hear’	*tima[n, ŋ]	NC, CC, EC, SC
45. ‘hunt’	*lagum	NC, CC, EC, SC
46. ‘mountain’	*amugud	NC, CC, EC, SC
47. ‘old (obj.)’	*ligid	NC, CC, EC, SC
48. ‘sun’	*pamalak	NC, CC, EC, SC

¹⁶ Possibly an irregular reflex of PPH *súlat: Bontok *súlat* ‘to block a hole’, Bikol *sulat*, Ilokano *sullat* ‘cork, stopper’, Hanunóo *súlat* ‘hole, such as body openings’, *súlat bulí?* ‘anus’, Alangan *súlat* ‘anus’.

¹⁷ Editors’ note. Jason Lobel (pers. comm.) notes that *sugbong* ‘shoulder’ is also found in Waray.

¹⁸ But note Northern Kankanay *dəgʔay* ‘strain, strive, make an effort, exert one’s self’.

¹⁹ Various forms in Kalinga dialects, all meaning ‘dragonfly’, are possibly connected, as for example Balenciagao *balliliŋ*, Lubuagan *belliliŋ*, Puapo *bililiŋ*, Kolayo *ballili*.

49. 'termite'	*sarik	NC, CC, EC, SC
50. 'throw (away)'	*tugbak	NC, CC, EC, SC ²⁰
51. 'fingernail'	*lu/*[l]udis	NC, CC, EC
52. 'run'	*buyut	NC, CC, EC
53. 'wing'	*kəpig	NC, EC, SC
54. 'throw'	*b[ia]sag	CC, EC, SC
55. 'waterfall'	*sənad	EC, SC, SI
56. 'shoulder'	*dəpi	NC, EC
57. 'call'	*dulaw	SC, AU
58. 'sweat'	*asub	SI, AU ²¹

2.4.6 Unique forms restricted to a single Negrito language

North Agta

59. 'butterfly'	*lumlum/*limlim	CC
60. 'sit'	*tugkuk	CC
61. 'thirst'	*g[ia]mtaŋ	CC
62. 'urine'	*sitəb	CC
63. 'walk'	*sugut	CC
64. 'hear'	*sanig	SC
65. 'rattan'	*karat	SC
66. 'run'	*gutuk	SC
67. 'salt'	*b[ia]gəl	SC

Arta

68. 'afternoon'	(ma-)*lutəp
69. 'arrive'	*digdig ²²
70. 'bone'	*sagnit
71. 'butterfly'	*pippun
72. 'drink'	*tim
73. 'ear'	*ibəŋ ²³
74. 'lime'	*ŋusu
75. 'man, male'	*giləŋ(-an) ²⁴
76. 'mosquito'	*buŋur
77. 'old (man)'	*dupu
78. 'one'	*sipəŋ
79. 'rain'	*punəd
80. 'run'	*gurugud

²⁰ Note also Ibanag *təbbo?* 'throw away', Pangasinan and Sɓ13 (Sambal) *tupak* 'throw', and Matigsalug Manobo *dəgpak* 'throw away'.

²¹ Note Ifugao (Kiangnan) *oháb* (< *əsáb 'warmth inside a house; person who has fever').

²² Note also Naga Bikol *digdi* 'come'.

²³ Note North Alta *tibəŋ* 'hear'.

²⁴ Note Arta *giləŋ* 'penis'.

81. 'say, tell'	*bud
82. 'sleep'	*idəm
83. 'two'	*təlip

North Alta

84. 'burn'	*təmuk
85. 'call'	*ŋuk
86. 'collapse'	*bəwəl ²⁵
87. 'depart'	*əg[ʔk]aŋ
88. 'fruit'	*ian
89. 'hear'	*tibəŋ
90. 'hit, strike'	*pu[ʔk]na
91. 'lie down'	*ədsəŋ
92. 'locust'	*pəsəl
93. 'long'	*lə[ʔk]aw
94. 'penis'	*gəyət
95. 'put, place'	*dətun
96. 'red'	*silit
97. 'seek'	*alyuk
98. 'stand'	*payuŋ
99. 'wait'	*tanud

South Alta

100. 'ant'	*il[əu]m
101. 'black'	*lit[əu]b
102. 'blow (v.)'	*uswa
103. 'burn'	*tiduk
104. 'bury, inter'	*laba
105. 'butterfly'	(ma-)*lawak
106. 'buttocks'	*timuy
107. 'call'	*gawi
108. 'carabao'	*uduŋ(-an)
109. 'cry'	*kəbi
110. 'deep'	*tanaw
111. 'fall (v.)'	*pagpag
112. 'fight/quarrel'	*itaw
113. 'fingernail'	*lunu
114. 'loincloth'	*g[ia]nat
115. 'long (time)'	*təwali
116. 'other (diff.)'	*kalad
117. 'put, place'	*bənu

²⁵ Note also Proto-Kalahan *b[əu]wəl 'rotten'.

118.	‘rain’	*dəsu
119.	‘sit’	*laŋad
120.	‘stand’	*piad
121.	‘tail’	*lambuŋ
122.	‘three’	*saŋay
123.	‘tree, wood’	*lab[ia]t
124.	‘true’	*kuduR ²⁶
125.	‘vagina’	(i-)*plaŋ
126.	‘widow, widower’	(na-)*dit
127.	‘wind’	*kabu(-an)

Central Agta

128.	‘bone’	*kaks(-an) ²⁷
129.	‘call’	*ulaŋ
130.	‘climb’	*dawit
131.	‘crocodile’	(maŋ-)*atu ²⁸
132.	‘feather’	*putput ²⁹
133.	‘hair’	*sapuk
134.	‘hunt’	*ikag
135.	‘ladle’	*lukuy ³⁰
136.	‘long (time)’	*luy ³¹
137.	‘no, not’	*eyen
138.	‘pound’	*buntul
139.	‘rain’	*tapuk
140.	‘run’	*g[ia]kan
141.	‘sand’	*laŋas
142.	‘sit’	*lipa
143.	‘sleep’	*pida ³²
144.	‘stand’	*[uə]di
145.	‘sweat’	*aldut/*ald[ia]t
146.	‘vagina’	*kin(-an)
147.	‘water, river’	*urat
148.	‘white’	*lapsay

²⁶ There is an apparently corresponding form in Arta *kurug* ‘true’, but the presence of /k/ indicates that it is borrowed, probably from a North Agta language. This then suggests a reconstruction with a final *R, probably *kuduR ‘true’. Bontok has *kutug* ‘lie’.

²⁷ Or (ka-)*ksan.

²⁸ Or (ma-)*ŋatu.

²⁹ But note PMP *putput ‘pluck, pull out’.

³⁰ Made of coconut shell.

³¹ On the basis of this form with Casiguran Dumagat *ale*, Himes reconstructs Proto–Northern Philippines *ʔalay ‘long time’.

³² Compare also South Agta *piges* (< *pigas) ‘sleep’.

South Agta

149.	‘fire’	*adiŋ	CS
150.	‘mosquito’	*kubuŋ	CS ³³
151.	‘shoulder’	*mugmug(-an)	CN
152.	‘sleep’	*lubat	CN

Sinauna

153.	‘child’	*ubun
154.	‘leaf’	*hayin ³⁴
155.	‘sit’	*səna
156.	‘stone’	*igaŋ
157.	‘wind’	*rugus

Ayta

158.	‘see’	*ələw
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2.5 Other evidence for a Pidgin origin of Negrito languages

As indicated above, I had earlier assumed that apparently unique terms in Negrito languages, if not post-Austronesian coinages, were probably Austronesian in origin and had been lost in most if not all other Austronesian languages, or had undergone radical semantic or phonological changes that obscured their relationships. There are a number of such terms, which I will discuss in this section. I shall claim, however, that they constitute further possible evidence for the presence of a pidgin in early contact times.

The discussion will focus on two areas: forms with unusual distribution of look-alikes in Austronesian languages, and possible Austronesian forms that have undergone radical phonological and/or semantic change.³⁵

2.5.1 Unusual distribution of Austronesian look-alikes in Negrito languages

The distribution of these forms is unusual, in that if they are really of Austronesian origin, they have been lost in most, if not all, of the non-Negrito languages of Luzon, and in some cases are retained only in a few languages in Mindanao (such as the Negrito language Mamanwa), and/or Palawan (including Batak). How can we account for this fact? One possible explanation is that they were learned by the Negritos as part of

³³ Editors’ note. Jason Lobel (pers. comm..) notes that the term *kubung* means ‘mosquito net’ not ‘mosquito’ in Rinconada Agta as well as in Bikol.

³⁴ Possibly cognate with Tagalog *hayin* ‘to set the table’.

³⁵ The use of the term ‘look-alike’ rather than ‘cognate’ leaves open for the present the question of whether or not true cognation is involved.

the Austronesian component of a pidgin during early contact with the Austronesians as they moved into Luzon from the north. Subsequently this contact language spread and was used fairly widely by different Negrito groups in Luzon in communicating with their Austronesian neighbors. During this stage the contact language acquired lexical items from the particular Negrito group that used it, and later these regional dialects shared in the phonological and grammatical innovations that developed in the languages of the local Austronesian group with which it was associated. With the dispersal of the Austronesian languages southward through the Philippines, the pidgin, by now creolized, maintained many of the old forms, even though they had become obsolete in the Austronesian languages from which they had originally come.

Another possible explanation is that those forms that only occur in Negrito languages in Luzon and non-Negrito languages in Mindanao may be part of a Negrito substratum in the non-Negrito languages of the Central and Southern Philippines. A number of the Manobo-language-speaking groups in Mindanao, including the Ata, Tigwa, and Matigsalug, although not hunter-gatherers, nor identifying themselves as Negrito, have a significant proportion of their population with clearly negroid genes (Richard Elkin, pers. comm.). Earlier Negrito populations in these areas have apparently been assimilated into the Manobo population, and many have left a substratum in the Manobo language of the area where they originally lived.

Some of the phonological changes (such as the raising and fronting of /a/ after /b/, /d/, and /g/, and the lowering of high front and back vowels—that is, /i/ and /u/ becoming /e/ and /o/ respectively—in some environments) that are found throughout the Negrito languages of eastern Luzon may also have had their source in this early contact language. It could be merely coincidence that the North Agta language spoken in the Casiguran area of Aurora has a more complex vowel system than any other Philippine language (Headland and Wolfenden 1967, Reid 1973, Headland and Healey 1974), or it may be substratal influence from the North Agta language originally spoken in this area.

Another common phonological change found in these languages was the loss of certain word-medial consonants, and subsequent reduction of the vowel sequence, resulting in a number of monosyllabic morphemes, as for example North Agta *god* < *Rawəd ‘betel leaf’, *pet* < *paqit ‘bitter’, *buk* < *buhuk ‘hair’, *beg* < *bahaR ‘g-string’, *don* < *dahun ‘leaf’. It seems possible that the Negrito languages prior to Austronesian-

contact were far more tolerant of monosyllabic morphemes than Austronesian languages typically are. A number of such morphemes appear in the preceding and following lists, as for example *bud ‘say, tell’, *but ‘throw’, *əl ‘all’, *lu ‘fingernail’, *luy ‘long time’, *pis ‘all’, *tim ‘drink’, and *tug ‘coconut shell ladle’. Other abbreviated forms that are clearly of Austronesian provenance occur widely. Note, for example, Central Agta *bu* ‘seed of fruit’ (see Proto–Philippine [PPH] *buaq, *buŋa); *pa* ‘thigh’ (see PPH *paqa); *aba* ‘shoulder’ (see PPH *abaRa); *bol* ‘hold’ (see Proto–North Cordilleran *əbəl). Similar abbreviated forms that are the result of syncopated intervocalic consonants also occur in some of the non-Negrito languages of Cagayan, such as Ibanag and Gaddang, so these may be areal features having nothing at all to do with the morphological structure of the original Negrito languages.

2.5.1.1 Forms shared among four Negrito language groups in Luzon

North Agta, Alta, Central Agta, and Sinauna

159. ‘abaca’ *arutay AU; NA

Reflexes of Proto–Southern Philippines *qaRútay ‘wild banana’ are found in Aklanun *agugútay*, Cebuano, Hanunóo *agútay*, and Tboli *kelutay*. It is not known to occur in any of the (non-Negrito) languages of Luzon.

North Agta, Alta, Central Agta, and South Agta

160. ‘chin, jaw’ *səlaŋ NC, CC, EC; NA, SA

Related forms occur in a number of Southern Philippine languages, including Tagalog *síhang*, and Bikol *sálang*. It is not known to occur in any of the (non-Negrito) Cordilleran languages of Luzon.

North Agta, Arta, Alta, and Central Agta

161. ‘throw away’ *but AU; NA, SA

This form is not known to occur in the non-Negrito languages of Luzon. A possibly related form occurs in the Southern Mindanao languages: Blaan *bat*, Tboli *bət* ‘throw away’, and is probably relatable ultimately to PPH *i-batu ‘throw’. Note also: AGTSI *ibatol*, Ibanag *ivuttu*, AGTCC5 *ibuttuŋ* ‘throw’.

2.5.1.2 Forms shared among three Negrito language groups in Luzon

North Agta, Alta, and Ayta

162. sit *iknud NC, CC, EC, SC, SI, AU; NA³⁶

³⁶ Sambal Ayta *ikno?* ‘sit’.

This is not known to occur in the non-Negrito languages of Luzon. Probable related forms occur in Kalagan, Mansaka, Dibabawon Manobo, and Subanun *ij kud* ‘sit’.

North Agta, Alta, and Central Agta

163. wing *əlad NC, CC, SC; SA³⁷

This is not known to occur in the non-Negrito languages of Luzon. It is shared also in Palawan by Batak and Aborlan Tagbanwa; in Mindanao by Western Bukidnon Manobo; and occurs in a number of non-Philippine Austronesian languages.

164. red *dadag CC, EC, SC, AU; SA

This is not known to occur in the non-Negrito languages of Luzon. Related forms are found in Buhid of Mindoro, Aborlan Tagbanwa in Palawan, and Mamanwa. The form is reconstructed for Greater Central Philippines by Zorc as *dadag ‘red’.

165. ‘deep, under’ *salad AU; NA, SA

This is not known to occur in the non-Negrito languages of Luzon. Related forms occur in Proto-Mansakan *salad ‘space under a house’, and Dibabawon Manobo *patisalad* ‘downward’.

North Agta, Arta, and Alta

166. ‘fly (v.)’ *əbər/ *igbər NC, CC, EC, SC, SI, AU; NA, SA

This is not known to occur in the non-Negrito languages of Luzon. Tiruray (a South Mindanao language) *ibər* ‘throw away’ is possibly related, and see also ART *i-bər* ‘throw’.

167. ‘run’ *ginan SI, AU; NA³⁸

Note also ART *ginan* ‘depart’. This is not known to occur in the non-Negrito languages of Luzon. See Sibale (Bisayan) *ginan* ‘go (away), leave’.

2.5.1.3 Forms shared between two Negrito language groups

North Agta and Arta

168. ‘back’ *səpaŋ NC, CC, EC, SC, AU

This is not known to occur in the non-Negrito languages of Luzon and is possibly related to Tiruray *səgaŋ* ‘back’.

Alta and Central Agta

169. ‘cheek, face’ (pa-)*siŋil NA, SA

³⁷ Also occurs meaning ‘feather’ in some North Agta languages (NC, CC, EC, SC). This form is a reflex of PMP *qelaj ‘wing, feather, thin object’ (reconstructed by Dempwolff, revised by Charles).

³⁸ Compare Central Agta *gikan* ‘run’.

See Aborlan Tagbanwa *basinjil* ‘cheek’. Several Northern Agta groups, as well as Gaddang, have reflexes of **padijil* ‘cheek’.

Alta and Sinauna

170. ‘water, river’ **laʔu* SA

This is not known to occur in the non-Negrito languages of Luzon and is possibly related to Proto-Manobo **laʔu* ‘thirsty’, with cognates in Sangir and Sangil. See also PPH **láuð* ‘high seas’.

2.5.1.4 Forms restricted to a single Negrito language

North Agta

171. ‘skinny’ **rasa* NC, CC, EC, SC, SI

This is not known to occur in the non-Negrito languages of Luzon. Related forms from PPH **Rasaʔ* ‘skinny’ occur in a number of Southern Philippine languages, as reflexes of **Raseq* (Charles 1973).

172. ‘chicken’ **kati* SI

This is probably cognate with Proto-Meso-Philippine **katiʔ* ‘rooster used as a decoy in a wild chicken snare’.

South Agta

173. ‘rain’ **g[ia]mis* CN

This is not known to occur in the non-Negrito languages of Luzon. Compare Tasaday *daməs* ‘rain’.

North Alta

174. ‘all’ **əl(-an)*

This is not known to occur in the non-Negrito languages of Luzon. An apparent cognate occurs in Binukid Manobo *alan* ‘all’.

2.5.2 Austronesian look-alikes in Negrito languages that often show radical sporadic phonological and/or semantic changes

It is surprising the number of forms that maintain only a single-syllable (usually, but not always, first syllable) similarity to possibly corresponding Austronesian forms.³⁹ Excluded from this set of data are forms with first-syllable similarity to an Austronesian form, but in which there is a recognizable regularity in the second-syllable modification, as in North Alta terms with second syllables originally beginning with a voiced

³⁹ This phenomenon has been extensively studied in Blust 1988.

stop plus /a/ sequence, in which /d/ is inserted before the second vowel, which is itself reflected as schwa. For example:

‘body’	<i>abdəʔ</i>	< *abak
‘eel’	<i>igdət</i>	< *igat
‘fat’	<i>tabdə</i>	< *taba
‘light weight’	<i>lagdən</i>	< *lagaʔan
‘root’	<i>ugdət</i>	< *ugat
‘woman’	<i>dəbdi</i> ⁴⁰	< *babaʔi

Words that have been radically changed phonologically or that have shifted semantically, and that would therefore have been a barrier to communication, can hardly be used to substantiate the presence of a pidgin, the very purpose of which is to facilitate communication between groups that have no common language. However, it is possible that after creolization and the loss of the original Negrito languages, such forms developed as part of a secret language and ultimately became linguistic markers of group identity.

2.5.2.1 Forms shared among three Negrito language groups

North Agta, Arta, and Alta

175.	‘cut, slice’	*gəlgəl	NC, CC, EC, SC, SI, AU; NA
176.	‘near’	*b[ia]kən	NC, CC, EC, SC; NA

See Ibanag *biko* ‘near’.

See PCORD *gə[d]gəd; PPH *gələt ‘cut, slice’.

177.	‘bathe’	*dimuy	SI; SA
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See PPH *diRus ‘bathe’; Ilongot (Kakiduge:n) *diyuy* ‘wash body’.

North Agta, Alta, and Central Agta

178.	‘say, tell; choose’	*paʔita	NC, CC, EC, SC; SA
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This form is obviously a reflex of PPH *pakita ‘show’. The semantic shift is restricted to the Negrito languages indicated, and is not found in non-Negrito languages.

2.5.2.2 Forms shared between two Negrito language groups

North Agta and Arta

179.	‘monkey’	*burug	NC, CC, EC, SC, SI, AU
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⁴⁰ The initial /d/ in this form is apparently a result of dissimilation, occurring also in North Alta *dəbuy* < *babuy ‘pig’.

See Proto–Cordilleran *buRaŋan ‘monkey’. Yogad *burog* ‘monkey’ is possibly a borrowing from a Negrito language.

180. ‘crocodile’ *bukarut NC, CC, EC, SC, AU

See PPH *buqaya ‘crocodile’,⁴¹ Kalamianan *bukaya?*, Batak *buŋut* ‘crocodile’, Ilokano *bokkarut* ‘kind of crocodile with variegated skin’.

181. ‘short (obj.)’ *pirit SC, SI, AU

See Proto–Cordilleran *pitik ‘short’.

182. ‘face’ *mud[ia]t SI

See PPH *muRiŋ ‘forehead’, Proto–Cordilleran *mukat ‘face’, and Gaddang, Ibanag *muton*, Itawis *muyun* ‘face’, and so forth.

183. ‘heavy’ *dətun SI

See Proto–Northern Cordilleran *dəgi, PPH *daRmət, and Ilokano *dagsen* ‘heavy’.

North Agta and Alta

184. ‘forehead’ *k[iə]dəp NC, EC, AU; NA, SA

See PPH *kiday and Proto–South-Central Cordilleran *kituŋ ‘forehead’.

185. ‘drunk, dizzy’ *linug AU; NA, SA

This may be related to Proto–Cordilleran *liweŋ ‘dizzy’.

186. ‘person, non-Neg.’ *uRdin NC, CC, EC, SI; NA

An apparent set of cognates meaning ‘red’ occurs only in Atta *ujjo:jin*, and its closely related neighboring language Ibanag *uzzin*. The meaning ‘non-Negrito person’ occurs only in Negrito languages.

187. ‘hard (substance)’ *kətug AU; NA

See Balangao *kənəg*, Kankanay *kəntəg*, Tigwa Manobo *kəgal*, and Sangir and Sangil *kəti?* ‘hard’. A possible cognate occurs in Isnag *kattug* ‘lust, sexual desire’, *makattug* ‘to suffer an erection’.

Arta and Alta

188. ‘water, river’ *wagət NA, SA

See PPH *waqiR ‘water, stream’.

189. ‘cry’ *siak NA

⁴¹ If these forms are in fact related, the /k/ reflex of PPH *q in the Negrito forms places the time of original contact at a very early period in the development of Philippine Austronesian languages, since *q is only retained as /k/ elsewhere in the Philippines in Kalamianan, and Tboli in the south of Mindanao. Other Negrito forms that show /k/ as a possible reflex of *q are nos. 189 and 208.

See Tagalog *iyak* and Kapampangan *kiyak* ‘cry’. However, this may be relatable to Proto–Western Malayo-Polynesian *Siaq ‘shy, ashamed’.

190. ‘earth, soil’ *tapək NA

See PPH *tanəq ‘earth, soil’.

Alta and Central Agta

191. ‘mud’ *lutit NA, SA

See PPH *lusak; Proto–Bashiic *lutək; Isnag *lupaŋ*; Proto–Cordilleran *luyek; Batak *lubut*; Kalamianan *lunaŋ*, *lugmuk* ‘mud’.

192. ‘sweet’ *lanis NA, SA

See Bontok *lamsit*; Ilokano *lami?is* ‘sweet’.

193. ‘carry, bring’ *[aə]da⁴² NA

See Tagalog *dala* ‘bring’; Ilongot (Kawayan, Dupax) *ʔadəm*, (Payo) *ʔada* ‘bring, carry’.

194. ‘big’ *haŋa SA

See PPH *ma-Raya ‘big’. Perhaps this was borrowed from a North Agta language in which *R > r > h.

195. ‘old (woman)’ *gupad SA

See Tagalog *magulaŋ* ‘old person’.

196. ‘waterfall’ *tabi SA

See Kapampangan and Sinauna *talon* ‘waterfall’.

197. ‘woman, girl’ (ma-)*huna SA

See Tagalog *huna?* ‘frailty, fragility of structure’, borrowed into AGTAU as *huna* ‘weak’.

2.5.2.3 Forms shared between North and South Alta

198. ‘love’ *bud[ia] NA, SA

See AGTUM *bu?ot*, Bisayan *bu?út* ‘love’

199. ‘hot, fever’ *pənaŋ NA, SA

See Inibaloi *pətaŋ* ‘hot’. The Alta languages and Inibaloi are all part of the Meso-Cordilleran sub-group of Philippine languages.

⁴² Several other Austronesian reduplicated forms of the shape C₁V₁.C₁V₁(C₂) occur in Negrito languages with the shape əCV, as for example PPH *nana, ALTN2, N3 *əna* ‘pus’ and PPH *mamaq, SIN1 *ama?*, AGTAU *əma* ‘betel nut chew’.

2.5.2.4 Forms shared among North Agta languages

200. ‘small (obj.)’ *bəlɪk NC, CC, EC, SC, SI

See Proto–Malayo-Polynesian *kədik ‘small’ (but no other known reflexes in the Philippines).

201. ‘star’ *pu[st]ian NC, CC, EC, SC

Although none of the languages has a *t* reflex in this form, it may be a reflex of PPH *putiq ‘white’, borrowed from a language such as Ibanag, in which **t* became *s* before a high-front vowel.

202. ‘tail’ *bunɪd⁴³ NC, CC < EC, SC

See Tagalog, South Agta (CN) *bujtot* ‘tail’.

203. ‘white’ *pun[st]it NC, CC, EC, SC

See PPH *putiq ‘white’.

204. ‘mud’ *ludəg CC, EC, SC

See PPH *lusak; Proto–Bashiic *lutək; Isneg *lupaŋ*; Proto–Cordilleran *luyek; Batak *lubut*; Kalamianan *lunaŋ*, *lugmuk* ‘mud’.

205. ‘sky’ *lakup NC, EC

See PPH *laŋit ‘sky’.

2.5.2.5 Forms restricted to a single Negrito language

North Agta

206. ‘mud’ *lukit NC

See PPH *lusak; Proto–Bashiic *lutək (see no. 204).

207. ‘ladle (coconut shell)’ *tug SI

See PPH *saduk ‘coconut shell ladle’.

208. ‘rat’ *bukət⁴⁴ SI

See Proto–Nuclear Cordilleran *buwət ‘a kind of large native rodent’. This implies a PPH *buqət. Ifugao and Yogad *bukat* ‘rat’ are also possibly related.

Arta

209. ‘bad’ *balaŋu

⁴³ In NC and EC also ‘feather’.

⁴⁴ See also Arta *bukət* ‘rat’ (the presence of a medial *k*, suggests that the form is a borrowing from North Agta), and AGTAU *bukat* ‘mouse’.

This may be related to PPH *balaŋaw ‘rainbow’. (The appearance of a rainbow in many Philip-pine cultures is considered to be a bad omen.)

210. ‘night’ *baŋwət

See Kapampangan *berji* and South Agta *báji* ‘night’; also Bikol *baŋgi* ‘night’ and Ilongot (Payo) *bəŋgi* ‘mid-night’.

211. ‘vagina’ *sabit

See Bontok *sipit* and Balangao *sopet* ‘vagina’.

Alta

212. ‘big’ *damanta SA

See Proto-Cordilleran *dakəl ‘big’.

213. ‘boil (n.)’ *pasa SA

See PPH *pəRsa ‘boil (n.)’

Central Agta

214. ‘dry in sun’ *sibaŋ

See PPH *silaR ‘sunshine, shiny’ and North Alta *sinag* ‘sun, day’.

215. ‘spouse’ *bab[ia]

See PPH *bana ‘husband’; also Buhid *babay* ‘spouse’.

216. ‘pregnant’ *bəsu

This may be related to PPH *bəsUR ‘full, sated’.

Sinauna

217. ‘boil (n.)’ *karapas

This is possibly from *kali-pəRsa ‘boil (n.)’; see Central Agta *kulipos* (< *kəlipəs) ‘boil (n.)’.

218. ‘call’ *[aə]ta

See PPH *tawaR ‘call’.

3. Conclusion

My earlier papers on the Negrito languages of northern Luzon focused first on the analysis of their inherited vocabulary to determine their subgrouping relationships vis-à-vis non-Negrito languages (Reid 1987, 1989a, 1991; Headland and Reid 1989, 1991). Subsequent work has considered the implications for language contact of borrowed vo-

cabulary in the Negrito languages (Reid 1989b). This paper examines the vocabulary that is neither clearly inherited nor borrowed from non-Negrito languages, but that appears to be unique to one or more of the Negrito languages.

I propose that the significant body of unique terms in Negrito languages, a fairly substantial number of which are part of the environment in which Negritos presumably lived and which tend to be culture specific (for example, abaca, rattan, sugarcane, coconut, betel leaf, rat, snake, buffalo, deer, dog, locust, crocodile, butterfly, termite, ant, mosquito, and so forth) or “secret” language (such as vagina, penis, and so forth), and many of which are shared exclusively among Negrito languages, possibly constitute an early Negrito substratum in these languages.

I am claiming that these forms are potential evidence of an early pidgin or trade language, subsequently creolized, which was developed by the Negritos to facilitate communication with in-migrating Austronesians.

The fact that Negrito languages today do not show typical features of pidgins or creoles such as limited vocabulary and simplified syntax is no proof that they did not start out in this way. The process of decreolization or adaptation to the status language over thousands of years has long since resulted in their developing all the morphology and syntax that characterize most other Philippine Austronesian languages.

The lexicon of a pidgin typically is constituted of forms from both of the languages that are in contact, although one, usually the status language, dominates, especially for basic or core vocabulary. I am assuming that the language of the Austronesians was the status language in this contact situation, and in fact we find a number of apparently very early Austronesian terms retained in the Negrito languages that have been lost in most of the non-Negrito languages of the Philippines, or retained only in geographically very distant languages.

Other explanations for all these facts are available, such as language shift following a period of bilingualism, but if we bring into consideration what is generally understood to be the prehistoric situation in the Philippines, with culturally more advanced Austronesians moving in as rice-growing colonizers, and needing the assistance of local laborers (whose languages they could not possibly have understood) to clear rainforest and develop fields, we can see that the prerequisites for the development of a pidgin were present. The data presented in this paper seem to me to have their surest explanation then as evidence for a pidgin, given that other grounds also lead us to expect such

a form of speech to have been present in the early stages of Austronesian–Negrito contact. Unfortunately they also provide evidence that prior to the arrival of non-Negritos, the Philippine Negritos were speaking languages that were not Austronesian.⁴⁵

⁴⁵ The strength of the major hypothesis of this paper depends crucially on the absence of recognizable cognates of Negrito lexical items in Austronesian languages. Since the earliest versions of this paper, many forms from my original data have been shown in fact to have Austronesian cognates, and have therefore been eliminated from the list. I would like to encourage readers to send me information on other apparent cognates that might reduce my list further, and thereby test the hypotheses.

Appendix A: Sources

The following is a list of all Negrito-language wordlists that have been used in the lexical comparisons cited in this paper. They are organized as follows: Commonly used ethnonym; wordlist abbreviation; geographical location where list was collected; source. The source abbreviations are as follows:

PML	<i>Philippine minor languages</i> (Reid 1971)
SIL	Files of the Summer Institute of Linguistics, Philippines
TNH	<i>A Dumagat (Casiguran)-English dictionary</i> (Headland and Headland 1974)
LAR	Reid, fieldnotes (1987, 1990, 1993)
FAY	<i>A comparative study of Philippine lexicons</i> (Yap 1977)
RBF	Robert B. Fox, unpublished wordlist
WP	Wesley Petro, unpublished wordlist

All of the wordlists form part of the Pacific and Asian Language Archive (PALA) of the University of Hawai'i, an online database accessible to all researchers.

Wordlists for Northern Agta

Northern Cagayan (NC)

Atta; ATT; Pamplona, Cagayan; PML
 Agta, AGTNC1; Palawi Island, Cagayan; SIL
 Agta; AGTNC2; Santa Clara, Gonzaga, Cagayan; SIL
 Agta; AGTNC3; Barongagunay, Santa Clara, Santa Ana, Cagayan; SIL
 Agta; AGTNC4; Gonzaga, Cagayan (Dupaningan); LAR

Central Cagayan (CC)

Agta; AGTCC1; Gattaran, Cagayan; PML
 Agta; AGTCC2; Gattaran (?), Cagayan; SIL
 Agta; AGTCC3; Yaga, Gattaran, Cagayan; SIL
 Agta; AGTCC4; Tanglagan, Gattaran, Cagayan; SIL
 Agta; AGTCC5; Mammit, Cagayan; SIL
 Agta; AGTCC6; Camonayan, Baggao, Cagayan; SIL

Eastern Cagayan (EC)

Agta; AGTEC1; East Coast Cagayan; SIL
 Agta; AGTEC2; Bolos Point, Cagayan; SIL
 Agta; AGTEC3; Valley Cove, Cagayan; SIL

Southern Cagayan (SC)

Agta; AGTSC1; Minanga, Peñablanca, Cagayan; SIL
 Agta; AGTSC2; Conyan, Minanga, Peñablanca, Cagayan; SIL

Agta; AGTSC3; Sapinit, Maconacon, Cagayan; SIL
 Agta; AGTSC4; Makagaw (Dupaninan), Cagayan; SIL

Southern Isabela (SI)

Agta; AGTSI; Dikamey, Cauayan, Isabela; SIL

Aurora (AU)

Agta; AGTAU; Casiguran, Aurora; PML and TNH

Wordlists for Arta

Arta; ART1; Maddela, Quirino; SIL

Arta; ART2; Villa Santiago, Aglipay, Quirino; LAR

Wordlists for Alta

Northern Alta (NA)

Alta; ALTN1; Baler, Aurora; MV

Alta; ALTN2; Ditailin, Maria Aurora, Aurora; RBF

Alta; ALTN3; Malevida, Dianawan, Maria Aurora, Aurora; LAR

Alta; ALTN4; Diteki, San Luis, Aurora; LAR

Southern Alta (SA)

Kabuluen; ALTS1; Rio Chico, Gen. Tinio, Nueva Ecija; WP

Kabuluen; ALTS2; San Miguel, Rio Chico, Gen. Tinio, Nueva Ecija; LAR

Kabuluen; ALTS3; Dikapanikian, Dingalan, Quezon; LAR

Dumagat; ALTS4; Sibul Springs, San Miguel and Pinaganakan, Norzagaray, Bulacan; LAR

Wordlists for Central Agta (AgtUm)

Dumagat; AGTUM1; Umiray, Quezon; SIL

Dumagat; AGTUM2; Umiray, Quezon; SIL

Dumagat; AGTUM3; Umiray, Quezon; SIL

Dumagat; AGTUM4; Dibut, San Luis, Aurora; LAR

Dumagat; AGTUM5; Bunbun, Panakulan, Polillo, Quezon; LAR

Wordlists for Southern Agta

Camarines Norte (CN)

Agta; AgtCN; Villa Bilin, Camarines Norte; SIL

Camarines Sur (CS)

Rugnot; AGTCS1; Lake Buhi, Camarines Sur; SIL

Inagta; AGTCS2; Sta Niño, Hayagan, and Sta Cruz, Ipil, Buhi, Camarines Sur; SIL

Inagta; AGTCS3; San Augustine, Buhi, Camarines Sur; SIL

Inagta; AGTCS4; San Ramon Lake Buhi, Camarines Sur; SIL

Wordlists for Sinauna

Sinauna Tagalog; SIN1; Tanay, Rizal; FAY

Remontado; SIN2; Paimahuan, Limoutan, Gen. Nakar, Quezon; SIL

Wordlists for Ayta

Aeta; SBL1; Botolan, Zambales; PML

Sambal; SBL2; San Carlos, Zambales; SIL

Sambal; SBL3; San Carlos, Pangasinan; SIL

Sambal; SBL4; Masinloc, (?); SIL

Ambalà; SBL5; Maliwacat, Cabalan, Olongapo, Zambales; SIL

Ambalà; SBL6; Batong Kalyo (Pili), San Marcelino, Zambales; SIL

Magbikin; AYT1; Kanáwon, Morong, Bataan; SIL

Magbikin; AYT2; Bayanbayanan, Magbikin, Mariveles, Bataan; SIL

Balugà; AYT3; Camatsili, Florida Blanca, Pampanga; SIL

Ayta; AYT4; Kakilingan, (?); SIL

Ayta; AYT5; Lumibao, Pampanga (?); SIL

Ayta, AYT6; Ma-ague-ague, (?); SIL

Wordlists for Negrito languages in Palawan and Mindanao

Batak; BTK; Palawan; PML

Mamanwa; MMN; Agusan; PML

Ata Manobo; MBOA; Mansalinao, Davao; PML

Appendix B: Reconstruction Data

It should be noted that the reconstructions cited here are not all being claimed as uniquely Negrito. Some of them have been reconstructed by Dempwolff, Dyen, Blust, and others for one or more of the early stages of Austronesian. What is of interest with these forms is that their reflexes are limited in Luzon to one or more of the Negrito languages, and that in a number of such cases, other reflexes are found only in a few geographically remote languages of Palawan or Mindanao.

159	‘abaca’	*arutay	AGTAU <i>qahutáy</i> , ALTN3, 4 <i>aduʔtay</i> , AGTUM3, 4 <i>arotay</i> , SIN2 <i>arutay</i>
34	‘accompany’	*ilan	ALTN3, 4 <i>élan</i> , ALTS2 <i>kákaylan</i>
68	‘afternoon’	(ma-)*lutəp	ART <i>malutəp</i>
174	‘all’	*əl(-an)	ALTN2, 4 <i>əlán</i> , 3 <i>alán</i>
100	‘ant’	*il[əu]m	ALTS2, 4 <i>ilóm</i> , 3 <i>ilúm</i>
69	‘arrive’	*digdig	ART <i>dumigdig</i>
3	‘ashamed’	*aməs	AGTCC1 <i>mamat</i> , 2 <i>ma:mat</i> , ALTN2 <i>amáməs</i> , 3 <i>maʔa-máməs</i> , 4 <i>məʔamáməs</i> , AGTUM3, 4 <i>mamamos</i> , 5 <i>nagkam-mamos</i>
168	‘back’	*səpaŋ	AGTNC1, 2, 3, CC4, 6, EC3 <i>sappaŋ</i> , SC2 <i>suppáŋ</i> , ART <i>sapáŋ</i>
209	‘bad’	*balaŋu	ART <i>baláŋu</i>
177	‘bathe’	*dimuy	AGTSI <i>mégdimoy</i> , ART <i>maŋdimuy</i> , ALTS2 <i>mandímoy</i> , 3 <i>nundimuy</i> , 4 <i>mandímuy</i>
32	‘betel leaf’	*li[t]lit	ALTN2 <i>litlít</i> , 3, 4 <i>litlit</i> , AYT2 <i>lilit</i>
212	‘big’	*damanta	ALTS2, 3 <i>demanta</i>
194	‘big’	*haŋa	ALTS4 <i>haŋá</i> , AGTUM3, 4, 5 <i>haŋa</i>
41	‘bitter’	*təkak	AGTCC3 <i>matakkat</i> , 4, NC1, 2 <i>matakkak</i> , CC6, EC1, 2, 3 <i>makkak</i> , NC3 <i>makkak</i> , SC2, 3, 4 <i>makak</i>
101	‘black’	*lit[əu]b	ALTS2 <i>nalitob</i> , 3 <i>nalitób</i>
102	‘blow (v.)’	*uswa	ALTS2 <i>immuswa</i>
213	‘boil (n.)’	*pasa	ALTS2, 3, 4 <i>pása</i>
217	‘boil (n.)’	*karapas	SIN1, 2 <i>karapas</i>
17	‘boil (v.)’	*ləbut	AGTCC3 <i>maglabut</i> , 4, NC1, 2, 3 <i>maglabbut</i> , CC6 <i>maglabbut</i> , EC1 <i>məgləbut</i> , 2, 4 <i>maglabbut</i> , 3 <i>lombut</i> , SC1 <i>paglabbutan</i> , 2 <i>maglabbut</i> , 3 <i>magləbut</i> , SI <i>pagləbutən</i> , AU <i>ləbut</i> , ALTN3 <i>labut</i> , 4 <i>lumalbut</i>

128	'bone'	*kaks(-an)	AGTUM3, 4, 5 <i>kaksan</i>
70	'bone'	*sagnit	ART <i>sagnit</i>
193	'bring'	*[aə]da	ALTN3 <i>adən</i> , 4 <i>əddənan</i> , AGTUM3, 4 <i>addi</i> , 5 <i>maṇadde</i>
15	'build fire'	*dukut	AGTAU <i>dukot</i>
103	'burn'	*tiduk	ALTS1 <i>tadok</i> , 2 <i>matedok</i> , 3, 4 <i>matédok</i>
84	'burn'	*təmək	ALTN3 <i>tamu?</i> , 4 <i>matmu?</i>
104	'bury, inter'	*laba	ALTS2, 4 <i>lábe</i>
5	'bury, inter'	*tapuR	AU <i>tapoh</i> 'to cover over; to fill a hole with dirt until level', ALTS3 <i>itapul</i> , AGTUM3, 4 <i>tapurin</i>
105	'butterfly'	(ma-)*lawak	ALTS2, 3 <i>malawák</i>
42	'butterfly'	*lilli	AGTCC6, NC3, EC3, SC4 <i>lilli</i> , EC1 <i>léley</i> , NC4, EC2 <i>lelle</i>
42	'butterfly'	*lullu	AGTSC2, 3 <i>lólo</i> , 1, 4 <i>lollo</i>
59	'butterfly'	*limlim	CC3 <i>lemlem</i>
59	'butterfly'	*lumlum	AGTCC1, 2, 5 <i>lomlom</i>
71	'butterfly'	*pippun	ART <i>peppun</i>
23	'buttocks'	*sula	ALTS4 <i>sula</i> , AGTUM3, 4, 5 <i>sula</i>
106	'buttocks'	*timuy	ALTS2, AGTSC3 <i>timoy</i>
218	'call'	*[aə]ta	SIN1, 2 <i>ataʔan</i>
57	'call'	*dulaw	AGTSC1 <i>dulawan</i> , 2 <i>dulawán</i> , 3, 4 <i>dulawan</i> , AU <i>duláw</i>
107	'call'	*gawi	ALTS2 <i>géwyan</i> , 3, 4 <i>gewyan</i>
85	'call'	*ŋuk	ALTN2 <i>ŋóʔan</i> , 3 <i>ŋoʔ</i> , 4 <i>ŋoʔan</i>
129	'call'	*ulaŋ	AGTUM3, 4, 5 <i>olaŋ</i>
108	'carabao'	*uduŋ(-an)	ALTS2, AGTSC3, 4 <i>uddúŋan</i>
193	'carry'	*[aə]da	AGTUM3, 4 <i>addi</i> , 5 <i>maṇadde</i>
169	'cheek'	(pa-)*siŋil	ALTN2 <i>paséŋil</i> , ALTS2, 3, 4 <i>pasijil</i> , AGTUM3, 4, 5 <i>pasijil</i>
172	'chicken'	*kati	AGTSI <i>kati</i>
153	'child'	*ubun	SIN1, 2 <i>ubon</i>
160	'chin'	*səlaŋ	AGTCC6, NC1, 3, EC2, 3 <i>sallaŋ</i> , 1 <i>səlaŋ</i> , ALTN2 <i>səláŋ</i> , 3 <i>saláŋ</i> , ALTS2, 3, 4 <i>sollaŋ</i>
178	'choose'	*paʔita	ALTS2 <i>maméta</i> , 3, 4 <i>pumeta</i> , AGTUM <i>gepeta</i>
130	'climb'	*dawit	AGTUM3, 4 <i>dumáwet</i> , 5 <i>dumawet</i>

86	‘collapse’	*bəwəl	ALTN3 <i>miníbwəl</i> , 4 <i>minébwəl</i>
131	‘crocodile’	(maŋ-)*atu	AGTUM3, 4, 5 <i>maŋatu</i>
180	‘crocodile’	*bukarut	AGTNC1, EC2 <i>bukarot</i> , CC3, SC1 <i>bukahot</i> , CC4, 4, EC1, 3, SC3, 4 <i>bukahot</i> , NC2, 3, 4 <i>bukarot</i> , SC2 <i>bukahót</i> , Art <i>bukarút</i>
109	‘cry’	*kəbi	ALTS2, S3, S4 <i>kumbi</i> , <i>kumukbi</i>
189	‘cry’	*siak	ART <i>mansía</i> , <i>mansiá</i> , ALTN2 <i>sumíya?</i> , 3 <i>siya?</i> , 4 <i>mənsíya?</i>
175	‘cut, slice’	*gəlgəl	AGTNC1, 3, CC1, 3, 4, SC1 <i>mggəlgəl</i> , NC2 <i>gəlgələŋ</i> , CC2 <i>maggəlgəl</i> , 6, EC2, 3 <i>maggəlgəl</i> , EC1, SC3, SI, AU <i>gəlgəl</i> , SC2 <i>maggəlgəl</i> , 4 <i>gəlgələn</i> , ART <i>gəlgələn</i> , ALTN3, 4 <i>gəlgəl</i>
110	‘deep’	*tanaw	ALTS2, 3 <i>tánaw</i>
165	‘deep’	*salad	AGTAU <i>disalad</i> ‘deep, inside’, ALTN3 <i>madisalad</i> , 4 <i>mə-dísalád</i> , ALTS4 <i>moddisalad</i> , AgtUm3, 4 <i>madisalad</i>
10	‘deer, buck’	*b[ia]dut	AGTSI, Art <i>bidut</i> , AU <i>bidut</i> ‘buck’
87	‘depart’	*əg[ʔk]aŋ	ALTN2, 3, 4 <i>uməgʔáŋ</i>
167	‘depart’	*ginan	ART <i>guminan</i>
185	‘dizzy’	*linug	AGTAU <i>linug</i>
14	‘dog’	*lapul	AGTAU <i>lapol</i> ‘puppy’, ART <i>lappul</i>
72	‘drink’	*tim	ART <i>mattim</i>
185	‘drunk’	*linug	ALTN3 <i>linúg</i> , 4 <i>minalinúg</i> , ALTS4 <i>mollinúg</i>
43	‘dry in sun’	*sarun	AGTNC1, 3, 4 <i>isaron</i> , CC6 <i>isəhon</i> , EC1, 2, 3 <i>isáhon</i> , SC3 <i>səhon</i> , 4 <i>masáhod</i>
214	‘dry in sun’	*sibaŋ	AGTUM3, 4 <i>siberin</i> , 5 <i>sibaŋin</i>
73	‘ear’	*ibəŋ	ART <i>ibəŋ</i>
190	‘earth, soil’	*tapək	ART <i>tapá</i> , ALTN2, 3 <i>tapə?</i> , 4 <i>tapá?</i>
182	‘face’	*mud[ia]t	AGTSI <i>mudet</i> , Art <i>mudít</i>
169	‘face’	(pa-)*siŋil	ALTS3 <i>pasinil</i> , AGTUM3, 4 <i>pasinil</i>
111	‘fall (v.)’	*pagpag	ALTS2, 3, 4 <i>mapagpag</i>
24	‘fast’	*paripari	ALTS4, 3 <i>moppalipáli</i> , AGTUM3 <i>maparipari</i> , 4 <i>paripari</i>
16	‘feather’	*pulug	ART <i>pulúg</i>
132	‘feather’	*putput	AGTUM3, 4 <i>putput</i>
163	‘feather’	*əlad	AGTNC1, 3, 4, CC3, 4, 5, 6, EC2, 3 <i>əllad</i> , NC2 <i>əllád</i> , SC2 <i>əllád</i>
199	‘fever’	*pənaŋ	ALTN3, 4 <i>mepanáŋ</i>

112	'fight, quarrel'	*itaw	ALTNC3 <i>ʔitaw</i> , 4 <i>maʔʔiʔitaw</i>
51	'fingernail'	*lu	AGTCC1, 2 <i>lu</i>
51	'fingernail'	*[l]udis	AGTNC2 <i>lúdis</i> , CC3, 4 <i>ludis</i> , NC3, CC6, EC2, 3 <i>udis</i>
113	'fingernail'	*lunu	ALTS2, 3 <i>lunu</i> , 4 <i>lunú</i>
11	'fingernail'	*[l]usip	AGTEC2, 3, SC2 <i>usep</i> , Art <i>lusip</i>
149	'fire'	*adiŋ	AGTCS1, 4 <i>adíŋ</i> , CS3 <i>adiŋ</i>
15	'fire'	*dukut	ART <i>dut</i>
166	'fly (v.)'	*əbər/*igbər	AGTNC1 <i>umbər</i> , 2 <i>umbar</i> , 3 <i>umebər</i> , SI <i>umbəh</i> , AU <i>egbəh</i> , CC1 <i>imubəh</i> , 2 <i>imubah</i> , 3 <i>imubar</i> , 4 <i>umubah</i> , 6 <i>umebbəh</i> , EC2 <i>umegbər</i> , 3 <i>umbəh</i> , SC1 <i>umebbar</i> , 2 <i>umbah</i> , 4 <i>umebah</i> , ALTNC1 <i>inombəl</i> , ALTS <i>umigbol</i> , ART <i>umbər</i>
184	'forehead'	*k[iə]dəp	AU <i>kidáp</i> , ALTNC3, 4 <i>idáp</i> , ALTS2, 3, 4 <i>koddop</i>
20	'forehead'	*[l]aŋas	AGTCC, SC1 <i>laŋas</i> , 2, 3 <i>laŋas</i> , 4 <i>laŋás</i> , AGTCS3 <i>aŋas</i> , 4 <i>áŋas</i>
18	'forget'	*liksap	AGTAU <i>leksapán</i> , ALTNC2 <i>minaliʔsapán</i> , 3 <i>liʔsap</i> , 4 <i>máliʔ-sapán</i>
22	'fragrant'	*səlub	ART <i>messalúb</i> , ALTNC3 <i>maslob</i> , 4 <i>məslob</i>
88	'fruit'	*ian	ALTNC2, 3 <i>iyán</i> , 4 <i>ían</i>
197	'girl'	(ma-)*huna	ALTS2, 4 <i>mahona</i>
133	'hair'	*sapuk	AGTUM3, 4 <i>sapok</i>
16	'hair'	*pulug	ART <i>pológ</i>
187	'hard (thing)'	*kətug	AGTAU <i>kətóg</i> , ALTNC2 <i>məʔtúg</i> , 3 <i>məʔtog</i> , 4 <i>məʔtug</i>
64	'hear'	*sanig	AGTSC1 <i>sanigən</i> , 2 <i>sasanigən</i> , 3 <i>magsánig</i>
89	'hear'	*tibəŋ	ALTNC2 <i>inétibəŋ</i> , 3 <i>minétebáŋ</i> , 4 <i>itíbəŋ</i>
44	'hear'	*tima[n, ŋ]	AGTCC3 <i>maɣtimaŋ</i> , 4 <i>maɣtiman</i> , 6, NC1, 3 <i>matiman</i> , 2 <i>na-timán</i> , EC1 <i>matimaŋ</i> , 2, 3 <i>natiman</i> , SC4 <i>mateman</i>
39	'heavy'	*dəgi	AGTNC1, 2, 3, 4, CC3, 4, 6, EC3, SC1 <i>mədaggi</i> , EC1 <i>ma-dəgge</i> , 2 <i>mədagge</i> , SC2, 4 <i>madəggi</i> , 3 <i>medəggi</i> , Au <i>dəgé</i>
183	'heavy'	*dətun	AGTSI <i>mədəton</i> , ART <i>medattun</i> , <i>medadtun</i>
90	'hit, strike'	*pu[ʔk]na	ALTNC3 <i>minápuʔna</i> , 4 <i>pinuʔnah</i>
199	'hot'	*pənaŋ	ALTS2, 3, 4 <i>mopnaŋ</i>
134	'hunt'	*ikag	AGTUM3, 4 <i>maɣʔikag</i>
45	'hunt'	*lagum	AGTNC1, 2, 3, CC6 <i>maɣlagum</i> , EC2 <i>maɣagum</i> , 3 <i>lagum</i>

9	'hunt'	*purab	AGTSC1, 2, 3, 4 <i>mamuhab</i> , ART <i>mamurab</i> 'hunt with bow and arrow'
160	'jaw'	*səlaŋ	AGTAU <i>səlaŋ</i> , ART <i>salaŋ</i> , AltN4 <i>səlaŋ</i> , ALTS3, 4 <i>sollaŋ</i> , AGTUM3, 4, 5 <i>siləŋ</i>
6	'kind'	*Rəbi	ART <i>meʔarbi</i>
35	'know'	*ənul	ALTN3 <i>annúlən</i> , 4 <i>ənnúlən</i> , ALTS2 <i>onólon</i> , 3, 4 <i>onnólan</i>
25	'know'	*abuyan	ALTS3 <i>abuyanan</i> , 4 <i>oʔʔabuyanan</i> , AGTUM <i>peabuyenan</i>
135	'ladle'	*lukuy	AGTUM3, 4, 5 <i>lukoy</i>
207	'ladle'	*tug	AGTSI <i>tog</i>
36	'lazy'	*b[ia]kət	ALTN3, 4 <i>mabíʔət</i> , ALTS3 <i>bikot</i>
26	'leaf'	*agid	ALTS2, 3, 4 <i>ágid</i> , AGTUM3, 4, 5 <i>agid</i>
154	'leaf'	*hayin	SIN1 <i>hayin</i>
91	'lie down'	*ədsəŋ	ALTN3, 4 <i>umədsəŋ</i>
74	'lime'	*ŋusu	ART <i>ŋusú</i>
92	'locust'	*pəsal	ALTN3, 4 <i>pəssal</i>
114	'loincloth'	*g[ia]nat	ALTS2, 3 <i>gínat</i> , 4 <i>gínat</i>
93	'long'	*lə[ʔk]aw	ALTN3 <i>malaʔʔaw</i> , 4 <i>məlaʔʔaw</i>
136	'long (time)'	*luy	AGTUM3, 4 <i>naloy</i>
115	'long (time)'	*təwali	ALTS2 <i>motwali</i> , <i>motweli</i> , 3 <i>natweli</i> , 4 <i>motwali</i>
198	'love'	*bud[ia]	ALTN3, 4 <i>budin</i> , ALTS2 <i>obbudin</i> , 3 <i>mabudi</i> , 4 <i>bumbudi</i>
75	'man, male'	*gilaŋ(-an)	ART <i>gilaŋán</i>
27	'man, male'	*patud	ALTS2, 4 <i>patúd</i> , AGTUM <i>patud</i>
179	'monkey'	*burug	AGTNC1, 3, EC2 <i>burog</i> , CC3 <i>buróg</i> , 4, 6, EC1, 3, SC1, 2, 3, 4, SI <i>buhog</i> , NC2 <i>buhóg</i> , AU <i>buhóg</i> , ART <i>buróg</i>
76	'mosquito'	*buŋur	ART <i>buŋúr</i>
150	'mosquito'	*kubuŋ	AGTCS3 <i>koboŋ</i> (See footnote 33)
46	'mountain'	*amugud	AGTNC1, 2, 3, 4, CC5, EC2, 3, SC4 <i>amugud</i>
204	'mud'	*ludəg	AGTCC6, 4, EC3 <i>lodəg</i> , SC2 <i>aludəg</i> , 3 <i>lódđəg</i>
206	'mud'	*lukit	AGTNC1, 3 <i>loket</i> , 2 <i>maloket</i>
191	'near'	*lutit	ALTN2, 3 <i>lutít</i> , 4 <i>məlútít</i> , ALTS2, 4 <i>lítit</i> , S3 <i>lutit</i> , AGTUM3, 4, 5 <i>lutit</i>

176	‘near’	*b[ia]kən	AGTNC1 <i>bikan</i> , 2 <i>bikan</i> , NC3, CC1, SC1 <i>abikan</i> , CC2, 3 <i>a-bikan</i> , 4 <i>abikan</i> , 5 <i>ababikan</i> , 6 EC2, 3 <i>mabikan</i> , 1 <i>mabitən</i> , SC2 <i>mabikan</i> , SC3, 4 <i>mabikən</i> , ART <i>mebbián</i> , ALTN <i>bi?ən</i> , 4 <i>bí?ən</i>
210	‘night’	*baŋwət	ART <i>bíjuət</i>
137	‘no, not’	*eyen	AGTUM3, 4, 5 <i>eyen</i>
47	‘old (obj.)’	*ligid	AGTNC1, 3, CC6, EC2, 3, SC1, 3, 4 <i>alegid</i> , CC4, NC2 <i>legid</i>
77	‘old (man)’	*dupu	ART <i>dupú</i>
195	‘old (woman)’	*gupad	ALTS2, 3, 4 <i>gupad</i>
78	‘one’	*sipan	ART <i>sípan</i>
116	‘other (diff.)’	*kalad	ALTS2, 3, 4 <i>kalád</i>
11	‘penis’	*g[ia]ləŋ	AGTSI <i>giləŋ</i> , Au <i>giláŋ</i> , Art <i>giləŋ</i>
94	‘penis’	*gəyət	ALTN4 <i>gəyət</i>
186	‘person’ ⁴⁶	*uRdin	AGTNC1, CC6, EC1, 2, SI <i>ogdin</i> , ALTN3, 4 <i>uldin</i>
6	‘pity’	*Rəbi	AGTAU <i>kagbi</i> , ART <i>pagarbián</i> , ALTN3 <i>?albi</i> , 4 <i>ma?albih</i> , ALTS2, 3, 4 <i>mokkalbi</i> , AGTUM3, 4, 5 <i>kalbi</i>
138	‘pound’	*buntul	AGTUM3, 4, 5 <i>magbuntul</i>
216	‘pregnant’	*bəsu	AGTUM3, 4, 5 <i>mabsu</i>
37	‘pregnant’	*tuyud	ALTN3 <i>matóyod</i> , 4 <i>mətúyud</i> , ALTS3 <i>mottuyud</i>
117	‘put, place’	*bənu	ALTS2, 3, 4 <i>ibno</i>
95	‘put, place’	*dətun	ALTN3 <i>idton</i> , 4 <i>idtun</i>
118	‘rain’	*dəsu	ALTS2 <i>dumudsu</i> , 3, 4 <i>dumsu</i>
173	‘rain’	*g[ia]mis	AGTCN <i>gemes</i>
79	‘rain’	*punəd	ART <i>púnəd</i>
139	‘rain’	*tapuk	AGTUM3, 4 <i>tapúk</i> , 5 <i>tapuk</i>
208	‘rat’	*bukət	AGTSI <i>bukət</i> , Au <i>bukət</i> ‘mouse’
2	‘rat’	*kuyəŋ	AGTNC1, NC3 <i>kuyəŋ</i> , NC4, CC3 <i>kíyəŋ</i> , SC3, 4 <i>kuyəŋ</i> , Au <i>kuyáŋ</i> , ALTN2, 4 <i>uyəŋ</i> , 3 <i>uyəŋ</i> , AGTUM5 <i>kuyóŋ</i>
65	‘rattan’	*karat	AGTSC1 <i>kəhat</i> , 2 <i>kahat</i>
1	‘rattan’	*lati	AGTNC1, 3, 4, CC4, 6, EC2, 3, SC1 <i>lati</i> , NC2 <i>latí</i> , CC3 <i>látí?</i> , EC1 <i>late</i> , Art <i>latí</i> , ALTN3 <i>látí</i> , 4 <i>latíh</i> , AltS2 <i>latti?</i> , 3 <i>látí</i> , 4 <i>lati</i> , AGTUM3, 4, 5 <i>lati</i>

⁴⁶ Only used of non-Negritos.

164	‘red’	*dadag	AGTCC1 <i>dahag</i> , 2 <i>daha:g</i> , CC6, EC2, 3 <i>madideg</i> , SC2, 4 <i>madideg</i> , AU <i>medidéꞑ</i> , ALTS3 <i>maderag</i> , AGTUM3, 4, 5 <i>maderag</i>
96	‘red’	*silit	ALTN2 <i>məslít</i> , 3 <i>masilit</i> , 4 <i>maslit</i>
170	‘river’	*laʔu	ALTS4 <i>loʔo</i> , SIN2 <i>lao</i>
147	‘river’	*urat	AGTUM3, 4, 5 <i>órat</i>
188	‘river’	*wagət	ART <i>wagət</i> , ALTN2, 4 <i>wagət</i> , 3 <i>wagət</i> , ALTS2, 3 <i>wagot</i> , 4 <i>wagút</i>
52	‘run’	*buyut	AGTNC1, 3, CC4 <i>bumuyot</i> , NC2 <i>bumúyot</i> , CC6, EC3 <i>bu-moyot</i> , 2 <i>magbuyot</i>
140	‘run’	*g[ia]kan	AGTUM3, 4 <i>gikan</i>
167	‘run’	*ginan	AGTSI <i>ginan</i> , Au <i>ginán</i> , ALTN4 <i>məngínan</i> , 2 <i>ginán</i>
80	‘run’	*gurugud	ART <i>maggurugúd</i>
66	‘run’	*gutuk	AGTSC1 <i>maggutok</i> , 2, 3, 4 <i>gumutok</i>
31	‘run’	*kaldit	ALTS2, 3, 4 <i>kumaldit</i> , CN <i>kaldit</i>
67	‘salt’	*b[ia]gəl	AGTSC1 <i>bigəl</i> , 2 <i>bigəl</i>
141	‘sand’	*laŋg[ia]s	AGTUM3, 4 <i>laŋgis</i> , 5 <i>laŋges</i>
81	‘say, tell’	*bud	ART <i>ibud</i>
178	‘say, tell’	*paʔita	AGTNC1, CC5, NC3, EC3 <i>ipeta</i> , CC4, 6, EC2, SC2, 3, 4 <i>ipeta</i> , NC2 <i>ipéta</i>
158	‘see’	*ələw	AYT5 <i>maələwan</i> , 6 <i>iliwán</i>
28	‘see’	*lawi[g]	ALTS2 <i>panláwin</i> , 3 <i>lawin</i> , 4 <i>lawín</i> , AGTUM3, 4 <i>pelawigin</i> , <i>pagelawegín</i>
97	‘seek’	*alyuk	ALTN3 <i>alúʔ</i> , 4 <i>məǵáliuʔ</i>
181	‘short (obj.)’	*pirit	AGTSC1 <i>apehit</i> , SI <i>apehet</i> , AU <i>apéhít</i> , ART <i>apírit</i>
56	‘shoulder’	*dapi	AGTNC1 <i>dapi</i> , EC3 <i>dapi</i>
151	‘shoulder’	*mugmug(-an)	AGTCN <i>mugmugen</i>
30	‘shoulder’	*subuŋ(-an)	ALTS2 <i>sóboŋan</i> , 3, 4 <i>sóbuŋan</i>
30	‘shoulder’	*sugbuŋ	AGTCS3 <i>sogbón</i> , 4 <i>sógboŋ</i> (See footnote 17)
162	‘sit’	*iknud	AGTNC1, EC2 <i>magetnod</i> , NC2 <i>magéknod</i> , <i>meknod</i> , 3 <i>met-nod</i> , CC6 <i>umetnod</i> , EC1 <i>məgiknod</i> , 3 <i>magitnod</i> , SC1 <i>ma-gitnud</i> , 2, 3 <i>magetnod</i> , 4 <i>megetnod</i> , SI <i>eknud</i> , Au <i>iknód</i> , ALTN2 <i>umítnud</i> , 3, 4 <i>umitnud</i>
119	‘sit’	*laŋad	ALT2, 3, 4 <i>lumaŋád</i>
142	‘sit’	*lipa	AGTUM3, 4, 5 <i>lumipa</i>

155	‘sit’	*səna	SIN1, 2 <i>mamasna</i>
60	‘sit’	*tugkuk	AGTCC2 <i>magtogkok</i> , 3, 4, 5 <i>magtogkok</i>
171	‘skinny’	*rasa	AGTNC1 <i>marasa</i> , 2, SC3 <i>mahása</i> , NC3 <i>marasa</i> , CC4 <i>mahasa</i> , 6, EC2, 3, SC1 <i>mahasa</i> , EC1 <i>məhasa</i> , SC4 <i>mahasa</i> , SI <i>məhasa</i>
205	‘sky’	*lakup	NC1, 2 <i>lakop</i> , 4, EC2 <i>lakóp</i>
82	‘sleep’	*idəm	ART <i>médəm</i>
152	‘sleep’	*lubat	AGTCN <i>lubet</i>
143	‘sleep’	*pida	AGTUM3, 4, 5 <i>pede</i>
38	‘sleep’	*puləd	ALTN3, 4 <i>mapóləd</i> , ALTS2, 3, 4 <i>mapulád</i>
200	‘small (obj.)’	*bəlik	AGTNC1, 3 <i>ballek</i> , <i>ballík</i> , CC3 <i>balit</i> , 4, SC4 <i>ballik</i> , CC6, EC2, 3, SC1 <i>ballik</i> , EC1, SI <i>balek</i> , SC3 <i>ballík</i>
7	‘snake’	*babak	ALTS3, 4 <i>bebek</i> , AGTUM3, 4, 5 <i>bebek</i> , SIN1 <i>babák</i>
215	‘spouse’	*bab[ia]	AGTUM3, 4, 5 <i>bebi</i>
98	‘stand’	*payuŋ	ALTN2, 4 <i>pumáyoy</i> , 3 <i>pumayuy</i>
120	‘stand’	*piad	ALTS2 <i>pumiyad</i> , 3 <i>pumiyéd</i> , 4 <i>pumiád</i>
144	‘stand’	*[uə]di	AGTUM3, 4 <i>umuddi</i> , 5 <i>umuddí</i>
201	‘star’	*pu[st]ian	AGTNC1, 3, 4, CC6, EC1, 2, 3, SC2, 3, 4 <i>pusiyan</i> , CC4 <i>pi-siyən</i>
156	‘stone’	*igaŋ	SIN1 <i>ígaŋ</i> , 2 <i>igáy</i>
21	‘summit’	*kurut	AGTNC1, 2, 3, CC3, 4 <i>kurot</i> , NC4 <i>kurót</i> , CC5 <i>kurut</i> , 6, EC2, 3, SC1, 2, 3, 4 <i>kuhot</i>
19	‘summit’	*ta[ly]tay	AGTAU <i>taytáy</i> , ALTS2, 3, 4 <i>taltay</i>
48	‘sun’	*pamalak	AGTNC1, 2, 3, 4, CC3, 4, EC2, 3 <i>pamalak</i> , SC2, 3, 4 <i>pa-malak</i>
145	‘sweat’	*ald[ia]t	AGTUM5 <i>aldet</i>
145	‘sweat’	*aldut	AGTUM3, 4 <i>aldut</i>
58	‘sweat’	*asub	AGTSI <i>asob</i> , AU <i>asób</i>
192	‘sweat’	*lanis	ALTN2 <i>məlánis</i> , 3, 4 <i>malánis</i>
202	‘tail’	*bunid	AGTNC1, 3, CC4, 6, EC1, 2, 3, SC2 <i>buned</i> , NC2 <i>bunéd</i>
121	‘tail’	*lambuŋ	ALTS2, 3 <i>lambuŋ</i>
49	‘termite’	*sarik	AGTNC1, 3 <i>sarek</i> , NC2 <i>sarék</i> , CC6, EC2, 3, SC2, 3, 4 <i>sa-hek</i> , 1 <i>səhek</i>
40	‘thick’	*bagəl	AGTNC1, 3, CC3, 4, EC2, 3, SC1 <i>mabigəl</i> , NC2 <i>mabégo?</i> , EC1, SC3, 4 <i>mabigél</i> , 2 <i>mabigal</i> , AU <i>bagól</i>

61	‘thirst’	*g[ia]mtaŋ	AGTCC1 <i>gimtaŋ</i> , 2 <i>gimtán</i>
8	‘thirst’	*pələk	AGTEC1 <i>maplək</i> , AGTAU <i>éplək</i> , ART <i>meʔipla</i>
122	‘three’	*saŋaɣ	AGTS4 <i>saŋaɣ</i>
54	‘throw’	*b[ia]sag	AGTCC6, EC2 <i>ibisag</i> , EC1 <i>bisag</i> , EC3 <i>bisagaŋ</i> , SC3, 4 <i>bisa-gaŋ</i>
161	‘throw’	*but	ALTN3 <i>ibut</i> , AltS2 <i>ibut</i>
50	‘throw’	*tugbak	AGTNC2 <i>tóbbak</i> , 3, EC2 <i>itobbak</i> , CC4 <i>maɣtobbak</i> , SC2 <i>i-togbak</i> (note also CC3 <i>itabak</i>)
161	‘throw away’	*but	AGTAU <i>ibút</i> , ART <i>ibut</i> , ALTN2 <i>ibút</i> , 2, 3 <i>ibut</i> , ALTS2, 3, 4 <i>ibut</i> , AGTUM3, 4 <i>bútin</i> , 5 <i>but</i> , <i>bobut</i>
50	‘throw away’	*tugbak	AGTNC2, 3, CC4, EC2 <i>itobbak</i> , 3 <i>itogbak</i> (note also: ATT <i>itabba?</i> , CC3 <i>itabak</i>)
123	‘tree’	*lab[ia]t	ALTS2, 3 <i>labét</i>
124	‘truth’	*kuduR	ALTS2, 3, 4 <i>akudul</i> (note also ART <i>kurúg</i>)
83	‘two’	*təlip	ART <i>tallip</i>
165	‘under’	*salad	ALTN4 <i>disálad</i> , ALTS4 <i>disalád</i> , AGTUM5 <i>disalad</i>
62	‘urine’	*sitəb	AGTCC1, 3, 5 <i>sitab</i> , 2, <i>sitab</i>
125	‘vagina’	(i-)*plaŋ	ALTS2, 4 <i>iplaŋ</i>
146	‘vagina’	*kin(-aŋ)	AGTUM3, 4, 5 <i>kinan</i>
211	‘vagina’	*sabit	ART <i>sabít</i>
4	‘vein’	*litid	AGTAU <i>lítid</i> , ALTN3, 4 <i>lítid</i> , AGTUM 5 <i>letid</i>
99	‘wait’	*tanud	ALTN3, 4 <i>məntanúd</i>
63	‘walk’	*sugut	AGTCC1 <i>maɣtugut</i> , 2 <i>magtugut</i> , 3 <i>maɣsugut</i>
13	‘wall’	*gəsəd	AGTSI <i>gəttəd</i> (note also ART <i>gisád</i>)
29	‘wall’	*sagbuŋ	ALTS2, S4 <i>sagboŋ</i> , AGTUM3, 4, 5 <i>sagboŋ</i>
170	‘water’	*laʔu	SIN1 <i>laʔu</i> , 2 <i>lao</i>
147	‘water’	*urat	AGTUM3, 4, 5 <i>órat</i>
188	‘water’	*wagət	ART <i>wagət</i> , ALTN2, 4 <i>wagət</i> , 3 <i>wagət</i> , ALTS2, 3 <i>wagot</i> , 4 <i>wagút</i>
33	‘waterfall’	*gərəɣ	AGTUM5 <i>goroy</i> , SIN2 <i>garáy</i>
55	‘waterfall’	*sənad	AGTEC2, SC2, 3, 4 <i>sannad</i> , EC3, SC1 <i>sənnad</i> , SI <i>sənad</i>
196	‘waterfall’	*tabi	ALTS2, 3 <i>tábi</i> , 4 <i>tabi</i> , AGTUM3, 4 <i>tabi</i>
148	‘white’	*lapsay	AGTUM3, 4, 5 <i>malapsay</i>

203	‘white’	*pun[st]it	AGTNC2, 3, CC6 <i>ponset</i> , EC2 <i>maponset</i> , SC3, 4 <i>maponset</i> (note also AGTEC1, SC2 <i>maponsak</i> , 1 <i>maponak</i>)
126	‘widow(er)’	(na-)*dit	ALTS2, 4 <i>nádit</i> , 3 <i>nadit</i>
127	‘wind’	*kabu(-an)	ALTS2 <i>kabuán</i> , 3 <i>kabwen</i> , 4 <i>kabúan</i>
157	‘wind’	*rugus	SIN1 <i>rugús</i> , 2 <i>irugús</i>
53	‘wing’	*kəpig	AGTNC3, 4, EC2 <i>kəppeg</i> , EC1 <i>kəpeg</i> , 3 <i>kəppeg</i> , SC2, 3, 4 <i>kəpeg</i>
163	‘wing’	*əlad	AGTNC2 <i>allad</i> , CC4, 6, SC1 <i>əllad</i> , ALTS2 <i>ullad</i> , 3, 4 <i>ollad</i> , AGTUM1, 3 <i>ilad</i>
123	‘wood’	*lab[ia]t	ALTS2, 3 <i>labét</i>
197	‘woman’	(ma-)*huna	AGTUM3, 4 <i>mahona</i> , 5 <i>mahoná</i>

Appendix C: Index of Reconstructions

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⁴⁷ See footnote 33.

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*[l]usip	‘fingernail’	11	*putput	‘feather’	132
(ma-)*lutəp	‘afternoon’	68	*rasa	‘skinny’	171
*lutit	‘mud’	191	*rugus	‘wind’	157
*luy	‘long (time)’	136	*Rəbi	‘kind, pity’	6
*mud[ia]t	‘face’	182	*sabit	‘vagina’	211
*mugmug(-an)	‘shoulder’	151	*sagbuŋ	‘wall’	29

*sagnit	‘bone’	70	*tanud	‘wait’	99
*salad	‘deep, under’	165	*tapək	‘earth, soil’	190
*sanig	‘hear’	64	*tapuk	‘rain’	139
*saṅay	‘three’	122	*tapuR	‘bury, inter’	5
*sapuk	‘hair’	133	*təkak	‘bitter’	41
*sarik	‘termite’	49	*təlip	‘two’	83
*sarun	‘dry in sun’	43	*təmuk	‘burn’	84
*səlaŋ	‘chin, jaw’	160	*təwali	‘long (time)’	115
*səlub	‘fragrant’	22	*tibəŋ	‘hear’	89
*səna	‘sit’	155	*tiduk	‘burn’	103
*sənad	‘waterfall’	55	*tim	‘drink’	72
*səpaŋ	‘back’	168	*tima[n, ŋ]	‘hear’	44
*siak	‘cry’	189	*timuy	‘buttocks’	106
*sibaŋ	‘dry in sun’	214	*tug	‘ladle’	207
*silit	‘red’	96	*tugbak	‘throw, throw away’	50
(pa-)*siŋil	‘cheek, face’	169	*tugkuk	‘sit’	60
*sipaŋ	‘one’	78	*tuyud	‘pregnant’	37
*sitəb	‘urine’	62	*ubun	‘child’	153
*subuŋ(-an)	‘shoulder’	30	*[uə]di	‘stand’	144
*sugbuŋ	‘shoulder’	30 ⁴⁸	*uduŋ(-an)	‘carabao’	108
*sugut	‘walk’	63	*ulaŋ	‘call’	129
*sula	‘buttocks’	23	*urat	‘river, water’	147
*tabi	‘waterfall’	196	*uRdin	‘person, non-Neg.’	186
*ta[ly]tay	‘summit’	19	*uswa	‘blow (v.)’	102
*tanaw	‘deep’	110	*wagət	‘river, water’	188

⁴⁸ See footnote 17.

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