

The Early Switch Hypothesis: Linguistic Evidence for Contact between Negritos and Austronesians

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Distribution of Negritos in the Philippines

The Philippine population consists of two generally quite distinct racial types. There are the so-called Malay peoples, numbering over 50 million, and then there are the Negritos, probably totaling fewer than 15,000, and speaking perhaps more than twenty-five distinct languages, about one-quarter of the total number of Philippine languages. The former are often referred to in the literature as "lowlanders" to distinguish them from the Negritos, who are typically hunter-gatherers who live in foothill or mountain areas. In this paper neither "Malay" nor "lowlanders" will be used to refer to non-Negritos. The first term implies that they came from or are somehow descended from Malays, which we know to be patently false. The second term implies that there are no mountain dwelling non-Negritos, which is also false. They will be referred to simply as non-Negritos.

Negritos are found in a number of areas in Southeast Asia. In the Philippines they are broadly distributed from the far north of Luzon, through the Bisayas in the Central Philippines, Palawan in the west, and in several areas of Mindanao in the south (Fig. 1).

Various hypotheses have appeared in the literature about the provenance of Philippine Negritos. Solheim (1981: 25) considers them to be the descendants of a late Pleistocene population scattered across the Philippines. Bellwood (1985: 74, 113) likewise considers them to be the descendants of the earliest population in the Philippines, with differences in the various populations being the result of micro-evolutionary development within the Philippines. Omoto (1987), on the basis of genetic studies, tends to favor a hypothesis that "there were two separate migrations in the formation of aboriginal hunter-gatherer groups of the Philippines; one probably migrated from Sundaland via Palawan Island to the western part of the Philippines, and the other probably along the southern coast of Sundaland eastward, or elsewhere from Wallacea northward to Mindanao... In this hypothesis the western group represented by the Aeta and the eastern group represented by the Mamanwa are of separate origins." He further suggests (Omoto, 1987) that the Aeta and Mamanwa groups have been separated for twenty to thirty thousand years.

It is generally believed however that the non-Negrito ("Mongoloid") peoples are relatively recent newcomers to the islands, being descendants of the

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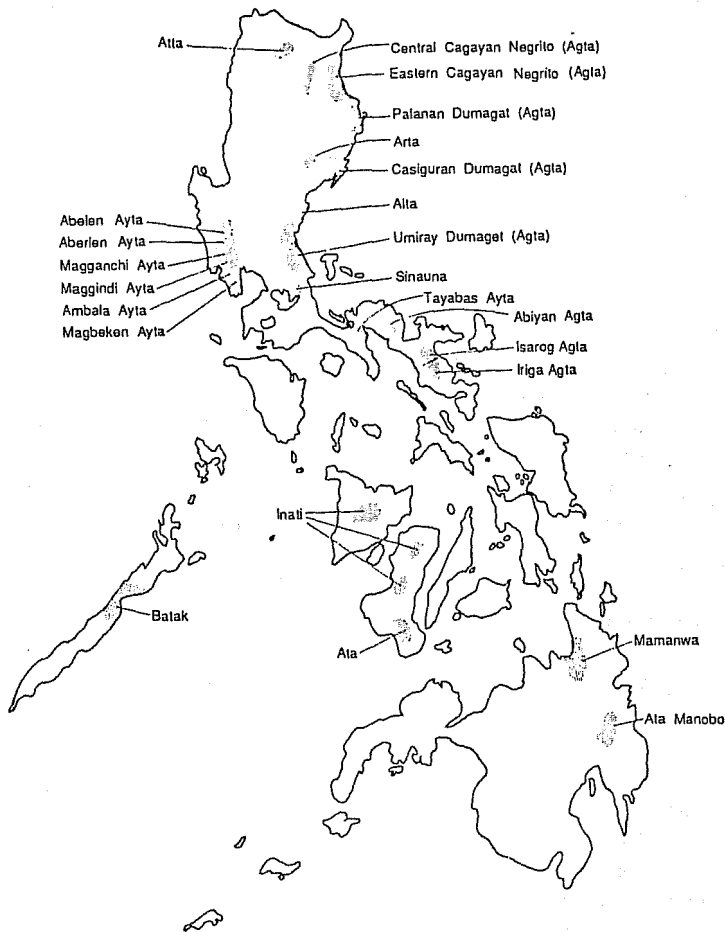


Figure 1. Negrito Languages of the Philippines.

movement of Austronesian speaking people into the area, probably less than 6,000 years ago.

Views of the Linguistic Relationships of Philippine Negrito Languages

In the early part of this century it was thought that the languages that Negritos spoke were of a different type from those spoken by other Filipinos. It very soon became obvious though that they were not, that Negritos spoke Austronesian languages, similar in type to the languages of the non-Negritos. Indeed it was thought that the languages that Negritos spoke were almost identical to the languages of their closest non-Negrito neighbors (Worcester, 1906: 861).

As we shall see, this is true in a few cases, but far from true in others.

Names for Negrito groups

Various names are commonly applied by outsiders to Negrito groups. For example, in Northern Luzon the terms Pugot, Baluga, Dumagat, and Aeta or Ita, are indiscriminately given to Negrito groups regardless of their language. There are also a large number of terms which are used by non-Negritos which have only local usage and apply only to the Negrito group(s) who live in close geographical proximity to themselves.

The terms which are of most interest however are those that reflect Proto-Philippine *qaRtaq *Negrito* (Blust, 1972; Reid, n.d.). These terms include **Agta, Atta, Arta, Alta** and **Ayta**, the variant medial consonant depending on the reflex of the proto-phoneme *R in those languages. These names are of interest because it is by these names that the majority of Negrito groups refer to themselves and furthermore it is the specific reflex of *R in each of these languages which provides an important clue to the genetic subgrouping relationship that each language has to other languages of the Philippines.

Language Switch Hypotheses

We have no way of telling at this point in history what the languages of the Negritos were like prior to the arrival of Austronesian speakers, and the adoption by the Negritos of Austronesian languages. But, assuming that at least some of today's Negritos are descendants of early *Homo sapiens* who have been wandering Philippine forests for at least 20,000 years, we can be pretty certain that each geographically distinct group must have had its own language, and that because of the extremely long time period, the languages must have been very different one from the other. The situation must have been somewhat like what we find today in New Guinea, where literally hundreds of very diverse languages are spoken by relatively small populations.

It is not surprising then that no-one has been able to uncover any common set of vocabulary in the Negrito languages which might reveal something of their linguistic situation before the arrival of Austronesians. They probably had very little commonly shared vocabulary, and even if a body of exclusively-shared vocabulary were discovered in some of the Negrito languages, it would be difficult to prove that these terms were not simply Austronesian words that had been lost in the non-Negrito languages.

There is also no way that we will ever be able to date the time when Negritos first learned Austronesian languages. The fact that they all speak Austronesian languages tells us nothing about when or why they came to give up their original languages. However there are a number of possible hypotheses as to when the switch could have taken place relative to other events in the language family, although they do not explain what the reasons were for the switch. I will discuss possible reasons later on.

The hypotheses that I propose below are not mutually exclusive. I do not want to imply that the loss of the original Negrito languages occurred at only

one point in the history of their contact with the in-migrating Austronesians. The opposite must have been true. Ecosystems differed throughout the archipelago, and there may have been less motivation for some of the Negrito groups than for others to give up their languages. But the obvious fact that they all did demands an attempt at explanation.

The Relatively-Recent Hypothesis

It is conceivable, though highly unlikely, that the linguistic switch could have taken place entirely since the Spanish arrived in the Philippines in the sixteenth century. It is conceivable because, given the right conditions a society can lose all memory of its original language within the space of a few generations. It is highly unlikely though because most of the linguistic facts do not support such a hypothesis.

If this is what had happened, since differentiation could only have proceeded for a very short time, we would expect to find Negrito groups speaking very close dialects of the languages which replaced their own. In fact there are a few Negrito groups that could fall into this category. Katabagan, for example, is said to be a totally assimilated Negrito group who speak Tagalog. What they spoke prior to their assimilation is anyone's guess. It is probable though that they spoke an Austronesian language similar to Tayabas Ayta just to the north of them. Similarly, Atta, a Negrito language spoken in several municipalities in northern Cagayan Province, shares 91% of its basic vocabulary with its closest neighbor, Ibanag, and the languages are said to be mutually intelligible (Thomas Headland, personal communication, Claudia Whittle and Ruth Lusted, personal communication).

Aeta, spoken in the Zambales mountains, was until recently (Busenitz, 1973) considered to be mutually intelligible with Sambal. However, further language survey (Wimbish, 1986) suggests that there are six different Negrito languages known as Ayta spoken in this area.

But given the same facts it is possible that the groups just mentioned could have learned their first Austronesian language thousands of years ago, and by maintaining continual intimate contact with their neighbors, shared in all the subsequent changes in the dominant community.

Such a situation could be described by the hypothesis of the following section.

The Relatively-Remote-with-Continual-Contact Hypothesis

This hypothesis appears attractive when one looks at the large number of Spanish loans in Atta. Certainly the Negritos did not have the kind of contact with Spanish which would have brought about borrowing on this scale. The Ibanags did have, and consequently had a massive influx of Spanish terms into their language. These have since been borrowed into Atta from Ibanag, because of their continuing intimate contact with that language.

The Relatively-Remote-with-Cyclic-Contact-with-the-Same-Language Hypothesis

A third possibility is that a group of Negritos could have learned their first Austronesian language at a remote period, subsequently withdrawn from their neighbors, resulting in normal language split, and then at a later date re-established intimate contact with them, resulting in extensive borrowing from them, or even replacement of their Austronesian language. Linguistically, it would be difficult to distinguish between this situation and that described above, where contact had not been broken for an extended period. It is probable however that some of the Negrito languages of the east coast of Northern Luzon fit this scenario.

There are a considerable number of Negrito bands scattered down the east coast of Northern Luzon, some of which appear to be quite closely related to one another, others of which are considerably different. The most closely related set of languages are the Southeastern Cagayan Negritos, the Palanan Dumagat and the Casiguran Dumagat groups, which share from about 70% of basic vocabulary in the case of Southeastern Cagayan Negrito and Casiguran Dumagat to 87% in the case of Palanan Dumagat and Casiguran Dumagat (Headland, 1975, based on the 372 wordlist of Reid, 1971).

Each of these languages has a *g* reflex of **R*, a feature which they share with the Northern Cordilleran languages such as Ibanag, Itawis and Yogad which are spoken in the Cagayan Valley which lies to the west of the Sierra Madre range. Casiguran Dumagat is the best described of these languages, and has a number of features which make it look very conservative. It has been grouped as a Northern Cordilleran language (Tharp, 1974: 101), primarily on the basis of its *g* reflex of **R*. Yet it does not share in a considerable number of other phonological innovations which characterize other members of that group, such as **e* to *a*, gemination of a single root medial consonant following **e*, various sound changes that either changed **s* to *t*, or **t* to *s*, and so on. McFarland's (1980: 66) subgrouping agrees with Tharp's in placing the Dumagat languages in a group coordinate with other languages of northern Cordilleran.

There are also two non-Negrito languages spoken in the same area on the eastern coast of northern Luzon, Kasiguranin and Paranan. Relatively little data is available from either of these languages. For Kasiguranin, there is a short wordlist published in Vanoverbergh (1937). The pronouns, case markers and verb affixation of this language are almost identical to Tagalog. Lexically, however Kasiguranin is very similar to its neighboring Negrito dialects, sharing for example, 77% of its basic vocabulary with Casiguran Dumagat versus only 52% with Tagalog (Headland, 1975). Although McFarland (1980) groups it with the Negrito languages it seems to be the language of a Tagalog group that moved into the Casiguran Valley and was influenced by the Negritos in the area, a view first proposed by Vanoverbergh who commented, "Here, however, instead of losing the language they [the Negritos] had borrowed from

their conquerors, they partly imposed it on their masters and brought into being a Casiguran dialect [Kasiguranin]..." (Vanoverbergh, 1937: 11).

Paranan, on the other hand, although showing considerable influence from Tagalog with 45% shared vocabulary (Headland, 1975), clearly retains case markers and pronouns which are very conservative. Specifically, it appears to be the only language in Luzon that still retains a **di** locative common noun marker (Finkbeiner, 1983: 6), e.g. **di bilay to the house, di Manila to Manila**, and so on. Although **di** occurs in many languages with various other case-making functions, it is as a locative common noun marker that it is reconstructible for Proto-Philippines. This is the function it has in Bilaan in the very south of the Philippines, and although it has been replaced in most other Philippine languages by some other locative markers, it is retained in languages throughout the Philippines as the initial formative of locative demonstratives (in these examples, as elsewhere in this paper, **q** represents glottal stop [?]); e.g.,

Ilokano: **ditoy here, dita there (proximal)**

Tagalog: **dine here, diyan there (proximal)**

Tiruray: **dini here, diyaqan, diyoq, diyoqo there.**

Although speakers of Paranan are now restricted to the geographical area around the town of Palanan, there is clear evidence that a wide area of northeastern Luzon was once occupied by people speaking a language that also had a **di** locative common noun marker. Nearly all of the old place names in this area have an initial **di** formant. Interestingly, these place names are mostly found within the present ranges of the Negrito groups being discussed in this section.

That the eastern coast of Luzon has been occupied by non-Negritos for thousands of years is supported by archaeological evidence (Peterson, 1974). Excavation at Dimolit, a site in the Palanan Bay area uncovered the post holes of house structures which are without doubt remains of an Austronesian settlement in the area, with pottery, and grain reaping knives. The area was probably occupied between 2500–1500 B.C. The present day Parananans are perhaps the last linguistic survivals of that settlement.

Casiguran Dumagat, Palanan Dumagat, and Southeastern Cagayan Negrito all share a considerable number of lexical and grammatical features with Paranan. A full and careful analysis of these features has still to be made, but preliminary investigation seems to indicate that these four languages constitute a genetic subgroup either coordinate with, or included in the Northern Cordilleran branch of Philippine languages.

The facts seem to support the hypothesis of this section, that the Negrito groups learned the language of their non-Negrito neighbors in the Palanan area at a fairly remote period, certainly long enough ago for the present differentiation among the Negrito groups to have taken place, and also long enough ago for the changes to have taken place that now distinguish these languages from Paranan. These changes are of two types, those that appear to be innovations

in the Negrito languages not shared by Paranan, and those that appear to be innovations in Paranan not shared by the Negritos.

Because of the paucity of information available for Palanan Dumagat and Southeastern Cagayan Negrito, examples of these two types of changes are given here only for Casiguran Dumagat. Of the first type, Casiguran Dumagat (Headland and Headland, 1974) has changed the old **di locative common noun marker*, which is still found in Paranan, from marking only singular nouns to marking only plural nouns. (The forms *to* and *ta* are now used in Casiguran Dumagat to mark singular locative common nouns.) Casiguran Dumagat has extended the functions of *di* to include also nominative and genitive (Headlands use the terms oblique, topic and attributive).

Of the second type, Casiguran Dumagat retains unreduced form of the completed aspect of the reconstructed Proto-Philippine (PPh) verbal prefixes (see Table 1). In Proto-Philippines, verbs were marked as completed aspect, or past tense, by simply infixing *-in-* (shown in Table 1 as <*in*>) following the first consonant, *m-*, of the verbal prefixes. Paranan, and all other Northern Cordilleran languages (as well as Ilokano, and the non-Negrito Central and Southern Cordilleran languages) have subsequently reduced these forms by deleting the first two segments, thus setting up an *m-/n- non-past/past* paradigm.

The evidence then, fairly clearly points to a very early contact with Austronesian speakers in the area which was probably near the place where Austronesians first entered the Philippines (assuming that they came south from Formosa). This contact has apparently been maintained over thousands of years, in a cyclic fashion, allowing for normal language differentiation as well as continuing diffusion of features, primarily lexical items from Paranan and other linguistic groups, such as Ilokano and Tagalog, with which they have from time to time associated.

The Relatively-Remote-with-Cyclic-Contact-with-a-Different-Language Hypothesis

A much more interesting hypothesis, because it is potentially more revealing of the prehistoric situation is that a Negrito group learned its first Austronesian language at some remote date, and then lost contact with its

Table 1. The Development of Verbal Prefixes

PPh	Casiguran	Paranan
* <i>m</i> < <i>in</i> > <i>aR-</i>	minag-	nag-
* <i>m</i> < <i>in</i> > <i>aN-</i>	minang-	nang-
* <i>m</i> < <i>in</i> > <i>a-</i>	mina-	na-

neighbors, either because they themselves moved, or as appears to be more likely, their non-Negrigo neighbors were driven off by other expanding non-Negrigo populations. Subsequently the Negrigos established contact with another language group, such as the in-migrating group, being affected to a greater or lesser degree by the nature of this contact.

One would expect in a situation such as this, that some evidence would remain of the original language that had been learned. For example, the sound shifts that characterized the original Austronesian language would be found in at least the basic vocabulary of this Negrigo language, and there would be an identifiable body of vocabulary which would appear to be borrowed from the language or languages with which later contact had been maintained. One might also expect to find features of morphology and syntax which agree more closely with those of the language family with which it was first associated than with the language with which it was subsequently associated.

In the following sections I will discuss two languages, the nature of which can be explained by a hypothesis of this sort.

1. Sinauna Tagalog

Sinauna Tagalog (ST), literally, Ancient Tagalog (Santos, 1975) is spoken in and around Tanay, Rizal province in the middle of a Tagalog speaking area. A close dialect of the language is spoken around the town of Infanta, and is called Infanta Dumagat (ID). The Sinauna Tagalog identify themselves as Tagalogs. The younger people all speak Tanay Tagalog. The language of the older people is not Tagalog, although it is heavily larded with Tagalog words. However their language retains a number of features that clearly indicate that their language is genetically part of the Sambalic group (which includes the non-Negrigo languages of Botolan and Tina Sambal, as well as Kapampangan), much farther to the north, and is not most closely related to Tagalog at all.

These features include a number of basic lexical items having a *y* reflex of Proto-Philippine **R* (Table 2). This is the regular reflex in the Sambalic languages, whereas the regular Tagalog reflex is *g*.

Table 3 presents forms which illustrate the regular Sinauna reflex of PPh **e*. In Sinauna, as in the other Sambalic languages, it is *a*, whereas in Tagalog, the regular reflex is *i*.

A cursory comparison of some of the verb affixation in Sinauna, Kapampangan and Tagalog (Table 4) shows that the Sinauna forms agree more closely with Kapampangan than with Tagalog. Both Sinauna and Kapampangan use a change in vowel (*a* to *i*) to distinguish past tense from present. In addition Sinauna and Kapampangan retain *m*-initial forms for all tenses. Although this is a retention from the proto-language and of little value for proving a subgrouping relationship, it is apparent that Sinauna does not participate in the innovations that resulted in *n*-initial forms found in Tagalog. (In Table 4, CV- stands for consonant-vowel reduplication, and colon [:] represents vowel length.)

Table 2. Examples of the y Reflex of *R in Sinauna

PPh	ST	Glossary
*qikuR	qikuy	tail
*quRat	quyat	vein
*baqeRu	baqyu	new
*beRqat	baqyat	heavy
*buRew	buyaw (ID)	drive away
*hiRup	qiyup	sip
*Ruang	paywang	gap

Table 3. Examples of the a Reflex of *e in Sinauna

PPh	ST	Glossary
qenem	qaqnam	six
qetut	qaqtut	fart
qutek	qutak	brain
beRqat	baqyat	heavy
buek	buak	hair
ngipen	ngipan	tooth

Table 4. Comparison of Sinauna Verb Affixation

Tense	Sinauna	Kapampangan	Tagalog
Present	mag-	mag-	mag-
Progressive	mina:g-	ma:g-	nagCV:-
Past	mig-	mig-, meg-	nag
Future	magCV-	mag-	magCV:-

It is significant that the full, unreduced forms of the completed aspect of Proto-Philippine verbs (see Table 1) were apparently also continued into Proto-Sambalic. In some of the Sambalic languages the pattern of reduction was generally different from that in the languages in the north of Luzon, the third and fourth segments being deleted, resulting in an *-a-/-i-* non-past/past paradigm. (Botolan Sambal [Antworth, 1979], on the other hand, has reduced its perfective affixes in the same way as did Paranan, and most of the other

languages of Luzon). The *-a-/-i- non-past/past* paradigm also occurs in Mamanua, a Negrito language in northeast Mindanao, but not as far as I have been able to discover in other east coast Mindanao languages. In Maranao, only the medial *-n-* was deleted, setting up an *-a-/-ia- non-past/past* paradigm.

Sinauna, however, alone among the Sambalic languages still maintains the unreduced form in part of its verbal paradigm, as can be seen in Table 4, distinguishing it again from the other members of that family, and giving evidence that it was learned from their non-Negrito neighbors at a very early period in the development of the Sambalic language family.

If we now look at free nominative pronouns for Sinauna, Kapampangan, Botolan Sambal and Tagalog (Table 5), we will see that Sinauna shares at least one innovation with the Sambalic family that is not shared by Tagalog, that is, loss of the final *w* from the second person singular (2s) form. Similarly, Sinauna does not share in the innovation reflected in the Tagalog first person plural (1,2p) form, which changed **-tamu* to *ta:yo*.

It is of interest also to note that Sinauna maintains features that were probably present in Proto-Sambalic, but have been subsequently lost in all other Sambalic languages. Inspection of these forms shows Kapampangan prefixing its pronominal bases with *qi-*, and Botolan Sambal instead using *hi-* from **si-*. Sinauna prefixes its pronominal bases with either *siqi-* or *siq-*, apparently reflecting an earlier system in which both prefixes (*si-* and *qi-*) were attached to the pronominal bases.

An alternate hypothesis, that Kapampangan actually reflects the original form of the prefix and that *si-* was attached after the dispersal of the family, is also possible. Under this hypothesis, the evidence would suggest that Sinauna is more closely related to Botolan Sambal than to Kapampangan.

It is clear from the above evidence that Sinauna is indeed a Sambalic language. Its geographic location, in the middle of a Tagalog speaking area could be the result of either a northerly in-migration of Tagalog speakers, or a southward shift in the hunting range of the Negritos. It is probable that in this case it is the Negritos who have retained their traditional foraging areas and it

Table 5. Sambalic and Tagalog Nominative Pronouns

	Sinauna	Kapampangan	Botolan Sambal	Tagalog
1s	saku	qaku	hiko	qaku
2s	siqika	qika	hika	qikaw
1,2s	siqitadaw	qikata	hita	kata
3s	siqya	qiya	hiya	siya
1p	siqkami	qikami	hikayi	kami
2p	siqkamu	qikayu	hikawo	kayo
1,2p	siqtamu	qitamu	hitamo	ta:yo
3p	sira	qila	hila	sila

is their earlier Sambalic speaking neighbors who migrated north under the pressure of in-migrating Tagalogs from Marinduque and Mindoro in the Central Philippines.

Evidence that the Tagalogs are the late comers to this area is considerable, and is generally accepted by linguists. Zorc states "When the Tagalogs first migrated to Southern Luzon, they came in contact with various Northern Philippine languages such as Kapampangan, Sambal, and (later?) Pangasinan. Through centuries of contact, trade, and intermarriage, these languages were displaced by Tagalog or moved north" (1971: vii). There is an Ayta group living south of Sinauna, in Tayabas. I know no source of data for this language, but its name indicates that it is probably an *R to y language also. The geographical extent of this early language with which the Ayta Negritos can be associated has been suggested by Zorc (1974). He has presented a number of features in the languages of Mindoro, including *R to y, that appear to be probable shared innovations with the Sambalic group and possibly with Bashiic in the far north, indicating that at least the northern languages of Mindoro are probably more closely related genetically to these northern groups than they are to the other languages of the Central Philippines.

2. Alta

Alta is a Negrito language spoken over a fairly wide area of the Sierra Madre from eastern Nueva Ecija to the boundary of Quezon and Nueva Vizcaya Provinces north of Maria Aurora. The northern and southern dialects of Alta are quite different from one another, and are said to be not mutually intelligible. The only published material for Alta is Vanoverbergh (1937), who refers to the language as Baler Negrito. Unpublished materials include Fox (1956), Petro (1974), and Reid (1987). Alta data presented in this section are from the northern dialect area, recorded in Kadayakan, Maria Aurora (Reid, 1987), which appears to be the most conservative phonologically of the dialects.

Although the northern Alta live in the same general area (the Baler River Valley and environs) as the southern Ilongot, who speak a language of the Southern Cordilleran family, their primary contacts, especially in the Dingalan area and in Nueva Ecija are with speakers of Tagalog. Consequently, most Alta are bilingual in this language. This contact has continued for long enough that the language shows a considerable number of Tagalog borrowings. There appears to be considerable contact also between the Alta and other Negrito groups, especially those speaking dialects of the Umiray Dumagat language (see section below) who are scattered down the eastern coast of Quezon Province.

The genetic relationship of Alta, however, is probably with the Central and Southern Cordilleran languages, which include Kalinga, Bontok and Ifugao (Central Cordilleran), and Pangasinan, Inibaloi, and Ilongot (Southern Cordilleran). Alta is the only extant Negrito language to be related to this group.

Its genetic relationship is indicated by its l reflex of *R, the reflex also

Table 6. Examples of the l Reflex of *R in Alta

PPh	<i>Alta</i>	Glossary
*qaRtaq	qaf ^l ta	man
*()duR	qadul	thunder
*baqeRu	bulu	new
*bahaR	bal	loincloth
*diRus	dilus	bathe
*huRas	qulas	wash
*kaRat	qalat	bite
*niuR	niyul	coconut
*saNDiR	sanggil	lean
*taRaquinep	tale:nip	dream
*wiRi	qawilih	left hand

found in the Central and Southern Cordilleran languages (Table 6). All of these languages, including Alta, also share an innovation in the system of verbal prefixes. The reflex of the Proto-Philippine actor focus prefix *maR- in these languages should be mal-. Instead, all show a reflex of man-.

There are several very conservative features of Alta which suggest that these Negritos switched to speaking an Austronesian language at a quite remote time. These features are as follows.

Two of the lexical items cited in Table 6 have been replaced by all of the other Central and Southern Cordilleran languages. These are the words for coconut and dream. Only in Alta are these terms preserved with the l reflex of *R, the way they must have been pronounced in Proto-South-Central Cordilleran.

Alta, like other Negrito languages discussed above, also maintains unreduced forms of the completed aspect of verbal prefixes. All other Central and Southern Cordilleran languages have reduced them to n- initial forms.

The other conservative aspect of Alta is its pronominal system. The pronouns of Alta do not reflect innovations that have occurred in all of the other languages of this subgroup. Table 7 compares the long nominative pronouns of Alta with the forms reconstructed for Proto-Southern Cordilleran (Proto-SthCord), Proto-Central Cordilleran (Proto-CntrCord), and Proto-Cordilleran, the parent of *all* the Cordilleran languages (including Northern Cordilleran). (see Reid, 1974, 1979; Tharp, 1974).

Alta does not share in the loss of final -w from the second person singular (2s) form, as have all other Central and Southern Cordilleran languages. Neither does Alta share in the loss of penultimate syllable -mu- from the second person plural (2p) form as have all other Central and Southern Cordilleran languages. Alta instead lost the final three segments of the original pronoun. Furthermore Alta does not share in either of the innovations that occurred in

Table 7. Nominative Pronouns in Alta and Cordilleran

	Alta	Proto-SthCord	Proto-CntrCord	Proto-Cordilleran
1s	siqən	siyak	saken	siyaken
2s	siqaw	siqika	sikqa	siqikaw
1,2s	siqe:ta	siqikita	daqita	siqikita
3s	siya	siya	siya	siya
1p	siqami	siqikami	dakami	siqikami
2p	siqam	siqikayu	dakayu	siqikamuyu
1,2p	siqe:tam	siqikitayu	dataku	siqikitam
3p	siddə	siqida	daqida	siqida

the pronominal formatives marking 1st person inclusive plural (1,2p). In Southern Cordilleran the original form became **-tayu**, in Central Cordilleran it became **-taku**. In Alta the form is **-tam**, a reflex of the form reconstructed for Proto-Cordilleran.

There is also an innovation that took place in the genitive pronoun set of Southern Cordilleran languages that is not shared by Alta. In these languages the 3rd person singular (3s) genitive pronoun ***-na** is replaced by **-tu**. Alta retains **-na**, the form which is reconstructed for Proto-Cordilleran. Alta is also different from the South-Central Cordilleran languages, in that its locative personal pronouns are prefixed with **di-**, like the Dumagat languages already described, rather than with a reflex of ***kani-**. Ivatan is the only non-Negrilo language in the north that has locative personal pronouns prefixed with **di**.

It seems likely then that Alta is the only language in the South-Central Cordilleran group to retain pronominal forms that were probably present in the proto-language of that group.

The Relatively-Remote-with-Little-Subsequent-Intimate-Contact Hypothesis

The most interesting hypothesis would be that a Negrilo group switched languages at a remote period, as a result of intimate contact with one of the early proto-languages in the Philippines, then went its own way, without subsequent intimate contact with that language or any subsequent daughter languages of the proto-language. Such groups would appear to be isolates, difficult to subgroup with other Philippine languages, and would potentially have great value for determining which features were present in the proto-language. Such groups would probably have led relatively isolated lives in peripheral geographic areas with low population density, and would have, like languages in other relic areas, retained features of the parent language which may have been lost in the more innovative languages of its immediate relatives.

Although there are several Negrilo groups which perhaps fall into this category in that their languages appear to be very different from the languages

of their immediate neighbors, and it is difficult to unambiguously group them with any other subgroup, they nevertheless show considerable lexical influence from local non-Negrito groups. This is to be expected, since within the historical period, at least, each of these groups has maintained close ties with their non-Negrito neighbors.

In the following sections, three such groups, the Arta, the Umiray Dumagat of Luzon, and the Inati of Panay will be discussed.

1. Arta

The Arta are a very small group of Negritos (perhaps fewer than one hundred families), living along the Addalem River in the proximity of Aglipay and Maddela, Quirinio Province in eastern Luzon. References to them in the anthropological and linguistic literature of the Philippines are almost non-existent. They are not included in Fox and Flory's (1974) otherwise comprehensive map of Philippine language groups, nor are they mentioned in McFarland's (1980) excellent linguistic atlas of the Philippines. They are generally referred to by local non-Negritos as Dumagats and assumed to be speakers of the same language as the Casiguran Agtas.

A short wordlist gathered by Headland (1977), and lexical and grammatical data gathered by Reid (1987) appear to be the only materials presently available on this language. Preliminary analysis of this data shows that Arta, as its name implies, has the reflex *r* for **R* (Table 8).

The only other language in Luzon with an *r* reflex for **R* is Ilocano, and it is possible that Arta may be most closely related genetically to Ilocano. However, considerable analysis has still to be done to establish this relationship. There is evidence that the language has borrowed from some of the Cagayan Valley languages, perhaps Yogad and Itawis, but it appears to have a fairly large percentage of unique lexical items, and some unique (for the area) phonological changes, including a zero reflex of **k*.

Table 8. Examples of the *r* reflex of **R* in Arta

PPh	Arta	Glossary
*qaRtaq	arta	man
*qeRes	ares	worm
*quRat	urat	vein
*()duR	adur	thunder
*baqeRu	buru	new
*dapuR	dupuran	hearth
*diRu	diru	soup
*huRas	uras	wash
*kaRat	uarat	bite
*taRang	tarang	rib

Further evidence for the aberrant nature of this language is found in the numeral system. It has unique forms for the numerals *one* and *two*, **si:pang** and **tallip**, respectively, and is the only Philippine language to use the term for *person* for the numeral *twenty*, thus **si:pang a qarta** *twenty*, **tallip a qarta** *forty*, **lima qarta** *one hundred* (literally, five people), and so on.

Arta, like other Negrito languages discussed above, also retains unreduced forms of the completed aspect verbal affixes (see Table 1).

2. Umiray Dumaget

Umiray Dumaget is the Negrito language spoken in Umiray, Quezon. It is also spoken in several other localities along the coast of Dingalan Bay and is reported also to be spoken in the Polillo Islands. Although heavily influenced by Tagalog, it has a number of features which distinguish it from other languages in the area. It has a *g* reflex of **R*, but does not appear to be closely related to any presently spoken non-Negrito language with the same reflex. Its closest relatives are possibly the languages along the coast to the north of it, Casiguran, Paranan and Palanan.

Table 9. Nominative Pronouns in Umiray, Paranan and Casiguran

	<i>Umiray</i>	<i>Paranan</i>	<i>Casiguran</i>
1s	iqako	siken	saken
2s	iqaw	siko	siko
1,2s	ikita	sikita	sikita
3s	iqeya	siya	siya
1p	ikami	sikami	sikame
2p	ikamo	sikam	sikam
1,2p	ikitam	sikitam	sikitam
3p	idə (< *qida)	hidi	sidiə: (< *sidi)

Table 10. Case-Marking Particles in Umiray, Paranan and Casiguran

<i>Nominative</i>	<i>Umiray</i>	<i>Paranan</i>	<i>Casiguran</i>
common present	??	i	i
absent	un	en	tu
common plural	un..idə	en hidi	de (< *da)
personal singular	i	ti	ti
plural	idə	de	de

The Umiray Dumagat pronouns are similar to those found in Paranan and in the other Dumagat languages (Table 9), but show that Dumagat did not share in an innovation in the 3rd plural form that characterizes Casiguran and Paranan, and it shows either a different pattern of reduction of the *siqi- prefixal element in the parent language of this group (Umiray has only an i- prefix), or else it retains a reflex of an original *qi- and never participated in the *si- replacement which appears in Paranan and Casiguran. (Compare the pronominal features discussed above for Sinauna and the Sambalic languages.)

The case marking systems in these languages (Table 10) also show Umiray with a system unlike other Philippine languages (Reid, 1978).

The device for marking plurality in a common noun phrase in Umiray, is similar to that still found in Ivatan and in a few other languages such as Ibanag, the form of the third person plural pronoun immediately follows the pluralized noun. Paranan and most other Philippine languages including Tagalog, place a plural marker between the case marker and the head noun. I suspect that pluralization following the head noun is a feature which was present in Proto-Philippines, but which has been lost in most of the extant languages. Unfortunately the lack of descriptive materials in this language, hampers a thorough examination of its possible relationships.

3. Inati

Inati of Panay (Pennoyer, 1986-87), although surrounded by Bisayan languages, shows no evidence that these are the languages with which it is most closely related genetically. It appears to have a unique reflex of *R, about a dozen forms show **d** for *R. (Bisayan languages have *R to **g**). It also appears likely that the inherited reflex of *e was **a**, like the Sambalic languages, not **u** as in the Bisayan languages (e.g. PAN *liqeR > liqad neck, *yaken > yakan mine, *beken > bakan negative) with *a > e in some environments (e.g. yemot < *Ramut, an interesting instance of *R becoming y). However, the reflex of the goal focus suffix *-en is -in.

This language also shows a semantic reversal of the demonstratives **ti** and **ta** that also occurred only in the Sambalic languages and Sinauna. In the Sogodnin dialect of Inati, **o** appears as a nominative marker, a form which elsewhere occurs only in Ivatan.

There can be no question that the ancestors of the Inati learned their language prior to the settlement of the Bisayas by the people now speaking so-called Bisayan languages. Unfortunately the language has undergone so many changes that it is difficult to see which, if any, Philippine group it is genetically most closely related to.

An examination of the other Negrito languages of the Philippines, in light of the linguistic evidence discussed above, particularly the various Ayta languages of Sambal, Batak of Palawan, Mamanwa of northeast Mindanao, and Ata Manobo, may shed further light on the kinds of relationships these peoples have had with their non-Negrito neighbors in prehistoric times.

Implications for Early vs. Late Contact

There seems to be a fair body of linguistic evidence then, to support the hypothesis that at least some of the Negrito groups learned their first Austronesian language at a very early stage in the history of Austronesian settlement of the archipelago. How early? Possibly before the dispersal of the earliest settlers in the case of the Eastern Luzon languages, and perhaps at earliest contact as settlers moved out and into other areas of the archipelago, probably over four thousand years ago. Bellwood (1985) suggests that by 2500 BC, Austronesians had already gotten well beyond the Philippines and were settling the Moluccas.

But why did the Negritos all completely switch to speaking Austronesian languages? Certainly it was not simply because they developed a trading relationship with them. Language replacement would require a much more intimate association than is needed for trading. Perhaps the languages started off as pidgins, and over the thousands of years since then have acquired all the grammatical paraphernalia of Philippine languages, but there is absolutely no linguistic evidence to support this.

The kind of contact that seems most likely to have occurred is the type where the two races lived and worked together, their children growing up together, with Negrito bilingualism developing, and probably within the space of a few generations forgetting their original tongues. What could have persuaded the Negritos to have become such good friends with the newcomers? The newcomers had much to offer Negritos (Blust, 1976). The Austronesians brought with them pottery. There is no evidence that the Negritos knew anything about pot making. But most valuable was the knowledge of rice agriculture that the Austronesians certainly brought with them.

Although there is no evidence that the Negritos took the new technologies and gave up the lifestyles they had followed for thousands of years prior to the arrival of the Austronesians, it is almost certain that they were happy to join in with the newcomers in making rice fields and sharing in the harvest of rice. There is good reason to believe that the Negritos had a very carbohydrate-poor diet, and that in some areas at least, there would have been insufficient wild root crops to provide a satisfactory diet (Headland, 1987). The introduction of rice agriculture must have introduced a source of deeply needed carbohydrates that brought the Negritos running.

The kind of mutual symbiosis that must have developed between the groups at the earliest stages of Austronesian settlement, has continued to the present, with Negritos living in non-Negrito communities, sometimes in their very houses, and in some cases establishing ritual kinship ties with them, primarily for the purpose of getting rice and other products that can be had in exchange for field labor, or for the meat and other forest products that the Negrito can bring with him.

The discussion in this section is to a large degree speculative, but does provide a reasonable explanation for the original language switch. What is

unexplained is why there appears to have been periods of withdrawal from intimate association with non-Negritos, long enough in some cases (such as those discussed in the last section above) for their new languages to have diverged to the point where it is difficult now to establish their immediate genetic relationships. Notice that these periods do not necessarily imply strict isolation from Austronesians. In fact the opposite is probably true, that is, every one of these groups probably continued to maintain periodic contact with their Austronesian neighbors, possibly for trading. But it was not the kind of intimate contact that must have initiated the original language switch and resulted in the complete disappearance of whatever languages they may have spoken prior to the advent of the rice growing newcomers.

References

- Antworth, E.L. (1979) A grammatical sketch of Botolan Sambal. *Philippine J. Linguistics Special Monograph No. 8*. Manila: Linguistic Society of the Philippines.
- Bellwood, P. (1985) *Prehistory of the Indo-Malaysian Archipelago*. New York: Academic Press.
- Blust, R. (1972) Note on PAN*qa(R)(CfT)a 'outsiders, alien people.' *Oceanic Linguistics*, 11: 166-171.
- Blust, R. (1976) Austronesian culture history: some linguistic inferences and their relation to the archaeological record. *World Archaeology*, 8(1): 19-43.
- Busenitz, B. (1973) *Sambal Survey*. Manila: Summer Institute of Linguistics. (Typescript)
- Finkbeiner, M. (1983) *Paranan Lessons. Lesson 8*. Manila: Summer Institute of Linguistics. (Typescript)
- Fox, R.B. and E.H. Flory (1974) *The Philipino People*. (Map) Manila: National Museum of the Philippines.
- Headland, T.N. (1975) Report of Eastern Luzon language survey. *Philippine J. Linguistics*, 6: 47-54.
- Headland, T.N. (1977) *Disibu Arta Wordlist*. Manila: Summer Institute of Linguistics. (Typescript)
- Headland, T.N. (1987) The wild yam question: how well could independent hunter-gatherers live in a tropical rainforest ecosystem? *Human Ecology*. (in press)
- Headland, T.N. and J.D. Headland (1974) A Dumagat (Casiguran) English dictionary. *Pacific Linguistics, Series C, No. 28*. Canberra: Australian National Univ.
- McFarland, C.D. (1980) *A Linguistic Atlas of the Philippines*. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.
- Omoto, K. (1987) Population genetic studies in the Philippines. (in this volume)
- Pennoyer, F.D. (1986-87) Inati: the hidden Negrito language of Panay,

- Philippines. *Philippine J. Linguistics*, 17(2)-18(1): 1-37.
- Peterson, W.E. (1974) Summary report of two archaeological sites from north-eastern Luzon. *Archaeology and Physical Anthropology in Oceania*, 9: 26-35.
- Reid, L.A. [Ed.] (1971) Philippine minor languages: word lists and phonologies. *Oceanic Linguistics Special Publication No. 6*. Honolulu: Univ. of Hawaii Press.
- Reid L.A. (1974) The Central Cordilleran subgroup of Philippine languages. *Papers of the First International Conference on Comparative Austronesian Linguistics, Honolulu. Oceanic Linguistics*, 13: 511-560.
- Reid, L.A. (1978) Problems in the reconstruction of Proto-Philippine construction markers. In S.A. Wurm and L. Carrington (eds.), *Proceedings, Second International Conference on Austronesian Linguistics, Fascicle I. Pacific Linguistics, Series C, No. 61*, pp. 33-66.
- Reid, L.A. (1979) Towards a reconstruction of the pronominal systems of Proto-Cordilleran, Philippines. In Nguyen Dang Liem (ed.), *Southeast Asian Linguistic Studies. Pacific Linguistics, Series C, No. 45, 3*: 259-275.
- Reid, L.A. (1987) *Arta and Alta Fieldwork Notes*. (Typescript)
- Reid, L.A. (n.d.) *A Note on the Names of Philippine Negrito Groups*. (Typescript)
- Santos, P.C. (1975) *Sinauna Tagalog: A Genetic Study Examining Its Relationship With Other Philippine Languages*. M.A.Thesis, Ateneo de Manila University, Quezon City.
- Solheim, W.G. (1981) Philippine prehistory. In G. Casal *et al.* (eds.), *The People and Art of the Philippines*. Los Angeles: Museum of Cultural History, Univ. of California, pp. 17-83.
- Tharp, J.A. (1974) The Northern Cordilleran subgroup of Philippine languages. *Working Papers in Linguistics*, 6(6): 53-114.
- Vanoverbergh, M. (1937) *Some Undescribed Languages of Luzon*. Nijmegen: Dekker van de Vegt N.V. (Publications de la Commission d'Enquete Linguistique III.)
- Wimbish, J. (1986) The languages of the Zambales mountains: a Philippine lexicostatistic study. In *Work Papers of the Summer Institute of Linguistics*, University of North Dakota Session, Vol. 30, pp. 133-142.
- Worcester, D.C. (1906) The non-Christian tribes of Northern Luzon. *Philippine J. Science*, 1(8): 791-863.
- Zorc, R.D. (1974) Internal and external relationships of the Mangyan languages. *Oceanic Linguistics*, 13(1 and 2): 601-642.
- Zorc, R.D. (1979) *Core Etymological Dictionary of Filipino. Fascicle 1*. Manila: Linguistic Society of the Philippines.