Typical Features of Austronesian Languages in Central/Eastern Indonesia

Marian Klamer
LEIDEN UNIVERSITY

This paper presents a list of typical properties of the languages of Central/Eastern (C/E) Indonesia, covering roughly the geographical area between Lombok and Papua. It focuses on those characteristics that set apart the C/E Indonesian languages from the Austronesian languages toward the West. A synthesis of recently published data on C/E Indonesian languages, the present paper provides an updated typological window on an area that is relatively under-represented in Austronesian research. It is argued that a typological characterization of a linguistic area like this can be used as a heuristic tool in comparative research. Because the area under consideration is geographically defined, the data do not have any direct bearing on issues of genetic subgrouping. Nevertheless, because all but one of the features listed here are those of Austronesian languages, they may be used to formulate hypotheses about the higher-order genetic affiliation of a language whose affiliation to a particular family (e.g., whether Austronesian or not) is yet uncertain. This is especially relevant for C/E Indonesia as a contact zone of languages with different (or unknown) genetic affiliations. How the list of typological features may be used to formulate specific hypotheses about contact-induced linguistic change is illustrated.

1. INTRODUCTION. This paper presents an initial typological characterization of the languages of the Central/Eastern (C/E) Indonesian region, roughly covering the geographical area east of Lombok and west of Papua.

The core sample of languages referred to in this paper are the Austronesian languages Muna (Sulawesi, Van den Berg 1989), Tukang Besi (Sulawesi, Donohue 1999), Bima (Owens 2000), Kéo (Flores, Baird 2002), Kambera (Sumba, Klamer 2001). This paper was written as part of Pieter Muysken’s Spinoza research programme “Lexicon and Syntax: Areal studies in Eastern Indonesia.” I wish to thank John Bowden, Maarten Kossman, Ger Reesink, Miriam van Staden, Hein Steinhauer, Cecilia Odé, and Lourens de Vries for stimulating discussions on various issues addressed in this paper. In addition, I am indebted to the following colleagues for inspiring discussions on Eastern Indonesian languages at the East Nusantara Workshops in Canberra (July 2000) and Leiden (June 2001): Louise Baird, Aone van Engelenhoven, Margaret Florey, Chuck Grimes, Catharina van Klinken, and Melanie Owens. An earlier version of this paper was presented at the 9th International Conference of Austronesian Linguistics at the Australian National University, Canberra, January 2002.

Oceanic Linguistics, Volume 41, no. 2 (December 2002)
© by University of Hawai’i Press. All rights reserved.
oceanic linguistics, vol. 41, no. 2

1998a), Buru (Moluccas, Grimes 1991), Alune (Moluccas, Florey 2001), Leti (Moluccas, East of Timor, Van Engelenhoven 1995), Teun, Nila, and Serua (Moluccas, NE of Timor, Van Engelenhoven, to appear), Fehan Tetun (Timor, Van Klinken 1999), Taba (Halmahera, Bowden 2001), and Biak (N of the Bird’s Head, Steinhauer, to appear). The locations where these languages are spoken are indicated on the map in figure 1.

There are several ways in which an overview such as this may be useful for Austronesian linguistic research. First, because it is a synthesis of data on C/E Indonesian languages that have become available in the past decade, it presents an updated typological window on C/E Indonesian languages.

Second, existing typological characterizations of Austronesian incorporate either the characteristics of Western Austronesian and Oceanic languages (e.g., Clark 1990, Tryon 1995), or of the Austronesian languages in Papua and Papua New Guinea (e.g., Voorhoeve 1994, Ross 1996, Foley 1998). The typical characteristics of C/E Indonesian languages do not feature in these overviews. The list of features presented here may be used to fill this gap in our typological picture of Austronesian languages.

Third, a typological overview of a linguistic area can be used as a heuristic tool in comparative research. Traditionally, most of the comparative research in Austronesian linguistics has a diachronic orientation: it aims at the establishment of genetic

![FIGURE 1. LOCATION OF CORE SAMPLE OF LANGUAGES DISCUSSED IN THIS PAPER](image-url)
relations between languages, and the reconstruction of protoforms. This paper, however, takes a synchronic approach to comparative research by making typological and areal comparisons. In this context, it is important to point out that synchronic and diachronic comparison are mutually dependent rather than competitive approaches. For example, although genetic relationships are established by the classical comparative method, it is also well known that “the comparative method is not a heuristic: ... when applied to vocabulary, it does not demonstrate relatedness, but simply assumes relatedness and proceeds to describe the relationships between the daughter languages” (Nichols 1996:40, emphasis mine). The classical comparative method, then, is a means to demonstrate an already existing hypothesis of genetic relationship through cognate paradigms of grammatical morphemes and sets of cognate lexical items (cf. Thomason and Kaufman 1988:201–202, Ross 1996). In other words, before the comparative method can be applied to unknown or unclassified languages, we must have a way to come to an “assumption” or “hypothesis” about the genetic affiliation of the languages under consideration. Such hypotheses may be based, among other things, on shared typological features, especially if those features are characteristic of a particular language family in a particular area. The present paper proposes a list of such characteristics for Austronesian languages in C/E Indonesia. In addition, the heuristic instrument of typological characterization is useful in situations where the comparative method cannot be applied adequately. Two major types of such situations have been identified in the literature: (i) if in a circumscribed geographical area there is a group of languages with only patchily distributed innovations, and differences in rule ordering, it will be next to impossible to reconstruct a shared ancestor language for that group; (ii) in areas where speakers of languages have been in contact for extensive periods, the similarities between languages do not necessarily point to a common ancestor but may be the effects of language contact. Both of these problems for the comparative method are in fact encountered in C/E Indonesia. The genetic classification of the members of the subgroup of Central Malayo-Polynesian (CMP) languages is generally considered to be problematic, because the innovations do not occur throughout the proposed group (Blust 1993, Ross 1995). It is assumed that the patchy distribution of innovations is due to the fact that the CMP languages are descendants of a chain of distinct dialects. In addition, there is linguistic and historical evidence that quite a few languages of Eastern Indonesia have influenced each other in contact situations, resulting in diffused shared features. In Halmahera, for example, Tidore has a mainly Non-Austronesian lexicon, and is therefore classified as such, but it has an “impressive” number of Austronesian grammatical features as well (Van Staden 2000:24), suggesting that diffusion takes place across genetic boundaries as well as within them. And in East Timor, speakers of the Non-Austronesian language Bunak have been surrounded by speakers of Austronesian languages (including culturally dominant languages like Tetun and Malay) for many centuries, so that it is only logical to find diffused Austronesian features in its lexicon and grammar. The Bird’s Head in NW Papua is another area where the limitations of the comparative method have become clear. The languages in this area have fairly similar grammatical structures but wildly different vocabularies. Because
of this latter fact, adequate cognate sets cannot be constructed, and applying the comparative method is virtually impossible (see also Voorhoeve 1987a,b, Foley 1998, Reesink 1996, 1998, to appear). In addition, for the Austronesian languages of Papua New Guinea it is reported that metatypy and language shift both interfere with a language’s correspondence with its genetic kin (Ross 1996).

In sum, in order to be able to adequately characterize languages in contact areas, we need additional heuristic instruments, alongside the basic cognate sets and cognate paradigms used for genetic classification and reconstruction. One such instrument is a list of typical features of the languages in a certain family in a certain area, and this paper presents such a list for the Austronesian languages in C/E Indonesia. Because the sample is geographically defined, the data do not have any direct bearing on issues of genetic subgrouping in this area, though they might be used to formulate hypotheses on the higher-order genetic affiliation of an unknown language, especially if it is spoken in a zone where languages of different genetic affiliations are presently in contact, or where historical evidence suggests contact situations existed in the past. The list of features presented here may also be used to qualify in some detail the type of structural mixes found in individual languages.

This paper is structured as follows. In section 1 I list a number of important typological distinctions between the Austronesian languages in C/E Indonesia and those towards the west. In particular, aspects of their phonology, lexicon (lexical structure, lexical classes, and idioms), morphology, and syntax will be discussed. In section 2, I discuss one areal feature in Eastern Indonesia that appears to have a Non-Austronesian origin. In section 3, I summarize the findings. In section 4, I use the list of typological features to formulate specific hypotheses on contact-induced language change.

2. TYPOLOGICAL DIFFERENCES BETWEEN AN LANGUAGES IN CENTRAL/EASTERN AND WEST INDONESIA. In this section, I discuss some typical characteristics that may be used to characterize the C/E Indonesian languages, and contrast them to the languages spoken towards the West. I focus on their phonology, lexicon (lexical structure, classes, idioms), morphology, and syntax.2

In most cases, the typological characteristics mentioned in this paper are generalizations of observed tendencies, and are phrased as relative rather than categorical statements. There is no reason to expect typological characteristics to show clear and/or uniform patterns across the linguistic area under study. On the contrary, for every characteristic discussed, we expect exceptions or counterexamples, many of which are mentioned as such in the appropriate sections. Yet, this does not affect the overall argument that there are indeed salient patterns to observe: they may not be black and white, but looking at different shades of grey can be interesting, too.

In quantitative terms, the features discussed in this paper are found in the majority—that is, more than half—of the languages that I looked at, unless more specific distributional statements are given. I have shied away from giving very specific figures because the research is based on a subset of Central/Eastern Indonesian lan-

---

2. Klamer (2002b) presents a number of general Austronesian typological features that may be considered as the background for C/E Indonesian Austronesian features discussed here.
languages that may not be representative for the entire area, as the many dozens of undescribed languages in the area have not been considered. However, the present sample is the optimal one (given our current knowledge of the area), in that it includes at least one language from every major geographic area of Central/Eastern Indonesia, including Sulawesi; the lesser Sunda islands Flores, Bima, and Sumba; Timor; the Moluccas; and Halmahera.

2.1. PHONOLOGY. In general, the phonology of C/E Indonesian languages follows Austronesian patterns. Three features may, however, be considered as typically occurring in the AN languages in C/E Indonesia, especially if we find them in combination with each other.

2.1.1 The presence of prenasalized and/or implosive consonants. Prenasalized segments occur in Sulawesi (Muna, Tukang Besi, Uma, Wolio), in Flores (Manggarai, Sika), in Roti (also referred to as Rotinese), and on Sumba (Kambera). They do not occur in Taba, Buru, Tetun, or Leti. Implosive stops occur in parts of Central Sulawesi (Blust 1993:253), one in Muna, two in Tukang Besi. Full sets of implosives can be found in Komodo, Bima, Manggarai, Kéo, and Kambera.

2.1.2 Roots are generally CVCV. Whereas AN languages towards the west have more complex root forms with consonant clusters and closed syllables, the languages in C/E Indonesia generally favor a more simple disyllabic CVCV root form. There are four phonotactic characteristics that are clearly correlated with this preference for CVCV roots.

2.1.2.1 A dispreference for homorganic, phonological CC clusters. Muna, Tukang Besi, Buru, and Kambera disallow CC clusters completely. Other languages may have CC clusters, but they should be considered a dispreferred pattern: such clusters are either nonhomorganic, or the words containing them are derived or constitute a tiny minority in the lexicon. For example, phonetic CC clusters appear in Leti, but there they are clearly the result of productive processes of metathesis and/or fusion (Van der Hulst and Klamer 1996). In Fehan Tetun, consonant clusters are the result of the “deletion” of an intermediate vowel, as illustrated in (1). In Taba, consonant clusters are generally multi-morphemic; as shown in (2).

(1) Tetun (Van Klinken 1999:24–25)

/balár/ > [blár] ‘astonished’
/sakili/ > [skili] ‘tickle’

(2) Taba (Bowden 2001:38)

N=han
3sg=go
‘She is going’

Because the generalization is that languages in the region prefer CVCV roots to more complex forms, we expect there to be languages with words containing monomorphemic consonant clusters; while it is also predicted that such words will constitute a minority in the lexicon of that language. Taba is an example of this: apart from
multimorphemic consonant clusters, it also has monomorphemic words with geminates or consonant clusters—and these clusters are neither synchronically nor diachronically derived (Hajek and Bowden 1999, Bowden 2001). However, the monomorphemic words with geminates/consonant clusters constitute “only a tiny minority” in the Taba lexicon (John Bowden, pers. comm.).

2.1.2.2 A dispreference for closed syllables (especially at end of root). The preference for simple CVCV roots also implies a preference for open syllables. Examples are Muna, Tukang Besi, Konjo, Wolio, Ngada, Manggarai, Roti, Sawai, Gorontalo, Leti, and Buru. The notion “preference” again refers to a majority pattern. In fact, a fair number of languages do have root-final consonants, including Kambera and Fehan Tetun. It is significant, however, that such root-final consonants are always a small subset of the total set of consonants of a language. For example, in Kambera, out of a total set of 19 consonants, only 6 (k, l, r, ng, h, t) can occur at the end of a word; in Fehan Tetun, from the total set of 13 consonants, only five (t, k, s, r, n) can occur at the end of a word. In other words, if they allow consonants to appear root-finally, languages have more restrictions on how this position may be filled than on consonant positions elsewhere in the word.

2.1.2.3 “Paragogic” vowel addition. Languages with root-final codas may still prefer a CV syllable to a CVC syllable. Such languages may use a “repair” strategy to create phonetically open syllables by inserting a “default” vowel after a coda. Inserting a paragogic vowel is such a repair strategy. The idea is thus that if a language has paragogic vowel insertion, it also has root-final consonants. An example is Kambera, where a default [u] is inserted after a root-final consonant: /u-nung/ > [u-nu-ngu] ‘drink’. Paragogic vowel addition occurs in the Sulawesi languages discussed in Sneddon (1993), and also in Muna, Konjo, and Wolio. On the other hand, because many C/E Indonesian languages lack root-final consonants, they do not employ the repair strategy of paragogic vowel insertion either, which may explain the limited distribution of this phenomenon in the area.

2.1.2.4 “Dropping” of root-final consonant. Dropping a final consonant is another repair strategy for languages with root-final codas to arrive at a structure with open syllables. Sneddon (1993) presents examples from Sulawesi languages. Diachronically, this process applied to native words in many Austronesian languages (Clark 1990, Tryon 1995), and we witness its synchronic application to loan words all over the region, for example in Tukang Besi kenta from Malay kentang ‘potato’) (Donohue 1999:38).

2.1.3 Metathesis. Metathesis occurs in the Southwest of the Moluccas and in Central and West Timor: Leti, Dawanese (Steinhauer 1996), Dobel, Buru, Teta, Niila, and Serua. An example from Leti (Van Engelenhoven 1995) is given in (3).

(3) Leti metathesis

\[
\begin{array}{c|c|c}
\text{FORM AT END OF PHONOLOGICAL PHRASE} & \text{PHRASE-MEDIAL FORM} \\
penta & \sim penat \quad \text{‘grass’} \\
ru:ni & \sim ruin \quad \text{‘dugong’}
\end{array}
\]
Traces of metathesis are found in Manggarai (Verheijen 1941). Metathesis seems predominantly an areal pattern of SW Maluku and W/C Timor; it is a feature that may be considered typical for this particular subarea within Eastern Indonesia—not for the area of C/E Indonesia as a whole. It does not occur in Muna, Tukang Besi, Tabo, Keo, Bima, Kambera, or Tetun.

2.2. LEXICON. The following three properties may be typical for the lexicon of C/E Indonesian languages, in contrast to those towards the west.

2.2.1 Emotion predicates are collocations of verbs and body-part nouns.

Some of the Eastern languages employ a special strategy to express emotional concepts: they derive intransitive emotion verbs (*be sad, be happy, be angry*; cf. Klamer 2001) by collocations of verb and body part nouns (cf. Klamer 2001). The Experiencer of the emotion is expressed as the possessor of the body part. The following examples from Fehan Tetun, Kambera, and Buru illustrate this.

(4) Tetun

\[
\text{Oan ne’e n-alo ha’u nawan mohu liu.} \\
\text{child this 3s-make 1s breath finished further}
\]

‘This child makes me furious.’ (lit. This child makes my breath finished)

(5) Kambera

\[
\text{Mbaha-nanya-ka na eti-na na maramba.} \\
\text{be.wet-3s.subj-perf art liver-3s.poss art king}
\]

‘The king is pleased.’ (lit. The king’s liver is wet)

(6) Buru

\[
\text{Da lale-n dofo.} \\
\text{3s inside-3s.poss be.straight}
\]

‘S/he is just.’ (lit. Her/his inside is straight)

Similar constructions also occur in other Timor languages, and in Bima, but not in Tabo. It is also reported to occur in Papuan languages, although these languages not only combine verbs and nouns, but also adjectives with nouns (Reesink, to appear:27). It does not, however, occur in Papuan Tidore, spoken in Halmahera. Malay/Indonesian is an example of a Western AN language that patterns similarly, because it employs similar collocations of verbs/adjectives and nouns to express emotion predicates. Sasak (Musgrave 1999), on the other hand, is more representative for the strategies used towards the west.

2.2.2 Numerals act like verbs. In some C/E languages, numerals function as the head of a clausal predicate, or numerals can be inflected like verbs (Tryon 1995). Examples are Kambera, Dobel, Tetun, and Tukang Besi. In Kambera, the argument of a numeral predicate can be expressed as a subject (with a nominative proclitic), an object (accusative enclitic), or a possessor (genitive enclitic), each of which conveys a different meaning (Klamer 1998:163, 410):
370 OCEANIC LINGUISTICS, VOL. 41, NO. 2

(7) Kambera
a. Da-dua kambulu pitu-a.
   3p.subj-two ten seven-mod
   ‘They (are) only twenty seven (people).’

b. Dua kambulu pitu-a-ha.
   two ten seven-mod-3p.obj
   ‘They are (a group of) only twenty seven (people).’

c. Dua kambulu pitu-a-da.
   two ten seven-only-gen
   ‘(There are) only twenty seven of them.’ (e.g., books)

Muna and Taba, on the other hand, do not have numerals acting like verbs.

2.2.3 Parallelism. Many languages in Eastern Indonesia employ the verbal art form of parallelism in narratives, sayings, poems, and songs. Parallelism is a structurally defined verbal art form that functions as a stylistic device in the ritual language that is used for religious performances, prayer, oration, poetry, and song. We find parallelism mainly in eastern Indonesia, and in particular on the islands of Roti, Sumba, Timor, the Moluccas, and Taba. Languages with parallelism include Roti, Kodi, Weyewa, Anakalang, Kambera, Leti, Kisar, Wetan, Tetun, Taba, Nage, Ata Tana ‘Ai, Sika, Alune, and Buru. Parallelism also occurs in scattered places elsewhere in Western and Eastern Austronesian languages, such as Malagasy, Manobo, Hawaiian, Dayak, Batak, Bugis, and Bare’e. An overview and further references are given in Grimes et al. (1997), and Fox (1977, 1988, to appear). In parallelism, semantically synonymic words or phrases are combined in (minimally two) parallel utterances. An example is the Roti mortuary chant in (8) in which each parallel element is marked (a1/a2), (b1/b2), etc. In this example, the verbs soku/ifa, ‘to carry/lift and sao/tu, ‘to marry/wed’ form dyadic sets (see Fox, to appear):

(8) Roti
Soku-la (a1) Pinga (b1) Pasa (c1)
carry name name
‘They carry Pinga Sasa
Ma ifa-la (a2) So’e (b2) Leli (c2)
lift name name
(and) they lift So’e Leli
De ana sao (d1) Kolik (e1) Faenama (f1)
marry name name
she marries Kolik Faenama
Ma tu (d2) Buna (e2) Tunulama (f2).
wed name name
(and) weds Buna Tunulama.’

Though parallelism is a property of oral literature, it is not purely stylistic: the pairings are obligatory; there is generally no stylistic optionality involved in the choice of a proper pair. This implies the existence of a mental lexicon with pairs of synonymic words/phrases (that often share grammatical and phonological properties
as well) that speakers must learn. For example, a speaker of Fehan Tetun must simply learn that the following words are proper pairs: akitou ‘dove’ and kowaua ‘crow’ (no other bird), taha ‘knife’ and balium ‘axe’ (no other instrument), lolo ‘stretch out’ and bi’i ‘stand on tiptoe’ (no other bodily position) (Van Klinken 2000).

2.3. MORPHOLOGY. There are four morphological characteristics that can be used to contrast the C/E Indonesian languages with those towards the west.

2.3.1 No productive voice (“focus”) system on verbs, no case on NPs. Most strikingly, the verbal voice or focus system that is so typical for the Western AN languages (e.g., the much-debated Tagalog focus system, or the Malay/Indonesian active-passive distinction) is no longer productive in the C/E Indonesian morphosyntax. If there is some voice morphology, it is fossilized, but in most cases it is absent altogether. Neither are full NPs marked for case. These observations apply to Taba, Muna, Alune, Leti, Tetun/Fehan Tetun, Kéo, and Kambera. Tukang Besi has some rudimentary case marking on NPs and some voice morphology.

2.3.2 Agent/subject indexed on the verb as prefix/proclitic, object as suffix/enclitic. Compared to the languages towards the West, many C/E Indonesian languages are “pronominal argument” languages, in the sense that morphemes attached to the verb/predicate may express the verbal argument(s), while the coreferent NPs are optional. The latter implies that NPs can be (and often are) omitted, for example when they are clear from the discourse context. Examples (9)–(12) illustrate some aspects of how the subject is marked in Alune, where it is common (though not obligatory) to mark third-person singular subjects with proclitics, and objects with enclitics. The coreferent NP may or may not be present, depending on various factors, both grammatical and pragmatic, that cannot be discussed here in detail. The example in (9) illustrates that a subject clitic (=) can cooccur with its coreferent NP, while in (10), the first clause has only a subject NP (no clitic), while the second clause has only a clitic (no NP). In Alune, the cliticization of nonthird person subjects is not very common, but it is possible. Example (11) illustrates a first person singular subject proclitic (and a third person singular object enclitic), while the subject in (12) is expressed with a full pronoun.

(9) Ap3a-le e=betau.
   pig-NM 3s.nh=get.up
   The pig got up. (Florey 2001, ex. 36)

(10) ... Uli leu ’ai ami-lua mo ne’a. I=’ai ...
   Uli return.home with 1pe-two neg dm. 3s=marry
   ...Uli didn’t return with us two. She married ... (Florey 2001, ex.3)

(11) A=due-le=i wete-le.
   2s sit/stay=3s child-NM
   You look after the child. (Florey 2001, ex. 5)

3. Papuan NPs, on the other hand, are typically inflected for case (Foley 1998).
4. Abbreviations: dm, discourse marker; nh, nonhuman; nm, noun class marker; pe, plural exclusive.
(12) Ami dulu.
_1p.excl. _descend

We disembarked. (Florey 2001, ex. 31)

Agent/subject morphemes that attach to the verb or predicate (phrase) occur in the Moluccas, Lamaholot (E Flores), Atoni (W Timor) (cf. Blust 1993:258), in Fehan Tetun, in the languages of Sumba, in Tabla (Halmahera), and in Bima (Owens 2000:8). Kéo (Flores), as an almost completely isolating language, also lacks subject morphemes. If a language has subject morphemes, they often show formal relations with *ku, *mu, *na, *ta, *ma, *ni, *da (Blust 1993). However, as the Alune subject proclitic paradigm in (13) illustrates, the relation may be rather obscure synchronically.

(13) Alune subject proclitics (Florey 2001:table 3)

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>u-</td>
<td></td>
<td>i-/ma-</td>
</tr>
<tr>
<td>2s</td>
<td>a-</td>
<td></td>
<td>mi-</td>
</tr>
<tr>
<td>3s.HUMAN</td>
<td>(e)i-</td>
<td>3p</td>
<td>u-</td>
</tr>
<tr>
<td>3s.NONHUMAN</td>
<td>e-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Objects are often not indexed, but if they are, they are suffixed/encliticized.6

2.3.3 Possessor suffix/enclitic. Contrary to what is often believed to be true for languages of E Indonesia (see, for example, the discussion in Grimes 1991:290, note 12), this area has no ‘normal pattern’ where the Possessor precedes the Possessee. In fact, the Questionnaires on Possession of the Third East Nusantara Conference (2001) show that the position of the Possessor noun/NP is quite variable across the languages of this area. Even within a single language, the position of the Possessor NP may be variable (e.g., in Fehan Tetun, Van Klinken 1999:151–152), and in Biak (Steinhauer, to appear). Instead of referring to the position of the possessor noun/NP, it is therefore more appropriate to formulate a generalization about the position of the affix/clitic marking the possessor: if a language has a possessor morpheme, it is generally a suffix/enclitic, not a prefix/proclitic. Examples are Leti, Kéo, Kambera, Tetun, the local vernaculars of East Timor: Baikenu, Kemak, Galoli, Atauru, Lakalei, Lolein, and Idate (Hull 2001: 117–118), and Biak. Taba had possessor suffixes at an earlier stage (Bowden 2001). Rather strikingly, the AN languages Teun, Nila, and Serua have possessor prefixes (Taber 1993, Van Engelenhoven, to appear). In this respect, they pattern like NAn languages such as Tidore (Van Staden 2000) in Halmahera, and Hatam, Sougb, Meyah (Reesink 1998), and Maybrat (Dol 1999), all languages of the Bird’s Head.

2.3.4 Morphological distinction alienable and inalienable nouns. Blust (1993:258) mentions the morphologically marked distinction between alienable and inalienable nouns as one of the two main morphosyntactic innovations of the CMP.

---

5. Pronominal paradigms of various Sumbanese languages, and illustrations of their use are given in Onvlee 1985, while the Kambera pronominal reference system is described and analyzed in Klamer 1997, 1998a, 1998b.

6. In contrast, Papuan languages often have object prefixes (Foley 1998).
South Halmahera/West New Guinea, and Oceanic languages. Kaitetu (Seram) and Selaru (Tanimbar Archipelago) maintain the distinction, as illustrated for Kaitetu in (14). Kaitetu distinguishes the possession of alienable and inalienable nouns by using a pronominal form that either precedes or follows the possessed noun:

(14) Kaitetu alienable/inalienable possession (Collins 1983:28)

<table>
<thead>
<tr>
<th></th>
<th>ALIENABLE: 'house'</th>
<th>INALIENABLE: 'eye'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1s</td>
<td>au luma</td>
<td>au matau</td>
</tr>
<tr>
<td>2s</td>
<td>alem luma</td>
<td>ale matam</td>
</tr>
<tr>
<td>3s</td>
<td>iniŋ luma</td>
<td>ini matŋ</td>
</tr>
<tr>
<td>1p.excl</td>
<td>ami ma luma</td>
<td>ami matama</td>
</tr>
<tr>
<td>1p.incl</td>
<td>ite ka luma</td>
<td>ite matala</td>
</tr>
<tr>
<td>2p</td>
<td>imi mi luma</td>
<td>imi matami</td>
</tr>
<tr>
<td>3p</td>
<td>sini si luma</td>
<td>sini matasi</td>
</tr>
</tbody>
</table>

Some of the languages of East Timor maintain a similar distinction: Waimaha, Lakalei, Isní, Lolein, and Kemak are reported as such by Hull (2001: 123–125). Leti shows traces of the distinction, just like Teun, Nila, and Serua (Van Engelenhoven, to appear). And in Fehan Tetun, too, there are statistical tendencies for distinct possessive marking on alienable vs. inalienable nouns, though the distinction is clearly not categorical (Van Klinken 1999:145). Buru has distinct configurations for alienable/inalienable nouns, but one and the same noun can occur in both constructions (Grimes 1991:287). Taba has lost the distinction (Bowden 2001), and it is absent in Kéo, Bima, and Kambera, in the East Timor languages Galoli, Habu, Idaté, Mambari, Tukudede, and Baikenu (Hull 2001:123–125). In Sulawesi, Tukang Besi has an inalienable/plural marker (Donohue 1999:346), while Muna has no alienable/inalienable distinction.

In sum, the morphological marking of the alienable/inalienable noun distinction is indeed a typical property that distinguishes C/E Indonesian languages from those toward the West. However, it is not generally true that alienable/inalienable nouns form separate noun classes in the lexicon. Nor is its occurrence restricted to the AN languages in this area, because the alienable/inalienable distinction is also marked in various NAn languages, including Tidore in Halmahera (Van Staden 2000), and Hatam (Reesink 1999), Maybrat (Dol 1999), Sough, and Meyah in the Bird’s Head (Reesink, to appear). In addition, it also occurs in the An language Biak, north of the Bird’s Head. On the basis of this evidence, we may hypothesize that the morphological marking of the alienable/inalienable distinction is an areal feature of C/E Indonesia (excluding Flores, Bima, and Sumba) that crosses genetic boundaries. The area under consideration would stretch from SE Sulawesi (where Tukang Besi patterns with the languages of the East while Muna does not) to Halmahera and the Bird’s Head and Biak, would include the Moluccas, and would have its Southern border in East Timor.

---

7. Kaitetu (Seram, Collins 1983:23) and Selaru (Blust 1993:259 citing personal communication with Wyn Laidig) further distinguish alienable nouns into edible and generic nouns. In my sample, I have found no further evidence for such a distinction, so that Kaitetu and Selaru may be considered as not representative for Eastern Indonesia in this respect.
2.4 SYNTAX. The syntax of the An languages in C/E Indonesia generally follows the standard Austronesian head-initial pattern:

(15) \[
\text{XP} \\
\text{Head} \quad \text{Dependent/Modifier}
\]

The head-initial character of the Austronesian languages is evident in correlating phrase structures that are found in the majority of Austronesian languages, including those in C/E Indonesia (Clark 1990, Tryon 1995, Foley 1998, Klamer 2002b):³

(16) Phrase structures correlating with head-initiality:
- VO constituent order
- Prepositions, not postpositions
- Complementizers are clause-initial/preverbal/pre-predicate
- Negators are clause-initial/preverbal/pre-predicate
- Possessed nominal precedes possessor
- Articles precede nouns
- Nominal compounds are morphosyntactically left-headed

However, the C/E Indonesian languages have two syntactic characteristics that set them apart from the Austronesian languages toward the west. First, they have no passive construction, and second, they are generally verb-medial rather than verb-initial.

2.4.1 Absence of a passive construction. Here, I define a passive construction in traditional, descriptive terms as: a clause where a verb carries special morphology to mark the promotion of the verb’s underlying Patient/Theme argument to become the grammatical subject, while demoting its original Agent into an oblique phrase. Such passive constructions are entirely lacking in Leti, Roti, Fehan Tetun, Alune, Tabu, and Kambera. (See the questionnaires on Valency of the East Nusantara Workshop 2000, and Klamer 1996). Austronesian Biak has an agentless passive. Tukang Besi has “passive” prefixes, but these are not passives in the sense defined above, because there is no demoted Agent involved (Donohue 1999:278–281). This is probably also true for Muna, which has an agentless, accidental “passive” prefix ti-. More toward the west, however, we do find passives with a demoted, oblique Agent. Sasak, for example, has a “passive” prefix te-; and verbs with this affix allow their Agent to appear in an oblique phrase (Musgrave 1998:92).

2.4.2 Generally V-medial. In contrast to the verb-initial pattern of many Western Austronesian languages, the languages in C/E Indonesian are predominantly verb-medial. Examples include verb-medial Muna, Bima, Kéo, Kambera, Tetun, Leti, Tabu, Teun, Nila, Serua, and the An languages of East Timor. There are also verb-medial languages in the West, including Acehnese, Malay/Indonesian, Balinese, and Sasak. The generalization is that they constitute a minority, whereas, in C/E Indonesia, verb-medial languages are in the majority.

³ Papuan languages are generally head-final (i.e., verb-final, having postpositions, etc.).
3. A Non Areal Feature in Eastern Indonesia. In Austronesian languages, the negation typically appears before the verb/predicate. In C/E Indonesia, too, most languages have preverbal negators, including Tukang Besi, Muna, Fehan Tetun (Van Klinken 1999:228), Leti (Van Engelenhoven 1995:213), Kambera (Klamer 1998a:107–108, 142) and Bima (Owens 2000: 127–137).

In Papuan languages, on the other hand, negations are generally post-verbal/clause-final. Examples of Papuan languages with final negations include languages from the Trans–New Guinea and Sepik-Ramu phyla, and languages on the West Bird’s Head (Mpur, Maybrat, Hatam), the South Bird’s Head (Inanwatan), and Yape island in the Cenderawasih Bay (Yawa) (see the references in Reesink 2001). Papuan languages of North Halmahera also have final negation; examples include Galela, Tidore, and West Makian (also referred to as Moi).

At the same time, we also find Austronesian languages with clause-final negation, and they occur in particular in the Moluccas and Papua. In the Moluccas, An languages with final negation include Buru, Alune, Taba, Ma’ya (Van der Leeden 1982, and pers.comm.), and Kei (Moluccas, Geurtjens 1921:38). In Papua, they include languages spoken in the area of the Bird’s Head and the Cenderawasih Bay, such as Irarutu (S Bird’s Head, Matsumura 1990), Ambai (Silzer 1983), Waropen (Held 1942), Mor (Laycock 1978), and Biak (NE of the Bird’s Head, Van Hasselt 1905, Steinhauser, to appear). Example (17) illustrates a clause-final negator in An Buru (Moluccas), and (18) An Taba (Halmahera).

(17) Buru (Grimes 1991:232)
Sira hapu lafa-t la yako langina moo.
3PL tie food-NOM for 1SBEN earlier not
‘They didn’t tie up trail food for me earlier.’

(18) Taba (Bowden 1998:400)
Nik calana kuda-k asfal te.
1SG.POSS trousers be.black-APPL bitumen NEG
‘My trousers are not blackened with bitumen.’

In other words, this typical NAN feature occurs in a number of An languages in the Moluccas and Papua, and Reesink (2001) explains this distribution by arguing that the clause-final negation in these An languages is due to contact with Nan languages in Halmahera and Papua. There are two types of motivation for this argument: linguistic and historical. With respect to the linguistic evidence, Reesink (2001) points out that there is a sound correspondence ba ~ βa ~ (u)wa that links the negative markers bar and big in Nan Mansim and Hatam (Bird’s Head) with βi in An Biak, Mor, and Wandamen (elsewhere in Papua), and (u)wa in the Nan languages of North Halmahera. The Tidore negation ua is an example of such a form:

(19) Tidore (Van Staden 2000:232)
Mina mo-cako ngofa-ge ua.
3SG.FEM 3SG.FEM.ACT-hit child there NEG
‘She does not hit the child.’
Insofar as this sound correspondence is significant, it cross-cuts genetic boundaries in the same area where we know that AN and NAN speakers have been in contact for at least hundreds, and probably thousands, of years.

Contacts between AN and NAN speakers in the area date from approximately 6000 BP (Van Staden 2000:19, cf. Andaya 1993), when the Austronesian speakers entered the Moluccas, where NAN communities had (long) been established. In addition, North Halmahera, in particular Ternate and Tidore, were important political centers from 1600 AD onwards, so that the Moluccan world, which was already at that time perceived as a unified entity, was becoming increasingly dominated by NAN speaking communities in Ternate and Tidore. Much of that political dominance was due to the important economical position of Ternate and Tidore as centers of international clove trade for more than 2,000 years. In addition, in the entire area, slave trade was very common, which must have implied that many speakers of NAN languages were moved to AN speaking areas, and vice versa. Also, it was very common for Tidorese NAN-speakers in the seventeenth century to have headhunting and raiding expeditions to other islands. The traditional routes of these expeditions went southward to the Aru-Kei islands, Taninbar, the Seram Laut Islands, Seram, Buru, Ambon, as well as northward to the Sulas, Banggai, and north Sulawesi (Andaya 1993:192). About a century later, the political and commercial relations between the North Halmahera NAN speaking communities and the Moluccan islands towards the south, including Seram, Banda, and Kei, appear to have remained just as tight, because, during the last quarter of the eighteenth century, the famous Tidore ruler Nuku, who rebelled against the Dutch Company, had to escape from Dutch expeditions directed against him and traveled with a group of followers around the Moluccan archipelago for several years (Andaya 1993:219–232). The fact that this was possible for a Tidorese ruler, and considered safe, suggests that the Moluccan islands were indeed considered an entity, and that this entity was connected with Tidore and Ternate (see Andaya 1993 for extensive argumentation). Because Nuku is also reported to have traded Papuan slaves, sea cucumber, and tortoiseshell for gunpowder and ammunition from Banda, slave trade must still have been common practice at the time too.

In sum, historical records indicate long-term and extensive interactions between Austronesians and Non-Austronesians in Halmahera and the Moluccas, and the Bird’s Head area including Biak. In particular, the NAN-speaking communities of Ternate and Tidore were politically and economically dominant in the Moluccas for many centuries, which makes it plausible that some features of their NAN languages diffused into the AN languages of Buru, Seram, and Ambon. In addition, the displacement of many AN and NAN speakers traded as slaves throughout the archipel-

---

9. For example, it is reported that already around 1570, the ruler of Ternate was also obeyed in Buru and Ambon (Andaya 1993:132).

10. For example, in the eighteenth century we find references to old treaties that allowed Tidorese to buy slaves in the New Guinea area, in particular around what is now called Fak-Fak, on the Southern shores of the MacCluer Gulf and the Bird’s Head in Papua. The Papuan slaves bought by the Tidorese from people in Fak-Fak had been recruited from the interior of Papua, probably from the Inanwatan area across the Gulf (Valentyn 1724, cited in Van Staden 2000:8).
ago may also have contributed to the mixing of NAn/An features in languages of this area. In this light, it is reasonable to analyze the NAn feature of final negation in the An languages Buru and Taba as having a NAn origin.

However, the NAn feature of final negation is found in Halmahera, the Moluccas, and Papua, and not in the languages of Bima, Flores, and Sumba, nor in Sulawesi. Like the features parallelism and alienable/inalienable possessive marking, final negation is typical for a subset of languages in C/E Indonesia that are either geographically adjacent, or linked by a common history, or both.

4. SUMMARY OF THE TYPOLOGICAL FEATURES DISCUSSED. The following 13 features have been discussed. Feature 1.–7. are typical for the C/E Indonesian languages with respect to their Western relatives:

1. Prenasalized and implosive consonants
2. Roots that are generally CVCC, with the correlated features:
   - No homorganic, phonological CC clusters
   - Preference for open syllables, esp. at the end of a root
   - “Paragogic” vowel addition
   - “Dropping” of root-final consonant
3. Verbs for mental and emotional states: V + body part noun
4. Numerals act like verbs
5. No productive voice (focus) system on verbs, no case on NPs
6. Absence of a passive construction
7. Generally V-medial

Feature 8. and 9. are areal features of Eastern Indonesia that do not cross genetic boundaries:

8. Parallelism
9. Metathesis

Though parallelism is found scattered around the An world, and metathesis is also found in some Oceanic languages, the occurrence of these features in particular areas of E Indonesia is so dense that they can be considered as defining these areas. The areas partly overlap: parallelism occurs in Roti, Sumba, Timor, the Moluccas, and Taba, while metathesis occurs in the Southwest of the Moluccas and in Central and West Timor only.

Feature 10. and 11. are areal features that do cross genetic boundaries:

10. Morphological distinction between alienable and inalienable nouns
11. Clause-final negation (a Non-An feature)

Feature 10. is an Austronesian feature, feature 11. a Non-Austronesian (Papuan) one. Both are found in Halmahera, the Moluccas and the Bird's Head, in both Austronesian and Non-Austronesian languages, and as such they can be considered features occurring across genetic boundaries defining roughly the same linguistic area.11

11. For a discussion on how linguistic areas are/may be determined, see Campbell 1998, chap. 12.
Finally, features 12.–13. refer to so-called “constituent” orders that are found in C/E Indonesia:

12. Agent/subject indexed on the verb as prefix/proclitic
   Object indexed as suffix/enclitic
13. Possessor is suffix/enclitic

These features do not define any linguistic area in particular. However, what feature 12 intends to make explicit is that a word-order typology of C/E languages should not a priori take the position of the subject noun/NP as the relevant parameter, because it may just as well be the pronominal morpheme that expresses the verbal argument (the NP being an optional adjunct). If such is the case, the position of the pronominal clitic prefix is, of course, the proper parameter to consider in comparisons of subject positions.

In the discussion of feature 13., attention was again drawn to the fact that NPs and pronominal morphemes do not show the same pattern. Contrary to commonly expressed beliefs, there is no generalization to be made about the relative position of possessor nouns/NPs in C/E Indonesia, but rather about the position of the possessive pronominal, which is generally suffixed. Because suffix possessors are quite common in the An world, this observation is particularly important in the comparison of An and NAn languages, because the latter often have possessor prefixes.

5. HYPOTHESES ON CONTACT-INDUCED LINGUISTIC CHANGE.
Assuming that the generalizations on which the preceding typological outline of C/E Indonesia is based are more or less accurate, we may put them to use in the study of contact-induced language change. In this section, I illustrate this by using the typological features listed above to formulate some explicit hypotheses on language change that is caused by contact.

According to Thomason (2001:76), there are three linguistic predictors of contact-induced language change: (1) universal markedness, (2) the degree to which features are integrated into the linguistic system, and (3) the typological distance between the source language and the recipient language. I briefly review these predictors here.

First, Thomason makes a distinction between the type of linguistic interference caused by language shift (or imperfect language learning), and interference caused by borrowing. The predictor Universal Markedness is most important in shift-induced interference. It implies that the more marked a feature is, the less easily it is part of a language shift. For example, consider a situation where a group of Dutch-speaking immigrants shifts to a “Target Language” (TL) English. In such a case, there will be interference that is the result of imperfect learning, rather than borrowing. We then find that the more marked items in the TL are less likely to be learned by the shifting group, simply because they are harder to learn than unmarked features. Therefore, the marked items are less likely to appear in the TL₂ of the shifting group. At the same time, the marked features in the shifting group’s original language (Dutch) are introduced into their TL₂. But these features are less likely to be learned by original TL (English) speakers, and are thus not likely to appear in TL₃.
In borrowing, however, markedness plays a lesser role. For example, when the same Dutch immigrants use words and constructions from English when they speak Dutch, the question of learnability appears to be irrelevant: in principle, marked features are borrowed as easily as unmarked features.

The second linguistic predictor of contact-induced language change proposed by Thomason is the degree to which features are integrated into the linguistic system. Features that are deeply embedded in elaborate interlocking structures are less likely to be borrowed, and also less likely to be transferred from a shifting group’s L1 into their TL2. In practice, this seems to apply especially to the inflectional morphology, and it is the main reason why inflectional morphology tends to lag behind other parts of grammar in almost every case study of interference.

The third predictor is the typological distance between the source language and the recipient language. Typological distance influences the previous two predictors: even features that are highly marked or highly integrated are readily exchanged between languages that are typologically similar. The most obvious instance of this is in dialect borrowing, where borrowing is common even in the inflectional morphology.

Below, I divide the typical C/E Indonesian features into more and less marked features. If we define a “marked” feature as one that is “structurally complex” and/or “cross-linguistically less common” (both often go hand in hand), the features in (20) are relatively marked, while the features in (21) are relatively unmarked:

(20) More marked features:

**AUSTRONESEAN:**
- Prenasalized and implosive consonants
- Metathesis
- Numeral used as verb
- Parallelism

**NON-AUSTRONESEAN:**
- Clause-final negation

(21) Less marked/unmarked features:

**AUSTRONESEAN:**
- Roots are generally CVCV
  - No homorganic, phonological CC clusters
  - Preference for open syllables, esp. at the end of a root
  - “Dropping” of root-final consonant
  - Paragogic vowels
- V + body part N express mental and emotional states
- No voice (focus) system on verbs, no case marking on NPs
- Absence of a passive construction
- Generally V-medial
- Morphological distinction between alienable and inalienable nouns
- Agent/subject indexed on the verb as prefix/proclitic,
  - object as suffix/enclitic
- Possessor as suffix/enclitic

If we now combine Thomason’s (2001:76) “predictors” with typological features, we can formulate hypotheses about contact-induced changes in C/E Indonesia like

those given in (22), (23), and (24). Note that, before these hypotheses can be tested, the question must be addressed as to what causes the change in the languages under consideration. Are we looking at interference caused by imperfect language learning, that is, language shift, or is borrowing involved, or is the interference caused by something else? If we are looking at language shift, the markedness of a feature may determine whether or not it takes part in the shift:

(22) Hypotheses on Markedness
   a. The features in (20) are less likely to be learned by a shifting group and are therefore less likely to appear in TL₂ than the features in (21).
   b. The features in (20) are less likely to be learned by the original TL speakers, and are thus less likely to appear in TL₃.
   c. The features in (20) are as easily borrowed as the features in (21).

The degree to which a feature is integrated into the linguistic system is another predictor of contact-induced change:

(23) Hypotheses on Degree of Integration
   The following inflectional features are less likely to be borrowed and also less likely to be transferred from a shifting group’s L₁ into their TL₂:
   a. The morphological distinction alienable/inalienable nouns
   b. Agent/subject prefix/proclitic, object suffix/enclitic
   c. Possessor suffix/enclitic

And finally, it is important to consider the typological distance between the contact languages, and how this relates to their genetic relation:

(24) Hypotheses on Typological distance
   a. The typological distance between two adjacent languages that are genetically closely related is smaller than the typological distance between two adjacent languages that are genetically unrelated.
   b. Marked features like those in (20), or highly integrated features like those in (23) are readily exchanged between typologically similar source and recipient languages.
   c. Marked and integrated features are more readily exchanged between two languages that are geographically adjacent and genetically closely related, than between two adjacent genetically unrelated languages.

Note that the three linguistic predictors on which the hypotheses are based are strictly formal, and as such, they are of less importance in processes of contact-induced change than social, cultural, and historical factors. In other words, strictly linguistic hypotheses such as these can only be fruitfully tested in a context where there is also a good understanding of the social, cultural, and historical factors involved in the linguistic change. In such a context, they can be used to make explicit certain assumptions or intuitions about the type of interference we do and do not expect between geographically adjacent languages, and how this relates to their genetic affiliation.
REFERENCES


Florey, Margaret. 2001. Verb and valence in Alune. In Explorations in valency in Austronesian languages, ed. by Peter Austin, Barry Blake, and Margaret Florey. La Trobe Papers in Linguistics, Bundoon: La Trobe University Linguistics Program.


Questionnaires on valency and oral traditions in East Nusantara languages, discussed at the Second East Nusantara Conference in Canberra, 2000, downloadable from http://rspas.anu.edu.au/linguistics/Conferences/EastNusantara


———. 1998. The Bird’s Head as Sprachbund. In Perspectives on the Bird’s Head of Irian Jaya, Indonesia, ed. by J. Miedema, C. Ode, and Rien A. C. Dam, 603–642. Amsterdam: Rodopi

