

REVIEW ARTICLE

The Austronesian languages. Revised edn. By ROBERT BLUST. (Asia-Pacific linguistics.)
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We review *The Austronesian languages*, by Robert Blust, with particular attention to how some of Blust's generalizations about the phonology and morphology of Austronesian languages play out in Malagasy and Chamorro.*

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The Austronesian languages (henceforth *AL*) by Robert Blust is a lightly revised and updated version of a book with the same title published in the Pacific Linguistics series in 2009.¹ *AL* is superficially daunting—845 large pages! But it is written and organized clearly, reads easily, and will be the standard reference for work on Austronesian (AN) languages for generations to come. Indeed, *AL* is unlikely to ever be superseded. Obviously, it cannot possibly tell us all there is to know about the 1,250 AN languages (Lewis 2009:19) of which *AL* mentions only 812(!). But *AL* does present a considerable range of observations and linguistic patterns that will be helpful for linguists and others doing research on AN languages. *AL* provides generalizations that can be checked which readers might not have thought of and allows them to see if some trait in a given language is novel or falls into an established pattern with other genetically or areally related languages. By way of example, the first author of this review (ELK) has been studying Malagasy (Western Malayo-Polynesian, Madagascar) off and on since 1969. Malagasy, unsurprisingly, distinguishes a human interrogative *iza* ‘who?’ from an inanimate *inona* ‘what?’, but to ask ‘What is your name?’ one says ‘Who is your name?’. Although *AL* does not mention Malagasy specifically in this regard, it observes that this usage is widespread across AN languages, so this is not a Malagasy idiosyncrasy (509–11) but, unexpectedly, must exist at some time depth in AN languages. Similarly, in Malagasy we find *Ranona* used to refer to or call someone whose name the speaker chooses not to make explicit.² Again, with no specific reference to Malagasy, *AL* cites several similar usages from other AN languages. So, curiously, *AL* enriched ELK's knowledge of Malagasy without informing him of new facts about Malagasy itself.

AL will also appeal to non-Austronesianists of various ilks. First, of course, to the general linguist interested in language change, *AL* provides a masterful overview of the research establishing the genetic relationship of AN languages, an accessible source describing many subgroups of the 812 languages mentioned, plus an invaluable bibliography that lists many works from different linguistic traditions and languages in one (fifty-two-page) source. To this we may add the recent and extensive bibliography of the languages of Borneo (and Madagascar) by Blust and Smith (2014).

Derivative from the linguistic evidence of genetic relatedness, *AL* provides the basis for inferences concerning the peopling of the Austronesian language area. This area extends from the island of Madagascar in the west through the various coastal and island

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¹ The revised edition being reviewed here has been published as an open-access monograph, available for download at <http://hdl.handle.net/1885/10191>.

² *Ranona* is presumably constructed from the personal-name article *Ra-* plus the noun *anona* ‘what-do-you-call-it’.

areas of the Indian Ocean and the Pacific, to Hawai‘i and Easter Island. The area includes New Zealand, but not Australia and only coastal inroads in Papua New Guinea. In many cases the best available evidence for migration patterns is linguistic. Who would have guessed that the dominant settlers in Madagascar came from Borneo? (Answer: Otto Christian Dahl (1951); see p. 782.) Equally, we can again on linguistic grounds disentangle some lexical and morphophonological influence of Bantu languages on Malagasy.

We turn now to a review of the eleven chapters of *AL*. In so doing, we consider the application of some of Blust’s generalizations to Malagasy, as it has proven to be an enlightening test case. A mark of a worthy work, after all, is how well its generalizations extend to new cases and how well the questions it raises lead us to improve our understanding of specific cases. And, obviously, we can plumb a language that one of us (ELK) has been working on for more than forty-five years more deeply than *AL* can, which covers over 1,200 languages. We also have data available, some entirely in Malagasy, that Blust did not have access to. Secondarily, we also consider how some of Blust’s generalizations play out in Chamorro (Western Malayo-Polynesian, Mariana Islands).

The first chapter of *AL* gives a short (thirty-page) presentation of the precise geographical areas in which AN languages are spoken (most within ten degrees of the equator; some subtropical), together with a general overview of the physical and cultural environment of these areas. There is also some discussion of the early foundational scholarship on these languages, accompanied by a history of naming conventions for various subgroups. Table 1.1 provides rough dates for the establishment of Neolithic cultures in insular Southeast Asia and the Pacific, starting with Taiwan (5500 BP) and ending with Hawai‘i (about 1400 BP). Some brief discussion is provided of Sanskrit and Islamic influence on various AN peoples at early dates.

Ch. 2 (ninety-five pages) presents an overview of the AN language family, focusing on the ‘history of research, salient features of language distribution, and typology’ (30). A history of the extensive debates about lower levels of classification of AN languages is reserved for Ch. 10 and is not reviewed here. Lewis 2009 is referred to for a complete list of the AN languages, along with language classification and population size. For many of the major subgroups of AN languages, *AL* does give rough figures for the languages with the greatest and least numbers of speakers.

Difficulties in distinguishing language from dialect pose a major problem in estimating the number of AN languages and the number of speakers of a given language. One pertinent issue involves dialect chains: sequences of linguistic groupings A/B, B/C, C/D, ... , where geographically pairwise groups would be considered dialects on grounds of mutual intelligibility, but with intelligibility decreasing as the language groups become geographically farther apart. *AL* (36) cites the Melanau dialect chain across the coast of Sarawak (N. Borneo), which runs for some 230 kilometers. But the longest, *AL* notes, is the Chuukic (Trukic) island chain running from Chuuk (Truk) in the east to the atoll of Tobi in the west, 2,500 kilometers, perhaps the longest dialect chain on earth.

A striking fact about the classification of the 1,200+ AN languages is that they are initially divided into ten genetic groups, nine of which are attested only in Taiwan (Atayalic, Tsouic, etc.; p. 30). This clearly supports Taiwan as the primary dispersal point of the AN languages.

The tenth group is Malayo-Polynesian (MP), which is divided into two major subgroups, Central Eastern Malayo-Polynesian (CEMP) and Western Malayo-Polynesian (WMP). WMP is unified by the presence of nasal substitution in certain prefixes used to form active verbs from roots, for example, Malay *pukul* : *memukul* ‘hit’; Malagasy *vely* :

mamely ‘hit’; Chamorro *chugu* ‘sap, juice’: *mañugu* ‘ooze’. *AL* notes that there is fragmentary evidence that this pattern extends back to Proto-MP (PMP) or even Proto-AN (PAN), in which case it would be a proto-feature retained in WMP, not a characterizing innovation. A map conveniently distinguishes languages in the two subgroups (35).

The informative table 2.1 lists the twenty politically recognized nations that are dominantly AN-speaking and discusses the history of the selection of the national language(s) of each nation. In terms of area, the largest five, in order, are: the Republic of Indonesia (1.9 million km²), the Malagasy Republic (Madagascar, 587,000 km²), Papua New Guinea (roughly one half of the island of New Guinea, 463,000 km²), the Federation of Malaysia (330,000 km²), and the Republic of the Philippines (300,000 km²). Of the twenty nations listed, eight have two national languages: in six, one of the national languages is English; in Madagascar it is French; and in the new Timor-Leste (redundantly named—both *Timor* and *Leste* mean ‘east’) it is Portuguese. In the Federated States of Micronesia, English is the only national language, and in Papua New Guinea the only official language is Tok Pisin, an English-based creole with many AN morphosyntactic and semantic features.

The remaining sections consider language distribution by geographical region. For each region the number of languages is discussed, and a brief typological overview is provided with comments on phonological typology and representative examples of various sentence types. We found the maps accompanying the geographical areas most helpful. The presentation is concise, to the point, and informative. This chapter, along with the previous one, will be quite helpful to those beginning to study some AN language.

Ch. 3 (forty-four pages) deals with language in society—a topic that would require many volumes had we the knowledge. The chapter is understandably short, surveying some noteworthy properties of AN languages that relate to the linguistic codification of social usage: respect language, men’s and women’s speech, vituperation versus profanity, specialized (sub)languages for specific purposes, code-switching, and so forth.

Every overview of AN languages is obliged to mention the elaborate, linguistically codified respect system of Javanese and its extension to neighboring languages: Sundanese, Madurese, Balinese, and Sasak. Javanese distinguishes two respect levels or ‘styles’ (plus one ‘neutral’ style), largely in terms of vocabulary. Within each style there is an honorific versus deferential distinction. This system appears to have arisen as part of the complex social etiquette system of the Javanese people rather than reflecting a property of any of the relevant ancestor languages.

AL notes the existence of some less elaborate and independent special vocabulary-marking systems in Micronesia and Polynesia. In Pohnpeian this is associated with title ranking, the highest title being that of the hereditary chief. The title system is used throughout the population, where respect speech between people of equal titles is determined by seniority. There are several hundred honorific morphemes that may affect the forms of verbs and nouns. Samoan and Tongan also have respect levels that are marked lexically. Learning the conditions under which a respect form or an ordinary form is used in these languages seems somewhat complex. Blust notes an interesting correlation, namely, that the inherited form of a word seems to be its ordinary usage form, whereas the polite or respect form is innovative. Furthermore, ordinary forms are often monomorphemic, whereas the innovative forms tend to be morphologically or syntactically analyzable.

Distinct forms of men’s and women’s speech seem to occur only in Atayal. Some distinctions are made in Cham, but Blust suggests that the differences are due primarily to unequal access to the traditional Indian-based script.

Blust notes an interesting linguistic distinction between profane speech and ‘vituperative’ speech (anger at oneself or another). The vocabulary choice for vituperative speech seems to be just ordinary lexical items designated as vituperative. Profane speech, by contrast, involves objects of ‘disgust, social delicacy, or reverence’ (140). This is seen in Bikol, and it seems that a number of items from this register can be reconstructed for Proto-Central Philippine.

The remainder of this chapter is concerned with references to animals, specialized languages (secret languages, ritual languages, hunting languages), and borrowings from other languages. Here we note extensive borrowing from Sanskrit into Old Javanese, primarily through religious texts, as well as extensive borrowing from Spanish into Chamorro. One interesting borrowing from Tagalog into English is *boondocks*, from Tagalog *bundók* ‘mountain’.

Ch. 4, on sound systems, is the longest chapter in *AL* (108 pages). Nearly as long is Ch. 9, which is devoted to sound change (eighty-seven pages). So phonology and phonological change are the most extensively treated topics in the book, unsurprising given Blust’s primary areas of publication and expertise. Ch. 4 first examines phoneme inventories on a regional basis, then phonological and morphologically related properties on a (sub)family-wide basis. The phonemic status of so-called ‘prenasalized consonants’—combinations of nasal plus homorganic consonant that may be clusters or single segments with internal structure—comes in for interesting discussion, to which we contribute below.

But first, it appears that AN segment inventories are on the smallish side, fifteen to twenty consonants and four to five vowels, whereas a more typical language inventory has between twenty and thirty-seven segments (Maddieson 1984:7). Obviously, these counts depend on the analysis of affricates and features such as aspiration, vowel length, prenasalization, and glottalization. If ‘prenasalized obstruents’ in Malagasy are taken to be unit phonemes distinct from their oral counterparts, then Malagasy has twenty-nine consonant segments. If they are taken to be clusters of nasal plus obstruent, then Malagasy has only nineteen such segments, well within the ‘Blust boundary’. Hawaiian has just thirteen phonemes, eight consonants and five (short) vowels, provided the five corresponding long vowels are analyzed as sequences of identical vowels. (Here, Blust only counts monophthongal vowels and consonants, not diphthongs.) The largest phoneme inventory in AN is Nemi (northeast New Caledonia), with forty-three consonants and five vowels. The smallest is Northwest Mekeo (southeast New Guinea), with seven consonants and five vowels. Five Eastern Polynesian languages have eight consonants and five vowels: Hawaiian, North and South Marquesan, Rurutu (Austral Islands), and South Island Maori (New Zealand). Maddieson 1984 cites only two languages with smaller phoneme inventories: Rotokas (East Papuan, with six consonants and five vowels) and Pirahã (isolate, Brazil, with eight consonants and three vowels).

Blust notes that the phonemes of Eastern Polynesian languages show very little allophony. Furthermore, and curiously, the small phoneme inventories correlate with later settlement dates within the AN family. Fijian, Rotuman, Tongan, and Samoan have somewhat larger phoneme inventories than the Eastern Polynesian languages; correspondingly, Fiji, Rotuma, Tonga, and Samoa were settled a little earlier than the islands of eastern Polynesia. This correlation only holds within AN, however. New Guinea, where Rotokas is spoken, has a settlement date orders of magnitude earlier—50,000 to 60,000 BP. The correlation also does not extend to AN-internal migrations. Madagascar was settled by AN speakers from Southeast Borneo (Kalimantan) around 400 to 700 AD.

Sections 4.1.1–15 cover the phoneme inventories of other MP languages. These provide the base for the interesting phonotactic issues and generalizations that *AL* presents in section 4.2, which we now discuss.

About 90% of lexical bases in PAN were disyllabic, and most others were trisyllabic. Words could be consonant-final. But the only consonant clusters allowed word-internally were an obstruent preceded by a homorganic nasal (e.g. **nd*, **mp*) or clusters created by reduplication of a monosyllabic root (**kiskis* ‘scrape’, **tuktuk* ‘knock, pound, beat’). In CEMP these clusters have generally been eliminated, except when they are accidentally of the form NC (222).

Blust observes that a number of AN languages, including Malagasy, have developed an exceptionally high percentage of polysyllabic bases compared to the AN norm (234). We note that Malagasy also adopted a strict (C)V syllable structure, under Bantu influence if O. C. Dahl 1951 is right, so that in some cases final consonants were dropped, leading to a relatively high percentage of monosyllabic roots, and in other cases a final *-a* was added, leading to many trisyllabic roots with stress on the antepenultimate syllable. These words generally end in *-na*, *-ka*, or *-tra* and are called *weak* in Malagasy grammars where they trigger complex morphophonological behavior.

Now, Malagasy has extensive sandhi rules—word and phrase incorporation, in which the final *-a* of a polysyllabic base is dropped, a pattern which suggests that these incorporation processes were in place historically before the *-a* was added. One way of viewing the synchronic result is that when a disyllabic base (with *-a* dropped) ends in a consonant and hosts incorporation, it must yield a form that satisfies the (C)V syllable template. For example, in *mivarotra+hena* ‘sells meat’ the *-a* drops, as does the voiceless postalveolar affricate *tr* (= /tʃ/), avoiding a prohibited consonant cluster, but its noncontinuant feature is inherited by the initial consonant of *hena*, yielding *mivaro-kena*. Similarly, *mangataka+fary* ‘steals sugarcane’ becomes *mangata-pary*, and *manana+vola* ‘has money’ becomes *manam-bola*. In all cases the initial consonant of the incorporatee inherits the feature noncontinuant from its host. This is a nice case where the historical perspective of *AL* gives insight into complicated synchronic morphophonology.

Similarly, in the case of monosyllabic Malagasy roots that take voice suffixes, we find without exception that an unsuspected consonant surfaces: compare *la* ‘refusal’ with *lavina* ‘be refused’, *ray* ‘receive’ with *raisina* ‘received’, and *foy* ‘hatch, abandon’ with *foizina* ‘be hatched, abandoned’. It is pleasing to think that this apparently epenthetic consonant was there historically and surfaces when followed by a vowel, reminiscent of the famous consonant alternations involving the *-Cia* suffix in Oceanic languages (247–48). Synchronically, it is reasonable to posit the unsuspected Malagasy consonant as part of the root and delete it in cases in which it is not followed by a vowel (Erwin 1996), maintaining the (C)V syllable template. Support for such a synchronic analysis is that for a given root, all vowel-initial suffixes induce the same ‘epenthetic’ consonant. The imperative from *foizina* ‘abandoned’ is *foizo*, and the imperative of the active form *mamoy* is *mamoiza*. But this historical hypothesis, while reasonable, needs to be supported with actual data.

AL observes that vowels in AN languages have few distributional restrictions. The main restriction is that schwa cannot occur prevocally or word-finally. A few languages (e.g. Balinese) have developed a word-final schwa from unstressed final **a*. In some WMP languages, some pre-penultimate vowels have reduced to schwa. Malagasy, however, has no schwas. Reduced unstressed vowels may lose their voicing, sometimes to the point of inaudibility, but do not reduce to schwa. It is easy to find minimal pairs that differ solely by an unstressed vowel: *entana* ‘package’, *entina* ‘carried’; *tovona*

'prefix', *tovana* 'suffix'; *mifono* 'wrap (v.)', *mifona* 'beg'. (We underline the vowel that bears main stress.)

Outside of Polynesia, AN languages tend to limit vowel sequences to at most two. Malagasy roots satisfy this constraint, but words formed by adding a vowel-final prefix to a root that begins with two vowels appear to have a three-vowel sequence, for example, *miaiky* 'to agree' (from *aiky*), *miaotra* 'to be brothers in law' (from *aotra*). In these cases, however, *ai* and *ao* are diphthongs, not true vowel sequences. One genuine example is the root *oitra* 'raise up, as with a lever', in which the *o* (= /u/) is stressed. The passive *aoitra* then genuinely presents a three-vowel sequence. So such sequences exist, but are not common.

Since virtually all roots in Malagasy end in CV, adding the common voice suffixes *-ina* and *-ana* produces sequences of two vowels, as in *vonoina* 'hit, killed' (from *vono*), with *o* and *i* articulated separately. In the few cases where a root does end in two vowels or a diphthong and accepts one of these suffixes, we always have an epenthetic consonant, as mentioned above: *foy*, *foizina* (see above); *dio* 'cleanliness', *diovina* 'cleaned'.

Section 4.2 provides much information about the distribution of geminate consonants in AN. Blust's table 4.32 lists by regions the number of languages known to have geminate consonants. Languages of this type seem fairly frequent, ninety-four (at least), and are not limited to any one area or genetic subgroup, though word-final geminates are found only in Micronesia. Here we add two points. First, as Blust tentatively suggests, Chamorro does indeed have medial geminates but not initial geminates (231). Second, Malagasy has no geminates among its roots (see Domenichini-Ramiaramanana (1977:31), henceforth D-R, who notes a few cases involving *n* and *l* when unstressed vowels have been deleted in speech).

The last major topic of section 4.2 is 'prenasalized obstruents'. This has been a major topic both in AN linguistics and more generally in phonological theory, where many examples are drawn from AN languages (see Blust 1997 and Cohn & Riehl 2008). In some cases, such as Fijian, a consonant C preceded by a homorganic nasal N, henceforth NC, clearly forms a unitary segment. In other cases, for example, Philippine languages, Malay, and Chamorro, NC is regarded by all as a cluster, that is, a sequence of two independently articulated consonants. In Chamorro, for instance, NC occurs only word-medially, and N and C belong to different syllables; N serves as the coda of the preceding syllable and C as the onset of the following syllable. This is revealed, for instance, by the fact that the vowel of the syllable closed by N undergoes vowel lowering, a process that lowers stressed high vowels to mid in closed syllables (e.g. *pontan* 'ripe coconut', descended from PWMP **buntan*). But the segmental status of NC in very many AN languages is unclear. Blust cites facts from Muna (van den Berg 1989) and Kambera (Klamer 1998) that purport to show that NCs are unit phonemes. The relevant facts for Kambera are: (i) NCs appear as syllable onsets both word-initially and word-medially, (ii) the nasals *n* and *m* cannot be codas, and (iii) Kambera lacks other complex onsets like *tr-*, *pl-*, or *st-*. All three of these properties hold of Malagasy as well (notwithstanding some borrowings, e.g. *Frantsay* 'French', *Ang(i)lisy* 'English', *republika* 'republic'; many borrowings have been assimilated, e.g. *dokotera* from English *doctor*, *lakilasy* from French *la classe*).

Blust claims that these facts show only that in NC in Kambera, N and C belong to the same syllable, not that they form a unit phoneme. He makes comparable objections to van den Berg's assertions for Muna. There is room for debate here; see below.

Blust also considers Malagasy and casts doubt on Dempwolff's (1937:72) and O. C. Dahl's (1951:33) assumptions that the inventory of Malagasy phonemes includes a

large number of prenasalized consonants. His criticisms include Dyen's (1971) claim that only the voiced prenasalized consonants are unit phonemes. Blust concludes that 'recognising a series of prenasalised obstruent phonemes in Malagasy seems precariously weak' (226).

This discussion prompted ELK to consider just what evidence could be mustered to decide the issue. Below, we first consider evidence in support of the existence of prenasalized obstruents in Malagasy, and then review Blust's arguments against this claim. (We draw on some source material in Malagasy not available to Blust.)

Duration. Cohn and Riehl (2008), citing Riehl 2008, claim that NC clusters have a longer duration than prenasalized consonants. And O. C. Dahl (1951:48) supports this for the C/NC distinction in Malagasy. He states (ELK's translation):³

Many facts have led me to treat the prenasalized consonant as a single consonant and not a complex of consonants. ... In Malagasy, I made measurements of the duration of the consonants, and I found that the duration of a prenasalized one does not exceed that of a plain oral one. I further found that if the oral element is voiced, the nasal element is longer than the oral one. If, on the other hand, the oral element is voiceless, the nasal element is shorter than the oral one.

The measurements are given in O. C. Dahl 1952, in a not-readily-available Norwegian journal not cited in *AL*. Dahl (1952:174) further notes that tongue tip and lip position do not change during the pronunciation of NC, so the N and the C are not articulated separately. These measurements and the observation concerning position are compelling arguments for the complex-segment analysis of NC in Malagasy.

Distribution. To establish our point, it is important to show that Malagasy has a reasonable number of roots that contain prenasalized consonants. A major reason why *AL* doubts the existence of prenasalized consonants in Malagasy is that the early claims for such consonants made by Dempwolff (1934–1938) and Dyen (1971) were, it seems, based on dictionary entries. Blust worked through Richardson's (1885) Malagasy-English dictionary, which contains about 10,000 entries, and found only twenty-eight words with initial prenasalized consonants, just those beginning with *mb* (eleven total), *mp* (six), *nd* (three), *ndr* (six), and *nt* (two). By contrast, Rajemisa-Raolison's (1985) monolingual Malagasy dictionary-encyclopedia, which is 1,059 pages long, has ninety-two entries beginning with *mpa/mpi*. Nonetheless, Blust's case here can be strengthened: word-initial *mp* and *nt* are pronounced [p] and [t], respectively, without prenasalization (despite the orthography). Word-initially, *nt* is virtually nonexistent while *mp* is very frequent, since it forms agentive deverbal nouns, as in *swim* : *swimmer*, *sing* : *singer*, and so forth. Many of these nominals have taken on lexically specific meanings: *mp(amp(i+velona))* = er(cause(be alive)) = 'midwife'. But word-initial *mp* phonetically remains [p].

Rajaona (1977:75–79) claims that historically the agentive prefix was *omp-* or *amp-*, and the prenasalized consonant, whose existence he accepts without question, was intervocalic, not word-initial. But O. C. Dahl (1988) argues that the *mp-* arises word-initially through Bantu influence, the initial *m* being a noun class 1 marker and added directly to a *p(an)*-initial nominalizer of AN origin.

³ In the original French: 'Plusieurs faits m'ont conduit à traiter la prénasalisée comme une consonne une, et non un complexe de consonnes. ... En malgache, j'ai fait des mensurations de la durée des consonnes, et j'ai constaté que la durée d'une prénasalisée n'excède pas celle d'une buccale simple. J'ai encore trouvé que, si l'élément buccal est sonore, la nasale est plus longue que la buccale. Si, au contraire, l'élément buccal est sourd, la nasale est plus brève que la buccale.'

In sum, then, the voiceless prenasalized consonants, noted orthographically as *nt*, *nk*, *nts*, *ntr*, and *mp*, do not occur word-initially. But that should not rule them out as unitary segments or phonemes, just as the voiced palato-alveolar fricative is an English segment (in *pleasure*, *measure*, *treasure*), even though it does not occur word-initially. Moreover, voiced NC occurs word-initially in Malagasy too often to ignore. Examination of Abinal & Malzac 1963 [1888, updated c. 1901], the more recent Rajaonari-manana 1995, and Rajemisa-Raolison 1985 yields the following fifty-one instances of words beginning with voiced NC, including, where known, cases derived by initial vowel deletion.

- (1) nj (/ⁿdz/): three words
njay ‘voila’ (< *injay*, < *inay*)
njainjay ‘having a difficult and unpredictable character’
njoula ‘cross-eyed’ (noted by D-R, p. 31)
- (2) nd (/ⁿd/): four words
nday aiza/ndaiza (*ndaiza ny satroko* ‘Give me my hat’) < *injay*
ndao ‘let’s go’ < *andao*
ndeha ‘let’s go, on the point of’ < *andeha*
ndondo ‘having a prominent forehead’
- (3) ndr (/ⁿdʳ/): three words
ndre/ndrô ‘exclamation of surprise or pain’
ndry/ndriako ‘pronoun: familiar, between women’
ndrofilahy ‘imp. be brave (children’s game)’
- (4) ng (/ⁿg/): thirty-one words
ngadona ‘beat’ (music, poetry)
ngaha ‘perhaps’ < *angaha*
ngahy ‘respect term of address’ < *Ingahy*
ngaly ‘shiny black’
ngamba ‘perhaps’ < *angamb*
ngara ‘gray, said of eyes’
nganja ‘perhaps’ < *angamba*
ngaosina ‘carried away by force’
ngarangidina ‘said of a complete period’ < *ngarangidina*
ngavoka ‘dust-colored’ (*havoka*, *mangavoka*)
ngazana ‘arid’
ngedona ‘dirty, of clothes (little used)’
ngelingely ‘debauched’ < *angelingeliny*
ngenongenona ‘murmurs, complaints’
ngerona ‘dirty black’
ngetroka ‘blackened with soot’
ngeza/ngezabe ‘really big’
ngidy ‘bitterness’
ngila ‘who blinks one eye’ < *gila*
ngilo ‘black and shiny, like shoes’
ngirina and *ngiri-maso* ‘who closes his eyes halfway’
ngita ‘kinky, woolly’
ngizina ‘very black’
ngitrika ‘layabout, do-nothing’
ngodona ‘noise of steps’
ngoly ‘made numb’

ngonongonona ‘words said between the teeth; murmur’

ngorodona ‘floor, sound produced by steps on the floor’

ngorongosy ‘jaundice’

ngoso ‘a serious kind of oath’

ngotsoka ‘cunning’

(5) *mb* (^mb/): ten words

mba ‘particle expressing respect, optative’

mbà ‘imperative of *omba* “follow”’: please be (e.g. well behaved)’

mbay ‘please permit ...’ (*mbay lalana tompoko* ‘please let me pass’)

mbamy ‘with, thus’

mbavy ‘a certain kind of small bush/tree’

mbetika ‘binary coordinator: sometimes ... sometimes ...’ (*mbetika izy mitomany*, *mbetika (izy) mihomehy* ‘sometimes he cries, sometimes he laughs’)

mby ‘arrived at’ < *omby*

mbika kely ‘abbreviation of *masombika* “small black person”’

mbola ‘still, yet’

mbomba ‘act of a mother clutching her offspring in her arms (or wings)’

Blust seems to discount NC-initial words resulting from the loss of a preceding vowel. But this does not entail the synchronic absence of word-initial NC. Rather, it gives an account of how some NC in initial position arise.

The list above establishes that voiced NC occur word-initially. Of course, we would like to explain why they occur more frequently intervocalically and why voiceless NC occur only there. But our goal here is to discuss the distribution of segments that exist.

A second distributional fact supporting the existence of word-initial prenasalized consonants is the currently frequent use of ‘short names’ for people. As a list of Malagasy authors reveals, proper names from the major dialect area (Merina, the basis of the written language) consist of a proper-noun article (often *Ra-*) followed by a sequence of adjectives and predicates. Translating for the nonce, with *Ra-* as *Mr.* or *Ms.*, proper names could be read as *Mr-has-big-father*, *Mr-noble-second-born*, and so forth. This results in long names. For example, some linguists’ names in the literature are *Randriamasimanana*, *Ralalaohervony*, *Razafimamonjy*, *Rabenilaina*. Names consisting of five to seven syllables are the norm. In consequence, people are often assigned a fixed ‘short name’ for daily use. These seem always to begin with voiced prenasalized consonants: *Mbola*, *Mboty*, *Mbalo*, *Mbelo*, *Mbela*, *Ndriana*, *Ndrema*, *Ndrasana*, *Ngita*, *Ngahy*, *Ndimby*, *Njaka*.⁴

Voiceless prenasalized consonants. For each of the five voiced NC, devoicing of the postnasal part results in a voiceless prenasalized C. So these NC are structurally more complicated than their uniformly voiced counterparts. We have seen that they are more restricted in their distribution and, further, that their status intervocalically may occasionally be doubted. D-R, for example, asserts that speakers often confuse *manatona* ‘to approach’ and *manantona* ‘to attach’. These are a minimal pair, differing just by the syllables *to* (= /tu/) and *nto* (= /ⁿtu/). So perhaps the language is losing these segments, but they are far from gone. In all five cases, C and ⁿC determine minimal pairs.

(6) tⁿt: *eto* ‘here close, visible, nonpast’ vs. *ento* ‘carry (imperative)’

t^t/ⁿt^t: root of *manatra* ‘warn, resist’ vs. *antra* ‘compassionate’

tsⁿts: *antsy* ‘knife’ vs. *atsy* ‘somewhat far, nonvisible, nonpast’

⁴ Thanks to Baholisoa Ralalaohervony for supplying many of these names.

written in Malagasy (Rajaobelina 1960, Razafindrakoto 1982). When ELK elicited syllabification from Malagasy speakers, they paused after *ma* and before *nde*. The clarity of the first *a* and the absence of nasality were quite striking to the French or English ear. This is quite consistent with the ONSET-INDUCED type of nasal harmony cited by Blust (1997) for languages in Borneo, rather than the CODA-INDUCED type seen in English. O. C. Dahl (1952:174), however, does say that vowels preceding prenasalized consonants are somewhat nasalized, noting that the strongest nasalization occurs when the vowel is between two nasals.

While eliminating the *m* from *mandeha* to form *andeha* is unproblematic on Blust's syllabification, eliminating the initial *a* forming the short, widely used, form *ndeha* 'let's go' would appear to yield a syllabification *n.de.ha*, making a single *n* a syllable. But Malagasy lacks syllabic nasals, so *n.de.ha* violates the EXHAUSTIVE PARSING condition of the PROSODIC HIERARCHY (Inkelas 1990:11, building on Selkirk 1986). On our view, *ndeha* is just *ⁿde.ha*, with the preferred AN disyllabic structure.

Blust must say (225, n. 28) that the final nasal of *maN-* somehow leaps the syllable boundary to form a CCV syllable, and this is only allowed when the first C is a nasal homorganic to the second. He attempts to justify this new syllable type by suggesting that homorganic NC is the 'least marked' of consonant clusters. But to be convincing we need a language-independent definition of markedness: a study based on a fair sample of world languages showing that (i) if a language has any consonant clusters, it has ones of the form NC, with N a nasal homorganic to C, and (ii) there are languages in which these clusters are the only consonant clusters.

Our mini-study of Malagasy prenasalization has been prompted directly by Blust's discussion. Obviously, ELK can go into more detail on a language he has been working on for over forty years than Blust can in a work designed to cover 1,250 languages. And we should note that Blust's table 4.29 classifies a spread of fifteen AN languages with regard to eight properties related to NCs. We agree with his evaluation for each of those entries for Malagasy. Just completing this table already represents an article-length research project.

The remainder of Ch. 4 covers a variety of phonological processes in AN languages, including palatalization, nasal spreading (forward from onsets, not anticipatory to codas, as in many Indo-European languages), vowel allophony, metathesis, stress rules, and the nasal substitution discussed above for Malagasy.

Ch. 5, on the lexicon (seventy-eight pages), touches on ten areas of semantically based lexical comparison. Here we discuss two of the areas: numeral systems and deictic expressions, and make a few passing comments about some of the others.

Numeral systems show striking similarities across the AN languages. They are quite generally base ten; the numerals from '1' or '2' to '10' are often recognizable cognates. Some languages have extensive derivative numeral systems; Blust cites Moronene (Sulawesi) (see Andersen 1999). Malagasy fits in this class: it has independent morphemes for the powers of ten up to a million: for example, *zato* '100', *arivo* '1,000' (obviously cognate with Malay *ribu*); also *alina* '10,000' and *hetsy* '100,000'. The numeral '1,000,000' is *tapitrisa* (*tapitra-isa* 'exhausted-number'). Ordinals are formed by prefixing *faha-*, for example, *faha-telo* 'third'; fractions are formed with *ampaha-*, for example, *roa ampahatelo* 'two thirds'. There are also morphologically complex 'times' expressions (e.g. *intelo* 'three times') and distributive numerals (e.g. *tsitelotelo* 'in threes, three by three'), which are often expressed by reduplication in other AN languages, as Blust observes. These complex forms can also be derived from interrogative pronouns, for example, *impiry* 'how many times?' from *firy* 'how much/many?', as well

as *fahafiry Rabe*? ‘which oneth was Rabe (the first, the second, ...)?’ and *ampahafiry* ‘what portion of (the class passed)?’.

In contrast, color terms are much less uniform across AN languages. It seems from *AL* that only the words for ‘white’, ‘black’, and ‘red’ are reconstructable for PAN and PMP.

Deictic expressions, such as demonstrative adjectives or demonstrative determiners, locative adverbs, and directionals, tend to be fairly rich across AN languages. Blust distinguishes between deictics of MICRO-ORIENTATION and MACRO-ORIENTATION. The former concern relations between objects and participants in discourse; the latter directional systems are used to orient oneself in the larger physical context.

In the micro-orientation category, most AN languages distinguish between inclusive and exclusive in first-person plural (and dual) pronouns, but do not mark gender. Most languages make at least a three-way distinction in demonstratives that is often associated with person: ‘close to speaker’, ‘close to addressee’, and ‘far from both’. *AL* cites several Philippine languages with such systems, and others with somewhat richer systems.

Vanuatu is cited as having the richest demonstrative systems. Araki (François 2002) has fourteen deictic markers that encode relative distance, the spatial or abstract relationship with a participant in the speech environment, and syntactic and pragmatic function. But even this system seems small compared to Malagasy’s. Rajemisa-Raolison 1971, an excellent high-school-level grammar, distinguishes six differentially marked levels of distance from speaker, as well as singular versus plural number, yielding twelve forms (p. 53). This is the only place in the language (except for *ianao* ‘you.SG’, *ianareo* ‘you.PL’) in which number is marked with an affix: the infix *-re-*. Each of the twelve demonstrative forms can take another infix, *-za-*, yielding the additional meaning of vaguer, more or less not visible to speaker or hearer. Compare *iny* ‘this, very far, visible more or less’ with its plural form *ireny* and their vaguer, more abstract, or not-so-visible forms *izany* and *izareny*. Demonstratives normally frame the noun they specify, for example, *ity zaza ity* ‘this child (close)’, *izany fomba izany* ‘that custom’.

In addition, Malagasy has a series of locative deictics that codes five degrees of relative distance, as well as distinguishing visible from nonvisible objects and—surprisingly—past versus nonpast reference, for a total of twenty more deictics (see Keenan & Polinsky 1998). These are widely used; for instance, locations, such as cities, are obligatorily accompanied by an appropriate locative deictic: for example, *Nipetraka tany Antsirabe Rabe* ‘Rabe lived there (fairly far, not visible) in Antsirabe’; compare *any Antsirabe* ‘there (fairly far, nonpast, nonvisible) in Antsirabe’ and *eny Antsirabe* ‘there (fairly far, nonpast, visible) in Antsirabe’.

Lexical and interrogative deictics in Malagasy are also richer than expected. They can distinguish temporal reference as well; compare *anio* ‘today, present or still to come’ with *androany* ‘today, already past’; *oviana* ‘when? (past)’ with *rahaoviana* ‘when? (future)’; and *taiza* ‘where? (past)’ with *aiza* ‘where? (nonpast)’.

Concerning macro-orientation systems, Blust notes two widespread parameters. One is the dimension seaward versus landward. This seems natural for island-dwelling peoples. It leads to some curious adaptations. It might happen that a phrase that is literally ‘to the mountain’ is used by coastal people to refer extensionally to ‘south’, while the same phrase for inland dwellers on the other side of the mountain means ‘north’. Such adaptations have occurred in Chamorro, whose directional system originally crossed a macro-orientation parameter (landward versus seaward) with a micro-orientation parameter (to the speaker’s left versus the speaker’s right). In other words, the four directional terms in Chamorro—*lagu*, *haya*, *luchan*, and *kattan*—originally meant, respectively, ‘seaward’, ‘inland’, ‘to the speaker’s left while facing seaward’, and ‘to the

speaker's right while facing seaward'. These terms have been reanalyzed as referring to the four cardinal points (north, south, etc.), but differently on the islands of Guam and Rota versus Saipan, in a way that reflects the orientation of each island's main settlement in the first half of the twentieth century (Solenberger 1953, Borja et al. 2006).

A second dimension indicates the west-east direction of the prevailing monsoons, again obviously important to sailing peoples. Table 5.21 in *AL* illustrates such terms for, again, fifteen AN languages. Blust notes that in several cases, directionals indicating the direction of monsoons have evolved into directionals indicating the cardinal points. This yields an interesting observation about the cardinal points in Malagasy. In several of the languages in table 5.21, the 'west monsoon' term is derived from PAN **SabaRat*—for example, Malay *barat* 'west, west wind'. In contrast, Malay 'east, east wind' is *timur*. Comparable terms exist in Malagasy, but with a ninety degree clockwise rotation: Malagasy *avaratra* 'north' is cognate with Malay *barat* 'west', and Malagasy *atsimo* 'south' is cognate with Malay *timur* 'east'. There has been independent Arabic influence in Malagasy, so we assume that the initial *a-* in the names of the cardinal points is a remnant of the Arabic article. It is tempting to speculate that the ninety degree rotation in directionals was due to a perceived change in direction of the prevailing wind. But we know of no evidence that the winds blow in any consistent direction in Madagascar, nor are there monsoons there, and despite some outrigger boats in the south, the Malagasy are not a maritime people.

A last point: Blust notes that in many AN languages periphrastic (as opposed to affixal) expressions of the future invoke words meaning 'back, behind', as in Malay *dikamudi-an hari* 'at a future time', where *kamudi* means 'rudder' and *kamudi-an* 'position behind or after'. The idea that time comes up to you from behind in the Malagasy countryside is developed in some length in Ø. Dahl 1999. In support of this notion, Ø. Dahl cites the standard New Year's greeting *Arahaba! Tratry ny taona (ianao)* 'Congratulations! (You) have been caught by the year'.

Ch. 6, on morphology (eighty-one pages), covers a dozen morphological properties of AN languages. We focus below on the property discussed in greatest detail and characteristic of AN languages more generally, namely reduplication.

AL's table 6.4 summarizes the reconstruction of particles and various types of affixes for PAN and PMP. Prefixes are the most frequent type of affix, as expected for languages that are verb-initial or verb-medial. But the suffixes reconstructed for Proto-Oceanic outnumber prefixes twenty-three to fourteen. Also reconstructed for PAN and PMP are four infixes and some circumfixes. A significant portion of this chapter concerns the expression of particular affixes in extant daughter languages.

Once again, Blust's historical perspective serves to heighten our awareness of certain features of Malagasy morphology. One is a kind of passive or intransitivizing prefix, *tafa-*, which indicates that the action was spontaneous or unexpected but also completed. I might say *Tafiditro ny omby* 'The cow was made to enter by me' to mean I got the cow (into the pen), but it might be better translated as 'I managed to get the cow in'. Equally, if I am startled by a noise in the next room, I might say *Tafatsangana aho* 'I stood up', indicating that I jumped up without having intended to beforehand. Blust reconstructs **ta/taR-* with the meaning 'sudden, unexpected, or accidental action'.

Two other affixes of note are the infixes *-um-* and *-in-*, used very productively in Philippine languages and in Chamorro. Blust mentions *-um-* (written *om*) in Malagasy, but to our knowledge speakers of Malagasy are not consciously aware of *om* as an affix. We know of only one pair of words that differ primarily by presence versus absence of *om*, namely *hehy* 'laugh (n.)' versus *mihomehy* 'laughs (v.)'. The active-voice markers

in Malagasy are, instead, the prefixes *maN-*, *mi-*, and (stative) *ma-*. Note, though, that one early grammar (Cousins 1894) does list *om* as productive.

In contrast, *-in-*, which is quite productive in WMP, shows up with some productivity in Malagasy, where it functions as a high-register passive marker, usually with a completive meaning (as in earlier stages of AN). Thus, the usual patient passive derived from the root *vaky* ‘broken (stative)’ is *vakina* (nonstative), formed with the suffix *-ina*. But in formal speech, one occasionally hears *v<in>aky*, which is formed with the infix. These forms are not common in everyday speech, yet fairly many verbs admit them. It is enlightening to see that this usage is motivated historically. It ties Malagasy to WMP in something like the way the Saxon genitive (in e.g. *John’s mother*) ties English to its Germanic sisters rather than its Romance cousins. We note that it is not possible in official Malagasy to use double infixes such as *-om-in-* or *-in-om-*, as happens in some Philippine languages (392) and Chamorro. (In Chamorro, *t-um-in-inihung* ‘is wearing a hat’ is the singular/dual ‘active’ progressive of *tinihung* ‘wear a hat’, from *tuhung* ‘hat’.) But Rajaona (1977:69) finds a few cases of double infixes in the Betsileo dialect of Malagasy, spoken just south of Merina.

More generally, Ch. 6 reconstructs many of the affixes that characterize the rich voice systems of Philippine-type languages. These extend from Malagasy through the Philippines and Northern Borneo, including Dusanic languages such as Kimaragang Dusun, with seven morphologically distinct voices in Sabah (Kroeger 1988). Chamorro, while a WMP language, has assigned different syntactic functions to many of the voice affixes it inherited from PAN and so no longer has a Philippine-type voice system (Chung 1998:37–43). To round out this picture, *Tukang Besi* (Donohue 2004), the most south-eastern of the WMP languages, has lost all trace of Philippine-type voice morphology, but does preserve an active-passive distinction in the interaction of argument marking on the verb and various syntactic processes (quantifier float, etc.).

We turn now to reduplication, a prominent expressive resource throughout AN that is often widely used. Blust begins by illustrating three types of reduplication from Thao (Formosan), all of which involve suffixing a reduplicant to the base (407). (Blust represents the reduplicant in bold and marks morpheme boundaries with a hyphen.) In full reduplication, the reduplicant is identical to the entire base, except that the base drops a word-final consonant, for example, *fi.lhaq* ‘saliva’ : *ma.-fi.lha.-**fi.lhaq*** ‘will spit repeatedly’. In suffixal foot reduplication, the reduplicant consists of a foot, for example, *i.-su.huy* ‘there’ : *pi-su.hu.-**huy*** ‘be put there repeatedly’. Finally, in suffixal CCV(C) reduplication, the reduplicant consists of a syllable preceded by the coda consonant of the preceding syllable, for example, *m.-ar.faz* ‘to fly’ : *m.-ar.far.-**r.faz*** ‘keep flying around’. Blust accounts for this latter, unusual type of ‘prosodic chimera’ by deriving it historically from **m-arafa-rəfaz* via schwa deletion (412). This third type of reduplication also occurs in Central Amis and Southern Paiwan (Formosan), as well as in Sye (Vanuatu), for example, *om.ti* ‘break’ : *om.ti-**m.ti*** ‘dilapidated’.

Blust notes a kind of dual to this type of reduplication in which the reduplicant is a syllable plus the onset of the next syllable. A particularly difficult variant of this is infixal reduplication in the Philippine language Agta, where the reduplicant consists of a syllable nucleus plus the onset of the next syllable. The vowel of the reduplicant is lowered, for example, *u.muk* ‘nest’ : *ma.g-u.m<o.m>uk* ‘wrap up against the wind’.

Not all reduplication in AN is so exotic. Blust cites several languages with simple CV reduplication. CV reduplication in Tagalog indicates future tense: for example, *bi-bili* ‘will buy’ from the root *bili* ‘buy’. Other interpretations of CV reduplication in other AN languages include durative, progressive, or perseverative aspect, plurality, collec-

tivity, or intensity. In Chamorro, for instance, reduplication of the CV that bears primary stress indicates progressive aspect: for example, *háhanao* ‘be going’ from *hánao* ‘go’; *tutútuahun* ‘be beginning’ from *tutúhun* ‘begin’; *dádangkulu* ‘still big’ from *dángkulu* ‘big’. But reduplication of an unstressed CV that follows the main stress indicates intensity, for example, *dángkululu* ‘very big’ from *dángkulu* ‘big’; *ñálang* ‘very hungry’ from *ñalang* ‘hungry’. The reduplication can be iterated to indicate even greater intensity, for example, *dángkulululu* ‘very very big’ (Topping 1973:215–16).

Fixed-segment reduplication also occurs in AN, for example, *Ca-* reduplication, where the *a* is fixed and only the C is copied from the base: for example, Puyuma *kadan* ‘whet’: *ka-kadan* ‘whetstone’.

Blust discusses many variations on the size of the reduplicant: full reduplication minus the coda, full reduplication minus the last vowel, and so forth. He also notes interesting interactions with affixation. Thus, in Tagalog and Malay, full reduplication of the base plus prefixation of a verbal prefix yields a weakening or imperfectivizing reading, such as *l<um>akad* ‘walk’: *mag-lakad-lakad* ‘walk a little’. We may add that this is the most frequent use of reduplication in Malagasy, as in *maro* ‘many’: *maromaro* ‘fairly many’; *manoratra* (*maN+soratra*) ‘writes’: *manoratsoratra* (*maN+soratsoratra*) ‘writes a bit’; *mitsangana* ‘stands up’: *mitsangantsangana* ‘strolls’.

Blust also points out cases of AN reduplication that are challenging for the thesis that reduplication conforms to the emergence of the unmarked (McCarthy & Prince 1994). In some cases, the reduplicant is a prosodic category more marked than the corresponding category of base; in others, the reduplicant is not a prosodic unit. In Chamorro, for instance, CV reduplication doubles the nucleus and the onset, but not the coda, of the targeted syllable (see the examples above). One difficult case is provided by West Tarangan, where sometimes the reduplicant is just a single consonant. For bases with initial stress, the reduplicant is a syllable, for example, *ke*: *keke* ‘wood’. But for bases with noninitial stress, if the syllable preceding the stressed syllable is open, then the reduplicant—which is prefixed to the stressed syllable—consists of a consonant identical to the post-tonic consonant of the base, as in *tapuran*: *tarpuran* ‘middle’.

Blust points out that even simple full reduplication in Thao may pose some issues for the emergence of the unmarked. In the first example above from Thao, the reduplicant exceeds the size of the base. A similar pattern is widespread in Malagasy: for example, *tahotra* ‘fear’ reduplicates to *tahotahotra*, *tapaka* ‘broken’ to *tapatapaka*. The general pattern is that a weak syllable (*-na*, *-ka*, *-tra*) drops from the right edge of the base, though the noncontinuant feature of its onset is inherited by the initial consonant of the reduplicant. This triggers the alternation between continuants and noncontinuants seen in the following (primary stress indicated by underlining): *lavitra* ‘far’: *lavidavitra* ‘somewhat far’; *velona* ‘alive’: *velombelona*; *fantatra* ‘known’: *fantapantatra*; *zavatra* ‘thing’: *zavajavatra* (*j = /dz/*); *sitrana* ‘cured’: *sitrantsitrana*; *resaka* ‘chat’: *resadresaka*; *hetsika* ‘agitation’: *hetsiketsika*. That the reduplicant copies the material from the stressed syllable to the right edge of the base is seen in, for example, *lehibe* ‘big’: *lehibebe*; *latabatra* ‘table’: *latabatabatra* ‘table (derogatory)’. So in cases in which an initial continuant mutates to the corresponding noncontinuant, as in *lavidavitra*, both the reduplicant and the surface form of the base differ from the base’s underlying form.

Blust notes a somewhat surprising case of verbal affixation interacting with full reduplication in Malay (409). Given the base *ganti* ‘substitute’, for example, the verbal prefix *bər-* can attach to either the base or the reduplicant: *bərganti-ganti* or *ganti-bərganti* both mean ‘to alternate with each other’. With other roots, the two forms may have somewhat different meanings. One wonders if the difference in form might reflect different or-

ders of application of reduplication and verbal prefixing. We frequently find such cases in Malagasy with the active prefix *maN-*. For example, from the root *tao* ‘do’ we reduplicate to *taotao* and prefix the passive *a-*, yielding *ataotao* ‘is done (by)’. But in the active we form *manao*, with nasal substitution eliminating the consonant, and reduplicate to *manaonao*. The reduplication process is the same in both cases: the reduplicant copies material from the main stressed syllable to the right edge of the base and then combines on the right with the base using normal sandhi rules. What differs is the order in which affixation and reduplication have applied: $\text{Pass}(\text{Dup}(\text{tao})) = \text{Pass}(\text{taotao}) = \text{ataotao}$, while $\text{Dup}(\text{maN}(\text{tao})) = \text{Dup}(\text{manao}) = \text{manaonao}$.

Here we have caught historical change in the act. The N of the *maN-* prefix often triggers nasal substitution or consonant mutation, making the initial consonant of the root hard to retrieve. For several verbs we hear both forms: for example, *vono* ‘hit, kill’ leads to both *mamonovono*, which is *maN*(*Dup*(*vono*)), and *mamonomono*, which is *Dup*(*maN*(*vono*)). Similarly, an alternant of *manoratoratra* ‘writes a bit’ is *manoranoratra*. Some roots require reduplication to apply after *maN-* prefixation: for example, *leha* ‘go’ : *mandeha* ‘goes’ : *mandehandeha* ‘goes a bit’, but not **mandehaleha*. Similarly, *la* ‘refusal’ : *manda* ‘refuses’ : *mandanda* ‘refuses a bit’, but not **mandala*. Other roots allow, or strongly prefer, reduplication to precede *maN-* prefixation: for example, *vangy* ‘visit’ : *mamangy* ‘visits’ : *mamangivangy* ‘visits a bit’, but not **mamangimangy*. Similarly, *velona* ‘alive’ leads to *mamelombelona*, but not **mamelomelona*. In several cases here, the reduplicant begins with (what, in our terms, is) a prenasalized consonant.

The case of voiceless NC in reduplication presents us with another contrast between the complex-segment analysis and the consonant-cluster analysis. Several vowel-initial roots ending in weak *-na* admit of two reduplications: for example, *adana* ‘slowness’ : *adanadana* or *adankadana*; *idina* ‘descend’ : *idinidina* or *idinkidina*. The first form is expected by the standard sandhi rules. On the (synchronic) complex-segment analysis, the second form is derived by replacing *n* with the prenasalized stop ^h*k*, so one nasal replaces another. On the cluster analysis, a *k* has been inserted into the middle of a syllable, namely the syllable *ni* in *i.di.ni.di.na*, and *na* in *a.da.na.da.na*. We submit that the replacement analysis using ^hC is more faithful than the insertion analysis.

Ch. 7, on syntax (seventy-six pages), gives a survey of some distinctively AN constructions and their realizations in representative AN languages. Much of the discussion is supplemented by the in-depth discussion of the relevant morphology in Ch. 6. The survey begins with some well-known topics that have been highly controversial: so-called Philippine-type voice systems, including the question of whether verb forms in these systems were exclusively nominal in PAN; case marking and its reconstruction in PAN; and accusativity versus ergativity in Polynesian languages and Philippine languages. The treatment of these topics is balanced, judicious, and focused primarily on morphosyntactic realization. For instance, after reconstructing a partial voice paradigm for PAN **kaen* ‘to eat’ (with reconstructed simple example sentences), Blust observes that a number of languages, including Malagasy and Chamorro, have voice systems that ‘derive from structures very similar to this reconstruction’ and ‘can be taken to illustrate what is meant by “Philippine-type” language’ (440). Morphologically and historically, this is unquestionably correct. We note that as far as (synchronic) syntax is concerned, the Malagasy voice system and the Chamorro voice system differ considerably from one another. The Malagasy voice system has been analyzed as involving multiple passives (Keenan 1976) or else agreement in case with an obligatory topic (Pearson 2005). The Chamorro voice system, by contrast, does not involve multiple passives, but does include a passive and an antipassive. Over and above this, Chamorro has agreement in

case in WH-constructions (WH-agreement), but not in simple clauses (Chung 1998). The brief discussion of the voice system of Malay, which ‘has reduced the original four-voice system to an active/passive contrast reflecting PMP **maŋ-* (AF), and **-in-* (> *ni-* > *di-*)’ (452), does not mention the so-called second passive, referred to as *pasifsemu* in Indonesian studies. This could well be because the second passive is characterized by the ABSENCE of voice morphology; see, for example, Cole et al. 2006.

Other topics dealt with in this chapter include word order, negation, responses to polar questions, possessive constructions, imperatives, and the vexed question of parts of speech. The discussion of word order is particularly extensive. Among other things, it carefully documents the geographical distribution of verb-initial, verb-medial, and verb-final languages, noting that the verb-initial languages are confined to two blocks, and that 80% of all AN languages are verb-medial (468). (The observation is perhaps surprising, given that many of the most intensively studied AN languages are verb-initial.) The discussion of negation ranges over some tantalizing constructions in various AN languages, including bipartite negatives, negative verbs, and negative personal pronouns. Polynesianists will miss a reference to Maori, which has negative verbs and uses a different negative verb for clauses with nominal predicates than for clauses with verbal predicates (see Bauer 1997).

Chs. 8 and 9, which deal with reconstruction and sound change, are in many ways the most impressive chapters of all. Blust’s mastery of these domains is unequaled—he is THE leading Austronesian comparative historical linguist—and the perspective he brings to the various achievements in the comparative study of AN is illuminating. Anyone who, like the second author of this review, has struggled to teach Dempwolff’s reconstruction of PAN phonology and to understand what, exactly, Dyen’s laryngeal theory was all about will be informed and enlightened by Blust’s detailed analysis of the history of PAN scholarship in section 8.1 and his thoughtful assessment of PAN phonology in section 8.2. Overall, Ch. 8 makes a significant contribution not just to Austronesian studies but also to the understanding of reconstruction and language change in general. The chapter concludes with a discussion of lexical reconstruction in PAN and some of its subfamilies. Fittingly, the focus is on the *Austronesian comparative dictionary*, coauthored by Blust and Stephen Trussel (2010–), Blust’s other magnum opus besides *AL*. Ch. 9, on sound change, focuses on sound changes that recur within the AN family, whether ‘normal’ (e.g. lenition, assimilation) or ‘bizarre’ (e.g. **t* > *k*). There is much here that will be of interest to typologists and historical linguists, including—but not limited to—the discussions of lenition, ‘erosion from the right’, metathesis, and gemination.

Finally, Ch. 10 (sixty-five pages) surveys the classification of the AN languages, its major subgroups, and the attempts that have been made to relate AN to other language families. Ch. 11 (sixteen pages) gives a brief overview of the research infrastructure for the study of AN languages, including conferences, publications, and bibliographies.

Although *AL* is remarkably complete and comprehensive in its coverage, it inevitably is not exhaustive. We draw attention to two limitations that are pointed out by Blust in the Preface.

First, *AL*—which is intended for the general linguist—‘pays relatively little attention to the burgeoning formalist literature’ on AN languages (xvii), particularly in generative syntax. While this is not an unreasonable strategy, one unintended consequence is that some works are passed over that not only contribute to syntactic theory but also advance the descriptive understanding of topics surveyed in *AL*. For instance, *AL*’s treatment of the loss of the PAN voice system would be enriched by discussion of Cole and

Hermon's research on this topic in varieties of Malay/Indonesian (e.g. Cole, Hermon, & Tjung 2006, Cole, Hermon, & Yanti 2008, and McKinnon, Cole, & Hermon 2011). An important contribution to the debate over whether the Proto-Polynesian case system was accusative or ergative is Ball 2007. Equally important is Aldridge's work on the ergative analysis of Philippine languages (e.g. Aldridge 2004, 2006, 2012). The vexed question of whether AN languages have the familiar array of lexical categories, dealt with in *AL*'s section 7.6, is addressed by Kaufman (2009) in a target article to which numerous theoretical linguists responded. We note here that *AL* does discuss and evaluate works in generative phonology and morphology that deal with AN languages (including McCarthy & Prince 1990, Spaelti 1997, Blevins 2004). Expanding the coverage to more works on the formal syntax (and semantics) of AN would further strengthen what is already an admirable survey.

Second, with the exception of the representations of the velar nasal, the palatal nasal, glottal stop, and schwa, forms cited in *AL* are usually cited in 'the orthography of the sources' (xxiii). For many languages, the orthography of the sources is phonemic, so this method of citation poses no problems. But for some languages there is an issue. The Chamorro forms in *AL*, from Topping 1969, 1973, and Topping et al. 1975, are in a Bloomfieldian morphophonemic orthography that represents nonlow vowels as mid if they could conceivably be pronounced as mid in any inflectional form of the word. This is responsible for much of the complexity of the 'fairly complex set of conditions for automatic vowel lowering in Chamorro' (263–64) described in section 4.3.2.8.

These observations in no way detract from the overall achievement of *AL*. Throughout, this work is comprehensive, authoritative, and consistently high quality—a massive, truly impressive work that is a gift to Austronesianists and general linguists alike.

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