

A linguist's perspective on the settlement history of Madagascar

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This paper combines evidence from historical linguistics and several other research disciplines in an endeavor to shed new light on the settlement of Madagascar by its current population some twelve centuries ago. It starts out making a clear chronological distinction between the time of the earliest contacts between East Africa and insular South East Asia, the time Madagascar was settled by Indonesians and Bantus, and the period of continued cultural and trade relations between Madagascar and Southeast Asia after this settlement. It touches on the history of human occupation in Madagascar and deals more in depth with the arrival of Indonesians and Bantus, including their identity and linguistic background. It also explores the position the Indonesian migrants might originally have taken in the demographic and socio-political landscape of their homeland in South Borneo. It discusses the various migration routes and the number of migration waves that have been postulated, trying, among others, to make sense of the seemingly contradictory evidence from historical linguistics and human genetics regarding the Asian roots of the current Malagasy. Finally, it points out some influence that Indonesian and Bantu languages may have had on one another.

1. Introduction¹

The human settlement of Madagascar has never failed to intrigue scholars of many different disciplines and is a topic full of mystery and controversial issues. Dahl's (1951) theory that the Malagasy language has its direct roots in South Borneo (see Map I) met initially with resistance from a range of scholars (including some linguists) and took some time to become accepted. One of the decisive factors in this acceptance – be it a somewhat belated one – was the human genetic evidence presented by Hurles et al. (2005). It showed, among others, that the Malagasy people shared significantly more DNA with the inhabitants of Borneo than with Austronesian speakers in other regions of Southeast Asia and Oceania.

In this paper I address some of the issues related to this topic that have recently been discussed in the literature. I am doing this from the perspective of a linguist, and my own research attempts to solve some of the problems involved are linguistic. However, this does not take away the fact that the research involved is essentially of a multidisciplinary nature.

The paper is organized as follows. In Section 2 I formulate several critical stages in the contact history between Island Southeast Asia (henceforth ISEA) and East Africa. In Section 3 I mention the evidence for the presence of a pre-Austronesian and pre-Bantu population in Madagascar. In Section 4 I try to demonstrate that the development of Malagasy as a separate speech form had already started in Borneo itself (hence prior to the migrations to East Africa), adducing linguistic evidence and pointing out some

¹ This is an updated version of a paper presented on the eighth of October 2015 at the Académie Malgache in Antananarivo.

potential socio-historical consequences. I argue for an indirect migration route (with a stop-over period in coastal East Africa) in Section 5. In Section 6 I address the various theories about multiple migration waves in the past, whether they involve separate arrivals of Austronesian-speaking and Bantu-speaking migrants or several consecutive waves of migrants from ISEA. In Section 7 I discuss the little we know about Bantu migrations: it seems to be clear, however, that Bantu-speakers did arrive at different stages and from several parts of Africa. In Section 8 I discuss the evidence for Austronesian influence on Sabaki languages, especially Swahili, and I end with some concluding remarks in Section 9.

In what follows I make use of a small number of conventions. Unless indicated otherwise, the term ‘Malagasy’ refers to the standard Malagasy variety which is based on the Merina dialect. My spelling of Malagasy lexicon largely follows the official spelling, except for final ‘y’ (written as *i*), ‘o’ (written as *u*), final ‘a’ (sometimes written as *ǎ*), and the indication of stress on polysyllabic words. However, I do not make any alterations to the spelling of Malagasy personal names. My reasons for these spelling changes are that both ‘i’ and ‘y’ stand for the same phoneme, the pronunciation of orthographic ‘o’ is closer to [u] than to [o], some final a’s are whispered vowels, and Malagasy stress is contrastive. I spell Ma’anyan, Malay and Javanese words according to their official spelling except for the mute ‘e’ which I write as *ə*, and the velar nasal, which I write as *ŋ*.

2. Several consecutive events can be distinguished in the history of contacts between East Africa and Southeast Asia



Map I. The Indian Ocean region

The settlement history of Madagascar used to be marred by contradictory dates. Dahl’s 5th century AD (fine-tuned to the late 7th century AD in Adelaar 1989) did not tally

with the presence of various edible plants and other importations from ISEA to Africa (see Map I), which often bear the signal of much earlier contacts. Whereas these introductions are very old and must have happened at least 23 centuries ago (Blench 2007 and later publications), linguistic and archaeological research on the settlement of Madagascar suggest a considerably more recent migration date. However, these seemingly contradictory dates can be reconciled if we envisage a protracted history of contacts and make a fundamental distinction between a period of initial contacts between East Africa and Southeast Asia and the time of the migration(s) of the Asian ancestors of the Malagasy to East Africa. In fact, for an effective study of the early history of Madagascar it is expedient to make a fundamental distinction between three historical events:

- a. The earliest contacts between East Africa and ISEA (at least 2300 BP)
- b. The migrations of Southeast Barito speakers from Borneo to East Africa (most probably 7th century CE) and the subsequent settlement of Madagascar (most probably 8th century CE)
- c. Continued cultural and trade contacts between East Africa and ISEA after the settlement of Madagascar (until the arrival of the Portuguese in the Indian Ocean in the 16th century CE)

3. Madagascar may already have had a human population before the arrival of speakers of a Southeast Barito language

Recent palaeozoogeographical research indicates that Madagascar was already inhabited by humans before the arrival of the mixed Austronesian-Bantu population mentioned above. Blench gives an overview of the evidence, which consists of “human-modified bones of extinct animals, the appearance of pollen of the introduced *Cannabis* *Humulus*, sudden increases in microscopic carbon particles above background values”, “increases in ruderal pollen”, the extinction of large animals most probably due to habitat destruction (fires) by humans, and the dramatic decrease of endemic animals correlating with a significant increase in rats and mice (Blench 2007). The notion of a previous population is also present in oral literature in Madagascar (although the evidence is somewhat contentious).

Burney et al. (2004:25) have carbon-dated the earliest human presence at ca. 2300 BP. Blench concludes from this date that the inhabitants in question cannot have been Bantu speakers, as the latter had not yet arrived in coastal East Africa at that time. He offers some hypotheses as to who these early inhabitants might have been, but it is fair to say that their ethnic affiliations are impossible to determine based on our current knowledge.

4. Malagasy had already become a distinct speech form before its speakers migrated to East Africa and became separated from Southeast Barito speakers in Borneo

Malagasy was probably not just an early form of Southeast Barito (henceforth SEB) that only began to diverge from all other SEB languages through contact with African languages after the migration(s) of its speakers to East Africa. There is much structural linguistic evidence to show that it had already started to run a separate course under the influence of Malay and Javanese, both prestige languages in Borneo and other parts of Indonesia already at the time of the migrations. It strongly suggests that Early Malagasy had already become a separate linguistic entity before its speakers moved away from South Borneo and crossed the Indian Ocean to settle eventually in Madagascar.

The arguments for this position are discussed in full in Adelaar (2017). What follows here is a somewhat shortened version of this discussion.

Consider the developments involving Proto-Malayo-Polynesian (PMP) **y*, the Malay loan-phoneme **s*, and the honorific prefix *ra-*.

4.1 Reflexes of PMP **y* in Malagasy and Ma'anyan

PMP had a consonant **y*, which must have been a velar fricative.² In SEB languages, this **y* became either **y* or \emptyset (that is, it was lost). In Ma'anyan the **y* reflex has remained *y*, and so it has in some forms of Malagasy (e.g. South Betsimisaraka), although in Merina and most other dialects of Malagasy it evolved further into *z*. Schematically, the changes look as follows:

PMP * <i>y</i>	>	Proto SEB * <i>y</i>	>	Ma'anyan <i>y</i> or <i>j</i> Ma'anyan \emptyset
		Proto SEB \emptyset	>	Malagasy <i>z</i> (<i>y</i> in some dialects) Malagasy \emptyset

This creates the impression that **y* developed in identical ways in both languages, but this is not entirely the case: while they both reflect historical **y* or \emptyset , they differ in the way these reflexes are distributed in their respective lexicons. In other words, while the type of change is the same, the tokens instantiating the change in question are not necessarily the same. Compare Table 1, showing some of the different reflexes of PMP **y* found in Malagasy and Ma'anyan:

Table 1. Ma'anyan and Malagasy reflexes of PMP **y* (in non-final position)

PMP	Gloss	Ma'anyan	Malagasy	(Malay	Javanese)
<i>*y</i> became <i>y</i> in Ma'anyan and <i>z</i> in Malagasy					
<i>*yatus</i>	'hundred'	<i>jatuh</i>	<i>zàtu</i>	<i>ratus</i> ,	<i>atos</i>
<i>*suyuq</i>	'to order'	<i>huyu</i>	---	<i>suruh</i>	<i>suruh</i> (< Malay)
<i>*təyas</i>	'quick, fast'	---	<i>tèza</i> 'firm, durable hardwood'	<i>təras</i> 'hardwood'	---
<i>*y</i> became \emptyset in Ma'anyan and <i>z</i> in Malagasy					
<i>*quyat</i>	'nerve, tendon'	<i>uat</i>	<i>ùzatră</i>	<i>urat</i>	<i>ot-ot</i> ('muscle')
<i>*bəyat</i>	'heavy'	<i>weat</i>	<i>vèzatră</i>	<i>brat</i>	<i>a-bot</i>
<i>*yabun</i> ?	'hazy, dim, vague'	<i>awun</i> 'barely audible (voice)'	<i>zàvună</i> 'fog' 'dim (vision)'	<i>rabun</i> 'fine rain, dew'	<i>awun-awun</i>

² It is usually represented as **R* in the comparative-linguistic literature.

*y became Ø in Ma'anyan and in Malagasy

* <i>baqəyuh</i>	'new; recently'	<i>wau</i>	<i>vàu</i>	<i>ba(ha)ru</i>	<i>wau</i>
		'recently'	'recently'	'now'	'recently'
* <i>suyut</i>	'to recede'	<i>uut</i>	<i>ùtră</i>	<i>surut</i>	(<i>surud</i> < Malay)
		'to drink'	'to massage'	'to recede'	
* <i>yasəŋ</i>	'to breathe'	<i>ahəŋ</i>	<i>àină</i>	---	---
		'spirit, thought'	'life; breath'		

*y became y in Ma'anyan and Ø Malagasy: no instances of such correspondence

In general, Malagasy maintained more reflexes of *y than Ma'anyan. The different ways in which these languages reflect *y and Ø are a strong indication that they had already become different dialects before Malagasy speakers left Borneo. The two reflexes are most likely the result of borrowing between different SEB dialects in an early stage of their divergence: apparently, some SEB varieties changed PMP *y to *y, and others lost *y altogether. Through continued contact among these varieties, and (possibly) motivated by sociolinguistic differences between them, some varieties ended up with two reflexes of *y. This apparently also happened in Ma'anyan and Malagasy. Since they have a different distributional outcome, and the outcome must be the result of language contact within the SEB area in Borneo, the most likely conclusion is that they had already become different dialects before the migration(s) to East Africa took place.

In Malagasy, the different distribution of z and Ø reflexes can hardly be explained by the presence of Malay or Javanese. Both the Malays and Javanese were involved in the foundation of a metropolis (Banjarmasin and its precursors) in South Borneo (Ras 1968) and had some crucial influence on the early Malagasy when they were still in Borneo. Both nations were also actively involved in maritime contacts with East Africa (see publications by Adelaar, Beaujard and Blench in the reference list). Their languages influenced Malagasy and Ma'anyan and kept doing so until even after the migrations (see below). However, in the above examples, borrowing from Malay is excluded because this language has a reflex r, which is very different from *y/z or Ø. Borrowing from Javanese is also impossible: although it does have Ø for *y, the overall structure of the corresponding Javanese words is rather different from the structure of its Malagasy and Ma'anyan counterparts, as it often involves syllable reduction, sound loss and/or vowel merger. Finally, the different distribution of *y and Ø reflexes can hardly be explained as post-migratory influence from Austronesian languages other than Malay or Javanese, given the unlikelihood of such influence to have reached Malagasy after the settlement of Madagascar.

4.2 Reflexes of borrowed *s in Malagasy and Ma'anyan

In the history of SEB languages, PMP *s became Proto SEB *h. It was maintained as h in Ma'anyan and possibly in the language of the Asian ancestors of the current Malagasy (henceforth Early Malagasy) but it was lost in modern Malagasy:

PMP *s > Proto SEB *h > Ma'anyan h
> (Early Malagasy *h? >) Malagasy Ø

In both languages, the loss of *s also affected early loanwords from Malay, but continued borrowing from these sources were the cause that s was eventually re-

introduced into the Ma'anyan and Malagasy phoneme systems. As a result, both Malagasy and Ma'anyan have "recent" Malay loanwords maintaining Malay *s*, and "earlier" Malay loanwords showing Ma'anyan *h*/Malagasy \emptyset for it. (Note that while relative age is the most obvious explanation for the fact that **s* became *h* in some cases and was maintained in others, other important explaining factors may be frequency of usage and level of adaptation).

However, although both languages share this overall pattern, they do not always maintain **s* in the same loanwords. Here again, although the types are the same (**s* became either *s* or *h* [\emptyset]), the tokens are not. Furthermore, Malagasy maintains **s* more often than Ma'anyan. Observe the list in Table 2 showing Malay loanwords with *s* that ended up in Malagasy and Ma'anyan; in the first two examples, both Malagasy and Ma'anyan maintain *s*; in the next six, only Malagasy maintains *s*; in the next two neither Malagasy nor Ma'anyan show *s*; in the last four, Ma'anyan shows *h*, and Malagasy has no corresponding forms:

Table 2. Malagasy and Ma'anyan reflexes of **s* in Malay loanwords

Malay	Malagasy	Ma'anyan
<i>S</i> :	<i>S</i> :	<i>S</i> :
<i>sədia</i> (< Sanskrit <i>sādhyā</i>) 'already; admittedly'	<i>satrìa</i> 'because'	<i>sadia</i> 'ready; already'
<i>sambaw</i> 'cargo ship'	<i>sàmbu</i> 'ship, large boat'	<i>sammaw</i> 'celestial ship'
<i>S</i> :	<i>S</i> :	<i>H</i> :
<i>sakay</i> (< Skt <i>sakhāy-</i> , accusative form: <i>sakhāyam</i>) 'subject'	<i>sakaiza</i> 'companion'	<i>hake</i> 'stranger; Muslim'
<i>gasiŋ</i> 'spinning top'	<i>hàsinā</i> 'spinning top'	<i>kahiŋ</i> 'spinning top'
<i>salah</i> 'wrong'	<i>salasàla</i> 'undetermined'	<i>hala</i> 'wrong'
<i>sisā</i> (< Sanskrit <i>śeṣa</i>) 'remains'	<i>sisā</i> 'remains'	
<i>k-asih</i> 'love'	<i>àsì</i> 'veneration'	<i>ahi</i> 'compassion'
<i>sakit</i> 'sick; troubled'	<i>sahir-ànā</i> 'worried, in trouble'	<i>hakit</i> 'difficult'
<i>S</i> :	\emptyset :	<i>H</i> :
<i>suŋay</i> 'river'	<i>ùni</i> 'river'	<i>huŋey</i> 'river'
<i>sampay</i> 'until; (originally 'to hang')	<i>àmpi</i> 'enough'	<i>hampe</i> 'until'
<i>S</i> :	---	<i>H</i> :
<i>sayañ</i> 'sad; pity'		<i>hayañ</i> 'sad; pity'
<i>sədikit</i> 'a bit'		<i>hadikit</i> 'rattan remains'
<i>soal</i> (< Arabic <i>su'āl</i>) 'problem, issue'		<i>hual</i> 'problem, issue'
<i>mahesa</i> (< Sanskrit <i>mahiṣa</i>) 'buffalo'		<i>eha</i> 'animal'

These instances reflecting **s* form a pattern that is reminiscent of the distributional pattern of PMP **ɣ* reflexes in Ma'anyan and Malagasy (3.1). It suggests that the borrowing of these instances constituted separate events in both languages. In theory, of course, this outcome could also be the result of continued influence from Malay on Malagasy after its speakers had left Borneo and migrated to East Africa. We know that there was continued contact between Indonesia and Madagascar after the settlement of

Madagascar (Adelaar 1989, 1995; Beaujard 2012). But this line of reasoning would be rather contrived. Notwithstanding some limited continued contact with Malay (and possibly Javanese) outside ISEA, in general the Malagasy language developed in almost splendid isolation from other Austronesian languages. On the other hand, Ma'anyan has remained in contact with Malay and Javanese ever since the early Malagasy left Borneo. Yet, the instances of Malay loanwords having maintained *s are much more numerous in Malagasy than in Ma'anyan.

4.3 The presence of the person marker *ra-* in Malagasy, and its absence in Ma'anyan

In the history of Malagasy there are two person markers, *ra-* and **i*.

The prefix *ra-* occurs with kinship terms, some dialectal personal pronouns, some common nouns with a human reference, and (very frequently) names. It adds a notion of respect to some of the resulting derivations. The occurrence of *ra-* in kinship terms is shown in examples such as:

rahavàvy 'sister (of a woman)'

(< **ra-* + SEB **aka* 'older sibling', PMP **aka* 'older sibling' + SEB **wawey* 'woman' < PMP **babehi* 'woman')

ravinàntu (Comorian Malagasy) 'child-in-law'

(< **ra-* + SEB **winantu* 'child-in-law' < PMP **b-in-antu* 'child-in-law')

rài 'father' (< **ra-* + Malay *ayah* 'father')

rèni 'mother' (< **ra-* + SEB **ine* 'mother' < PMP **ina* 'mother')

This *ra-* is also prefixed to personal pronouns in regional Malagasy forms, as in

Tandroy Malagasy *rahu* (< *ra-* + **ahu*) '1st person sg.',
 rehe (< *ra-* + **iha*) '2nd person sg.',
 re (< *ra-* + **iye*) '3rd person sg., and in

South Sakalava *rie, ri* (< *ra-* + **iye*) '3rd person sg.' and
 rahai (< *ra-* + **ahai*) '1st person plural exclusive'.

It is found in common nouns with a human reference, e.g.

rafùtsi 'term of address for an old lady' (< **ra-* + *fùtsi* 'white', in reference to the colour of the old lady's hair)

rànunã 'what's-his-name' (< **ra-* + *ànuna* 'thing, whatchamallit')

North Malagasy *ramatùà* 'Madam, Mrs.' (< **ra-* + *matùà* 'eldest child')

Finally, it is found in personal names, e.g. *Ranavalona* and *Radama* (names of Malagasy royalties in the nineteenth century) and *Razafintsalama*, *Rajaona* (names of Malagasy linguists).

The prefix *ra-* is an innovation. It does have corresponding forms in western Indonesian languages such as Javanese and Balinese (*ra-*), Malay and Batak (fossilized *da-*) and, on first sight, even Fijian (*ra-*), but these are in all likelihood the result of borrowing or (in the case of Fijian) an independent development. In ISEA, *ra-* and *da-* only occur in languages spoken in the western part of Indonesia and Malaysia, and in the SEB group, Malagasy is the only member in which this prefix has a regular presence. It has partly replaced **si*, an older and inherited PMP

personal prefix which is still reflected in Ma'anyan *hi* and Malagasy *i-*, *iz-* or *z-*. The latter are retentions occurring in forms like

Ma'anyan	<i>hi la'atu</i> 'Mr/Ms so-and-so' <i>hi Ramanis</i> 'Sweety (name of a young woman in a tale)' <i>hie</i> 'who?' (< * <i>hi-ie</i> ' < PMP * <i>si</i> + * <i>ia</i> '3rd person singular')
Malagasy	<i>Iboto (ibùtu)</i> , <i>Ibonia (ibunia)</i> (personal names) <i>Imerina (Imèrinā)</i> 'Merina country' <i>iànunā</i> 'Ms/Mr so-and-so' <i>isika</i> 'we, us (including you)' <i>izahàì</i> 'we, us (without you)' <i>izàhu</i> 'I' <i>zàfi</i> 'grandchild, descendant' <i>zànakā</i> 'offspring' <i>zàndri</i> 'youngest sibling'

In some Malagasy forms *ra-* and *i-/z-/iz-* are combined, but note that here, *ra-* is prefixed to *i-/z-/iz-*, another indication that the former is more recent than the latter, e.g. *razàndri* 'my youngest sister or brother' (respectful term, which derives from *ra-* + SEB **hi* + SEB **andri* 'younger sibling').

Malagasy *ra-* appears to be a loan morpheme from Javanese (Adelaar 1995b, 2010). It occurs in all Malagasy dialects, although it seems to occur more often within eastern and Central Malagasy dialects than in the western and southern ones. Given that it is represented in all Malagasy dialects, it must already have been part of Early Malagasy, and since the Javanese language and culture played a hegemonic role in the early history of South Kalimantan, and only a minor role in the history of Madagascar, the borrowing of *ra-* from Javanese into Early Malagasy is much more likely to have happened in South Borneo than in Madagascar.

4.4 Malagasy as a separate speech form in Borneo: the historical context

As indicated above, if Malagasy was already a distinct speech form before the migrations, chances are that its speakers were in a relatively equal relationship with Malays; in contrast, if it was not yet distinct, subordination of its speakers to the Malays is more likely, all things being equal. Having a distinct speech form would suggest that they already formed their own community and had taken some distance from their traditional society, which implies a certain amount of acculturation to Malay society. If the relationship was relatively equal in terms of social hierarchy and stratification (and not, say, one of slave versus slave owner), one would understand why there are so many Malay, Javanese and Sanskrit elements in Malagasy, which include not only words, but also the Javanese honorific prefix *ra-*. One would also be able to put into perspective the fact that the 7th-century Old Malay inscriptions from South Sumatra and Bangka Island include a few lines in an unknown language that seems to represent a form of SEB, if not early Malagasy (Aichele 1936; Dahl 1951:158; Adelaar 1989:35-36).

The identity, role and status of the ancestors of the early Malagasy migrants before they left South Borneo remains uncertain. Nevertheless, rather than war captives or forced labour they may have been a section of the SEB speakers who cooperated with local Malays and began to acculturate to them in a similar way as the Orang Asli (*Bidadari*) people once did in the Malay peninsula. Some Orang Asli groups were economically and politically in a symbiotic relationship with the local Malays. They were loyal to the ruler of Malacca, contributing to the welfare and safety of his kingdom up to the 18th

century (Andaya and Andaya 2001:44-49, 81, 87). The Malays in Malacca were most likely also assimilating Orang Asli into their community. A similar symbiotic relationship between Malays and some of the early Malagasy people in South Borneo would explain the participation of the latter in the maritime expeditions of the former, and the likelihood that the few lines in an unknown language occurring in the oldest Malay inscriptions represent early Malagasy.

Historically, most cities along the coasts of Borneo were founded by nuclear Malay-speaking migrant groups which consequently absorbed and assimilated a constant influx of natives from the Bornean hinterland. This resulted in metropole populations which are ethnically, linguistically and culturally Malay but share much of their DNA with the native population outside the metropole.

In this context it is worth noting that recent genetic research conducted by Brucato et al. (2016), which includes Madagascar and South Borneo, shows that the Malagasy have much autosomal DNA in common with the people living in the city of Banjarmasin, more so than with the Ma'anyan, who live up-country. It is conceivable that at a certain stage in history a SEB speaking ethnic group became associated with the nearby Malay metropole-to-be (nowadays Banjarmasin). It would have come under the linguistic and cultural influence of this metropole and begun to develop a separate identity. During this process, some of its members would have joined the maritime adventures of the Malays and ended up in East Africa and Madagascar, whereas others continued to be assimilated to the metropolitan population. Such a course of events would explain the high level of autosomal DNA shared by the Malagasy and the citizens of Banjarmasin.

5. A settlement of Madagascar from East Africa rather than directly from South East Asia

There are several theories about the way SEB speakers and Bantu speakers may originally have reached the island. For instance, Dahl (1951) implicitly assumed that SEB speakers had directly come from South Borneo to Madagascar, which was already settled by Bantus speaking a form of "Old Comorian". Murdock (1959) and Deschamps (1960) concluded that the SEB speakers in question first traveled to East Africa, where they subsequently mixed with local Bantus before the ethnically mixed community thus formed finally crossed over to Madagascar. Deschamps also believed that East Asians arrived in two major waves. The second wave would have consisted of the Zafiraminia (see below), which he believed to be Malay speakers who brought typical Hindu Malay and Hindu Javanese cultural elements to Madagascar's east coast and beyond. Simon (1988, 2006) proposed a settlement of Madagascar by SEB speakers from the Comoros rather than from the African mainland. In a somewhat similar vein, Beaujard (2012:565) assumes that SEB speakers sailed directly from ISEA to the Comoros and North Madagascar, although they might also have been in contact with Bantu speakers before their arrival in Madagascar. Adelaar (2007) and Blench (2007) agree with Murdock's "Out-of-Africa" scenario. Blench finds evidence for a settlement of Madagascar from the East African continent in, among others, the nature of musical instruments and the names of plants and animals on the island. While there are perfectly good Austronesian terms for domestical animals and cattle, and the chicken originally spread from mainland South East Asia over the rest of the world, Malagasy has Bantu terms for these animals. It also has Bantu loanwords for essential products such as banana and taro (*Colocasia esculentum*), although these plants originally hail from New Guinea and East Asia respectively. Adelaar reaches his conclusion based on the linguistic and human genetic homogeneity in Madagascar. Although there is a considerable dialect

variety, speakers from most parts of the island are able to communicate with one another. Lexical differences aside, all dialects by and large share the same basic grammar, including in those areas of the grammar where Bantu influence made itself felt the most (e.g. the tense system, use of the diminutive nominalizing prefix *ki-*, semantic categories in the deictic system etc.). There is also a shared Bantu influence in the lexicon of all dialects, although it became blurred by the subsequent large Bantu influence on the lexicon of some specific dialects (especially in the northern and western regions). Human genetically, the tests made by Hurles et al. and later research teams of geneticists show that Malagasy people in general share Southeast Asian as well as East African genes in both their Y-chromosome and mitochondrial DNA. In other words, most Malagasy share African and Southeast Asian ancestry along both their male and female ancestors. At least from a historical perspective, both the language is reasonably uniform and the original spread of genes is more or less the same everywhere on the island. This seems to be caused by a bottleneck situation, in which ethnic and linguistic mixing happened outside Madagascar and resulted in a single new group before its members migrated to Madagascar. This is not to deny that there have not been more recent arrivals of Africans, or to claim that the current Malagasy phenotypes are the same as those at the time the island became occupied by SEB speakers. What it does mean is that when they first set foot in Madagascar, the SEB-speaking migrants had already integrated Africans among them.

Here, one could also make the economical observation that migrating to East Africa made much more sense than settling on Madagascar, because coastal East Africa with its large supplies of slaves, gold and other trade commodities had economically much more to offer for outsiders than the isle of Madagascar.

Only recently a group of archaeologists (Crowther et al. 2016) discovered that the rice, mung beans and cotton found in Madagascar and the Comoros have a common source. These crops turn out have been introduced from Southeast Asia rather than from South Asia or the Middle East, and this must have happened from the 8th century AD at the earliest. They are part of an agricultural zone which is different from the one predominating in East Africa, although it marginally includes some Swahili islands (such as Pemba) along the East African coast. This discovery may seem to contradict the idea that the first SEB speaking group to arrive in Madagascar had already integrated original Bantu speakers. But it can possibly also be reconciled with it, given that some Swahili islands are included in the agricultural zone in question, and these islands have played a major role in the emergence of Swahili civilization (Middleton 1992). It can also be reconciled with a migration via the Comoros.

6. Was there more than one migration wave from ISEA to East Africa?

6.1 The Null-Duff syndrom

The idea of several migrations from ISEA in several waves and from opposite directions has been in the minds of Malgachisants for many decades. It is probably inspired by the fact that some areas of Madagascar (especially the west coast) have a “darker” and more African population, whereas in other regions (such as the central highlands) the people tend to have more East Asian features. It is no doubt also inspired by local history. However, the matter is a complicated one, and what you see (and hear) is not always what you get. Skin colour and Negroid or Mongoloid features are phenotypical distinctions, and they are not necessarily indicative for one’s genetic make-up, let alone for the ultimate origins of one’s society. This is also clearly the case in Madagascar, where human genetic research has demonstrated that the entire indigenous Malagasy

population shares African as well as Austronesian genes via both the maternal and paternal line. Linguistically, the dialects of Malagasy are also relatively homogeneous. At any rate, they are not divergent enough to warrant speculations of being the historical outcome of the encounter of groups speaking languages as different as SEB and Bantu on the island of Madagascar in the last millennium and a half. In other words, it is not so evident that Africans and Southeast Asians came to Madagascar in separate migrations. The different phenotypes of the Malagasy can also be explained by other factors. One is of course the relatively large influx, after Madagascar's initial settlement, of African slaves in northern and western parts of the island. A less obvious but nonetheless very important factor may be the effects of malaria, a disease which claims more victims in warm and humid coastal areas than in dry and cool highlands. Sub-Saharan Africans are more resistant to malaria than Asians and Caucasians on account of the fact that some 70% of them pertain to a blood group phenotype in which the Duffy antigens are not expressed (these antigens serve as receptors to which the malaria parasite can bind). Given a genetically heterogeneous Malagasy population group from the outset, the effects of lack of malaria resistance in coastal areas later on may be one of the reasons why there are currently less Mongoloid-type Malagasy in these areas than in the central highlands.

6.2 Did Southeast Barito speakers and Bantu speakers arrive separately?

As stated above, Murdock was the first to propose the "Out-of-Africa" scenario, which was also adopted by Deschamps (1960), and more recently by Adelaar (2007) and Blench (2007). Other scholars believe that these Southeast-Asians and Africans had reached Madagascar in separate migrations. Dahl (1951) already represented this view, when he wrote that SEB speakers migrated to an island which was already occupied by a Bantu population speaking Old Comorian. It is basically also Beaujard's position. In his 2003 article he argues that the first migrants sailed directly from ISEA to the Comoros and North Madagascar, from where they spread along the east coast of Madagascar and moved into the central highlands. Bantu speakers arrived somewhat later, settling on the west coast and bringing their own distinctly African features. A subsequent creolisation process and migrations within Madagascar would have created the linguistic and ethnic situation as we know it today. However, in later publications Beaujard also considers the possibility that the SEB migrants might have mixed with local Bantus in the Comoros before they moved to their final destination (Beaujard 2011:172), or that the early migrants had undergone Bantu influence on the East African coast before they settled in Madagascar itself (Beaujard 2012:565).

It is likely that a separate arrival of Austronesians and Bantus would have created a very different situation from the one we find today. It does not account for the relative linguistic unity of the island, the lack of expected creolization phenomena involving Bantu features in certain regions, the occurrence of an early layer of Bantu loanwords and grammatical features which is common to all Malagasy dialects, and the fact that West coast dialects are just as Austronesian in structure as the central and eastern ones. In this context, it should be emphasised that many Bantu features in Malagasy are not due to borrowing from Comorian or Swahili but come from older yet unidentified Bantu sources (see section 7 below). It is also hard to reconcile with the common gene pool of the Malagasy consisting of a mix of Austronesian and Bantu genes in both the mitochondrial and Y-chromosome DNA.³ All these facts favour a course of events in

³ Sequences of the Polynesian motive in the mitochondrial DNA are admittedly much lower among

which the Malagasy people came to the island as a mixed Austronesian-Bantu group rather than as two separate groups. Finally, there is the commonsense question why Asian migrants would have come all the way to Madagascar and the Comoros while ignoring the vast East African coast, which was economically much more attractive and a rich supplier of ivory, slaves, gold and other metals.

6.3 Several migration waves from ISEA?

Several scholars believe in multiple waves of migrants from ISEA (Deschamps 1960, Ottino 1986) or at the least, in important continued contacts with ISEA after the initial settlement of Madagascar (Beaujard 2012).

I do not see any convincing linguistic evidence for various migration waves from ISEA at different points in history and tend to agree on this with Simon (2006). The latter argues the migrants may have belonged to several social strata, rather than being the result of different migration waves. I also agree with Beaujard (2012) that contacts between ISEA and Madagascar following to the initial migrations must have continued until the 16th century CE, although I differ with him in my assessment of the nature and impact of these contacts. While they did bring Islam to Madagascar's East coast, they were not as ethnically variegated and culturally involving as claimed by Beaujard (Adelaar 2016).

The Zafiraminia were already briefly mentioned in Section 4.4. They are the descendants of traditional ruling groups in East and Central Madagascar. Allegedly of a lighter complexion than other Malagasy people, they are traditionally considered to have come from Mecca in the 13th century AD. They adhere to a hybrid form of Islam and are the ones who introduced Sorabe, an adaptation of the Arabic writing system, to Madagascar. After experiencing defeat and persecution in the 16th century by the Zafikazimambo, a later and more orthodox group of Muslims in East Madagascar, they moved away from their original home region around Mananjary in Antambahoaka (see Map II). They spread to other parts of the East coast and to the central highlands, where they played a pivotal role in the establishment of local kingdoms, including the Merina one. They did so by providing these kingdoms with an ideological blueprint which is based on the myth of Ibonia, a Malagasy cultural hero and is strongly reminiscent of a Hindu-Javanese power structure.

groups like the Vezo and Mikea than among other Malagasy subgroups (Razafindrazaka 2010). However, that does not contradict the fact that all Malagasy groups share Austronesian and Bantu DNA.



Map II. Madagascar: dialect variety and the migrations of the Zafiraminia towards the interior

Deschamps (1960), Ottino (1986) and Beaujard (2003 2012) basically describe Zafiraminia as a late Malay migrant group. While it may be the case that the Zafiraminia had adopted several features from the Indianised (and later Islamised) ISEA, there is no substantial cultural, historiographic or linguistic evidence for the claim that they were, in fact, ethnically Malay. It certainly makes no sense from the point of view of ISEA culture history or historiography, which does not mention Madagascar, let alone a group that can in any way be associated with the Zafiraminia.

The name of this group has often been associated with Ramni, originally the name of a polity near present-day Banda Aceh (Aceh Province in North Sumatra, Indonesia) and by extension one of the Arabic names of Sumatra. The etymological analysis would be *zafy* ‘grandchild, descendant’ + *Ramni* ‘Sumatra’, and the historical meaning ‘people descending from Sumatra’, or possibly ‘people descending from Ramni (in Sumatra)’. A historical relationship between these terms is theoretically possible but remains ad hoc. For one thing, having a similar proper name is of itself hardly solid evidence for any historical claim. For another, a factor generally glossed over in this debate is that Ramni in Sumatra was ethnically Acehnese, and not Malay. While it is true that the Malay language and culture played a prominent role in the history of Acehnese courts (comparable to Latin in medieval Europe), it did much less so among the common people. The latter continued to speak Acehnese, which is a very different language. So, even if the Zafiraminia did turn out to be Southeast Asians, it would still need to be established whether – and to what extent – they were Malays or identified with Malays.

One could speculate that some east coast Malagasy people once accepted spiritual (and administrative?) leadership from (Muslim) Malay teachers who had crossed the Indian

Ocean and somehow ended up in Madagascar. People on Madagascar's east coast might have adopted these spiritual leaders in their communities and derived a separate highly class-conscious identity from them. If these leaders were sufficiently charismatic, their followers might have associated with them to the point of assuming the same ethnic background, or of becoming perceived by others as having the same ethnic background. While this may be how the Zafiraminia acquired their own ethnicity, there is no ground for considering the entire community to have descended from Malay immigrants.

Even if there was a relationship between the Zafiraminia and Ramni, the nature of it remains unspecific: would it show that the Zafiraminia as a group hailed from Ramni? Or that they were Malays? Or only that Ramni in North Sumatra was a main trading centre and the original home to a few individuals (possibly just one individual) who moved to East Madagascar and had a key role in what would become Zafiraminia society? While still speculative, last explanation certainly makes more sense than the one proposing a Malay origin of the community as a whole.

7. The influence of African languages on Malagasy can be traced to several periods and various source languages

Two clear observations can be made with regard to contact with African languages: (1) only influences from Bantu languages are identifiable, and (2) these Bantu influences enable us to identify several borrowing events which differ in terms of their sources and times of occurrence.

Concerning the first observation, there have been speculations about linguistic influence from Cushitic and Khoi-San languages in mainland East Africa. Cushitic speakers are nowadays in the minority in East Africa, but they must have been much more prominent before the arrival of Bantu speakers to the African East coast, which must have happened sometime after 800 BC (Schadeberg 2006:160). The process of language shift they underwent may have been a gradual one. It is not clear whether there are Khoi-San languages at all in this part of the world, although various linguists have tried to identify the Hadza and Sandawe as such, and there are speculations that the Khoi-San languages were once spread all the way to Africa's Northeast coast (Güldemann 1999). Whatever the history of these languages may have been, there is as yet no solid evidence that they left any traces in Malagasy, except indirectly via Bantu languages.

Furthermore, although Madagascar may have had a pre-Austronesian and pre-Bantu speaking population, as discussed above, there is really no way of telling which language this population might have spoken, whether it was Cushitic, Khoi-San or any other type of language. Some lexical data from Beosy and Mikea (and even Vezo) have been adduced to argue that they were part of a non-Bantu and non-Austronesian substratum (e.g. Blench 2010a). These data actually have very little meaning as they cannot clearly be related to any other recorded language. They also lose much of their value against the realization that all Malagasy dialects contain some idiosyncratic vocabulary that does not have corresponding forms in Standard Malagasy, and furthermore the realization that as far as its overall lexicon and structure is concerned, a dialect like the currently spoken Mikea is not any less "mainstream" than other Malagasy dialects.

In short, there is as yet no clear evidence for influence from Cushitic – or Khoi-San languages on Malagasy, neither through a substratum left by an earlier population in Madagascar, nor as influence from Cushitic – or Khoi-San speakers in mainland Africa.

Concerning the second observation, namely that there are several layers of Bantu influence, Dahl (1951) already pointed this out by distinguishing between an “Old Comorian” substratum and the presence of loanwords from Swahili and current Comorian in Malagasy. The presence of an Old Comorian substratum presumes that Comorian speaking people already lived in Madagascar before the arrival of Austronesian speakers. It also presumes that these Austronesian speakers came directly from ISEA. Current theories do not necessarily adhere to these views, but few scholars would deny the existence of some chronological stratification into old and recent Bantu elements in Malagasy. Simon (2006:151-152) is very explicit, distinguishing the following four categories of Sabaki languages:

- a. Around the 7th century AD: contact with a southern variety of Sabaki which must have been a language ancestral to Kimwani and Shimasiwani
- b. Later, between 7th and 11th centuries AD: contact with Bantus living at the Ruvu and Pangani estuaries; their languages are Kivumba, Kivanga, Kitanga, Kipemba and Kihadimu
- c. Also later: influence from an old form of Shimasiwani (also found in local varieties of Comorian languages)
- d. In the 11th century AD: borrowing from Kizigula and Kizaramu.

This differentiation is very specific, and it may need further investigation whether or not Bantu borrowed elements can be divided into so many categories. Nevertheless, it underscores two observations made by earlier Dahl (1988) and later by Adelaar (2007, 2009), namely that there is a distinction between the 7th and 11th centuries AD as two main starting points for Bantu-Malagasy contact, and that the first period concerns a Bantu language other than Swahili or Comorian.

8. Austronesian influence in Bantu languages and cultures

It has always been clear to linguists and ethnographers alike that there is a strong African imprint on the language and culture of Madagascar. As far as linguistic influences on the island can be identified, these are clearly Bantu. Less obvious is that there is also an Austronesian imprint on the cultures and languages of East Africa. The matter remains seriously understudied and Southeast Asian experts and Africanists alike have usually turned a blind eye to it. Nevertheless, this was pointed out by various prominent scholars in the past (including Ferrand 1907, 1919, Hornell 1928, 1934, 1946, and Murdock 1959). An up-to-date overview of the evidence of contacts between Africa and ISEA can be found in the works of Blench (Blench 2010a and other publications). To remain on the conservative side, among the things that were introduced from ISEA to Africa are staple food products (the banana, water yam and Colocasia taro); boat technology (the outrigger canoe), and a disease like elephantiasis. Blench notes that the cultural transfer was not unilateral, and that an important item such as the xylophone in ISEA must have come from Africa. The Javanese xylophone as used in the gamelan orchestra may be very sophisticated, but typologically it stands rather alone. On the contrary, the many xylophones in Africa represent a wide morphological variety and many developmental stages. All things being equal, it seems that the prototype originated in Africa and that only one typological variety found its way into ISEA, no matter how emblematic this variety has become as a crucial element in gamelan orchestras.

Linguistically, a difference must be made between evidence of Malagasy influence on the nearby Comorian languages, and such evidence on Swahili. The former is clear and uncontested. It is mentioned in Nurse and Hinnebusch (1993:332, 559) and documented

to some extent in some of the entries in Ahmed-Chamanga's (1992) Ndzuan-French dictionary and Blanchy's (1996) Maore-French dictionary. But then again, lexical influence in neighbouring languages comes hardly as a surprise. Malagasy influence on Swahili is less obvious, although there definitely is some evidence. The one Austronesian item in Swahili that many seem to be aware of is *kiazi* 'tuber', which was traced to Malay *kəladi* 'taro (colocasia)' (cf. Schadeberg 2009:82; Walsh n.d.). This etymology makes sense from a formal and semantic point of view, although it remains striking that *kəladi* does not have cognates in other Austronesian languages. But there are also other possible Malay loanwords Swahili. Walsh collected many of them⁴. Other sources - for loanwords from Malay as well as Malagasy - are Adelaar (2007) and Hoogervorst (2013). These loanwords clearly illustrate contacts between Sabaki speakers and speakers of Malay and Malagasy that must have persisted over an extended period. While some proposed loanwords cannot be dated or are demonstrably recent, other loanwords are definitely old. Among the latter we find the following ones:

From Malay:

- a. Malay *tuba* 'fish poison', Swahili *u-tupa* 'id.' (Walsh)
- b. Malay *kəladi* 'taro (colocasia)', Swahili *kiazi* 'tuber' (Walsh)
- c. Malay *kota* 'fortified place, town', Swahili *u-kuta* 'stone walls of a house' (ultimately from Dravidian; Adelaar, Hoogervorst)

From Malagasy or Malay:

- a. Malagasy *sambu* 'ship', Ma'anyan *sambaw* 'celestial ship', Old Malay *sambaw* 'ship', dialectal Swahili *sambo* 'id.' (Walsh);
- b. Malagasy *farihi* 'lake', Malay *pərigi* 'well, spring', and Swahili *m-fereji* 'ditch, furrow' (ultimately < Dravidian)
- c. Malagasy *sùratrà*, Malay *surat* 'writing; letter, document', Swahili *chora* 'to carve, draw' (see Adelaar [1989] for the Malayo-Polynesian origin of this set)

From Malagasy:

- a. Malagasy *tùrakă* 'to launch (spear, etc.), throw', Swahili *tora* 'fishing spear'
- b. Malagasy *vàri* 'rice (in general)', Swahili *wali* 'cooked rice' (ultimately < Dravidian)
- c. Malagasy *vuài* (Malay *buaya*) 'crocodile', Swahili *m-buai* 'savage, rapacious'

Finally, Adelaar (2015) speculates that the Swahili locative suffix *-ni* was borrowed and has its source in Malagasy *-ni*, which is a genitive marker. An argument for such borrowing is that Swahili and a few other East and South Bantu languages stand out for having a locative suffix among the Bantu languages, which are overwhelmingly prefixing and usually have locative prefixes which are well established in Bantu history. The semantic shift involved is explained by the fact that Malagasy *-ni* often co-occurs with the locative prefixes *i-* and *aN-*. It may also occur by itself in locative constructions that for some reason have lost their locative prefix. We find the following genitive constructions:

with i-: *i-vela-ni* [LOC-leaving,abandoning+3GEN] 'outside, exterior, foreign'

⁴ Walsh (unpublished); this is the source of items listed in Blench 2012, Table 3).

- with aN-*: *an-dani-ni* [LOC-end-3GEN] ‘on one side, on the one hand’
 an-ivu-ni [LOC-centre-3GEN] ‘in the middle’
- with no prefix*: *ara-kevi-ni* ‘approximately’ [following-thinking-3GEN]
 aman’-etsi-ni ‘by the hundreds of thousands’ [*aman* ‘with’, *hetsi*
 ‘hunderd thousand’]
 ambu-ni ‘above, on top’ (there is no *ambu but compare *avu*
 ‘elevated’)
 amba-ni ‘below, beneath’ (no *amba, but compare *ava*
 ‘downstream’)
 fara-ni [posterity;final,last-3GEN] ‘last; finally, in the end, at last’
 eu akaiki-ni ‘next to (it)’ [*eu* ‘here (in sight)’, *akaiki* ‘near’]

This combination of affixes may have been misinterpreted by Bantus learning Malagasy; they may have reanalyzed the *-ni* suffix as being a genitive marker, rather than *i-*, *aN-* or \emptyset -.

As indicate above, the arguments remain speculative. Their acceptance will be co-dependent on the outcome of further research into Malagasy-Bantu contact and the historical context in which it took place. See Adelaar (2015) for a more detailed account of this theory.

9. Concluding remarks

In the preceding pages I showed some recent developments in the study of the settlement history of Madagascar. While they are seen from the viewpoint of a linguist, the research involved is clearly of a multidisciplinary nature.

These developments are very exciting, not only since the input of human genetics (in its current form based on Cavalli-Sforza’s principles), but also with renewed contributions from linguistics, archaeology, social anthropology, oceanography, ethnobotany and zoobotany. Furthermore, the increasing tendency in various disciplines to use quantitative methodology has the potential to enhance the quality of research outcomes.

Nevertheless, it does not suffice to follow the results of any new research or methodology without remaining very critical and keeping an eye on their effects on the general research field. Provided that these results are sound, they will either have a corrective - or a reinforcing effect on previous research results from various disciplines. But more importantly, they will also have to be integrated into a meaningful encompassing theoretical model made up of multidisciplinary evidence. The need for such integration sounds self-evident, but in practice it is not easy to achieve in the study of Malagasy prehistory or any other multidisciplinary research. It involves an appreciation – if not a keen understanding – of the research methods in fields other than one’s own, and a rather rigorous re-assessment of one’s own research strategies (aims, methods, terminologies) in order to reach truly multidisciplinary informed results at an advanced research level.

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